CSR Activity Report (CSR Guideline Activity Reports)

Social Contribution Activities as a Good Corporate Citizen

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

Basic Approach

As the foundation of its business activities, Toray Group works to build ties with local communities and contribute to society through its core businesses. Embracing a corporate philosophy of contributing to society as the ultimate objective of its corporate activities, Toray Industries, Inc. has worked to foster social development since its founding. The Group's Corporate Missions were set out in 1995 and include “For society: To establish ties and develop mutual trust as a responsible corporate citizen.” Social contribution activities were included in Toray Group's CSR Guidelines established in 2004, and these activities have been a part of the Group’s CSR activities ever since.

Today, the Group is working to achieve the Toray Group Sustainability Vision, which calls for solving social issues by expanding its Green Innovation and Life Innovation businesses. These efforts are driven by the Medium-Term Management Program, Project AP-G 2022, and the Long-Term Corporate Vision, TORAY VISION 2030. While contributing to society through its business activities, the Group will continue to promote social contribution activities as a good corporate citizen to help solve global issues such as those addressed by the United Nations Sustainable Development Goals (SDGs), as called for in its CSR Roadmap 2022. Based on the social issues that the Group aims to solve through its businesses, the focus 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, the Group is focusing on activities uniquely suited to Toray, including providing educational support in such areas as science, the environment, and career education, as well as offering support for improving and developing science and technology and promoting science education through the activities of Toray science foundations around the world. The Group maintains social contribution activities at a designated scale to ensure a specified measure of social contribution over the long term.
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.

1 The Sustainable Development Goals (SDGs) were adopted in September 2015 at the UN Sustainable Development Summit attended by more than 150 Heads of State. These 17 goals and 169 targets are worldwide objectives to be reached by 2030.

Related Policies

<table>
<thead>
<tr>
<th>Toray Group Social Initiative Policies</th>
<th>Revised Sep 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Based on its Corporate Philosophy of &quot;Contributing to society through the creation of new value with innovative ideas, technologies, and products,&quot; we will contribute to sustainable development of local and global society as a good corporate citizen, while continuously supporting social initiatives among employees.</td>
<td></td>
</tr>
<tr>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>4. We will examine all marketing and advertising activities from the perspective of social contribution before finalizing them.</td>
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</table>

Priority Areas for Social Contribution

Science and Technology Promotion: Toray Group strives to live up to its corporate philosophy of “Contributing to society through the creation of new value with innovative ideas, technologies and products” by providing innovative technologies and advanced materials. The Group is committed to taking on the challenge of innovation across all of its corporate activities. That is why the Group must develop and retain human resources who can generate this continual innovation. Also, via the Toray science foundations around the world, the Group is providing research grants, promoting science education, and fostering public interest in science, looking to make a long-term contribution.
Environment and Communities: Toray Group is pursuing Green Innovation businesses that help solve global issues relating to the environment, resources and energy. Utilizing its expertise and human resources, the Group is continuously engaged in environmental conservation activities while collaborating with local communities.

Health and Welfare: Toray Group’s Life Innovation businesses contribute to better medical care and longevity, foster public health, and support personal safety. To help build a world where people everywhere can live long, healthy lives, the Group promotes sports and cancer screening awareness. Individual business sites support education programs for children and social welfare initiatives.

Social Contribution and the Sustainable Development Goals

Toray Industries has from the beginning engaged in corporate activities with the ultimate purpose of contributing to society, viewing itself as a public entity. The Company considers the growth of its business as an indication that it has earned the recognition and support of society as a corporation that is endeavoring to practice its philosophy of contributing to society.

In 1955, Toray Industries established the company principle that “Toyo Rayon contributes to communities” as an explicit statement of its founding principles. From around that time, everyone at Toray Industries, from management to employees, began pursuing diverse initiatives to realize the philosophy of contributing to society. These activities ranged from making donations to various organizations and institutions, providing humanitarian assistance and financial aid to disaster-stricken areas, and inviting students to visit Toray’s manufacturing sites and providing them with informational materials.

