Driving Polyplastics CSR with SDGs

CSR REPORT 2021
Corporate Social Responsibility
2020.4 - 2021.3

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Supporting global manufacturing with engineering plastic.

Polyplastics is Japan’s first specialized manufacturer of engineering plastic. Engineering plastic is made from functional resins having such properties as superior mechanical strength and heat resistance. It is used in a variety of products, including aircraft, automobiles, home appliances, and food packaging, and is indispensable to modern manufacturing. The Polyplastics Group has a network of 32 operations sites spread across 13 countries and regions through which we provide engineering plastic and technical support to customers worldwide.

Corporate Outline
- **Company Name**: Polyplastics Co., Ltd.
- **Established**: May 1964 (Founded: June 1962)
- **Capital**: 3 billion yen
- **Shareholders**: Daicel Corporation
- **Representative**: Toshio Shiwaku, Representative Director and President
- **Number of Employees**: 2,177 (Polyplastics Group)
- **Business Operations**: Manufacturing and sales of various types of engineering plastic and polymers

Number of Employees: 2,177
R&D/Technical Solution Center: 6 sites
Production: 7 plants
Sales: 19 offices

Consolidated Net Sales: 131 billion yen
Consolidated Operating Income: 17.8 billion yen

Polyplastics CSR
- Top Message
- Highlights of FY2020
  - Certification of TOPAS® COC as a “Recyclable Material”
  - LAPEROS® LCP Additional UL Certification for Grade S475
- Engineering Plastic Business
- Harmony with Environment
- Develop Talented and Engaging Human Resources
- Social Contribution Activities
- Compliance

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Polyplastics’ Business Expansion

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As mentioned in the Corporate Philosophy, our corporate social responsibility (CSR) is contributing to shaping an abundant future for society through our engineering plastic business. In that sense we see a significant overlap between putting our Corporate Philosophy into practice and undertaking CSR.

We focus on CSR both in terms of business activities and social contribution activities spanning the five areas of “Engineering Plastic Business,” “Harmony with Environment,” “Human Resources Development,” “Compliance” and “Contribution to Society.”

As part of our efforts to facilitate and strengthen CSR activities within the Polyplastics Group, we use the perspectives of SDGs as an important indicator when putting our approach to CSR into action.
Adapting to significant change while offering Polyplastics’ distinctive contribution to the realization of a more sustainable society

-Shaping a Sustainable Society with Our Plastics-

Polyplastics has embarked on a new Mid-Term Business Plan adapted to changes occurring both internally and in society. We continue to move forward towards our goal of realizing a more sustainable society as the No.1 engineering plastic solutions provider.

Embarking on a new Mid-Term Business Plan adapted to changes both internal and external

FY2020 was a year of major changes, both inside and outside of Polyplastics. One was COVID-19. The pandemic has caused significant damage to the world’s economy, while, at the same time, giving rise to new needs in society and different approaches to how we work. The other one was the change within our company. In October of last year, Polyplastics moved from a US-Japan joint venture, as it has been since its founding, to a wholly-owned subsidiary of Daicel Corporation. This change has helped to simplify corporate governance and allows for more nimble managerial decision-making.

Thus, from FY2021 we have embarked on a new, five-year Mid-Term Business Plan (MTP) which is adapted to these two areas of change. In terms of business, our key focus for the medium term between now and 2025 is to strengthen supply capacity of COC, LCP and POM and to earn the trust of customers in the European and American markets. In addition, we are working to adapt to the world-changing technological innovations taking place in and between various industries, including automated driving and electrical motor innovation in the automotive industry and the launch of 5G communications in the ICT industry, while, at the same time, continuing to pursue CSR activities that contribute to the realization of a more sustainable society. Our MTP is designed to provide clarity of direction for Polyplastics in a time of global economic uncertainty. It goes without saying just how important it is that we change in response to a changing environment. At the same time, however, our commitment to being the global No.1 engineering plastic solutions provider for our customers remains unchanged and undimmed. We are moving forward into a new business landscape, equipped with a new MTP for developing and expanding Polyplastics’ distinctive engineering plastic business.

