

*Shaping a Sustainable Society
with Engineering Plastics*



CSR Report 2025

Corporate Social Responsibility
2024.4 - 2025.3

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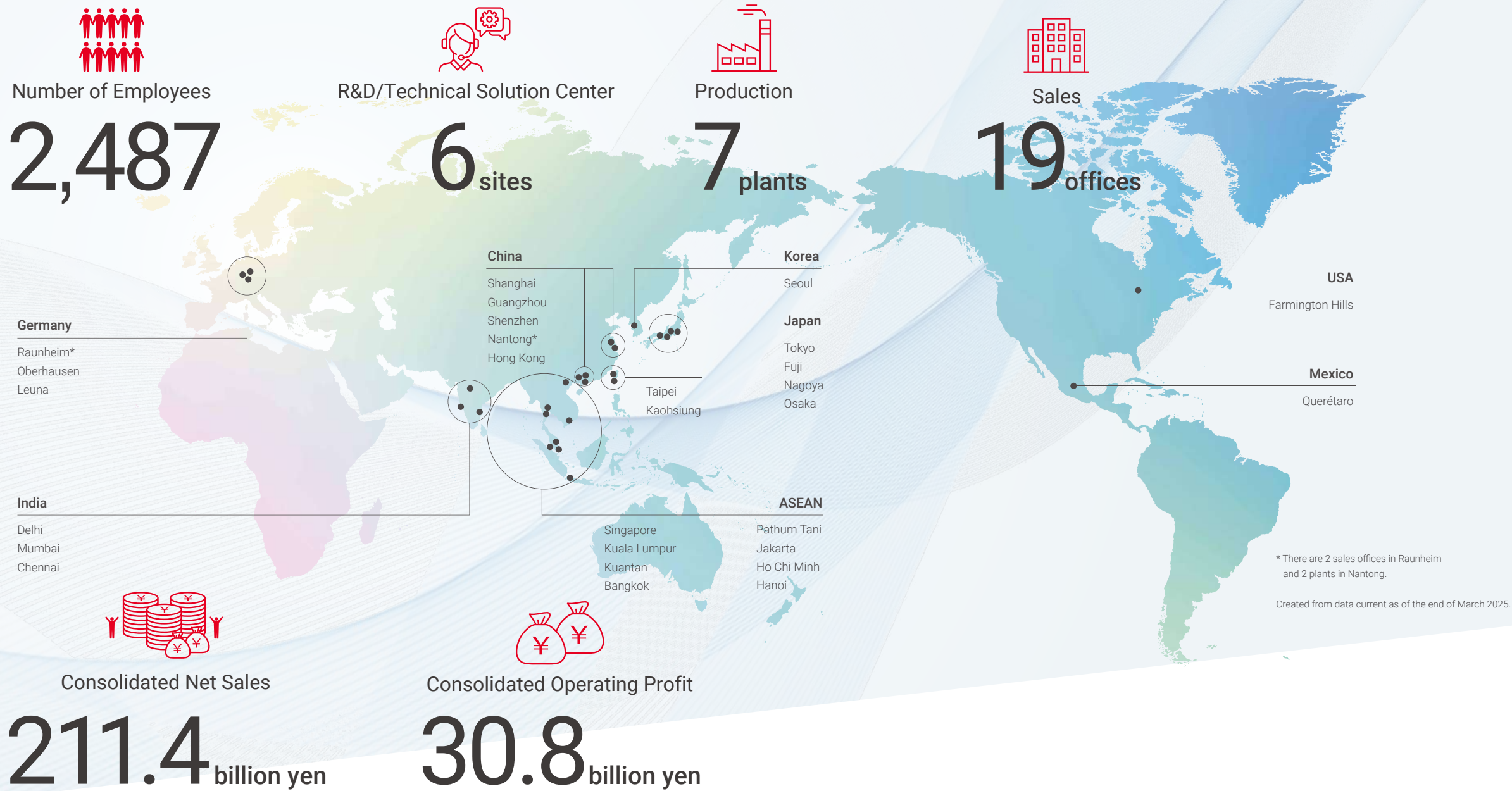
Our Sustainability Site

Polyplastics
DAICEL Group

At a Glance

Supporting global manufacturing with engineering plastics

Polyplastics is Japan's first specialized manufacturer of engineering plastics. Engineering plastics are made from functional resins with 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. Through its network of 32 bases spread across 13 countries and regions, the Polyplastics Group provides engineering plastics 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	Takashi Miyamoto, Representative Director and President
Number of Employees	2,487 (Polyplastics Group, as of March 31, 2025)
Business Operations	Manufacturing and sales of various types of engineering plastics and polymers

Editorial Policy
This report contains information about the activities the Polyplastics Group conducted during the 2024 fiscal year. The term “employees” as used in this report refers to all those who work in the Polyplastics Group.

Applicable Period
April 1, 2024 to March 31, 2025

Organization Covered
The Polyplastics Group

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Acetal Copolymer DURACON® POM Well-balanced mechanical properties and outstanding sliding properties	Polybutylene Terephthalate DURANEX® PBT Superior electrical properties and reliability for electronic devices and components	Polyphenylene Sulfide DURAFIDE® PPS A linear polymer that is extremely tough and shock resistant	Liquid Crystal Polymer LAPEROS® LCP “Super Engineering Plastics” with thin-wall flowability that challenges assumptions about engineering plastics	Cyclic Olefin Copolymer TOPAS® COC Superior transparency and safety suited to healthcare and food packaging applications	Polyethylene Terephthalate RENATUS® PET High heat resistance and superior electrical properties rivaling those of thermosetting resins	Long Fiber Reinforced Thermoplastics PLASTRON® LFT Combining rigidity and high impact strength to expand the scope of resinification	Engineering plastics Fine powder DURAST® Powder Enabling improved properties, streamlined manufacturing process, and reduced material loss	Polyetherketone SARPEK® PEK High strength and rigidity with higher heat resistance and durability to replace metals in harsh environments
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Our CSR

Shaping a Sustainable Society with Engineering Plastics

Shaping an abundant future for society through our engineering plastics business, mentioned in our Corporate Philosophy, is our Corporate Social Responsibility (CSR). We focus on CSR both in terms of business activities and social contribution activities, while actively working to meet the expectations of the global community in SDGs, Carbon Neutrality and other areas.

Toward a Sustainable and Abundant Future for Society

SUSTAINABLE
DEVELOPMENT
GOALS

Circular Economy

Carbon Neutrality

As part of our efforts to facilitate and strengthen CSR activities within the Polyplastics Group, we use the perspectives of the SDGs as important indicators when putting our approach to CSR into action.