In 1986, Toray Industries established the corporate philosophy of “ Contributing to society through the creation of new value with innovative ideas, technologies and products,” which carries on the core concept of the previous company principle. Toray Group pursues this corporate philosophy by emphasizing the social contributions of its businesses in making business decisions. The Group considers every aspect of its corporate conduct and the conduct of its employees through the lens of contributing to society. It is for this reason that Toray Group’s core businesses naturally align with the United Nations Sustainable Development Goals (SDGs), whose themes include resolving global environmental issues and contributing to health and longevity.

While the SDGs have recently become the focus of international development efforts, Toray Group has been working since the beginning to resolve global social issues like these, as it strives to live up to its corporate philosophy.

Structure

Since April 2012, Toray Industries has positioned the CSR Operations Department as a specialized department focusing on social contribution activities. The department is responsible for planning and promoting its own voluntary programs implemented independently, as well as aggregating CSR performance across Toray Group. Policy related to CSR activities and major CSR initiatives are discussed by the CSR Committee. Policy is communicated to Toray Group sites in and outside Japan through CSR discussion meetings held with each company and department, as well as at meetings attended by representatives from each country where the Group operates outside Japan that are held to promote activities suitable for the particular circumstances of each country and company.
CSR Roadmap 2022 Targets

**CSR Roadmap goals**

1. As a member of society, implement social contribution activities that help to solve the global issues addressed by the SDGs and other initiatives
2. Voluntarily and continuously engage in the priority areas of “science and technology promotion,” “environment and communities,” and “health and welfare”
Main Initiatives and Key Performance Indicators

(1) Implement social contribution activities at the appropriate scale

(2) Actively engage in social contribution activities that are distinctive of Toray Group, focusing on science and technology promotion

(3) Promote social contribution activities in collaboration with stakeholders such as local communities and non-profit organizations

(4) Educate employees in Toray Group in order to instill the significance of social contribution, and encourage each site to continually participate voluntarily and actively in social contribution activities

(5) Develop a wide range of educational support activities such as sending employees to teach science, environmental, and career education classes at schools

(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

<table>
<thead>
<tr>
<th>Key Performance Indicator (KPI)</th>
<th>Target</th>
<th>Fiscal 2021 Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-❶ Social contribution expenditure (% change from average expenditure over last six years)</td>
<td>100% or higher</td>
<td>100% or higher</td>
</tr>
<tr>
<td>10-❷ Social contribution activities (number)</td>
<td>2,500 or more</td>
<td>2,500 or more</td>
</tr>
<tr>
<td>10-❸ Beneficiaries of educational support activities such as science classes for schools and career education (number)</td>
<td>15,000 or more</td>
<td>15,000 or more</td>
</tr>
</tbody>
</table>

Reporting scope: Toray Group
Looking to the Future

Toray Group was founded with a commitment to contribute to society. In keeping with this pledge, the Group works to build relationships of trust with local communities by taking initiatives in the priority areas of “science and technology promotion,” “environment and communities,” and “health and welfare.” In addition, as a good corporate citizen, the Group pursues activities that contribute to the development of local communities and the resolution of global issues. Toray Group social contribution activities continue to evolve in ways that inspire Group employees and make them proud.

Toray Group employees visit science and physical education classrooms as guest instructors, support career education activities, and host plant tours for local children and students. The Group receives requests from many schools and communities, and these activities are expanding both in and outside of Japan. The goal set in fiscal 2014 was for these activities to reach a cumulative total of 100,000 people as a means of supporting education that will nurture leaders for a sustainable world. In August 2021, the goal was achieved when this number reached a cumulative total of 109,360 at the end of fiscal 2021.
CSR Activity Report (CSR Guideline Activity Reports) - Social Contribution Activities as a Good Corporate Citizen

Fiscal 2021 Results (Data edition)

**Social contribution expenditure** (% change from average expenditure over last six years)

- **Reporting scope**: Toray Group
- **Target in fiscal 2021**: 100% or higher
- **Result in fiscal 2021**: 86%

**Social contribution activities (number)**

- **Reporting scope**: Toray Group
- **Target in fiscal 2021**: 2,500 or more
- **Result in fiscal 2021**: 1,710

**Beneficiaries of educational support activities such as science classes for schools and career education (number)**

- **Reporting scope**: Toray Group
- **Target in fiscal 2021**: 15,000 or more
- **Result in fiscal 2021**: 11,331
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 2022 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.