Accelerating our efforts to reduce environmental impact as we incorporate group technology

FY2020 was an important year in terms of the process for realizing a more sustainable society. In line with the greenhouse gas reduction targets established by the Paris Agreement for 2020 onwards, companies will be expected to achieve specific results. Furthermore, beyond the Paris Agreement targets, there are the voluntary commitments of the world’s major nations to achieve carbon neutrality by around 2050, with the year 2020 serving as an important, collective milestone internationally in terms of the timeline for greenhouse gas reductions.

Polyplastics, as well, is working, via our MTP, to reduce greenhouse gas emissions and other negative environmental impacts from our business practices. In the MTP, by utilizing advanced manufacturing technology possessed by Daicel, we will put into place manufacturing processes that are among the most energy-efficient in the world, switch to using energy with an even lower carbon footprint, and develop a plan for bringing biomaterial-derived POM to market. Additionally, another socially conscious initiative we are pursuing is the development of monomaterial package films using COC and polyolefin. In 2025, Europe is planning to introduce a pricing scheme for plastic packaging that is based on environmental load. And in order to accelerate a switch from disposable materials to materials recycling as a practical means of lowering the environmental load created by plastics, we will work, as a COC resin supplier, to facilitate the widespread adoption of highly functional and easily recyclable polyolefin monomaterial film.

Opening a Technical Solution Center (TSC) in Europe

Building a solutions network comprised of six, interconnected hubs

Engineering plastic is a valuable material used in fields where dependability is especially required. In the field of mobility, engineering plastic is an essential material for manufacturing lighter, more energy-efficient vehicles, for developing vehicle automation and for improving safety; while, in the field of ICT, engineering plastic helps make high-performance 5G devices possible.

We will provide data-based solutions, as engineering plastic experts, for realizing highly reliable and long-life products with a minimum of materials. In FY2021, we opened a Technical Solution Center (TSC) in Europe at a location adjacent to Frankfurt Airport in Germany, which now gives us six TSC working together in a worldwide network that delivers localized solutions to customers. Any company has to contribute to realizing the sustainable society in the future. We will continue to take on the responsibility of tackling this challenge as a leading supplier of engineering plastic which is now essential material for society.

Toshio Shiwaku
Representative Director and President
Recyclable Material

to realize a circular economy

Boosting production capacity

TOPAS® COC has received third-party certification as a recyclable material. It is expected to meet and exceed existing plastic third-party certification as a recyclable material. Polyplastics’ product, TOPAS® COC, has received increasingly circular economy-minded European certification of recyclable material. It is expected that the acquisition of third-party certification will greatly reassure both the industries currently using TOPAS and the companies considering using it about the reliability.

Significance of this certification

TOPAS has been adopted in a broad range of fields, including healthcare and food packaging, thanks to its superior transparency and safety. In addition, due to the fact that TOPAS is, broadly speaking, an olefin resin similar to PE and PP, it has been increasingly adopted in recent years as an easily recyclable plastic for use with PET bottles and other shrink label and stand-up pouch applications, and it is already widely available within Europe. The circular economy concept is being increasingly implemented throughout Europe, requiring producers and processors to use soft “polyolefin monomaterials” (i.e., materials made solely from olefin resins) for their packaging materials due to the fact that they are perfectly suited to recycling, and this is making TOPAS an increasingly indispensable material.

Providing plastic recycling-related solutions

In 2020, the Council of the European Union adopted the “Directive on the reduction of the impact of certain plastic products on the environment,” which puts a ban on the distribution of commonly used, disposable plastic products, such as straws and cutlery (forks, knives, spoons, chopsticks, etc.), by 2021. Also, in order to further accelerate market movement towards plastic recycling for the sake of establishing a circular economy, this directive establishes an extended producer responsibility* for all packaging materials that will take effect by 2024. It is in this context that TOPAS has received third-party certification as “an olefin resin and recyclable material.”