Corporate Philosophy

MISSION

We contribute to building an abundant future society by innovation and developing talented and responsible people, through pursuing the unlimited potential of engineering plastics

VISION

The excellent solution provider for engineering plastics

We will continue to provide the excellent solutions for engineering plastics to our customers, in technology, quality, services, supply, and all other aspects

VALUE

1. The "Polyplastics-Way": We create value together with our customers

- We always stand closest to our customers.
- We understand customers' needs by knowing our customers from the inside out.
- We continue to provide higher-than-expected value based on brilliant technology and services.
- Following the above, we build strong relationships of trust with our customers and grow and develop together with them.
- We call these activities the "Polyplastics-Way," which is our most important basic value.

2. The "Polyplastics-Family": Our teamwork

- We consider each other important. We respect individuality and diversity.
- We emphasize teamwork based on mutual trust and cooperation among all employees.
- At the same time, as a team, we embrace the challenge of seeking to constantly evolve.
- We call this team the "Polyplastics-Family," which is our most important basic value.

Engineering Plastics Business

Contributing to the shaping of an abundant society through engineering plastics solutions

Harmony with Environment

Reducing environmental impact and carrying out business operations in harmony with environment

Developing Talented and Engaging Human Resources

Utilizing and contributing to the development of talented and engaging human resources

Compliance

Prioritizing compliance and carrying out business in a socially fair and appropriate manner

Contributing to Society

- Contributing to local prosperity
- Cultivating the next generation
- Supporting employee-led social contribution activities

Business Activities

Contributing to Society through Our Business Activities

Social Contribution Activities

Providing Opportunities for Social Improvement

CSR Policy

With the aim of shaping a sustainable and abundant future for society, we pursue CSR in our business activities and social contribution activities.

CEO Message

Engineering Plastics for a More Sustainable Future

Engineering plastics offer limitless possibilities. As an essential material for both past and future manufacturing, we are committed to creating innovative and sustainable engineering plastic solutions through co-creation with diverse partners.

Commemorating Our 60th Anniversary

In FY 2024, our company proudly celebrated its 60th anniversary. When we were founded in 1964, Japan was in the midst of rapid economic growth, marked by the Tokyo Olympics. Since then, we have weathered numerous economic challenges, including the bursting of the IT bubble in 2001 and the global financial crisis in 2008. Each time, thanks to the unwavering support of our customers, we overcame adversity and steadily grew into a leading company in the field of engineering plastics. I would like to take this opportunity to express my sincere gratitude. In FY 2023, the global logistics disruptions triggered by the COVID-19 pandemic led many manufacturers to accumulate large inventories of raw materials. As a result, it took longer than expected to reduce the excess inventory in the market, making the year particularly difficult for us. However, in FY 2024, despite a global decline in production volume among Japanese automobile manufacturers, we achieved a recovery in performance. This was driven by the emergence of AI-equipped smartphones and PCs, the increase in production of AI servers, and our strengthened sales and R&D efforts targeting Chinese automakers and parts manufacturers. On the production front, we began commercial operations at our new POM plant in Nantong in November, with an annual capacity of 90,000 tons. This has enabled us to establish a system that meets the strong domestic demand for POM in China, while also improving lead times and reducing transportation costs. We are now better positioned than ever to respond to the evolving needs of our customers.

Inevitable 1.5°C Rise in Global Average Temperature

At the same time, a look at the global environment in 2024 has revealed that the global average temperature will definitively rise by at least 1.5°C over pre-Industrial Revolution levels (according to the Copernicus Climate Change Service, a meteorological information organization run by the EU). As this exceeds the limit on the magnitude of the increase in temperature as set forth in the Paris Agreement, which constitutes an international framework for countermeasures intended to deal with global warming, the development of laws by each country to achieve full-scale decarbonization through carbon dioxide emissions trading schemes, carbon taxes, and other carbon pricing initiatives will now go into full swing. In addition to working toward the attainment of carbon neutrality by 2050 and halving total GHG emissions by 2030

(on the part of the Daicel Group compared to 2018), we must seek to create comprehensive environmental solutions with a greater sense of urgency than ever before. Accordingly, we launched the DURACIRCLE® brand to address rapidly changing environmental needs and trends around the world and further accelerate the implementation of environmental solutions. “DURA” was taken from the word “durable”, representing the durability of engineering plastics which is a hallmark of DURACON® POM and other brands in our engineering plastics business. Combined with “CIRCLE” to evoke the concept of a cycle, the name expresses our dedicated commitment to pursue 100% recycling of engineering plastics as a leader in the field. Looking ahead, we will unite the full strength of the Daicel Group to achieve the biomass conversion of all engineering plastic raw materials. At the same time, we will build a comprehensive circular scheme for all engineering plastics by integrating mechanical recycling, chemical recycling, energy recovery, and carbon-to-feedstock technologies. Through these efforts, we aim to lead the way in creating a truly sustainable future for engineering plastics.

Engineering Plastics for a More Sustainable Future

For more than half a century, we have stood closest to our customers, delivering value that exceeds expectations through our exceptional engineering plastics technology and dedicated service. Together with our customers, we have grown and evolved. Through our value co-creation initiative, the Polyplastics-Way, we believe that the engineering plastics we develop have the power to make the world more sustainable. Guided by our unwavering commitment to realizing a sustainable society, we will continue to walk alongside our customers—shaping their needs into tangible solutions through engineering plastics. This is the core value that defines who we are.

Takashi Miyamoto
Representative Director and President





DURACIRCLE® Launched Toward 100% Engineering Plastic Recycling

The rise in extreme weather and natural disasters has made climate change a major global challenge.

As decarbonization laws globally advance, stricter regulations are expected beyond 2030, urging companies to adopt environmentally-friendly products. In FY 2024, we launched DURACIRCLE® to meet these environmental demands and drive sustainability through innovation in engineering plastics.

Our Commitment to Challenge as the Leader in Engineering Plastics

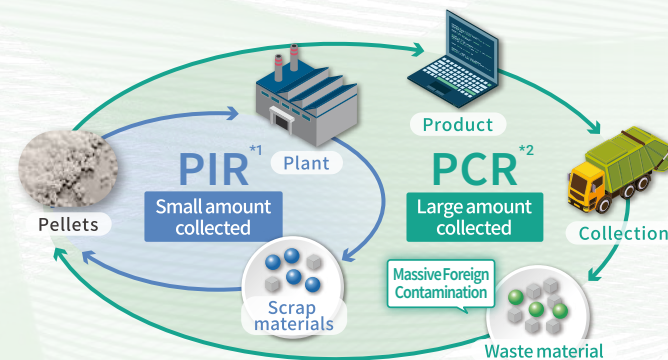
As a leading company in engineering plastics, we are deeply committed to the challenge of achieving 100% circularity. Our DURACIRCLE initiative embodies this determination, aiming to co-create sustainable value with our customers. Through the expansion of mechanical recycling, chemical recycling, biomass utilization, CO₂ utilization and all related environmentally-friendly products, technologies, and services, DURACIRCLE represents our unwavering dedication to building a more sustainable future together.



