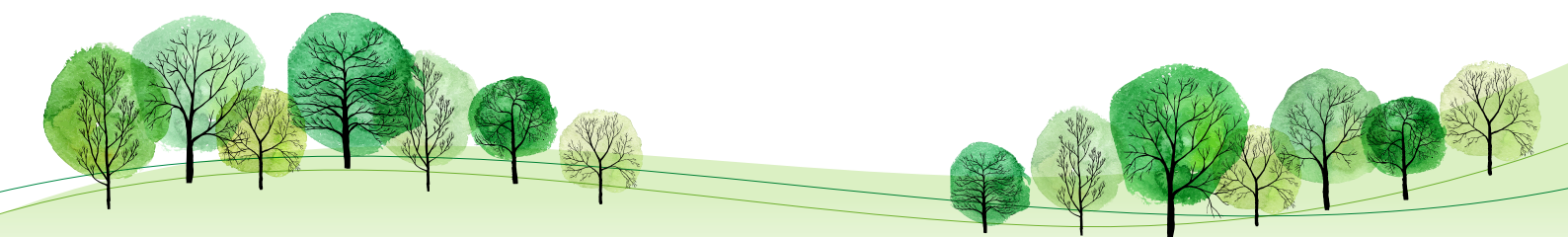


DAICEL GROUP SUSTAINABILITY REPORT 2021

Sustainable Value Together



Contents

Sustainability Top	3
Basic Philosophy	6
Message from the President and CEO	7
Special Feature 1. Accelerate 2025-II Mid-Term Management Strategy	9
Special Feature 2. Creating a Cycle of Happiness with Our Autonomous Production System	14
Roundtable Discussion with Outside Directors	15
Value Creation Process	17
Sustainability Management	
Sustainability Promotion	18
Materiality	28
Environmental Report	
Environmental Management	33
Response to Climate Change	37
Reduction and Recycling of Industrial Waste	46
Emission Management of Chemical Substances	51
Water Resource Preservation	55
Environmental Management and Prevention of Air Pollution	59
Preserving Biodiversity	62
Environmental Accounting	65
Social Report	
Respect for Human Rights	68
Responsibility for Customers and Product Safety	
Enhancing Product Quality	71
Chemical and Product Safety	76
Process Safety and Disaster Prevention	79
Distribution Safety	84

Creating Attractive Workplaces	
Occupational Health and Safety	89
Policy and Guidelines on Human Resources	95
Initiatives to Help Employees Maintain Mental and Physical Health	99
Support for Human Resource Development	106
Promoting Diversity and Inclusion	118
Foster a corporate culture that meets employee needs	129
Sustainable Procurement	143
Contribution to Local Communities and Society	150
Governance	
Corporate Governance	154
Corporate Compliance	170
Daicel Group Conduct Policy	183
Daicel Code of Conduct	184
Risk Management	191
Information Security	195
Responsible Care Activities	199
Human Development Center	210
Native Forests for Life Initiative	217
Independent Assurance Statement	221
Editorial Policies	222
List of Data Collection Boundaries	
Scope of Reporting for Human Resources and Governance Data	224
Scope of Data Calculation for Environmental and Occupational Safety Performance	229
Participation in Initiatives and External Recognition	230

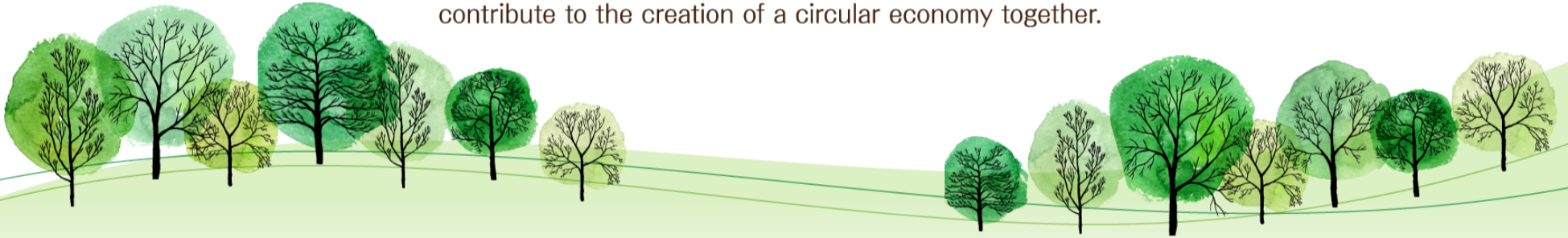
Sustainability

Roundtable Discussion with Outside Directors Expectations for the Mid-Term Management Strategy and the Importance of Risk Management



Just as a natural forest composed of diverse types of trees and plants achieves sustainable growth, the Daicel Group will realize sustainability in its products, manufacturing processes, and people by multiplying the diversity of each employees.

We will also expand the circle of value co-creation with partners who share our aspirations and contribute to the creation of a circular economy together.



Daicel Group Sustainability



Sustainability
Management

Materiality



Sustainability Related Articles



Daicel's Monozukuri Manufacturing



Cellulose Acetate



Preventive Measure against COVID-19

Policy list 	Editorial Policies 	Independent Assurance Statement 
Participation in Initiatives and External Recognition 	Scope of Reporting for Human Resources and Governance Data 	Scope of Data Calculation for Environmental and Occupational Safety Performance 
Status of Environmental Management System Certification 	Status of Quality Management System Certification 	GRI Standards Content Index 

2021 CONSTITUENT MSCI JAPAN
ESG SELECT LEADERS INDEX

2021 CONSTITUENT MSCI JAPAN
EMPOWERING WOMEN INDEX (WIN)



Whistleblowing
Compliance
Management
System

* THE INCLUSION OF DAICEL CORPORATION IN ANY MSCI INDEX, AND THE USE OF MSCI LOGOS, TRADEMARKS, SERVICE MARKS OR INDEX NAMES HEREIN, DO NOT CONSTITUTE A SPONSORSHIP, ENDORSEMENT OR PROMOTION OF DAICEL CORPORATION BY MSCI OR ANY OF ITS AFFILIATES. THE MSCI INDEXES ARE THE EXCLUSIVE PROPERTY OF MSCI. MSCI AND THE MSCI INDEX NAMES AND LOGOS ARE TRADEMARKS OR SERVICE MARKS OF MSCI OR ITS AFFILIATES.

We place great importance on the Basic Philosophy concept, and in future will continue to hold this concept without being influenced by changing times.

The company making lives better by co-creating value

Sustainable Value Together

Co-creating value ●●●

Understanding and communicating together with various partners, to jointly create new value

Message from the President and CEO



Yoshimi Ogawa
President and CEO, Daicel Corporation



We Contribute to Building a Circular Society with Partners that Share Our Aspirations

For over a century, Daicel has been building on its cellulose business, a naturally derived material. Amid growing expectations for social change toward a circular society, we will take advantage of our accumulated technologies developed over the years and take on the challenges of a transforming society by combining our collective wisdom.

Actions to Reinforce Our Foundation during the COVID-19 Pandemic

In FY2021/3, the spread of COVID-19 limited what we could do, and the global economic outlook remained uncertain. While these circumstances regrettably caused sales to decline, we took action to address the pandemic and forged ahead to reinforce the Daicel Group and generate profit for the first time in four fiscal years.

Along with thoroughly reducing costs in our existing businesses, we sought to retreat from unprofitable products such as those related to defense and relocate and consolidate production bases that were no longer profitable in order to become a more robust organization. We also turned Polyplastics Co., Ltd. (Polyplastics) into a wholly owned subsidiary and reviewed the governance of the Daicel Group as a whole to restructure Daicel's businesses and create a competitive organization that could respond promptly to social needs.

Reflecting on the past year, I realize that I had required the

roughly 12,000 employees of the Daicel Group around the world to adapt to significant changes. Nevertheless, Directors and employees worked closely together to overcome the hardships of the pandemic. I feel we have made solid progress toward our goal of evolving into a corporate group that can respond much more quickly and flexibly to external factors.

Daicel's Unique Contribution to a Circular Society

We took a closer look at the "Accelerate 2025" Mid-Term Management Strategy announced in June 2020 and re-launched "Accelerate 2025-II" this fiscal year. The strategy is underpinned by our steadfast determination to execute the new Long-Term Vision and Mid-Term Management Strategy based

■ Please see Special Feature 1, entitled Accelerate 2025-II, on page 14.

on our Sustainability Management Policy (Sustainable Product, Sustainable Process, and Sustainable People).

As a materials manufacturer, we believe it is not enough for Daicel to contribute to society by simply making good products; the manufacturing process itself must be sustainable. Products made by people (employees) with a sense of fulfillment will bring happiness to everyone and society as a whole. Moreover, the products should be made through a process both people and eco-friendly. We are convinced this will create a sense of pride and confidence among workers and create new value.

For example, cellulose, which represents one of Daicel's strengths, is a naturally derived biomass material. The process of separating cellulose from pulp, however, consumes an enormous amount of energy, undeniably placing a burden on the natural environment. This is the reason why we have been exploring methods for drastically improving the process. As a result of joint research with universities, we have developed a technology for separating cellulose using less energy with a lower burden on the environment. ■

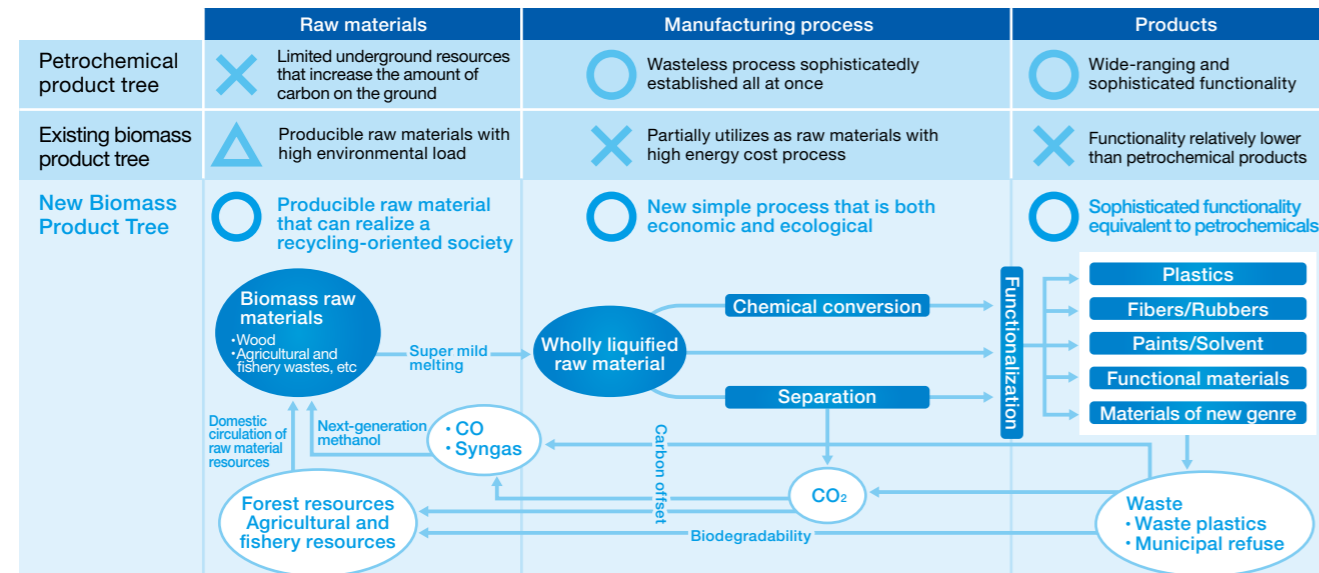
Furthermore, the technology will enable us to separate other useful raw materials for chemical products that had

previously been disposed of and burned as waste. This realization of new Biomass Product Tree has opened up the possibility of using renewable biomass to create new materials that can replace or supplement conventional petroleum-based chemicals. Although the technology is currently at the research stage, it may also be applicable to waste generated by agriculture and fisheries. With this technology, economic activity in the secondary industry could contribute to revitalizing and reinforcing primary industries. Daicel is proposing the establishment of a sustainable society based on a new industrial ecosystem of collaboration between the primary and secondary industries.

Japan is a country rich in nature, with roughly 70% of its land covered by forests. If we could use these forests as a renewable resource through a waste-free process that is also environmentally sound, we would be able to contribute to building a circular society unique to Japan to enhance the value

■ Please see "Sustainable Process" on page 20.

Sustainable Process Achieving goals with environmentally and people friendly methods
New biomass product tree that DAICEL aims for



of our natural bounty while also maintaining affluent lifestyles. I believe this is precisely the concept of co-existing with nature that the Japanese people have traditionally cherished.

Daicel, which had its starting point in naturally derived materials, such as cotton and pulp, is ideally suited for performing this task, and I believe this is our mission.

The aim of the Biomass Value Chain, mentioned in the Mid-Term Management Strategy, is to realize a sustainable society that is uniquely Japanese. Of course, Daicel will not be able to achieve this goal alone. We will plan to advance with partners and customers who share our values.

Creating New Value through Co-Creation

We hope to contribute to realizing our long-term, carbon- and energy-offset goals by clarifying how Daicel can apply its unique strengths and offer more effective methods.

For example, Daicel is flexibly using power generated at the Ohtake Plant by sharing excess electricity within the Group through self-consignment. We could further reduce energy consumption of the entire chain by extending this effective use of electricity across the entire supply chain. We are also collaborating with a university to develop new process technologies that require smaller equipment for processes such as chemical reactions and refining. The downsized manufacturing process will provide greater control over production capacity by enabling us to increase or decrease the use of equipment according to the required production

volume. This more compact process will also considerably reduce energy use by eliminating the need for owning excess equipment.

Once we have thoroughly reduced CO₂ emissions, we must develop commercially viable technologies and processes for the effective use of CO₂ as a fundamental solution to climate change. Daicel's nanodiamond technology could be used to enhance the reduction of CO₂ to CO. It would also make this process less expensive and more effective. I am convinced we can realize this technology in the not-too-distant future, once Japanese industries implement an all-out research effort.

With regard to carbon neutrality, a company alone can achieve a great deal, as I have pointed out a number of times. In regard to the previously mentioned joint research on cellulose, I am convinced we will be able to generate results that exceed our expectations using fewer assets, once we combine our respective strengths in a collective effort to tackle major challenges through industry-academia-government collaboration involving multiple organizations.

We are making steady progress on the virtual company and Cross-Value Chain concepts included in our Mid-Term Management Strategy. Our joint development project with Daikin Industries, Ltd. (Daikin) is an excellent example of producing maximum profit at minimum cost through co-creation. In this project, we jointly developed a total heat exchange-type element coated with a permeable membrane that reduces energy consumption by achieving high heat exchange rates as well as realizing a low pressure loss filter. One of Daikin's strengths is its metal processing technology, whereas Daicel excels in chemical materials production, which

means that engineers at both Daikin and Daicel have taken different approaches to manufacturing. If both sides were to place all their cards on the table during joint development, the pace of development would significantly accelerate and ultimately lead to the creation of products that meet the precise needs of end-users. Daicel handles materials upstream, while Daikin processes that material downstream. We engaged in this project with frankness, sharing corporate know-how that would be kept secret under normal circumstances, and each company has become one step in the process in the common value chain. By forming such a virtual company, we were able to amplify our strengths and complement each other, which allowed us to accelerate the pace of research and maximize results.

Rather than limiting collaboration to mutually supplying products from upstream to downstream within the vertical supply chain, we seek to enhance shared value by collaborating laterally with companies moving in the same direction, including competitors. Our goal is to realize a sustainable society while simultaneously expanding our sustainable businesses by constructing a cross-value chain that flexibly expands the network beyond organizational boundaries.

■ Please see "Sustainable Product" on page 18.

Key Themes for Accelerating Corporate Growth

As we begin to fully mobilize toward achieving the Mid-Term Management Strategy in FY2022/3, we will lay the foundation for constructing this cross-value chain by combining the wisdom of the entire Group to more effectively deploy the broad range of businesses, resources, and assets owned by the Daicel Group. We will first place priority on more extensively collaborating with Polyplastics, which is now a wholly owned subsidiary. Polyplastics handles engineering plastics such as Polyacetal (POM), which is enjoying growing demand in various areas, including for automobiles and electronic components. We will make solid investments in increasing production capacity in this area to drive Daicel Group growth while minimizing costs.

I view this transition of Polyplastics into a wholly owned subsidiary as a process of integration. While paying due recognition to the brand cultivated by Polyplastics over the years, we can generate a synergy that will broaden the possibilities of our business through mutual respect and learning. Additionally, we will enhance our respective corporate value as we seek to maximize the synergistic effect.

■ Please see "Financial Strategy" on page 16.



People are the Foundation of Sustainable Growth

Our Mid-Term Management Strategy will ultimately be embodied by people. Even 10 to 20 years of continuing increases in sales and profit would be worthless should employees be unhappy. I would go so far as to say that the very existence of Daicel would be meaningless unless profit obtained through its business were returned to shareholders and employees as well as reinvested in businesses that serve society.

Management must fulfill the key responsibilities of creating a fulfilling work environment and returning profits to employees. Daicel has just completed a major reform of its personnel system for managers for the first time in 20 years. We will follow up in the next fiscal year by expanding reforms to include non-managerial personnel. We have introduced a multiple-track job grade system by eliminating seniority to enable exceptional promotions while also revising the evaluation and compensation structure toward raising lifetime wages. We have also adopted a stock-based rewards for managerial personnel as well as Directors. To ensure that employees feel pride in the company and enjoy a fulfilling work life, we will support individuals who take on challenges without fear of failure under a fair and credible new evaluation system.

We believe that the happiness of each employee and their families is essential for bringing happiness to society as a whole. We will contribute to realizing a sustainable society by consistently upholding Human-Centered Management so that all Group employees experience fulfillment and work with vitality.

■ Please see "Sustainable People" on page 22.

Special Feature 1

Accelerate 2025-II Mid-Term Management Strategy

Realizing a Sustainable Society While Achieving Sustainable Business Expansion

In FY2021/3, the Daicel Group formulated its Long-Term Vision DAICEL VISION 4.0 and its Mid-Term Management Strategy Accelerate 2025, which is based on the vision. The core concept is to follow our Sustainable Management Policy to expand the scope of co-creation from Daicel Corporation to its Group companies and then suppliers and customers in our supply chain, and thus serve society by providing value that transcends the efforts of any single company.

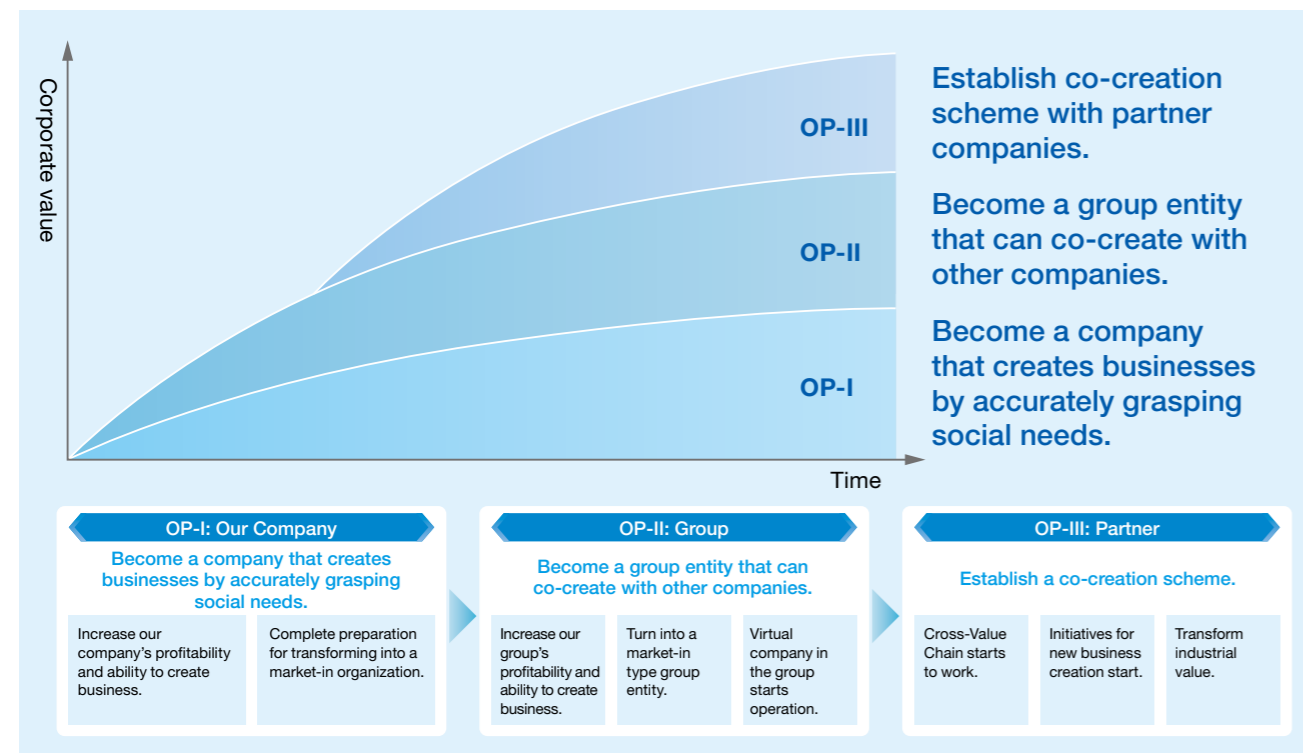
This special feature provides an overview of our Long-Term Vision and Mid-Term Management Strategy and explains our strategies and initiatives in terms of products, manufacturing processes, and employees.

How the Long-Term Vision Expresses Daicel's Resolve

- States the direction of the company's growth toward delivering valuable products and services to society, in ways that care for people and environment, while providing a sense of pride and fulfillment for employees
- Confirms that growth will be achieved by strengthening the competitiveness of the Daicel Group and the number of partners who share our aspirations to deliver even greater value to society

Path to Becoming a Company Making Lives Better by Co-Creating Value

The Long-Term Vision defines our path to construction of a co-creation entity in three Operations (OP).



Main Initiatives Outlined in the Mid-Term Management Strategy

In our Mid-Term Management Strategy, we sought to realize the three elements of the Sustainable Management Policy by categorizing concrete initiatives for each Operation described in the Long-Term Vision under the "Company-wide strategy," "Business strategy," and "Functional strategy."

Key Points of the Company-wide strategy	<ul style="list-style-type: none"> • Business selection and concentration through portfolio management • Raise management efficiency by comprehensively reducing assets and costs (asset light strategy)
Key Points of the Business strategy	<ul style="list-style-type: none"> • Explore social needs and latent customer demand to develop new businesses and applications through organizational restructuring • Create autonomous self-propelled organizations by delegating authority to quickly and flexibly take actions to meet the needs of their immediate markets and customers • Realize the Cross-Value Chain by seeking business collaborations and M&A across supply chains both vertically and horizontally
Key Points of the Functional strategy	<ul style="list-style-type: none"> • Business creation strategy: strengthen exploration of social needs through independent R (research) and D (development) and proactive use of intellectual property • Production strategy: engage in a thorough effort to reduce costs and boost productivity • DX strategy: realize virtual companies by constructing a digital architecture • Personnel strategy: enable diverse human resources to shine, and provide a personnel system that rewards effort

Goals of the Long-Term Vision and Mid-Term Management Strategy

By pursuing our Long-Term Vision and Mid-Term Management Strategy, we hope to ultimately deliver happiness to individuals and all of society as a company that contributes to building a circular society.

<p>Formation of a New Business Group (Value Co-Creation Entity) We will establish partnerships across departments, companies, and industries to co-create through a shared philosophy.</p>
<p>Provision of Happiness in Four Domains We will provide new value in the business domains of Health, Safety/Security, Convenience/Comfort (Smart), and Environment, where we can meet social needs by applying the strengths of the Daicel Group.</p>
<p>Realization of New Biomass Product Trees As our mission as a chemical company founded on cellulose, we will utilize dormant forest resources in Japan as a renewable resource to realize new product derivatives based on wood as the raw material while ensuring that both products and production processes are environmentally sound.</p>
<p>Implementation of Carbon Offsets and Energy Offsets We will seek to reduce the burden on the global environment by creating mechanisms that maximize the efficiency of energy use and by developing technologies that enable the reuse and effective use of emitted carbon and energy.</p>

Contributing to Building a Circular Society

Special Feature 1 Mid-Term Management Strategy "Accelerate 2025-II"

Financial Strategy

Meeting the FY2026/3 Management ROIC Target to at Least 10% to Maximize Asset Efficiency and Enhance Corporate Value

Daicel adopted ROIC as a key new management target for the latest Mid-Term Management Strategy. During the period covered by this strategy, we will accelerate profit growth by aggressively extending 210 billion yen in capital investment to boost production of main products and set up production sites. Meanwhile, we will seek to raise productivity by carefully selecting investment projects, improving CCC and steadily selling cross-holding shares under an asset light policy and by thoroughly cutting costs to achieve **the ROIC target of at least 10% by FY2026/3**, the final year of the Mid-Term Management Strategy. We will also seek to optimize the capital structure to realize returns that exceed capital costs (WACC for the final fiscal year is estimated at around 6%).

The results of the Mid-Term Management Strategy and targets for management indicators are summarized below. Please see page p.26 for business strategies by segment.

	(billion yen)		(billion yen)				
	FY2021/3 Results	FY2026/3	FY2021/3 Results		FY2026/3		
	Net Sales	Operating Income	Net Sales	Operating Income	Net Sales	Operating Income	
Net Sales	393.6	500.0					
Operating Income	31.7	70.0					
Income Attributable to Owners of Parent	19.7	48.0					
EBITDA	58.6	116.0					
ROE	6.6%	18.0%					
ROIC	4.1%	10.0%					
ROA	3.2%	8.0%					
			Medical/Healthcare	16.2	1.6	25.0	3.0
			Smart	24.7	3.4	45.0	8.0
			Safety	67.2	2.2	100.0	15.0
			Materials	104.2	17.9	105.0	25.0
			Engineering Plastics	168.6	21.2	217.0	35.0
			Others	12.7	1.5	8.0	1.5
			Corporate	—	-16.1	—	-17.5
			Total	393.6	31.7	500.0	70.0

Notes:
 ROIC: Return On Invested Capital; CCC: Cash Conversion Cycle; WACC: Weighted Average Cost of Capital; EBITDA: Earnings Before Interest Taxes Depreciation and Amortization;
 ROE: Return On Equity; ROA: Return On Assets

Financial Capital Strategy

In addition to improving profitability, Daicel will reduce working capital, sell non-business assets and take other actions to generate 470 billion yen in distributable profit during the period covered by the Mid-Term Management Strategy (FY2022/3 to FY2026/3), which will be allocated to growth investments, shareholder return and debt repayment. As for return to shareholders, **we will designate the current cash dividend per share (annual dividend of 32 yen) as the minimum and seek to achieve a total return ratio of at least 40% for each fiscal year with consideration for dividend payment and flexible acquisition of treasury stock.** While our capital structure changed significantly due to turning Polyplastics Co., Ltd. into a wholly owned subsidiary and associated fund procurement in October 2020, we plan to establish a stable financial composition with an equity ratio of at least 45% and net D/E ratio of 0.5% or less.

Cash Allocation

Cash Input (Accumulated over 5 Years)

Cash flows from operating activities	370.0
Cash	End-March 2021 Forecast* 80.0
	Sale of cross-holding shares 20.0
Debt financing	0

Total distributable amount 470.0

Cash Output (Accumulated over 5 Years)

Growth investment	Capital investment 210.0
Shareholder return	Total amount of return 60.0
Debt repayment	120.0
Cash	80.0

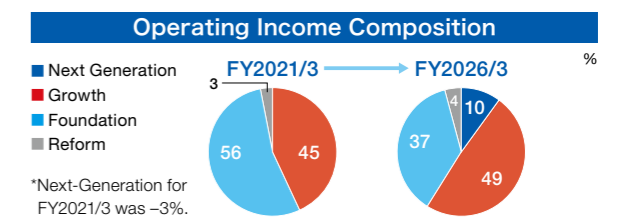
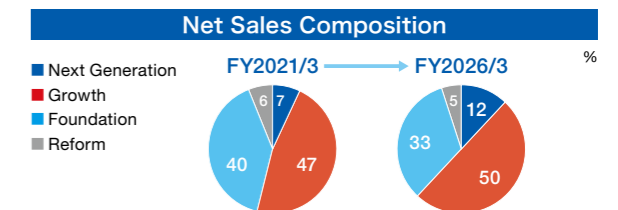
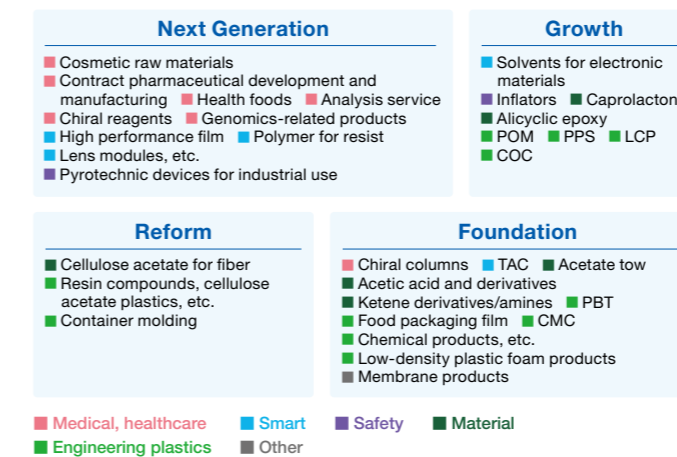
Balance Sheet

2026/3 forecast			
Assets		Assets and Liabilities	
Current Assets	290.0	Liabilities	310.0
Cash and Cash Equivalents	80.0	Interest-bearing Debt	160.0
Working Capital	190.0	Net Assets	280.0
Fixed Assets	300.0		
Tangible and Intangible	230.0		
Cross-shareholdings	30.0		
Total	590.0	Total	590.0

* As of February 2021, upon the announcement of the Mid-Term Management Strategy

Portfolio Management

The Daicel Group comprises a diverse array of businesses based on its core technologies of cellulose chemistry, organic chemistry, polymer chemistry and pyrotechnic technologies. Under the Medium-Term Management Strategy, we consolidated these into 32 businesses and categorized them into **next generation, growth, foundation and reform** based on industrial growth, competitive environment, sales growth, operating profit and business characteristics. We will prioritize resource allocation to raise the proportion of business categorized as "next generation" and "growth" in terms of net sales and operating income. We will also seek to accelerate the pace of selection and concentration of businesses by regularly evaluating each business based on criteria such as ROIC and the sales growth ratio.



Synergy Effect by Making Polyplastics a Wholly Owned Subsidiary

In October 2020, Daicel turned Polyplastics, Co. Ltd., a leading engineering plastics company that had been jointly established with a U.S. company, into a wholly owned subsidiary. This will provide us with greater freedom in developing global markets while expanding our growth strategy, such as the development and adoption of new merchandise as well as investments in boosting capacity. As a result, **we expect a synergy effect of 20 billion yen in EBITDA by fiscal 2026/3.**

We established the Performance Materials Headquarters in April 2021 to demonstrate the synergy effect in our resin businesses by re-examining the portfolio of the Daicel Group's resin businesses, expanding our product line through collaborations, mergers and acquisitions, and reinforcing cross-divisional relationships between each group company's marketing, research and production departments. We are also seeking to generate new materials with added value by combining Daicel's monomer development technology (computational chemistry) with Polyplastics' polymerization technology and to create synergies beyond the framework of our resin businesses by deploying the market-in (customer-in) approach, which Polyplastics has developed for many years, to the entire Group.

20.0 billion yen planned up to FY2026/3

Acceleration of global operations Effect: 13.0 billion yen

- Invest in boosting production to capture future demand
- Expand sales to the U.S. and European markets

Realization of cost-cutting synergy Effect: 6.0 billion yen

- Accelerate DAICEL production innovation
- Efficiently manage indirect departments (personnel rotation/centralization of procurement, engineering and human resources)

Maximization of Group synergy Effect: 1.0 billion yen

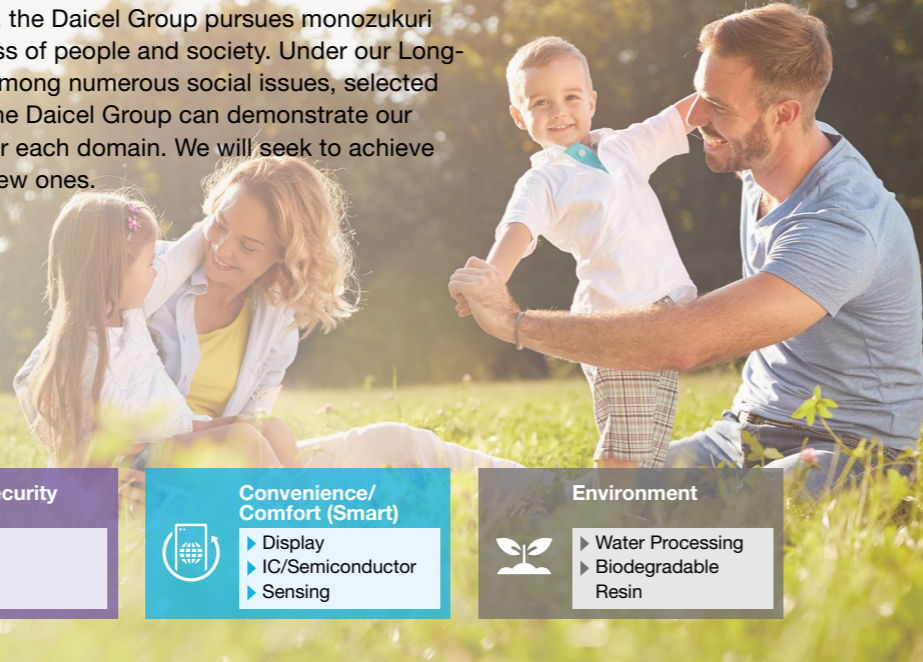
- Utilize marketing abilities of Polyplastics
- Mutually utilize R&D resources (computational science/measuring equipment, etc.)
- Improve catalysts and other matters of existing businesses

Note: The above monetary values of the synergy effects are expressed in terms of EBITDA.

Special Feature 1 Mid-Term Management Strategy "Accelerate 2025-II"

Sustainable Product Contributing to the Happiness of Society and People

Based on our Sustainable Management Policy, the Daicel Group pursues monozukuri manufacturing that contributes to the happiness of people and society. Under our Long-Term Vision, we identified four domains from among numerous social issues, selected areas where demand is expected to rise and the Daicel Group can demonstrate our strengths, and then designated key markets for each domain. We will seek to achieve growth in our businesses while also creating new ones.

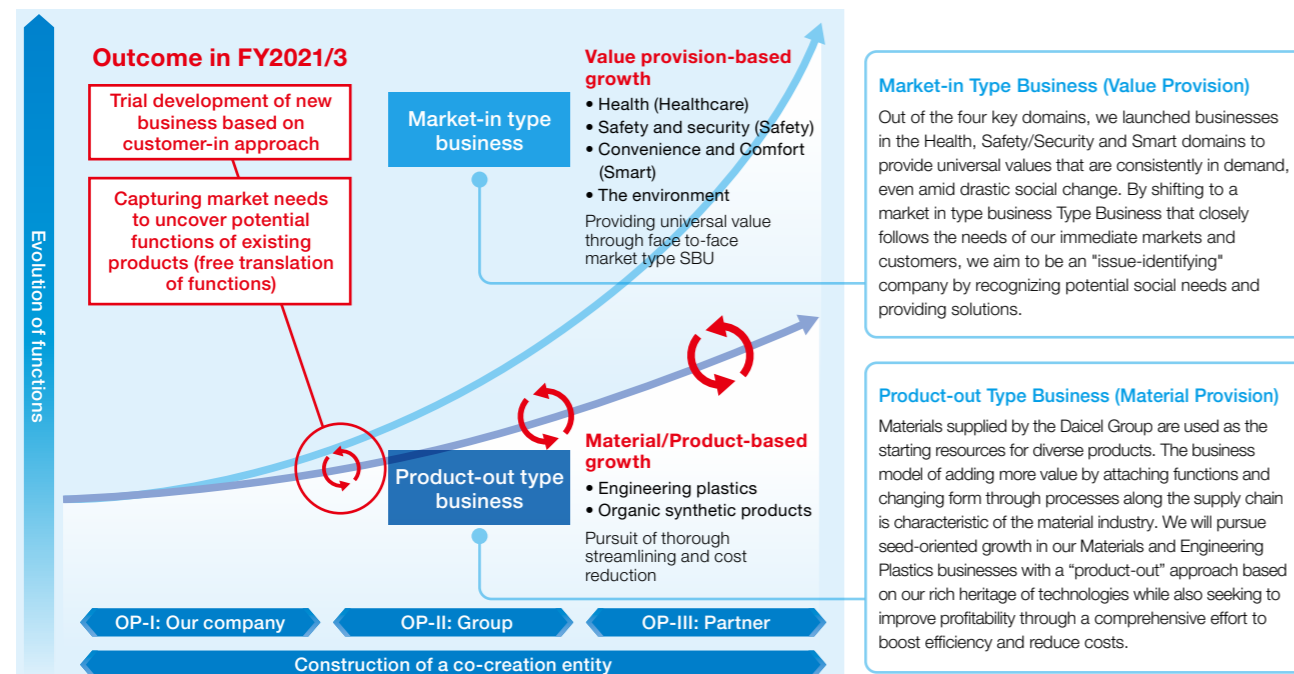


Four Domains and Market Focus



Two-Way Approach of Value-Providing Business and Material-Providing Business

In April 2020, we redefined our business categories that had been based on technologies and products to a system comprising three value-providing business units and two material-providing units. Further business growth will be driven by the twin wheels of a value providing (Market-in) business model focused on key markets and a material providing (Product-out) business model focused on technologies and materials that we have cultivated over the years.



Striving to Become an Issue-Identifying Company Example of Value Co-Creation with a Customer

Daicel Corporation and Daikin Industries, Ltd. began exchanging technologies about 20 years ago. Since 2016, we have been engaged in joint development that transcends our supplier-client relationship in order to create the world's first and the world's top-value products by leveraging our respective strengths. Spearheaded by management, we held a series of discussions through exchanges between engineers including seconding staff, while many relevant divisions within Daicel united to resolve issues by drawing upon our comprehensive abilities as a material manufacturer. As a result, in FY2021/3 we jointly developed a total heat exchange-type element coated with a permeable membrane used in ventilation equipment as well as a low-pressure loss filter for large-scale air conditioning units to address the growing global interest in air flow due to the COVID-19 pandemic.



Engineers from both companies who engaged in joint development (back row: Daikin Industries, front row: Daicel Corporation)

Daicel Group think there is a limit to what a single company can do or one process can achieve in the creation of products. In our Mid-Term Management Strategy, we will raise efficiency in the investment of our resources while increasing the number of options for solving problems by co-creating value together with our business partners and customers connected with the supply chain.

VOICE / Comment from a Customer



We commercialized a total heat exchange-type element using a permeable membrane sheet that offers the world's top energy-saving* and safety* features, and we did that at a very fast pace. This achievement was only possible through co-creation with Daicel. Mr. Ogawa, President and CEO of Daicel, said at a joint meeting on co-creation that "the material used for the products does not have to be our own as long as their development contributes to Daikin's business." This left a strong impression on me, and I'm convinced that Daicel's speedy decision-making and unwavering commitment to seeing the project through led to this result. The project gave me a renewed awareness of the importance of developing materials to create highly differentiated products. I hope we can continue co-creating as a team of unrivaled technologies and products based on Daicel's superior material and production technologies and with a powerful relationship of trust with Daikin.

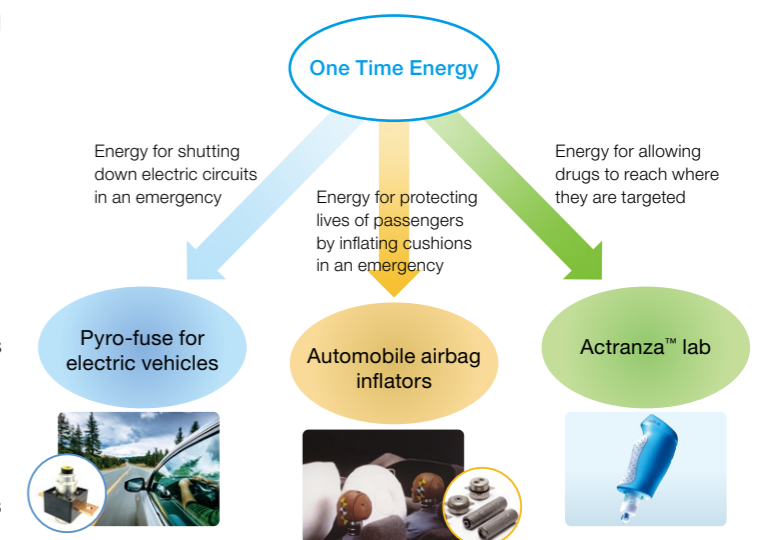
*Achieved enthalpy exchange efficiency of 80% and barrier rate of more than 99.99%

Kiyoshi Kuroi Senior Engineer, Group Leader, Technology and Innovation Center, Daikin Industries, Ltd.

Discovering Latent Applications for Products by Freely Translating Functions

Daicel describes its process of redefining the essential functions of a product to open up new markets and create new businesses as a "free translation of functions."

One example is the air bag inflator for automobiles. Its essential function can be defined as a system for safely, securely, and instantly generating a single burst of optimum energy (One-Time Energy). One product inspired by this free translation is Actranza™ lab, a needle-free drug distribution device that does not require needles. We also applied the essential functions of One-Time Energy and developed the Pyro-fuse, which is mounted on electric vehicles and shuts down power in an emergency. Free translation of functions will enable us to discover new market needs we can meet with our technology and to promote new business creation based on the Daicel Group's genealogy.



Special Feature 1 Mid-Term Management Strategy "Accelerate 2025-II"

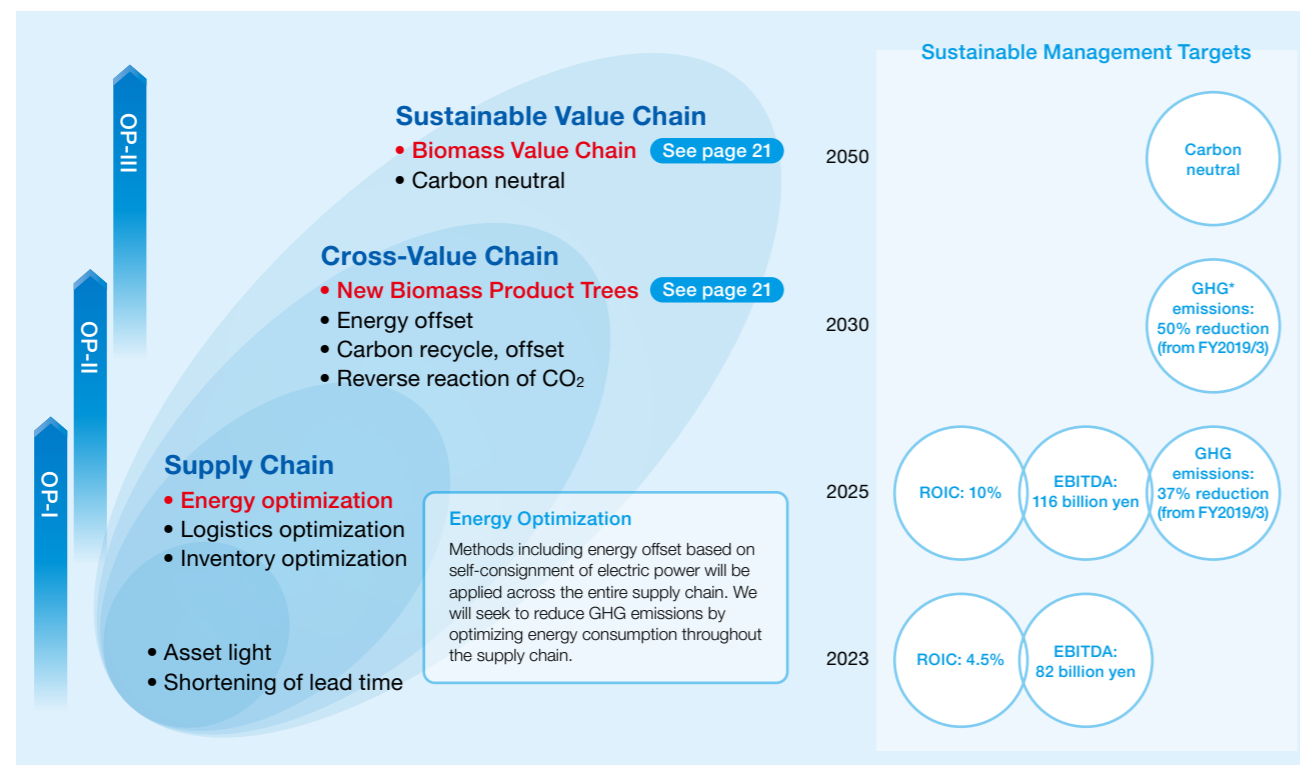
Sustainable Process Achieving Goals with Methods that Are Sound for the Environment and People

In addition to reducing the Daicel Group's greenhouse gas (GHG) emissions by pursuing an asset light strategy, we will take on significant challenges toward constructing a circular society, including offsetting energy across the supply chain with innovative production approaches and developing biomass product trees using completely new methods.



Creating Solutions that Reduce Environmental Impact

While the chemical industry provides beneficial materials for reducing environmental impact, its manufacturing processes are energy-intensive. The Daicel Group is addressing this by creating highly effective solutions in terms of its manufacturing processes. Saving energy in manufacturing will reduce environmental impact, cut costs, and improve productivity. Through these initiatives, we raise our competitiveness as a manufacturer and aim to achieve our business targets.



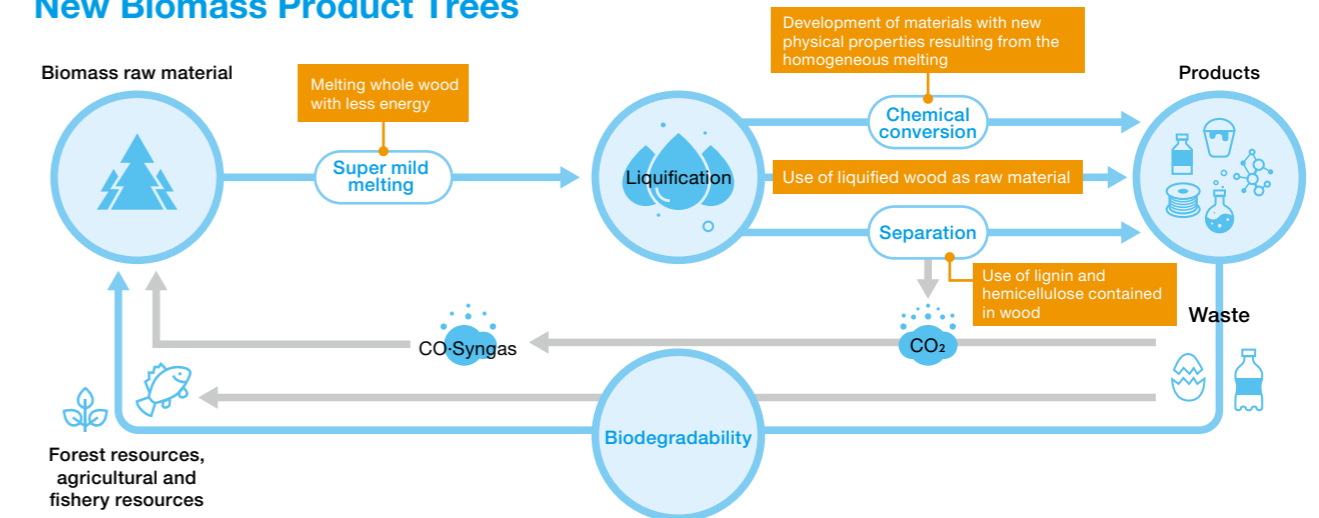
* Greenhouse gas

New Biomass Product Trees Hold the Key to Carbon Neutral Operations

Reducing the Environmental Impact in the Manufacturing Process and Transforming and Using a Whole Tree to Create High-Performance Products

Cellulose acetate, which is our key product, is a biomass product made with wood pulp as its main raw material. Natural polymers such as wood, does not dissolve easily, which creates an energy-intensive manufacturing process. Daicel is seeking to address this through joint research with Kanazawa University and Kyoto University toward establishing a technology for melting wood at room temperature and under normal pressure conditions, which requires less energy. In addition to cellulose, the technology has so far allowed us to separate highly reactive substances contained in wood, such as hemicellulose and lignin, which had until recently been underutilized in the conventional manufacturing process. We are beginning to see good prospects for developing materials with new physical properties by applying our method for homogeneous melting to cellulose. We seek to reduce the volume of CO₂ emissions in the manufacturing process by our new technology. However, even though CO₂ emissions are discharged into the atmosphere, we are also developing a technology for converting CO₂ to CO that can be reused for other purposes.

New Biomass Product Trees



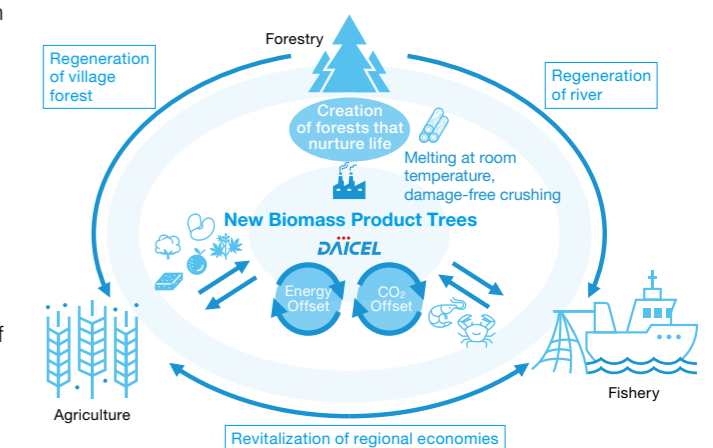
Towards realizing the Biomass Value Chain Concept

New technologies under development can be applied to separate beneficial ingredients from wood as well as agricultural and fishery waste. We are seeking to further enhance the economic viability of primary industries by creating cash value for the waste they generate that can be reused as raw materials in secondary industries. We believe this could lead to a new industrial ecosystem that links primary and secondary industries within a circular economy.

This type of economic cycle can revive the declining forestry industry, and sites for harvesting wood can be reborn as deciduous broad-leaved forests. By spreading their roots wide and deep, a forest of deciduous trees will improve the water retention of the mountains and reduce the risk of landslides. It will also contribute to restoring the natural ecosystem by promoting the circulation of water resources and nutrients between the mountains, rivers, and sea. Daicel is proposing to create such a circular system under its Biomass Value Chain concept.

We hope to collaboratively pursue this project with everyone who shares our aspiration, across the boundaries of industry, academia, and government.

Biomass Value Chain



Special Feature 1 Mid-Term Management Strategy "Accelerate 2025-II"

Sustainable People Giving Employees a Sense of Fulfilment

The driving force for realizing the goals laid out by Daicel's Long-Term Vision and Mid-Term Management Strategy lies within each employee. The Daicel Group will pursue Human-Centered Management to become a company that grows while providing a sense of worth and fulfilment to its diverse employees.



Kotaro Sugimoto

Representative Director,
Senior Managing Executive Officer,
General Manager of Corporate
Support Headquarters

Fair Evaluation and Support for Personal Growth to Achieve Employee Happiness will enhance the company's competitiveness

While each person may have a different motivation for working, all employees understand they will spend a considerable amount of time at work throughout their lives.

The Daicel Group aspires to be a company that gives employees a sense of fulfilment through their work. This is because pursuing and feeling fulfilment in work means that each employee can fully demonstrate their abilities as a professional, and we believe this is what gives a company its competitive edge.

In our Mid-Term Management Strategy, we sought to (1) transform into an autonomous and self-propelled organization and (2) reform work styles that encourage each employee to take on challenges while respecting diversity. We will seek to transform and manage an organizational structure that encourages all employees to be self-driven in taking on challenges and embody work styles that enable them to feel a sense of self-fulfilment and personal growth. Moreover, fair evaluation commensurate with the process and results also supports personal growth. We believe this benevolent cycle links the happiness of employees to the higher competitiveness of the company, and we will implement each measure toward achieving the Mid-Term Management Strategy through extensive discussions with all employees.

Transforming into an Autonomous and Self-driven Organization

In FY2021/3, Daicel carried out a large-scale organizational change. By creating autonomous units for the Research and Development Department based on their respective functions and reorganizing business units by their respective markets, we are seeking to clarify the goals, functions, and roles of each organization to become autonomous, self-driven, and capable of thinking on their own, swiftly make decisions, and act with flexibility. We are simultaneously implementing the necessary delegation of authority and appointments.

Reforming Work Styles to Encourage Every Employee to Take on Challenges while Embracing Diversity

In April 2021, we reviewed the human resources system and significantly updated the system for managerial positions in an effort to offer solid compensation for both the process and results.