Social contribution expenditures in fiscal 2021 were 1.43 billion yen (approximately 900 million yen at Toray Industries alone), which is 86% of average expenditures over the last six years (fiscal 2015-2020, 1.66 billion yen), in contrast to the target of 100% or higher set in the CSR Roadmap 2022. This difference was due to the cancellation of the Shanghai Marathon as a COVID-19 pandemic measure and other factors.

In fiscal 2021, the main beneficiaries were Toray Science Foundation, Toray science foundations in Malaysia, Thailand, Indonesia, and the Republic of Korea, and sponsorship of the Tokyo Marathon.

In fiscal 2021, Toray Industries Inc., on behalf of Toray Group, donated approximately 220 million yen to Toray Science Foundation. Toray Group companies outside Japan donated approximately 250 million yen to Toray science foundations around the world.

In its CSR Roadmap 2022, 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 2021 was 1,710, short of the target of 2,500 or more. This shortfall was due in large part to the fact that the COVID-19 pandemic led to the voluntary cancellation of activities, such as cleanup campaigns and other events in which employees would participate in-person, when it was thought to be difficult to ensure health and safety.

The number of beneficiaries of educational support activities increased compared to 2020 due to the implementation of online classes and company interviews during the COVID-19 pandemic. However, the beneficiaries of these activities in fiscal 2021 still numbered only 11,331, falling short of the Group target of 15,000 or more. This was due to the limited number of school visits by instructors and group-based educational events.

**Related Information**

- Toray Science Foundations around the World
Breakdown of Expenditure in Fiscal 2021

Culture, art, and other
11%

Health, welfare, sports
10%

Environment, communities
13%

Academics, science research, education
66%

CSR Activity Report (CSR Guideline Activity Reports) - Social Contribution Activities as a Good Corporate Citizen

Activities Carried Out in Fiscal 2021

Toray Group’s Educational Support Activities

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, Group employees teach classes at local elementary, junior and senior high schools.

In fiscal 2021, in order to prevent the spread of COVID-19 infections, in-person classes conducted by employee instructors at schools were still somewhat limited. Once infection levels had subsided, classes were provided to some schools where pandemic safety measures could be confirmed. Due to the ongoing COVID-19 pandemic, the Group also conducted online classes using a web conferencing system during periods when states of emergency had been declared and the authorities had issued priority measures to prevent the spread of the virus. Using online tools, Toray Group has been able to expand the scope of its educational support activities, discovering new possibilities for meeting the demands of future educational settings by offering classes at distant schools, which has not been possible in the past, and by introducing lesson formats that are not possible with in-person settings.

The Group also lent laboratory equipment made with Toray advanced materials to 61 elementary, junior high, and senior high schools across Japan that the Group was unable to visit, for their use in lessons on science, chemistry, and the SDGs. Toray’s educational programs have been well received by many teachers because the experiments they include help students understand how science and technology contributes to solving global environment problems.
Questionnaire Results on Teaching Materials Provided by Toray Group

- Satisfaction with classes using materials provided by Toray

How satisfied were you with the teaching materials provided?

- Satisfied
  - 16%
- Very satisfied
  - 84%
Feedback on Effectiveness of Program

Q1. The program makes students think of the problems occurring on the planet as related to their own lives.

Q2. The program helps students understand that what they learn in science helps in their own lives and is useful technology for solving global problems.

Educational Support Activities for Career Education, Company Tours, and Other Programs

In addition to science experiment lessons and environmental education programs, Toray Group collaborates on career education and hosts office and plant tours in response to requests from local schools, boards of education, and non-profit organizations.

Toray Industries provided career-related talks to junior high and high school students by explaining job responsibilities at Toray. The instructors also shared stories from their own school days, and covered other topics that would be useful for students when considering their future career paths. The use of web-based tools also expanded, and online job interviews were implemented.

Among the group companies in Japan, Toray Advanced Film Co., Ltd. has resumed providing classes to neighborhood elementary schools, which had been suspended for the past two years due to the COVID-19 pandemic. In these classes, the instructors showed the students familiar products manufactured at the factory, such as the materials used to package candy and snacks, and conveyed Toray’s appeal. Toray Research Center Inc. collaborated with an active learning program at a technical college, providing lectures and technical advice for group work.