Major Challenges in Recycling Processes

Recycling—recovering waste plastics and reusing them as raw materials for new products—can make a significant contribution to reducing environmental impact. However, this

process faces several major challenges, including securing sufficient quality and quantity of collected materials, degradation of resin performance due to repeated use, and contamination from impurities such as dirt and metal particles. Moreover, as recycling efforts expand from industrial waste to general household waste, the level of contamination in waste plastics increases, making reuse even more difficult. This growing complexity presents another significant hurdle in achieving effective and sustainable recycling.



*1 PIR: Post-Industrial Recycling: Recycling of scrap materials and other materials generated in the manufacturing process prior to delivery to the final consumer

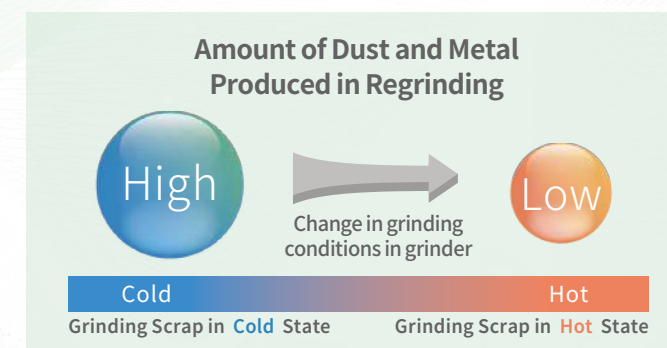
*2 PCR: Post-Consumer Recycling: Recycling of items after they have been delivered to the final consumer

Providing Solutions for the Recycling of Engineering Plastics

We have begun a recompounding service and commenced developing resins based on the use of PCR-derived recycled raw materials as one possible solution for the recycling of engineering plastics to address the challenges that such recycling poses.

Recompounding Service

This service is an initiative through which the sprues, runners, and other molding scraps that are generated in customers' manufacturing processes are not discarded but are instead collected and ground by us and recompounded or made into pellets to become new products. By using this recycled material as a raw material, we can reduce the amount of virgin material used while maintaining product quality and even help lower the carbon footprint of products. This service was launched in FY 2023, and thanks to the cooperation of our customers, we have successfully established a stable system for collecting waste plastics—one of the key challenges we initially faced. In terms of quality stabilization, we have made significant progress in metal removal technologies. By carefully selecting the appropriate grinding equipment and optimizing grinding conditions through repeated trials, we have dramatically reduced the incidence of metal contamination. In particular, for certain types of grinders, we have found that regrinding molded waste while it is still hot—rather than after it has cooled—can significantly reduce the generation of dust and metal particles. Furthermore, we are continuing to explore advanced metal removal technologies in collaboration with external partners, including the potential introduction of new removal methods.



Launching of DURANEX® rG-PBT GHB336

PBT is widely used for automotive parts, electrical and electronic parts, and other uses thanks to its superior heat resistance and electrical properties. DURANEX® rG-PBT GHB336 constitutes a marketed grade containing approximately 30% recycled PET raw materials derived from PCR materials collected from the market and helps to reduce the product carbon footprint and improve recycled raw material usage rates. We also plan to commercially develop environmentally-friendly products made with the use of PCR raw materials in connection with other engineering plastic resins.

Customer-Focused Environmental Solutions

In addition to our work on mechanical recycling as introduced here, we are also developing all sorts of environmental solutions—from chemical recycling, biomass utilization, CO₂ utilization, and the provision of products and technical services. In order to dispel customers' concerns about the stability of supply and quality and performance matters when it comes to environmentally-friendly products and meet their diverse environmental needs, we will continue to offer a comprehensive environmental solutions. What will help make this possible is DURACIRCLE.



02 Daicel Group's New Task Force! Our Challenges in the xEV Market

In recent years, we have seen a shift to xEVs, such as plug-in hybrid EVs (PHEVs), fuel-cell EVs (FCEVs), and battery EVs (BEVs), in countries around the world. Since EVs use electricity rather than gasoline, their use leads to significant reductions in greenhouse gas and harmful exhaust emissions while they are being driven, making them environmentally-friendly and sustainable options that contribute significantly to carbon neutrality.

Daicel Group Launches the xEV Task Force

In order to promote the spread of sustainable xEVs, the Daicel Group has also introduced a wide range of products, including high-voltage connectors, power modules, engineering plastics for DCDC converters, circuit breakers using ONE TIME ENERGY[®],*1 power storage and transmission systems, and functional films for in-vehicle displays. In the past, our efforts were limited to individual group company-level or SBU*2 approaches, and as a result, the Daicel Group was not fully able to provide optimized products and services for the xEV market as a whole.

*1: Technology employed in airbags to generate instantaneous power

*2: Abbreviation for Strategic Business Unit; refers to a business division operating within the Daicel Group



xEV Task Force

Offering Fully Optimized Products and Services

We established the xEV Task Force to enable the Group to provide comprehensive solutions to the xEV market, whose profile will continue to rise in the future, by leveraging the know-how amassed to date by each SBU and Group company and the relationships of trust that have been cultivated with our customers. This task force aims to enable the Group to become the trusted partner for customers by providing products and services fully optimized by the Daicel Group for the xEV market and creating opportunities for new business through the creation of value together with customers.

EV-Specific Challenges

Because EVs are driven not by engines but by motors, the demand for high-heat resistant materials is declining. If anything, new needs for maintaining and managing electronic parts and systems at optimal temperature levels (thermal management) must be satisfied. In addition, EVs are equipped with high-voltage batteries, such that we need to prevent occupants from suffering electric shocks and secondary disasters from occurring in the event of a traffic accident or malfunction.

Together Toward Greater Heights in xEV with Daicel Group

When it comes to xEVs and BEVs in particular, thermal management for controlling vehicular heat is seen as

something that is very important given the impact it has on fuel economy and battery performance and durability. Since thermal management in BEVs maintains the temperature around the batteries at 100°C or less, it is possible to replace the nylon or other high-heat resistant materials typically used in gasoline-powered vehicles with POM or long-fiber polypropylene (PP). The use of POM or long-fiber PP instead of metal or PPS will lower the product carbon footprint as well as amount of energy consumed during molding.

It is possible to safely and instantaneously shut off any high-voltage and high-current batteries used in EVs with the use of a circuit breaker for which the advanced technological capabilities of ONE TIME ENERGY, a piece of technology wielded by Daicel's Safety SBU, have been harnessed. Daicel's Smart SBU also provides protective materials for parts, including insulators for EV motors and power modules featuring integrated power semiconductors. Comprehensively providing safe, reliable, and highly functional products in the xEV market by marshalling such capabilities of the Daicel Group will certainly help the xEV market evolve further in the years to come.