* Extended producer responsibility: An approach to producer responsibility which expands the scope beyond product production and usage to encompass disposal and recycling as well

Applications using TOPAS

There are many examples of PET bottle shrink labels, stand-up pouches and other packaging materials widely used throughout Europe which add TOPAS® COC together with PE and PP olefin resins in order to provide functional enhancement. The acquired third-party certification indicates that TOPAS can be recycled together with olefin resins, like those contained in these packaging materials, in a specially designated disposal process, thereby contributing to the development of polyolefin monomaterials and recycling promotion of packaging materials.

This also makes it possible to demonstrate to the relevant authorities that products containing TOPAS are sufficiently recyclable.

Construction of No. 2 Plant in 2023 to meet supply needs

With demand for TOPAS continuing to grow, local German subsidiary TOPAS Advanced Polymers GmbH will establish a new plant in Leuna that is scheduled to start operation in 2023 aside from existing plant in Oberhausen. This new plant will have an annual production capacity of 20,000 tons, which is more than double the current capacity and, moving forward, will serve as a central production hub for providing customers with a stable supply of TOPAS.

NEW

Leuna

No. 2 Plant

Oberhausen

No. 1 Plant

01

00

NEW
Additional UL Certification for Grade S475

Providing essential product quality even at a recycled material usage rate of 80%

To meet our customers’ needs to ensure effective resource utilization, Polyplastics has secured additional UL certification*1 for Grade S475 of LAPEROS® LCP which verifies the fact that its quality (physical properties) at a recycled material usage rate of 80% is equivalent to that of a product made from virgin materials.

Characterized by its thinness and high flowability, LAPEROS® LCP is the prime example of a super engineering plastic. It boasts superior heat resistance and the unusual property of greater mechanical strength the thinner it is, as well as high dimensional precision. Due to these properties, it is frequently used in the ultra-miniature precision connectors found in mobile tablets, smartphones and other cutting-edge IT devices that are being made increasingly smaller.

Naturally, when molding these connectors, they must be attached to sprues and runners, but, once they are molded, these attachments are thrown away. As the size of the products being manufactured grows smaller, the percentage of sprues and runners gets higher, causing a problem of more waste. With society becoming increasingly concerned about the needs for more effective utilization of resources, our LAPEROS customers expressed a desire to use their sprues and runners as a recyclable resource that can make up to 80% of the resin content used in product molding.

We first performed molding using virgin materials, after which we manufactured recycled materials. Prescribed amounts of recycled and virgin materials were mixed together and molded to make the test pieces. They were subjected to testing to see whether its physical properties held up as well as a test piece made of 100% virgin materials.

The process of obtaining certification for the recycled materials, which first required the creation of recycled materials, and then the comparison of test pieces results with those of virgin materials, was much more involved than the certification process for just the virgin materials. In the end, we were able to obtain additional UL certification of S475 as capable of achieving required product quality, even at a recycled material usage rate of 80%.

Providing effective resource utilization along with product quality

Society’s expectations with regard to effective resource utilization will only continue to go higher. From the standpoint of product quality assurance, using virgin materials is easier and more certain. However, in order to meet the needs of customers and, by extension, society with regard to effective resource utilization, we will need to offer resins that incorporate an even greater proportion of recycled materials while reliably ensuring a high level of product quality.

Moving forward, we will, as the No.1 engineering plastic solutions provider, actively pursue further certifications and seek to develop and propose new products that can realize both effective resource utilization and reliable product quality for a sustainable and abundant future for society.