Group companies outside Japan also give career-related talks to local students, and provide education to foster awareness of safety, disaster prevention, and the environment. For example, in France, Toray Carbon Fibers Europe S.A. teamed up with neighboring companies and the local fire department to jointly provide first aid workshops for elementary school students. In Thailand, Toray Textiles (Thailand) Public Company Limited delivered an online lecture on textile products such as airbags to local university students majoring in textiles.

The Toray Industries volleyball team, Toray Arrows, has been involved in supporting children’s physical development through volleyball clinics and on-site instruction at elementary school physical education classes. In fiscal 2021, volleyball clinics were held with COVID-19 pandemic infection prevention measures in place.
Through a web conferencing system, students from Tokyo Metropolitan Chihaya High School interview Toray personnel about "&+™", a fiber made from recycled plastic PET bottles (Tokyo and Osaka head offices of Toray Industries, Inc.)

An employee from the Toray Industries Mishima Plant gives a talk to local junior high school students about working as a researcher.

Elementary school students learn about familiar film technology such as candy and snack packaging (Toray Advanced Film Co., Ltd.)

Technical college students discover the appeal of work related to plant engineering (Toray Engineering East Co., Ltd.)

Local high school students listen to a talk on employment and careers (Toray Composite Materials America, Inc.)

At a local environmental fair, elementary school students listen to a presentation on global environmental issues and Toray Group activities (Toray Resin Mexico, S.A. de C.V.)
Letter of thanks from elementary school students who participated in a first aid workshop delivered in collaboration with neighboring companies and the local fire department. (Toray Carbon Fibers Europe S.A., France)

Safety education being provided to local elementary and junior high school students in response to a request from the local community (Toray Industries (India) Private Limited)

University engineering students listen to an online lecture concerning Toray Group’s advanced technology and materials (P.T. Toray Industries Indonesia)

Volleyball clinic for local junior high school boys provided by the Toray Arrows men’s volleyball team

Online volleyball clinic provided by the Toray Arrows women’s volleyball team
Workshops at the Science Museum

Since 2012, Toray Industries has been conducting two workshops, which use filtration experiments to examine the importance of the Earth's water, and the amazing properties of fibers, at the Science Museum located in Kitanomaru Park in Tokyo, every day that the museum is open. In fiscal 2021, approximately 4,800 people, from young children to adults, attended the workshops, which were held with infection prevention measures in place, such as a limitation on the number of participants and a shortened timeframe.

Supporting the Biology Olympiad

Since 2007, Toray Industries has helped to send students to the International Biology Olympiad (IBO) through the Japan Science Foundation. The Company’s aim is to help develop the next generation of leaders in the life sciences. The 32nd IBO was hosted by Lisbon, Portugal but held online. The four high school students chosen as the representatives for Japan won medals (2 silver and 2 bronze medals).

Held Aozora Science School

Since 2015, Toray Industries has organized the Aozora Science School to foster children’s interest in and an affinity for science by offering fun activities that combine nature and science. Until recently, the event has been held every summer since 2015 at a campsite at Lake Kawaguchi in Yamanashi Prefecture. In 2021, however, an interactive experiment class was held online instead, as a way to help prevent the spread of COVID-19 infections. The participants consisted of 90 elementary school students from all over Japan. Using an experiment kit sent to them in advance, the participants engaged in various science activities that could be enjoyed at home.

They put together an insect robot made with a small motor and scrub brush and conducted a "water dance experiment," in which they dripped water on a Toray water-repellent textile and observed the water drops rolling around the surface of the fabric. During the break, players from the Toray Arrows volleyball team made an appearance and conducted a quiz competition, which the students thoroughly enjoyed.

While this was the first such online event, it was clear that the children were learning science while having fun. The serious expressions and surprised exclamations of the students were apparent even through the monitors.