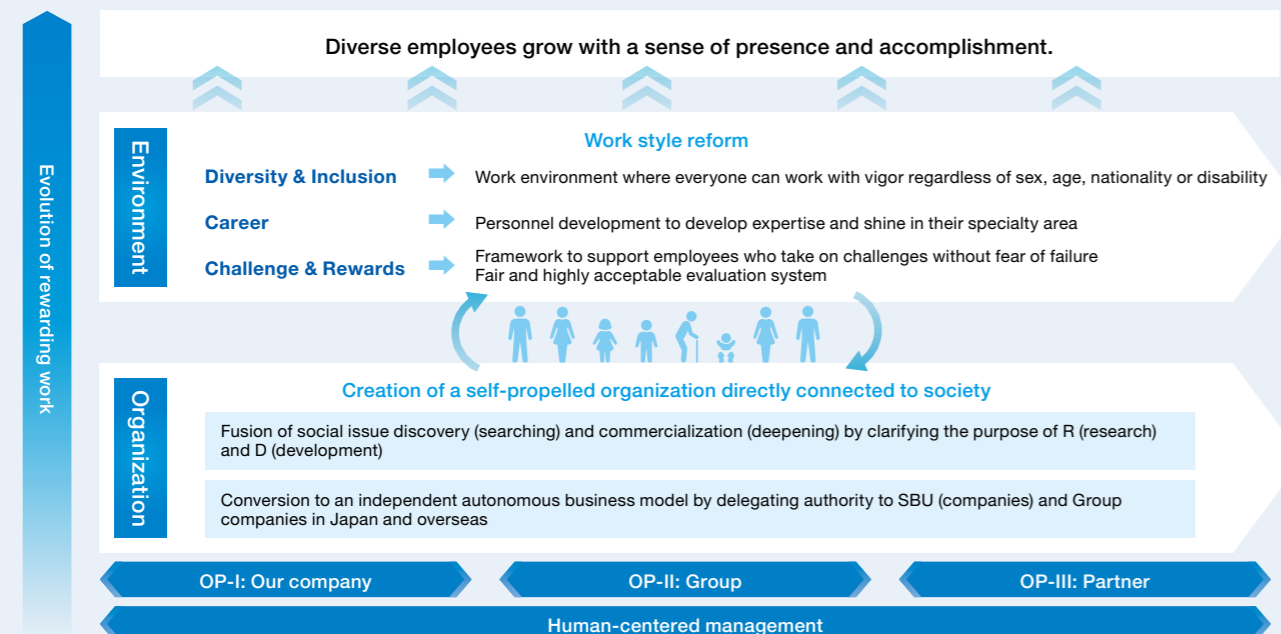
Adoption of a multiple-track job grade system	<ul style="list-style-type: none"> Enable multi-track career planning by shifting from the generalist-oriented career development of the past to specialist/management career options Clarify abilities to be developed according to individual aptitude
Elimination of seniority	<ul style="list-style-type: none"> Abolish number of years of experience as a condition for promotion Enable diverse career development
Linking appointments to compensation	<ul style="list-style-type: none"> Clarify responsibilities and authority of each role based on a job-grade system Create a link between roles and compensation to realize a system in which performance is rewarded
Establishment of a restricted stock benefit system for employees	<ul style="list-style-type: none"> Encourage employees to contribute greatly to the success of the business Improve lifetime wages

Shifting to implementing Initiatives with an Onsite Perspective by Establishing the Human Resources Strategy Committee

In April 2020, we established the Human Resources Strategy Committee, composed of 15 members with diverse backgrounds in work location, affiliation, position (managerial position and/or union member), and other aspects. In the past, the Human Resources Division was mainly responsible for drawing up personnel policies. The committee was set up in response to a recommendation by members of a project team tasked with formulating Long-Term Vision to continue discussions on human resources strategy. We are actively incorporating the opinions of employees on the ground to improve the effectiveness and swift deployment of initiatives across the company.

In FY2021/3, the committee took action on the evaluation, post-retirement re-employment and personnel systems. We were able to identify new issues, and the results were reflected in the personnel system for managerial positions. In FY2022/3, we are focusing on revisions to the labor union system.

Looking ahead, we will continue to expand human resource initiatives that support the personal growth of employees by maintaining consistency with Daicel's Basic Philosophy, management policies, and strategies.



VOICE / System Developed through Dialogue with Employees



Listening to employees through the Human Resource Strategy Committee provided insight into the issues, questions, and expectations that differ by position and which were difficult to grasp by the Human Resources Division acting alone. We considered revisions to the system through repeated conversations with employees and sought to maintain two-way communication by offering a detailed explanation when we could not meet their expectations. At the same time, we frequently presented our recommendations to management and promptly incorporated the feedback and requests into the system, making it possible to revise the system quickly.

We will continue to explore personnel initiatives so that Daicel can remain as a company that provides employees with a sense of personal growth through their work every day.

Satoru Nose Leader of the Human Resources Strategy Committee, Division Manager of Innovation and Business Development Promotion, Innovation and Business Development Headquarters and Head of Innovation Strategy Department, Innovation Park

Special
Feature

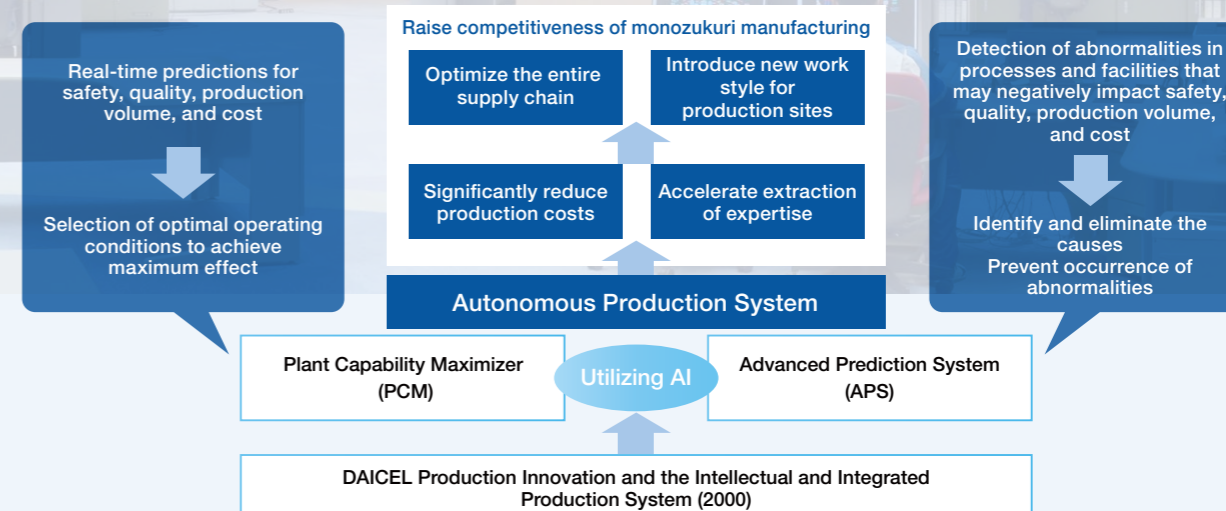
2

Creating a Cycle of Happiness with Our Autonomous Production System

In FY2021/3, Daicel developed an Autonomous Production System that assists in implementing optimal solutions for monozukuri manufacturing at chemical plants. It represents an evolution of DAICEL Production Innovation completed 20 years ago. In addition to significantly cutting production costs, we sought to make extra time by reducing the workload toward developing a cyclical process for society in which people work with happiness and greater creativity.



Overview of the Autonomous Production System



Key Points of the Autonomous Production System

(1) Significant reduction in time, from the detection of an abnormality to decision-making and action

The system grasps the real-time status of the manufacturing facility and detects abnormalities before they materialize, thus reducing the need for manual monitoring and predicting operational status and leading to a dramatic reduction of the workload for onsite workers. Furthermore, since the system presents the causes of the abnormality along with countermeasures, operators can respond before the situation reaches the stage that previously required executive decisions.

(2) Support for taking the necessary actions to achieve production goals

Out of the many possibilities for improving plant operations, this system recognizes actions that are important to the production goals of each plant and presents only the essential alternatives, allowing operators to choose the optimal response.

to production, through which we will take the initiative to think through and propose solutions in advance instead of simply responding to customer requests.

Creating Happiness in Society through the Supply Chain

The common goal of both DAICEL Production Innovation and the Autonomous Production System is to proceed with reforms toward realizing a more creative work style and give workers a sense of fulfillment, which is synonymous with the joy of working. By exchanging information and creating value together with companies across the supply chain that share this philosophy, we can also realize optimal quality and cost as well as an environmentally sound supply chain.

“We are working to create a forest of companies connected to the supply chain. Even amid a changing business environment, it will allow us to maintain sustainable growth through mutual support. We hope to create a value chain that is connected to our suppliers and customers through a win-win relationship of trust and empathy.” — Fumihito Miyoshi, head of the Monozukuri Production Innovation Center, General Manager Office of the President.

The use of AI has dramatically reduced the labor required for visualizing expertise, which constituted the heart of DAICEL Production Innovation, and it facilitates the introduction of the Autonomous Production System. We hope to ultimately use the system for connecting companies that share Daicel's aspirations and function as an information platform for creating a cycle of happiness.

DAICEL Production Innovation Forms the Basis of the Autonomous Production System

As opposed to the assembly industry, the manufacturing process in the chemical industry cannot be observed since it involves substances undergoing change inside pipes and tanks. With data obtained from sensors such as for pressure and temperature, operators in the control room can draw on their experience and intuition to make decisions on monitoring and operating the plant and on responding to abnormalities.

In the mid-1990s, Daicel faced the need to quickly make a generational shift and hand down plant operation skills ahead of the mass retirement of experienced employees. Our solution was DAICEL Production Innovation. Around four years after 1996, we visualized the flow of approximately 8.4 million instances of decision-making related to plant operations that were known by expert operators and which, until then, had been a part of their experience and intuition, and we incorporated them into the operation support system. As a result, productivity has almost tripled at our Aboshi Plant. Daicel deployed this method to its process-based plants in Japan while also spreading it outside the Group, which contributed to raising the competitiveness of the Japanese manufacturing sector. The purpose of DAICEL Production Innovation is not about making people move like machines. It reflects our will to realize a work style that enables people to focus on tasks that benefit from human creativity by combining the knowledge about plant operations acquired by individuals and using systems to standardize operations.

Inheriting the Will of Our Predecessors to Achieve an Evolution in Production Innovation by Utilizing AI

DAICEL Production Innovation allowed us to maintain safe operations and reduce the number of serious quality-related issues. We were unable, however, to effectively use of all the know-how and skills collected from experienced operators. It was too difficult for computing technology at the time to execute the complex arithmetic processing that involved pursuing higher quality while considering the additional elements of cost and energy balance for optimal plant operations. To make this possible, we created two AI-based applications in a joint project with the University of Tokyo and developed the Autonomous Production System in August 2020 as the evolutionary version of DAICEL Production Innovation.

Production Site Work Style Reform that Adds New Value

Implementation of the Autonomous Production System improves productivity and ensures stable quality, leading to substantially reduced production costs by helping correct the excessive cost of repairs in the course of preventing malfunctions and maintaining facilities. It will also help to reduce inventory through effective production. According to our estimates, we will be able to reduce production costs by up to ten billion yen once the system has been installed at all relevant plants in Japan.

Furthermore, we will raise the competitiveness of our manufacturing as we use the extra time freed up by the reduced workload to engage in more creative tasks. Through these innovations, we will adopt a more aggressive approach

Roundtable Discussion with Outside Directors

Expectations for the Mid-Term Management Strategy and the Importance of Risk Management

Accelerate 2025-II has just been launched as our Mid-Term Management Strategy for contributing to the development of a circular society. We took this opportunity to invite three of our outside directors representing different backgrounds to share their expectations for the strategy and their views on the importance of risk management in a roundtable discussion with Kotaro Sugimoto, Representative Director of Daicel Corporation.



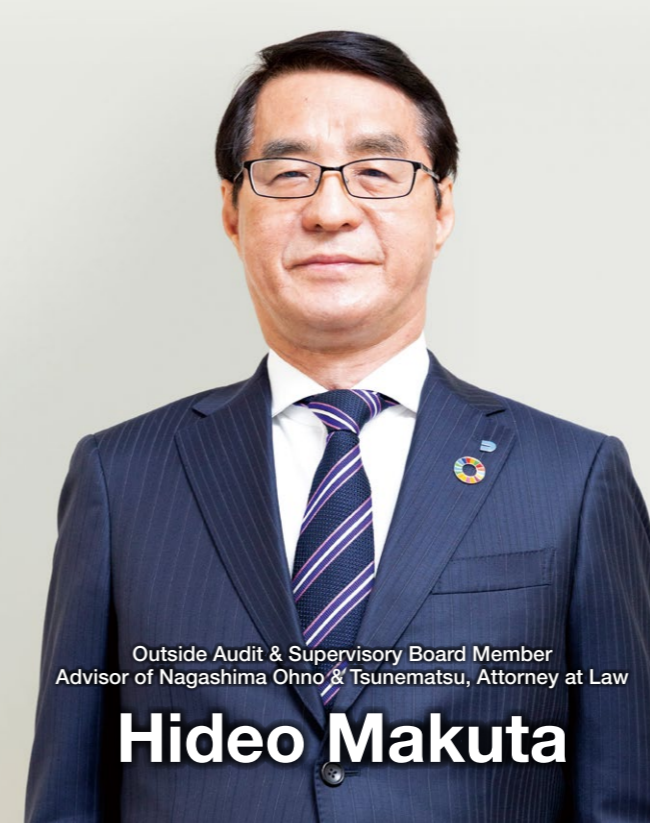
Outside Director,
Member of the Nomination and Compensation Committee,
Honorary Advisor of Sumitomo Mitsui Banking Corporation

Teisuke Kitayama



Outside Director,
Member of the Nomination and Compensation Committee,
Outside Director of Japan Airlines Co., Ltd.,
Outside Director of Maruha Nichiro Corporation

Sonoko Hacchoji



Outside Audit & Supervisory Board Member
Advisor of Nagashima Ohno & Tsunematsu, Attorney at Law

Hideo Makuta



Representative Director, Senior Managing Executive Officer,
General Manager of Corporate Support Headquarters,
Member of the Nomination and Compensation Committee,
Member of the Management Advisory Committee

Kotaro Sugimoto

Directors Engage in a Free Exchange of Views During Board Meetings

Sugimoto Let me begin by asking about your impressions of Daicel's Board of Directors.

Makuta I joined the board in June last year and felt there was a lively exchange of opinions led by outside directors. Some of their views are quite critical, and I have also freely expressed my opinions during meetings.

Kitayama I have been a board member for the past three years and have felt that the atmosphere at Daicel has made it much easier to offer one's opinions than that of other companies.

Hacchoji The open minded atmosphere and disciplined proceedings work together to ensure good progress in the board meetings. I think we engage in meaningful board meetings that allow us a free exchange of views among members.

Looking Back on Major Agendas of FY2021/3 from the Perspective of Effectiveness

Sugimoto How effective was the board in discussing major agendas, which were the large-scale investment for making Polyplastics a wholly owned subsidiary and formulation of the Mid-Term Management Strategy?

Makuta I was confronted with a major management decision concerning Polyplastics immediately after my appointment and felt a little lost at first. However, I participated in the discussion thanks to the detailed explanation offered by Chairperson Fudaba. Daicel makes a sincere effort to share information openly with outside directors and ensure that we have adequate reference materials and time to make confident decisions. The Company operates a highly effective Board of Directors in the sense that it honors its stewardship responsibilities and

guarantees in a safe environment which allow members to make management decisions.

Hacchoji In formulating the Mid-Term Management Strategy, I pointed out the possibility that investors and employees may not understand expressions that are unique to Daicel or words that are used differently from their normal context. I focused on bridging the gap based on an outsider's perspective to ensure that Daicel's passionate aspirations are conveyed to others.

Sugimoto As an inside member of the board, I tried to provide the information in advance so as to facilitate appropriate deliberation by outside directors, such as M&A projects including the Polyplastics case. Regarding the latest Mid-Term Management Strategy, outside directors offered numerous opinions and spent much time on discussing the issues, which provides me with the sense of truly working together to formulate this strategy. Please comment on the content of the strategy.

Mid-Term Management Strategy: Honing Daicel's Competitive Edge with a New Approach and an Unchanging Corporate DNA

Kitayama As Mr. Sugimoto pointed out, the Mid-Term Management Strategy was made public after holding four or five discussions following the initial stage. It upholds the new corporate mission of contributing to the development of a circular society and presents a carefully crafted strategy for fulfilling this mission. I believe that Daicel's innovative creations will accelerate based on the customer-in approach adopted as a commitment to address social issues and customer needs directly. As seen in the joint development project with Daikin Industries, Ltd. (page 19), I have great expectations that the broad range of technologies and unique product lineups that characterize Daicel will directly lead to greater possibilities for

Roundtable Discussion with Outside Directors



co-creating new value both within the Group and with other companies.

Makuta I would like to see Daicel surprise the world with significant innovations by accumulating the experience of co-creating value with various companies, including startups, in a unified team effort on new business development across all departments. As evidenced by DAICEL Production Innovation, Daicel's competence lies in its ability to take on the challenges of manufacturing head on and seeing it through to completion. The Company is likely to encounter major challenges in the course of executing its grand Mid-Term Management Strategy, but I am convinced that the targets will be met by tenaciously taking one steady step at a time.



Hacchoji Daicel will shift from a stance of delivering technologies and products based on its own perspective to a customer-in approach of solving problems alongside customers as an issue-identifying company. I hope this change will further strengthen Daicel's excellent corporate DNA of seeking new applications for its existing technologies based on flexible thinking, as in the case of its pyrotechnology used in airbag inflators, which has been applied to create Actranza™ lab., a device for injecting medicine under the skin without using needles. I also give high marks to the Mid-Term Management Strategy from the perspective of fostering employees who will inherit this DNA.

Sugimoto Under the strategy, it is important to implement change as needed while maintaining Daicel's positive DNA. By continuing Human-centered Management, we will also focus on creating vibrant workplaces for our employees.

Importance of Risk Management

Sugimoto The economic impact of the COVID-19 pandemic has deepened our awareness by providing a lesson on the importance of risk management. Amid the dramatic changes in the business environment, I feel there are broad issues we must address in that area. What are your views as outside directors with regard to Daicel's current status and issues?

Kitayama As well as disasters and economic volatility, climate risks have become more significant since the Japanese government committed to achieving carbon-neutral status by 2050. The Accelerate 2025-II Mid-Term Management Strategy has upheld the goals of reducing emission of greenhouse gas by 50% by 2030 and achieving carbon-neutral status by 2050, but this will require commensurate costs. I will be carefully watching how these costs play out amid the need for other strategic investments.

Hacchoji Daicel seeks to contribute to the development of a circular society and includes climate change initiatives in its sustainable management policy, which show that it recognizes climate change not only in terms of Business Continuity Plans and risk management but also as a vital concern for chemical manufacturers.

Makuta While long-term verification is required to assess the impact of environmental and social risks such as climate change and human rights, the very survival of a company may be threatened if it comes under fire over these issues. On the other hand, a sincere response to these issues may enhance corporate value. This is a theme that must be tackled under President Ogawa's strong leadership.

Sugimoto Since chemical manufacturing is an energy intensive industry, we have continuously sought to reduce energy consumption as we contribute to society through business. However, seeking a response amid expectations of a

further rise in costs poses a major challenge.

Makuta Speaking from my experience with various industries, Daicel is capable of making an earnest effort to address environmental and social issues. And my view is strengthened by Daicel's stance on quality control. Many companies consider quality defects as an individual issue that can be resolved through employee training, but Daicel tries to identify the root cause of defects and considers measures at the facility and raw material levels with the aim of preventing a recurrence. It is a company that invests generously where necessary to ensure steady improvement, so I am convinced that it will sincerely face up to environmental and social risks. That said, I think it can do better at sharing risk information with outside directors. We can make decisions and offer advice that are more appropriate if the Company will consistently share such information.

Sugimoto As Mr. Makuta pointed out, we often receive feedback on providing much clear information on risks and are aware that this is an area in which we can do better. We pride ourselves on being an honest company that discloses information sincerely and will consider ways to share risk information with outside directors.

Hacchoji What I fear most are risks that we cannot even imagine, such as the ongoing COVID-19 pandemic. It is our responsibility as outside directors to keep such cases in mind to uncover latent risks in each major project from an external perspective. And it is important to expand the scope of the risk map by doing so.

Makuta At the same time, a company needs to pursue aggressive governance and take risks from time to time in order to achieve business growth. It is our role as outside directors to offer objective opinions based on knowledge in our respective areas of expertise to encourage executive officers so they can steer the Company toward a rational course between risk-taking and risk management.

Fostering Manager Candidates for the Next Generation

Sugimoto We recognize that fostering future managers is another major issue. I would like to hear the views of Mr. Kitayama and Ms. Hacchoji, who are also members of the Nomination and Compensation Committee.

Kitayama With regard to fostering future managers, I would like to see the Company create an organization in which employees can express their opinions to their superiors without hesitation. In ancient China, there were officers appointed to warn and advise the Emperor on political matters. Taizong, the second Emperor in the Tang dynasty, is said to have ruled well by listening closely even to scathing criticism from his subjects. I hope Daicel will make this kind of management its goal and



foster personnel who can directly express their views on various strategies and initiatives.

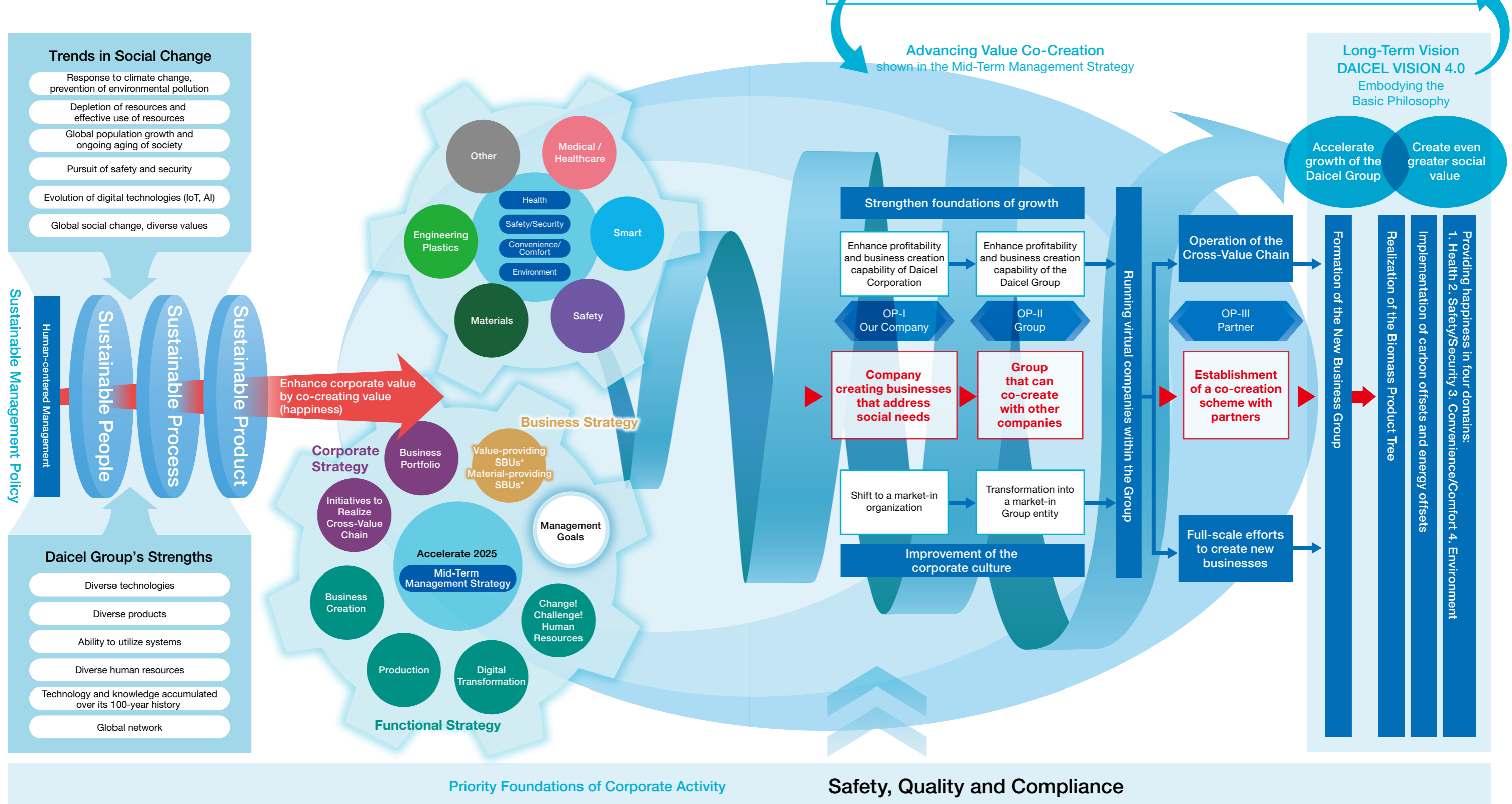
Hacchoji A leader who can make employees happy must have enough experience of overcoming hardship. I believe the only way to foster future leaders is through experience. While employees can acquire knowledge on management through training sessions, they cannot develop leadership without practical experience. So, I hope individuals will gain management skills through experience to become excellent leaders.

Sugimoto Thank you very much for your time today. We will certainly strive to live up to your expectations by incorporating your candid remarks in managing the Company.



Value Creation Process

Under its Basic Philosophy and Priority Foundations of Corporate Activity, the Daicel Group will continue to contribute to people's happiness by advancing value co-creation based on its Sustainable Management Policy to expand the scope of partnerships.



* Strategic Business Units

Sustainability Promotion

The Daicel Group's business activities are guided on a day-to-day basis by its basic philosophy of making people's lives better by co-creating value. Today, as public values are changing significantly in terms of realizing a sustainable society, the Group has sought to articulate its basic management approach by laying out the Sustainable Management Policy. Under this policy, we will prioritize safety, quality, and compliance as the most important foundation and seek to achieve a sustainable society and the Group's business expansion with integrity, tireless efforts, and self-transformation.

Sustainable Management Policy

Sustainable Management Policy

- We create and provide people with new values to achieve better quality of life.
- We construct a circular process with all our stakeholders to make harmonious coexistence with the environment.
- We promote "human-centered management" that enables diverse employees to grow while establishing their own presence and achieving fulfillment.

■ Conceptual diagram of Sustainable Management Policy



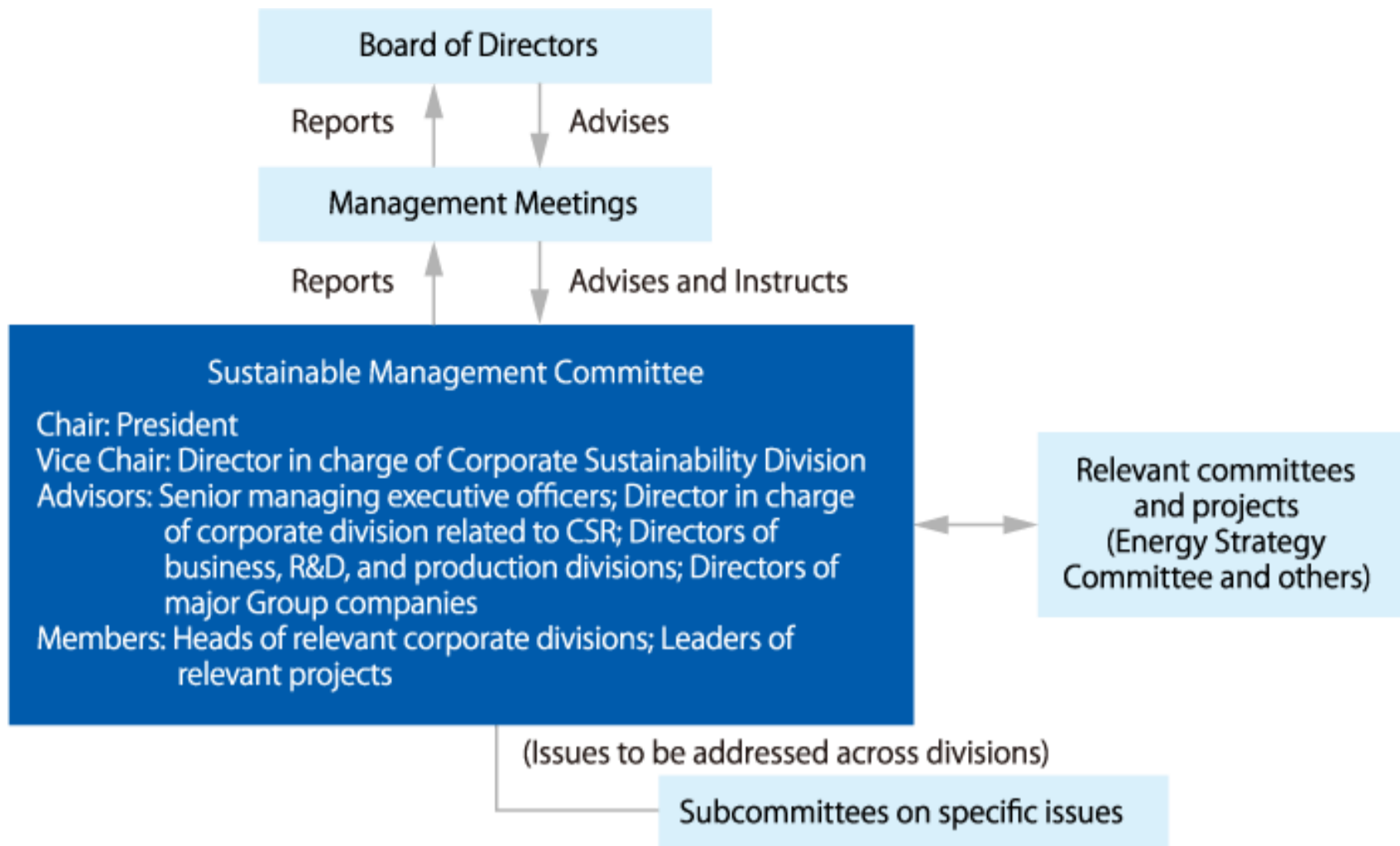
Sustainable Management System

In FY2021/3 the Daicel Group established the Sustainable Management Committee, chaired by the president and mainly comprising the heads of CSR-related divisions as members to engage in management-level discussions on the important agenda of promoting a circular society and Daicel's response to climate change. We also seek to raise the level of our CSR actions on issues including human rights, work environment, corporate ethics, sustainable procurement, and information disclosure through the activities of subcommittees on specific issues. Daicel will continue to address issues related to sustainability group-wide.

To further promote our contribution to developing a circular society, which is our mission under the Accelerate 2025-II Mid-Term Management Strategy revised in February 2021, in addition to existing members, including directors responsible for CSR-related divisions, all senior managing executive officers, directors responsible for business, R&D and production divisions, and directors of major Group companies began participating as advisors from FY2022/3 to accelerate our contribution to achieving sustainability through our businesses and innovation.

In June 2021, the Daicel Group identified its key sustainability issues, or materiality, to bolster its efforts for the Mid-Term Management Strategy and the CSR foundation. The Sustainable Management Committee will designate a KPI for each item and periodically evaluate progress to maintain a CAPD cycle.

■ Diagram of the Sustainable Management System



Joining the United Nations Global Compact

Daicel Corporation signed the United Nations Global Compact in April 2020 to support its intention to resolve global issues as a responsible corporate citizen. The Global Compact upholds the Ten Principles in the areas of human rights, labor, the environment and anti-corruption. The Daicel Group will comply with and practice the Ten Principles to promote responsible corporate management as a means for contributing to the creation of a sustainable society.

To encourage a greater understanding of the principles throughout the Company, relevant divisions of Daicel have joined the subcommittees organized by the Global Compact Network Japan from FY2022/3 to collect and share information.

➤ [Ten Principles of the United Nations Global Compact and the Daicel Group's Initiatives](#) 

➤ [Global Compact](#) 

WE SUPPORT



Initiatives for Achieving the SDGs Toward Realizing a Sustainable Society

The Sustainable Development Goals (SDGs) were adopted at the UN Sustainable Development Summit in 2015 as international goals aimed at creating a sustainable world that is better than today by 2030. Based on the pledge that no one will be left behind, the SDGs consist of 169 targets and 17 goals in areas including climate change, poverty, and gender equality, and enterprises are required to pursue initiatives to achieve the goals.

The Daicel Group believes its corporate mission is to recognize social issues and contribute to realizing a society characterized by sustainable products and business processes and to achieving the SDGs while creating new value for society. In FY2021/3, we sought to promote a greater understanding throughout the Group through the SDGs Ambassadors and activities to enable each employee, including those at Group companies, to develop their awareness of the SDGs and take the initiative to achieve the SDGs through their work.

In FY2021/3, with a view to making concrete contributions to development of a circular society outlined in our Mid-Term Management Strategy, we will work on evaluating and setting target on our contributions to the SDGs through our products and business. We will also develop our responses to our newly identified key sustainability issues (materiality) such as climate change.

[> materiality](#)

Initiatives Aimed at Spreading an Understanding of the SDGs

We consider it vital that each Daicel Group employee understands the SDGs and achieves personal growth by taking actions driven by their contribution to the goals. To this end, we are implementing various initiatives led by the Corporate Sustainability Division to promote awareness of the SDGs.

SDGs Ambassador Activities

The SDGs Ambassadors initiative was established by the Daicel Group in FY2021/3 as a community of self-motivated volunteers that cross the boundaries of worksites, job types and positions in order to promote awareness throughout the Group. A total of 74 employees, including those at Group companies and assigned overseas, participated in monthly online study groups (seven times in FY2021/3) to engage in a mutual exchange across worksites. Activities for promoting the SDGs have been launched at each site, with the SDGs ambassadors playing a central role. In FY2022/3, related activities began with an expanded community of 106 members (as of May 2021), including members from Group companies that did not participate last year. Ten SDGs ambassadors with a passion for the SDGs have been chosen as key persons who will work on spreading an understanding of the SDGs as their operational Objectives.



Examples of activities by SDGs ambassadors

Arai Plant

Three SDGs ambassadors shared their thoughts on taking everyday actions from the perspective of SDGs under the theme of “Pursuing the SDGs in my daily life.”



DM Novafoam Ltd.

SDGs ambassadors were dispatched to worksites that do not provide PCs for individual employees to explain about the SDGs in person. Employees participated in the “Learning about the SDGs with a smile” quiz held during the Daicel Group Sustainable Week in December 2020.

Daicel Safety Systems Inc.

To deepen understanding and spread awareness of the SDGs, ambassadors convey basic information on the SDGs during the monthly morning meetings of all employees, providing time for all employees to think about ways to engage with the SDGs both as a company and as individuals.



Internal Dissemination Activities

We continued our efforts in FY2020/3 by disseminating information on the SDGs and activities by SDGs ambassadors through our company newsletter Palette and the Arcus intranet (result: SDG information was published 13 times). In response to requests from individual divisions, members of the Corporate Sustainability Division gave lectures on topics relevant to each division (result: four lectures were attended by approximately 200 people).



Group-wide Online Event (Sustainable Week)

A Group-wide event called “Daicel Group Sustainable Week” was held with mainly online participation from December 1 to 9, 2020. A variety of events were offered under the catchphrase “What are SDGs? Let’s find your own SDG?” which included a message from the president, dialogues prepared by the diversity promotion project Wellbe , a live event by SDG personality Nana Takamatsu, and the SDGs Quiz Contest. About 1,500 people from the entire Group participated in these events.



Dialogue with Ms. Nana Takamatsu

Position-based Training

We continued our efforts from FY2020/3 by implementing position-based training for new employees and newly appointed managers. Since it was difficult to hold in-person training due to the COVID-19 pandemic, we used online tools to provide practical training programs that included Group discussions. In FY2022/3, we will expand the targets for training to those who have been promoted to middle and senior positions and by linking the content of the program with training organized by other CSR-related divisions such as those responsible for corporate ethics and responsible care. Additionally, we will strive to foster future leaders of sustainable management through a systematic training program for employees. The program will continue from the time they join the company to when they are assigned to a managerial post.

SDGs Survey




To assess the results of dissemination activities, we conducted our second SDGs Survey in February 2021. We sent a questionnaire to 5,850 employees, including those at Group companies (response rate: 74%) and found that over 90% of the respondents were aware of the SDGs while about 60% understood the content of the goals. We will continue to raise employee understanding and promote SDG initiatives through our business operations.

Promoting Contributions to the SDGs through Products and Businesses

Efforts to Evaluate Our Contribution to the SDGs

To clearly present our contribution to the SDGs through our products and businesses, we are constructing a system for qualitatively and quantitatively evaluating our contribution to the SDGs across our entire value chain. By combining this evaluation system with an environmental assessment based on LCA, we will seek to more clearly assess the Daicel Group's contributions to the SDGs and pursue management that will maximize our contribution.

Initiatives on eco-friendly Products

Relevant SDGs	Product	Outline	Environmental Impact
	BELLOCEA® Spherical Cellulose Acetate Particles Characteristics of BELLOCEA®	Spherical fine particles derived from cellulose (plant fiber), a natural material, and acetic acid, the main component of vinegar.	Highly biodegradable compared to petroleum-based resins and can be hydrolyzed through the action of water.
	Konjac Ceramide Superior properties of Konjac Ceramide compared with other plants (Japanese text only)	We are developing materials and supplements using plant-based Konjac Ceramide, which is safe and highly effective in health and cosmetic applications.	Tobiko (fly powder) from konjac tubers discarded in the past contain ceramides that are beneficial for maintaining health and beauty. Daicel developed a health food material by upcycling tobiko powder using Patented manufacturing methods. It contributes to resources recycling.
	TOPAS®COC PET bottle labels that float on water	Floating labels using TOPAS®COC raise the recycling ratio of PET bottles.	TOPAS®COC is being used as a material for labels with a smaller specific gravity than conventional labels, allowing them to float in water. Both materials can be collected as single material resin by efficiently separating labels and bottles.

Stakeholder Engagement

The Daicel Group aspires to be an honest company by forging highly reliable, collaborative relationships with all stakeholders involved in our business, including customers, suppliers, shareholders and investors, local communities and employees. We will strive to accurately understand stakeholder demands and expectations for the Daicel Group and reflect them in our business activities.

[> Stakeholder Engagement](#) 

The Ten Principles of the UN Global Compact and the Daicel Group's Initiatives

Human Rights

Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights; and

[Respect for Human Rights](#)
[Responsible Procurement](#)

Principle 2: make sure that they are not complicit in human rights abuses.

Labour

Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;

[Daicel Code of Conduct](#)
[Respect for Human Rights](#)
[Occupational Health and Safety](#)

Principle 4: the elimination of all forms of forced and compulsory labour;

[Promote diversity and inclusion](#)

Principle 5: the effective abolition of child labour; and

[Foster a corporate culture that meets employee needs](#)

Principle 6: the elimination of discrimination in respect of employment and occupation.

Environment

Principle 7: Businesses should support a precautionary approach to environmental challenges;

[Environmental Management](#)

Principle 8: undertake initiatives to promote greater environmental responsibility; and

[Responsible Care Activities](#)
[Sustainability Promotion](#)
[Biomass Product Trees](#)

Principle 9: encourage the development and diffusion of environmentally friendly technologies.

Anti-Corruption

Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery.

[Corporate Compliance](#)

Stakeholder Engagement

Stakeholder	Details	Main Methods of Communication
Customers	Corporate customers and general consumers to whom we provide our products and solutions	Dissemination of information via the corporate website and other media Contact points Organization of exhibitions and participation in exhibitions
Shareholders and Investors	23,799 shareholders (as of March 31, 2021), individual and institutional investors	Annual General Meeting of Shareholders (once a year) Financial Results Announcement Business briefings (four times a year) One-on-one interviews (about 200 times a year) Participate in conferences for overseas investors (four times a year) Individual visits to overseas investors (three times a year) Small meetings (twice a year) Facility tours (once a year) Dissemination and disclosure of information via the Daicel Report and corporate website Contact points
Suppliers	Suppliers of raw materials and components	Daily business transactions Responsible care promotion activities Contact points CSR Procurement Survey
Employees	All of the Daicel Group's 11,606 employees (as of March 31, 2021)	Various training seminars and educational training Central Healthcare Committee and Workplace Healthcare Committees Group newsletter and intranet Signing of the Labor-Management Charter with the labor union Compliance Help Line
Local Communities	Locations of the Daicel Group's offices and plants	Voluntary activities Friendship events with local residents Participation in local events
Industry and Academia	Partner companies, universities and research institutions with whom the Daicel Group conducts joint research and development	Joint research and development Participation in projects

Under its basic philosophy of improving the quality of life by co-creating value, the Daicel Group pursues business activities based on its Sustainable Management Policy. In formulating the Accelerate 2025-II Mid-Term Management Strategy in FY2021/3, we identified the materiality that will drive our efforts to realize it. Going forward, we will continue to apply a CAPD cycle to address material issues for achieving a sustainable society.

[> Sustainable Management Policy](#)

[> The Mid-term Management Strategy Accelerate 2025-II](#) 

Background and Approach to Identifying Our Materiality

We sought to identify our materiality by giving due consideration to how the Daicel Group could draw upon its strengths toward addressing social issues represented by the SDGs from the perspectives of the “Product, Process and People” in our Sustainable Management Policy. We also examined aspects related to safety, quality, and compliance as the priority foundation for our action.

Process of Identifying Materiality



Extract social issues

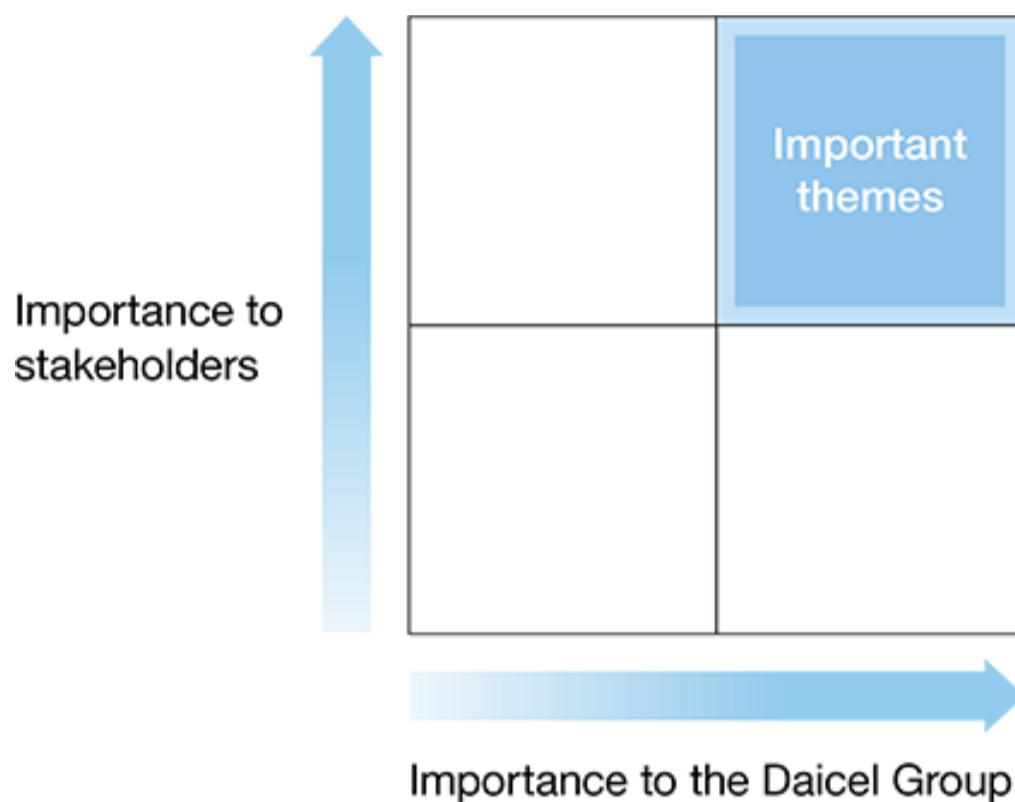
We referenced international guidelines, SDGs, the principles of the United Nations Global Compact and guidelines published by industry organizations to extract social issues that the Daicel Group should address.

STEP 2 Prioritize

We assessed items extracted in Step 1 by giving consideration to the following aspects to identify key themes with high priority by plotting them on the materiality map according to “Importance to stakeholders” and “Importance to the Daicel Group.” We then sorted them into the two categories of “Growth of the Daicel Group and value co-creation” and “Foundation for the Daicel Group's continuity and governance.”



















- Consistency between the Long-Term Vision and Mid-Term Management Strategy
- Consistency with related policies such as the Sustainable Management Policy, the Daicel Group Conduct Policy, and the Daicel Code of Conduct
- Consolidation of opinions from relevant departments





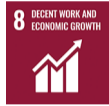





Materiality Map





Materiality

		Materiality		Relevant SDGs
Materiality aimed at achieving growth of the Daicel Group and value co-creation	Sustainable Product	Contribute to beauty and health	<ul style="list-style-type: none"> ● Sustainable cosmetic raw materials ● Health food materials for intestinal microbiome products ● Solutions for the pharmaceutical market ● Medical devices using “One-Time Energy” 	
		Contribute to the Smart Society.	<ul style="list-style-type: none"> ● High-performance films that contribute to the functional improvement of displays ● Solvents for semiconductor processing and polymers for resists 	

		<ul style="list-style-type: none"> ● Visualization technology based on sensing ● High-quality, high-performance materials that contribute to smart technology 	
	Provide safety and security for society.	<ul style="list-style-type: none"> ● Products that ensure safety and security of mobility ● Products that ensure safety and security of civilian applications 	 
	Provide environmentally friendly materials and technology.	<ul style="list-style-type: none"> ● Environmentally friendly plastics ● Materials and functional products that reduce environmental loads ● Water treatment membranes 	    
Sustainable Process	Contribute to the development of a circular society.	<ul style="list-style-type: none"> ● New biomass product tree ● Recycling waste and CO₂ into raw materials ● Biomass Value Chain 	    
	Respond to climate change	<ul style="list-style-type: none"> ● Energy optimization and energy offset* ● Clean energy ● Carbon recycling and carbon offset* ● Other CO₂ reduction measures 	 
Sustainable People	Promote diversity and inclusion	<ul style="list-style-type: none"> ● Work environment where everyone can work with vigor regardless of gender, age, nationality or disability 	 
	Support personal growth	<ul style="list-style-type: none"> ● Personnel development for honing expertise ● Framework to support employees who take on challenges ● Highly fair evaluation system 	 

		Materiality		Relevant SDGs
Materiality related to the foundation for the Daicel Group's continuity and governance	Environment	Reduce environmental impact	<ul style="list-style-type: none"> ● Water resource preservation ● Environmental management and prevention of air pollution ● Reduced emissions and effective management of chemical substances ● Consideration for the local environment ● Reduction and recycling of industrial waste in business activities 	   
	Social	Ensure process safety and disaster prevention , occupational health and safety	<ul style="list-style-type: none"> ● Elimination of process incidents based on risk assessments ● Minimization of damages based on crisis assessments 	
		Ensure chemical safety and enhance product Quality	<ul style="list-style-type: none"> ● Reinforced quality management to prevent recurrence of quality defects ● Centralized management and sharing of chemical substance information 	
		Respect human rights	<ul style="list-style-type: none"> ● Establishment and implementation of human rights due diligence ● Development of a framework for corrective and remedial action against human rights abuses, and employee education ● Dialogue with stakeholders on human rights 	  
		Foster a corporate culture that meets employee needs	<ul style="list-style-type: none"> ● Shorter working hours and improvement in the annual paid leave acquisition ratio ● Promotion of telework and support for flexible work styles 	

		Materiality		Relevant SDGs
Materiality related to the foundation for the Daicel Group's continuity and governance	Social	Promote sustainable procurement	<ul style="list-style-type: none"> • Dialogue with suppliers on promoting CSR • Improved level of CSR across the supply chain 	
	Governance	Strengthen foundation for Group governance and compliance	<ul style="list-style-type: none"> • Reinforce corporate governance • Enforce thorough compliance • Strengthen risk management initiatives • Boost information security 	

*A carbon offset/energy offset means to use up carbon as energy and resources effectively.

STEP 3 Confirm validity

The Corporate Sustainability Division and other relevant divisions discussed the validity of important themes identified through Steps 1 and 2. The results were reported and approved at the Management Meeting and subsequently endorsed by the Board of Directors.

STEP 4 Formulate materiality and KPIs

By going through Steps 1 to 3, we identified 15 material issues and will designate a KPI for each, and we will periodically evaluate progress to maintain a CAPD cycle. We will also review our materiality as needed in response to future changes in society and our business.

Environmental Management

Basic Approach

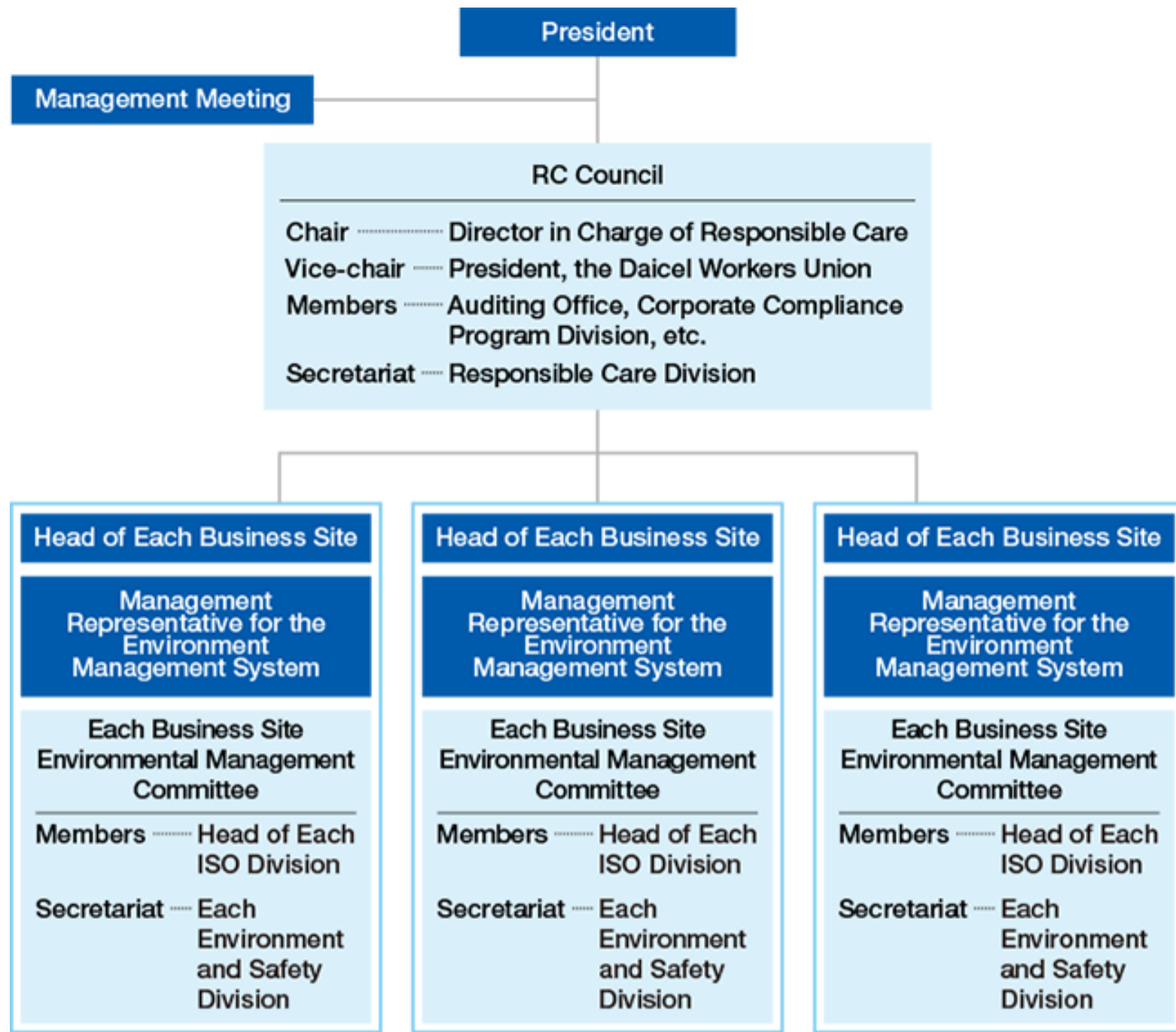
The Daicel Group seeks to fulfill its role in realizing a circular society by engaging in Groupwide activities for the environmental protection by making effective use of limited resources in its manufacturing process to minimize the Group's environmental impact. In accordance with the [Daicel Group Basic Policies for Responsible Care](#), we pursue initiatives under the specific themes of addressing climate change, reducing and recycling waste, reducing emissions of chemical substances, preserving water resources, preventing air pollution, and preserving biodiversity. Daicel's business sites and Group companies execute their own environmental management system and regularly report their progress while engaging in continuous dialogue with our stakeholders.

The Daicel Group will also advance initiatives for protecting the environment in an integrated effort across the value chain.

Management Structure

The Daicel Group has established an environmental management system under implementation system for responsible care to implement energy-saving measures, reduce CO₂ emissions, waste and the environmental impact on air and water quality, and preserve water resources and biodiversity. In each of these initiatives, we strive to protect the environment through continuous improvements by applying a CAPD cycle through which we revise our plans based on the results of the certification audits for ISO 14001 as well as internal and RC audits and formulate and execute new plans.

■ Our Structure for Environmental Management



➢ [Responsible Care Activities](#)

➢ [Response to Climate Change](#)

➢ [Reducing and Recycling Waste](#)

➢ [Management of Chemical Substance Emissions](#)

➢ [Water Resource Preservation](#)

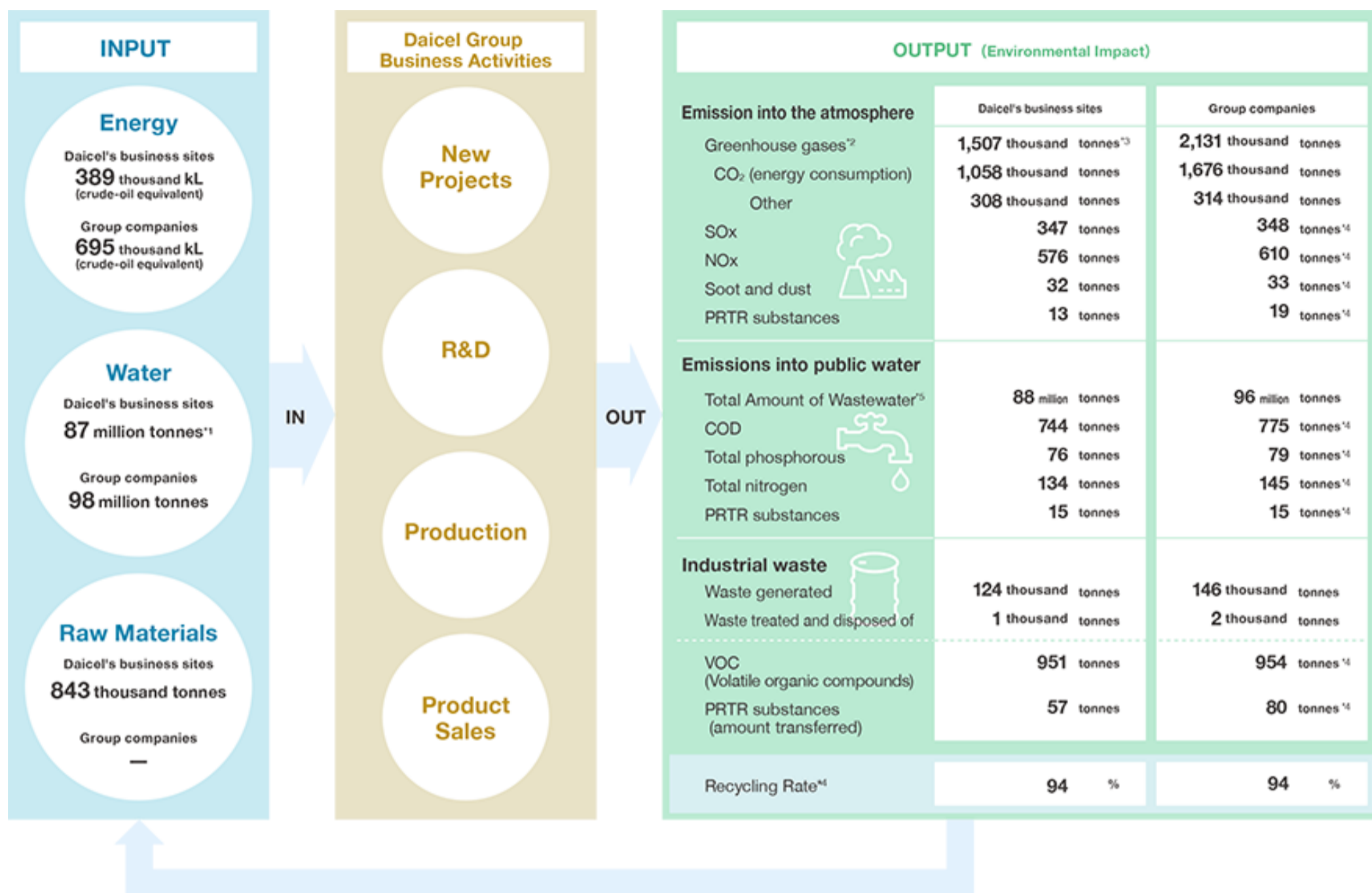
➢ [Environmental Management and Prevention of Air Pollution](#)

➢ [Preserving Biodiversity](#)

Environmental Impact of Business Activities

The environmental impact of the Daicel Group's business activities (material balance) in FY2021/3 is shown below.