*1 Additional UL certification showing that the quality (physical properties) at a recycled material usage rate of 80% is equivalent to that of a product made from virgin materials. Thus, we set out to obtain additional UL certification showing that the quality (physical properties) at a recycled material usage rate of 80% is equivalent to that of a product made from virgin materials.
A growing, global movement to establish a circular economy

There is increasing interest worldwide in the circular economy concept, which involves shifting from an economy built on disposable goods to one built on long-lasting goods. The entire social economy, from the supply chain to the consumer, needs to change to realize a circular economy, as shown in the following five. (See (1) to (5) in the figure below)

Impact on society and global environmental preservation

It is expected that transitioning to a circular economy will facilitate slower, more sustainable use of raw materials from petroleum resources, including engineering plastic, and materials used for energy, and that this will result in less landfill disposal and incineration without heat recovery, as well as less illegal dumping. In addition, it is predicted that a circular economy would lead to more active adoption of renewable energy and resources, thereby promoting resource and energy efficiency across the entire product life cycle, from manufacturing to consumption to disposal, and thus, in turn, would lead to further reductions in greenhouse gas emissions across the life cycle, including manufacturing, with the stated goal of Europe and Japan to achieve net-zero greenhouse gas emissions by 2050.

Polyplastics’ comprehensive initiatives

In order to help the Daicel Group in building a more recycling-oriented society through efforts that promote a more sustainable society and expand sustainable business practices, we in Polyplastics are undertaking sustained and active efforts to "do what we can, do what we should" (see (1) to (3) in the figure below) through our Engineering Plastic Business to hasten the establishment of a circular economy.

**Polyplastics’ approach to - and initiatives to achieve - a circular economy**

1. **Research and develop products which effectively utilize reusable, plant-derived raw materials and mechanical/chemical recycling processes**
2. **Pursue market development for long-life, durable products with high added value, and improve the precision of technology used to estimate reusable lifespan**
3. **Explore methods for actively achieving greenhouse gas reductions in the process of production and transportation, as well as methods for communicating greenhouse gas reduction by product**
4. **Move from exclusive ownership to shared use among consumers in society**
5. **Utilize recycling-focused designs based on classification and separation of waste products**

(TOPICS)

**Providing Greater Technological Support via On-line**

We have established a free, on-line technical support service, "WEB@TSC™", for receiving support 24 hours a day, 365 days a year. In addition to providing various technical information, other product-related inquiries, requests for safety and export-related certificate issuance and other customer needs are meticulously handled. This easily accessible, Web-based service has been well-received among our customers.

**Customers’ voice**

- Swift issuance of various certifications via a website has been of great help.
- Thanks to a more user-friendly website, we can easily get the necessary information at any time.
- For physical properties data not listed on the website, we received a response based on testing data. It helped our product design.
The Polyplastics Group pursues reduction of the Group’s environmental footprint as a whole through the initiatives undertaken by each plant individually. This page presents key topics and themes, together with performance, for the fiscal year. In line with our newly established Group Environmental Basic Policy, we have made further efforts in environmental impact reduction activities to achieve medium and long-term environmental targets in our Mid-Term Business Plan.

### The Polyplastics Group Environmental Basic Policy

Based on Corporate Philosophy, Group Code of Conduct, and Polyplastics’ CSR Approach, we will make efforts to reduce the environmental burden in all business activities of product development, production, and sales, aiming to achieve both economic development and global environmental conservation. We will contribute to the realization of sustainable society.

1. Comply with all environmental laws and regulations
2. Contribute to the environment through our products
3. Reduce the environmental burden of all business activities
4. Foster an environmental mindset

#### FY2020 Performance

**CO₂ Emissions Reduction**

The Kuantan Plant in Malaysia has switched from using its own steam boiler to using that of another company whose energy source creates significantly fewer CO₂ emissions. As a result, the plant has reduced its emissions by 27.9% compared with FY2013.

**Energy Saving Activities**

As a result of the Kuantan Plant’s decision to switch to external procurement of steam power (at left), the plant achieved a 9.1% improvement in energy efficiency compared with FY2019.