1 Aozora Science School is a hands-on educational camp designed by Toray Industries, supervised by Leave a Nest Co., Ltd. and provided by JTB Corporation.
Children listening intently to an online class

Students conduct a water-repellent fabric experiment remotely

Participants build a simple robot using a kit sent in advance

An employee in California explains to the students in English how to make slime – an opportunity only possible through online learning

Players from the Toray Arrows volleyball teams add excitement to the learning program

Related Information

› Aozora Science School official website (Japanese site)
› Aozora Science School Facebook page (Japanese site)
Toray Group has outlined a corporate philosophy of “contributing to society through the creation of new value with innovative ideas, technologies and products,” which the Group delivers on by practicing innovation. In order to continuously deliver innovation, the Group must secure and develop talented human resources. For this reason, the Group takes a long-term perspective on human resource development. One way it does this is by contributing to the promotion and support of basic science and science education in society, which is one of the main social contribution activities of the Group, through the activities of Toray Science Foundation and Toray science foundations in Thailand, Indonesia, Malaysia, and the Republic of Korea.

### Related Information

› Toray Science Foundations around the World

### Toray Science Foundation

Toray Science Foundation was established way back in 1960 to help advance science, technology and culture. The Foundation created quite a stir when it was first established, as it was a pioneering foundation of its kind, and its activities continue to win high praise today. Its support activities include grants and prizes in the fields of basic science and science education that are offered by no other similar organizations. The Foundation celebrated the 60th anniversary of its founding in June 2020.

### 62nd Toray Science and Technology Prizes, Toray Science and Technology Grants, and 53rd Toray Science Education Prizes

In February 2022, the Toray Science Foundation chose the latest recipients for the 62nd Toray Science and Technology Prizes, Toray Science and Technology Grants, and 53rd Toray Science Education Prizes. The presentation ceremony held in March 2022 was the first in three years. Toray Science and Technology Prizes were awarded to Dr. Ryoichiro Kageyama and Dr. Toru Okabe respectively. They and the science educators who were awarded Toray Science Education Prize received certificates, medals, and prize money. Grants totaling 130 million yen were awarded to 11 recipients of Science and Technology Grants.
**Dr. Ryoichiro Kageyama**

*The significance of oscillatory gene expression in development*

Dr. Kageyama discovered that gene expression oscillates periodically during the development of various tissues and also clarified the significance and molecular mechanism behind this. This important achievement is expected to lead developmental research and serve as a technological basis for tissue regeneration.

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**Dr. Toru H. Okabe**

*Development of environmentally-sound recycling technologies for rare metals*

Dr. Okabe has made pioneering achievements, including the invention of recycling technology for separating and extracting rare metals without generating harmful substances. As demand grows worldwide for the rare metals essential for the production of lithium-ion batteries and other products, this technological achievement is expected to become increasingly important.

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Junior and senior high school science education is a particular focus of the Toray Science Foundation. Mr. Takeya Nishimaki, a teacher at Matsumoto Fukashi High School in Nagano Prefecture, received the Toray Science Education Award in the name of the Minister of Education, Culture, Sports, Science and Technology. This award recognizes teachers who have achieved remarkable educational results through creativity and ingenuity.
Mr. Takeya Nishimaki
Development of a High-output Battery using Agar Gel as a Classroom Teaching Tool

Mr. Nishimaki developed a high-output Daniell cell in cubic form featuring a thin agar gel sheet sandwiched between two kinds of metal plates. The electrodes can be easily replaced, making it suitable for quantitative experiments and learning about battery mechanisms and the properties of various metals. Mr. Nishimaki's application of this as teaching material in the classroom has been highly appraised.

Related Information

> Toray Science Foundation

Malaysia Toray Science Foundation (MTSF)

In fiscal 2020, MTSF postponed the 27th Presentation Ceremony due to the COVID-19 pandemic. Accordingly, in fiscal 2021, the 27th and 28th Presentation Ceremonies were held jointly online. MTSF awarded a total of 628,000 ringgit (equivalent to about 17.16 million yen) in prize money and grants to 59 recipients for the two years. As an honored guest, Dr. Adham Baba, Malaysia's Minister of Science, Technology and Innovation, expressed his appreciation for Toray's CSR activities on behalf of the Malaysian government. To deal with such challenges as the COVID-19 pandemic and climate change, the development of outstanding scientists is considered essential. As an organization that motivates young scientists and educators, MTSF is greatly appreciated for contributing to the medium and long-term development of science and technology in Malaysia. Mr. Kaname Araki, Charges d'affaires ad interim at the Embassy of Japan in Malaysia also conveyed deep gratitude for the role MTSF has played in deepening the bonds of friendship between Japan and Malaysia over the years.