Environmental Impact in FY2021/3



- *1 Includes 33 million tonnes of seawater for cooling.
- *2 Includes CH₄, N₂O, HFC, PFC, SF₆, and NF₃, aside from CO₂.
- *3 Includes the headquarters, etc.
- *4 Daicel's business sites and Domestic Group companies.
- *5 Includes byproduct water from manufacturing.

[> ESG Data](#) [Environmental Performance Data](#)

Internal Environmental Audits

In accordance with ISO 14001, each business site of the Daicel Group undergoes audits by a certification body and an annual internal audit. The internal audit is focused on auditing compliance with standards, follow-ups on matters that had been previously pointed out, and legal compliance with environmental regulations.

Education and Training on the Environment

The Daicel Group provides education in accordance with ISO 14001 on operations that have an impact on environmental performance such as our initiatives on climate change, reduction and recycling of waste, and management of chemical substance emissions, as well as content aimed at fulfilling our compliance obligations. In particular, we seek to raise awareness of our climate change initiatives among employees at the headquarters through the work of the Energy Strategy Committee.

Status of Compliance with Environmental Regulations

In FY2021/3, there were no serious violations of environmental regulations or litigations involving compensation for environmental damages.

[> ESG Data](#) [Violations of Environmental Regulations](#)

Status of Environmental Management System Certification

Environmental management system certification has been obtained by 85% and 63% of our production sites in Japan and overseas, respectively. Please refer to the following link on the current status of environmental management system certification.

[> Status of Environmental Management System Certification](#)

Response to Climate Change

Basic Approach

The Daicel Group designated its medium- to long-term targets for reducing GHG emissions under its [Basic Policies on Responsible Care](#) with the goal of realizing a carbon neutral society. We will seek to reduce GHG emissions for the Group and throughout our cross-value chain following a fundamental review of our production processes. We will also embrace new technologies and renewable energy while switching fuels and optimizing energy consumption.

Medium-term reduction target for GHG emissions

Medium-term reduction target for GHG emissions

- 2050: Achieve carbon neutrality*¹
- 2030: 50% reduction in GHG emissions (compared to FY2019/3)*²
- 2025: 37% reduction in GHG emissions (compared to FY2019/3)*²

*1 Applicable to the Daicel Group's Scopes 1, 2, and 3 emissions

*2 Applicable to the Daicel Group's Scopes 1 and 2 emissions

To achieve carbon neutrality by 2050, we designated a medium-term target of reducing GHG emissions by 50%, compared to FY2019/3 levels, by 2030. We decided on this target after referencing the level of reductions required to maintain the global rise in temperature below 1.5°C from Pre-Industrial Revolution levels, as laid out by the Paris Agreement, and to adhere to the framework of the Science Based Targets initiative (SBTi). To achieve this medium-term target, we will further develop the energy-saving initiatives we have been undertaking, for GHG emission reductions.

Our Structure for Promoting GHG Emission Reductions

To bolster our Group-wide initiatives for saving energy and reducing GHG emissions, we expanded the scope of the Energy Saving Committee in July 2020 by establishing the Energy Strategy Committee, which reports directly to the president and CEO. The Energy Strategy Committee is chaired by the Energy Management Control Officer, who is the executive officer responsible for the Production Management Headquarters, with membership comprising the heads of our production, energy, and other corporate departments in Japan. The committee will promote and manage energy savings and also construct a circular process for the entire Group that is in harmony with the global environment from the three aspects of reductions in the Energy Department, reductions in production processes, and innovative reductions for achieving the Group's overall target.

Initiatives for Reducing GHG Emissions

Reducing GHG Emissions

In FY2021/3, GHG emissions for the Daicel Group as a whole dropped by 108 thousand t-CO₂ from the previous fiscal year to 2,131 thousand t-CO₂ (down 5% year-on-year). This is broken down into a reduction of 1,676 thousand t-CO₂ (down 2% year-on-year) in GHG emissions at Daicel's business sites and domestic Group companies and a reduction of 455 thousand t-CO₂ (down 13% year-on-year) in GHG emissions at overseas Group companies.

Energy consumption has a major impact on GHG emissions. In FY2021/3, energy consumption for the Daicel Group fell 4%, or 27 thousand kL in crude-oil equivalent, from the previous fiscal year to 695 thousand kL, due to the higher ratio of scrap tire in fuel used at the Ohtake Plant as well as the shift to highly efficient boilers at Polyplastics Asia Pacific Sdn. Bhd.

In FY2021/3, energy-derived CO₂ emissions for Daicel's business sites (including the head offices) fell 2% from the previous fiscal year to 1,058 thousand t-CO₂, thus meeting the medium-term target (for the period ending in FY2021/3) based on the Keidanren's Commitment to a Low-Carbon Society.

Medium-term target (final year: 2020)

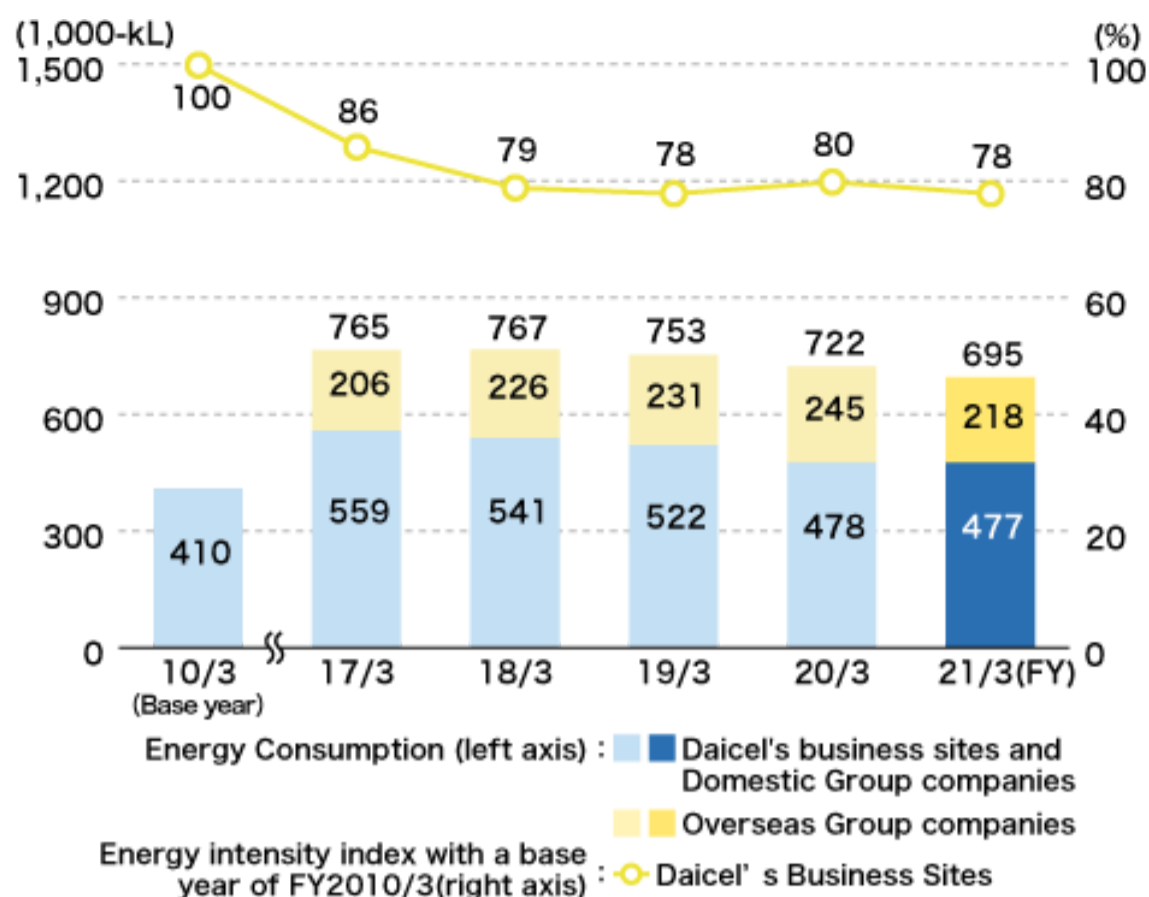
Year-on-year improvement of at least 1% in average change in energy intensity (Based on the calculation method in the Energy Conservation Act)

Energy-derived CO₂ emissions (BAU) of 1,580 thousand t-CO₂ or less

FY2021/3 Achievements

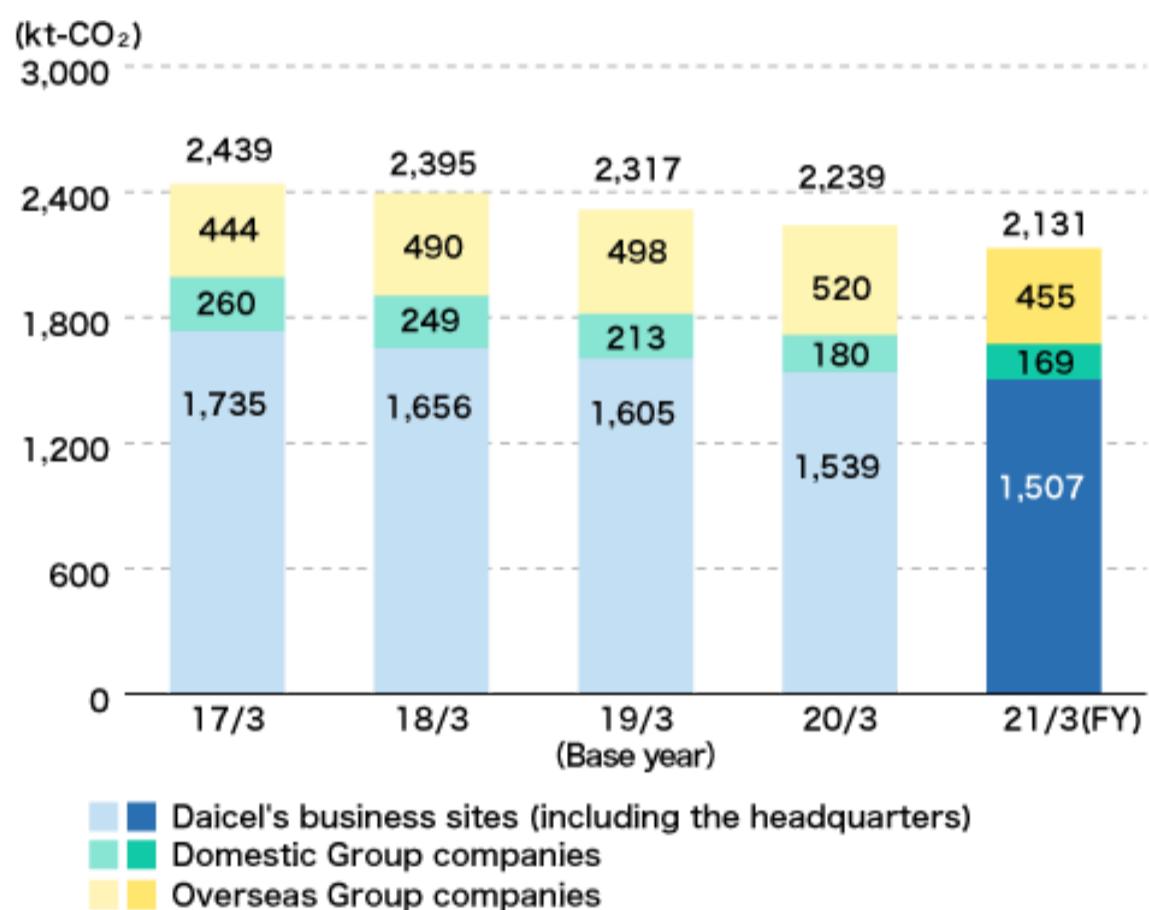
Year-on-year improvement of 2.8% in average change in energy intensity, 1,070 thousand t-CO₂ in energy-derived CO₂ emissions (BAU)

Energy Consumption



* Energy intensity is measured by the quantity of energy required per unit output or activity. In an index of energy intensity, the energy intensity is the quantity of energy required per unit output and the energy intensity of a reference year is treated as 100. The power sold externally has been included in this calculation from FY2017/3 in accordance with the revised Electricity Business Act.

GHG emissions (Scope 1,2)



Reducing CO₂ Emissions across Daicel's Supply Chain

We believe that we must reduce GHG emissions not only by the Daicel Group but also by its suppliers, and we have been working to identify and reduce the volume of GHG emissions across the entire value chain in accordance with the GHG Protocol, the world's most widely used standards, since FY2021/3.

GHG emissions by Scope

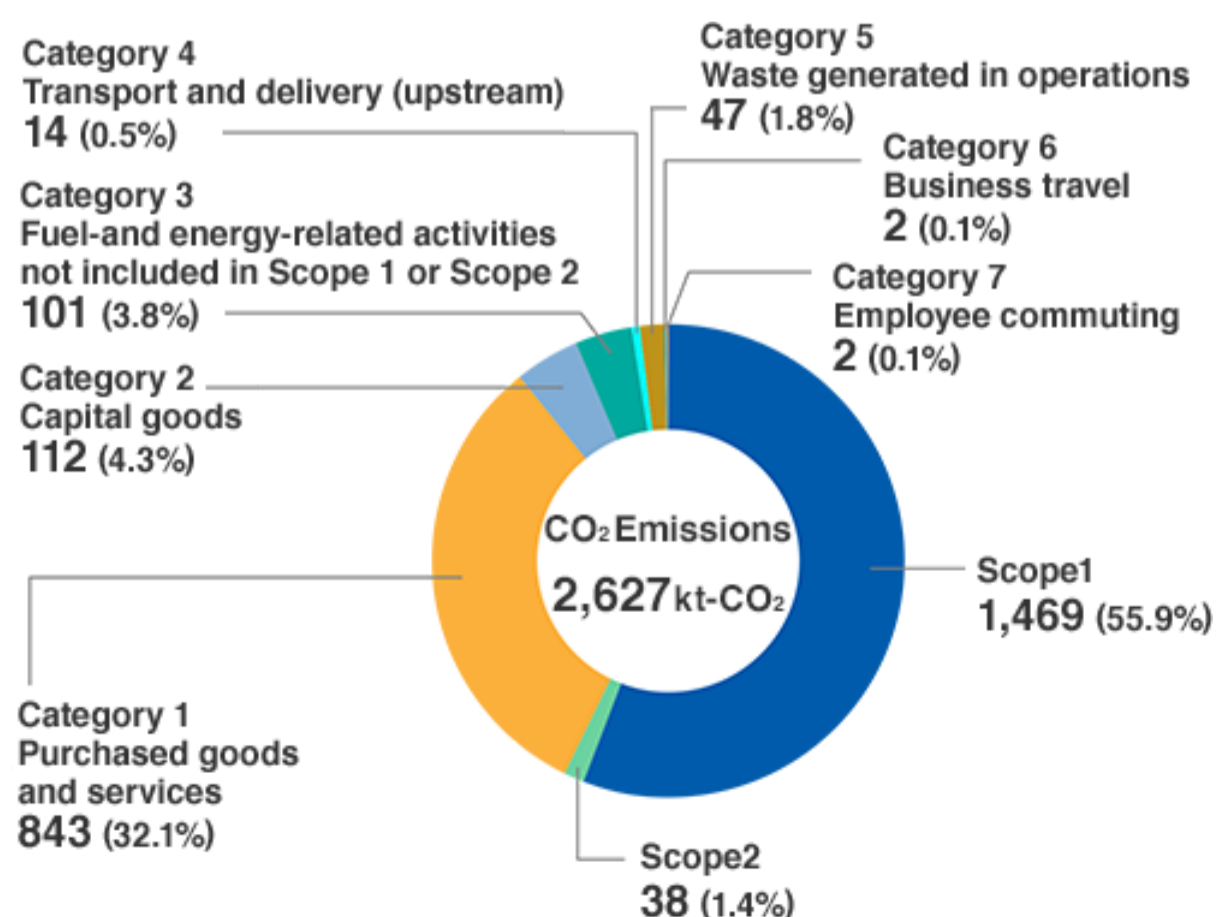
Categories		Emissions (thousand t-CO ₂)
Scope 1* ¹	Direct GHG emissions	1,469
Scope 2* ¹	Electricity indirect GHG emissions	38
Sum of Scope 1,2* ¹		1,507
Scope 3	Other indirect GHG emissions	1,121
Category 1* ²	Purchased goods and services	843
Category 2* ³	Capital goods	112
Category 3* ²	Energy-related activities outside Scope 1 and 2	101
Category 4* ²	Transportation and distribution (upstream)	14
Category 5* ²	Waste generated in operations	47
Category 6* ⁴	Employee business travel	2
Category 7* ⁴	Employee commuting	2
Sum of Scope 1,2,3		2,627

*1 Daicel's business sites (including the headquarters)

*2 Daicel's business sites

*3 Daicel Group

*4 Daicel's business sites and Domestic Group companies



* Emissions of scope 1, 2 and 3 at our business site are calculated and verified by a third party.

Initiatives to Reduce the Environmental Impact of Logistics Operations

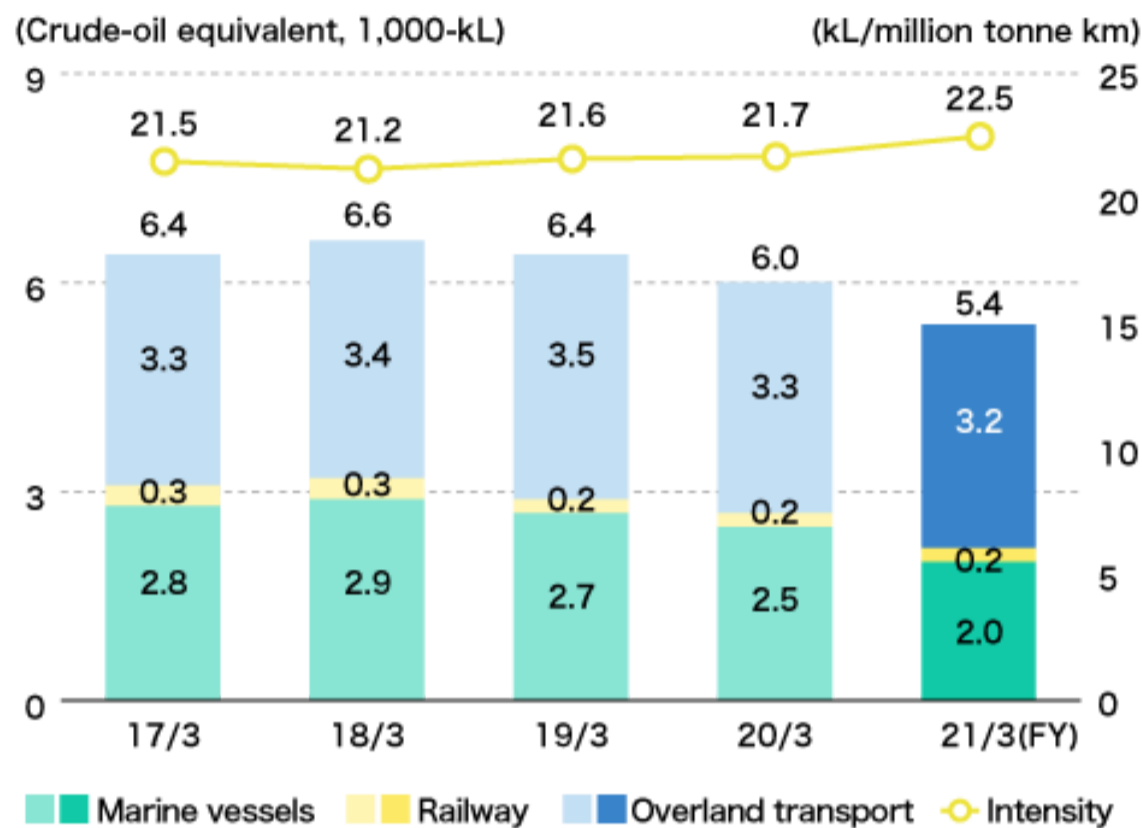
The Daicel Group is striving to curb energy consumption associated with product transportation through initiatives that include promoting a modal shift*¹ and container round use*².

As for conserving energy in logistics in FY2021/3, the Company has improved its energy consumption associated with land transportation and marine vessels, and the energy consumption rate decreased by 0.8%.

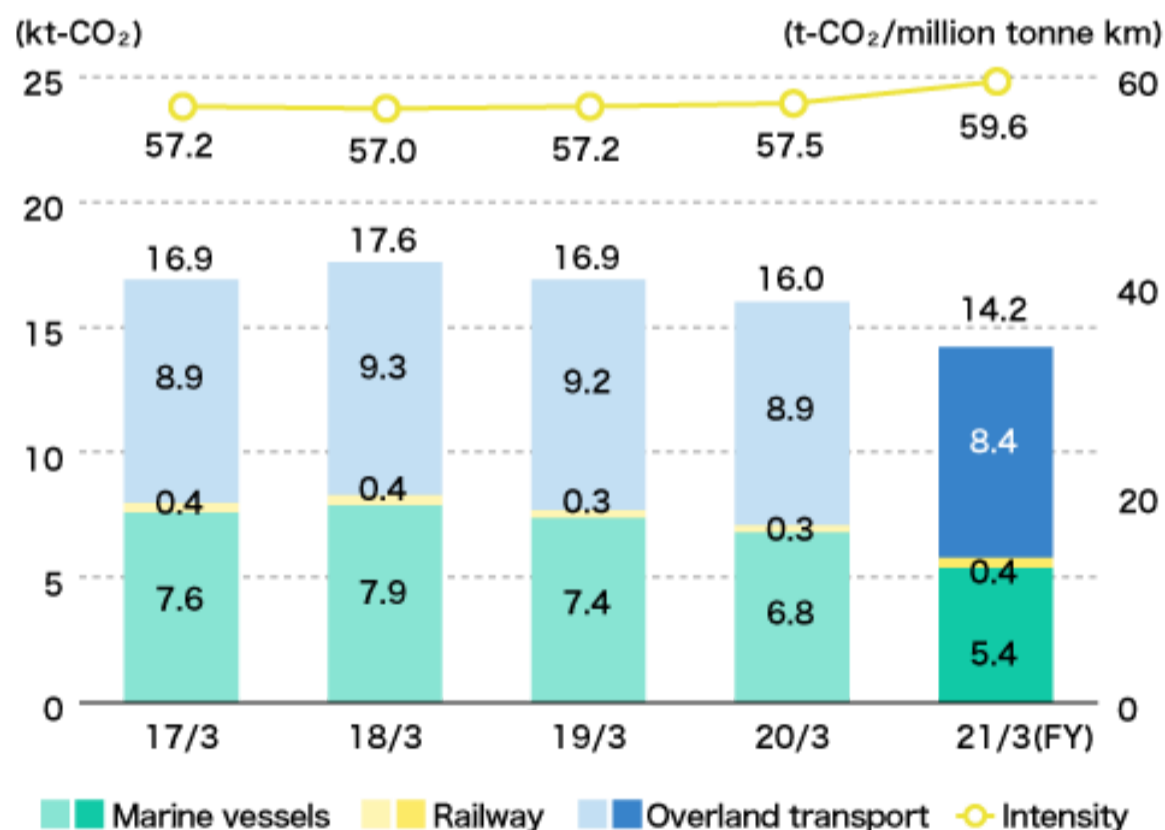
*1 modal shift: The shift from truck-based goods transportation to more environmentally friendly marine and railway transportation.

*2 round use: The practice of using devanned import containers for exports without returning them to the shipping companies.

Energy Consumption and Energy Consumption Rates in Logistics Operations (The Daicel's business sites and Domestic Group companies)



CO₂ Emissions/Intensity (The Daicel's business sites and Domestic Group companies)



Reduction in Transport CO₂ Emissions by Modal Shift

Daicel Logistics Service switched its logistics between the main ports of imports and exports and Daicel's plants from road to sea transport in 2007 to reduce CO₂ emissions generated in logistics. Currently, approximately 8,000 containers are transported by sea every year. With this modal shift, the company has successfully achieved a 70% reduction in CO₂ emissions compared to road transport.

* Calculated on the basis of 40-foot containers.

Promoting Container Round Use

Reusing imported goods containers for exporting products can reduce CO₂ emissions associated with the transport of empty containers. Daicel Logistics Service Co., Ltd. has adopted the round use method for containers for export and import operations to further reduce CO₂ emissions. This also saves energy by realizing smooth, efficient transport based on its proprietary system for facilitating the matching process for each shipping company. In addition, we strive to ensure safe transport by reviewing the standards for container use and implementing simple repairs as needed.

[> Daicel Logistics Service Modal Shift and Round Use \(Japanese text only\)](#) 

Reducing GHG Emissions from Three Angles

The Daicel Group responds to climate change through the building of a circular process, which will enable us to run our business in harmony with the global environment, from the three angles of GHG reductions in existing production processes, GHG reductions in the Energy Department, and innovative GHG reduction technologies.

Optimizing Energy Savings in Production Processes

Energy consumption by the Himeji Production Sector and Ohtake Plant account for 80% of Daicel's business sites overall consumption. We treat these as one virtual factory and centrally manage information related to their manufacturing processes. This enables us to formulate optimal manufacturing plans and achieve overall optimization and energy savings. We will also seek to reduce GHG emissions by installing and deploying an autonomous production system based on AI logic, which we jointly developed with the University of Tokyo. This is part of our Intellectual and Integrated Production System constructed through "Daicel Way" production innovation.

[> Process Innovation](#)

Energy Operation Optimization System

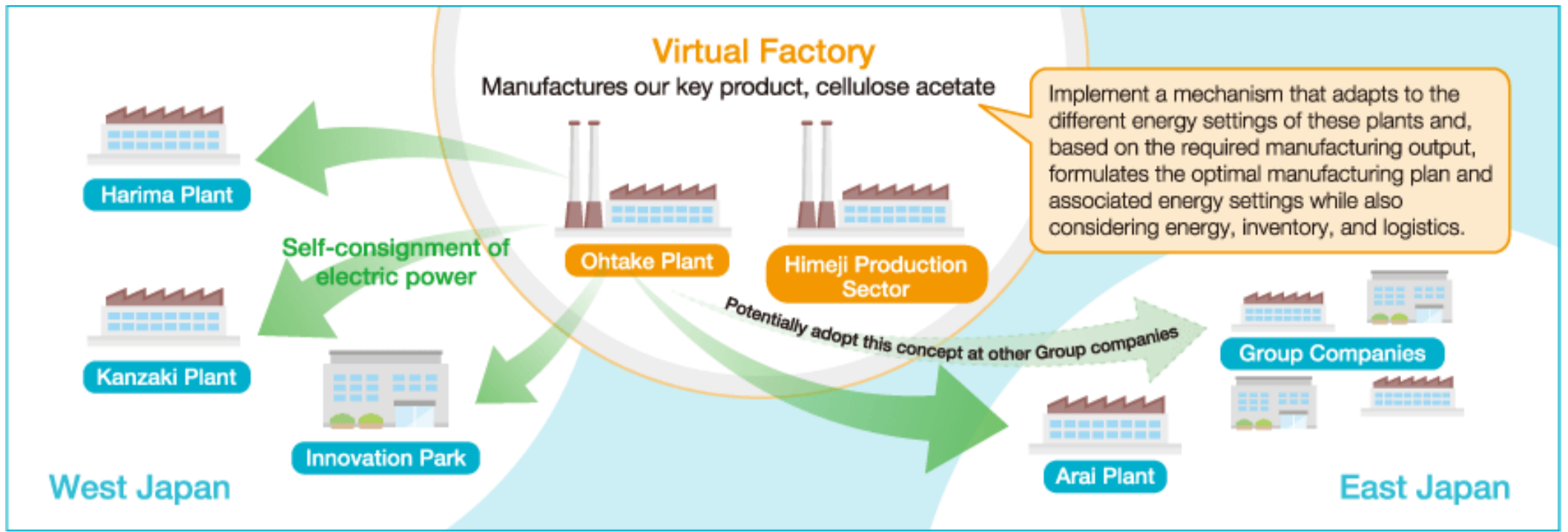
In order to manage our energy consumption in accordance with the optimal manufacturing plan, we have introduced the Energy Operation Optimization System. This provides online monitoring and controls over the actual operational settings based on the optimal settings as calculated by simulation, and it is used by the Himeji Production Sector and Ohtake Plant.

Leveraging the Self-Consignment System

As part of optimizing energy supply and demand, in June 2018 the Ohtake Plant started sending excess generated electricity to other worksites in West Japan using the self-consignment system. It began sending electricity to the Arai Plant in East Japan in May 2020 and to the Fuji Plant of Polyplastics Co., Ltd. in April 2021.

Looking ahead, we expect to further extend the system to other Group companies toward achieving zero purchased electricity at the Group level.

■ The Self-Consignment System



Reducing GHG Emissions in the Energy Department

Each of our plants generates its own steam and electricity for manufacturing, and we also seek further energy conservation and reductions in GHG emissions by upgrading their facilities, promoting fuel conversion for boilers and practicing green procurement.

■ Energy-saving and GHG reduction measures at each plant

Aboshi Plant	In September 2012, the plant installed a cogeneration system with gas turbines. In June 2019, it started selling its excess electricity.
Ohtake Plant	In August 2007, the plant started selling its excess electricity. In July 2016, it installed an additional boiler. Two dual-fuel boilers are run in parallel using a mix of coal and scrap tires as fuel.
Arai Plant	In January 2017, the plant switched from a coal boiler to a cogeneration system with gas turbines.

Reduce Fossil Fuel Use

The Ohtake Plant seeks to reduce its use of fossil fuel use by using a mix of coal and scrap tires as fuel for its boilers.

➤ [Reduction and Recycling of Industrial Waste](#)

Innovative Technologies Aimed at Reducing GHG Emissions

The Daicel Group looks well beyond efforts to improve and refine its technologies when putting in place energy-saving measures. It also works to comprehensively review its production processes and develop new technologies to reduce its GHG emissions.

Distillation processes tend to account for around 40% of general energy consumption in the chemicals industry. This is also true for Daicel's operations. As a result, uncovering new distillation process energy-saving technologies will go a long way toward reducing energy consumption. The distillation process utilizes high-temperature thermal energy while, on the other hand, generating large volumes of low-temperature exhaust heat energy, which is released unused. With this in mind, a truly beneficial energy-saving technology for the distillation process must be developed with a focus on the effective recovery and reuse of low-temperature exhaust heat energy as well as a reduction of high-temperature thermal energy use.

The Daicel Group has launched an innovative energy-saving technology project and has been promoting cross-sectional activities throughout every level of the Company. These efforts have led to the creation of a modified Petlyuk process and vapor recompression (VRC) technology to reduce the energy consumption of distillation towers. Although Petlyuk and VRC technologies have been used for other applications, Daicel is the first in the world to verify their use in chemical plants.

Moreover, we are engaged in joint research with several universities to establish the technology for melting wood at normal temperature and pressure (which requires less energy) toward constructing a new biomass product tree that holds the key to a carbon-neutral future. We are also developing a technology for recycling carbon dioxide by converting it into carbon monoxide through a reverse reaction. This is to reduce the amount of CO₂ that escapes into the atmosphere even after measures are taken to limit CO₂ emissions in the manufacturing process.

[> New Biomass Product Trees \[PDF : 1.2MB\]](#) 

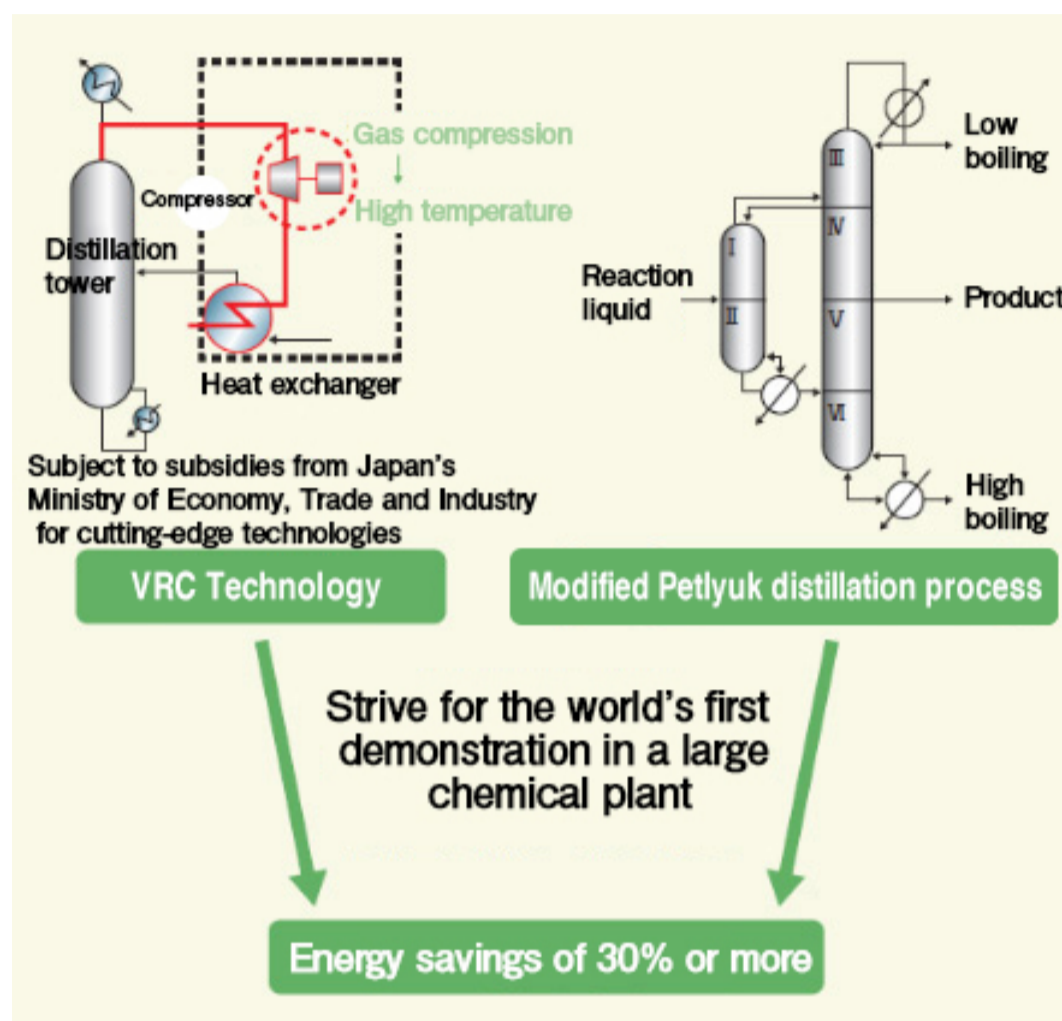
Enhancing Our Current Technologies

● Modified Petlyuk distillation process

Petlyuk distillation, and its practical application as a dividing-wall column (DWC), is widely recognized as an energy-saving technology. However, the introduction of a DWC has been limited to the complete replacement of distillation towers. Unable to use existing facilities, a DWC initiative entails massive amounts of capital expenditure. By refining Petlyuk technology, Daicel developed a new process technology that allows for application through improvements to distillation towers. Since 2014, the technology has been applied at the Arai Plant and the Company's acetic anhydride manufacturing facilities.

● Vapor Recompression (VRC) Technology

Expectations are mounting that VRC technology will become ubiquitous to recover heat as high-temperature steam by compressing the exhaust heat inherent in low-temperature steam. While this technology has been widely used in aqueous-system simple distillation processes, there have been no examples of its application in organic solvent distillation processes. Aiming to do just this, Daicel has been working with a compressor manufacturer to develop a compressor that would enable the use of the VRC technology in organic solvent distillation processes. Verification is now underway using a prototype distillation process.



New Technologies that Adapt to Environmental Change

● Membrane Separation Technology

The evaporation process in distillation consumes massive amounts of energy. Dramatic energy savings, however, are possible if a membrane separation technology is used instead. And we have been evaluating the operating life of various candidate membranes since April 2016.

● New Reaction Technology

We developed an innovative process, which leverages a newly developed reaction technology with a new catalyst. This is installed at the Aboshi Plant's 1,3-BG facility, which will be completed in September 2020. We expect that energy consumption will be reduced by approximately 20% compared to that of conventional technologies.

● New Wastewater Treatment Technology (Anaerobic Wastewater Treatment Technology)

Anaerobic wastewater treatment does not require oxygen and therefore requires less energy. In addition, the methane gas generated can be used for heating. Since April 2016, we have been experimenting and validating this new technology for use in production.

Reduction and Recycling of Industrial Waste

Basic Approach

[The Daicel Group follows its Basic Policies for Responsible Care](#) to implement a variety of initiatives for reducing environmental impact, including preservation of water resources, environmental management of air pollution, reductions in emissions and appropriate management of chemical substances. With regard to waste reduction and recycling, we are further promoting the 3Rs to reduce the amount of waste. This includes efforts to save resources, reuse, and recycle as we strive to realize a circular society and circular economy.

Toward Achieving Our Mid-Term Targets

As our mid-term target for the period ending FY2026/3, we are focusing on (1) raising the recycling rate at Daicel's business sites and Domestic Group companies to 95% or higher and (2) achieving zero emissions at Daicel's business sites and Domestic Group companies. To improve our recycling rate, we will continue to apply the 3Rs to industrial waste by promoting the effective use of resources and reducing the amount of waste incinerated without energy recovery. In regard to achieving zero emissions, we will work on enhancing our recycling rate for plastic waste and organic sludge.

Mid-Term Targets for Waste Disposal

Mid-Term Targets through FY2026/3	Definition
Raise the recycling rate for Daicel's business sites and Domestic Group companies to 95% or higher	Recycling rate = $\frac{\text{Recycled materials}^* + \text{Thermally recycled materials}}{\text{Total amount of industrial waste}^*}$
Achieve zero emissions for Daicel's business sites and Domestic Group companies	Reduce landfill to less than 1% of the total amount of industrial waste*

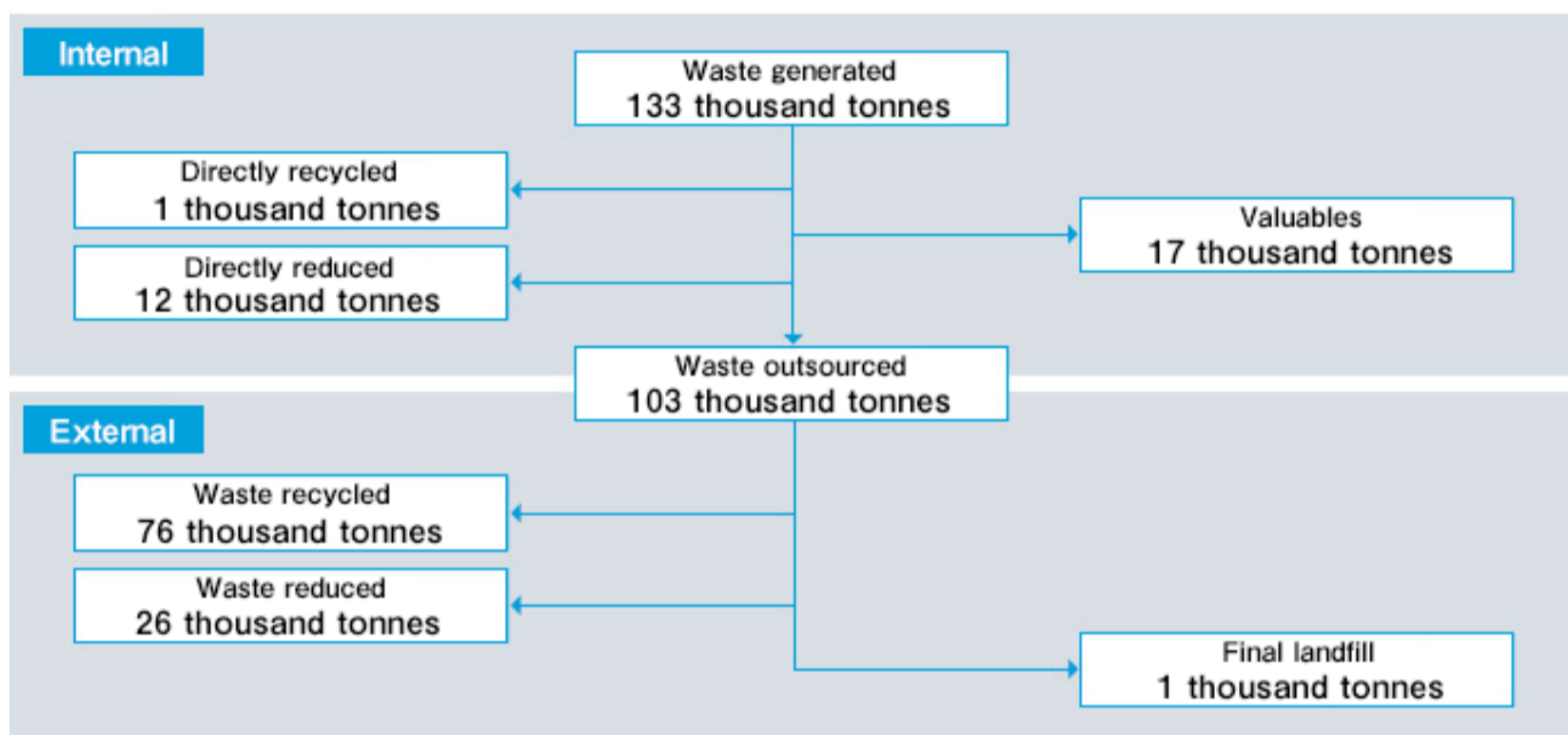
* Includes valuables

Initiatives to Reduce Industrial Waste

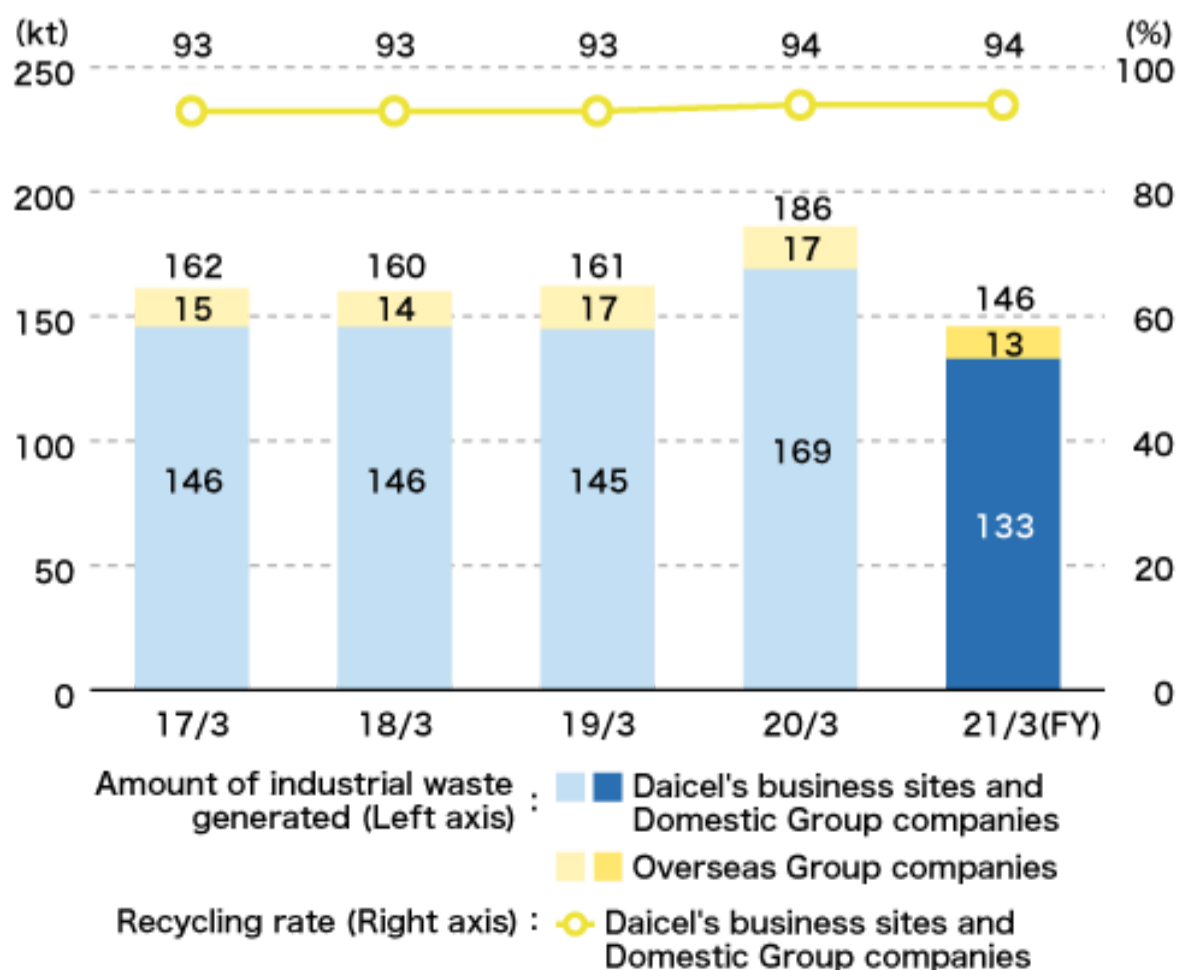
The Daicel Group intends to achieve zero emission status by promoting initiatives for reducing industrial waste centered on the 3Rs.

In FY2021/3, the amount of industrial waste generated by the Daicel Group decreased by 21% compared to the previous fiscal year to 146 thousand tonnes as plant removal work peaked and production of some products was adjusted. The recycling rate was unchanged year-on-year at 94%. The amount of landfill waste fell 54% from the previous fiscal year to 2.1 thousand tonnes due to the absence of a one-time disposal situation that occurred the previous year. In FY2021/3, the landfill rate for Daicel's business sites and domestic Group companies was 1.1%. We will strive to achieve our new target of zero emissions from FY2022/3. As a company involved in businesses that create industrial waste, we ensure that all our waste is properly disposed of by checking permits, disposal methods, and other details of the contracted industrial disposal companies at their sites. In the coming year, we will continue to work on waste recycling and reduction.

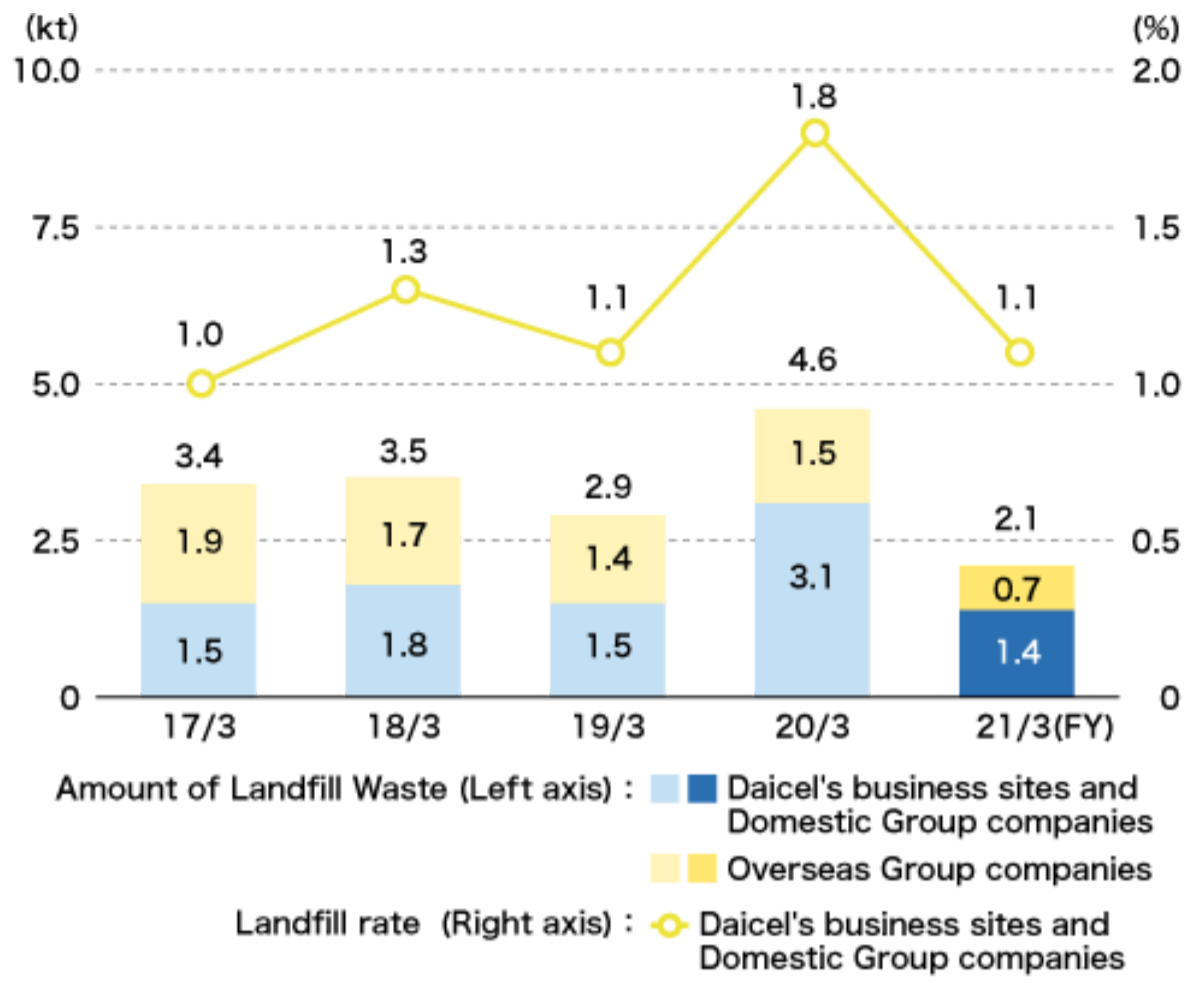
Industrial Waste Reduction and Recycling Flow in FY2021/3 (Daicel's Business Sites and Domestic Group Companies)



Amount of Industrial Waste Generated and Recycling Rate



■ Amount of Landfill Waste and Landfill Rate



> ESG Data [Industrial Waste Reduction](#)

Promoting the 3Rs

The Daicel Group pursues the 3R initiatives of reduce, reuse, and recycle, including the conservation of resources, under the Daicel Group's Basic Policies for Responsible Care.

Major 3R Initiatives

Reduce	Improve the manufacturing facility for inflators	We seek to reduce industrial waste by modifying the manufacturing facility to lower defect rates for welding and caulking.
	Engineering Plastics	We seek to reduce industrial waste by introducing a drying process to reduce the volume of deposits with a strong odor that occur during wastewater treatment.
Reuse	Reuse palettes for shipping	We promote reuse by switching to palettes that are easier to reuse and by conducting bulk collection of palettes.
	Reuse containers	We promote reuse by cleansing containers to avoid single use.
Recycle	Recycle boiler slag into raw material for cement and other materials	We select multiple disposal companies to promptly implement recycling.
	Recycle metals	We recycle metals by sorting waste generated by plant removal.
	Recycle inflators	We implement the treatment of explosive waste from inflators of scrapped automobiles at our facilities, and we sort metals and plastics for recycling.

TOPICS

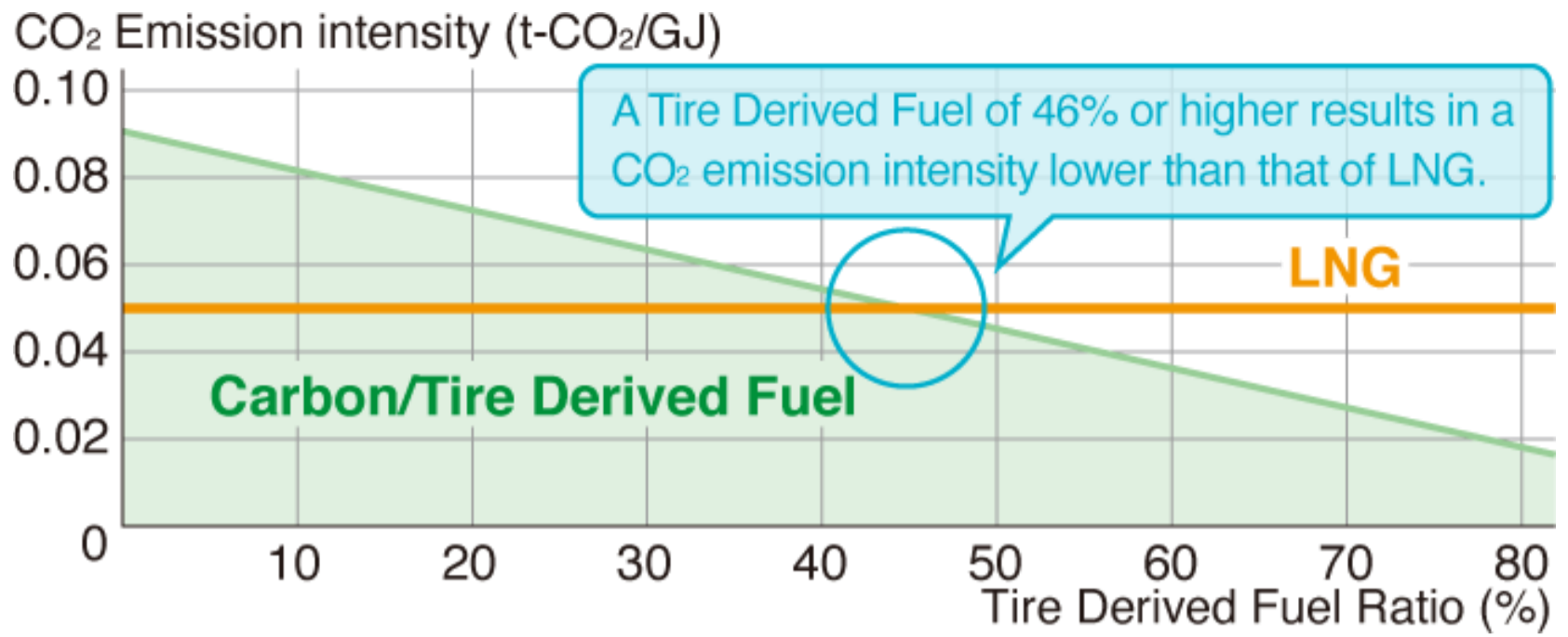
Using Tire Derived Fuel to Reduce Fossil Fuel Use

In Japan, roughly 100 million scrap tires, or about one million tonnes, are generated each year, placing a considerable load on the environment. We carry out thermal recycling at the Ohtake Plant to effectively use tires as energy fuel. Since co-firing of coal and tire chips can reduce the use of fossil fuels, we have been collaborating with manufacturers of power generation equipment and making progress in the improvement of the co-firing rate and development of technologies to generate the necessary level of power safely.