**Industrial Waste Reduction**

Along with a reduction in production volume, PRTR substance emissions at the Fuji Plant declined 17.1% in FY2020 compared with FY2019. The plant is continuing to work to reduce emissions further through a variety of initiatives, including introducing emissions control equipment.

#### Medium and Long-Term Environmental Targets

**CO₂ Emissions Reduction**

Reduce CO₂ emissions intensity by 21.5% by FY2022 (compared with FY2013)

**Energy Saving Activities**

Reduce specific energy consumption by 1% or more per year by FY2022 (compared with FY2019)

**Air Pollution Emissions Reduction**

Establish VOC measurement methods and benchmarks by FY2022

**Industrial Waste Reduction**

Reduce the rate of landfill disposal and incineration without heat recovery to less than 16% by FY2022

By FY2030, achieve and maintain zero-emissions targets for the entire group
Reduction environmental impact through raw materials management with RFID

Since 2018, when it marked its 50th year in operation, the "Fuji Plant Restructuring Project" has been underway to develop a vision for the plant’s future and to come up with and implement measures that will turn this vision into reality. One of these measures was the introduction of raw materials management system with RFID.

Introduction of raw materials management system with RFID

One of the challenges was improving product quality and operational efficiency via raw materials management. This challenge consists of the following four specific points.

Product quality improvement
- Prevent wrong input of raw materials
- Ensure traceability of raw materials

Operational efficiency improvement
- Prevent errors by eliminating manual checking
- Use automated checking to shorten operation time, eliminate checklists

To realize the above goals, raw materials management system with RFID was introduced. This system makes it possible to perform real-time checking and assessment of raw materials stocks by affixing RFID tags to raw materials pallets, reading/writing the data via antennas set up around the plant and handy terminals, and connecting to various other systems.

Reducing environmental impact

This initiative is expected to improve product quality and operational efficiency. Furthermore, it is also expected to reduce the product waste generated from wrong input of raw materials and to reduce paper usage as a result of moving over to a paperless system, which leads to reducing the environmental impact of business activities.

Moving forward, Polyplastics will continue to focus on the production advancement, the delivery of high-quality products, and the reduction of environmental impact in its processes.

Overview and impact of raw materials management system with RFID

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<td>After RFID tag data is identified at each production process, raw materials are used</td>
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Overview of the RFID System:

- **RFID tag**: A small device that contains data about the raw materials.
- **Server**
- **Scanners**: Equipment to read RFID tags.
- **Instruction sheet**: Contains guidance on the RFID system.

**What is “RFID”**

RFID, which stands for “Radio Frequency Identification”, is a system which uses scanners to read and write data stored in the memory of specialized tags. (RFID is used at the Fuji Plant)

**Product quality improvement**

- Prevent wrong input of raw materials
- Visualize raw materials storage locations
- Improve precision of product traceability
- Prevent operational errors by eliminating manual checking
- Increase operational efficiency by going paperless (e.g., eliminating the need for paper checklists)

**Operational efficiency improvement**

- Reduce the amount of wasted product (waste material) generated from wrong input of raw materials
- Reduce paper usage by moving over to a paperless system

Also contribute to environmental impact reduction

1

RORO vessel* shipping

In terms of CO₂ emissions reduction, railway shipping produces fewer emissions than maritime shipping, which produces fewer emissions than truck shipping. We were actively pursuing railway shipping up until the year before last, when torrential rains and other factors made railway shipping an impractical option; so, we then actively began pursuing RORO vessel shipping as an alternative. We are currently exploring how to expand the scope of the product delivery area serviced by RORO vessels.

Utilize backhaul shipping

In the past, the Fuji Plant had been using courier delivery for some small cargo deliveries to the Chubu region. In FY2020, backhaul shipping by truck of small cargo deliveries of raw materials from the same Chubu region to the Fuji Plant was introduced as a means of improving transportation efficiency. Because reducing small cargo deliveries contributes to reducing delivery distance, the use of backhaul shipping is being actively explored.