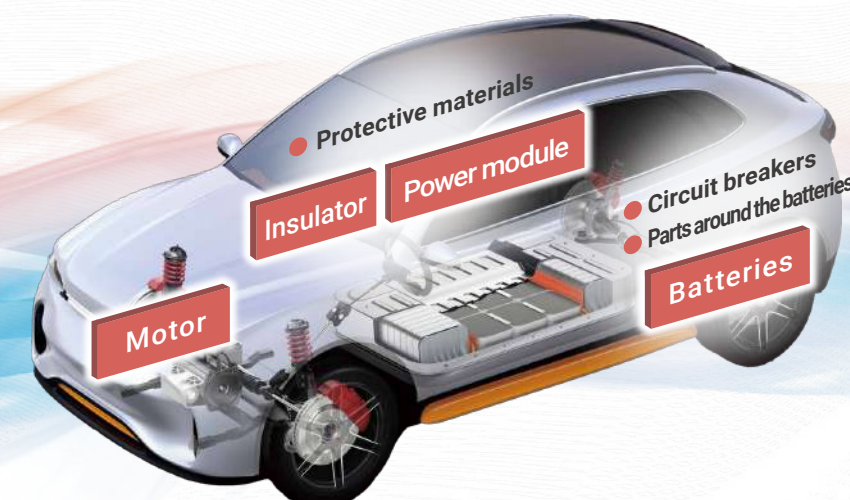
Marshalling Daicel Group's strengths

Polyplastics
DAICEL Group

DAICEL
Safety SBU
Smart SBU

Contributing to a Sustainable Society and Looking to the Future

Whereas around 10 million xEVs were sold globally in 2021, this number is expected to undergo a nearly eight-fold increase to around 80 million xEVs by 2035. Nevertheless, the history of this sector has just begun. All sorts of new challenges to be addressed will likely continue to emerge, such as in terms of a lack of charging infrastructure and the time it takes to charge batteries. To further promote the spread of xEVs, solutions to these new challenges will be required. In the future, we plan to create new value for the xEV market by working on developing new resins across Group companies and SBUs and considering partnerships with outside research and development teams. Going forward, we will marshal the capabilities of the Daicel Group to offer comprehensive solutions for the xEV market and help realize a sustainable society through the creation of new value.





Engineering Plastics Business

Contributing to shaping of an abundant society through the provision of engineering plastics solutions

Subject
01

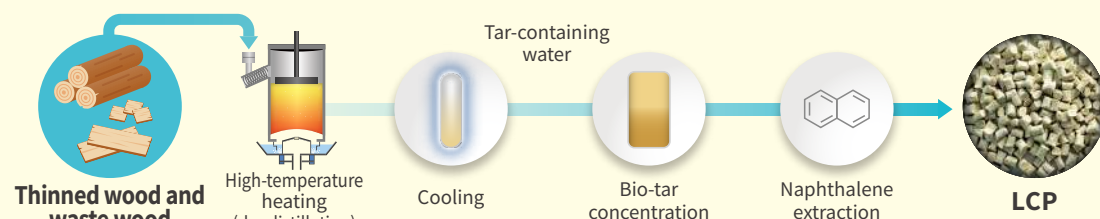
Making All Key Monomers Sustainable



Polyplastics has previously unveiled LAPEROS® LCP, a plastic made using biomass-derived key monomers. This time, we introduce another important key monomer of LCP as we have begun to study the use of sustainable materials.

Until now, naphthalene-derived monomers have been used quite extensively for grades of LCP used primarily for narrow-pitch connectors. Naphthalene is contained in coal tar, which is generated during the high-temperature process of producing coke from coal. However, the environmental impact is high since carbon dioxide is generated whenever coal is burned. Making such monomers sustainable is thus a key challenge. In order to make all raw materials of LCP sustainable, it is vital that we determine the feasibility of making naphthalene-derived monomers sustainable. To address this, we turned our attention to a traditional Japanese practice that has been passed down for generations: charcoal making. Charcoal is produced by heating wood at high temperatures in a charcoal kiln through a process known as dry distillation. During this process, gas components are released and can be cooled to obtain wood tar—also known as bio-tar. This method allows for the reuse of resources such as thinned wood and scrap timber, making it an environmentally-friendly

approach. Moreover, naphthalene can be extracted from this bio-tar, offering a valuable raw material. In many ways, this traditional technique has emerged as a truly sustainable and promising solution for the future. LCP grades developed with sustainable raw materials are also superior in terms of thin-walled and high liquidity and are used in narrow-pitch connectors. These narrow-pitch connectors are essential in various mobile devices, wearable terminals, in-vehicle inverters, converters, battery-monitoring systems, and probe cards for inspecting semiconductors and printed circuit boards and will play an important part in the development of these industrial sectors. The grade of LCP that supports such materials is capable of meeting the needs of our customers' environments, while also contributing to the continued advancement of future society. We will provide comprehensive environmental solutions as a leading company in the area of engineering plastics while we continue to promote the development of environmentally-friendly products.



Making naphthalene-derived monomers sustainable

Subject
02

Development of New DURACON® POM Short-Fiber Cellulose Reinforced Grades



Low-impact materials are gaining attention in building a recycling-oriented society, with plant-derived cellulose offering strong potential. We are developing DURACON® POM grades with short-fiber cellulose to meet environmental needs. Cellulose is a recyclable, abundant fiber that helps reduce CO2 emissions throughout a product's life cycle. These grades use recycled cellulose made via a low-waste solvent method, and the fibers come from non-edible parts, improving resource efficiency. Further impact reduction is possible by combining cellulose with DURACON® bG-POM and our recompounding service. A key feature of this material is its ability to retain POM's excellent sliding properties. Unlike glass fiber-reinforced POM, which can cause wear on counterpart materials, cellulose enables both high rigidity and smooth sliding. With increased cellulose content, stiffness comparable to

glass fiber grades can be achieved. This grade is suitable for a wide range of applications, including automotive safety parts, mechanical components, daily items, and PC keyboard parts. Its versatility and performance make it a promising solution for sustainable innovation in engineering plastics.