Moreover, we are promoting recycling through the use of dust and cinders as well as roadbed improvement agents, which account for about 70% of the total volume of generated industrial waste and the sorting and collection of plastic waste.

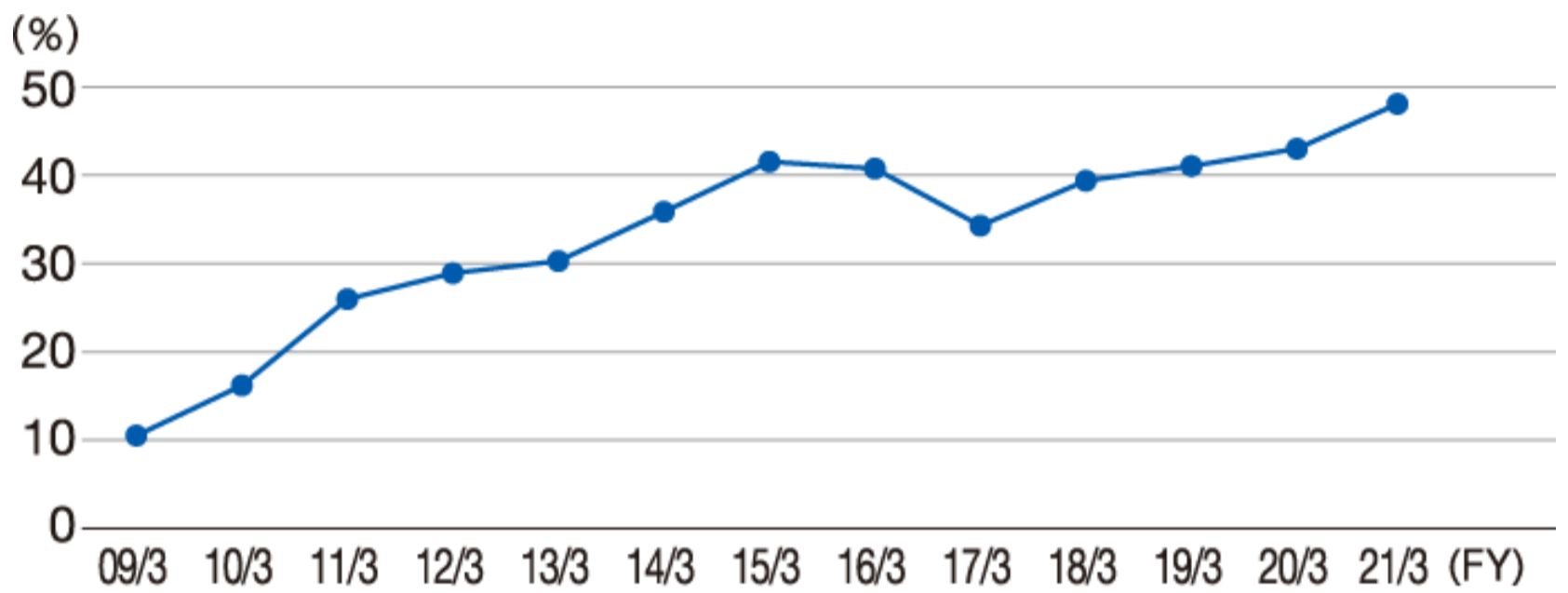
In FY2021/3, we sought to improve the quality control of scrap tires and achieved a co-firing rate of 48%. Going forward, we will continue to reinforce our recycling efforts to bring about a sustainable society.

■ How the Tire Derived Fuel Ratio Affects CO₂ Emission intensity*



* Volume of energy-derived CO₂ emissions as defined in the Energy Conservation Act.

■ Tire Derived Fuel Ratio at the Ohtake Plant



Initiatives Addressing Marine Plastics

As part of Preserving Biodiversity activities, the Daicel Group strives to solve the marine plastic waste problem.

[> Initiatives Addressing Marine Plastics](#)

Emission Management of Chemical Substances

Basic Approach

The Daicel Group monitors the emissions and transfers of chemical substances, including those regulated under the Pollutant Release and Transfer Register (PRTR), and volatile organic compounds VOCs to promote reductions in emissions. It also practices appropriate management of chemical substances in accordance with the [Daicel Group Basic Policies for Responsible Care](#).

Management structure

[> Our Structure for Responsible Care](#)

Reducing PRTR Substance Emissions

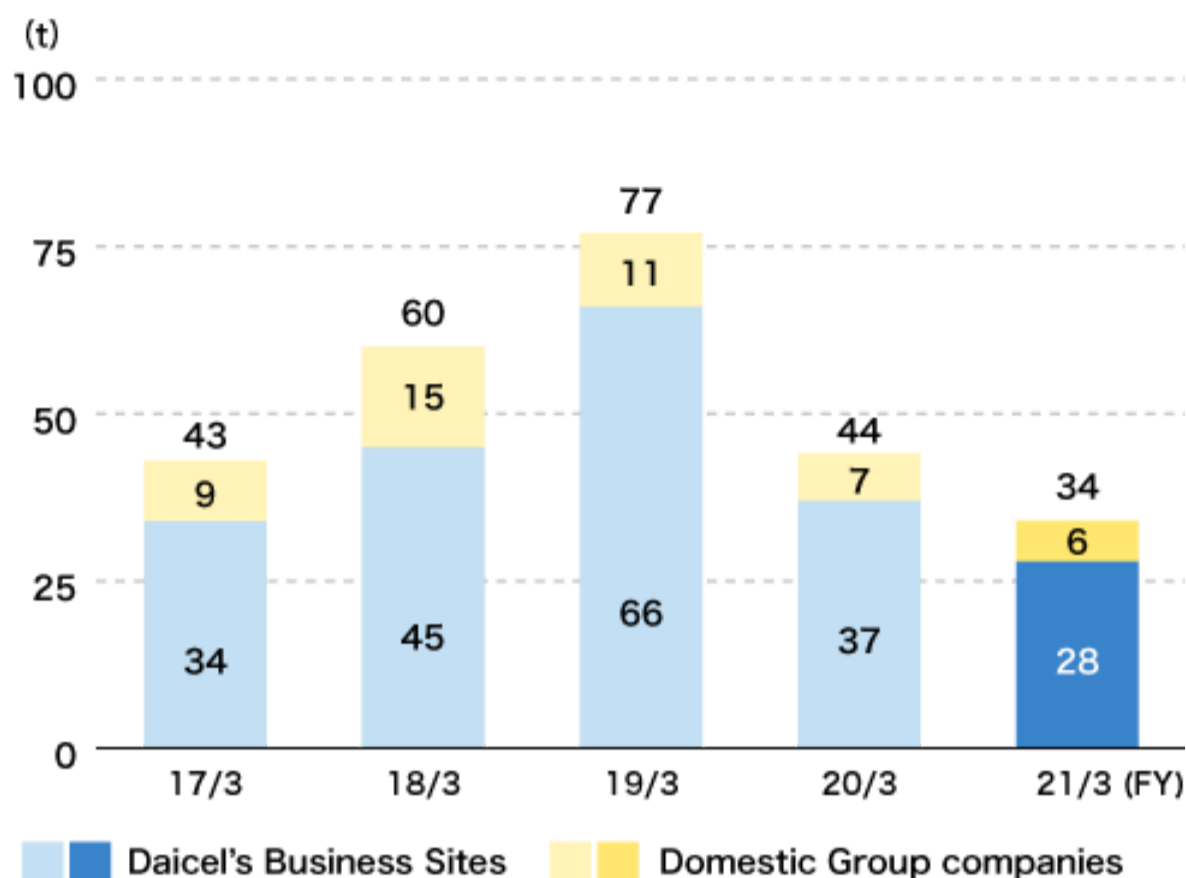
With regard to the chemical substances specified by Japan's Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management (known as the PRTR Act), for the second consecutive year, we achieved our medium-term target of reducing total emissions at our business sites by 40% or more from levels in FY2002/3 (from 189 tonnes to 113 or less). Total emissions at Daicel's business sites and Domestic Group companies fell 22% year-on-year to 34 tonnes due to changes in the method of discharge. Daicel handled 59 out of 462 substances requiring mandatory registration. Moreover, we intend to reinforce the monitoring of our emissions of PRTR-regulated chemical substances and remodel our processes and facilities to seek further reductions in emissions. To that end, we will set a reduction target of 80% or more from levels in FY2002/3 (from 189 tonnes to 38 or less) at Daicel's business sites and Domestic Group companies for the next medium-term target, covering the period ending in FY2026/3.

Medium-Term Target and Results (Daicel's Business Sites)

Medium-term target: Reduce emissions of PRTR-regulated substances by 40% from FY2002/3 levels (emissions of 113 tonnes or less)

FY2021/3 result: Achieved 40% reduction from FY2002/3 levels (28 tonnes in emissions)

Emission of PRTR Substances (Daicel's business sites and Domestic Group companies)



> ESG Data [Substances Subject to the PRTR](#)

Emission and Transfer of PRTR Substances (FY2021/3 Daicel's business sites and Domestic Group companies)

(t /year)*¹

Ordinance-designated number	Substance	Total emissions	Emissions				Sewage	Off-side
			Emissions into atmosphere	Emissions into water	Emissions into land	Business site landfill disposal		
1	Zinc compounds (water-soluble)	2.1	0.0	2.1	0.0	0.0	0.0	
4	Acrylic acid and its water soluble salts	0.0	0.0	0.0	0.0	0.0	0.1	
9	Acrylonitrile	0.2	0.2	0.0	0.0	0.0	0.0	
10	Acrolein	0.9	0.0	0.9	0.0	0.0	0.0	
12	Acetaldehyde	1.8	0.6	1.3	0.0	0.0	1.6	
13	Acetonitrile	0.1	0.1	0.0	0.0	0.0	18.0	
28	Allyl alcohol	1.0	0.0	1.0	0.0	0.0	0.0	

31	Antimony and its compounds	0.0	0.0	0.0	0.0	0.0	0.0	1.4
56	Ethylene oxide	1.2	0.7	0.5	0.0	0.0	0.0	0.0
67	2,3-Epoxy-1-propanol	5.0	0.0	5.0	0.0	0.0	0.0	0.0
84	Glyoxal	0.0	0.0	0.0	0.0	0.0	0.0	0.9
150	1,4-Dioxane	0.0	0.0	0.0	0.0	0.0	0.0	1.0
151	1,3-Dioxolane	2.6	2.6	0.0	0.0	0.0	0.0	0.0
161	Dichlorodifluoromethane	2.3	2.3	0.0	0.0	0.0	0.0	0.0
186	Dichloromethane	0.3	0.3	0.0	0.0	0.0	0.0	2.3
240	Styrene	4.4	4.4	0.0	0.0	0.0	0.0	0.0
243	Dioxins* ²	0.4	0.0	0.4	0.0	0.0	0.0	1.0
277	Triethylamine	1.0	0.5	0.5	0.0	0.0	0.0	3.2
300	Toluene	4.1	4.1	0.0	0.0	0.0	0.0	46.5
308	Nickel	0.2	0.0	0.2	0.0	0.0	0.0	3.5
351	1,3-Butadiene	0.1	0.1	0.0	0.0	0.0	0.0	0.0
375	2-Butenal	0.4	0.0	0.4	0.0	0.0	0.0	0.0
392	n-Hexane	0.8	0.2	0.6	0.0	0.0	0.0	0.8
400	Benzene	0.2	0.2	0.0	0.0	0.0	0.0	0.4
405	Boron compounds	1.9	0.0	1.9	0.0	0.0	0.0	0.0
411	Formaldehyde	2.9	2.9	0.0	0.0	0.0	0.0	0.0
423	Methylamine	0.4	0.0	0.4	0.0	0.0	0.0	0.0
	Others* ³	0.2	0.2	0.1	0.0	0.0	0.0	0.1
	Total	34.2	19.4	14.8	0.0	0.0	0.0	79.7

*1 The threshold for amounts handled was 1 tonne/year/workplace.

*2 Unit for emissions and transfer of Dioxins is mg-TEQ/year.

*3 Substances with emissions below 0.01 tonnes per year are consolidated under Others.

Reducing of Volatile Organic Compounds VOCs Emissions

The Daicel Group explores alternatives to chemical substances that pose a hazard to humans and the ecosystem, and it strives to reduce the use of such substances. Moreover, we seek to ensure safety in all our business activities including production, consumption, and disposal by conducting a solid risk assessment on chemical substance safety under our total assessment system.

As a result of these initiatives, there were no leakages of volatile organic compounds (VOCs) in FY2021/3. VOC emission

volume rose 6% year-on-year to 954 tonnes, as emissions of acetone, a VOC, increased in line with a rise in the production volume of acetate tow for cigarette filters at the Aboshi and Ohtake plants. Nevertheless, we were able to achieve our medium-term target for the period that ended in FY2021/3 of reducing VOC emissions by 40% or more from levels in FY2001/3 at Daicel's business sites.

Looking ahead, we will promote further reductions in VOC emissions by setting a reduction target of 60% or more from levels in FY2001/3 (2,145 tonnes) at Daicel business sites and Domestic Group companies for the next medium-term target by FY2026/3, the final year of the target.

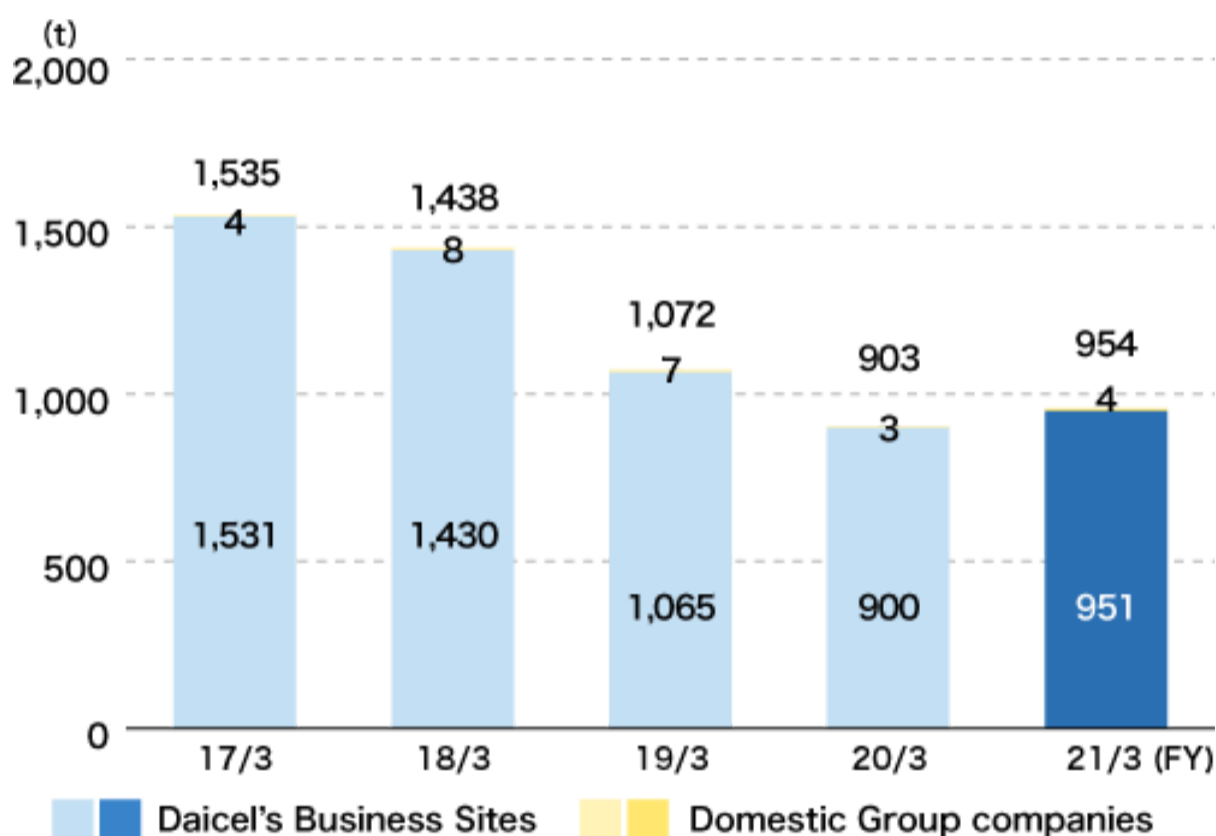
Medium-Term Target and Results (Daicel's Business Sites)

Medium-term target: Reduce VOC emissions by 40% from FY2001/3 levels (emissions of 1,282 tonnes or less)

FY2021/3 result: Achieved 40% reduction from FY2001/3 levels (951 tonnes in emissions)

> [Total Environmental, Health and Safety Assessment System](#)

■ Changes in VOC Emissions (Daicel's business sites and Domestic Group companies)



> [ESG Data](#) [Air Emissions](#)

Appropriate Control of PCBs

In compliance with the Waste Management and Public Cleansing Act and the Act on Special Measures Concerning Promotion of Proper Treatment of PCB Wastes, the Daicel Group conforms to appropriate practices for the storage and management of transformers, capacitors, stabilizers of lighting equipment, and other machinery containing polychlorinated biphenyls (PCBs).

In FY2021/3, we completed registration for disposing high-concentration PCBs, whose disposal deadline falls at the end of FY2022/3, at the Kitakyushu Facility of Japan Environmental Storage & Safety Corporation (JESCO). As a result, we expect to complete disposal within the statutory deadline.

Water Resource Preservation

Basic Policy

Water is one of Earth's irreplaceable natural resources, and risks associated with water are on the rise across the globe. Daicel Group adheres to [Daicel Group's Basic Policies on Responsible Care](#) as it seeks to preserve water quality and reduce water use in its business operations by managing the use of this limited resource and implementing wastewater treatment in an appropriate manner.

Management Structure

[> Our Structure for Responsible Care](#)

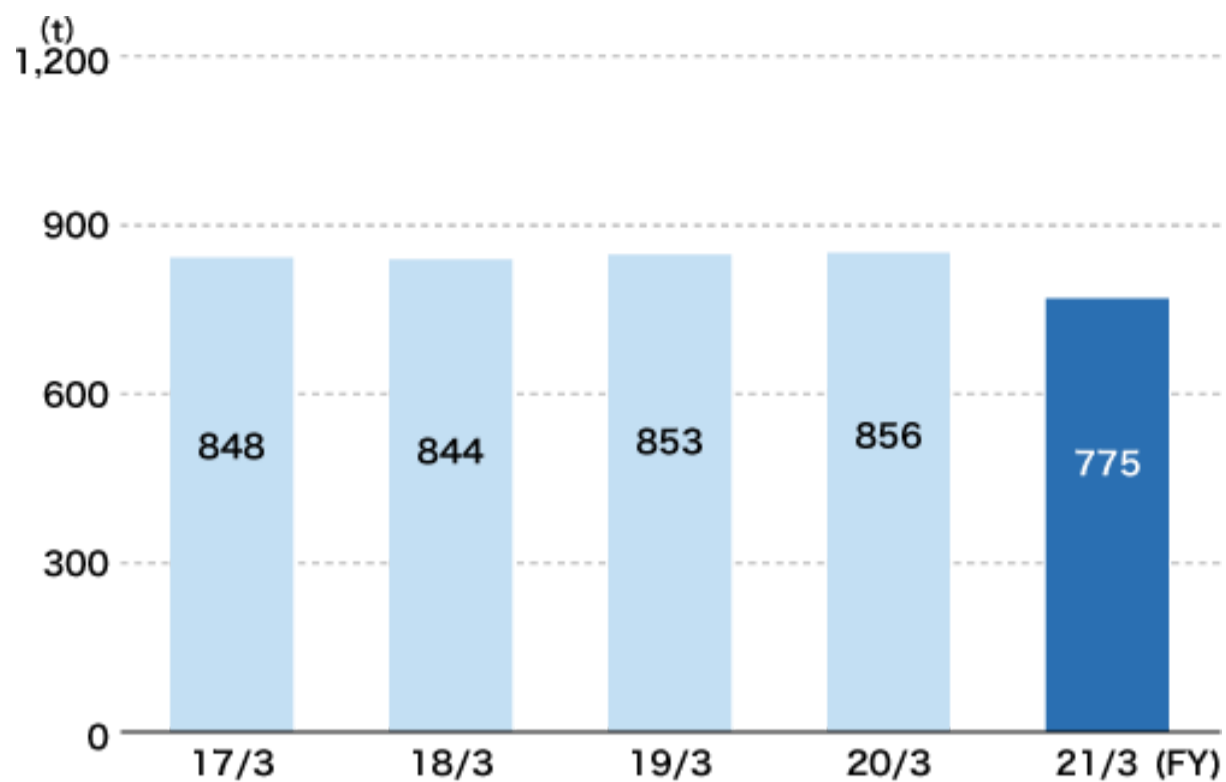
Managing Water Quality

The Daicel Group reduces the environmental impact of industrial wastewater by operating a stable and highly advanced wastewater treatment facility at each of its plants to raise the quality of wastewater to levels that can be discharged into rivers and the ocean. Under an environmental management system based on the ISO 14001 standard, each plant regularly measures the quality of wastewater and sets voluntary control values that are more stringent than the limits set by prefectures, cities, and local communities under ordinances and agreements. They also strive to protect the environment by maintaining wastewater within the limits of its control values. In FY2021/3, we continued to practice proper wastewater management based on the voluntary standards. As a major effort in FY2021/3, we proceeded to remodel the wastewater treatment facility at the Aboshi Plant to promote the reuse of cooling water.

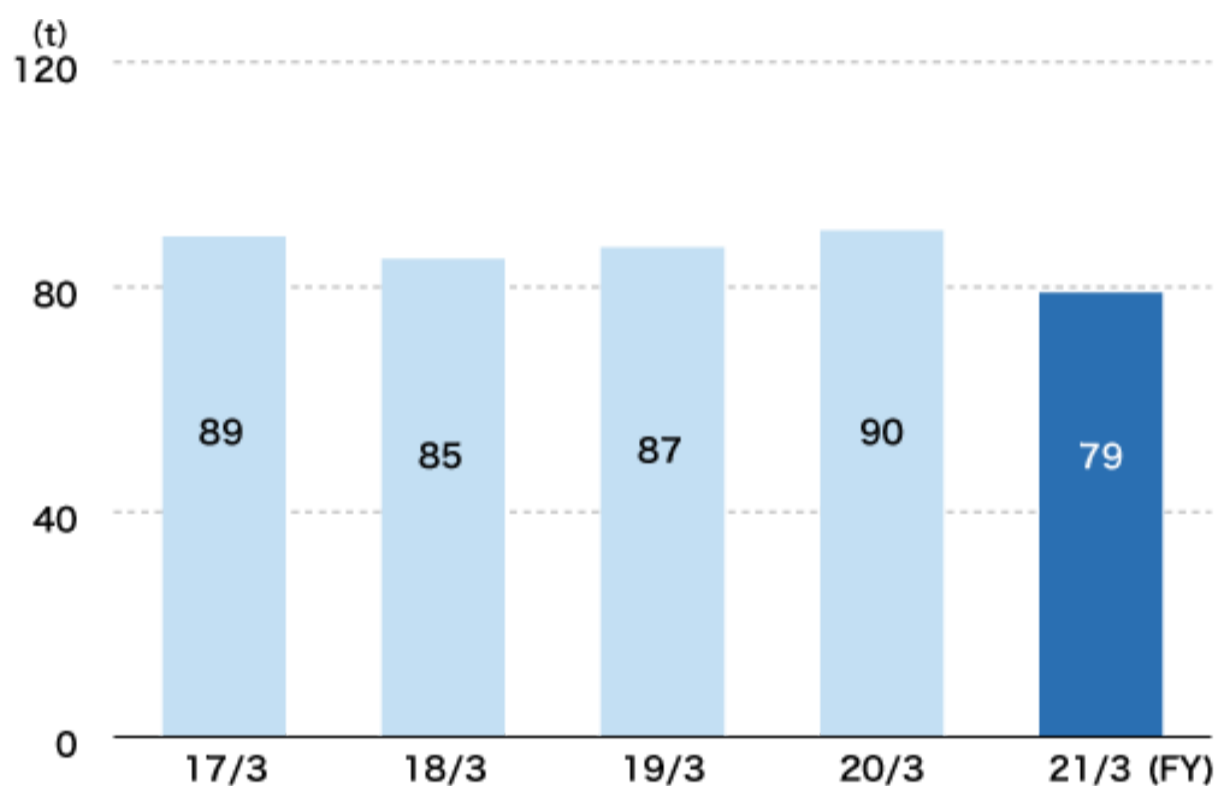
When formulating new plans for business, we evaluate the effects of wastewater on water quality in advance by operating the Total Environmental, Health and Safety Assessment System. To fulfill our manufacturer responsibilities, we take all measures to avoid the risks of water pollution from all causes. This includes improving wastewater treatment facilities in collaboration with facility manufacturers and developing wastewater simulation technology jointly with universities.

[> Total Environmental, Health and Safety Assessment System](#)

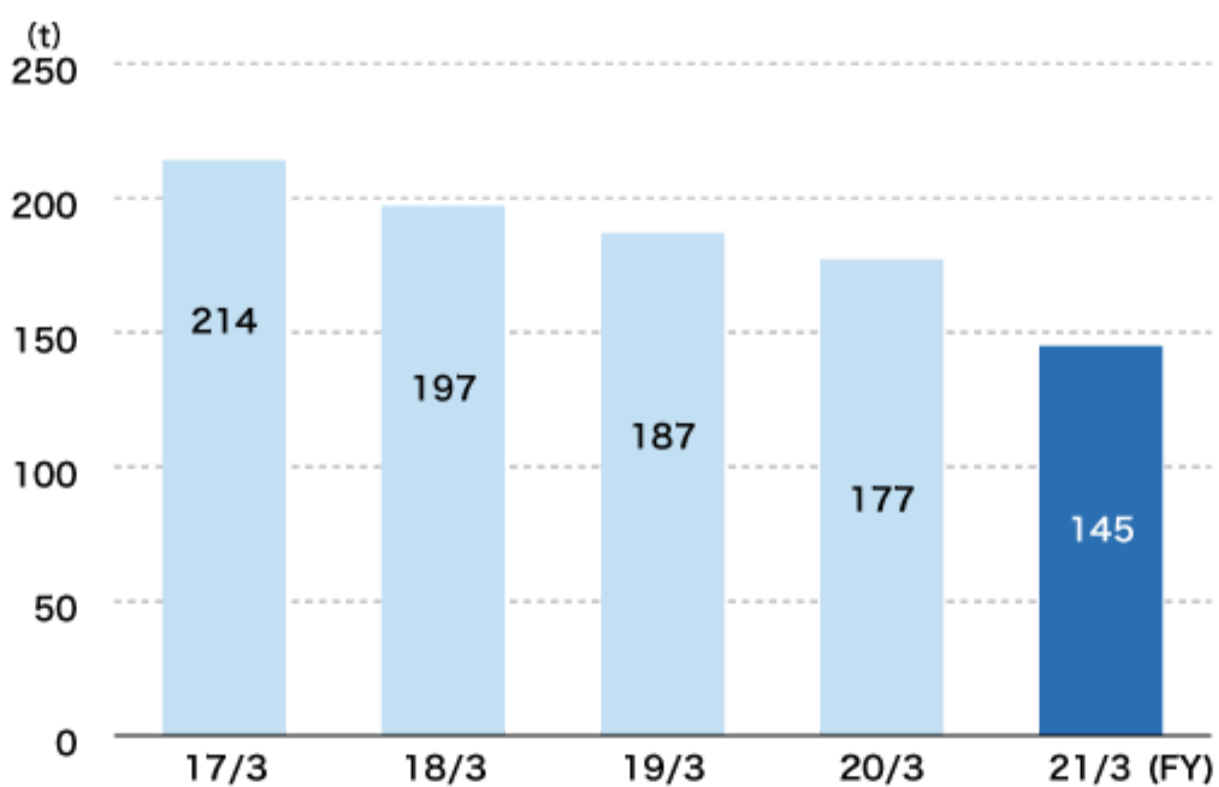
■ COD Emissions (Daicel's Business Sites and Domestic Group Companies)



■ Phosphorous Emissions (Daicel's Business Sites and Domestic Group Companies)



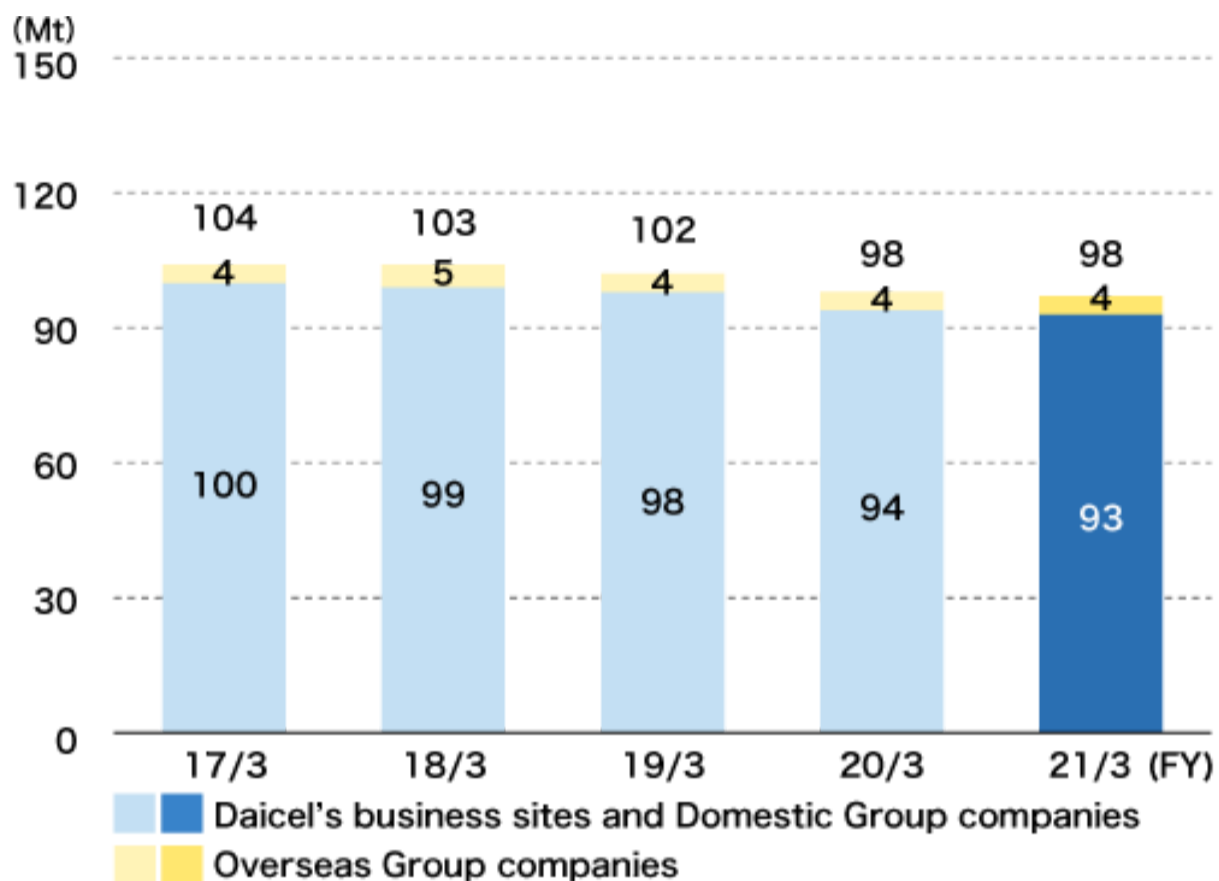
■ Nitrogen Emissions (Daicel's Business Sites and Domestic Group Companies)



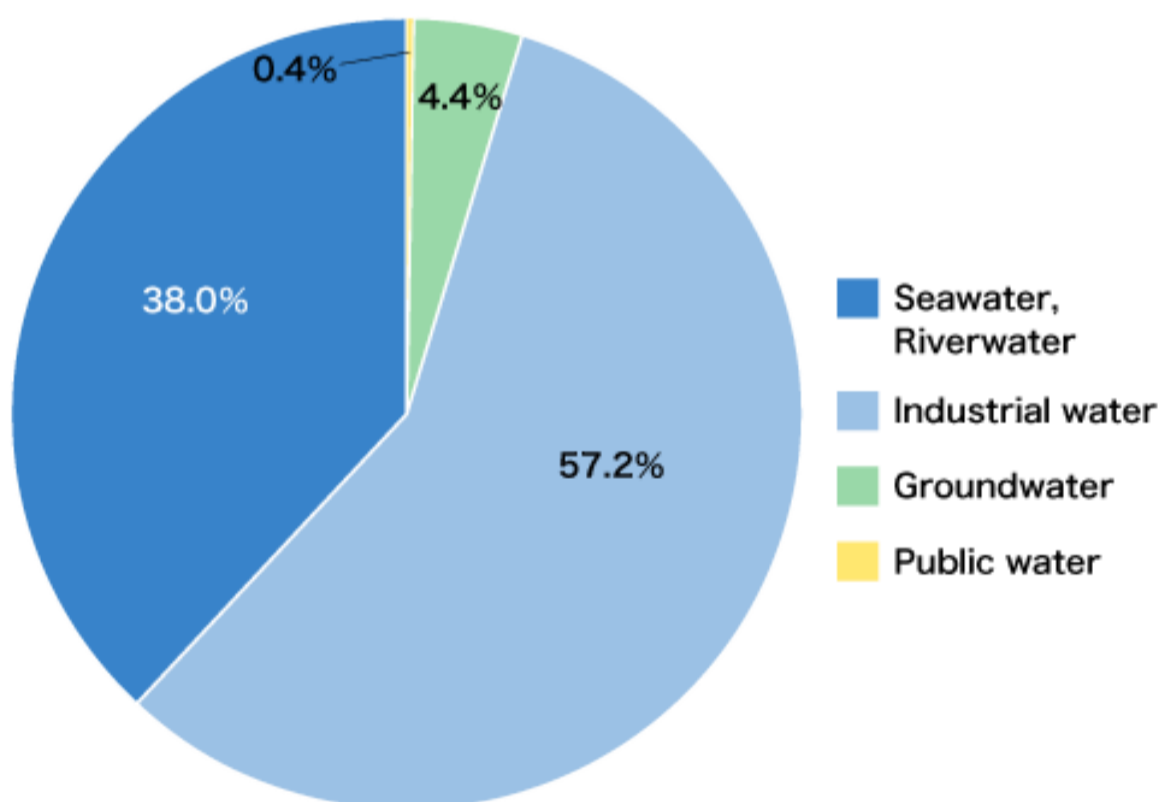
Efficient Use of Water

The Daicel Group seeks to reduce water use at its business sites. We have been promoting efficient use of water by setting a mid-term target (for the period through FY2026/3) of reducing water use by 10% from levels in FY2019/3. To achieve the target, we are working to recycle and reduce cooling water used in cooling towers and elsewhere and also measuring and monitoring the intake, discharge, and consumption of water at our business sites to review the manufacturing process.

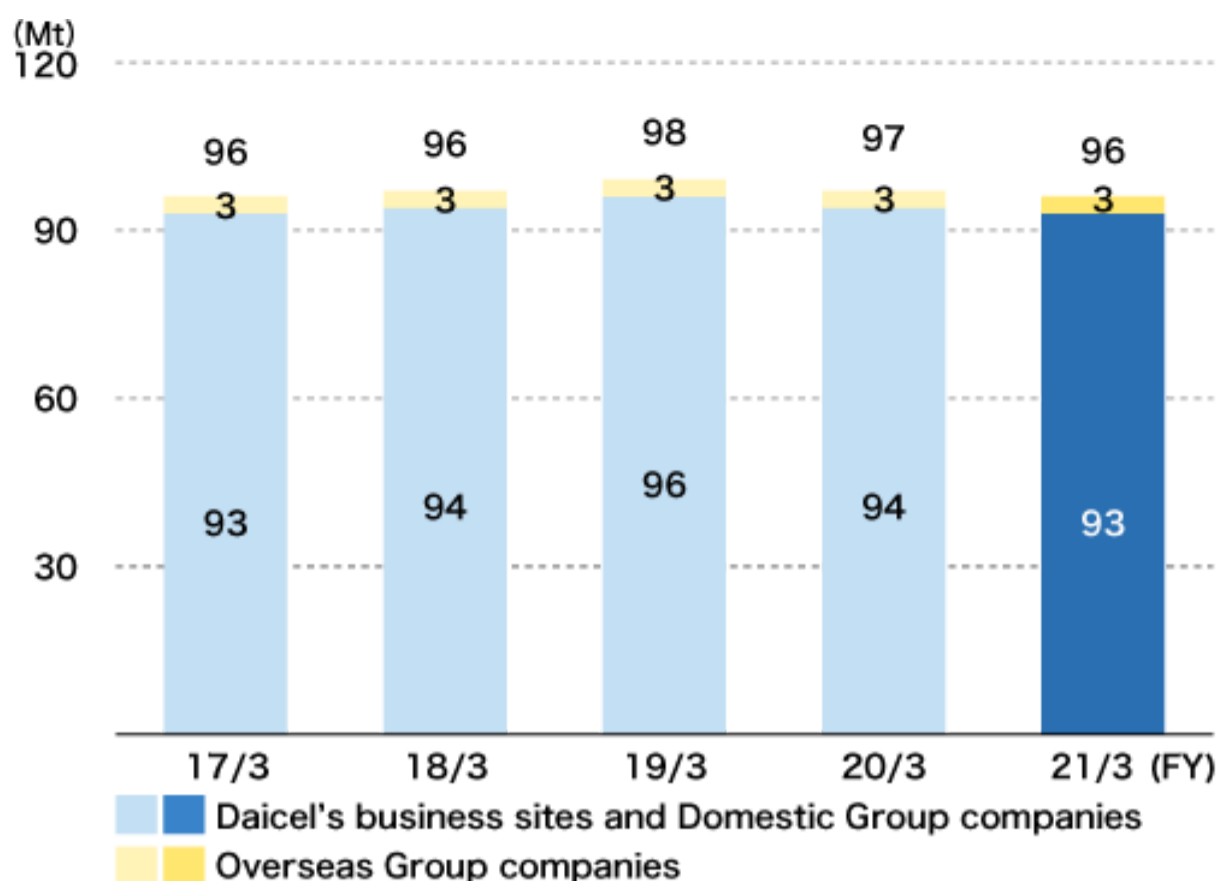
Water Intake (Daicel Group)



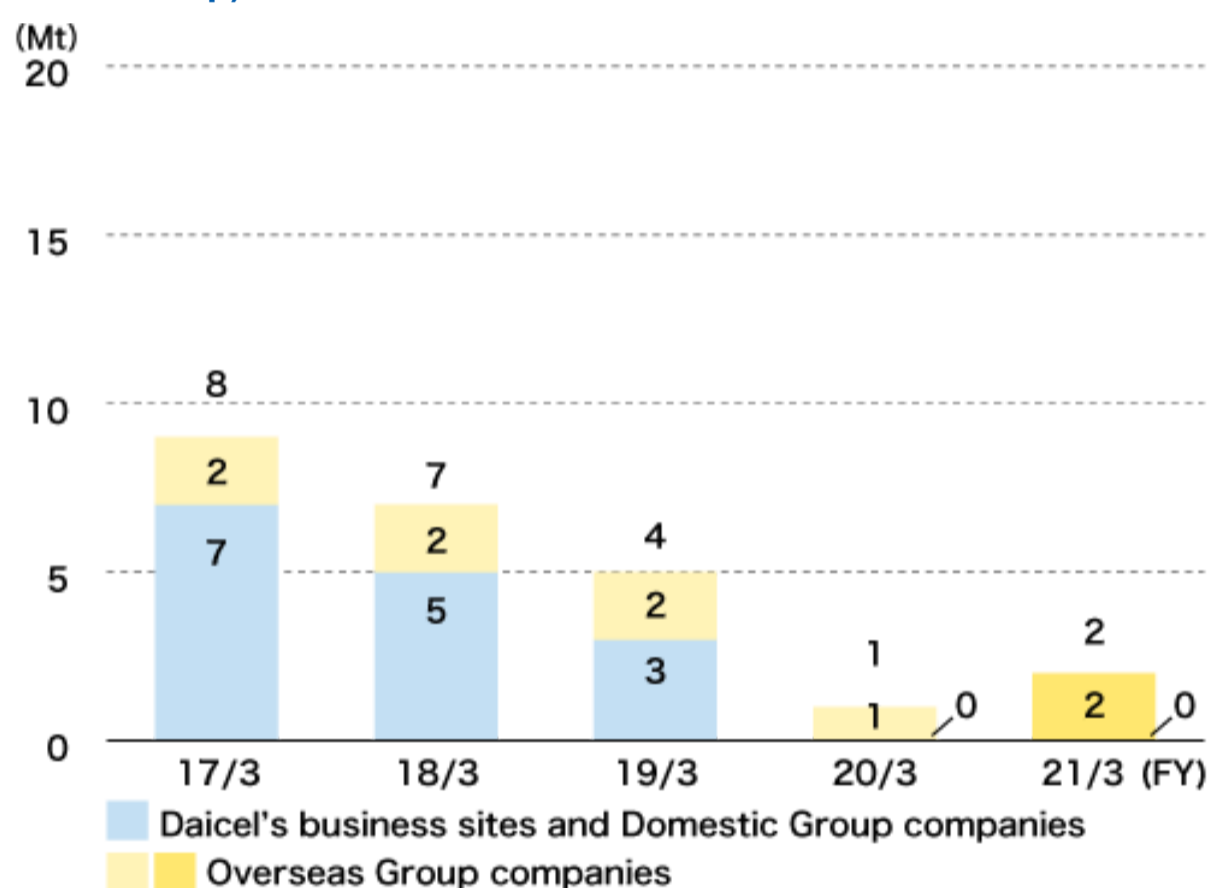
Breakdown of Water Intake (FY2021/3, Daicel Group)



Water discharged (Daicel Group)



Water Consumption (Daicel Group)



> ESG Data [Water Resources and Water Quality](#)

Assessment of Water-Related Risks

Led by the Risk Management Committee, the Daicel Group conducts regular risk assessments on water use at each plant in Japan to accurately grasp and appropriately manage the risks. We address water-related risks by taking preventive actions and measures for mitigating damage, and we confirm the status of their implementation on a regular basis. In FY2021/3, we sought to bolster our preparedness against large-scale natural disasters by conducting an overall inspection of facilities, revising the guidelines on earthquakes, tsunami and evacuation, and discussing the human and hardware aspects of our measures in response to Japan's Fundamental Plan for National Resilience, formulation of which is being completed in fiscal 2021.

Environmental Management and Prevention of Air Pollution

Basic Approach

Guided by its [Basic Policies for Responsible Care](#), the Daicel Group's efforts extend beyond simply complying with regulatory requirements to further reduce its emissions of air pollutants (sulfur oxides (SOx), nitrogen oxides (NOx), soot and dust). It continually strives to reduce its environmental risk by improving the facilities at each of its plants and periodically monitoring their emissions.

Management Structure

[> Our Structure for Responsible Care](#)

Prevention of Air Pollution

Daicel's business sites and Domestic Group companies strictly comply with regulatory requirements as well as other requirements as determined through negotiations with local governments and municipalities in regard to total emission volume and the density of specific substances. The Group strives to limit its emissions of air pollutants by voluntarily setting targets that are more stringent than required.

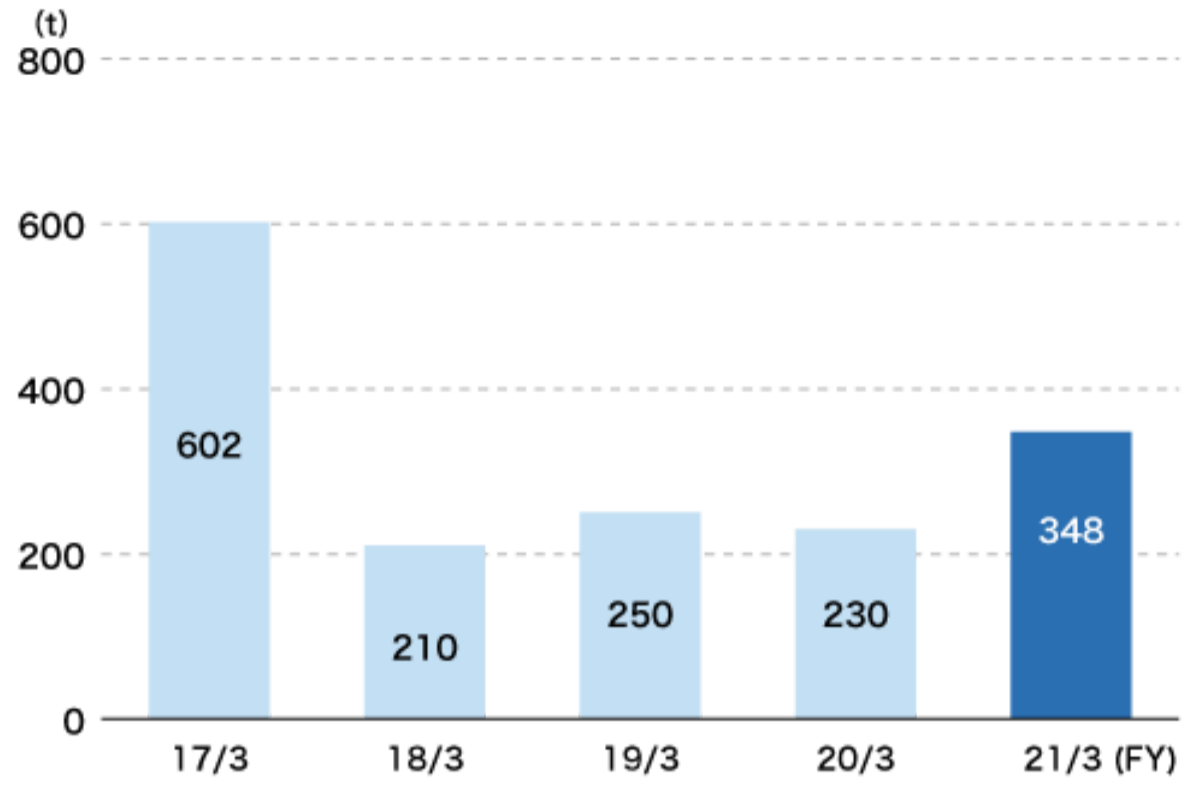
In FY2021/3, NOx emissions decreased from the previous fiscal year to 610 tonnes, and while emissions of SOx and those of soot and dust increased year-on-year to 348 tonnes and 33 tonnes, respectively, they remained below our voluntary targets. The main cause of the increase was a rise in the use of boiler fuel, and we plan to reduce our future emissions of SOx, soot and dust by optimizing processes and treatment conditions.

Initiatives

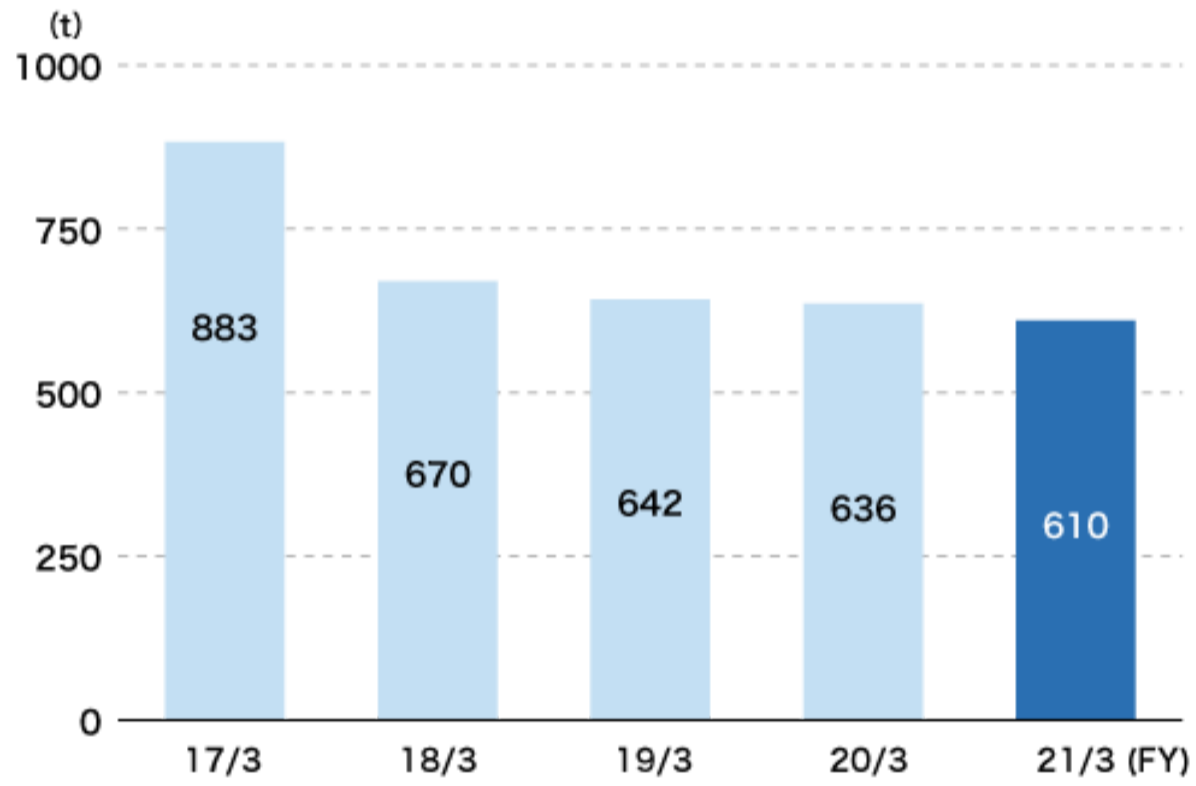
- Reduction of SOx through use of stack-gas desulfurization technology
- Reduction of NOx through use of NOx removal catalysts
- Reduction of soot and dust through use of dust collectors installed at combustion facilities, including boilers

Before formulating a plan for the development of a new product or change to a manufacturing process, we carefully assess the potential impact it may have on air quality using our Total Environmental, Health and Safety Assessment System. After that, we take the appropriate measures to fully address any possible issues before executing the plan.

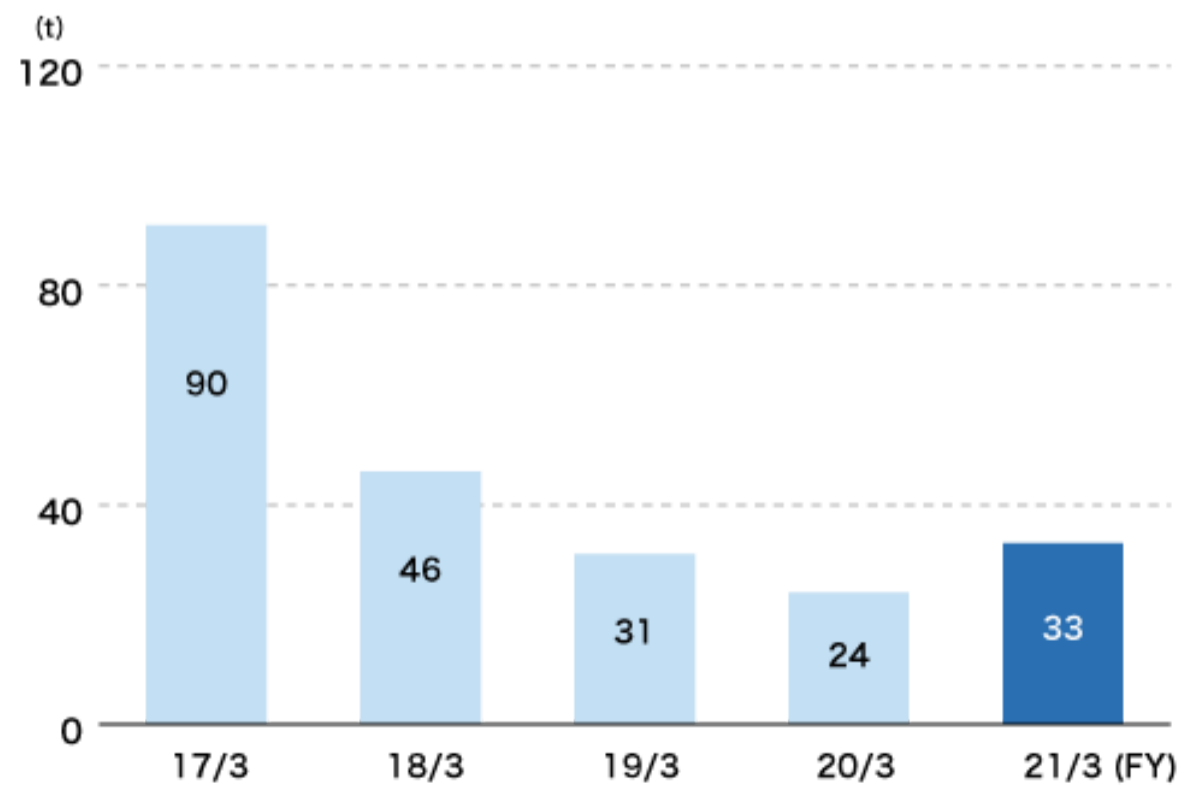
■ **SOx Emissions (Daicel's business sites and Domestic Group companies)**



■ **NOx Emissions (Daicel's business sites and Domestic Group companies)**



■ **Soot and Dust Emissions (Daicel's business sites and Domestic Group companies)**



> ESG Data

[Atmospheric Emissions \(SOx, NOx, Soot, and Dust, VOC, CFC-11, CFC-12\)](#)

> ESG Data

[Environmental Load Data](#)

Preserving Biodiversity

Basic Approach

Guided by the [Daicel Group Basic Policies for Responsible Care](#), we operate our business with due consideration for the preservation of biodiversity to pass on to future generations the wonders nature has to offer.

Management Structure

Daicel is a member of the Japan Business and Biodiversity Partnership, jointly established by KEIDANREN (Japan Business Federation), the Japan Chamber of Commerce and Industry, and KEIZAI DOYUKAI (Japan Association of Corporate Executives) in conjunction with the 10th Conference of the Parties (COP10). To further clarify our commitment to biodiversity conservation, we incorporated our initiatives on preserving biodiversity into the Daicel Group's Basic Policies for Responsible Care in FY2012/3.