Shorten delivery distance

Prior to FY2020, after the processing of polymer resins at a compounding in the Chubu region, the compounded products were shipped back to the Fuji Plant instead of being directly shipped to customers in the Kantō region. In FY2020, these delivery routes were revised so that the compounded products could be sent directly to the customers in the Kantō region without returning to the Fuji Plant, thereby shortening delivery distance. This shortening of delivery distance is connected with a reduction in CO₂ emissions. Moving forward, we will continue to work towards even greater optimization of our delivery routes.

Group-wide safety activities

Within the Polyplastics Group, together with in-house contractors, we are working to raise safety awareness among our employees with the goal of eliminating occupational accidents.

**Goal of eliminating occupational accidents**

- Increase operational efficiency by going paperless (e.g., eliminating the need for paper checklists)

**Polyplastics recognized by the DBJ for its “advanced, environmentally-conscious initiatives”**

In March 2020, following evaluation by the Development Bank of Japan Inc (DBJ), using the screening system (grading system) it developed to evaluate corporate environmental management, Polyplastics was rated as an “Advanced company in activities for environment preservation.”

**Environmentally-friendly logistics**

The Fuji Plant is actively working with logistics companies to reduce CO₂ emissions generated from products transportation processes. There was a large drop in demand due to the COVID-19 pandemic; however, the subsequent and sudden rebound in demand has meant a corresponding increase in urgent shipments. As a result, specific energy consumption, as an indicator of the energy efficiency of our logistics operations, was 3% higher than FY2019, but we are actively working to shorten overall delivery distances, to utilize backhaul shipping, modal shifts, and other practices that will help reduce our CO₂ emissions.

**TOPICS**

**Installation of additional detectors as a result of stronger VOC regulations in China**

To reduce greenhouse gas emissions, China’s government has strengthened its VOC (Volatile Organic Compound) gas detection and warning-related standards. Accordingly, Nantong Plant has installed additional gas detectors to ensure any VOC or other gas leakage can be immediately identified and treated.

**GROUP WIDE SAFETY ACTIVITIES**

**GROUP TARGET AND RESULTS**

<table>
<thead>
<tr>
<th>Year</th>
<th>Target</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>0.07</td>
<td>0.33</td>
</tr>
<tr>
<td>2017</td>
<td>0.4</td>
<td>0.4</td>
</tr>
<tr>
<td>2018</td>
<td>0.2</td>
<td>0.2</td>
</tr>
<tr>
<td>2019</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>2020</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

*Occupational accident incidence safety indicator. This indicator represents the number of employee lost-time injuries and non-lost-time injuries per 200,000 working hours.*
At Polyplastics, we have made efforts to create a work environment where employees can appealingly realize their potential, irrespective of their gender, nationality, age or other attributes. As part of this, we have established a management system in our Group companies utilizing national staff who play a larger and more independent role. There have been already some national staff who played important roles as top management in Group companies, and FY2020 saw that other national staff members were newly assigned as managing directors in Group companies. Promoting localization of management makes it possible to meet the needs of local employees meticulously, to achieve smooth business operation based on deep understanding for each country’s environment, and, as a result, to provide more opportunities for national staff to achieve better performance.

National staff appointed Managing Director of Group company

I became a member of PTM in April 2003 as the first employee hired upon construction of the PTM Nantong Plant, and in the years since, I have worked in the Human Resources Department, ESH Department, and as General Plant Manager and, later, Assistant Managing Director before receiving the great honor of being appointed Managing Director of PTM. In recent years, the Chinese government has enacted a variety of safety enhancement, environmental protection and energy efficiency-related laws and regulations for chemical plants. In order to ensure stable plant operations in this environment, it is essential that not only the company but all of its employees, as well, be acutely responsive to the changes around the company. I view my role as providing employees with a positive model and fostering mutual trust that leads to the development of a highly productive team, from which both the employees and the company will benefit and grow.