Related Information

> Malaysia Toray Science Foundation
Thailand Toray Science Foundation (TTSF)

The 28th Thailand Toray Science Foundation Presentation Ceremony was held in March 2022. In fiscal 2021, TTSF awarded two Science and Technology Prizes, 20 Science and Technology Research Grants, and 9 Science Education Prizes totaling 5.45 million baht (equivalent to about 20.98 million yen) in prize money and grants. The presentation ceremony began with a video message from Toray Industries President and TTSF Honorary Chairman Akihiro Nikkaku. Dr. Suchinda Malaivijitnond of Chulalongkorn University then delivered a speech on behalf of the honorees, saying that past TTSF award winners have been successful on the frontlines in various fields and regions, and that researchers in Thailand consider it a source of encouragement and pride to receive awards and research grants from TTSF.

As a guest of honor, Japanese Ambassador to Thailand Kazuya Nashida offered the honorees his congratulations, saying that he was impressed by the efforts of the TTSF over the past 28 years. The ceremony concluded with a speech from the President of the Privy Council, General Surayud Chulanont, who, as the Chairman of the Ceremony Committee, expressed his deep appreciation for Toray's business activities in Thailand over the years and for TTSF's contribution to the development of science and technology in Thailand.

Indonesia Toray Science Foundation (ITSF)

The 28th presentation ceremony of ITSF was held online via web conferencing in March 2022, awarding one Science and Technology Prize, 18 Science and Technology Research Grants, and 10 Science Education Prizes totaling 975 million rupia (equivalent to about 7.22 million yen). As a guest of honor, Mr. Kenji Kanasugi, the Japanese ambassador to Indonesia, said that he was impressed that Toray, as a Japanese company, has continued to contribute to the development of science and technology in Indonesia through the ITSF for many years. Mr. Nadiem Makarim, Indonesia's Minister of Education, Culture, Research, and Technology, noted that innovative science education is being accelerated with the Science Education Awards. He praised this type of education saying that it is also the aim of his ministry's Free Learning Program. On behalf of the Indonesian government, Dr. Laksana Tri Handoko, head of the National Research and Innovation Agency, also thanked ITSF for its contributions.
Korea Toray Science Foundation (KTSF)

In 2021, KTSF awarded Science and Technology Prizes to two researchers for their outstanding research results and three-year Research Fund Grants to four young researchers to pursue new research projects. The 4th KTSF presentation ceremony was held in October with a minimum number of attendees, limited to the recipients, their families, and Toray Science Foundation staff, in order to prevent the spread of COVID-19 infections. Toray Industries President and KTSF Honorary Chairman Akihiro Nikkaku congratulated the honorees via a video message from Japan. He expressed his hope that the Foundation's activities will help promote science and technology and nurture scientists and contribute to the friendship and goodwill between the Republic of Korea and Japan.
In addition to implementing initiatives to conserve the environment around its production sites, Toray Group companies collaborate with non-profits and municipal governments on ongoing efforts to clean up rivers and shorelines, and maintain forests.

**Major Environmental Activities at Offices and Plants**

Employees cleaned up litter around the factory as part of their efforts to contribute to the local community and beautify the neighborhood. By having employees participate in the cleanup, the plant aims to raise awareness and will continue this as an initiative related to environmental preservation. (Toray Industries, Inc. Ishikawa Plant)

Employees cleaned along the Maekawa River embankment adjacent to the factory as part of environmental preservation and community contribution activities. The collected garbage was sorted and properly disposed of as waste. (Toray Industries, Inc. Chiba Plant, plant affiliate companies)

As part of environmental preservation efforts, head office employees helped maintain flower planters in the square in front of Chitose-Funabashi Station on the Odakyu line (Setagaya-ku, Tokyo). Many employees commute to work through this station. (Suido Kiko Kaisha, Ltd., Suiki Technos, LTD.)