We implement each initiative appropriately through the implementation system for responsible care which directly reports to the president and CEO.

[> Our Structure for Responsible Care](#)

Initiatives Aimed at Preserving Biodiversity

Biodiversity provides numerous direct and indirect benefits every day, yet human activities are placing a significant stress on the Earth's ecosystems. This is causing a rapid increase in endangered species and threatening biodiversity. Given these circumstances, it is our responsibility to protect biodiversity and use biological resources in a sustainable manner for future generations.

To prevent the loss of biodiversity, Daicel is striving to address climate change, reduce and recycle waste, control emissions of chemical substances, and preserve water resources. Moreover, our R&D divisions have established in-house rules to ensure that their research and development activities are undertaken in conformity with the "Law Concerning the Conservation and Sustainable Use of Biological Diversity through Regulations on the Use of Living Modified Organisms" (Cartagena Protocol).

Initiatives Addressing Marine Plastics

In recent years, non-biodegradable plastic waste discharged into the ocean has become a serious threat to marine resources. In particular, plastic waste that is less than five millimeters in size not only damages marine life but also poses a problem as particles that absorb hazardous substances. The Daicel Group is developing cellulose acetate, an environmentally sound, highly marine biodegradable natural material. We believe that we can contribute a solution to the marine plastic waste problem by using this material as an alternative to the tiny plastic beads contained in face washes and cosmetics.

The Daicel Group has also joined the Japan Clean Ocean Material Alliance (CLOMA), set up by the Ministry of Trade, Economics and Industry in 2019, to solve the issue by accelerating the pace of innovation through a united effort the public and private sectors across industries.



[> Highly biodegradable cellulose acetate CAFBLO™](#)

[> Participation in Initiatives and External Recognition](#)

Participation in a New Platform for Achieving Hiroshima Prefecture's Zero Marine Plastic Waste Declaration

Hiroshima Prefecture has announced its “2050 Shining Green Sea Setouchi Hiroshima Declaration,” aimed at reducing plastic waste discharged into the ocean to zero by 2050. Daicel will participate in the GREEN SEA Setouchi Hiroshima Platform (GSHIP), which will be launched to achieve the declaration.

At a press conference in June 2021, we introduced "CAFBLO™," a highly biodegradable cellulose acetate developed by Daicel, under the theme of “Developing and promoting widespread use of marine biodegradable plastics.”



At the press conference

Native Forests for Life

Native Forests for Life is an initiative aimed at creating forests based on the tree planting methodology (Miyawaki method) advocated by The late Dr. Akira Miyawaki. Daicel has organized a Native Forests for Life Committee, chaired by the president, to engage in a Groupwide effort for creating native forests for life. We have also proposed a biomass value chain in our “Accelerate 2025” medium-term strategies. We will realize a biomass product tree that effectively uses 100% of a tree to transform timber into a valuable resource to contribute to the forestry industry. By revitalizing forestry and turning neglected forests into forests for life, we can recover their water retention functions, reduce landslides, and enrich farmlands, which in turn will revitalize agriculture. As nutrient-rich groundwater flows into rivers, it will also revive fishery resources. The Daicel Group aims to build a sustainable society with a new model in which value circulates through a co-creative effort between primary industries such as forestry, agriculture and fisheries, and secondary industries including chemical manufacturers such as ourselves.

➤ [Native Forests for Life Initiative](#)

➤ [The Biomass Value Chain Concept \(Mid-Term Management Strategy “Accelerate 2025-II”\)](#) 

Environmental Accounting

Daicel has introduced an environmental accounting system to quantitatively measure costs associated with environmental protection efforts and results yielded from these activities in terms of economic value or physical mass. By doing this, it strives to ensure that such activities are efficient and effective.

In FY2021/3, we invested approximately ¥6.4 billion in measures to protect the environment. Total investment in the environmental activities accounted for 26% of total investment, up 10% from the previous fiscal year (16%). Major investments for the environment included approximately ¥5.2 billion in pollution prevention costs related to the installment of new plants and the reinforcement of wastewater treatment facilities and approximately ¥0.7 billion in capital investment for remodeling facilities to increase the reuse of cooling water and for the development of business infrastructure. The economic benefits resulting from environmental conservation activities grew from ¥1.1 billion in FY2021/3 to ¥1.8 billion due to cost reductions achieved by saving resources and energy. We will continue to appropriately assess these impacts and promote environmental conservation.

■ Basic Elements of Environmental Accounting

Target period	April 2020 to March 2021
Calculation method	Calculated according to the Environmental Accounting Guidelines, Year 2005 Edition, published by the Ministry of the Environment of Japan and the Environmental Accounting Guidelines for the Chemical Industry, published by the Japan Chemical Industry Association (JCIA)
Amounts invested	Actual sums for capital investment in environmental conservation in FY2021/3.
Cost amounts	The totals for actual expenses of equipment depreciation, maintenance, management and labor related to environmental conservation.
Economic benefits associated with environmental conservation activities	Indicated as monetary benefits only and do not include risk avoidance effects or de facto effects. Economic effects attributable to reductions in energy costs are resented as the effects of energy cost reductions over a 12-month period realized through energy-saving initiatives.

Environmental Conservation Costs

2021/3 Environmental Conservation Costs

Classifications		Amounts invested (Millions of yen)	Cost (Millions of yen)	Classifications
(1) Business area costs		6,165	4,100	<ul style="list-style-type: none"> Environmental conservation costs of controlling the environmental impact of our production and service operations that occur within business areas (business area costs)
Breakdown	① Pollution prevention costs	5,227	1,782	<ul style="list-style-type: none"> Investments and costs associated with the prevention of air and water pollution, control of harmful substances Levies for pollution-related health damages
	② Global environmental conservation costs	256	579	<ul style="list-style-type: none"> Costs associated with the introduction of energy-saving facilities (such as new boilers and freezers), capital expenditures for fuel conversion and depreciation costs associated with these facilities Costs associated with thermal pinch analysis and other energy-saving initiatives
	③ Resource recycling costs	682	1,739	<ul style="list-style-type: none"> Costs associated with resource-saving initiatives, recycling and the appropriate treatment and disposal of industrial waste, etc.
(2) Upstream and downstream costs		0	365	<ul style="list-style-type: none"> Costs associated with initiatives to curb the environmental impact of upstream or downstream operations supporting our production and service activities (such as costs for the disposal of automobile airbag inflators)
(3) Administrative costs		0	699	<ul style="list-style-type: none"> Costs for maintaining the environmental management systems, performing environmental measurements and providing environmental education in addition to costs associated with divisions in charge of environmental management, etc.
(4) R&D costs		0	157	<ul style="list-style-type: none"> Costs associated with R&D work for reducing the environmental impact of products and technologies (such as the development of eco-friendly products)

(5) Community activities costs	195	54	<ul style="list-style-type: none"> • Costs attributable to environmental promotion activities, participation in community event
(6) Environmental damage costs	0	3	<ul style="list-style-type: none"> • Costs for environmental conservation related to environmental damage and environ
Total	6,360	5,379	

Items	Amount (Millions of yen)	Environmental Rate (%)	Remarks
Capital expenditures in the applicable period	24,410	26.1	Ratio of environmental investment
R&D expenditures in the applicable period	14,192	1.1	Ratio of environmental protection research and development expenses

> ESG Data [Environmental Accounting](#)

Economic Effects (Monetary Benefits) Resulting from Environmental Conservation Activities

FY2021/3 Environmental Conservation Benefits

	Items	Amount (Millions of yen)
Economic effect	① Cost reduction through energy conservation	432
	② Cost reduction through resource conservation	901
	③ Benefits obtained by recycling	386
	④ Reduction of expenses for waste treatment or disposal	62
	Total	1,781

Respect for Human Rights

Daicel Group Human Rights Policy

At the Daicel Group, we recognize that, in order to progress and grow in tandem with society, it is imperative that we respect the human rights of anyone and everyone involved in or connected to us through our business activities. To fulfill this responsibility, the Daicel Group hereby establishes the Daicel Group Human Rights Policy (“the Policy”).

Basic Position

We, the Daicel Group, are strong believers that “People are the foundation for our success.” The Daicel Group Conduct Policy and each Group company’s Code of Conduct declare our determination to comply with all laws and regulations; act with high ethical standards and sound judgment; respect the diversity, personality and individuality of every member connected to the Daicel Group and contribute to realizing a healthy and sound society that is free from discrimination and harassment.

Moreover, as a signatory of the United Nations Global Compact, we fully support international standards for human rights. We acknowledge the standards listed in the United Nations International Bill of Human Rights (Universal Declaration of Human Rights and both International Covenants), the core conventions set forth by the International Labour Organization (ILO) in their Declaration on Fundamental Principles and Rights at Work, and the United Nations Guiding Principles on Business and Human Rights. Accordingly, we promise to continue and promote efforts to respect and address the human rights in line with the above standards.

Scope of Application

The Policy applies to all executives and employees of the Daicel Group. The Daicel Group will also encourage its business partners and suppliers to support the Policy, and in concert with them, will promote activities to fulfill its responsibilities relating to human rights.

Human Rights Due Diligence

The Daicel Group will establish a system of human rights due diligence which will be continuously implemented. Human rights due diligence is a series of processes that includes identifying any adverse human rights impact connected to the Daicel Group and preventing or mitigating potential risks to human rights.

Correction and Remedy

When the Daicel Group identifies that it has caused or contributed to an adverse impact on human rights contrary to the Policy, it will promptly take corrective and remedial actions through appropriate procedures.

Education and Training

The Daicel Group will provide appropriate education and training to ensure that the Policy is integrated into all business activities and that human rights due diligence is effectively implemented.

Applicable Laws and Regulations

The Daicel Group will observe laws and regulations of countries and regions where it conducts business. However, if a conflict occurs between internationally recognized standards of human rights and the standards stipulated by laws and regulations of an individual country or region, the Daicel Group will pursue a direction that respects international principles of human rights.

Dialogue and Consultation

In implementing the Policy, the Daicel Group will seek expert advice on human rights both from within the company and external independent experts, and engage in dialogue and consultation with our Group stakeholders.

Information Disclosure

The Daicel Group will publicly disclose the progress and results of its human rights activities based on the Policy.

Efforts to Instill Respect for Human Rights in Practice

Human Rights Due Diligence

Under its Human Rights Policy, the Daicel Group has stated a commitment to support the United Nations Guiding Principles on Business and Human Rights and consistently implement human rights due diligence in accordance with the Guiding Principles. Human rights due diligence is a series of processes that include identifying any adverse human rights impact associated with the Daicel Group and preventing or mitigating potential risks to human rights.

Initiatives for Group Companies

Daicel has been conducting risk assessments on human rights for Group companies both in and outside of Japan since FY2020/3.

In FY2020/3, we sent a questionnaire on human rights and labor practices to 12 Group companies in Japan and 10 overseas and conducted interviews based on their responses.

In FY2021/3, we sent a questionnaire to these 12 companies in Japan again and requested them to submit their responses along with substantiating documents. We implemented a more detailed risk assessment through reviewing the submitted documents and conducting interviews based on a checklist. We also sent the questionnaire to eight additional Group companies overseas that had not been covered in the risk assessment in FY2020/3, and we conducted interviews based on their responses.

The results of the survey revealed no human rights violations by Daicel Group companies or cases requiring correction. However, through the risk assessment, we found detailed human resource issues relating to revisions in laws and regulations in each country, the statutory employment rate of persons with disabilities etc. We are continuously addressing these issues.

Daicel is committed to pursuing initiatives for ensuring human rights due diligence at 100% of our major Group companies.

Initiatives for the Supply Chain

The Daicel Group promotes initiatives that ensure respect for human rights across its supply chain by addressing issues concerning human rights and labor practices in the Daicel Group CSR Purchasing Guidelines, in addition to its Human Rights Policy.

In FY2021/3, we requested 797 of our major suppliers to sign a Certificate of Confirmation to check that they follow the Daicel Group CSR Purchasing Guidelines. These major suppliers account for over 85% of all purchasing by the Group, and 664 companies signed the Certificate of Confirmation. We also ask major suppliers to complete a Self-Assessment-Questionnaire (SAQ) on CSR procurement, which includes assessment of human rights and labor practices, to identify human rights risks in our supply chain.

[> Sustainable Procurement](#)

Human Rights Education and Training

The Daicel Group provides employees with human rights education and training based on the Daicel Group Human Rights Policy to deepen understanding of human rights.

In FY2021/3, we implemented an e-learning program on human rights along with other topics for Daicel Corporation and Group companies in Japan. We also distributed educational materials on corporate ethics each month throughout the Daicel Group. These materials include content related to human rights, such as harassment based on sexual orientation and gender identity (SOGI) and working with persons from different backgrounds.

Moreover, we invited a lecturer who identifies as LGBT and held human rights education on LGBT specific issues for Directors of Daicel Corporation and Group companies in Japan. The video of this lecture was shared with all Group companies in Japan, and each division implemented human rights education accordingly.

In July 2021, we implemented new e-learning dedicated to human rights, with the participation of 5,813 employees from Daicel Corporation and Group companies in Japan (participation rate 95.0%). This program began by explaining the basic idea of respecting human rights and provided information on the key global issues of forced labor, child labor and human trafficking. The program also provided an opportunity for learning about the Human Rights Policy and about specific human rights issues arising from the COVID-19 pandemic.

We will continue providing employees with human rights education and training going forward.

Reporting and Consultation

The Daicel Group operates the Compliance Help Line System (internal whistleblower system) to receive reports and provide consultation on issues that include human rights. Issues can be raised anonymously to protect the identity and privacy of whistleblowers. Rules are also in place to prohibit any adverse treatment of whistleblowers. In addition, an online consultant contact has been set up on our website, which can be used by stakeholders outside the Daicel Group to report or consult on human rights issues as well as other issues.

[> Compliance Help Line System \(Internal Whistleblower System\)](#)

Enhancing Product Quality

The Daicel Group strives to ensure and enhance quality by adhering to its Quality Policy.

Quality Policy for Daicel Group

Each member of the Daicel Group promises to deliver safe and quality products which can be used with assurance by the customer. In order to realize this policy, we undertake the following actions.

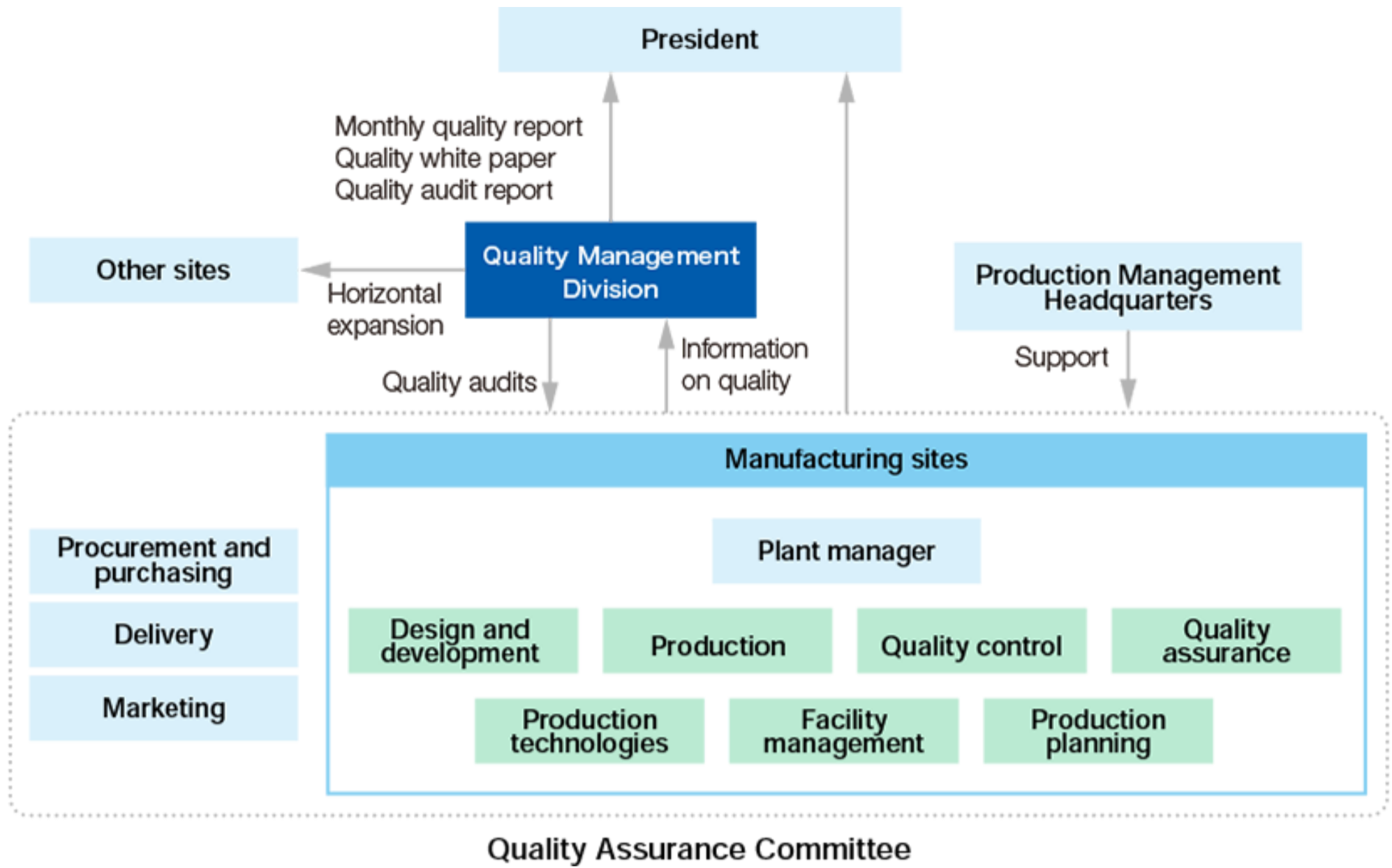
- We listen to customer requirements and deliver trust and satisfaction.
- We clarify and seek to achieve the required quality.
- We obey laws and regulations.
- Each member looks at matters from the customer's perspective and undertakes actions on their own initiative.

Quality Management System

The Daicel Group has constructed a quality management system at each manufacturing site under the leadership of the plant manager (general manager).

The Quality Assurance Committee, comprising departments at each site and other relevant departments, serves as the main organization in pursuing continuous improvements, with the support of the relevant corporate departments.

■ Our Structure for Quality Management



Certification Status

We have obtained these certifications to meet the requirements of our customers and markets: ISO 9001, IATF 16949 for the automotive sector, ISO 13485 for the medical equipment sector, ISO 22000 and FSSC 22000 for food safety management, and JISQ 9100 for the defense sector.

All of our manufacturing sites, both in Japan and overseas, have obtained quality management system certifications.

[> List of Certifications](#)

Major Initiatives for Ensuring Quality

Our initiatives for ensuring quality involve planning products based on Daicel's proprietary technologies and market needs and proceeding with design and development. During trial production and the early stages of commercial production, we review the product from the perspective of seeking out any issues related to quality. We then move on to mass production after conducting the necessary assessments. We ensure traceability throughout the production process, from raw materials to the final product, and the manufactured products undergo testing and inspection before they are shipped to the market. Following the market launch, we manage changes in product specifications or changes in raw materials and processes by assessing the risks of changing any element in accordance with quality requirements and agreements with customers.

At each plant, internal audits and Quality Assurance Committee meetings are held regularly to check up on the status of quality management operations, conformity, effectiveness and other aspects to make improvements. The targets are set for improvement at the start of the fiscal year based on various benchmarks including the number of customer complaints and in-process defects. An annual review is held at the end of each fiscal year between the plant manager and relevant departments to determine further improvements for the next fiscal year.

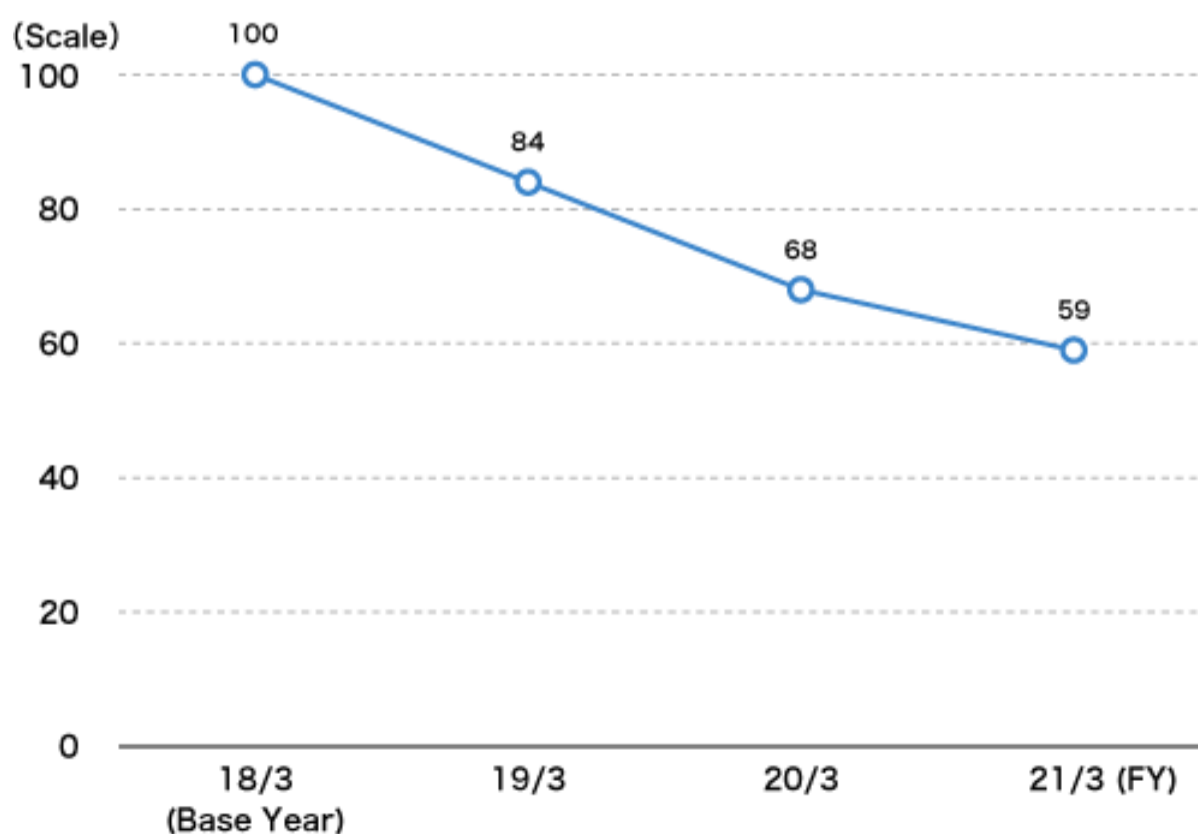
In addition, the Quality Management Division set up in the head office also works to ensure continuous improvement by confirming that these mechanisms are being properly operated at each plant in the Daicel Group. Also, it conducts audits aimed at strengthening the management capabilities of the entire Group.

Responding to Customer Feedback

Daicel responds to complaints and inquiries from customers by conducting primary investigations on issues such as in-process defects and abnormal tendencies, and it swiftly provides feedback. Consequently, we offer replacements as necessary and seek to prevent a recurrence by investigating the causes of the occurrence or release of defective products. We also implement corrective and preventive actions. In addition to information provided by customers, quality defects and anomalies that are rediscovered during product inspection or the production process are recorded in a dedicated database designed to reflect the common workflow of all Group companies, to visualize and accumulate such information for preventing recurrences and improving quality.

As a result of these efforts, the number of customer complaints has been decreasing every year.

■ Number of Customer Complaints for the Daicel Group*



* Shows a change in the number of customer complaints on a scale where data for FY2018/3 is 100.

* Scope: Daicel Corporation, Dainichi Chemical Co., Ltd., Daicel Pyrotechnics Ltd., Daicen Membrane-Systems Ltd., Daicel Miraizu Ltd., Daicel Pack Systems Ltd., Daicel Aboshi Sangyo Co., Ltd., DM Novafoam Ltd. , and Polyplastics Co., Ltd. (includes overseas companies), Daicel Nanning Food Ingredients Co., Ltd., Shanghai Daicel Polymers, Ltd., Daicel Safety Systems Europe Sp.z o.o., Daicel Safety Systems Americas, Inc., Daicel Safety Systems (Jiangsu) Co., Ltd., Daicel Safety Technologies (Jiangsu) Co., Ltd., Daicel Safety Systems Korea, Inc., Daicel Safety Systems (Thailand) Co., Ltd., Daicel Safety Technologies (Thailand) Co., Ltd.

Internal Education and Training

In addition to providing education for each organizational unit that operates the quality management system, the corporate departments host training sessions on quality management, quality control and internal audits. The programs cater to each job rank and experience to gradually raise the level of knowledge.

[> Support personal growth](#)



Image Analysis System that Leverages Cutting-edge IoT and AI-driven Technologies

To further ensure the security and trust of our customers, we strive to enhance quality by introducing the latest technologies and are meeting our customer expectations. For example, we signed a partnership agreement with Hitachi Ltd. to introduce an IoT-driven image analysis system that leverages AI to the Harima Plant (Tatsuno City, Hyogo Prefecture), one of our manufacturing sites for inflators, a key component of automobile airbags.

The system is capable of consistently monitoring the status of operations, facilities and materials via images captured by multiple cameras installed along production lines. This made it possible to closely manage the quality of every product unit being manufactured, instead of inspecting representative samples. It also led to the shift from representative-point management of each lot to all-point management based on the serial number of each product, which significantly improved the in-process guarantee rate for products. Moreover, the AI-based analysis of massive volumes of image data helps us spot the types of manual operations most susceptible to mistakes (and most in need of improvement), determine optimal conditions for facility operations and enhance overall operational efficiency. By FY2021/3, we completed installing the system in all main lines at the Harima Plant and in our model production lines in China and Thailand. In the coming years, we plan to roll out the system to all our global production bases as well.

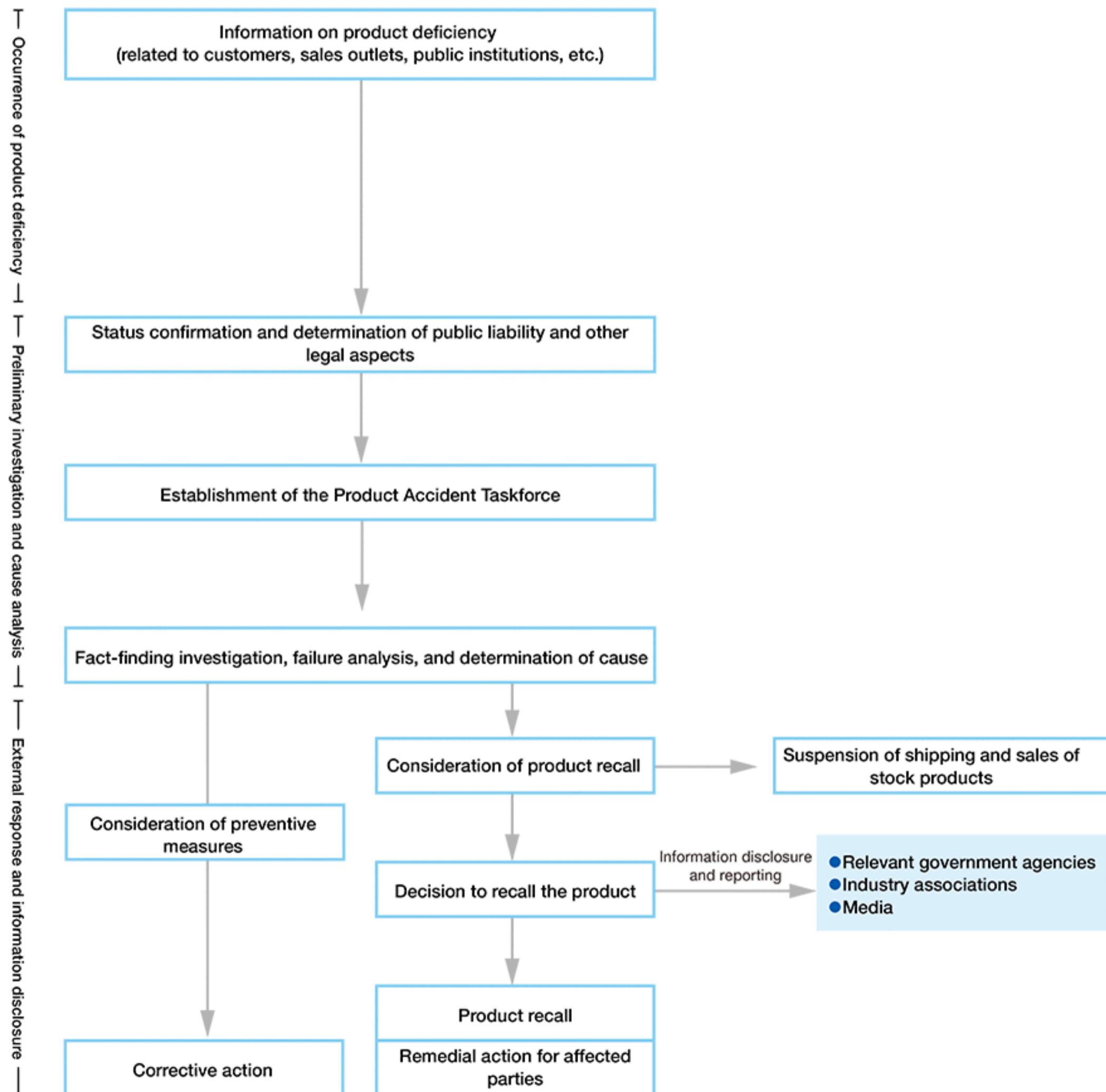
We will leverage a cloud-based database to collect and analyze the images from the system and develop plans to move toward globally standardized designs and procedures.

[> Practical Application of an Image Analysis System](#)

Risk Management for Product Safety

The Daicel Group evaluates the risk of health hazards associated with our products under a Total Environmental, Health and Safety Assessment System. We have placed particular emphasis on reinforcing our product safety assessments. We practice appropriate risk management by implementing Product Crisis Assessment, which involves identifying and monitoring risks associated with current product safety measures and assessing the status of incident responses. We have also initiated Product Safety Advisory Meetings and invited a team of third-party specialists to conduct a risk assessment. In FY2021/3, there were no incidents that threatened customers' assets and physical wellbeing.

■ Process Flowchart for Responding to Serious Product Deficiencies



➤ [Total Environmental, Health and Safety Assessment System](#)

Chemical and Product Safety

Basic Approach

In line with its [Basic Policies for Responsible Care](#), the Daicel Group strives to ensure the safety of its products and promote continuous improvement in product stewardship* across its entire supply chain. At the same time, we practice chemicals management with consideration for risks that arise throughout the product life cycle, from development and manufacturing to use, consumption, and disposal. We are committed to disclosing the information required for properly handling chemical substances both inside and outside the Group.

* Product stewardship is an initiative for minimizing the impact of chemical substances on human health, safety, and the environment throughout the entire value chain related to the life cycle of a chemical product, encompassing its development, manufacture, distribution, use, disposal, and recycling.

Management Structure

Under the Responsible Care Promotion System, spearheaded by the RC Council, the Daicel Group strives to ensure chemical and product safety throughout the process of development, manufacturing, distribution, use, disposal, and recycling of chemical products. We practice proper chemical substance management by implementing the Total Environmental, Health and Safety (EHS) Assessment System as a means for evaluating risks associated with chemical substances in regard to health, safety, and the environment.

➤ [Our Structure for Responsible Care](#)

➤ [Total Environmental, Health and Safety Assessment System](#)

Chemical Substance Management

Initiatives to Maintain Compliance with International Chemical Regulations

Daicel not only complies with domestic regulations pertaining to the management of chemical products but also maintains compliance with the chemical regulations enforced in each country in Europe, the U.S., the Asia-Pacific, and other regions by utilizing search databases for domestic and international laws to obtain the latest information on revisions to laws and regulatory trends in each country.

In May 2018, Daicel completed registrations of its products designated under the European Union's REACH*, in compliance with regulatory timelines specified by the regulations based on the volume of substances being manufactured or imported.

* REACH (Registration, Evaluation, Authorization and Restriction of Chemicals) : the regulation mandates that producers must register their chemical products with the European Union and conduct safety assessments, restrict their use, and control permits for their use.

Provision of Chemical Information

Daicel provides the following information on chemical substances to ensure that customers can use its products with a sense of safety and security.

<p>Information disclosed via the Safety Data Sheet (SDS)*¹</p>	<ul style="list-style-type: none"> ● Daicel creates SDS for all of its products in accordance with GHS*² and the Industrial Safety and Health Act of Japan and provides the information to customers. ● Daicel publishes SDS for its major products on the corporate website.
<p>Information disclosed via GPS/JIPS*³ activities</p>	<ul style="list-style-type: none"> ● Daicel participates in GPS/JIPS (Global Product Strategy/Japan Initiative of Product Stewardship), a voluntary initiative promoted by the Japan Chemical Industry Association (JCIA) for reinforcing control over chemical products. ● Daicel publishes its 12 Safety Summaries, based on risk assessment results, on the GPS Chemicals Portal Site run by the JCIA.
<p>Information disclosed via chemSHERPA*⁴</p>	<ul style="list-style-type: none"> ● Daicel has declared its support for promoting the use of chemSHERPA, a scheme developed by the Ministry of Economy, Trade and Industry of Japan for communicating information on the ingredients of chemical products.

*1 SDS: Safety Data Sheet, a document providing information on the properties of chemical substances and instructions about their handling.

*2 GHS: Globally Harmonized System of Classification and Labelling of Chemicals that provides rules regarding the presentation of hazard information of chemical substances and precautions for their handling based on globally harmonized classification and labeling methods.

*3 GPS/JIPS: Global Product Strategy/Japan Initiative of Product Stewardship, the voluntary actions of the chemical industry promoted by JCIA and based on the chemical management strategy of ICCA. Through these actions, the industry conducts risk assessments of chemical products, creates safety summaries to easily explain results to people outside the industry, and makes these summaries publicly available.

*4 chemSHERPA: A scheme that aims to ensure the appropriate management of content of chemical products while communicating information regarding their ingredients throughout supply chains and based on a unified list.

[> Public information about Safety Data Sheet](#)

[> Chemical risk assessment support portal](#)

Consolidated Management of Chemical Information

Through Daicel's unique chemical information management data bank called D-CLik, the company unified information on raw materials, intermediates, and finished products with regard to their physical, chemical, and hazardous properties and relevant regulations. As for D-CLik data, we not only register new chemical substances but also provide continuous updates by collecting monthly safety test reports and other relevant documents from the entire Company and submitting them to the Responsible Care Division, which manages chemical information. This allows us to create SDSs and labels for the safe and secure handling of our products. The necessary information can also be promptly provided to customers, and we can assess the risks associated with chemical substances including our products.

In-House Training and Education

To ensure appropriate management of chemical substances, we regularly provide all employees who handle chemical substances with educational programs focused on the hazardous properties of chemical substances and appropriate methods for handling them as well as on the domestic and overseas laws and regulations governing them.

Particularly with respect to domestic and overseas laws and regulations, we have assigned chemical product management supervisors in each business division and Group company who gather four times a year to exchange information, which is undertaken in two parts. Participants share information and discuss topics such as chemical product regulations in Japan and overseas along with the latest information and trends related to industry groups in the first part, and topics such as regulatory trends and internal management systems focused on conveying information about chemicals in the second. In FY2021/3, the meeting was conducted online to prevent the infection of COVID-19 and was attended by 250 people including the heads of each division and relevant staff.

Information on toxicity, hazardous properties, and related regulations for all chemical substances and products handled by Daicel are compiled in a list in the chemical substances safety assessment, conducted as part of the Total EHS Assessments. Based on this list, we consider measures for mitigating the risks of hazardous properties and incorporate them into work procedures. In addition, we train all staff handling chemical substances on these audit results.

Process Safety and Disaster Prevention

Basic Approach

The Daicel Group regards safety as one of its most important foundations. Adhering to [the Daicel Group Basic Policies for Responsible Care](#), it identifies risks associated with processes related to safety and disaster prevention through various assessments. The Group then takes preventive actions that include eliminating and mitigating those risks. Moreover, in the event of a safety incident during any process, systems based on the BCP Guidelines are in place to respond with measures aimed at minimizing damage.

Management Structure

[> Our Structure for Responsible Care](#)

Initiatives on Process Safety and Disaster Prevention

To achieve its goal of zero accidents involving fires, explosions, and leaks, the Daicel Group engages in voluntary initiatives to ensure process safety by conducting risk assessments always to identify and address hazards. The causes and countermeasures concerning problems that occur at Daicel Group sites are discussed at the monthly meetings of supervisors of the environmental and safety divisions and then shared among relevant divisions across the Group to prevent similar incidents.

Status of Accidents in FY2021/3 (Daicel's business sites and Domestic Group companies)

- Small fire: two cases (down four from FY2020/3)
- Leakage: six cases (down two from FY2020/3)
- All of the above incidents were contained at the business site and did not affect operations. The causes of these incidents have been investigated, and preventive measures were implemented to address both physical and human errors. These measures have also been deployed at similar business sites across the Group.

Risk Assessment

The Daicel Group seeks to ensure safety as a foundational principle of its operations by identifying, assessing, analyzing, and addressing process safety risks based on its Total Environmental, Health and Safety Assessment System.

Initiatives for FY2021/3

With regard to self-reactive substances involving the risk of runaway reactions associated with thermal decomposition and polymerization, a Working Group conducted reaction analyses that included simulations based on the latest data and information. In addition, we systematically introduced remotely operated surveillance cameras to reinforce the monitoring of plants deemed to be at risk and installed remotely operated fire extinguishing facilities to minimize any damage in the event of an accident.

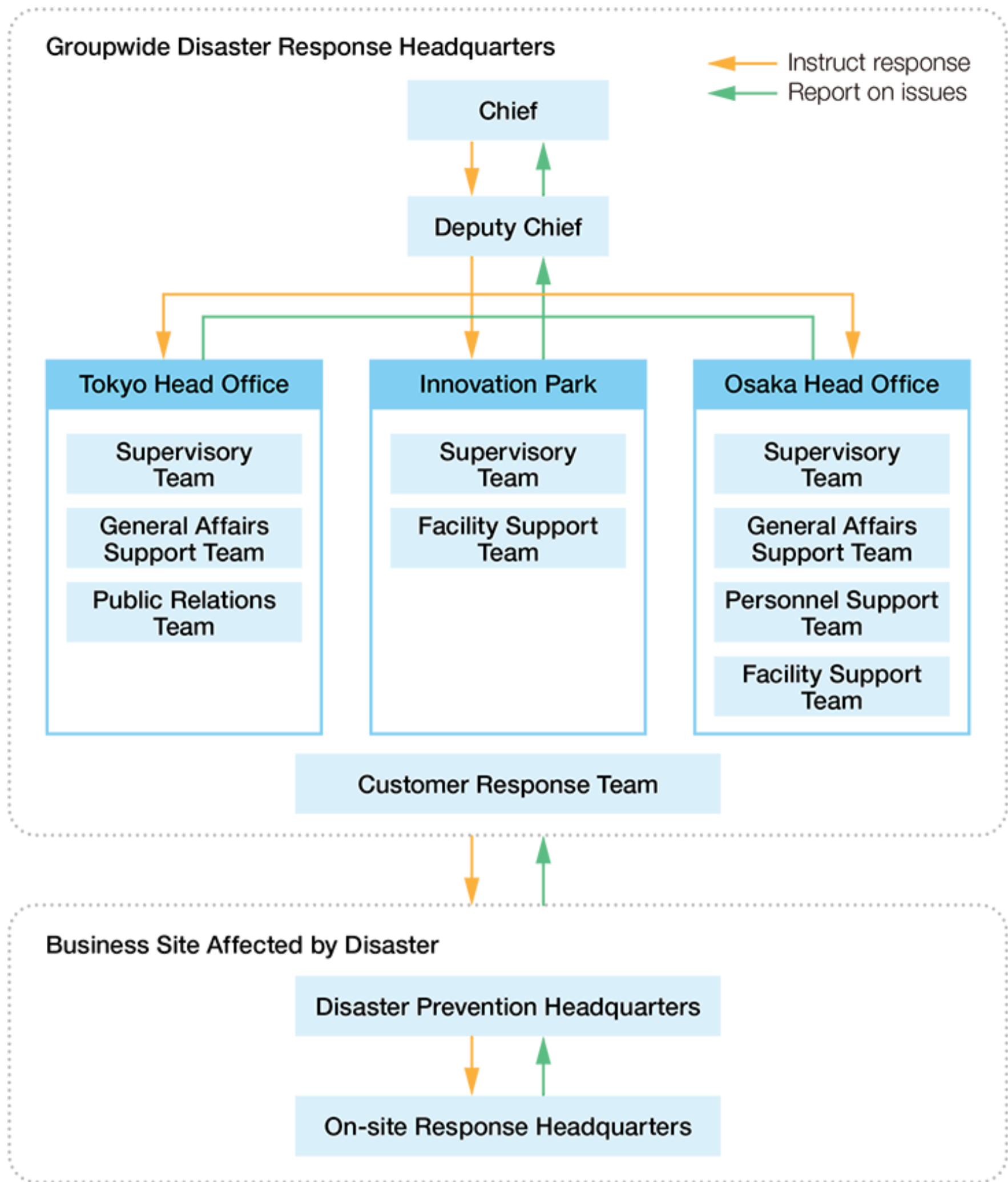
[> Total Environmental, Health and Safety Assessment System](#)

Emergency Response

In the event of a major disaster such as a huge fire, explosion, or natural disaster, including earthquakes and tsunami, the Daicel Group will respond in accordance with its the Disaster Response Rules by setting up a Groupwide Disaster Response Headquarters at the Innovation Park and the Osaka and Tokyo head offices. The president will serve as the chief and the director in charge of the Responsible Care Division as deputy chief to provide overall supervision.

Satellite communication antennas have been erected at the three bases of the Groupwide Disaster Response Headquarters, and a Disaster Information Sharing System including video and other tools was introduced in 2019 as a means of securing the information network infrastructure between business sites during a widespread disaster. The Disaster Information Sharing System has been introduced at the Ohtake and Aboshi plants, while systems for safety confirmation and emergency calls have been introduced at all Group business sites in Japan to reinforce our emergency response. The deployment of these systems will support quick and effective responses through close collaboration with the headquarters.

■ Our Structure for Emergency Response



Earthquake, Tsunami, and Liquefaction Countermeasures

Taking a systematic approach, Daicel has been pushing ahead with assessments of risks associated with earthquakes, tsunami, and liquefaction as well as the analyses of seismic conditions at its facilities and their structural reinforcement. In FY2016/3, we completed structural reinforcement work in line with the Act for Promotion of Renovation for Earthquake-Resistant Structures. Currently, efforts are underway to equip the facilities with greater earthquake resilience in accordance with Daicel's in-house standards.

Disaster Prevention Drills

The Daicel Group conducts emergency safety drills in accordance with the annual plans of each business site. The drills are designed to prepare employees through repeated practice so that, in the event of an emergency, they are well versed in lifesaving and first-aid procedures, capable of preventing spillover effects from a disaster, and able to efficiently collaborate with other members of communities around our business sites.

Complementing these efforts, Daicel conducts Groupwide disaster countermeasure exercises each year that address the possibility of a widespread disaster. In FY2021/3, we conducted initial response drills and BCP training without providing participants any advance information on the disaster scenario.



Emergency drill at a petroleum complex in Hyogo Prefecture(conducted in FY2020/3)



Aboshi Plant: Joint emergency drill with the local fire department and neighboring companies (conducted in FY2020/3)



Aboshi Plant, Innovation Park: Joint emergency drill with the local fire department (conducted in FY2021/3)



Otake Plant: Joint emergency drill with the local fire department (conducted in FY2021/3)

TOPICS

FY2020 Chairman's Award from the High Pressure Gas Safety Institute of Japan



The Hirohata Plant of the Multiple Production Company's Himeji Production Sector was recognized as an excellent manufacturer with an award from the High Pressure Gas Safety Institute of Japan.

The Chairman's Award is presented to commend businesses and individuals for outstanding achievement in preventing disasters related to high pressure gas. We believe the Hirohata Plant was recognized for its manufacturing technology training and management related to high pressure gas.

Distribution Safety

Basic Approach

As a distributor, Daicel Corporation works with Daicel Logistics Service Co., Ltd. to ensure safe distribution and quality management. As for distribution safety, we aim to achieve zero logistics accidents, occupational accidents and at-fault traffic accidents by adhering to the [Daicel Group Basic Policies for Responsible Care](#). In assuring quality, we are guided by the [Quality Policy for Daicel Group](#) and strive to achieve our target of “taking responsibility as a logistics contracting company by quickly and sincerely responding to complaints and accidents relating to logistics to earn the customer satisfaction (CS) of the distributors.”

Management Structure

We promote initiatives for ensuring distribution safety and quality with a focus on Daicel Logistics Service, given that the company handles most of the distribution operations of the Daicel Group.

Daicel Logistics Service implements and operates its quality management system in accordance with ISO 9001 using a CAPD cycle. To fulfill its responsibility as a distributor, Daicel Corporation checks up on the status of Daicel Logistics Service’s initiatives and engages in resolving any issues as part of its responsible care activities.

[> Daicel Logistics Service Co., Ltd. Quality Policy \(Japanese text only\)](#)

Safe Transport of Products and Logistics Management

Initiatives for Ensuring Safe Transport

Daicel Logistics Service promotes safe transport by upholding the targets of zero logistics accidents*, zero occupational accidents and zero at-fault traffic accidents. Annual distribution safety targets are set up by each distribution center. Progress on achieving the targets is reviewed each month by the Safety and Quality Committee, which comprises the heads of each center and departments, and improvements are made, including revising the targets as needed.

In FY2021/3, while there were zero logistics accidents and at-fault traffic accidents, there was one occupational accident. We investigated the causes of the incident and revised the operational structure and procedures to prevent a recurrence.

* Logistics accidents: Accidents such as fire, explosion, leakage, discharge and loss associated with hazardous products (hazardous materials, poisonous and deleterious substances, high-pressure gas, environmental pollutants, combustibles).

Daicel Logistics Service Safety Targets:

Zero logistics accidents, zero occupational accidents and zero at-fault traffic accidents

FY2021/3 Results:

Achieved zero logistics accidents and zero at-fault traffic accidents

Failed to achieve zero occupational accidents (one incident)

> ESG Data [Logistics Accidents, Occupational Accidents and At-fault Traffic Accidents](#)

Major Initiatives for Achieving the Safety Targets

We seek to prevent logistics accidents, occupational accidents and at-fault traffic accidents by consistently implementing initiatives designed to firmly establish safety awareness and behavior among employees.

Major Initiatives

Prevention of logistics accidents	<p>Safety education based on Transport Safety Management conducted at each distribution center (once a month)</p> <ol style="list-style-type: none">(1) Appropriate mind frame for driving vehicles used in business(2) Basic rules for ensuring safe operation of vehicles used in business(3) Structural properties of vehicles used in business(4) Proper method of loading cargo(5) Dangers of overloading(6) Matters that require attention when transporting hazardous materials(7) Appropriate transportation routes and status of roads and traffic on that route(8) Predicting and avoiding danger, and response to emergencies(9) Safe driving according to the driver's aptitude(10) Biological and psychological factors affecting drivers with regard to traffic accidents, and methods for addressing these factors(11) Importance of managing health(12) Appropriate driving methods for vehicles used in business with equipment designed to enhance safety
Prevention of occupational accidents	<p>Health management for safe transport (daily)</p> <ol style="list-style-type: none">(1) Measurement of blood pressure and body temperature before driving(2) Roll call(3) Daicel Logistics Service's measures against COVID-19
Prevention of at-fault traffic accidents	<p>Operation managers at each distribution center provide education on safe driving to drivers using dashcam video of their actual transport operations (as needed)</p>

Initiatives for Ensuring Safety during Transport and Storage of Hazardous Materials

In addition to transporting dangerous goods, Daicel Logistics Service handles refrigeration and fixed-temperature storage of ordinary goods, low-temperature and fixed-temperature storage of Type 4 hazardous substances. It also operates a warehouse for Type 5 hazardous substances. Hazardous materials are transported and stored in accordance with Japan's Fire Service Act and the United Nations Recommendations on the Transport of Dangerous Goods (Orange Book)*¹. Daicel Logistics Service also implements its own safety measures in an effort to prevent accidents.

Major Safety Initiatives

- Formulate and make effective use of operation manuals and check lists on the transport, loading and unloading of dangerous goods.
- When filling dangerous materials, observe instructions on labels (displayed on the product and at the storage location) and standard operating procedures for storage and handling.
- When transporting dangerous materials, carry Yellow Cards*² as an obligation.
- Provide education on physical properties of dangerous materials during safety meetings (around once a month).
- Provide training for skilled experts and drivers at the Safety and Quality Training Center (around 15 times a year).

*1 United Nations Recommendations on the Transport of Dangerous Goods: Recommendations compiled by the United Nations and revised every two years with the aim of harmonizing national regulations and international rules on the transport of dangerous materials such as gunpowder, gases, liquids and solids.

*2 Yellow Cards: Listing emergency responses to be taken by drivers, firefighters and police officers in the event of an accident.

Response to Distribution Accidents

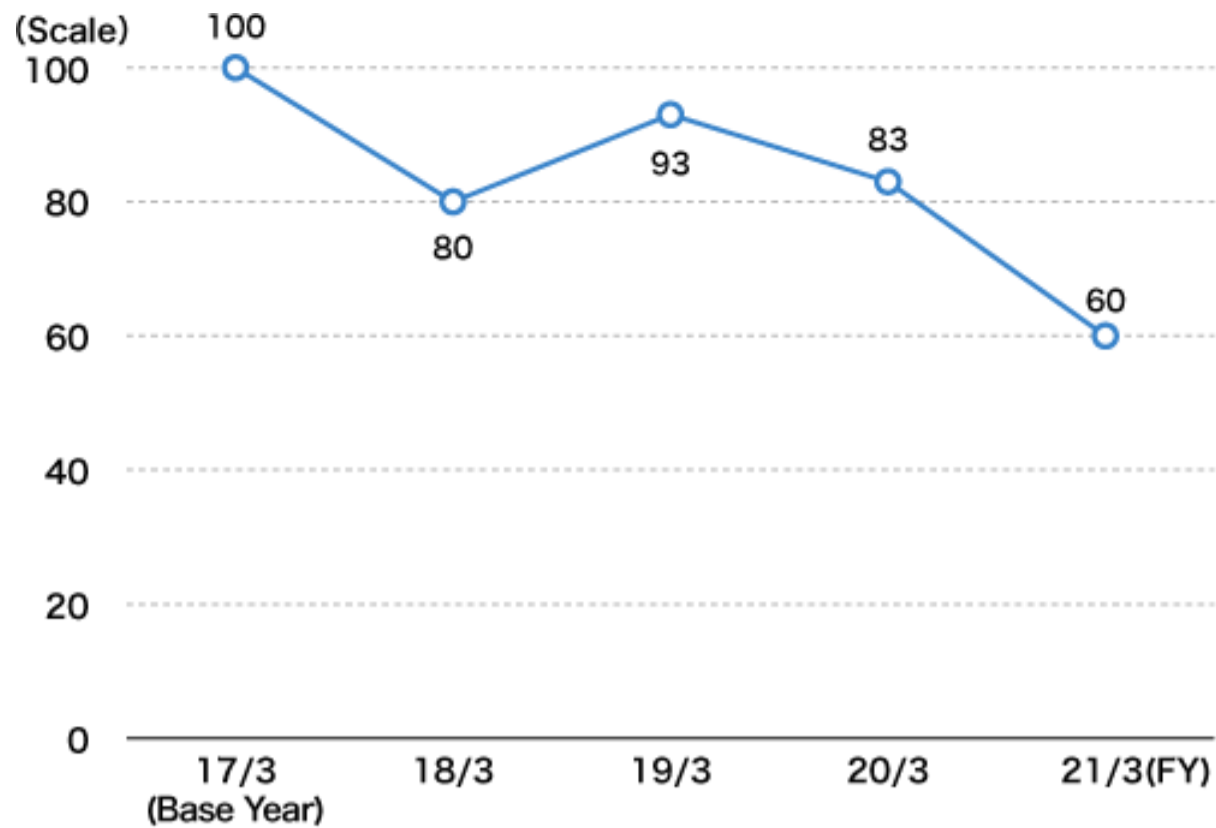
Daicel Logistics Service has established its emergency response and contact lists based on its Emergency Response Regulations. The company also conducts internal emergency reporting drills at least three times a year to remain prepared for emergencies.

Initiatives for Managing Logistics Quality

Daicel Logistics Service promotes stringent management of logistics quality by following its policy of "taking responsibility as a logistics contracting company by quickly and sincerely responding to complaints and accidents relating to logistics to earn the customer satisfaction of the distributors." Each month, the Safety and Quality Committee confirms the status of ongoing issues as well as the effectiveness of cause analysis and response, toward achieving the target of zero Logistics Issues*.

In FY2021/3, the number of logistics issues including shipping and delivery errors and customer complaints fell by 27% from the previous fiscal year, or 40% from the reference year of FY2017/3. Since most of the observed incidents were recurrence of incidents, we intend to improve our preventive measures and raise employee awareness.

■ Number of Logistics Issues



* Logistics Issues: Overall term for logistics accidents, complaints, shipping and delivery errors, occupational accidents, traffic accidents and on-site accidents.

Promotion of the White Logistics Movement

Agreeing to the White Logistics Movement, launched by the Ministry of Land, Infrastructure, Transport and Tourism (MLIT), Ministry of Economy, Trade and Industry (METI) and Ministry of Agriculture, Forestry and Fisheries (MAFF), the Daicel Group submitted a declaration of its voluntary activities to the secretariat of the movement on September 27, 2019.

The White Logistics Movement is a key initiative of the National Action Plan for Realizing the Work-style Reform in the Motor Carrier Business being promoted mainly by the MLIT, METI, and MAFF. Shipping line and logistics service providers work together to contribute to economic growth by addressing the growing shortage of truck drivers and ensuring stable logistics necessary for people's lives and industrial activities.

The key objective of the movement is to improve productivity of truck transportation and logistics efficiency while also striving to realize a "white" labor environment that makes work easier for female drivers and those over the age of 60. Promotion of the White Logistics Movement is expected to contribute to an improvement of productivity, reduction of CO₂ emissions and stable logistics operations while fulfilling the company's social responsibilities. The Daicel Group has adopted the initiative with the aim of enhancing the working environment for its employees.

Initiatives to Reduce the Environmental Impact of Logistics Operations

The Daicel Group is striving to step up its measures to secure distribution safety and enhance the quality of its logistics operations. Simultaneously, it is engaged in efforts to curb energy consumption associated with product transportation by, for example, promoting a modal shift*¹ and container round use*².