Three Key Points for an Environmentally-friendly Approach

Short-fiber cellulose-reinforced grades



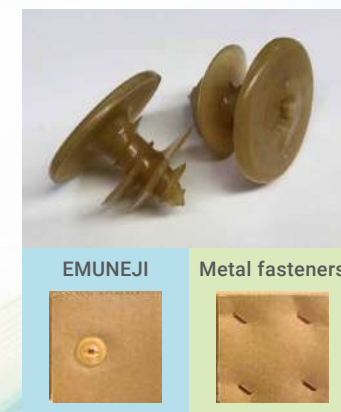
Subject
03

PLASTRON® LFT Cellulose Fiber-Reinforced Grade



The transportation company Asakawagumi Unyu provides a comprehensive array of logistics services, including ground transportation, warehousing, and packaging, on top of its port transport operations. Our PLASTRON® LFT cellulose fiber-reinforced grade has been selected for use in Asakawagumi Unyu's EMUNEJI. The EMUNEJI are a plastic packaging material used to fasten reinforced cardboard for transport. While metal fasteners are limited in terms of the tools used to attach them and may require fairly skilled work, EMUNEJI can be easily attached with an electric screwdriver or other such tool, thereby increasing work efficiency. Since the tips of these screws do not protrude, they also enhance safety during handling and transport whenever work is being performed, or goods are being transported. In recent years, there has been a growing demand for packaging materials that contribute to reducing environmental impact. In response to this trend, our LFT cellulose fiber-reinforced grade—offering both sufficient mechanical strength and the benefits of a biomass-based material—has been selected for use. Packaging materials for transport are sometimes used for exporting goods and must, therefore, be tough enough to withstand exposure to harsh environments for logistics. The

cellulose fibers used in our newly adopted grade are long fibers, which enable the material to achieve higher impact strength and greater rigidity. From an environmental standpoint, this cellulose fiber is a plant-derived sustainable material and does not generate residual substances when incinerated, unlike glass fibers and metals, which means that it can undergo thermal recycling, thus helping to reduce industrial waste. Since the amount of energy consumed in manufacturing this cellulose fiber is less than it is for the nylon resin that is used in the general grade of EMUNEJI, the product carbon footprint is also low. Since this grade is lightweight, its use contributes as well to a reduction in carbon dioxide during transportation by reducing emissions associated with transportation materials. We are actively advancing the development of environmentally-friendly products, including exploring grades that utilize post-consumer recycled (PCR) materials as the base resin for LFT.



EMUNEJI

Metal fasteners



Harmony with Environment

Reducing environmental impact and carrying out business operations in harmony with environment

Subject
01

Environmental Promotion System

2030 GHG Reduction Target

Daicel Group

Total GHG emissions
(Scope 1, 2)

50% reduction
(vs. 2018)

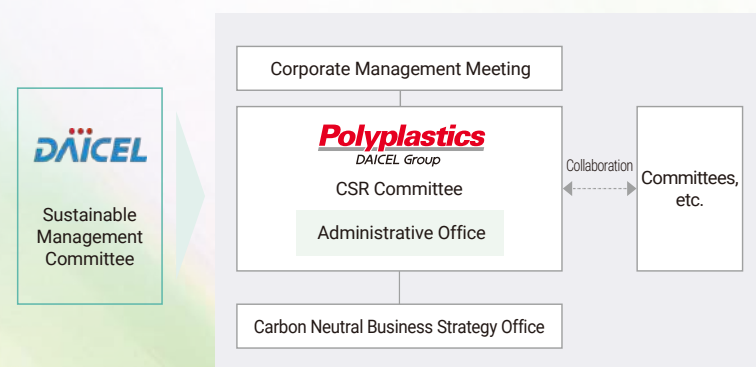
Polyplastics Group

PCF-focused GHG
emissions intensity
(including CO₂ derived from raw materials)

30% reduction
(vs. 2018)

CSR Promotion System

In addition to holding regular CSR Committee meetings, we also convene CSR Committee meetings on environmental business strategies for which the Carbon Neutral Business Strategy Office serves as the administration office. Based on the growing environmental needs of our customers, we will provide comprehensive environmental solutions, including market development with an understanding of the circular economy as a business opportunity, activities to meet GHG reduction needs, and the supply of green products.



Polyplastics Group Environmental Basic Policy

Based on our Corporate Philosophy, the Daicel Group Guidelines for Conduct and Code of Ethics, and our CSR policy, the Polyplastics Group is committed to reducing the environmental impact of all business activities in the development, production, and sale of our products. In doing so, we aim to contribute to achievement of a sustainable society in which economic development is attainable together with global environmental conservation.

1. Compliance with environment-related regulations
2. Contribution to environment through our products

We improve the convenience of society through our products and contribute to the development of a recycling-oriented economy by reducing the size, weight and extending the lifespan of our customers' products. In addition, we continue to actively address to solve social issues such as environmental problems through the development and provision of products and solutions that contribute to global environmental conservation.

3. Reducing the environmental burden in all business activities

In all business activities such as product development, production and sales, we actively work on protecting the global environment, including the following initiatives.

- Regular and quantitative grasping of environmental load
- Reduction of CO₂ emissions to mitigate climate change
- Promotion of energy saving activities
- Reduction / Reuse / Recycling of waste
- Reduction of emissions of chemical substances and waste to air, water and soil
- Utilization of renewable energy
- Effective use of water resources

4. Fostering an environmental mindset

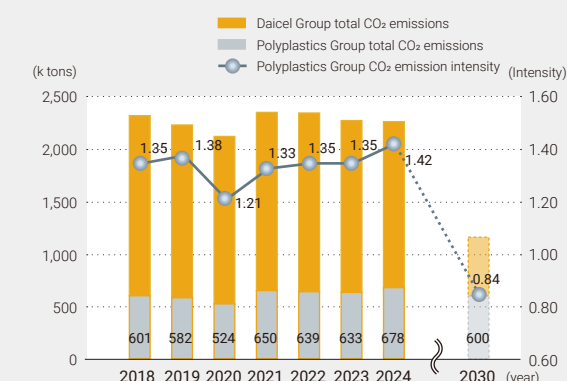
Subject
02

FY2024 Performance Medium-Term Targets

CO₂ Emissions Reduction

In FY 2024, CO₂ emissions increased slightly on a year-on-year basis from an increase in the volume of manufacturing, trial operations conducted at our new plant in Nantong, China (90,000 tons per year), and an increase in the amount of steam and electricity used to deal with plant-related problems. However, the rapid establishment of our new plant in Nantong, which came online in November, brought the rate of steam usage down by 11% over the initial forecast, resulting in lower CO₂ emissions than originally expected. We plan to make large investments for growth toward 2030, and although CO₂ emissions are expected to increase as a result, we aim to reduce emissions to the same level as in 2018, the base year. We will do it with thorough energy conservation through production and technological innovation, energy conversion away from fossil fuels, and other measures, as well as significantly reducing emission intensity.