Training systems to foster diverse human resources

Training for newly assigned managers
We implement a standardized training program for newly assigned managers across the entire Polyplastics Group designed to facilitate mutual understanding and respect of diversity, cultivation of globally applicable skills and the creation of a human resources network.

Management training using LIFo®
In Taiwan, management training was provided to managers who utilized the LIFo approach, focusing on individual strengths and styles. Thanks in part to this, employee satisfaction scores increased by 27.3% in the FY2020 employee engagement survey.

### TOPOCS

Create an employee-friendly workplace
Our aim is to create a company which is accommodating of diverse human resources and which enables them to effectively and happily perform their duties. As the foundation for such an environment, we develop mechanisms to facilitate the taking of paid leave, and we operate various employee-focused systems, including employee reappointment and rehiring systems and childcare and family care leave systems.

Polyplastics achieved the highest rating of the “DBJ Health Management Rating” for finance
In December 2020, the Development Bank of Japan (DBJ) introduced the world’s first finance menu for its “Health Management Rating” method, and, in terms of “DBJ Health Management Rating” finance, we received the top rating in recognition of the high level of emphasis it places on employee health.

Childcare Leave Usage Rate
We actively encourage employees to make use of childcare leave. In FY2019, the childcare leave usage rate among women employees was 100% and 73.3% among men.

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At Polyplastics, we pursue CSR activities in the entire Group. Up until now, each Group company has acted independently in pursuing CSR activities; however, in order to enhance both the quality and quantity of our activities, we have created a network which brings all of our CSR-related members from every company together. The aim of this network is to facilitate the smooth exchange of ideas and information between the Headquarters and Group companies, as well as between the Group companies themselves, in order to make our initiatives more active and effective. Also, in implementing our social contribution activities, the CSR-related members belonging to this network will be spearheading local initiatives aimed at “contributing to the prosperity of local areas,” “cultivating the next generation” and “supporting employee-led social contribution activities.”

Three focus areas for social contribution activities

# Contributing to the prosperity of local areas
Employees around the world doing what they can to enrich their local communities

# Cultivating the next generation
Providing the children who represent the future of society with learning opportunities via Polyplastics-style initiatives

# Supporting employee-led social contribution activities
Supporting volunteering minded employees at each of our business sites

Organizer’s Comments

Polyplastics is doing what it can to ensure that we live in a healthy and prosperous community. This initiative is a great way to connect to nature and experience seeing how human actions directly affect the waterway. Even though it’s a small activity in the world, it brings elation that we are helping to improve the watershed locally and that we can collect data to help educate the public about the importance of water health. Although just two PolyUS members and their families participated in this year’s event, we are striving for more participation in the future.

Kuantan
Donating plant equipment to educational institutions

# Cultivating the next generation
The Kuantan Plant in Malaysia made a donation to educational institutions of injection molding machines, analytical instruments and other plant equipment that is no longer used. Everything that was donated was equipment that is no longer suitable for industrial use but still more than suited for educational use. This initiative was intended as way of contributing to the education and development of the next generation.

Fuji
Initiatives for cultivating the next generation

# Cultivating the next generation
In recent years, children in Japan have fewer opportunities to experience manufacturing first-hand. As a manufacturing company, we are motivated to help cultivate the next generation, as they represent the future of manufacturing, and, towards that end, we undertake educational activities aimed at local children and students. In FY2020, we worked in coordination with the Fuji Chamber of Commerce & Industry to provide vocational presentations at Shizuoka Prefectural Fuji-Higashi High School and Fuji Municipal Yoshiwara-Kita Junior High School. We also welcomed students visiting from Fuji Municipal Fuji-Minami Elementary School as part of their life sciences studies.