*1 The shift from truck-based goods transportation to more environmentally friendly marine and railway transportation.

*2 The practice of using devanned import containers for exports without returning them to the shipping companies.

➤ [Response to Climate Change](#)

Technical Training at the Safety and Quality Training Center

In 2011, Daicel Logistics Service opened the Safety and Quality Training Center on the premises of its Kansai Logistics Center Amagasaki Sales Office. This move was intended to step up its efforts to maintain distribution safety and quality, both essential to earning customer trust. In FY2021/3, we held driving skills training for newly hired drivers by taking every precaution against infections amid the COVID-19 pandemic. We also held a seminar on forklift operation skills for staff in charge of loading and unloading cargos, through a combination of online classes and practical skill training in small groups. Technical training sessions are held around ten times each year. As of March 31, 2021, approximately 1,080 employees had completed training at the center.



Technical Training

[> Training at the Safety and Quality Training Center of Daicel Logistics Service Co., Ltd. \(Japanese text only\)](#)

Occupational Health and Safety

Basic Approach

To ensure the safety of its workplaces, the Daicel Group promotes various measures such as conducting risk assessments of all its activities, including R&D, manufacturing, and logistics, in accordance with [the Daicel Group Basic Policies for Responsible Care](#) .

Placing the highest priority on safety in manufacturing, all of our business sites and partner companies promote the 3S methodology, namely Seiri (Sorting), Seiton (Setting-in-Order), and Seisou (Shining) as well as near-miss reporting and KY (danger detecting) training to improve the foundation of our production sites.

Management Structure

The Daicel Group is working to improve occupational health and safety under the leadership of safety management supervisors assigned to each business site through a system of responsible care under the direct supervision of the president and CEO. Management and business sites exchange information on occupational accidents and process safety incidents using a database specifically designed for that purpose. Supervisors of the environmental and safety divisions meet once a month to determine the root causes of accidents and reported incidents, identify similar cases, and implement countermeasures across relevant business sites. In addition, at the Special Meetings and Responsible Care Audits, issues and progress of the Responsible Care Activity Plan, which each business site formulates, are confirmed and discussed.

A total management system has been introduced at our business sites in Japan and overseas. Some Group companies have also obtained external certification (OHSAS 18000).

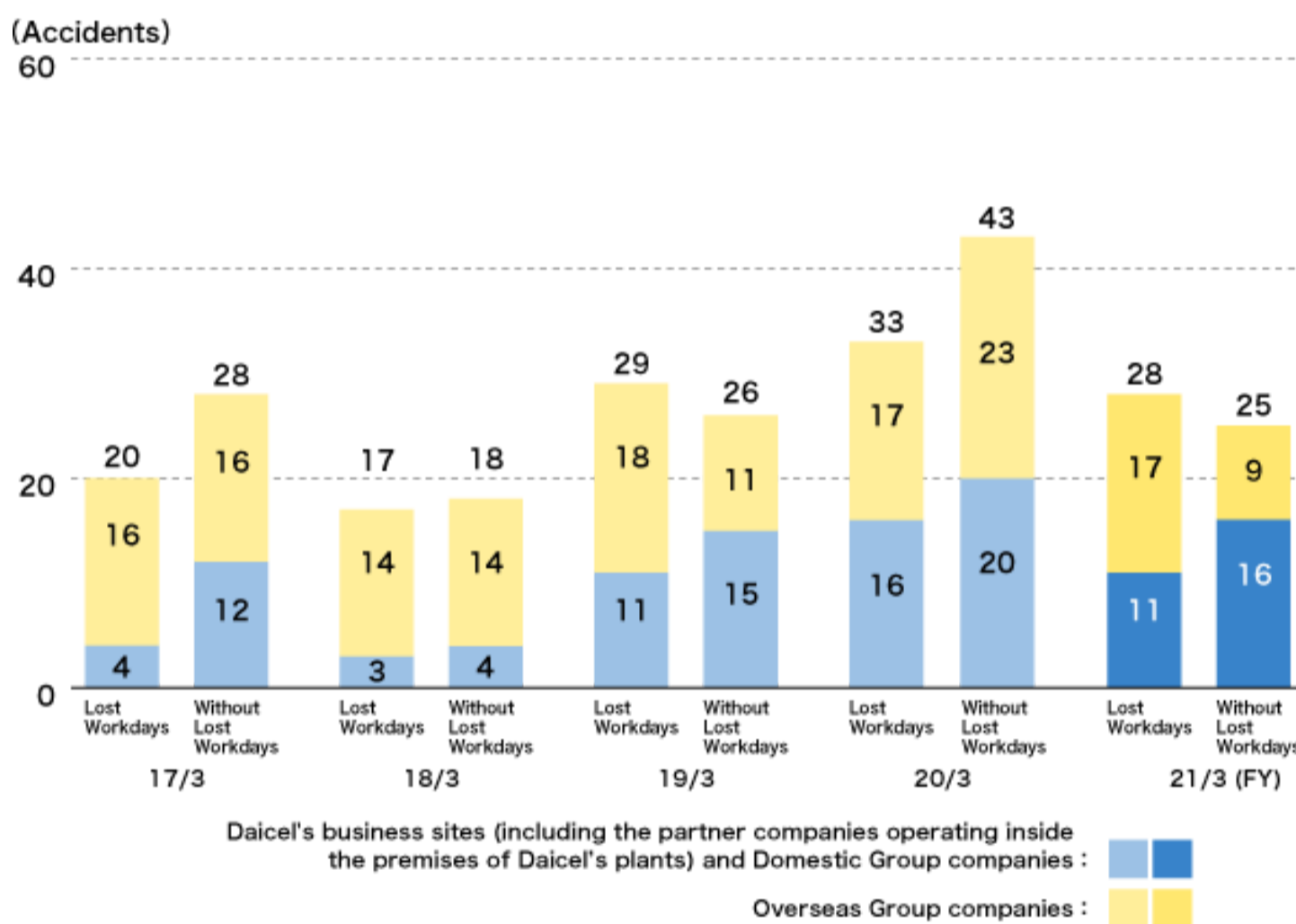
[> Our Structure for Responsible Care](#)

Initiatives toward Zero Occupational Accidents

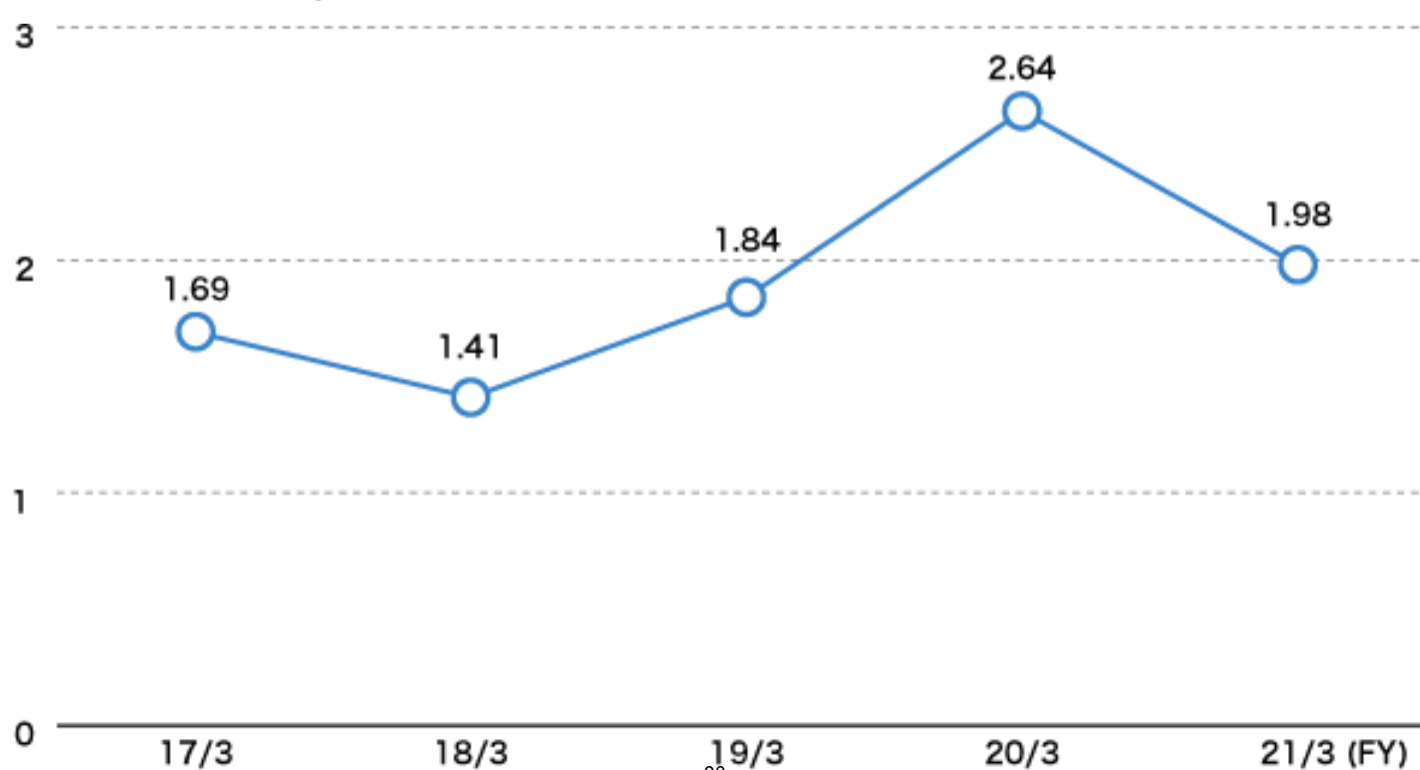
In FY2021/3, as in the previous fiscal year, we sought to achieve our goal of eliminating serious occupational accidents such as chemical injuries and heat stroke. With regard to chemical injuries, the wearing of protective gear was reconfirmed during a pre-work safety assessment, one of our ongoing efforts. As a result, there was one incident in FY2021/3. As for heat stroke, we continuously provided workplaces with readily accessible drinking water and mineral supplies as well as rest areas. In addition, we have laid down rules on the use of masks worn as a preventive measure against COVID-19 infection with consideration for the prevention of heat stroke. As a result, there was no incident in FY2021/3.

In FY2021/3, there were 53 occupational accidents for the entire Group, consisting of 28 with lost workdays and 25 without. The number of accidents declined by 23 cases from FY2020/3, and there were no fatal accidents. In Japan, there were 27 occupational accidents, consisting of 11 with lost workdays and 16 without. The number of accidents decreased by 9 from FY2020/3, while the severity ratio fell by 0.043 points from FY2020/3 to 0.021. Occupational accidents and the recurrence of preventive measures are being shared horizontally across business sites to prevent similar accidents.

Number of Occupational Accidents (Daicel Group)

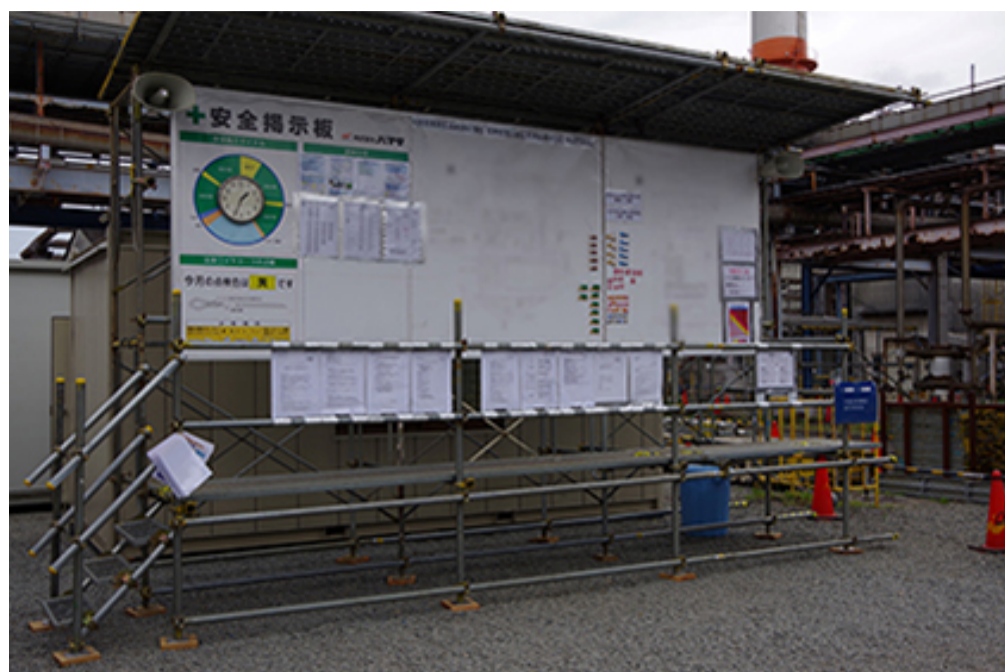


Occupational Accident Frequency Rate (Daicel Group)



* Occupational Accident Frequency Rate = (number of people involved in an occupational accident / total actual working hours) × 1 million hours

> ESG Data [Numerical Data on Occupational Accidents](#)



Patrols to ensure against heatstroke and injuries from hazardous substances

Initiatives to Improve Occupational Health and Safety

Safety Education for Employees and Partner Companies

The Daicel Group formulates its own training programs on necessary technologies and skills and provides regular safety education for employees. At the Aboshi Plant, the Operation Training Center (TRC) was set up to provide training on technology and knowledge related to chemical plants, and all staff receive basic training on plant operations. Meanwhile, the Maintenance Dojo at the Aboshi Plant provides specialized training for maintenance of plant facilities, mainly for onsite staff and partner company employees.

TRC branch offices have been set up at each business site as places for technical education unique to each site, including manufacturing technologies, occupational health and safety, environmental preservation, and control of chemical substances. For example, the Human Development Center at the Harima Plant provides the necessary knowledge and skills for assembly-based manufacturing in an effort to develop human resources through practice and experience, in addition to classroom lectures.

Furthermore, in career development training for newly promoted employees, conducted as part of our human resource development program, we explain the thinking behind RC ethics and present an outline of the Daicel Group's ongoing initiatives. At the same time, to reinforce the importance of placing safety first in manufacturing, we educate employees on our approach to disaster and risk management by citing the history of the explosion and fire that occurred at the Sakai Plant in 1982, using newspaper articles from that time and video footage. In the human resource development program for engineers to exercise their specialized skills, we organize seminars on assessment methods, including HAZOP*, total assessment and technical assessment, as well as the environmental management system.

*HAZOP : "Hazard and operability" is a qualitative analysis method for providing feedback on potential hazards and operability issues in the design process.

> [Support Personal Growth](#)

> [Human Development Center](#)

Safety Exchange Meetings for Group Members

Since FY2015/3, we have been holding casual exchange meetings aimed at fostering a sense of unity among Group members and heightening the awareness of those who take on front-line operations with regard to 3S and other safety assurance initiatives. With the labor union and management acting in collaboration, these meetings are attended by forepersons and mid-level managers from Daicel production sites and other domestic Group companies. The sessions usually involve a tour of plant facilities and small-group discussions on 3S case studies to help participants exchange their insights. Participants become leaders of their respective workplaces and endeavor to improve safety by applying the knowledge they have gained at the exchange meetings. In FY2021/3, we refrained from holding the meetings after determining that group sessions pose a high risk of spreading COVID-19 infection.

■ Safety Exchange Meetings

FY	Location	Participants
2021/3	—	—
2020/3	Harima Plant	12
2019/3	Kanzaki Plant, Daicel Logistics Service Co., Ltd. Amagasaki site	25
2018/3	Okayama Plant, DM Novafoam Ltd.	18
2017/3	Hirohata Plant	18
2016/3	Harima Plant	19
2015/3	Aboshi Plant	21





Facility tour given by the Safety Exchange Meeting Members

Creation and Distribution of “The Essence of Safe Operations” and “Basic Internal Rulebook on Construction Work”

Daicel has established numerous in-house rules on manufacturing safety. To enable all front-line operators of the Group involved in manufacturing to be aware of, think about, and act on ensuring safety on the same basis, we released the first edition of the “Essence of Safe Operations” and the “Basic Internal Rulebook on Construction Work” in FY2014/3.

“The Essence of Safe Operations” is a pocket-size leaflet that provides readers with quick references on the gist of safety rules, such as how to use tools, anytime and anywhere. The leaflet is revised and upgraded each year. In April 2018, we issued the third edition, which includes more diagrams and photos so as to facilitate reading and understanding. In June 2020, the fourth edition was distributed, which includes rules for preventing electrostatic accidents and the appropriate wearing of new uniforms.

The “Basic Internal Rulebook on Construction Work (Safety Version)” is a compilation of Daicel’s unified basic rules related to construction work, and it was created in response to voices pointing out discrepancies in the rules depending on the content of construction work. We created the rulebook based on our belief that complying with these rules is essential, not only to ensure one’s own safety but also to ensure the safety of colleagues working at the same site. The “Basic Internal Rulebook on Construction Work (Quality Version)” focuses exclusively on rules aimed at preventing a recurrence of serious incidents resulting from defects in construction quality. It was created with the intention of encouraging employees to gain a deep understanding of the key points for ensuring construction quality and to comply with the rules. We issued both revised rulebooks in April 2021.

安全作業必携 (第4版)

株式会社ダイセル

2020年6月

The Essence of Safe Operations

工事に関する社内基本ルール集 (安全版)

第7版
(2021年4月改定)

 株式会社ダイセル

エンジニアリングセンター

〇〇工場

安全版

(株)ダイセル

Basic Internal Rulebook on Construction Work (Safety Version)

Safety Programs for Partner Companies and Business Partners

We strive to ensure the safety of each business site by educating not only Daicel Group employees but all employees of partner companies who are involved in manufacturing and construction work. To raise safety awareness, we continuously provide education on safety rules related to occupational safety, process safety, and disaster prevention on a regular basis, such as when workers enter the worksite for the first time or before undertaking periodic repair work.

Policy and Guidelines on Human Resources

Daicel Group's Human Resources Policy

In following our aim to globalize our businesses and rapidly expand overseas, we established the Daicel Group's Human Resources Policy in 2013 to guide our employees with diverse values on working together. The policy reiterates Daicel's unchanging philosophy that has been handed down over the years and seeks to disseminate this along with the three core principles to employees around the world. The policy is in Japanese, English, Chinese, Thai and Polish so that most of our employees can read it.

With regard to our approach to people, in Sustainable Management Policy, the Daicel Group upholds its commitment to promoting "human-centered business management" that enables diverse employees to grow while establishing their own presence and achieving fulfillment. The belief expressed in our Human Resources Policy that people are the foundation for our success is connected to "human-centered business management" by a common thread.

Daicel Group's Human Resources Policy

People are the Foundation for Our Success

The Three Core Principles of Our Human Resources Policy

Will

We encourage the strong will and courageous decisions of each individual.

Diversity & Inclusion

We continue to evolve through the interaction of our diverse personalities.

Integrity

We do the right thing and proudly follow the right path.

Having unveiled the Human Resources Policy, Daicel's President delivered the following message to all employees worldwide with the aim of ensuring the policy's spirit would be shared by every Group employee.

On behalf of the Daicel Group, I am pleased to present this human resource policy covering all employees of the Daicel Group worldwide.

Our human resources policy establishes the underpinning for various personnel practices such as recruitment, training and development, placement, and determining appropriate treatment. We, the Daicel Group, have characterized the policy with the phrase “People are the foundation for our success.” To start with, no company can exist without people, and many companies emphasize the importance of their employees. The word “people” holds a special significance for us because we deeply believe that people are imbued with infinite power, and we depend on our ability to realize the full potential of this source of power. Sometimes we can expose our world to unknown potential, balancing even the very fate of the company, but our cumulative history has made us the very people we are. I am also convinced that future prosperity cannot be achieved without the contribution of our people, namely, it is people that form the foundation of our success. Herein we reiterate the firm determination of the Daicel Group under our human resources policy, and we are pleased to put these thoughts into a form that all can share.

President & CEO



Human Resource Guidelines

The Daicel Group has established unified guidelines for all Group members. Since 2013, we have been building a solid foundation for our human resource management systems based on these guidelines. Unlike the Human Resources Policy, which expresses our unchanging belief, we consider the Human Resource Guidelines as guidance that can be updated with the changing times. We revised some of the guidelines in 2019 to place more emphasis on human rights and labor while also making these items more understandable for staff working around the world.

The guidelines describe matters to be observed by all Daicel Group companies with respect to human resource practices. They specify objectives, basic concepts, compliance rules and recommendations ranging from human rights and labor, recruitment, compensation, the human resources development system and the appraisal system. For example, the basic concepts of the guidelines stipulate the need to “respect human rights and reject complicity in human rights violations” and “develop a culture where the employer, superiors and subordinates think of each individual's career and put ideas into practice.” Recommendations include the need to “utilize the training programs offered by other Group companies actively.”

When we exchange views with Group companies or conduct human rights due diligence, we verify whether each company is implementing human resource practices in line with the guidelines.

Applying the guidelines, we will continue to improve our human resource practices that will help employees enhance their capabilities and raise their motivation to perform their duties.

■ Objectives and Basic Concepts of the Human Resource Guidelines

Practices	Objectives	Basic Concepts
Human rights and labor	Improve productivity by respecting human nature and realizing a workplace environment whereby each employee can demonstrate his/her full potential	<ul style="list-style-type: none"> ● Respect human rights and reject complicity in human rights violations ● Provide equal opportunities, such as for promotion and training, without undermining fairness on the grounds of race, nationality, gender, etc. ● Acknowledge diversity and inclusion to achieve a favorable workplace environment through promoting mutual communication and compromise ● Contribute to lives of people and society through work, and create a company which is trusted by society ● For resolution of issues, the company and employees understand each others' viewpoints, and promote solutions through negotiation and discussion ● Create a healthy mental and physical working environment which values communication with employees ● Improve productivity throughout the workplace with a good environment, and retain an appropriate number of employees
Recruitment	Recruit talent who empathize with Daicel Group Basic Philosophy and Human Resources Policy (Will, Diversity & Inclusion, Integrity)	<ul style="list-style-type: none"> ● Recruit talent with strong will and integrity who can create new value ● Carry out equal and fair recruiting process regardless of ethnicity, nationality, gender etc. (Diversity & Inclusion)
Compensation	Create a corporate culture that efforts as well as results will be rewarded	<ul style="list-style-type: none"> ● Design a human resources system that reflects both company performance and individual performance ● Create a system that can reflect fair treatment, based on approach to HR Policy (Will, Diversity & Inclusion, Integrity) and contribution to the company of each employee ● Ensure fairness, rationality and transparency in determination of compensation ● Continuously verify the validity of the company's reward standards

Practices	Objectives	Basic Concepts
Human resources development system	Implement effective and systematic human resources development system based on HR Policy that “People are the foundation for our success”	<ul style="list-style-type: none"> ● Develop employees who can work properly while protecting safety and quality standards based on rules established in each country and region ● For strong-willed and decisive employees working at their own initiative, provide opportunities to take on more challenging roles and broader duties for their growth ● Broaden employee field of vision by providing a stimulating environment that allows discussion encompassing a variety of interests and values ● Enhance employees' value by developing their awareness of self-development and providing maximum support for them to improve their abilities ● Develop a culture where the employer, superiors and subordinates think of each individual's career and put ideas into practice
Appraisal system	Through appraisal system, create the foundations of company success by disseminating HR Policy and Corporate Values, developing human resources and realizing proper compensation	<ul style="list-style-type: none"> ● Design appraisal system that appropriately evaluates the performance of each employee ● Establish a system which takes into account employee making efforts to achieve targets of HR Policy (Will, Diversity & Inclusion, Integrity) and also processes leading to good results ● Promote communication between superiors and subordinates through an appraisal system and use this system for human resource development ● Establish a fair and transparent appraisal system ● Realize the appraisal which is based on objective facts by cultivating understanding of the system

➤ [Sustainable Management Policy](#)

➤ [Daicel Group Human Rights Policy](#)

Initiatives to Help Employees Maintain Mental and Physical Health

Basic Approach

The Daicel Group's personnel measures are aligned with its Human Resources Policy and Human Resource Guidelines.

The Daicel Declaration on Health Management was established in FY2019/3 based on our belief that maintaining the health and vigor of our employees will create a favorable balance between the quality of life of individual employees and the sustainable development of the Company. At Daicel, healthcare committees play a central role in helping employees manage their health by organizing health checkups and providing guidance on well-being, monitoring the stress level of employees by conducting stress checks, and alleviating stress.

Daicel Declaration on Health Management

The Company will strive to offer a safe and comfortable workplace based on the conviction that its business foundation relies upon the mental and physical health of each employee.

The Company will act in collaboration with the health insurance society to help each employee as well as their families engage in autonomous and proactive efforts to maintain and improve their health conditions.

President and CEO 

Our Structure for Health Promotion

In 2003, the Company established the Healthcare Committee, consisting of representatives from labor unions, management, and Daicel's health insurance society, to create workplaces where individual employees can demonstrate their individuality and capabilities while ensuring their mental and physical well-being.

To further enhance the Groupwide health support system, we set up a Central Healthcare Committee along with healthcare committees at each business site.

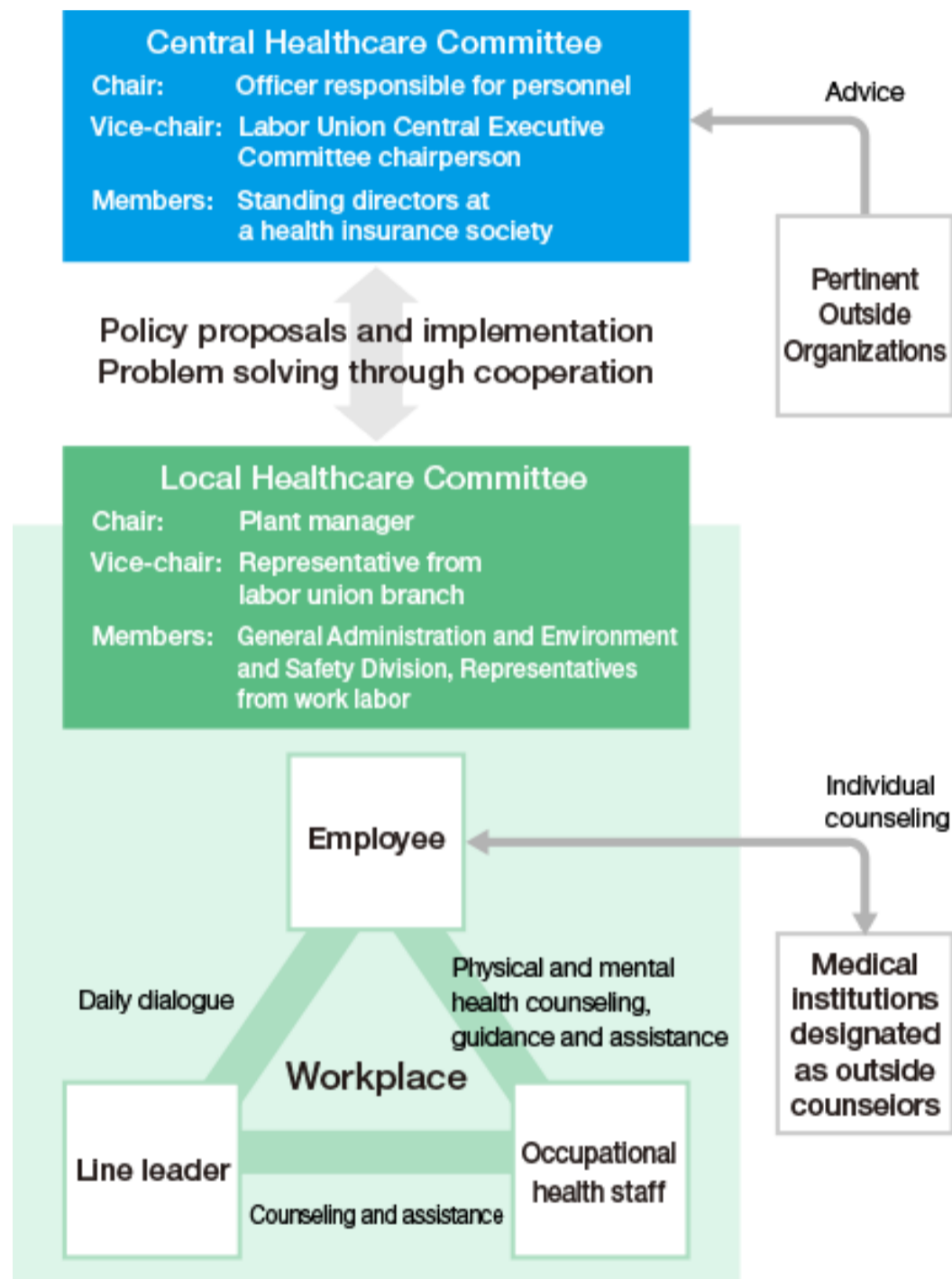
Central Healthcare Committee

In addition to formulating plans and measures and developing the framework for healthcare activities for the entire Group, the Central Healthcare Committee checks on the progress of initiatives by the healthcare committees at each business site and provides assistance. In planning measures for healthcare activities, the committee seeks advice from pertinent outside organizations as needed.

Healthcare Committees at Each Business Site

The healthcare committees plan and execute healthcare activities for each business site, including various health education programs and health-related events, and an improvement plan for the working environment based on group analysis of stress check results. The improvements are implemented in collaboration with the individual worksite leaders.

■ Our Structure for Health Promotion



Strengthening Our Structure for Health Promotion

To strengthen our healthcare promotion structure, Daicel has designated a team of industrial healthcare staff comprising full-time corporate health nurses and contract psychiatrists. The team provides employees with daily guidance on health matters and addresses the needs of employees with mental disorders and supports their reinstatement at work. It also conducts preventive education to provide early detection and a timely response to mental issues while making it easier for employees to seek consultation. In addition, employees on overseas assignment can have an annual consultation with a nurse and online consultations as required when working long hours.

Initiatives Undertaken by the Health Nurse Team

We have 11 full-time nurses (as of March 31, 2021), who work together as a team across business sites to build a cooperative framework and promote information sharing. The team participates in formulating and executing action plans to improve the workplace environment for each business site based on the results of mandatory stress checks. Moreover, it is involved in educational sessions focused on preventing physical and mental health issues. Team members share their insights as lecturers during position-specific training and orientation training for new graduates and lateral hires. These activities help prevent any health issues from arising and support corporate health nurses in improving their planning and teaching skills. Furthermore, these nurses provide information on managing physical and mental health by regularly publishing a health newsletter to raise employee awareness on how to maintain well-being and take preventive health measures.



A health nurse discusses how to stay healthy and enthusiastic



Attendees take turns giving presentations

Utilizing Psychiatrists Employed Exclusively by Daicel

Currently, Daicel employs four psychiatrists (As of March 31, 2021) to bolster its follow-up care system for employees who have developed mental health issues. Every psychiatrist is assigned a geographical segment for his/her oversight, thereby ensuring that employees in need receive meticulous care.

Maintaining and Promoting Good Health

Regular Health Checkups

We implement regular health checkups, mandated by law, for employees of Daicel Corporation, thus the employee medical examination rate is 100%. In addition, to improve the reexamination rate, corporate health nurses encourage those employees who are subject to a secondary examination, to take it during a follow-up consultation.

> ESG Data [Regular Health Checkup Rate](#)

Specified Health Checkups

Daicel cooperates with the Health Insurance Union to implement specified health checkups and specific health guidance mandated by laws governing health insurance unions. This is to ascertain the status of employee health by analyzing the results and responses from medical interviews. We are working to prevent lifestyle diseases by seeking to achieve the national targets of 90% or higher for specified health checkups and 55% or higher for specific health guidance. We have attained the target for specific health guidance since FY2020/3 and intend to further improve this rate.

■ Specified Health Checkups and Specific Health Guidance Rate

	Target value	FY2018/3	FY2019/3	FY2020/3	FY2021/3
Specified health checkup rate	90%	79.2%	80.9%	84.6%	84.0%
Specific health guidance rate	60%	41.2%	50.6%	55.6%	58.6%

Prevention of Secondhand Smoke Exposure

In view of the risk of damaging health from exposure to second-hand cigarette smoke, we are working to reduce the risk by limiting smoking areas inside the business sites. Since October 2020, the Health Insurance Union has been providing free online programs to support employees seeking to quit smoking by bolstering health management through a joint effort with the Company.

Mandatory Stress Checks

Aiming to develop a vibrant workplace, Daicel has been actively assisting each business site in efforts to better manage their working environments by, for example, utilizing the results of stress checks. In FY2021/3, the stress checks carried out by Daicel and its Group companies achieved 99.9% coverage of all employees. The Group is providing employees with face-to-face sessions with a psychiatrist if they suffer excessive stress and are in need of counseling. In addition, the healthcare committees at each business site conduct comprehensive analyses of stress check results and then formulate and execute plans to tackle any issues that are identified in order to maintain and promote good employee health.

Training Related to Mental Health

Daicel conducts training for managers on mental health support for their subordinates and self-care. The training is designed to enhance communication skills through hands-on experience workshops in addition to acquiring basic knowledge of line care and stress management, and learning how to improve mental health through lectures by outside speakers. While we could organize only a few sessions in FY2021/3 due to the COVID-19 pandemic, we introduced new online mental health training by corporate health nurses during rank-based training for new recruits, mid-career recruits and newly appointed managers.

Initiatives to Shorten Working Hours

With the firm belief that the mental and physical health of each employee form the foundation of business success, the Company is actively working on improving the work-life balance of our employees and taking measures to further optimize their working hours.

[> Initiatives to Shorten Working Hours \(Foster a corporate culture that meets employee needs\)](#)

Health Consultation Desk

The Daicel Health Insurance Union operates a free health consultation desk. Experienced health counselors including full-time physicians at external institutions are available to provide advice on health issues over the phone all day and year-round. Employees are encouraged to freely consult on physical disorders caused by prolonged periods of telework or concerns related to their everyday lives. To protect the caller's privacy, personal information and what is discussed during the consultation is not made available to the employer or the Health Insurance Union.

The Consultation Desk covers:

- (1) 24-hour telephone health consultation service
- (2) Mental health counseling service
- (3) Second opinion service
- (4) Secondary medical examination arrangement service
- (5) Support for medical examination for lifestyle diseases
- (6) Arrangement and introduction service for medical examinations
- (7) Support for balancing cancer treatment and work

Health Guidance and Consultations for Employees Posted Overseas

In FY2016/3, Daicel began closely assessing the working status of employees posted overseas. Since FY 2018/3, we have been conducting follow ups for long-time workers such as counseling with corporate health nurses in accordance with domestic standards with the aim of their robust health management.

In addition, since FY2009/3, the Company had been implementing measures such as providing in-person counseling with a nurse to employees whose working hours were deemed excessively long. However, we switched to online consultations in FY2021/3 due to COVID-19 and held consultations with all employees posted overseas. Daicel will continue to maintain and improve the health of these employees, who play an important role in the operations of overseas affiliates.

Preventive Measure against COVID-19

In response to the global spread of COVID-19, in February 2020 we established the Daicel Group Countermeasures Headquarters, headed by the President, followed by local countermeasures headquarters at each business site. At the Daicel Group Countermeasures Headquarters, the Human Resources Department took the lead in collecting information on infected persons at sites in Japan and overseas and providing a response. It also formulated measures to prevent infection in the workplace.

Daicel employees have been taking advantage of telework to prevent infections. However, telework can lead to a lack of physical activity and health maintenance as well as mental health problems due to less personal communication. It has also come under scrutiny as an emerging social issue. In response, to maintain the mental and physical health of employees and prevent the development of disorders, we hold online health classes, provide information on mental health, organize health seminars and use an external consultation desk established by the Health Insurance Union.

[> Preventive Measure against COVID-19](#)

TOPICS

Recognized for the Second Consecutive Year as a “WHITE 500” Organization under the 2021 Certified Health & Productivity Management Outstanding Organizations Recognition Program

For the second year running, or the second year running, Daicel Corporation was recognized as a “WHITE 500” organization under the 2021 Certified Health & Productivity Management Outstanding Organizations Recognition Program. With this program, co-sponsored by the Ministry of Economy, Trade and Industry and Nippon Kenko Kaigi, companies are selected for their excellent health management initiatives such as those tailored to the needs of local communities and initiatives in line with Nippon Kenko Kaigi goals. In Daicel, under the themes “mental health care” and “physical health care,” members of the Central Health Care Committee organized by labor management and the health insurance society, including industrial health staff (industrial doctors, public health nurses, etc.) and psychiatrists, take action together to maintain and improve the mental and physical health of employees. Their activities also involve supporting the reinstatement to work of employees with mental health disorders, preventive education to provide early detection, and a timely response to mental issues and framework development. These efforts have led to our receiving this honorable recognition.



Polyplastics Obtains Top-Tier Rating from DBJ for Employee Health Management

Polyplastics Co., Ltd. was recognized for being outstanding in its employee health management and received the top-tier rating under the Employees' Health Management Loan Program of the Development Bank of Japan Inc. (DBJ). In the latest rating, Polyplastics received high recognition for the following points.

- Led by its healthcare team, the Company addresses the identified health issues by analyzing various data and making a thorough effort to prevent any deterioration in health and raise awareness among employees.
- Adhering to the Polyplastics work style (Shi-A-Wa-Se happiness framework), the Company is creating a workplace environment that caters to the diverse needs of employees and their work styles.
- Aiming to enhance engagement, the Company shares its mission, vision and values with employees. It also holds workshops at each division on issues mentioned during employee awareness surveys to prepare for the formulation of future measures.



Support for Human Resource Development

Basic Approach

The Daicel Group implements personnel measures in accordance with its Human Resource Policy and Human Resource Guidelines.

The Daicel Group recognizes human resources to be the foundation of its corporate activities, and the company aims to foster an environment and corporate culture in which diverse employees can work with vigor and fully demonstrate their abilities. Daicel has defined its basic approach to human resource development and provides support so that each employee can grow into a human asset who respects others while also sustaining the passion and focus to see tasks through to completion.

- Nurturing human resources will help the Company grow.
- Any attempt to achieve better results will nurture employees.
- With a corporate culture that trusts and values people, all Daicel employees shall undergo human resource development in line with their respective posts and responsibilities

Management Structure

Under the director in charge of human resources, the Human Resources Division promotes various training programs in collaboration with each Group company. Human resource development for operators and engineers who are indispensable at manufacturing sites at each plant are conducted by the Operation Training Center (TRC), set up as a facility responsible for the Company-wide education and training programs for all employees. The TRC uses a mockup plant to provide opportunities for operators to acquire the necessary knowledge, experience and skills through hands-on training.

Furthermore, to enhance the quality of construction work including maintenance skills and construction management and supervision, we opened a Maintenance Dojo that provides practical education and training not only for employees of the Daicel Group but also for those of partner companies engaged in maintenance work.

The rotation schedule for training is submitted for deliberation by the Aptitude-based Placement Committee, comprising the Human Resources Division, top management and directors in charge of each SBU, and training is implemented according to the respective development plans for each human resource.


[> Safety Education for Employees and Partner Companies](#)

Human Resource Development System

Various systems and structures are in place to support Daicel's human resource development. The effectiveness of human resource development is further enhanced by skillfully combining these methods according to the position and ability of each employee.

■ Human Resource Development System and Personnel System

Method	Content
On-the-Job Training (OJT)	<ul style="list-style-type: none"> ● Fundamental component of Daicel's human resource development ● Systematically conduct training at workplaces through work
Offsite Job Training (Off-JT), e.g., Group seminars	<ul style="list-style-type: none"> ● Programs implemented outside workplaces ● Opportunities to gain experience that cannot be acquired via OJT ● Active discussions between persons with different ideas help enhance their individuality
Self-directed development	<ul style="list-style-type: none"> ● A fundamental practice that must be embraced by those seeking to achieve personal growth ● Continuously achieve self-innovation through individual volition
Rotation (change of roles or functions)	<ul style="list-style-type: none"> ● Help employees gain a broader range of skills and experience and nurture the capabilities of those serving as leaders ● Encourage employees to realize their full potential by changing workplaces and duties
Assessment (reviewing the skills of each individual)	<ul style="list-style-type: none"> ● Help employees objectively review their skillsets against the standards of the division and Company ● Facilitate self-directed development by helping individuals assess their own strengths and weaknesses
Self-Development System (Human Resource Development Notebook)	<ul style="list-style-type: none"> ● A system is in place that enables employees to convey their own career vision to the Company. Once a year, employees submit a report to their supervisor about their views on job type, job location and career. ● Through dialogue with employees, the supervisor determines placement and development methods that will lead to further growth and success for employees based on their aspirations, aptitude and ability.
Human Resource Development Plan	<ul style="list-style-type: none"> ● An annual human resource development plan is formulated every year to encourage the mid- to long-term growth of each employee and link their career objectives to the Company's goals. ● Successor plans are created to secure capable resources who can potentially take on key management positions as leaders in the years to come (some of Daicel's global counterparts have also adopted this successor planning process).

<p>Technician Training System</p>	<ul style="list-style-type: none"> ● A system was established for training young engineers to support individual growth.
<p>Professional Career Track System</p>	<ul style="list-style-type: none"> ● A system is focused on developing human resources specialized in very specific fields and who possess promising skills and knowledge for tackling challenges and enables professionals to choose their own career path and hone their expert skills. <p>Desirable Traits</p> <ol style="list-style-type: none"> (1) Those capable of taking key roles as leading authorities in specific areas (2) Those determined to stay committed to acquiring specialist skills and knowledge at the early stage of their careers (as of March 31, 2021, 14 employees are on this career track, each playing key roles in their areas of specialty)
 <p>In-house Certification System for Skilled Experts</p>	<ul style="list-style-type: none"> ● A key system for nurturing technicians aimed at fostering a culture that respects manufacturing techniques and encourages individuals' efforts to develop their skills. (As of March 31, 2021, 56 employees have been certified for their distinguished skills.) ● At the same time, we systematically nurture successors to ensure manufacturing safety and quality.

> ESG Data [Support for Human Resource Development](#)

Performance Appraisal to Support Human Resource Development

Daicel uses Management By Objectives (MBO) as a performance appraisal method to support human resource development. The objectives of each division are broken down to the individual level, and we evaluate employees twice a year based on achievements corresponding to their individual objectives. Daicel practices MBO by upholding the keywords “Dialogue, Growth and Achievement” and emphasizes extensive dialogue between the superior and the subordinate. This is based on our underlying belief that mutual understanding and trust fostered through dialogue will encourage employees to take on the challenge of achieving higher goals on their own initiative, which in turn will lead to personal growth.

In addition to evaluating employees on their job performance, we appraise their conduct and attitudes according to their job and rank. We provide employees with feedback on the result of this evaluation, which is ultimately reflected in their compensation.

We are committed to maintaining a fair and equitable evaluation system by disclosing it to all employees and providing MBO assessor training to enable more appropriate evaluations, leading to enhanced human resource development.

Human Resource Development and Training Programs

The Company has various human resource development programs for enhancing the skills of employees.

Overview of Training Programs in Place

Key Corporate Policies	Assessment	Career development	Development of special skills			Business skills essential for all career categories			
Corporate ethics and compliance education Responsible Care and safety education	Management leaders Leaders P4 Assessment P3 Assessment P2 Assessment P1 Assessment Senior staff Grade S5 test Grade S4 test Mid-level staff Grade S3 test Grade S2 test	Training for newly appointed directors at Group companies Next generation leaders' seminar (2) Training for newly appointed managers Next generation leaders' seminar (1) Training for newly appointed Grade S5 Training for newly appointed Grade S4 Basic training for mid-level staff Training for newly appointed Grade S3 Training for newly appointed Grade S2	Technologies Engineer development program Specialist engineer training (R&D, engineering and production technology) • Including financial affairs, legal affairs and IP seminars Patent education for mid-level technicians Financial affairs seminars	Production Operation Training Center curriculum Basic Action Practical Plant Operation Course (heat transfer, evaporation, etc.) Facility Management Course (machinery and electrical instrumentation)	Sales Practical training for marketing	Legal affairs and contracts Legal affairs seminars Intellectual property IP seminars MBO Training for MBO evaluators New employee education Senior employee lectures	Information systems Information systems security seminars Global Overseas training Training prior to overseas assignments (language, etc.) Overseas language training (Cebu Island and U.K.) TOEIC tests English language training for new graduates	Self-directed development E-learning English conversation course Acquisition of qualifications	
	For all employees (1) Selective (2) By nomination (3) Open call	New recruits (new graduates) Introductory training Follow-up training Training in Manufacturing (basic knowledge) New Facility operation course Training in Basic actions Training in Manufacturing undertaken by each division at their production sites, with senior employees serving as lecturers							

* “Leaders” refers to managerial posts.

Training Programs for New Employees

To quickly equip new employees with the skills needed to start making contributions to the Company, Daicel provides a training program that covers areas from basic knowledge that corporate employees require to workplace conduct.

The program is conducted at the Nishiharima Training Center, and new employees initially learn about social and workplace conduct, Company policies, and other basic knowledge and skills. This is followed by training at the Operation Training Center and production sites. Through these activities, new staff acquire the essential knowledge they need to perform their duties in a manufacturing workplace.

■ Training Schedule for New Employees

	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.
Assignment				Admin. staff (university graduates) interviewed	▶▶▶▶▶▶▶▶	▶▶▶▶▶▶▶▶					Engineers (university graduates/high school graduates) interviewed	▶▶▶▶▶▶▶▶	▶▶▶▶▶▶▶▶	Engineers (university graduates/high school graduates) assigned to workplaces
Group seminars	Introductory training (high school graduates)	Introductory training (university graduates)				Overseas language training (administrative staff)	Follow-up training 1	Overseas language training (engineers)					Follow-up training 2	
Training for manufacturing	Administrative staff (university graduates)	Basic operation training	Plant training											
	Engineers (university graduates)		Plant training		Interim presentation meeting								Final presentation meeting	
	High school graduates	Basic operation training	Basic operation course (renewed)		Plant training		Interim presentation meeting							
Self-directed development				E-learning (first-half) In-house TOEIC tests							E-learning (second-half) In-house TOEIC tests			

Training in Manufacturing

All newly graduated employees are initially assigned to a plant and undergo one year of training in manufacturing. At this time they learn the fundamentals of manufacturing and plant operations through OJT at the front line of production.

Plant training consists of instruction on basic facilities and the eight-hour-shift system, allowing new employees to actually see, hear, and feel what it is like to be in a plant. This experience deepens their appreciation of safety, quality, costs, and the environment, all watchwords of plant operations. Moreover, they are instructed in subjects relevant to their particular work areas.

While receiving advice and guidance at the workplace, trainees come into contact with many employees in each work area. Through the training, we aim to give new employees an appreciation of what it takes to aspire to do our best in manufacturing.

Career Development

As part of the ongoing career development process for employees, we create a human resource development plan every year. The objective is to encourage the mid- to long-term growth of each employee and link their career objectives to the Company's goals.

Position-Specific Training

Daicel provides training programs that are tailored toward different positions as defined in the Company's job grade system, ranging from new employee to new director for Group Companies. Each training session is aimed at nurturing human resources to live up to the expectations for their positions and respective roles and responsibilities. In addition to sessions that deal with subjects such as corporate ethics, basic legal literacy, and other essential knowledge and rules that employees need to know, we provide training for the skills in areas such as communication and management. In FY2021/3, the training session were attended by a cumulative total of 325 employees.

Next-Generation Leaders Training

Daicel provides Next-Generation Leaders Training, targeting employees who are expected to soon become section chiefs in the hope of placing competent young personnel in optimal positions where they can demonstrate leadership and grow into leaders of their divisions at an early stage. The participants experience action learning for a year, aimed at resolving issues faced by their own divisions. As of March 31, 2021, ten employees selected from within the Company are enrolled in the training.

Development of Specialized Skills

As a manufacturing company, capable engineers are the foundation of our business, and developing them is one of our most significant tasks. We maintain an extensive training curriculum, which ranges from the Monozukuri Training (manufacturing training), offered to new employees, to sessions on specialized knowledge and skills needed at various points in their careers.

The Engineer Development Program

The Company's Human Resource Development for Engineers Committee meets quarterly to review progress on the Engineer Development Program, which includes financial literacy as well as technical skills and knowledge, and improve its content. Completing the program is considered a prerequisite for promotion to a manager, and it is effective for strengthening employees' engineering capabilities over several years.

The global Engineer-Development

The Safety Strategic Business Unit (Safety SBU) manufactures airbag inflators for automobiles at six manufacturing sites, one in Japan and the other five overseas (U.S., China, South Korea, Thailand, and Poland). While each site develops its own training and development programs, the Human Development Center at the Harima Plant trains and certifies trainers specialized in critical processes and special skills to ensure that the same level of quality and safety are incorporated into manufacturing practices worldwide. As of March 31, 2021, there are 21 certified trainers, and they cultivate and certify new trainers locally at each business site.

Daicel Safety Systems (Jiangsu) Co., Ltd. (DSSC) in China, the largest of our manufacturing sites, has a new training center, completed in 2019, where educational programs are run in four Dojos (safety, quality, maintenance, and assembly). In FY2021/3, Daicel Safety Systems (Thailand) Co., Ltd. (DSST) in Thailand set up two Dojos (safety and maintenance) and started to provide educational programs. We will continue to instill the monozukuri spirit of Daicel in our employees and conduct training and development programs tailored to local cultures and the size of each business site, primarily to ensure safety and quality.

[> Human Development Center](#)



During the training program

Overseas Language Training

We have also established programs for dispatching all employees for overseas language training, ranging from short-term study (English) for all new employees, to sending employees recommended by department managers to study overseas, and to various universities for longer periods (English and Chinese). We aim to foster a global mindset among new employees by creating opportunities to promote not only language learning but also cross-cultural understanding. While we were unable to implement overseas language training in FY2021/3 due to the COVID-19 pandemic, we will plan for the resumption of the program by taking appropriate measures in response to the changing circumstances.

Training for maintenance engineers

Assurance of safety and quality is the basis for Monozukuri (manufacturing) activities and a matter of the utmost importance for our ongoing business, and thus, we need to develop human resources who are capable of achieving them. We should not be satisfied with simply acquiring more sophisticated technologies and knowledge. It is also important to remain focused on the basics and diligently execute basic manufacturing activities such as greetings; 3S activities, namely Seiri (tidying), Seiton (putting everything in order), and Seisou (cleaning); crisis-identification activities; and hazard prediction activities. We will maintain our management principle of “start with basics, and return to basics,” adopted at the time of our founding, and continue to develop the right people who support Daicel’s Monozukuri activities with a focus on “assurance of safety and quality”.

Operation Training Center (TRC)

The Operation Training Center (TRC) provides training programs to foster operators and engineers, who are indispensable at each manufacturing site. The center was set up in 2002 as a facility responsible for the Company-wide education and training programs for all employees, with the goal of instilling and maintaining “Production Innovation by the Daicel Way”. Production Innovation by the Daicel Way goes back to the basics and focuses on human-oriented manufacturing. By systemizing the skills and know-how of experienced staff and enabling everyone to put them to practical use, it endeavors to achieve a broad range of results including: (1) safe and stable operations, (2) dramatically higher productivity, (3) substantially lower manufacturing costs, (4) smoother, more uniform operations and quality stabilization, (5) the passing on of skills and techniques and human resource development, and (6) energy conservation. The TRC is a place where operators acquire the knowledge, experience and skills needed in their jobs, through experience-based training using both real equipment and simulators. It enables trainees to learn effective ways to operate and control equipment used in actual worksites with a structural understanding of the equipment.



Operation Training Center (TRC) and Small-Scale Plant

[> Daicel's Commitment to Monozukuri Manufacturing](#)

Education and Training Programs

Target:

New employees, operators at all levels, engineers, and workplace leaders (foremen, managers, and general managers).

Content of training programs:

We implement 25 different training courses and their contents include basic manufacturing activities such as greetings, 3S methodology, namely seiri (tidying), seiton (putting everything in order), and seisou (cleaning), and crisis-identification activities to hands-on experience and work on small-scale chemical plants and training devices, which involves training for operating distributed control systems (DCS) at each job level. Employees can raise their awareness of safety by learning about the objectives and background of the safety measures and rules introduced on the basis of lessons learned from past incidents. In addition, we provide experience-based hazard education using specialized equipment that simulates entanglement, static electricity, solvent and dust explosion, pressure, and exposure to chemicals.

Since its inception, we have been using an annual CAPD cycle* to actively improve the TRC's training curriculum, programs and textbooks. We have also kept class sizes small (interactive education with about six students) to maximize educational outcomes.

* Instead of a plan, do, check, and act (PDCA) cycle, which is a general methodology for making improvements, Daicel has adopted a CAPD improvement cycle to avoid the risks of overlooking crucial facts and realities that often lie in the initial planning stage.

Pressure Experience

This equipment runs pressurized water through pipes of varying diameters and simulates different pressures resulting from pipes of varying diameters. Trainees develop a better understanding of pressure, which they rarely come across in their daily lives.



Pressure simulator

Entanglement Experience

This equipment simulates an artificial hand getting entangled in a roller. By demonstrating the shock of entanglement, we teach about the danger of rotating components.



Entanglement simulator

On an annual basis, the TRC offers experience-based training with a focus on chemical plants, not only to Company employees but also to university and vocational high school students. From the time it opened in 2002 to the end of FY2020, a total of 7,586 people completed their training at the TRC (FY2021/3: 283). The number includes 3,066 operators (excluding new employees) (FY2021/3: 58), 1,823 engineers (FY2021/3: 95), 1,820 new employees: (FY2021/3: 115), 486 workplace managers (FY2021/3: 15), and 391 students and other staff (FY2021/3:0).

The TRC was awarded “the Responsible Care Award (RC Award)” at the JCIA’s 9th Responsible Care Awards in 2015, in recognition of its activities toward “passing on skills, and education and training in the process industry” since FY2002.



RC Award Certificate

Maintenance Dojo

In the past, Daicel has taken a variety of measures to strengthen the maintenance of chemical plants. However, with the passing of the torch from one generation to the next in and around 2007, the Company began noting signs of declining capabilities in maintenance skills, construction management and supervision, acceptance inspections, and problem analysis. In response, we opened the Maintenance Dojo and began offering a curriculum for mechanical work in FY2016/3 and a curriculum for electrical and instrumentation work in FY2018/3 to ensure future generations fully gain the vital maintenance skills and techniques they need to improve construction quality.