Employees regularly clean up around the plant as a community contribution activity. (Toray Coatex Co., Ltd.)
In Fukushima Prefecture, businesses set their own global warming countermeasure targets and participate in an environmental protocol initiative sponsored by the prefectural governor. As a result of reporting on its daily environmental activities, Toray Advanced Film received an Encouragement Award as part of the 2021 Fukushima Protocol Project. (Toray Advanced Film Co., Ltd.)

Employees cleaned up the public road in front of the factory. They will continue their cleanup activities to help promote environmental preservation by reducing litter, which can cause accidents and injuries to both people and animals. (Toray Composite Materials America, Inc.)

Employees carried out tree planting activities in Nantong, China, to promote local greening and nature preservation. (Toray Polytech (Nantong) Co., Ltd., China)

The group company donated grafted seedlings for local reforestation. (P.T. Indonesia Toray Synthetics)

On TBSK Environmental Protection Day, employees picked up litter around the factory. (Toray Battery Separator Film Korea Limited)
Biodiversity Preservation and Interaction with Local Communities Using a Waterside Biotope

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 the start of operations in 1971. The plant marked its 50th anniversary in January 2021 by creating a waterside biotope in the green spaces on its premises. The plant has been promoting activities based on a deep awareness of the importance of social contribution, and has even expanded initiatives for biodiversity conservation and ecosystem preservation.

As part of these efforts, in 2019, the plant joined Project Linking Life with One Another, 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. As part of the project activities, students gain access to the plant's green space for environmental study. Accordingly, the plant is helping to develop human resources using its green space, which also plays an important role as a tool for communicating with the local community.

Since its creation in January 2021, the plant’s waterside biotope has been used as a fieldwork site for monitoring biodiversity conservation. It is regularly visited by local university and other students who belong to the Project Linking Life with One Another student executive committee.

In December 2021, the plant participated in an event called LOVE! GREEN DAY 2021, sponsored by the Japan Ecologist Association of Support, which allowed the public to experience the green spaces of companies participating in the Project Linking Life with One Another. The purpose of this event was to let people in the community experience the importance of living creatures and nature, while learning about the biodiversity conservation efforts of participating companies. At the Tokai Plant, visitors observed nature in the waterside biotope, took part in a quiz competition on living creatures, and experienced making nature-based crafts such as Christmas wreaths and stained glass using acorns, fallen leaves, and twigs collected from the green space. The visitors included many children with a strong interest in nature, living creatures, and manufacturing, and they appeared to learn a lot from the experience. Based on a clear management plan and targets, the Tokai Plant has been working on the preservation and further utilization of green spaces, while maintaining its green spaces for biodiversity conservation and next generation human resource development. Based on a favorable evaluation of these activities, the plant was certified as Excellent Stage 2 in the SEGES MOU (Maintenance, Operation and Utilization) category of the Social and Environmental Green Evaluation System (SEGES), a green certification program provided by Japan's Organization for Landscape and Urban Green Infrastructure.

Visitors observe creatures at the waterside biotope during the LOVE GREEN DAY 2021 event

Visitors make Christmas wreaths and stained glass using acorns, fallen leaves, twigs and other materials collected from the plant's green space (during the LOVE GREEN DAY 2021 event)
A gray heron visits the Tokai Plant biotope

SEGES Excellent Stage 2 certification

2 A term coined by combining the Greek words *bio* (life) and *topos* (place) that indicates a space inhabited by the wildlife native to an area.

3 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 greenbelts 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

4 The Social and Environmental Green Evaluation System (SEGES) 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 MOU (Maintenance, Operation and Utilization) 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 2022, 144 corporate green spaces have been certified.
Sponsorship of the Tokyo Marathon and Initiatives for Sustainability

Toray Industries has sponsored the Tokyo Marathon since 2011 as a way to contribute to society through the promotion of sporting events. The Tokyo Marathon also promotes sustainability initiatives as part of its activities. As an ongoing joint sustainability initiative with the Tokyo Marathon, Toray Industries provides its Ecodear™ plant-based polyester fiber to produce eco-friendly volunteer clothing, as well as carrier bags distributed to runners. At the Tokyo Marathon 2021, held in March 2022, used PET plastic bottles from the water provided to runners on the day of the race were collected for the purpose of making Toray’s recycled fiber &+™. This fiber is being used for a new project to upcycle water bottles into volunteer clothing for the 2024 Tokyo Marathon. With the help of a large number of volunteers, the used water bottles were packed in numerous plastic bags bearing the recycling message, "See you later". It was an unusual but refreshing sight.
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 2021 Shanghai Marathon was canceled due to the COVID-19 pandemic.