Daicel Group total CO₂ emissions (Scope 1, 2)



Medium-Term Target

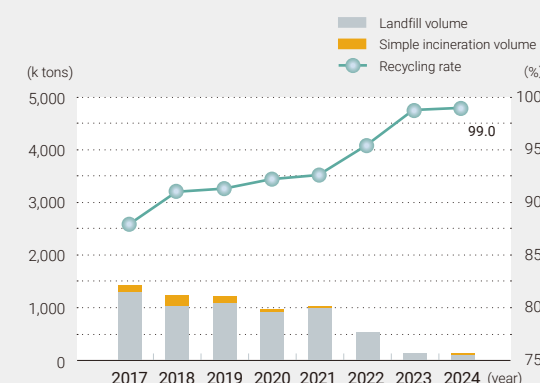
By 2030
Daicel Group
Total GHG emissions
(Scope 1, 2)

50% reduction
(vs. 2018)

Industrial Waste Reduction

From 2023 onward, the Daicel Group is using recycling rate as a management indicator. This fiscal year, our recycling rate rose by 0.2 points over the previous fiscal year to reach 99.0% thanks to the progress made in the sorting of items to be disposed of at the Kuantan plant. We are also continuing to study the feasibility of new ways of recycling waste at each of our plants. We are striving to further improve our recycling rate.

Recycling rate



Medium-Term Target

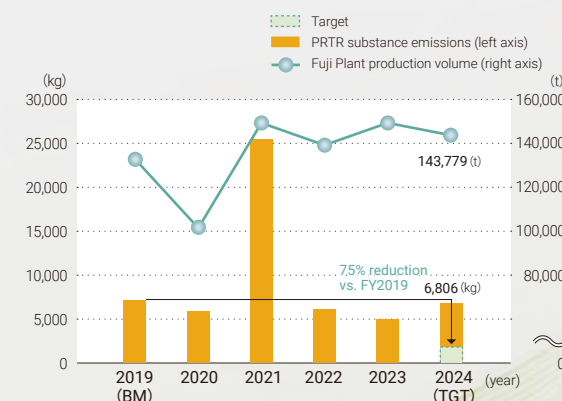
By 2025
Group recycling rate
At least 97%

Reducing Emissions of Chemical Substances (PRTR* Substances)

In accordance with the Law for PRTR and Promotion of Chemical Management (PRTR Law), we survey and monitor our annual emissions of the chemical substances covered by the law, and report the results to the government. In FY 2024, we maintained zero emissions of benzene as we had in the preceding fiscal year. On the other hand, we were unable to sufficiently remove formaldehyde with exhaust-treating scrubbers because of rising water temperatures during the summer, such that PRTR emissions rose slightly over the preceding fiscal year, which unfortunately prevented us from meeting our targets for FY 2024. We will work on reducing emissions of PRTR substances by studying the introduction of an exhaust gas combustion facility while continuing to upgrade our current facilities.

*Pollutant Release and Transfer Register

PRTR substance emissions(Fuji Plant)



Medium-Term Target

By 2024
75% reduction
(Fuji Plant, vs. 2019)



Subject
03

Kaohsiung Plant Cuts 1,500 t/year CO₂ with Advanced Control Technology



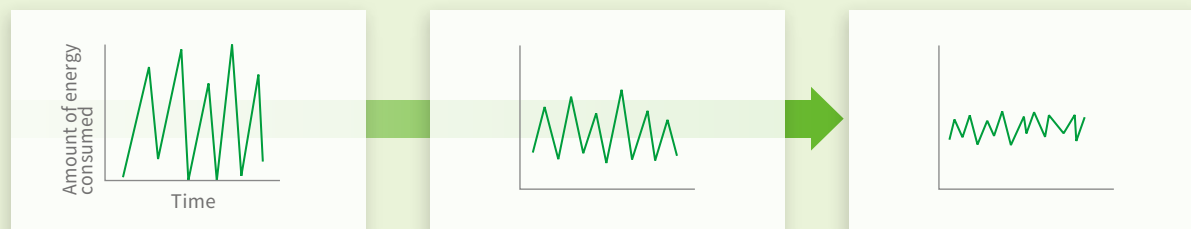
In FY 2022, Polyplastics introduced Advanced Control Technology (ACT) to optimize process control for a part of the POM production process (TOX process) at the Fuji Plant. This fiscal year, we took steps to introduce ACT at the Kaohsiung Plant, which also maintains a similar TOX process, in order to further accelerate the reduction of CO₂ emissions for the entire Group.

At the Fuji Plant, where ACT has already been introduced, optimizing the reduction of energy consumption across all steps by controlling processes for the entire distillation process has succeeded in reducing the amount of steam produced by 34,400 tons per year (equivalent to a reduction of around 4.4% for the entire Fuji Plant). This is about 1.5

times the reduction amount expected at the time of planning and translates into a reduction of approximately 4,500 tons of CO₂ per year. At the Kaohsiung Plant as well, the introduction of ACT is expected to reduce the amount of steam produced by 5,800 tons per year (which would translate into a reduction of 1,500 tons of CO₂ per year).

Advanced Control Technology

In a complex production process where multiple distillation columns interfere with one another, advanced control technology optimally controls the entire process to achieve efficient operations. Previously, temperature and pressure levels in each distillation column would be monitored and controlled by operators, such that optimally controlling the entire process would have been difficult even if each individual piece of equipment was operating optimally.



Energy consumption with conventional operations

Optimized for each individual piece of equipment

Plant-wide optimization through the adoption of Advanced Control Technology

Steam reduction	5,800t/year
CO ₂ reduction	1,500t/year
Efficient operations	Stabilization of quality

Through advanced control, it is possible to optimize the entire manufacturing process—not only reducing steam consumption, but also minimizing quality variations and alleviating operational burdens

We plan to introduce advanced control technology at the Kuantan plant in FY 2025 and at our Nanton plant thereafter. Advanced control technology is used to not only reduce CO₂ emissions but also help stabilize product quality and lessen the operational burden placed on work sites. Its application accelerates decarbonization and other sustainable initiatives for the entire Group.

Subject
04

Project for Logistics Innovation



In recent years, many companies have found themselves facing varied and complex challenges in the area of logistics including driver shortages, demands for better working conditions, including with respect to long working hours; excessive inventory; job specialization; and the need to reduce CO₂ emissions. In order to implement optimal solutions to these challenges for the entire Group, Daicel has launched a Project for Logistics Innovation to visualize and accelerate the prioritization of issues through a logistics assessment and other actions.

Through this project, we have been working to address logistics issues across the entire supply chain, such as by improving loading rates, identifying, and reducing delivery and waiting times and incidental work, and accelerating the processing of shipping instructions. Reducing the environmental impact is an important

theme among such logistics issues. Improving loading rates in particular is directly tied to efforts to improve transportation efficiency, the attainment of which is expected to reduce CO₂ emissions.

To successfully improve the loading rates, it is essential to gain the cooperation of our customers who receive the shipments, in addition to our own initiatives. As such, we have faced challenges in achieving significant progress. However, we were able to improve loading rates this fiscal year by engaging in repeated discussions and building a system of cooperation with our customers. Previously, goods were often shipped without fully loading the trucks. By reducing the frequency of orders and deliveries, we were able to improve transportation efficiency and thereby help reduce CO₂ emissions.

Reducing in CO₂ Emissions by Improving the Transport Loading Rate

In one example in which loading rates were improved, there was an issue where many deliveries were being made without loading trucks to full capacity.