Initiatives of the Maintenance Dojo

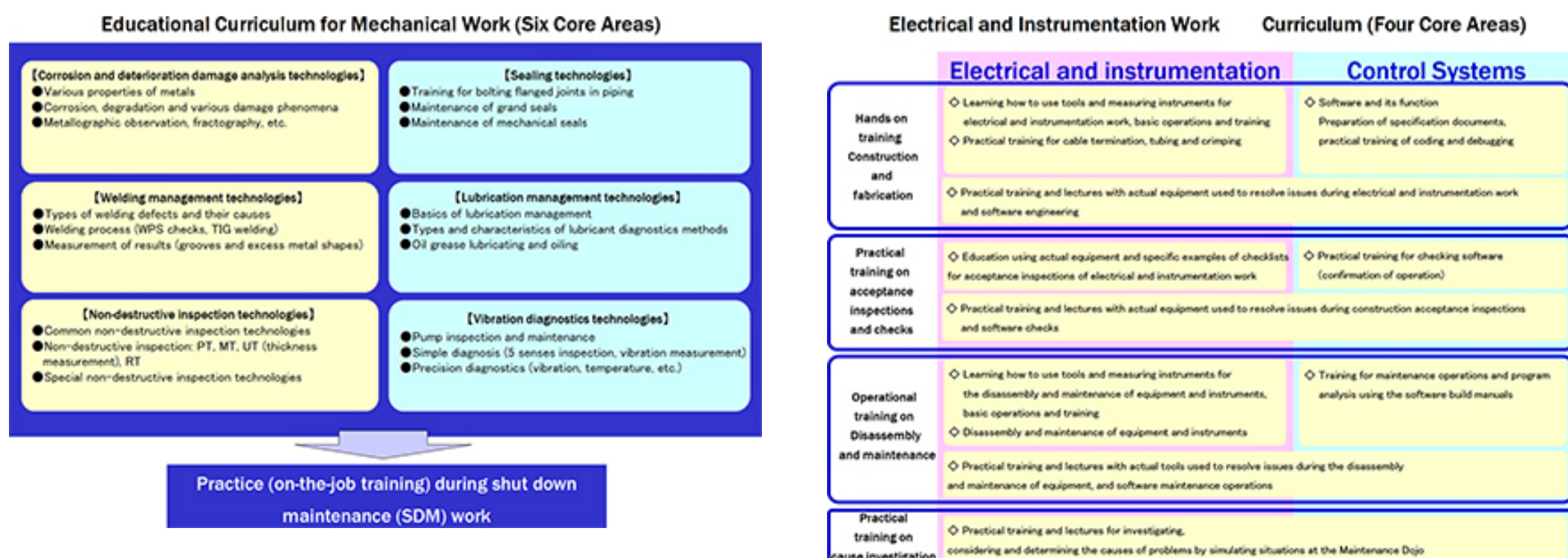
To assure safety and quality in chemical plants, properly maintaining and managing equipment on a daily basis is essential. It is therefore also vital to accurately identify and evaluate equipment conditions and take the necessary measures at a stage when defects are small, and it is humans who taking these important actions. We believed that traditional knowledge- and experience-based human resource development was inadequate for developing these human resources, and so we opened a Maintenance Dojo as a place for practical education in techniques and skills.

At the site, we are nurturing human resources who can take ownership of the maintenance and management of Daicel equipment and perform these tasks with confidence and pride.

Core members of our equipment diagnostic engineering department serve as supervisors and instructors at the Maintenance Dojo where maintenance technology required for the Company is organized into the following categories.

1. Specialized maintenance education for maintenance engineers
2. Voluntary maintenance education for operators
3. Technical training for staff of partner companies

The educational curriculum for mechanical work consists of six core technologies: corrosion and deterioration damage analysis, welding management, nondestructive inspection, sealing technologies, lubrication management, and vibration diagnostics. The curriculum for electrical and instrumentation work consists of four core areas: practical training on construction and production, practical training on acceptance inspection and checks, operational training on disassembly and maintenance, and practical training on cause investigation. Through these curriculums, we offer a practical education not limited to imparting knowledge through classroom lectures. In addition, technical skills acquired at the Maintenance Dojo are put to practical use through inspection for construction approval during the periodic repair and construction work (SDM construction), thereby improving the level of trainee skills. The targets for this training are not only Daicel employees but also staff of partner companies engaged in maintenance work.



Case Study Regarding Education and Training for Tightening Pipe Flanges

Training on tightening pipe flanges began at the Aboshi Plant in 2009. The original evaluation system used in flange tightening training enables the visualization of trainee skills by displaying them on a computer screen in real time. This is related to the axial force of a bolt at the time of the flange tightening and the surface force of a tightened gasket (Photo 1). Due in part to the introduction of a skill certification system, these efforts have had a remarkable impact on preventing leakage from pipe flanges and resolving related problems. Since 2015, the training has been incorporated into the Maintenance Dojo and fully rolled out at other plants (Photo 2).



Flange bolting simulator (D-BOLVIS: Daicel Bolting Visualization)



Scientific training on flange bolting with a simulator

Examples of Training Programs for Construction and Production, and Acceptance Inspection and Checks for Electrical and Instrumental Systems

- Instructions on using tools and measuring instruments for electrical and instrumentation work, basic operations and training
- Practical training for cable terminal processing, tubing, and crimping terminal processing
- Practical training for checking software and replacing the converter card

Construction training devices

Air Piping Work <ul style="list-style-type: none"> • Types of union fittings • Combination of ring joints, fair joints, and Swagelok tube fittings • Size and type of screws • Cutting and bending • Procedures for tightening union fittings • Types of pipes 		Impulse Line Work <ul style="list-style-type: none"> • Wrapping method of sealing tape • Types of union fittings, combination of Swagelok tube fittings • Size and type of screws • Cutting and bending • Procedures for tightening union fittings • Procedures for connecting impulse lines and 3-valve manifolds • Types of pipes
Transmitter Installation Work <ul style="list-style-type: none"> • Tightening oval flanges • Types of oval flanges 		Cable Gland Work <ul style="list-style-type: none"> • Types of connectors • Understanding of gas seal structure • Structure and types of pressure resistant packing • Compatibility with cable sizes • Ground wiring • Certified device combinations • Procedures for tightening pressure resistant packing
Instrumentation Wiring Work <ul style="list-style-type: none"> • Cable termination, crimping • Tightening torque for wiring • Wiring routing inside terminal box and equipment connections 		Electrical & Instrumentation Wiring <ul style="list-style-type: none"> • Conduit removal • Types of conduits • Installation of lock nuts and bushings • Installation of flexible tubing • Piping support methods • Wiring routing (inside round box)
Wiring Work on Electric Motors <ul style="list-style-type: none"> • Taping • Cable disconnection (preliminary checks, Y-Δ) • Ground wiring • Motor rotation direction 		Board Wiring <ul style="list-style-type: none"> • Tightening screws • Wiring arrangement, etc.

Device used in practical training for construction and production



Employees in training programs

Promoting Diversity and Inclusion

Basic Approach

The Daicel Group implements personnel measures in accordance with its Human Resources Policy and Human Resources Guidelines. In its Sustainability Management Policy, the Daicel Group clearly states its commitment to realizing a sustainable society and expanding business by promoting human-centered management. This type of management enables diverse employees to grow while establishing their own presence and achieving fulfillment. In accordance with this approach, the Group is creating a workplace environment that supports diversified human resources and in which each employee can fully demonstrate their talents.

Our Structure for Promoting Diversity

The Human Resources Division supervised by the director responsible for this area leads the Company's human asset management, in which a CAPD cycle is applied for planning and implementing specific measures. The measures that are important from a management perspective are submitted for deliberation to major meetings such as the Management Meeting and Strategy Meeting. In addition, in a move spearheaded by the Corporate Sustainability Division, Daicel launched the Diversity Promotion Project, entitled "WellBe" for short, in January 2020. WellBe is composed of volunteers from each Daicel department, and the project is supported by the President and CEO as well as directors in charge, who serve as lead supporters. WellBe aims to make employees happier, and its members organize special events and training sessions to raise employee awareness about certain issues. They also collaborate with the Human Resources Division to introduce new workstyles and develop systems designed to improve the working environment. In FY2021/3, the project worked on the theme of experiencing new workstyles, and tackled ten topics primarily focused on telework and online communication.

TOPICS

Fostering a Corporate Culture of Mutual Respect through the “Thanks for your compliment” Project

To increase psychological safety in the workplace by invigorating communication between employees, WellBe promotes three initiatives that encourage employees to “offer praise, refrain from scolding, offer help, declare support and express gratitude.” An e-learning session was held for each half-year period, in which employees learned while responding to a survey, and Mr. Takayoshi Nishimura, President of the Association of Japanese Praising Masters, was invited to speak in an online lecture open to all employees, which was attended by about 160 people. We will continue to advance initiatives that lead to changing the mindset of employees about such issues.



Messages displayed at the Aboshi plant



We send thank-you cards to each other

Initiatives for Promoting Diversity

Daicel promotes diversity with a focus on advancing female employees. In order to support the career development of motivated women and create workplaces that cater to their needs, we promote initiatives related to telework and raising the annual paid leave acquisition ratio. As a result, these efforts are leading to the creation of workplaces and systems not only for women but also for a diverse group of employees so that they can fully demonstrate their talents.

■ Initiatives for Diversity Promotion

	Measures	2015	2016	2017	2018	2019	2020
Support for career development	Nadeshiko Seminar training aimed at developing women leaders			Phase 1	Phase 2	Phase 3	
	Exchange meetings for newly hired female graduates with STEM backgrounds						
	Diversity Seminars						
Development of workplace environments	Free address system	Osaka	Tokyo	iPark			
	Promotion of annual paid leave acquisition		2 days	3 days	4 days	5 days	5 days
	Work from home						
	Work from a satellite office				Telework days	Telework days	
	Addition of five paid days for childcare leave						
	Promotion of childcare leave acquisition by male employees						
	Shortening of prescribed working hours				Full-time day work	Shift work	
	Use of smartphones as internal extension phones					Employees working from home are provided with smartphones	
	Attendance management system (visualizing attendance))				Head office systems	Harima, Aboshi, Ohtake	iPark·iPark Arai
	Office casual dress code						
	Electronic seal and electronic contracts						

> ESG Data [Numerical Data on Diversity](#)

> [Promotion of Telework and Initiatives for Raising the Annual Paid Leave Acquisition Ratio \(Foster a corporate culture that meets employee needs\)](#)

Helping Women Earn Career Success

Since we formulated an action plan based on Japan's Act on Promotion of Women's Participation and Advancement in the Workplace in April 2016, we have sought to harness the abilities of men and women equally in our business by actively hiring women and organizing managerial training for them.

In addition, Daicel worked on cultivating an environment that accommodates workstyles such as working from home so that employees can continue to work while enhancing their work-life balance, regardless of gender.

As a result, we were able to achieve during FY2021/3 all of the targets in our action plan (FY2017/3–FY2022/3), which was formulated in April 2016 and revised in 2018 to raise some of the targets.

Results of Action Plan Based on Japan's Act on Promotion of Women's Participation and Advancement in the Workplace

Plan period: April 1, 2016 to March 31, 2021

Targets:

Target 1: Increase the number of women who take managerial positions by 2.5 times to a ratio of 4%*

Result: Ratio of women in managerial positions rose to 4% (32 women) in February 2021

Target 2: Increase the number of women in senior roles (candidates for managerial positions) by 1.3 times to a ratio of 8%

Result: Ratio of women in senior roles rose to 10.6% (122 women) in February 2021

Target 3: Raise the annual paid leave acquisition ratio from 62% to 70% or greater

Result: Ratio rose to 73.6% in FY2022/3

* Based on the number of women in managerial positions (12) and women in senior roles (84) as of April 2016. Managerial position signifies managers, and senior roles signify positions subordinate to managers.

In April 2021, we formulated a new Action Plan for the next five years to continue addressing changes in the business environment and diverse needs of customers. We are pursuing initiatives under the new plan to ensure diversity in every job level and position, and to reflect varied perspectives that arise from exchanges between diverse personalities in corporate management.

Action Plan Based on Japan's Act on Promotion of Women's Participation and Advancement in the Workplace

Period: April 2021 to March 31, 2026

Target:

Target 1 Maintain at least two female directors, including executive officers (one female director as of April 2021)

Aim: Maintain strong corporate governance by incorporating diverse perspectives at every level of the corporate workforce.

Target 2 Increase the ratio of women in management positions to at least 10% (4% as of April 2021)

Aim: Seek gender equality in management positions to become an organization capable of meeting diversifying customer needs by incorporating and sharing diverse perspectives and opinions.

Target 3 Raise the ratio of women in positions immediately under section managers to 15% or higher (10% as of April 2021)

Aim: Bring the Company-wide gender ratio closer to equal and develop a working environment in which everyone can work with vigor.

Target 4 Ensure that all employees take a five-day holiday once a year using paid leave and designated national holidays.

Aim: Support employees in leading meaningful lives and having good physical and mental health through well-planned long holidays.

■ Targets and Initiatives of the Action Plan Based on Japan's Act on Promotion of Women's Participation and Advancement in the Workplace

Target 1 Maintain at least two female directors, including executive officers (one female director as of the formulation of the target)

Aim : Maintain strong corporate governance by incorporating diverse perspectives at every level of the corporate workforce.

FY2022/3	<ul style="list-style-type: none"> ● Plan a program that fosters candidates for directors ● Regularly report to management on matters related to promoting women's careers (until FY2026/3)
FY2023/3 and beyond	<ul style="list-style-type: none"> ● Launch a program that fosters candidates for directors (program will continue until FY2026/3)

Target 2 Increase the ratio of women in management positions to at least 10% (4% at the time of target setting)

Aim : Seek gender equality in management positions to become an organization capable of meeting diversifying customer needs by incorporating and sharing diverse perspectives and opinions.

FY2022/3	<ul style="list-style-type: none"> ● Hold well-being seminars to enable women to pursue their careers in good health over the long term (until FY2026/3)
FY2023/3 and beyond	<ul style="list-style-type: none"> ● Plan and implement training for heads of divisions in charge of fostering female managers (until FY2026/3)

Target 3 Raise the ratio of women in positions immediately under section managers to 15% or higher (10% at the time of target setting)

Aim : Bring the Company-wide gender ratio to equal and develop a working environment in which everyone can work with vigor.

FY2022/3 and beyond	<ul style="list-style-type: none"> ● Hold well-being seminars to enable women to pursue their careers in good health (until FY2026/3) ● Enhance external communication about our work environment that is flexible and employee-friendly
---------------------	--

Target 4 Ensure that all employees take a five-day holiday once a year using paid leave and designated national holidays.

Aim : Support employees in leading meaningful lives and having good physical and mental health through well-planned long holidays.

FY2022/3	<ul style="list-style-type: none"> Encourage employees to take two or more consecutive paid leave days, toward achieving the target of a five-day leave
FY2024/3 and beyond	<ul style="list-style-type: none"> Encourage employees to take three or more consecutive paid leave days, toward achieving the target of a five-day leave

* Our paid leave target excludes the following cases.

1 : Employees who have taken childcare leave during the current fiscal year

2 : Employees whose paid leave allocated by the Company for the current fiscal year is less than 20 days

[> Action Plan for Helping Women Earn Career Success \(database of companies that promote women's careers\) \(Japanese only\)](#)



		FY2017/3	FY2018/3	FY2019/3	FY2020/3	FY2021/3
Women in Managerial Positions	Number of Women	15	17	26	29	35
	(Ratio)	(2.0%)	(2.0%)	(3.3%)	(3.6%)	(4.1%)
Women in Senior Roles	Number of Women	93	105	108	121	137
	(Ratio)	(9.2%)	(9.2%)	(9.2%)	(10.2%)	(11.5%)

[> Foster a corporate culture that meets employee needs](#)

> ESG Data [Numerical Data on the Advancement of Women](#)

TOPICS

Certified as a “Leading Company for Women's Advancement” from Osaka City



On November 1, 2019, Daicel was certified by Osaka City as a “Leading Company for Women's Advancement” In addition to legal compliance, the city applies a certain set of criteria to certify companies that actively promote the development of a workplace that allows women with career ambitions to remain in the workforce, work-life balance, and men’s participation in childcare, housework, and activities in the local communities. Daicel was recognized for its ongoing efforts to support the advancement of women. We will continue to focus on promoting diversity and creating workplaces where every employee can express their individuality and perform at the best of their abilities regardless of gender, nationality, or disabilities.

TOPICS

Received the “Eruboshi” Three-Star certification from the Ministry of Health, Labor and Welfare



Daicel received the “Eruboshi” Three-Star certification from the Ministry of Health, Labor and Welfare based on Japan’s Act on Promotion of Women’s Participation and Advancement in the Workplace. The “Eruboshi” program grants certification to companies that are recognized for making excellent progress in empowering women. Daicel met all five criteria—hiring, employee retention, overtime work, ratio of female executives and career development, and received the top-tier certification of Three Stars.

Over the years, Daicel has been developing a work environment that enables employees to work in a flexible manner by fully demonstrating their personalities and abilities. Furthermore, it has sought to revise existing systems and introduce new ones. We intend to continue creating a worker-friendly environment and developing systems that enable employees to choose their own work styles depending on their respective life stage.

Declaration of Support for KEIDANREN's “#Here We Go 2030 Challenge Initiatives for 30% of Executives to be Women by 2030”

“The NEW Growth Strategy” announced by KEIDANREN (Japan Business Federation) in November 2020 focuses on diversity and inclusion as the key drivers for achieving sustainable growth. It upholds the goal of raising the ratio of female executives to 30% or more by 2030. Daicel declared its support on April 5, 2021.

< About KEIDANREN's “Challenge Initiatives for 30% of Executives to be Women by 2030” >

This is a goal based on the “The NEW Growth Strategy” announced by KEIDANREN in November 2020, and it is guided by the following four points.

- (1) Positioning diversity and inclusion as key corporate strategies, we will carry out initiatives that lead to business impact.
- (2) By focusing on boards of directors, the decision-making bodies of companies, we will accelerate initiatives to apply the perspectives of a diverse range of people, including women, to the execution of operations and governance.
- (3) We will provide support in line with each career stage, from hiring to leadership development including identifying candidates, in order to strengthen the talent pipeline.
- (4) We will pursue the creation of organizations and environments that can maximize the performance of all employees by breaking away from previous employment practices and reforming the organizational culture.



[> Keidanren “Challenge Initiatives for 30% of Executives to be Women by 2030”](#)

Diversity Lectures Held for Management

In January 2021, we invited a lecturer from Nippon Life Insurance Company to conduct an online seminar for management (including executives at Group companies) on the theme of “Promoting Diversity—Changing Mindsets and Work Styles with Men’s Childcare Leave,” which was attended by about 60 people.

In addition, an archive video has been made available across the Group and is being used to promote diversity at each workplace.

Advancing the Careers of Non-Japanese Employees

Daicel provides the following assistance upon hiring non-Japanese employees.

At present, we have 15 non-Japanese employees working in Japan.

- Assistance with visa application procedures
- Explanation on company systems (policies, personnel system and other issues)
- Provision of information required for working in Japan

Promoting Employment of Persons with Disabilities

Daicel systematically hires persons with disabilities and creates workplace environments that enable them to fully demonstrate their individual abilities. This is both to fulfill its social responsibility of maintaining the ratio of persons with disabilities in the total workforce above the statutory employment rate and to provide support so that persons with disabilities can contribute as members of society.

As of June 1, 2021, the rate of persons with disabilities in the total workforce was above the statutory requirement at 2.43% (non-consolidated). We aim to ensure that each individual can contribute in the best possible way at each worksite.

■ Ratio of persons with disabilities in the total workforce (non-consolidated)

	FY2018/3	FY2019/3	FY2020/3	FY2021/3
Ratio of persons with disabilities in the total workforce	2.19%	2.17%	2.17%	2.43%

* The statutory employment rate in Japan was set at 2.0% up to March 31, 2018, 2.2% from April 1, 2018, and 2.3% from March 1, 2021.

* Results as of June 1 of each fiscal year.

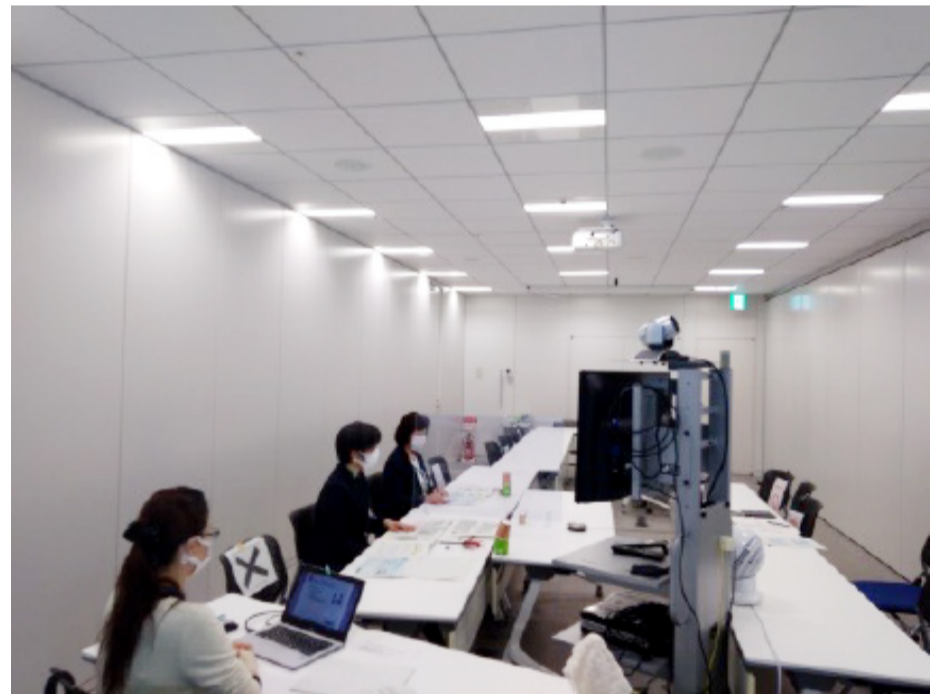
TOPICS

Seminars on Fostering Supporters for Workers with Mental or Developmental Disorders

Daicel invited two Employment Assistants for Employees with Mental Disorders from the Employment Service Center in Umeda City to the Osaka head office as lecturers to deepen our understanding of these disorders. We held three online seminars on fostering supporters for workers with mental or developmental disorders (two hours each), attended by a total of 90 employees mainly from the administration division of each business site.

During the seminars, the Employment Assistants offered basic information on mental and developmental disorders, explained what those who have them are capable of achieving, and then answered questions from the attendees. Since some of them were from workplaces where they work with people who have such a disorder, their questions were based on their own experiences. This made the seminars more valuable because the participants could learn from each other as well.

We intend to continue holding these seminars on a regular basis with the aim of creating workplaces where employees with these disorders can work with a sense of security.



Encouraging Senior Employees to Remain Active in the Workforce

Daicel has a system in place that allows employees who have reached the retirement age of 60 to continue working for the Company and use their extensive knowledge and experience in the workforce. In accordance with the revised Law Concerning Stabilization of Employment of Older Persons, the system applies to employees seeking to continue to work through age 65.

In FY2021/3, 54 out of 57 employees who reached that age were re-employed under the system, and 184 senior employees are currently working at the Company after passing their retirement age as of March 31, 2021. Daicel will maintain working environments where veteran employees can make use of their careers, knowledge, and experience.

> ESG Data [Number of Senior employees](#)

Consideration for Employees Identifying as LGBT

The Daicel Group aims to create attractive workplaces in which every employee, including those identifying as LGBT, can fully demonstrate their abilities. We set up an LGBT consultation desk in April 2019 toward creating an attractive workplace for all employees. Group companies are promoting conversations with their LGBT employees. For example, as a result of such discussions, the changing room policy was adjusted to accommodate transgender needs.

TOPICS

A human rights seminar focused on LGBT issues for executives of Daicel Corporation and Group companies

In February 2021, we held a human rights seminar focused on LGBT issues for executives of Daicel Corporation and Group companies, which was attended by about 60 people. A transgender employee at a Group company served as the lecturer, and participants learned about the environment surrounding people identifying as LGBT from their perspective. While the seminar was held online to prevent the spread of COVID-19, an active discussion took place.

[> Respect for Human Rights](#)

Foster a corporate culture that meets employee needs

Basic Approach

The Daicel Group implements personnel measures in accordance with its Human Resource Policy and Human Resource Guidelines. It laid out the “My Action Declaration” in April 2021 as part of a collaborative effort between labor and management. Together we will seek to create an environment and foster a corporate culture in which each employee can remain highly motivated while having a sense of fulfillment and accomplishment as they achieve personal growth.

My Action Declaration

We will fully support the aspirations of each individual.

Message expressed by labor and management in the declaration

It is important for Daicel employees not only to focus on their working life but also to place value on their private life and time with family and friends, to think about the kind of life they want and about how they should work while having a sense of fulfillment and accomplishment, and also to reap rewards in the context of the life they envisage. We will fully support the aspirations of each individual so they are driven with the mindset that, “My life is mine alone, so I will strive to make it better.” Let’s take the first step in that direction.

Management Structure

The Human Resources Division supervised by the director responsible for this area leads the Company’s human asset management, in which a CAPD cycle is applied for planning and implementing specific measures. The measures important from a management perspective are submitted for deliberation to major meetings such as the Management Meeting and Strategy Meeting.

The Company engages in continuous dialogue with the labor union, primarily through various committees as outlined in the section titled “Sound Labor-Management Relations”, as we seek to foster a worker-friendly corporate culture in a united effort between labor and management. We also collaborate with the Diversity Promotion Project, launched in January 2020 to change mindsets and reform our systems toward becoming a company that meets the needs of its diverse workforce.

[➤ Promoting Diversity and Inclusion](#)

Initiatives to Shorten Working Hours

In order to improve the work-life balance of all our employees and create work environments that meet their individual needs, Daicel is seeking to shorten the prescribed working hours.

By consistently and proactively pursuing initiatives for shortening working hours, the Company was selected as a Company with Best Practices by the Osaka Labor Bureau in November 2019. In conjunction with the Ministry of Health, Labor and Welfare's "No Overwork Campaign", held every year in November, the bureau identifies companies taking active measures to reduce overwork and gives them the title of Company with Best Practices. Our achievements in 1) shortening the prescribed working hours, 2) introducing "free-address" seating in our main offices, and 3) introducing work-from-home, satellite offices, and other telework capabilities were evaluated highly and resulted in our receiving the honor.

■ Measures to Shorten Working Hours

Timing	Description
April 2017	Reached an agreement with the labor union in regard to shortening mandatory working hours and increasing the number of holidays.
April 2018	Mandatory working hours for full-time employees, other than shift workers, was reduced from 8 to 7.5 hours per business day. Achieved a decrease of approximately 120 hours, or about 6.2%, in mandatory annual working hours.
April 2020	Increased the annual holidays for shift workers by 10 days.
April 2022	Planning to increase annual days off to 122 days.

Visualizing Working Hours

Daicel visualizes actual working hours by including the log-on and log-off times of workers' terminals in the attendance reports. By creating such a system, we seek to maintain and manage our employees' health amid the ongoing expansion of remote work.

Correcting Extended Working Hours

Daicel endeavors to correct extended working hours by prohibiting overtime work exceeding 75 hours under an agreement with the labor union. In addition to operating a system for visualizing actual working hours, the Higher Productivity Promotion Committee, which comprises labor and management, seeks to correct extended working hours by monitoring the status of applications for overtime by each department, determining the causes of overtime work, conducting interviews in the relevant department, and discussing concrete measures for improvement. Moreover, to follow up on employees who could not avoid extended work, we hold consultations with industrial doctors and corporate health nurses for employees whose monthly overtime exceeded 60 hours and for those whose monthly overtime has exceeded 45 hours for three consecutive months.

Initiatives for Realizing Flexible Work Styles

Helping Employees Manage Their Work-Life Balance

At Daicel, we are focused on implementing measures that offer diverse and flexible working arrangements to our employees, which in turn helps them better manage their work-life balance.

Daicel's Programs to Help Employees Adopt Flexible Work Styles

We ensure that our personnel programs and policies exceed statutory targets and requirements.

■ Daicel's Programs to Help Employees Adopt Flexible Work Styles

Program/Policy		Full-time Employee	Contract Employee	
			Post-Retirement Employee	Contract Employee
Support for Child-rearing and Nursing Care	Prenatal leave 6 weeks prior to childbirth 14 weeks in case of multiple pregnancies	○	○	○
	Postpartum leave 8 weeks following childbirth Employees can return to work after 6 weeks from childbirth based on their own wish and doctor's approval	○	○	○
	Child-rearing leave Until the day before a child has reached the age of one In certain cases, until the day before a child has reached the age of two	○	○	○
	Nursing care leave Up to 5 days per year In cases where employees need to engage in the nursing care of two or more family members whose conditions meet such criteria, up to 10 days per year	○	○	○
	Extended nursing-care leave* Up to 365 calendar days	○	○	○

Program/Policy		Full-time Employee	Contract Employee	
			Post-Retirement Employee	Contract Employee
Support for Child-rearing and Nursing Care	<p>Family care leave</p> <p>In case employees need to care for their preschool-age children, they are entitled to special leave of up to 5 days per year aside from their annual paid leave (if raising more than two preschool-age children, up to 10 days per year)</p>	○	○	○
	<p>Special leave due to non-work accidents or illness*</p> <p>Employees are entitled to take special leave of up to 20 days per year aside from their annual paid leave, in the event they have a non-work accident or are sick and must be absent from work for over 3 consecutive working days.</p>	○	○	○
	<p>Special paid leave for employees whose spouse gives birth*</p> <p>Male employees are entitled to special paid leave of up to 3 days when their wife gives birth.</p>	○	○	○
Mental and Physical Health	<p>Annual paid leave*</p> <p>Employees are entitled to a fixed number of annual paid leave days based on years of service from the first day of their employment.</p>	○	○	○
	<p>Promotion of annual paid leave acquisition*</p> <p>In conjunction with the formulation of annual operational schedules, each worksite designates multiple dates on which employees are encouraged to take annual paid leave.</p>	○	○	○
	<p>Health Day*</p> <p>Employees are entitled to special paid leave for the purpose of health management during the month of their birthday or the previous or following month.</p>	○	○	○

Program/Policy		Full-time Employee	Contract Employee	
			Post-Retirement Employee	Contract Employee
Work-Life Balance	<p>Reduced work hour system*</p> <p>Employees who meet the criteria (pregnant, childbirth, child rearing, nursing care) are allowed to reduce their working hours by up to 135 minutes per day. They can also use flextime in combination with this program.</p>	○	○	○
	<p>Flextime*</p> <p>Employees are allowed to work under a flexible work schedule that meets a set of criteria without defining the core hours.</p>	○	○	○
	<p>Remote work program (work from home or from a satellite office)*</p> <p>All employees are entitled to work from home on an as-needed basis. Employees can also work at locations that are not their designated business sites for the purpose of work efficiency and productivity (no limitations on frequency per month).</p>	○	○	○
	<p>Side business*</p> <p>Employees are entitled to engage in work other than Daicel operations for the purpose of enhancing their knowledge and skills.</p>	○	○	○

* Program or policy adopted by Daicel beyond its statutory obligations.

[> ESG Data](#) [Numerical Data on Work-life balance](#)

Improvement in the Annual Paid Leave Acquisition Ratio

In 2016, the Group set a goal of 70% or more in its annual paid leave acquisition ratio. To accomplish this, the number of the days designated by the Company, during which employees are recommended to take annual paid leave, has been raised in stages, from three to four days in FY2019/3, and then to five in FY2020/3 and we have achieved our annual paid leave acquisition ratio of 73.4%. In FY2021/3, the ratio fell year-on-year to 72.1% due to the effect of voluntary lockdowns amid the COVID-19 pandemic.

[> ESG Data](#) [Ratio of employees taking annual paid leave](#)

Promoting Remote Work (Work from Home or a Satellite Office)

The Company promotes remote work as a flexible, efficient work style that eliminates the limitations associated with specific working times or workplaces. In April 2017, we implemented a program that allows eligible employees, including those engaged in child and nursing care, to work from home. In October 2018, the program's eligibility was extended to include all employees, and the limitation on the number of days that employees are allowed to work from home per month was eliminated. At the start of 2020, telework quickly became widespread as a preventive measure against the spread of COVID-19. During the nationwide state of emergency, our office workers in principle worked from home, and we reduced the number of employees coming into the office by almost 70% at our main offices in Osaka and Tokyo and the Nagoya Sales Office. In addition, we incorporated remote work at our plants and research facilities. We have confirmed multiple benefits from introducing remote work, including less time spent in transit or commuting and increased productivity. Instead of viewing this expansion in telework as a temporary trend, we will seize the opportunity to change our work styles. We also intend to maintain our efforts to further increase productivity and achieve a better work-life balance.

The Company has established about 40 satellite offices, mainly within the Tokyo metropolitan and Kansai areas. These offices have the necessary equipment and Internet access and provide convenient work environments for employees in transit or on business trips, allowing them to do their jobs without having to return to their offices.

* At Daicel, the work-from-home program (implemented in April 2017) and work-from-satellite-offices program (implemented in February 2019) are collectively referred to as remote work.



Employee at a satellite office

Encouraging Childcare Leave for Male Employees

From the perspective of improving the work-life balance and creating a workplace that encourages male employees to take childcare leave, the Company introduced a paid portion (five days) to this type of leave in FY2018/3. The percentage of eligible male employees taking the leave in FY2021/3 was 57.8%.

TOPICS

Employee's Voice: Childcare Leave Was a Good Opportunity for Changing My Mindset



Engineering Center
Purchasing Group
Takabe Masaharu
(As of as of July 1, 2021)

I took a childcare leave in July 2020. During that time, I made a creative effort to spend as much time with my child as possible by changing diapers and taking walks in the neighborhood together. I did worry about my work before taking the leave, but now that I have, I feel it has changed my mindset on parenting. And I hope many employees will take this leave in future.

TOPICS

Seminar for Men on Balancing Work and Parenting, a Joint Event by 11 Companies in the Kansai Area

In February 2021, 11 companies based in the Kansai area got together to hold an online seminar for men on balancing work and parenting. Professor Jun Nakahara of Rikkyo University gave a keynote speech and served as the moderator, and about 110 participants from each company exchanged their views on parenting and the difficulties involved. Participants offered feedback such as: "I never discussed parenting with men before, so it was a refreshing experience," "I'd like to continue sharing information" and "I hope it becomes easier to take childcare leave."

Looking ahead, we would like to provide opportunities for exchanging information on childcare among Daicel Group employees.

Working Environments that Provide Flexibility for Employees

Daicel is focused on creating working environments that enable employees to perform at the best of their capabilities, thus contributing to higher productivity.

Introduction of the Free-Address System

Daicel introduced a “free-address” (free seating) office layout at the Tokyo and Osaka Head Offices as well as the Nagoya sales office to step up its efforts to promote work style reforms. This has led to the creation of an even less territorial office layout than the past, which facilitates worksite communication and in-house collaboration.

The free-address office layout was also adopted by iCube, a part of the Innovation Park, which is an R&D powerhouse that opened in April 2017. This made it possible for technical staff specializing in such fields as exploratory research, product development, production innovation, process innovation, and engineering to gather in one large office space. The setting helps them to inspire each another and boosts motivation as they work together to push forward with the development of new products and innovative mass-production technologies as well as the creation and commercialization of new businesses.

The free-address office layout was also introduced at the “F-BASE” in Polyplastics Co., Ltd.’s Fuji Plant. At F-BASE, divisions that had been dispersed across different areas of the plant (operation, maintenance, technology, testing, logistics, and safety) were integrated into one floor in an effort to gather expertise about manufacturing. By encouraging free exchanges across divisions in the open environment of a free-address office, we will promote further innovations.



Office atmosphere

Introduction of the New “Office Casual” Dress Code

As part of its work style reforms, the Company introduced the new “Office Casual” dress code for employees at its main and branch offices. Apart from “Cool-Biz” and “No Tie” attires, already accepted in our workplaces, employees can also wear T-shirts, sneakers, and other casual clothing under the new dress code. This gives them the flexibility to choose what to wear according to their specific roles. The Company will continue to focus on creating working environments that enable employees to perform at the best of their capabilities, thus contributing to higher productivity.

In our worksites other than the main and branch offices, employees wear uniforms as a protective measure. In October 2019, these were upgraded to be more functional.



Employees in Office Casual Attire

Guidance on Reward Standards and Transparent Decision-Making on Compensation

At Daicel, we believe that providing secure rewards is an important element of an employee-friendly corporate culture. As part of our process of human rights due diligence, we check whether Daicel Group companies are paying salaries in compliance with the laws and regulations of each country or region, including paying salaries above the statutory minimum wage and providing extra payment for overtime work. While such legal compliance is a given, the Daicel Group’s Human Resource Guidelines also request each Group company to “conduct verification of company compensation levels and salary items against external benchmarks regularly” to maintain the competitive level of reward standards based on the labor market.

Decisions on compensation are left to the discretion of each Group company, but we also pay due consideration to ensuring a transparent decision-making process for compensation. The Human Resource Guidelines state that we must “establish rules for wage structure and salary items, and disclose them to employees.” For example, Daicel Corporation discloses its salary scale to applicable employees in addition to its salary-related rules.

Employee Benefits and Welfare (Yu Ai Kai Mutual Aid Association)

This fraternal association was created to leverage the mutual aid of members for their improved well-being and to nurture self-motivation and a spirit of friendship.

This association was created in accordance with the welfare policies defined by Daicel's labor union and management in order to leverage the mutual aid of members for their improved well-being and to nurture self-motivation and a spirit of friendship. Its members consist of Daicel's employees and staff of Daicel Group companies.

■ Benefits and Welfare

Item	Description
Congratulatory stipend for weddings	The stipend is paid when a member gets married.
Congratulatory stipend for childbirth	The stipend is paid when a member or their spouse gives birth to a child.
Congratulatory gifts when a member's child enters school	A gift is presented when a member's child has entered elementary, junior high, or high school (recipients choose a gift from a catalogue).
Stipend for members at the passing of a family member	The stipend is paid when a family member of a member has passed away. The amount varies by the degree of kinship.
Consolatory stipend for injuries and illness	The stipend is paid when a member takes a leave of absence due to a work-related injury or illness. The amount varies by the required days of leave.
Consolatory stipend for damage attributable to disasters	The stipend is paid when a member's dwelling is damaged by a fire, storm, flood, earthquake, or other disaster. The amount varies by the degree of damage.
Stipend for members on leave of absence	The stipend is paid when a member takes a leave of absence due to a non-work accident or illness, provided that the reasons for such leave meet the in-house criteria stipulated by the entities for which they work. The stipend is paid based on the required days of leave.
Stipend for subsidizing hospitalization expenses	The stipend is paid when a member or family member is hospitalized at a medical institution where health insurance is applied due to non-work accidents or illness. The stipend is paid per day of hospitalization, and the amount varies by the type of injury or illness.
Nursing care support stipend	The stipend is paid when a member applies for a nursing care leave program in place at their respective entity. The amount varies by the length of nursing care leave applied for.

Item	Description
Orphanage education annuity	Following a death, an annuity is paid to a member's dependent child or children. The annuity is paid monthly for each child attending elementary, junior high, or high school.
Refund upon withdrawal from membership	A refund is paid to members withdrawing from the association, with the sliding amount determined based on the period of membership.
Survivor's benefits	Benefits are paid to the survivor when either the member or registered spouse passes away.
Social contribution activity awards	A cash award is given to commend individual (or a group of) members deemed to have made a significant contribution to society.
GLTD insurance	Long-term disability insurance is in place to provide coverage for members who are unable to work for an extended period of time due to disability resulting from an injury or illness and who are not fully insured by the public insurance system or conventional disability income insurance.

Employee Benefits and Welfare Program for Diverse Lifestyles

In addition to the employee benefits and welfare program provided by the fraternal association, Daicel has adopted a benefits and welfare program that can be used by employees according to their lifestyles as part of its efforts to improve the work-life balance.

Cafeteria Plan

Daicel provides employees with the Cafeteria Plan, an optional benefits and welfare program that allows employees to choose from menus that meet their personal needs, such as career development, healthy living, childcare and nursing care, and travel. In FY2022/3, we expanded our services for supporting childcare and nursing.

Use of Company-Sponsored Babysitter Dispatch Services

We subsidize part of the cost when an employee hires a babysitter through the Company-sponsored babysitter dispatch service launched by Japan's Cabinet Office in November 2020. We will continue to consider various programs and measures to help employees balance work and life with a sense of security.

Daicel Employee Stock Ownership Association

To help employees build their wealth and holding shares through contributions to enhance their sense of unity with the company, Daicel Group established Daicel Employee Stock Ownership Association. As of March 2021, 2,279 members of the Daicel Employee Stock Ownership Association have joined the company and hold 5.048 million, shares.

■ Daicel Employee Stock Ownership Association (as of March 31 of each fiscal year)

	2016	2017	2018	2019	2020
Number of members	1,805	1,912	1,986	2,223	2,279
Number of shares owned	3.854 million	3.975 million	4.08 million	4.647 million	5.048 million

Communication with Employees

Sound Labor-Management Relations

Summary of the Labor and Management Charter

- The Company and the Union shall understand each other's position and make decisions through negotiations and discussions based on respect for human life and dignity.
- The Company shall give latitude to Union activities and will not discriminate against its employees due to such Union activities.
- The Company and the Union shall eliminate excessive control and respect the humanity of employees. Employees shall contribute to the Company's business on their own will through efforts to enhance productivity.
- The Company shall treat employees in a fair and appropriate manner with the aim of making the maximum use of the capabilities of each employee.

Daicel considers its employees to be an important stakeholder and, accordingly, has established the Labor and Management Charter, which has been signed by representatives of labor unions and management. Both parties respect each other's standpoints and discuss issues in good faith in order to best develop the Company's business. Through these efforts, we are maintaining and reinforcing a healthy relationship between labor and management. In addition, labor and management committees are set up at each workplace. The Daicel Group undertakes a variety of measures covering a wide range of areas. This includes discussions between labor and management regarding such issues as working conditions, productivity improvement, personnel systems, working hours, and health management.

■ Major Labor-Management Committees

Name	Purpose
Central Management Council	<ul style="list-style-type: none"> ● Issues requiring negotiation ● Issues requiring consultation ● Issues requiring reporting or briefing (All of the above are important.)
Central Healthcare Committee	Support the mental and physical well-being of employees to raise individual productivity and create vibrant and healthy work environments.
Central Productivity Promotion Committee	<ul style="list-style-type: none"> ● Promote the work-life balance, formulate policies on work style reform ● Monitor initiatives and activities aimed at reducing total working hours ● Share good practices related to reducing total working hours ● Monitor applications for overtime exemptions by each business site
Liaison Meeting on Labor-Management Issues	Discuss issues related to corporate management

> ESG Data [Labor Union Membership and Composition](#)

Organizational Health Index

The Daicel Group conducted the Organizational Health Index (OHI) survey in FY2021/3 to understand the current status of the organization. Taking into account the results, we will consider appropriate steps and measures as required.

■ Overview of OHI in FY2020/3

Period	January 2020
Respondents	All employees of Daicel at domestic and overseas Group companies
Number of respondents (response rate)	6,855 (81%)
Survey method	Online Questionnaire
Main questions	<ul style="list-style-type: none"> ● Work Environment ● Motivation ● Innovation ● External Orientation

Fostering a Sense of Unity Across the Daicel Group

Recognizing employees as important stakeholders, we are constantly developing systems to meet their expectations and needs while also maintaining dialogue and other communications through the labor union. We also utilize various internal communication tools to regularly share information with all Group employees in multiple languages. This is to foster a sense of unity across the Daicel Group by stimulating internal exchanges.



Palette(6 Languages)



SOCIO(For Japan only)



PC

Smartphone



Arcus (Japanese and English language editions): Online Group internal newsletter

Sustainable Procurement

In its purchasing activities, the Daicel Group carefully evaluates quality, pricing, and delivery dates while also considering social impact, in such areas as the environment, human rights, and the labor force. We have established our views on purchasing in the Basic Purchasing Policy and the Daicel Group CSR Purchasing Guidelines, and we seek compliance from our suppliers as we work together toward realizing a sustainable society in an effort that extends across the entire supply chain.

Basic Purchasing Policy

To achieve the goals of its Basic Philosophy, the Daicel adheres to its Conduct Policy and practices the following basic policies in its purchasing activities.

1. Fairness and Rationality of Transactions

- We shall be fair in providing prospective suppliers with opportunities for participating in business transactions. Also we shall conduct our purchasing activities in an open manner with no regard for previous dealings and with no preference for companies domiciled in Japan.
- Our overall considerations shall be limited to matters of quality, price, stability of supply, state of technological development, environmental considerations, and the assurance of safety. We shall consider these aspects in a comprehensive manner.

2. Legal Compliance and Confidentiality

- We shall comply with laws and corporate ethics in our business operations.
- We shall strictly protect confidential information obtained through businesses and shall never infringe the intellectual property rights of third parties.

3. Establishing Relationships of Trust

- We shall strive to establish better partnerships with our suppliers in consideration of mutual benefit and trust as well as good faith.

4. Adherence to CSR Initiatives

- We shall promote sustainable development with our suppliers through our activities for corporate social responsibility and value improvement.

Daicel Group CSR Purchasing Guidelines

The Daicel Group has established the Daicel Group CSR Purchasing Guidelines in line with its Basic Purchasing Policy. These guidelines form the basis of purchasing transactions, and they are adhered to by the Daicel Group as well as by its suppliers around the world in a proactive effort toward realizing a sustainable society that extends across the entire supply chain. In FY2021/3, we distributed a certificate of confirmation to 797 major suppliers of the Daicel Group (accounting for over 85% of total procurement), seeking their signature to ensure that they understood the content of the Daicel Group CSR Purchasing Guidelines, and we received signatures from 664 companies (83% response rate).

Daicel Group CSR Purchasing Guidelines

1. Compliance with laws, regulations, and social norms
 - In the course of business activities, we shall comply with laws, regulations, and social norms with regard to such matters as business transactions, labor management, environmental preservation, safe operations, and intellectual property, thereby living up to higher standards of corporate ethics and fair business conduct.
 - In addition to complying with laws and regulations enforced in the countries and regions where we operate, we shall respect the cultures and customs of these local communities.
 - We shall not provide or receive entertainment or gifts that can be deemed to exceed the scope of sound commercial practice and social norms.
2. Respect for human rights and the working environment
 - We shall not condone forced labor, child labor, underpaid labor, or any other inhuman labor practices.
 - We shall eliminate discrimination within our workforce and strive to offer equal opportunity and realize the fair treatment of employees.
 - We shall prevent workplace harassment, bullying, and violence.
 - We shall respect the rights of our employees and, to this end, provide adequate wages while appropriately managing their working hours.
3. Occupational safety and health
 - We shall prevent occupational accidents and diseases by offering a safe and sanitized working environment and by paying close attention to the management of employee health.
 - We shall formulate emergency countermeasures by anticipating possible accidents and disasters with the aim of protecting employee safety.
4. Environmental consideration
 - We shall strive to reduce the environmental impact of our operations by, for example, reducing resource and energy consumption in the course of production, packaging, and distribution and by curbing emissions of CO₂ and industrial waste.
 - We shall pursue business operations that give due consideration to the protection of the global environment and the conservation of biodiversity.

5. Sound business management

- We shall strive to engage in sound and transparent business management and appropriately disclose corporate information with stakeholders with the aim of establishing sincere relationships based on a spirit of mutual interest, respect, and trust.
- We shall not provide any benefit to antisocial forces while also strictly prohibiting the provision or receipt of undue gain attributable to such fraudulent activities as insider trading.

6. The pursuit of product quality and product safety as well as improvement in technologies

- We shall strive to meet customer requirements with regard to product quality and safety in addition to providing accurate information about our products and services.
- We shall strive to develop products and solutions through the pursuit of new technologies and better quality.

7. Stable supply and flexibility to remain responsive to changes

- We shall deliver our products on time and strive to maintain stable supply.
- We shall formulate business continuity plans to secure our preparedness for emergencies, including natural disasters and operational accidents.

8. Information security

- We shall put in place security measures to combat network threats with the aim of ensuring that none of our systems are damaged by such threats or exploited by hackers to harm the systems of others.
- We shall appropriately protect the personal information we handle whether it pertains to customers, employees, or other third parties.
- We shall maintain the appropriate management of confidential information we receive from customers or other third parties, striving to prevent the leakage of such information.

9. Contribution to communities and society

- We shall develop collaborative relationships with local communities and strive to contribute to the development of society.

10. Promotion of CSR initiatives in which all supply chain constituents play their roles

- We shall proactively push ahead with CSR initiatives while also disclosing the status of such initiatives.
- We shall ask our business partners to join our efforts to promote CSR with the aim of encouraging our entire supply chain to engage in CSR.
- We shall engage in responsible purchasing practices, observing purchasing regulations that are in place to address social issues related to specific materials such as conflict minerals regulations.

➤ [The procurement of raw materials, fuels, and components](#)

➤ [Equipment procurement](#)

Our Structure for Promoting Sustainable Procurement

In FY2021/3, the Daicel Group established a Procurement Subcommittee under the Sustainable Management Committee for promoting sustainable procurement with a sense of unity throughout the Group. The subcommittee comprises individuals charged with supervising procurement from the Raw Materials Purchasing Center, Corporate Sustainability Division, SBUs, and major Group companies and meets periodically to engage in discussions encompassing the entire Group in regard to procurement operations that had been conducted by each business site or Group company in the past. The subcommittee met five times in FY2021/3.

During these meetings, the members exchange information on procurement, confirm the progress of sustainable procurement being pursued throughout the Group, deliberate on the Group's response to conflict minerals, and set targets and formulate plans for implementation. Their discussion is reported to the Sustainable Management Committee, chaired by the president and CEO, which provides feedback on its own deliberations and debates and then reflects the results in the activities of the subcommittee.

[> Sustainability Promotion](#)

Initiatives for Sustainable Procurement

Selection Process for New Suppliers

When initiating transactions for purchasing major raw materials and fuels from a new supplier, we confirm the status of the supplier's initiatives on realizing a sustainable society, according to the content of the transaction.

Specifically, we examine the supplier's activities across a wide range of areas related to quality assurance and stable supply, corporate governance, fair trade, human rights, labor conditions, health and safety, business management, contribution to local communities, information security, and promotion of CSR, and expansion of initiatives across the supply chain. We plan to conduct a comprehensive assessment based on the results and use them as criteria for deciding whether to initiate business with a supplier.

Communication with Current Suppliers

When purchasing raw materials and fuel, we conduct quality audits of our current suppliers according to the content of the transaction, and any supplier that falls short of our standards or that is deemed to be high risk is instructed to make improvements.

Self-Assessment-Questionnaire (SAQ) on CSR Procurement

To assess the sustainability initiatives of suppliers, the Daicel Group created SAQ by referring to the SAQ created by the UN Global Compact Network Japan. We seek to raise awareness among suppliers and reduce environmental and social risks by using our SAQ to periodically assess such risks and by offering feedback.

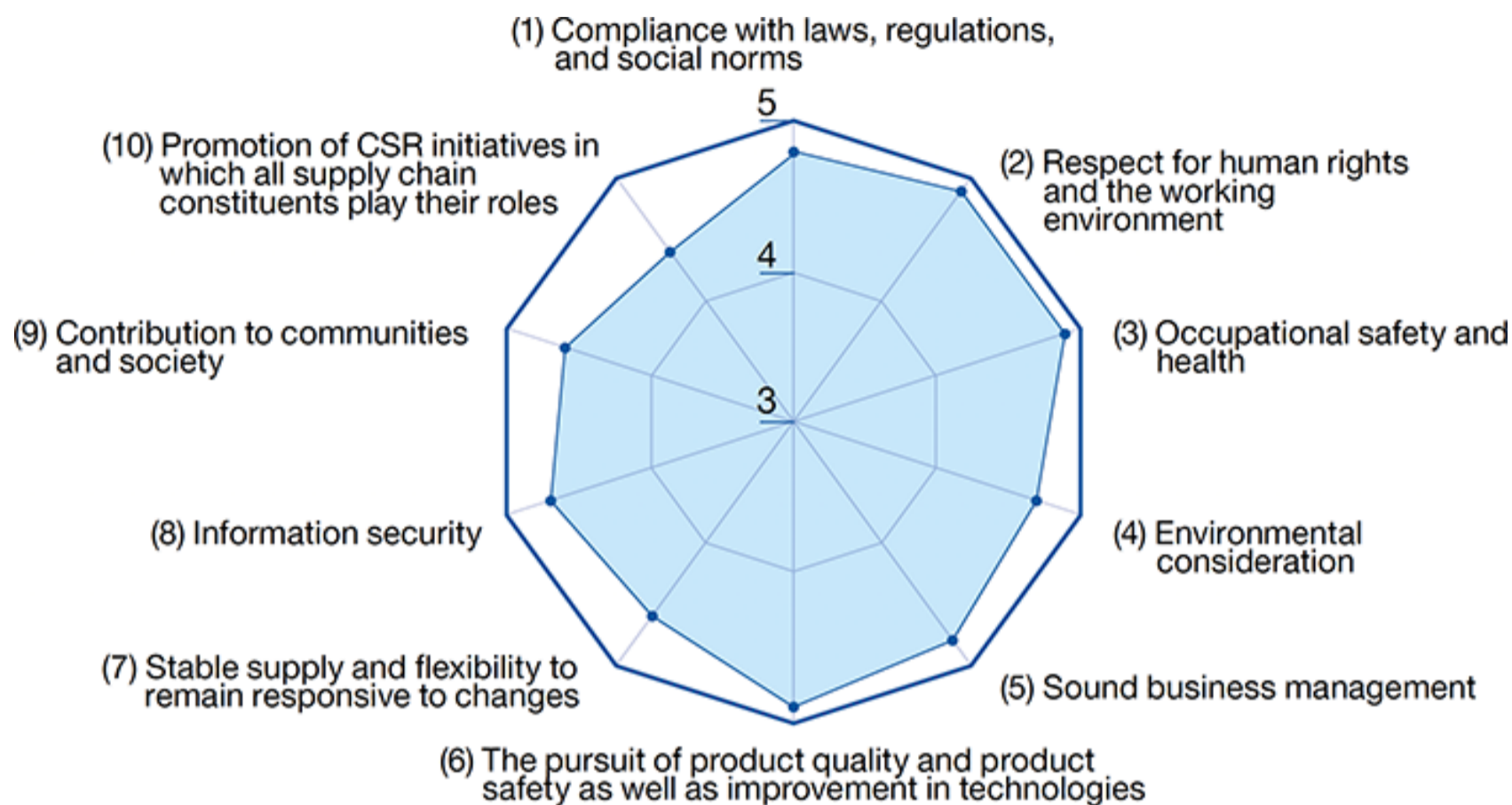
■ Self-Assessment Questionnaire on CSR Procurement: Main Assessment Items

Assessment Item	Details
Compliance with laws, regulations and social norms	Establishment of management policies, legal compliance, establishment of whistleblowing system, restrictions on offering gifts and entertainment
Respect for human rights and the working environment	Prohibitions against discrimination, forced labor, child labor and inhumane treatment, while ensuring adequate pay and appropriate management of working hours
Occupational safety and health	Occupational safety and health and management of workplace hygiene, response to occupational injuries, illnesses and emergencies
Environmental consideration	Prevention of environmental pollution, effective use of energy, reduction of greenhouse gases, reduction of waste, initiatives on preserving biodiversity
Sound business management	Information disclosure, elimination of inappropriate profit-taking, respect for intellectual property, elimination of antisocial forces
The pursuit of product quality and product safety as well as improvement in technologies	Provision of information on products and services, quality assurance for products and services, management of chemical substances
Stable supply and flexibility to remain responsive to changes	Stable supply
Information security	Defensive measures against network threats, measures for preventing leakage of personal information and for preventing leakage of confidential information we receive from customers and third parties
Contribution to community and society	contribution to global community and local community
Promotion of CSR initiatives in which all supply chain constituents play their roles	Sustainable procurement of minerals, promotion of CSR initiatives

Survey Results

In FY2021/3, we conducted an SAQ targeting 797 major suppliers of the Daicel Group, accounting for over 85% of total procurement, and received responses from 664 companies, an 83% response rate. For the 173 companies that were deemed to be lacking, we will confirm the issues with each supplier and support improvement efforts. We value communicating with our suppliers and will work together to develop a sustainable supply chain.