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 2021, COVID-19 infection prevention measures were implemented for the concerts, including temperature taking, mandatory mask-wearing, hand disinfecting, and limiting attendees to half the number of seats available.

Six performances were held at three locations, and crowding at school venues was avoided by using gymnasiums. The concerts were enjoyed by many student and adult audience members.

Performance at Tokyo Opera City

Musicians perform at a school Fureai Concert
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. As a good corporate citizen, the Group supports local communities through social contribution activities.

Support for COVID-19 Infection Prevention

The Group donated one million ringgit to the Penang COVID-19 Fund as part of efforts to reduce the spread of COVID-19. Toray Group has been operating in Penang since the early 1970s. As a corporate citizen in Malaysia, Toray made this donation based on the belief that it is important to contribute to the communities and countries in which it operates. (Malaysia Toray Group)

Donating food to people impacted by COVID-19 (P.T. TI Matsuoka Winner Industry, Indonesia)

Donating hand washing stations and hand sanitizer to the local community as a measure to reduce COVID-19 infection (P.T. Indonesia Toray Synthetics)

Donating face masks and dry food to the local Department of Labour Protection and Welfare for distribution to people impacted by COVID-19 as a measure to help reduce infection (Carbon Magic (Thailand) Co., Ltd.)
Vocational Research Support for Junior High School Students in Ofunato City, Iwate Prefecture

Since 2012, Toray Industries has sent researchers each year to Career Challenge Day, a career education event held in Ofunato City, Iwate Prefecture, as part of the Ministry of Education, Culture, Sports, Science and Technology Education Rebuilding Project. Researchers from the Company speak with local junior high school students and explain the nature of the R&D work done at a manufacturer. In fiscal 2021, the in-person event was cancelled due to the COVID-19 pandemic so the Company provided teaching videos and answered questions from junior high school students. The Company is committed to continuing to participate in this event, which helps the youth of Ofunato City find career paths.

Career Challenge Day is an alternative program for the workplace experience education that was no longer possible after the Great East Japan Earthquake. In fiscal 2012, the program was awarded the Minister of Education, Culture, Sports, Science and Technology Award.

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 November 2021, a volleyball clinic was held for fifth graders at Yamoto Nishi 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 fifth graders, and a practical training was provided by fellow Olympian and former Arrow Nobuharu Saito.

During the training, the students enjoyed the physical activity and teamwork, and the venue was filled with excited voices. During the talk, Kana Oyama explained the importance of cooperating with teammates and caring for others, and the students listened intently. The question-and-answer session was also lively, and the clinic proved to be a very meaningful experience for those involved.
Support for Local Community Development

The Group donated a total of 100,000 yuan to local charitable associations for community development in Nantong. The annual donation began in 2012, and 2021 marked the 10th year. (Five Toray Group companies in and around Nantong, China)

Support for Wildfire Recovery

Toray Advanced Materials Korea Inc. donated 100 million won to the Korea Disaster Relief Association to support victims affected by forest fires on the east coast of the country, including Gangwon Province and Gyeongsangbuk Province. The donation will be used to provide support for disaster relief supplies and restore forest fire-hit areas.

Humanitarian Assistance for Victims of the War in Ukraine

Toray Industries donated 30 million Hungarian forints (approximately 11 million yen) to the Hungarian Red Cross for humanitarian assistance for the victims of the war in Ukraine. Toray Group is developing a wide range of business areas in Hungary, including carbon fiber, PPS resin compounds, and battery separator film for rechargeable lithium-ion batteries (LiBs). Hungary has been providing assistance to refugees who have fled from neighboring Ukraine. With its base in Hungary, Toray Group decided to help these victims through the Hungarian Red Cross. Group companies in the country are also providing additional support such as making company housing available to refugees.