In order to resolve this issue and ensure efficient deliveries, we asked customers to aggregate delivery dates and optimize the allocation of trucks through the introduction of the truck allocation system and held repeated discussions to achieve this goal. Our customers agreed with our proposal and made it possible to reduce the frequency of deliveries from once daily to once every other day. This outcome led to improved transportation efficiency as well as reduced CO₂ emissions from transportation.

Before



After



In the future, we aim to work not just on our own but also collaborate with other Daicel Group companies to realize joint delivery and joint warehousing initiatives and will strive to evaluate efficiency by ascertaining and analyzing data on material amounts, inventory data, and logistics costs. We also

plan on streamlining operations by reducing overseas deliveries and harnessing analytical tools in concert with the operations of our overseas plants and will develop proactive reforms in the area of logistics for the realization of sustainable logistics.

Subject
05

Introducing Solar Water Heaters



In China, energy-saving measures are being implemented as part of a national project and investment projects for the construction of plants and other facilities are also required to achieve high levels of energy conservation. At our new plant in Nantong, which was completed this fiscal year, we installed solar water heaters on the roof of the office and locker room building at the plant as part of efforts undertaken for the promotion of carbon neutrality. The solar-heated water is used to wash hands and for showers. This is expected to reduce electricity use by around 60 kWh/day and CO₂ emissions by approximately 46 kg/day. At our Nantong plant, there are also initiatives being taken that

involve the use of energy-efficient motors and air-conditioning equipment and varying the number of cooling tower fans and cooling water pumps in operation according to the load in order to optimize energy consumption. We will continue to operate environmentally-friendly plants and equip them with sustainable equipment and facilities.





Developing Talented and Engaging Human Resources

Utilizing and contributing to development of talented and engaging human resources

Subject
01

Toward Achieving “Sustainable People” Throughout the Daicel Group



With the recent trend toward globalization, it has become essential for companies to secure diverse human resources, and initiatives for diversity, equity, and inclusion (“DE&I”) have become even more important. The Daicel Group has positioned DE&I as one of its key management issues, and is creating a system that enables each of its diverse employees to maximize their unique abilities and individuality.

Diversity Week

In FY 2024, Polyplastics held the Diversity Week for the purpose of getting each of our employees to deepen their understanding of DE&I issues and think about diversity in more personal terms. During Diversity Week, various events, such as lectures, training, and discussions within departments, were held to give employees opportunities to think about DE&I from a variety of different perspectives. Here's some examples of this initiative.

Blind Soccer Experience

We organized a blind soccer experience to raise awareness of those with physical impairments and promoting discussions among employees. It is said that humans obtain 80% of their information through sight. Blind soccer is played by completely blocking the participants' vision, making them rely on voice, sounds, and trust in teammates, such that it is a sport that requires a heavy dose of communication skills and teamwork.



The participants in this event noted the following: “It was a chance to rethink and understand what is needed for communication” and that “It was a great experience in that I was able to learn about myself and about my teammates.” This experience involved the participation of 16 persons from various Daicel Group departments, including Daicel employees who are active as blind soccer players.

Career-related Lecture Delivered by Outside Director Okajima

Daicel's outside director, Mari Okajima, delivered a lecture that addressed DE&I and career development. She talked about what it takes to be a leader and the state of diversity with a focus on activities carried out by women. This lecture was presented in a hybrid format through both online and offline channels and was attended by 265 employees.



Subject
02

Silent Communication

In Hong Kong, a workshop was held to deepen understanding of minority groups. The purpose of this workshop was to get people to experience first-hand the difficulty of communicating with others without the use of sound and thereby promote understanding of those who are hard-of-hearing. The 13 employees who participated in this workshop wore soundproof earphones and played a game that required that they communicate with others through sign language, body language, and other such actions. Participants were reminded of the importance of understanding those with hearing impairments and learned about the importance of mutual respect in the workplace and about the ideas and notions that should be considered in order to create a workplace environment in which people of varied backgrounds can flourish.



Subject
03

Working with an Acceptance of Individual Differences



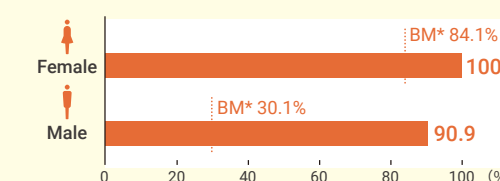
Polyplastics (Japan) is promoting initiatives to create a work environment where sexual minority employees can work without suffering disadvantage or discrimination. In FY 2024, we held, as we did the preceding year, an LGBTQ seminar for all employees to acquire basic knowledge of sexual minorities. At family days held by the Daicel Group at our Tokyo head office, an LGBTQ-themed picture book produced for participating employees and their families was introduced. At multiple in-house Diversity Week events organized throughout the Daicel Group, sweets placed in original packaging featuring a rainbow design symbolizing allies were distributed to participants in an effort to highlight the importance of working while accepting what makes each of us different. We will continue to promote initiatives to foster a work environment where everyone is mutually acknowledged and respected.



Creating a workplace where diverse employees can play active roles

Childcare Leave Usage Rate

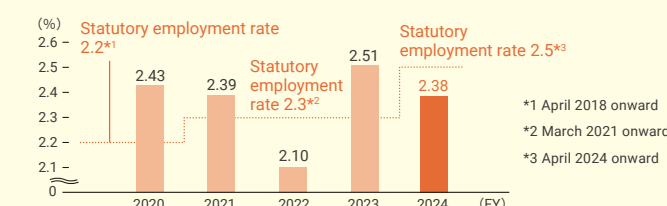
In FY 2024, the childcare leave usage rate for women was 100% and for men was 90.9%. The childcare leave usage rate for men exceeded the national average by 60.8 points.



*The benchmark is the FY2023 national average. (Based on the 2023 Basic Survey on Equal Employment by the Ministry of Health, Labour and Welfare)
*Childcare leave usage rate = number of employees who took childcare leave during the fiscal year / number of employees who had children born during the fiscal year

Rate of Employees with Disabilities

In FY 2024, the rate of employment for persons with disabilities was 2.38%, which fell short of the statutory employment rate of 2.5%. However, hiring activities continued to be carried out with a view to reaching the statutory employment rate and the rate of employment in a single month at the end of March 2025 improved to 2.73%. We will continue to exchange information not only with local special needs schools but also with organizations that provide support to persons with disabilities, further expand our hiring activities, and proactively recruit persons with physical disabilities other than those with intellectual disabilities.