Leuna
Donating to organization supporting pediatric cancer patients and their families

# Contributing to the prosperity of local areas
As a result of an employee-proposed initiative, employees at the Leuna Plant in Germany donated approximately 2,000 euros to an organization which provides support to local pediatric cancer patients and their families. The money donated will be used as funding for recreational activities and the purchase of toys for children who have reached the end of their long-term treatment and for supporting the families of children who have died from cancer.

Shanghai
Receiving the office building’s trash separation contest award

# Supporting employee-led social contribution activities
Employees at the Shanghai office in China are being proactive about trash separation in their office. And, in FY2020, their efforts were rewarded with the receipt of the Environmental Award as part of the Trash Separation Contest held at their office building.
Doing what we can in the midst of the COVID-19 pandemic

As a result of the infectious spread of COVID-19, many of the social contribution activities that involve employees gathering together had to be canceled in FY2020. However, at Polyplastics, because we believe that it is important to continue these activities, even if the scale is reduced or the formats are changed, we have tried and found different ways to keep contributing to society, such as by conducting activities from home or via online. Here are some examples of the activities we carried out in FY2020.

### “Mottainai” Initiatives during the COVID-19 pandemic

Each year for the past three years, we held the “Mottainai” initiatives event in which our employees can donate household goods that they no longer use. In a normal year’s event, employees bring in their goods on the event days, and they are distributed to those in need by NPO Mottainai JAPAN, however, because the event had to be canceled in FY2020 due to the COVID-19 pandemic, each site in Polyplastics set up donation boxes instead. After discussion with the NPO about what goods to donate, we decided, based on the current situation, to include soap and other hygiene items. Also, in order to give employees a better understanding of the pandemic situation in the recipient countries and help give them a greater incentive to participate, information about what is happening in those countries was provided by the NPO and compiled into articles that were shared in company bulletin board. The employees responded to this by donating nine boxes full of goods, including soap.


### Supporting employee-led social contribution activities

Polyplastics places great importance on ensuring company business practices are in compliance with laws and social norms and, towards this end, promotes compliance-related activities from a variety of perspectives to enhance each and every employee’s awareness of compliance. In FY2020, some Group companies implemented their own, independent initiatives in addition to the Group-wide activities.

#### Hold a “Compliance Photo Contest”

Across the Polyplastics Group, August is Compliance Awareness Month, and it is used as a time to reaffirm the importance of compliance as well as to ensure compliance-related practices are in place and being followed. During Compliance Awareness Month in FY2020, individual companies within the Group implemented their own, original program in addition to the Group-wide program in order to ensure that the information and approaches were tailored to local conditions and social considerations.

In Germany, TAP and PolyEU jointly ran a Compliance Photo Contest intended to raise individual awareness about compliance violations. Photos portraying the sorts of workplace compliance violations that can commonly occur were collected and a winner was selected.

#### Introduction of “three lines of defense” to strengthen the compliance system

At Polyplastics, we have applied the “three lines of defense” approach, which is widely used in internal control, to compliance. The three lines of defense can be roughly sorted between “Operations departments,” “Administrative departments” and “Internal auditing departments,” and each of these performs specific defense functions tailored to their role. In FY2020, these three lines of defense were introduced into three areas representing high compliance-related risk (quality-related fraud, subcontractor-related legal impropriety, harassment prevention).

Clarity of each department’s roles following introduction of the three lines of defense

<table>
<thead>
<tr>
<th>First line of defense</th>
<th>Second line of defense</th>
<th>Third line of defense</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operations departments</td>
<td>Administrative departments</td>
<td>Internal auditing departments</td>
</tr>
<tr>
<td>Take ownership of compliance risks by performing risk control</td>
<td>Perform monitoring of the first line of defense</td>
<td>Provide reasonable guarantees</td>
</tr>
<tr>
<td>• Identify compliance risks</td>
<td>• Check that the PDCA cycle is being implemented properly</td>
<td>• Perform checking from an independent position</td>
</tr>
<tr>
<td>• Take action to address identified risks</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>