*1 April 2018 onward
*2 March 2021 onward
*3 April 2024 onward



Social Contribution Activities

Providing opportunities to make society better as a corporate citizen

Contributing to Local Prosperity



Contributing to the prosperity of the local area, which is the foundation of the business activities

Cultivating the Next Generation



Offering a forum for nurturing the next generation for securing human resources that would sustain the future society

Kuantan

The Earth Hero

In Kuantan (Malaysia), we held an event called "The Earth Hero" for the purpose of promoting health and contributing to the local community. More than 100 employees and their family members participated in this event. After engaging in workouts through Zumba, aerobics, and jogging activities at a park near the plant, participants planted trees in the park and painted curbstones in need of some maintenance.



Hong Kong

Food Angel

In Hong Kong, we held a program known as "Food Angel" to provide box lunches for free to those in need of support. Eight employees participated and helped make 2,100 box lunches using surplus food provided by foodstuff companies.



Bangkok

Garbage-sorting Education for Primary School Children

In Bangkok (Thailand), we visited local primary schools and gave lessons on sorting trash. Since waste separation is not a common practice in Thailand, these lessons were given to convey the importance of this activity. Lessons were given using games to allow the children to learn while having fun.



Kaohsiung

Fuji Plant and TSC Tour for Taiwanese High School Students

A total of 38 teachers and students from a local high school in Kaohsiung visited our Fuji Plant and TSC in Japan. This visit was part of the Chemical Industry Program, which aims to provide career education related to the chemical industry. This was the second time the program had been held, following its first run in the previous fiscal year. After the tour, representative students delivered statements of gratitude and presented us with a letter of appreciation and commemorative gift.



Shanghai, Nantong, and Querétaro

Greening Activities

In Shanghai and Nantong (China), employees visited the desert in the northwestern part of the country and planted trees to help prevent further desertification of the region. In Querétaro (Mexico) employees and their families also planted 47 tree seedlings as a measure to prevent global warming.



Mumbai

Temple Clean-Up Activities

In Mumbai (India), we carried out temple clean-up activities with a local NGO. On the day, all employees participated in these activities and also made donations to support the development of female farmers. These initiatives were highly appreciated by locals and even featured by local newspapers.



Bangkok

Lectures on Engineering Plastics

In Bangkok (Thailand), we have been participating in a project to develop robot components using dies in collaboration with a local engineering university. As part of the project, a lecture was held to share knowledge on engineering plastics and related topics, which attracted 139 university students.



Hanoi

Seminars on Engineering Plastics Held at Hanoi University of Science and Technology

In Hanoi (Vietnam), we participated in a next-generation development project (called Joint Lab) undertaken jointly by several Japanese companies and held seminars for students covering topics from the basics of resins to the basics of molding. On the day, around 60 students participated, and some of them later indicating that they were able to gain practical knowledge and greater familiarity with the latest technologies.



Supporting Employee-led Social Contribution Activities



Supporting social contribution activities by leveraging the voluntary mindset of individuals

All locations

My Carbon Reduction Challenge



This fiscal year, an initiative known as the “My Carbon Reduction Challenge” was held across the entire Group, including overseas subsidiaries. For this initiative, individual employees declare what they can and should do to help reduce carbon dioxide, share photos after completing their activities, and collectively vote to determine which photos are the best of the best. In Malaysia, some employees declared that they would carpool with each other to get to work. The top five entries were presented with special prizes.



Farmington Hills

Toy Exchange



In Farmington Hills (United States), a toy exchange program was organized to collect donations of toys, books, stuffed animals, and other gently used items. The collected items were all donated to a local NPO and then delivered to children in foster care.



Seoul

Making Organic Soap



In Seoul (South Korea), we held an event for which six participating employees got to experience making organic soap. This event not only raised awareness among these employees of environmental issues through the use of naturally derived ingredients but also served as an opportunity to deepen interactions by having them work together.



Singapore

Think Global



In Singapore, we collaborated with Daicel Singapore to conduct a program called “Think Global” to learn about SDGs through card and role-playing games. Participants indicated that they were able to learn about the importance of the economy and environment and of striking the right societal balance through this event.



Daicel Group

“Mottainai* Initiatives” for the Seventh Consecutive Year



For the seventh consecutive year, we conducted “Mottainai Initiatives,” a program to collect items that people are no longer using at home and donate them to an NPO. In FY2024, the event was further scaled up with the addition of two new Daicel sites, and a total of 7,603 donated items were collected, exceeding the number donated the previous year.

*Mottainai means “What a waste!” in Japanese



Compliance

Prioritizing compliance and carry out business in a socially fair and appropriate manner

Subject

01

Kuantan Plant Achieves Silver Status in RBA-VAP

In response to the greater needs for CSR by customers, we began conducting voluntary CSR audits through the RBA Validated Assessment Program (VAP) at each plant as part of our responsible sourcing program in FY 2023. The Kuantan plant, which belongs to the group company in Malaysia, underwent an RBA-VAP audit last fiscal year. As a result, the Kuantan plant acquired Silver Status as a Sustainable Plant. Last fiscal year, we conducted an RBA-VAP audit at the Fuji plant as well in November and improvement measures addressing issues pointed out in the audit are being carried out. The Responsible Business Alliance (RBA) is an alliance of companies promoting sustainable values for workers, the environment, and business across the entire global supply chain and has set forth standards in its Code of Conduct to make sure that the working environment is

safe, that workers are treated with respect and dignity, and that business activities are ethically performed in a responsible manner in terms of the environment impact. Silver Status in Kuantan plant means that the plant appropriately manages all aspects of labor, health and safety, the environment, ethics, and its management system as set forth in the RBA Code of Conduct. We will continue to further promote corporate activities in line with the RBA Code of Conduct with the aim of ensuring that all Group plants, including the Fuji plant, are sustainable.



Subject

02

Corporate Sustainability Reporting Directive in Europe

In order to comply with the Corporate Sustainability Reporting Directive (hereinafter referred to as the “CSRD”), which was issued in January 2023 and made applicable to companies operating in the EU, a Daicel Group-wide project was launched last fiscal year. For the Group, TOPAS Advanced Polymers GmbH (TAP) in Germany came within the scope of this directive and will henceforth be required to submit reports containing quantitative data and qualitative statements on environmental, social, and governance (ESG) matters (non-financial areas)

beginning in FY 2025. In undertaking Phases 2 and 3 last fiscal year, we produced a roadmap setting forth actions to be taken to ascertain ESG matters (nonfinancial areas) for disclosure as required by the CSRD, conducting a double materiality assessment (corporate and social impact assessment) and a gap analysis, and grasping the matters to be disclosed to prepare a draft of a first-year disclosure report. We will continue to proactively work on disclosing appropriate information on sustainability to all stakeholders.

Company	Phase 2					Phase 3					
	May	June	July	August	September	October	November	December	January	February	March
TAP	Double materiality assessment (impact assessment)		GAP analysis			Formulate roadmap		● Formulate a disclosure framework in the area of ESG ● Establish a data collection system ● Comply with EU taxonomy ● Select auditor			