■ Survey Results of Major Raw Materials and Fuel Suppliers



Responsible sourcing of Mineral

Profits gained from minerals commonly known as 3TG, mined in the Democratic Republic of Congo and its neighboring countries, are being used to fund the activities of armed groups and anti-government organizations responsible for serious human rights violations. Under Section 1502 of the Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) enacted in January 2013, companies listed on U.S. stock exchanges are required to investigate and report on how such minerals are being used, particularly tin, tantalum, tungsten, and gold (commonly known as 3TG). Throughout its supply chain, the Daicel Group will not, by any means, tolerate the procurement of the minerals from conflict-affected areas which results in human rights violations or environmental destruction. In FY2021/3, we conducted a CMRT survey of suppliers (a total of 25 companies) that handle items including tin, tantalum, tungsten, and gold out of the raw materials and parts we procure on a continuous basis. As a result, we confirmed that there were no issues of concern (100% response rate). In addition, in response to customers' requirements, we have begun conducting the cobalt survey using the CRT (Cobalt Reporting Template). We will continue to expand the minerals surveyed in order to meet the glowing expectations of the society.

Sustainable Procurement of Palm Oil Products

Out of the roughly 200 million tons of vegetable oils produced worldwide, palm oil ranks at the top in terms of production volume, with over 35% of total volume. As we entered the 21st century, the progressive development of large-scale oil palm plantations in Southeast Asia has led to the destruction of rain forests with a serious impact on the ecosystem and has therefore raised public concern. Recognizing the responsibility of a company that uses chemical products derived from palm oil as a raw material, the Daicel Group joined the Roundtable on Sustainable Palm Oil (RSPO) in August 2018 and is seeking to switch to palm oil-derived raw materials certified by the RSPO. In 2019, we began selling RSPO-certified products as raw materials for use in cosmetics, and we are gradually expanding this product line. We will continue to play our role in realizing a sustainable society through our supply chain for RSPO-certified products.

BCP Procurement

In view of the procurement risks and impact on the supply chain, we implement measures with regard to our main raw materials and fuel by gradually adopting multi-sourcing and accumulating safety stock, on a priority basis. Out of 382 raw materials, we completed the process for 243 items by FY2021/3 and are continuing to work on the remaining 139 items.

Procurement Helpline

To promote fair transactions in line with our Basic Purchasing Policy, the Daicel Group has set up a helpline to receive reports from suppliers. We ask our suppliers to report on legal violations and deviations from the Basic Purchasing Policy so that we can resolve any issues. Individuals consulting or reporting on issues through the helpline are protected from any adverse treatment.

[> Inquiry as to our business \(Including procurement\)](#)

Internal Education and Training

In FY2021/3, we held a study group for purchasing staff handling raw materials and fuel on topics including EcoVadis and questions included in the SAQ conducted with suppliers. A second study group was held pertaining to sustainable procurement for purchasing staff handling equipment. We also held study groups during meetings of the Procurement Subcommittee, comprising staff from each SBU as well as divisions handling the purchasing of raw materials, fuel, and materials at Group companies. Study group topics included sustainable management and supply chain management (including implementing SAQs), the circular economy, and information disclosure. We have also incorporated personal goals for sustainable procurement initiatives in the evaluation of all purchasing staff to encourage each individual to exercise initiative.

Contribution to Local Communities and Society

Communication with Society

As part of its Responsible Care initiative, the Group maintains active communication with local communities. In order to build good relationships and contribute to local community development, we participate in an extensive range of activities such as those for nurturing children as the future generation and volunteer projects.

Supporting Local Food Producers through the Daicel Gift Catalog

Food producers have been hit hard by the COVID-19 pandemic. At the Ohtake Plant, we decided to support producers in Hiroshima Prefecture, where the plant is located, as well as in Yamaguchi Prefecture adjacent to Ohtake City, by creating an original gift catalog listing local products as part of the employee benefit program in January 2021. The catalog was made available upon request from employees, who purchased the products as gifts. To help producers of agricultural and marine products, as well as manufacturers who suffered losses due to the pandemic, the catalog listed a total of 16 items, including 14 items from the Hiroshima Mall online shopping site operated by the Prefecture, cultured yellowtail from Atata Island in Ohtake City, and Japanese sake with a “Daicel” label produced by local breweries. About 500 employees made a purchase from the catalog. The project made employees happy and also benefited the local community as well.



Sake with the “Daicel” label was a huge hit

Supporting Local Restaurants by Eating Boxed Meals

Facing limited options for employee benefit events under COVID-19, the Ohtake Plant consulted its union and launched the Takeout Bento Project for Employees that would lead to supporting local restaurants. We received cooperation from the Ohtake Takeout program operated by the Ohtake City Chamber of Commerce, which lists restaurants providing takeout services, and asked four shops to supply 100 meals a day from February 24 to March 8, 2021, distributing a total of 800 meals to employees. The summer festival and other events had been canceled due to the pandemic, giving us fewer opportunities to interact with the local community, but we were nevertheless able to make a contribution by ordering bentos.



Distributing bentos to employees



Cheering up the local community and employees through a bento

Visiting a Foster Home

Employees of Daicel Safety Systems (Jiangsu) Co., Ltd. (DSSC) and Daicel Safety Technologies (Jiangsu) Co., Ltd. (DSTC) visited a foster home in Danyang City on May 30, 2020, to coincide with China's International Children's Day on June 1. They delivered gifts of everyday items such as paper diapers, shampoo, toothpaste, soap and towels. Through such voluntary activities, we hope that more people will take an interest in children living in foster homes and that children will feel the warmth of the community around them.



Donating everyday items to a children's foster home

Support Activities for Children in Poverty

Daicel Safety Systems (Jiangsu) Co., Ltd. (DSSC) and Daicel Safety Technologies (Jiangsu) Co., Ltd. (DSTC) donated money and books to Bei Cheng Kindergarten, Hou Xiang Elementary School and Jian Shan Junior High School in September 2020. In November, Hou Xiang Elementary School held their fall sports event under the name of Daicel Cup Sports Festival.



Basketball competition at Hou Xiang Elementary School

Participating in a Charity Campaign for SMA Patients

In June 2020, our Polish subsidiary, Daicel Safety Systems Europe Sp. z o. o. (DSSE), participated in the Gaszyn Challenge charity campaign. This began in Poland's Gaszyn region as a charity aimed at collecting donations for a girl suffering from spinal muscular atrophy (SMA). The campaign quickly spread across the country and successfully met the originally planned amount of donations. Now it has become a fund for supporting other children suffering from SMA. Under the rules of the campaign, participants must do ten pushups and donate five Polish zloty (about 150 yen) or more. If you are unable to complete ten pushups, you must donate ten Polish zloty (about 300 yen) or more. DSSE participated by invitation of Electrolux, a company in our neighborhood. In turn, we passed the baton to three more companies to ensure that the activity will continue into the future.



Employees taking part in the Gaszyn Challenge

CSR Activities in Thailand Amid the COVID-19 Pandemic

Guided by the CSR philosophy of “fulfilling our corporate responsibility as a member of society,” Daicel Safety Systems (Thailand) Co., Ltd. (DSST) and Daicel Safety Technologies (Thailand) Co., Ltd. (DSTT) have conducted CSR activities over the years by collaborating with the government-affiliated Employee Welfare Council, universities and local communities. In the spring of 2021, DSST and DSTT started their CSR activities to tackle the continued spread and impact of COVID-19 in Thailand, having affected people’s lives as infections continued to rise.

Collecting Money from Employees to Donate Medical Supplies

On April 29, 2021, we used money collected from employees (about 400,000 yen*) to purchase pharmaceutical products and medical supplies, such as disinfectants, and donated them to nearby hospitals.

* 1THB≈3.5 JPY, 1THB≈0.03USD, 1THB≈0.03EUR



Donating supplies to a nearby hospital

Donating Protective Gear to Hospitals and Members of the Local Community

On May 19, 2020, we donated protective gear to medical workers, community leaders and public interest groups.



Protective gear donated



Corporate Governance

Basic Approach

Strengthening corporate governance is an important management task that enables us to enhance corporate value and achieve our social mission and responsibilities as a listed company.

Daicel maintains its agility by clarifying the responsibilities of each part of its organization and by adopting a management system that supports timely decision-making and implementation. Moreover, by actively soliciting external opinions to improve management transparency and fairness, Daicel will strive to maintain the soundness of its corporate management.

History of Strengthening Corporate Governance

Date	Initiative	Purpose
June 1999	Introduced the Executive Officer System	To separate supervisory and business execution functions clearly
June 2000	Appointed Outside Directors	To strengthen decision-making and supervisory functions and ensure transparency in management
	Established the Nomination and Compensation Committee	To improve objectivity and transparency in the nomination and compensation assessment process
April 2002	Established the Management Advisory Committee	To strengthen decision-making functions through deliberation of important matters
June 2003	Shortened the term of office for Directors from two years to one	To clarify management responsibilities of Directors to shareholders To build a system that responds quickly to changes
March 2006	Established the Information Disclosure Committee	To ensure reliability of the information to be disclosed
April 2006	Established the Risk Management Committee	To accurately understand and appropriately manage risks

August 2010	Established the Internal Control Council	To build an internal control system and ensure the adequateness of its operation
June 2015	Increased the ratio of Outside Directors to 50%	To ensure further transparency of decision-making and supervisory functions and management
January 2016	Started to evaluate the effectiveness of the Board of Directors	To maintain and improve the effectiveness of the Board of Directors
January 2020	Improved the method for evaluating the effectiveness of the Board of Directors	To introduce individual interviews in addition to surveys

Corporate Governance Framework

Daicel Corporation is a company with Audit & Supervisory Board and has established a corporate framework under which its Board of Directors makes management decisions in an efficient manner and fulfills its supervisory functions. Such a framework has enabled us to keep reinforcing our corporate governance.

Specifically, by welcoming Outside Directors and allowing them to provide opinions and advice based on their expertise, Daicel is working to ensure that the decisions made by its Board of Directors are appropriate and the execution of Director duties is effectively supervised.

Moreover, we have adopted an Executive Officer System that has enabled us to clearly separate our decision-making, supervisory, and business execution functions. Such a clear division of roles has allowed us to bolster our business management structure and, consequently, corporate activities.

[> Corporate Governance Report \(July 20, 2021\)\[PDF:654KB\]](#) 

■ Outline of the Corporate Governance Framework (as of June 25, 2021)

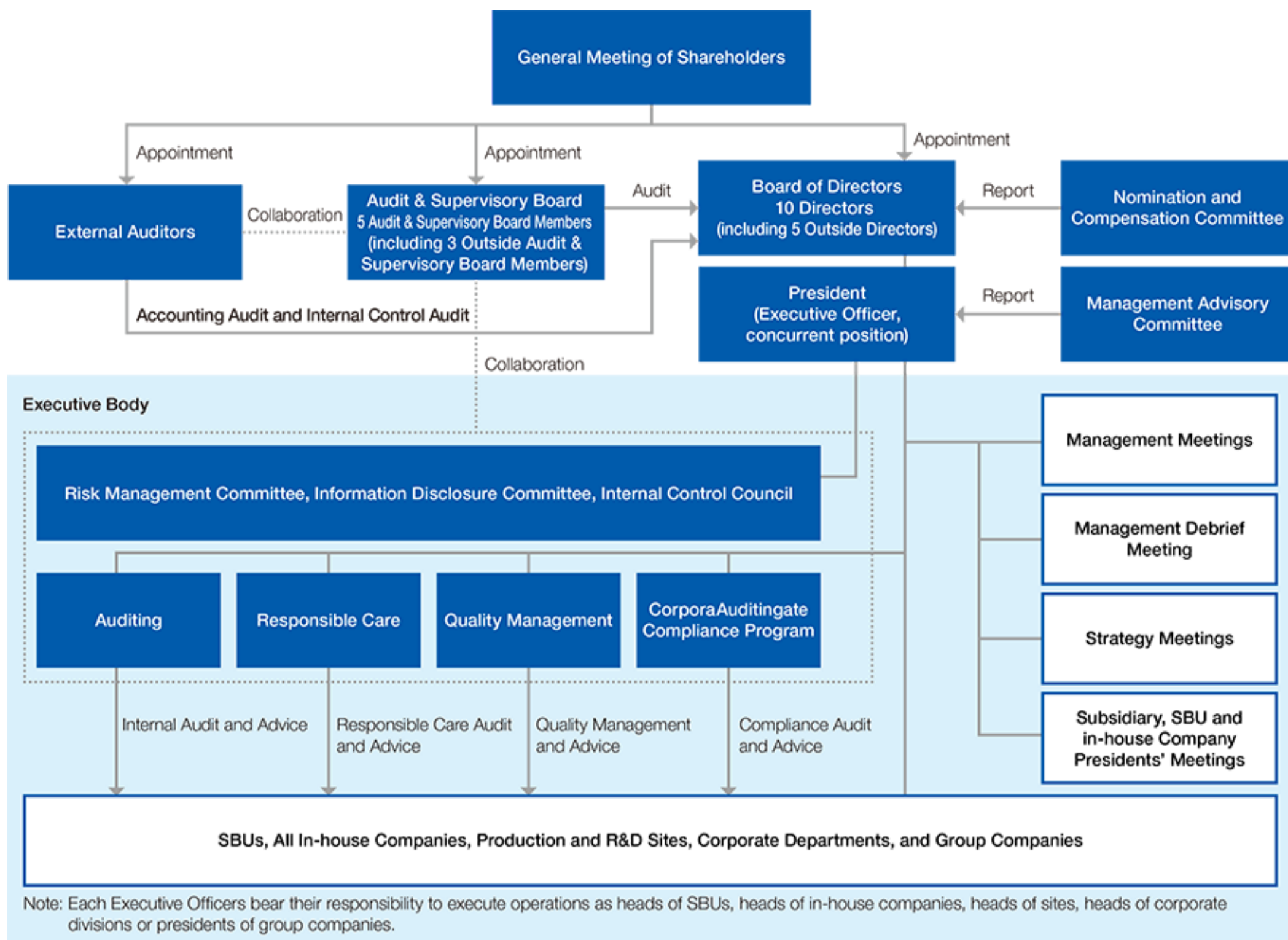
Item	Content
Type of organizational structure	Company with Audit & Supervisory Board
Chairperson of Board of Directors	Director, Chairperson of Board of Directors
Number of Directors	10 (including 1 female director)
Number of Outside Directors	5 (all 5 are independent directors)
Number of Audit & Supervisory Board Members	5

Item	Content
Number of Outside Audit & Supervisory Board Members	3 (all 3 are independent Audit & Supervisory Board members)
Number of Executive Officers	20 (including 4 officers concurrently serving as directors)
Number of Board of Director meetings held in FY2021/3 (Average attendance rate of outside directors/outside Audit & Supervisory Board members)	16 (96.3%/100%)
Number of Audit & Supervisory Board meetings held in FY2021/3 (Average attendance rate of outside Audit & Supervisory Board members)	15 (100%)
Term of office for directors	1 year
Term of office for Audit & Supervisory Board members	4 years
Average term in office for directors	3.8 years
Average term in office for Audit & Supervisory Board members	2.8 years
Voluntary advisory body to the Board of Directors	Nomination and Compensation Committee is composed of 8 Directors (including 5 Outside Directors) and chaired by an Outside Director.
Body that deliberates important corporate matters and reports to the President	Management Advisory Committee
Compensation system for Directors and Audit & Supervisory Board Members*	1.Monthly compensation 2.Performance-linked remuneration (excluding Outside Directors and Outside Audit & Supervisory Board Members) 3.Restricted Stock Compensation (excluding Outside Directors and Audit & Supervisory Board Members)
External Auditor	Deloitte Touche Tohmatsu LLC

* The compensation system also applies to executive officers and others.

The ratio between the three types of compensations (1, 2, and 3) is roughly maintained at 65:20:15.

■ Corporate Governance Framework (as of June 25, 2021)



Board of Directors

Daicel's Board of Directors comprises 10 directors, 5 of whom have been appointed from outside the Company. The Board of Directors meets to make decisions concerning important management issues in line with the regulations of the Board of Directors. Furthermore, the Board of Directors supervises the execution of business and business operations. Every outside director at Daicel is tasked with providing advice and supervisory functions according to their experience and expertise. The Company's 5 outside directors have each been designated as independent directors. In addition to regular monthly meetings, a special meeting of the Board of Directors is also convened as needed. In FY 2021/3, the Board of Directors was held 14 times, and the attendance rate for outside directors was 96.3%.

Audit & Supervisory Board

Daicel currently has 5 Audit & Supervisory Board members, 3 of whom have been appointed from outside the Company. The Audit & Supervisory Board holds meeting to share information, deliberate on, and make decisions about important issues related to the Company's audits. In addition, Standing Audit & Supervisory Board members are required to attend meetings such as the Management Meetings, Management Debrief Meetings, and Strategy Meetings as well as those of the Risk Management Committee and other important meetings, enabling them to audit the overall management of corporate affairs. Audit & Supervisory Board members regularly receive reports from the Company's internal auditing divisions and External Auditor. They collaborate through the exchange of information and opinions as needed. All three of the outside members are independent directors. In FY2021/3, the Audit & Supervisory Board was held 15 times, and the attendance rate for outside members was 100.0%.

Nomination and Compensation Committee

The Nomination and Compensation Committee deliberates and reports on the personnel and remuneration of directors, executive officers, and other officers in response to requests from the chairperson of the Board of Directors or the chairperson of the Audit & Supervisory Board. The committee comprises outside directors, the chairperson of the Board of Directors, and representative directors. The committee is chaired by an outside director to ensure the objectivity and transparency of nominations and compensation, and 5 out of 8 members, or the majority, are outside directors. In FY2021/3, the Nomination and Compensation Committee was held 9 times, and the attendance rate for members was 100.0%.

Management Advisory Committee

The Management Advisory Committee serves as an advisory body for the president and CEO and is in charge of deliberating important corporate matters such as the planning of Group strategies and consequent business restructuring. The committee comprises the president and CEO, directors (excluding outside directors) and executive officers designated by the president and CEO and is convened as needed. In FY2021/3, the Management Advisory Committee was held 16 times with a 100.0% attendance rate.

■ Composition of Each Body and Status of Director Activities (as of June 25, 2021)

Name	Position	Term in Office	Independent Director	Execution of operations	Board of Directors (FY2021/3 Attendance)	Audit & Supervisory Board (FY2021/3 Attendance)	Nomination and Compensation Committee (FY2021/3 Attendance)	Management Advisory Committee (FY2021/3 Attendance)	Remarks
Misao Fudaba	Chairperson of Board of Directors	11years			● (100%)		● (100%)		Chairperson of Board of Directors
Yoshimi Ogawa	Representative Director President and CEO	10 years		●	● (100%)		● (100%)	● (100%)	Chairperson of Management Advisory Committee
Kotaro Sugimoto	Representative Director	2years		●	● (100%)		● (100%)	● (100%)	
Yasuhiro Sakaki	Director	1 year		●	● (91.7%)			● (100%)	
Akihisa Takabe	Director	2 years		●	● (100%)			● (100%)	
Masafumi Nogimori	Outside Director	4 years	●		● (100%)		● (100%)		Chairperson of the Nomination and Compensation Committee
Teisuke Kitayama	Outside Director	3 years	●		● (100%)		● (100%)		
Sonoko Hacchoji	Outside Director	2 years	●		● (93.8%)		● (100%)		

Name	Position	Term in Office	Independent Director	Execution of operations	Board of Directors (FY2021/3 Attendance)	Audit & Supervisory Board (FY2021/3 Attendance)	Nomination and Compensation Committee (FY2021/3 Attendance)	Management Advisory Committee (FY2021/3 Attendance)	Remarks
Toshio Asano	Outside Director	2 years	●		● (100%)		● (100%)		
Takeshi Furuichi	Outside Director	1 year	●		● (91.7%)		● (100%)		
Shinji Fujita	Standing Audit & Supervisory Board Member	2 years			● (100%)	● (100%)			Chairperson of the Audit & Supervisory Board
Hisanori Imanaka	Standing Audit & Supervisory Board Member	1 year			● (100%)	● (100%)			
Ryo Ichida	Outside Audit & Supervisory Board Member	7 years	●		● (100%)	● (100%)			
Junichi Mizuo	Outside Audit & Supervisory Board Member	3 years	●		● (100%)	● (100%)			
Hideo Makuta	Outside Audit & Supervisory Board Member	1 year	●		● (100%)	● (100%)			

* Attendance rate is the actual result in FY2021/3.

[> Directors and Senior Management](#)

[> Standards for Independence of Outside Directors and Outside Audit & Supervisory Board Members\[PDF:22KB\]](#) 

Effectiveness Evaluation of the Board of Directors

Daicel conducts an effectiveness evaluation of the Board of Directors to maintain and improve its performance through questionnaires and individual interviews to each board member and Audit & Supervisory Board member.

FY2021/3 Initiatives Based on the FY2020/3 Effectiveness Evaluation

In view of the Effectiveness Evaluation of FY2020/3, the Board of Directors has been engaged in initiatives for spending more time on issues related to determining management strategy, such as the formulation of medium-term strategies for deliberation by the Board of Directors.

■ FY2021/3 Effectiveness Evaluation of the Board of Directors

Evaluated	10 Directors and 5 Audit & Supervisory Board Members
Evaluation methods	<ul style="list-style-type: none"> ● Questionnaire ● Individual interviews
Main themes	<ul style="list-style-type: none"> ● Composition of the Board of Directors ● Contents of deliberation, resolutions, reports, etc. ● Management methods of the Board of Directors
Overview of evaluation results	<p>The Board of Directors engaged in productive discussions with outside directors and actively offered their opinions, and we were able to confirm that the board is accomplishing its expected roles effectively. On the other hand, there were some issues that needed to be addressed to improve the board's effectiveness. The main issues pointed out were:</p> <p>(1) Board composition issue</p> <ul style="list-style-type: none"> ● Addressing diversity in the Board of Directors <p>(2) Board deliberation issues</p> <ul style="list-style-type: none"> ● Setting the themes that are particularly appropriate for board deliberations ● Sharing information with the Board of Directors in an appropriate way ● The ideal way for the Board of Directors to monitor progress on the execution of management strategies <p>(3) Board operation issues</p> <ul style="list-style-type: none"> ● Ways for enhancing the provision of useful information for making appropriate decisions (handling of technical terms and in-house jargon, timing of delivering reference materials for board meetings) ● Ways for effectively using remote board meetings

Appointment and Compensation of Directors and Audit & Supervisory Board Members

Appointment and Nomination Procedures for Directors and Senior Management

In nominating candidates for directors and Audit & Supervisory Board members and appointing management executives, Daicel seeks individuals with the right personality, knowledge, motivation, ethical stance and management perspectives for leading the Company and who meet the basic criteria of supporting and upholding the Daicel Group's Basic Philosophy, Sustainable Management Policies, Conduct Policy, and Daicel Code of Conduct and possessing the necessary credentials and experience for enhancing Daicel's medium- and long-term corporate value.

The Board of Directors decides on nominations and appointments based on the advice of the Nomination and Compensation Committee.

Daicel has declared its support for the Challenge Initiatives for 30% of executives to be women by 2030 (#HereWeGo203030), sponsored by Keidanren. Daicel has positioned Diversity & Inclusion (D&I) as a key sustainability issue (materiality). The Company will seek to further enhance our corporate value by combining the power of diverse human resources including women.

* Executives includes senior managers such as directors, Audit & Supervisory Board members, and executive officers.

Reasons for Appointment and Status of Activities of Outside Directors and Outside Audit & Supervisory Board Members

Daicel appoints its outside directors in accordance with its Standards for Independence of Outside Directors/Outside Audit & Supervisory Board Members, which require that outside directors be sufficiently independent and to present no risk of conflict of interest with general shareholders. Daicel also designates all outside directors who satisfy the independence criteria as independent directors.

Reasons for Appointment of Directors and Audit & Supervisory Board Members (as of June 25, 2021)

Directors	Position	Reason for Appointment
Misao Fudaba	Chairperson of Board of Directors	Mr. Fudaba has been contributing to raising Daicel's corporate value during his tenure as President and CEO of the Company from 2010 to 2019 and subsequently as the chairperson of the Board of Directors. We determined that he was qualified to manage the Daicel Group and its global businesses given his track record and wealth of experience, achievements and insight related to the overall management of Daicel.
Yoshimi Ogawa	Representative Director President and CEO	Mr. Ogawa has demonstrated strong leadership in guiding the entire Group toward achieving higher corporate value as the President and CEO of the Company since June 2019. We determined that he was qualified to manage the Daicel Group and its global business given his track record and wealth of experience, achievements and insight related to the overall management of Daicel.

Directors	Position	Reason for Appointment
Kotaro Sugimoto	Representative Director	Mr. Sugimoto possesses a wealth of experience, achievements and insight related to the overall management of Daicel, fostered as the head of administrative departments, including finance and accounting as well as compliance. We determined that he was qualified to manage the Daicel Group and its global businesses.
Yasuhiro Sakaki	Director	Mr. Sakaki possesses a wealth of experience, achievements and insight related to the overall management of Daicel, fostered as head of the Pyrotechnic Devices Business and departments involved in promoting corporate strategy. We determined that he was qualified to manage the Daicel Group and its global businesses.
Akihisa Takabe	Director	Mr. Takabe possesses a wealth of experience, achievements and insight related to the planning and development of new products at the Daicel Group, fostered as head of R&D and new product development for broad areas including basic technology and product development. We determined that he was qualified to manage the Daicel Group and its global businesses.
Masafumi Nogimori	Outside Director	Mr. Nogimori possesses a wealth of insights and experience, fostered as a manager of a company that produces and sells medical products, and applies these in the management of Daicel.
Teisuke Kitayama	Outside Director	Mr. Kitayama possesses a wealth of insights and experience, fostered as a manager of financial institutions, and applies these in the management of Daicel.
Sonoko Hacchoji	Outside Director	Ms. Hacchoji possesses a wealth of insights and experience, fostered as a member of a management team at financial institutions and a hotel management company, and applies these in the management of Daicel.
Toshio Asano	Outside Director	Mr. Asano possesses a wealth of insights and experience, fostered as a manager of companies that manufacture and sell chemical goods, and applies these in the management of Daicel.
Takeshi Furuichi	Outside Director	Mr. Furuichi possesses a wealth of insight and experience fostered as a manager of a financial institution, which we hope he will apply to the management of Daicel.

Audit & Supervisory Board Members	Position	Reason for Appointment
Shinji Fujita	Standing Audit & Supervisory Board Member	Mr. Fujita has been in charge of Daicel's accounting department for many years. Given this track record, we determined that he was qualified to serve as an Audit & Supervisory member responsible for implementing audits based on a neutral and objective perspective to ensure sound management at Daicel.
Hisanori Imanaka	Standing Audit & Supervisory Board Member	Mr. Imanaka has been in charge of supervising management across departments as the head of Daicel's management planning and sustainable management. Given this track record, we determined that he was qualified to serve as an Audit & Supervisory member responsible for implementing audits based on a neutral and objective perspective to ensure sound management at Daicel.
Ryo Ichida	Outside Audit & Supervisory Board Member	Mr. Ichida possesses highly specialized knowledge, insight, and experience gained through his practice of accounting and tax affairs. He has also served as an outside director and is experienced in practical business operations. For these and other reasons, the Company has determined that he is qualified for the post of outside Audit & Supervisory Board member.
Junichi Mizuo	Outside Audit & Supervisory Board Member	Mr. Mizuo possesses highly specialized knowledge and experience as a scholar of CSR, corporate governance, and business ethics. He has also served as an outside director and is experienced in practical business operations. For these and other reasons, the Company has determined that he is qualified for the post of outside Audit & Supervisory Board member.
Hideo Makuta	Outside Audit & Supervisory Board Member	Mr. Makuta possesses highly specialized knowledge and extensive insight as an attorney at law and has served as a prosecutor at the Supreme Prosecutors Office, a member of the Fair Trade Commission, and an outside officer of companies. Given this track record, the Company has determined that he is qualified for the post of outside Audit & Supervisory Board member.

* Directors were appointed on June 25, 2021, and Audit & Supervisory Board members were appointed as of the date of the General Meeting of Shareholders held in the past fiscal years.

Compensation for Directors and Audit & Supervisory Board Members

1. Basic Policy

- (1) Compensation of Directors and Audit & Supervisory Board Members shall be determined by Board of Directors' resolution for Directors, and Audit & Supervisory Board Members' discussion for Audit & Supervisory Board Members within the scope of the total amount of compensation, etc., approved by the General Meeting of Shareholders.
- (2) Compensation of Directors shall consist of monthly compensation, performance-based bonuses, and stock compensation, which will generally be paid according at a 65:20:15 ratio. This rule does not apply to Outside Directors, who shall be paid only a monthly compensation. The compensation of Audit & Supervisory Board Members shall consist solely of monthly compensation.
- (3) To ensure objectivity, transparency, and validity regarding compensation, the Board of Directors makes its decision following deliberations based on recommendations made by the Nomination and Compensation Committee.

2. Basic Policy on Compensation

(1) Monthly Compensation

In principle, the monthly compensation of Directors and Audit & Supervisory Board Members is a fixed amount paid in accordance with internal rules that are determined by the Directors' duties and job titles in business execution and as to whether or not the Audit & Supervisory Board Members are full-time.

Regarding monthly compensation, the company has revised the compensation to an appropriate and fair level reflective of its business performance, accomplishment of medium- and long-term business plans, and social situation, among other factors.

(2) Performance-linked remuneration

Performance-linked remuneration of directors are paid in accordance with the accomplishment of performance indicators designated by the Board of Directors.

Currently, net sales and operating income are used as the indicators to evaluate business growth, market expansion, and improvements in the earning power of our core business. These indicators are given a 50-50 weighting, and the basic amount of the performance-based bonus is calculated by multiplying the rank-based amount with a payout rate that fluctuates between 0% and 200% depending on the level of accomplishment of the performance indicators. The payout rates linked to the indicators are calculated as follows.

- Calculate the standard deviation (σ , sigma) based on the average value of net sales over the past five years.
- Draw a line based on three points: the value of net sales for the relevant fiscal year, which serves as an indicator; the value that is 1σ higher than the first figure, and the value that is 1σ lower than the first figure.
- The payout ratio is determined by plotting the actual net sales of the relevant fiscal year on that line.

The final amount of performance-based bonuses are determined by assessing the status of each director from the perspectives of practicing sustainable management policies and accomplishing medium-term strategies, and adding or subtracting up to 20% to or from the basic amount of the performance-based bonus.

(3) Restricted Stock Compensation System

Daicel introduced Restricted Stock Compensation System to step up value-sharing with shareholders and motivate directors to contribute more to medium- to long-term improvement in corporate value. The stocks cannot be transferred for a period of 30 years, and the Board of Directors decides on an amount for each eligible individual, which is then divided by the stock price at a certain point to calculate the number of shares to be awarded.

* Daicel does not have a system for paying retirement benefits to officers.

■ FY2021/3 Total Compensation

Category	Number of Recipients	Amount (Annual)			
		Cash Compensation		Stock-based Compensation	Total
		Monthly Compensation	Performance-based Bonus		
Directors	12	320 million yen	123 million yen	62 million yen	507 million yen
(Outside Directors)	(6)	(66 million yen)	(–)	(–)	(66 million yen)
Audit & Supervisory Board Members	7	103 million yen	–	–	103 million yen
(Outside Members)	(4)	(39 million yen)	(–)	(–)	(39 million yen)
Total	19	424 million yen	123 million yen	62 million yen	610 million yen

* The above figures for the number of recipients and amount include 2 Directors and 2 Audit & Supervisory Board Member who retired as of the 154rd General Meeting of Shareholders, held on June 19, 2020.

Training for Directors and Senior Management

Directors and Audit & Supervisory Board Members attend external seminars and training sessions in order to acquire the knowledge necessary for the performance of their duties and work tasks in addition to updating their skills. The Company bears the costs of these activities. It also provides annual compliance training for Directors, Audit & Supervisory Board Members, Executive Officers, and other senior employees (excluding outside directors).

In addition, we provide opportunities for Outside Directors to tour our manufacturing sites and receive an explanation of Daicel's business activities during the Board of Directors' meetings so they can better understand our business and utilize their knowledge in discussions with in Board of Director's meeting.

Establishment of the Internal Control System

Daicel develops and manages a system of internal controls under its Basic Policy for Structuring the Internal Control System to ensure the appropriateness of its business operations as stipulated under Japan's Companies Act. Furthermore, Daicel has established the Internal Control Council chaired by senior managing executive officer, who concurrently serves as the general manager of the Corporate Support Headquarters, and comprising general managers of corporate departments as members, to accurately grasp the status of the establishment and management of these systems and to discuss related measures toward ultimately ensuring the effectiveness of internal controls throughout the Group. Standing Audit & Supervisory Board members also attend meetings held by the council as observers. The council provides a report on its activities to the Audit & Supervisory Board and Board of Directors, and the Board of Directors has confirmed that the Basic Policy is being implemented appropriately.

➤ [Basic Policy for Structuring Internal Control Systems\[PDF:48KB\]](#) 

Policy Regarding Cross-Holding of Shares

Policy on Cross-Holding of Shares

We only adhere to a shareholding policy insofar as it is judged to contribute to the improvement of medium- and long-term corporate value from the perspectives of strengthening business relationships, maintaining the stability of transactions with financial institutions, and maintaining or strengthening cooperative business relationships.

When any stocks do not meet the purpose of our possession or are not recognized as being economically rational due to changes in the business environment or other factors, we will reduce them accordingly. As of March 31, 2021, Daicel has cross-holdings of shares in 54 companies (equivalent to 65,864 million yen reported on the balance sheet).

Verification by the Board of Directors

We will periodically verify the appropriateness of the purpose, the quantitative and qualitative benefits arising from business transactions, and the economic rationality of the risks held of all stocks that we possess. We report the results of this verification to the Board of Directors, and the content is examined carefully.

As a result of the verifications, in FY2021/3 we sold all our shareholding in one listed stock and part of our shareholding in another listed stock. We also sold all our shareholding in one unlisted stock.

Standards Regarding the Exercise of Voting Rights Associated with Cross-shareholdings

Regarding voting rights related to strategic shareholdings, we exercise those rights with due consideration for avoiding any serious impacts on Daicel and our Group's purposes of possession, contributing to sustainable growth and enhancing mid- and long-term corporate value of the investee company, and contributing to the common benefits of shareholders.

■ Status of Cross-Shareholdings (Top 10 Stocks) (as of March 31, 2021)

Stock	No. of Shares	Amount Reported in Balance Sheet at Fiscal Year-end (Millions of yen)	Purpose of Shareholding
FUJIFILM Holdings Corporation	5,809,249	38,172	Given our business transactions involving cellulose acetate and other products, we have continuously held these shares to maintain and strengthen our favorable relationship with the company.
Kansai Paint Co., Ltd.	2,656,709	7,850	Given our business transactions involving organic chemicals, we have continuously held these shares to maintain and strengthen our favorable relationship with the company. However, we are considering reducing our shareholding as a result of deliberations.

DAIKIN INDUSTRIES, LTD.	156,000	3,481	We have continuously held the shares to maintain and strengthen our favorable relationship with the company in pursuing joint development of products and other activities.
Japan Tobacco Inc.	1,500,000	3,187	Given our business transactions involving acetate tow and other products, we have continuously held these shares to maintain and strengthen our favorable relationship with the company.
NAGASE & CO., LTD.	1,197,000	2,069	Given our business transactions involving organic chemicals, we have continuously held these shares to maintain and strengthen our favorable relationship with the company.
Tokyo Ohka Kogyo Co., Ltd.	271,100	1,876	Given our business transactions involving organic chemicals, we have continuously held these shares to maintain and strengthen our favorable relationship with the company.
Denka Company Limited	322,600	1,425	Given our business transactions involving organic chemicals, we have continuously held these shares to maintain and strengthen our favorable relationship with the company.
Mitsubishi UFJ Financial Group, Inc.	1,963,580	1,161	We have continuously held these shares to maintain and strengthen our favorable relationship with the company to ensure stable financial and settlement operations for the Daicel Group.
Toyoda Gosei Co., Ltd.	369,700	1,075	Given our business transactions involving automobile airbag inflators and other products, we have continuously held these shares to maintain and strengthen our favorable relationship with the company.
Nihon Plast Co., Ltd.	1,000,000	619	Given our business transactions involving automobile airbag inflators and other products, we have continuously held these shares to maintain and strengthen our favorable relationship with the company.

Communication with Shareholders and Investors

Appropriate Information Disclosure and Constructive Dialogue

Daicel encourages fair evaluation of its corporate value by following its disclosure policy to foster accurate understanding of the Company among its stakeholders, including shareholders and investors. With the aim of building relationships of trust with all its stakeholders, Daicel has opted for a basic policy of disclosing corporate information in a timely, impartial, accurate, and proactive manner on an ongoing basis. We also carry out IR activities to engage in dialogue with our shareholders and investors to further enhance the company's value.

[> Our disclosure policy, including our basic policy on information disclosure](#)

General Meeting of Shareholders

We have considered the Annual General Meeting of Shareholders as a valuable opportunity to engage with our shareholders. Daicel posts the convocation notice for its Annual General Meeting of Shareholders on its website prior to distributing it by postal mail, aiming to provide shareholders with sufficient time to examine the agenda items. Moreover, to ensure that as many shareholders as possible to exercise their voting rights, we offer voting alternatives via postal mail or the Internet, using computers, smartphones and other devices, for those who are unable to attend the meeting. To facilitate their further understanding of initiatives of the Daicel Group, we are striving to provide easy-to-understand answers to questions voiced by shareholders.

The annual General Meeting of Shareholders was held on June 19, 2020, and an extraordinary General Meeting of Shareholders was held on August 7, 2020, amid the COVID-19 pandemic. During the meetings, we asked shareholders to wear masks and placed alcohol-based disinfectants near the reception desk and contactless thermometers near the entrance as measures to prevent infection. Inside the buildings, we seated shareholders at a greater distance from each other compared to past meetings, and staff disinfected the microphones after use by each shareholder. Daicel's directors and organizing staff also checked their temperatures and physical condition prior to participating and wore masks during the meetings.

We will continue holding the General Meeting of Shareholders with due consideration for safety and thoroughly implementing measures to prevent infection.

IR Activities

In line with the aforementioned basic policy on Information disclosure, Daicel adopts a proactive approach toward its IR activities.

By holding quarterly results briefings as well as individual interviews, and interviews at conferences sponsored by securities companies, the Company strives to promote communication, aspiring to foster better understanding of the organization among institutional investors.

In FY2021/3, we held a briefing on the Mid-Term Management Strategy and a strategy briefing following the transformation of Polyplastics Co., Ltd. into a wholly owned subsidiary, and the president and CEO offered an explanation to investors. In view of the COVID-19 pandemic, these IR events, including the results briefings, were held online by means of teleconferencing to allow for the participation of as many investors as possible.

With respect to individual investors, we distributed a video explaining our business through securities companies, in addition to providing information via our corporate website and shareholder newsletters. Furthermore, we conducted an online survey of 2,000 individual investors to develop a deeper understanding of the Daicel Group and collect feedback.

[> For Investors](#)

■ FY2021/3 Activities

Activity	Frequency	Outline
Financial briefing sessions for analysts and institutional investors	4	Held on a quarterly basis; the interim was presented by the president and CEO, while the previous period, the first and third quarter were explained via conference calls hosted by the Investor Relations Department
Strategy briefing for analysts and institutional investors	3	<p>Held a briefing (online conference with the president and CEO) on the new long-term vision “DAICEL VISION 4.0” and the new mid-term strategy “Accelerate 2025” on June 10, 2020</p> <p>Held a briefing on strategy briefing following the transformation of Polyplastics Co., Ltd. into a wholly owned subsidiary on July 20, 2021 (presentation by the president and CEO in a conference call)</p> <p>Held a briefing on the medium-term management strategy “Accelerate 2025-II” on February 24, 2021 (presentation by the president through a face-to-face meeting and online conference)</p>
Individual interviews with analysts and institutional investors	Approx. 200 interviews	Conducted online conferences and teleconferencing with analysts and institutional investors
Small meetings with domestic institutional investors	4	Held an online meeting with domestic institutional investors by the president and CEO
Participation in conferences for overseas investors	2	Participated in a conference in Japan for overseas investors and held an online conference presented by the officer in charge of IR
Distribution of video on Daicel’s business for individual investors	1	Delivered a video on Daicel’s business operations to individual investors through the marketing channel of securities companies

Corporate Compliance

Basic Approach

Corporate ethics (compliance) constitutes one of the foundations upon which we pursue sustainable management. The Daicel Group’s corporate compliance activities are synonymous with practicing the [Daicel Group Conduct Policy](#) , which is based on our [Basic Philosophy](#) of being “the company making lives better by co-creating value,” as well as each Group company’s Code of Conduct, which have been established to embody the policy. We also believe that instilling a sense of corporate compliance in every employee is just as vital for corporate management. Accordingly, each division and Group company formulates an annual corporate compliance activity plan in a systematic Group-wide effort to promote corporate compliance activities.

Conduct Policy : Principles and standard of judgment for achieving the Basic Philosophy (common Group policy)

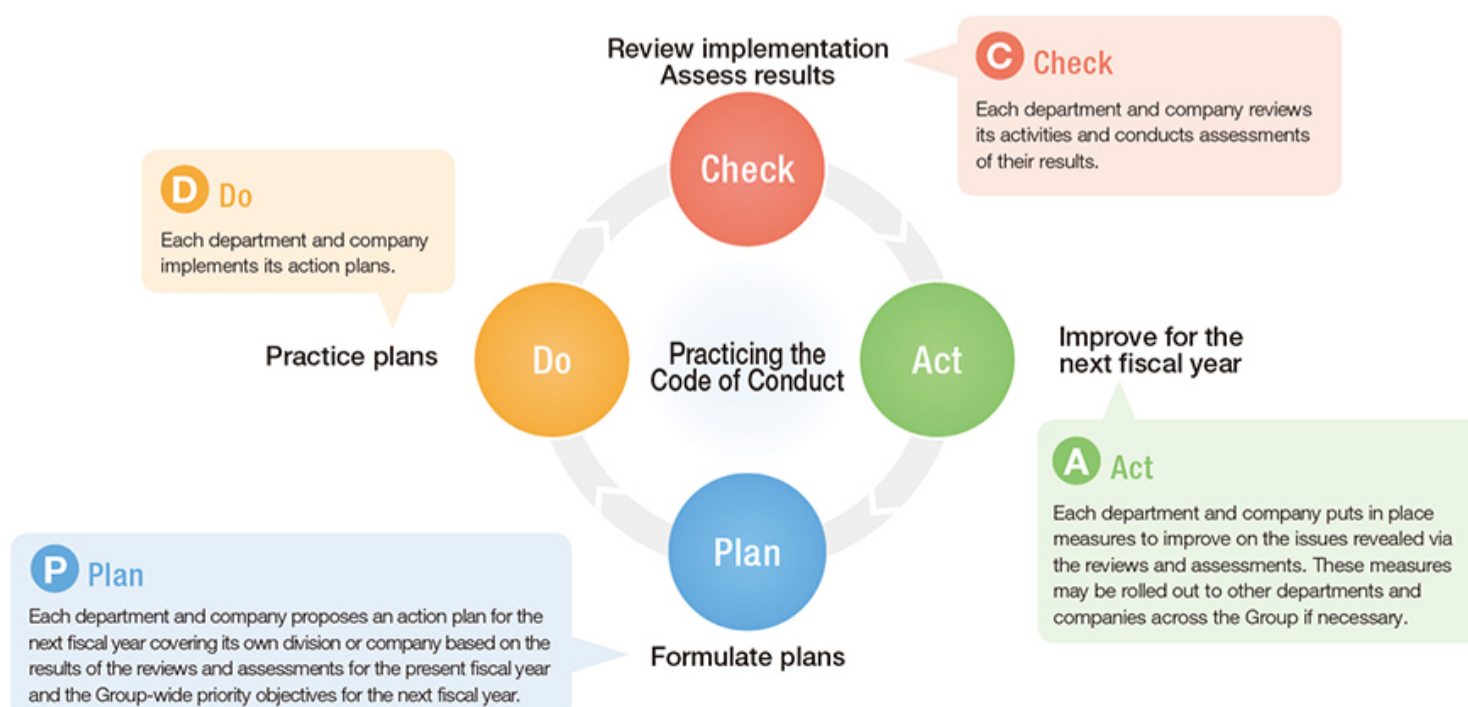
Code of Conduct : Specific code for realizing the Conduct Policy
[Daicel Code of Conduct](#)

Corporate Compliance Management System

To promote corporate compliance activities, the Daicel Group established the Corporate Compliance Management Regulations and the Corporate Compliance Management System based on a check-act-plan-do (CAPD) cycle* to drive continuous improvement and development of the activities. The Daicel Group believes that corporate compliance should not be limited to the activities of certain individuals or organizations but should be practiced by all Group employees.

* Instead of a plan-do-check-act (PDCA) cycle, the more widely known approach to continuous improvement, Daicel has adopted a CAPD improvement cycle to avoid the risk of overlooking crucial facts and realities that often lie hidden in the initial planning stage.

Corporate Compliance Management System Based on the CAPD Cycle



Corporate Compliance Program Promotion System

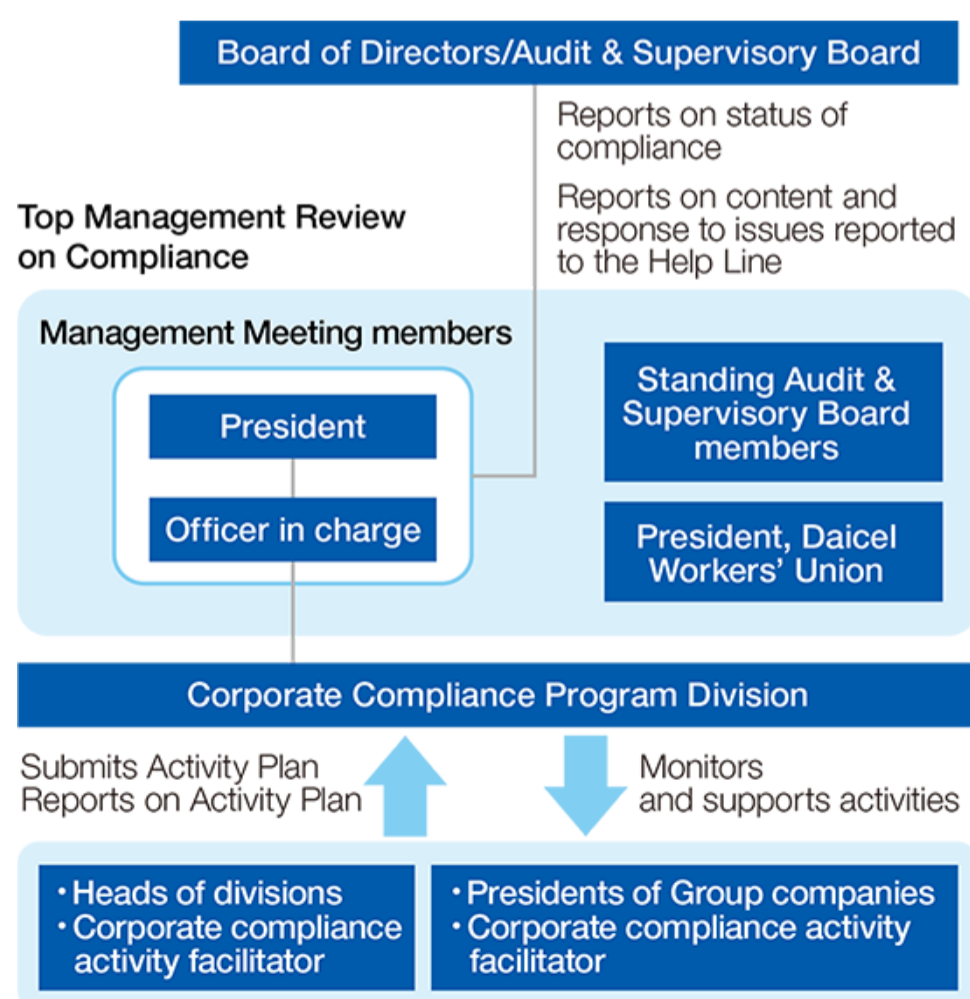
Daicel has established a Corporate Compliance Program Division under the responsibility of a Senior Managing Executive Officers to promote its corporate compliance activities across the entire Group. The head of each Daicel division and Group company appoints a compliance activity facilitator to spearhead corporate compliance activities. Each organization submits a report on the status of corporate compliance and outstanding issues to the Corporate Compliance Program Division at the end of the fiscal year. The division compiles these reports and presents them at the Top Management Review on corporate compliance, which is attended by the president and other members of the management team, Standing Audit & Supervisory Board members, and the president of the Daicel workers union, to discuss related issues and objectives for the next fiscal year. The Corporate Compliance Program Division reports the result of the discussion to the Board of Directors, which deliberates on key objectives for the next fiscal year. Following approval by the Board of Directors, the Corporate Compliance Program Division presents the priority objectives to each organization, which then formulates activity plans in accordance with the priority objectives.

The Corporate Compliance Program Division exchanges views with each organization and conducts hearings to offer advice on the status of their respective activities on corporate compliance. In addition to being important from an internal control perspective, Daicel views these exchanges as an opportunity for dialogue with the aim of improving efforts for promoting corporate compliance activities, and members of the relevant divisions are also asked to attend as needed. In the event that the Corporate Compliance Program Division identifies any issues that may significantly impact corporate management from reports submitted by each organization or through the exchange of views, it will confirm the facts and promptly report to the corporate compliance officer and the Standing Audit & Supervisory Board members to discuss how to respond.

In addition, the Corporate Compliance Program Division submits a periodic report about four times a year to the Board of Directors and the Audit & Supervisory Board. This report summarizes the reports received and consultations undertaken through the Compliance Help Line System, which was set up to identify and adjust for management risks at an early stage, as well as the status of response and results.

✓ Compliance Help Line System (Internal Whistleblowing System)

■ Corporate Compliance Program Promotion System



Legal Compliance System

We have established the Legal Compliance System, in which each supervisory division responsible for applicable laws and regulations ensures compliance with and manages information on the latest legal developments. We seek to ensure thorough legal compliance under the system by having 13 corporate departments, including the Legal Group, take responsibility as the designated legal compliance divisions and provide them with information on revisions to laws, regulations, and guidelines as well as educational materials. When new laws and regulations are established, the Legal Group temporarily takes on the role of a legal compliance division to confirm content and other important matters before designating the appropriate legal compliance division.

Initiatives Pursued by Daicel's Committees

To address specific compliance issues, such as export management and the protection of personal information, individual committees are established in accordance with each set of relevant rules and regulations. These committees consider pertinent issues and help resolve them in an effort to ensure robust compliance.

■ Committees (Excerpt)

Committees	Regulations	Frequency of Meetings	Members	Purpose
Risk Management Committee	Risk Management Regulations	Once per year	Chairman: Senior Managing Executive Officers Members: <ul style="list-style-type: none"> Heads of corporate departments 	To discuss and approve issues and countermeasures related to promoting risk management of the entire Group
Information Disclosure Committee	Regulations on Information Disclosure	As needed	Chairman: President Vice Chairman: Senior Managing Executive Officers Members: <ul style="list-style-type: none"> Management and heads of other related divisions 	To discuss and determine the concrete details, schedule, and methods of information disclosure and to discuss information that may be required for future disclosure from the perspective of crisis management

Committees	Regulations	Frequency of Meetings	Members	Purpose
Export Controls Committee	Regulations on Export Controls	Once per year	Chairman: Senior Managing Executive Officers Members: <ul style="list-style-type: none"> Head of Production Management Headquarters Head of Corporate Sustainability Head of Responsible Care Head of Corporate Compliance Program Head of Legal Group 	To establish and thoroughly integrate an internal management system across the Company to ensure there are no illegal export activities or provision of goods and technologies under security trade-related laws and regulations for maintaining international peace and security
Personal Information Protection Committee	Regulations on Personal Information Protection	As needed	Chairman: Senior Managing Executive Officers Members: <ul style="list-style-type: none"> Head of Corporate Compliance Program Head of Personnel Group Head of Digital Strategy Division Head of Investor Relations & Corporate Communications Head of Legal Group 	To ensure the proper handling of personal information based on the relevant laws and regulations such as the Act on the Protection of Personal Information

Fair Business Practices

The Daicel Group Conduct Policy declares our determination to conduct honest trade in accordance with the basic principles of fair and free competition. Moreover, the Daicel Code of Conduct provides concrete rules concerning compliance with antitrust laws (6-1), highly transparent political and governmental relationships (6-4), implementation of fair and honest procurement transactions (6-5), business entertainment, and other related matters (6-6).

Each Group company has established similar codes of conduct and ensures thorough understanding by all employees. All Daicel Group employees are determined to act in line with the spirit of this policy and live up to the code in their day-to-day operations. In FY2021/3, there were no reports of anticompetitive behavior, serious violations of laws or regulations governing corruption, bribery or other illegal activities, or fines or monetary penalties.

Compliance of Antitrust Laws

In its business activities, the Daicel Group seeks to maintain fair and free competition through compliance with the Antimonopoly Act (Act on Prohibition of Private Monopolization and Maintenance of Fair Trade), the Subcontract Act (Act against Delay in Payment of Subcontract Proceeds, Etc. to Subcontractors) as well as laws, regulations, and guidelines on anticompetitive behavior stipulated by each country. Daicel has formulated a compliance manual for the Antimonopoly Act, the “DOs & DON'Ts” practical guide on U.S. antimonopoly law, and a practical guide on EU antimonopoly law. We concurrently seek to raise employee awareness through rank-based group training and e-learning. For employees who are to be transferred outside of Japan, we educate them on local laws and regulations as well as other important issues. We provide education catered to the needs of each company by organizing e-learning for the prevention of anticompetitive behavior for domestic Group companies, as mentioned above, while also providing English language educational materials and confirmation tests for overseas Group companies.

✓ Education and Training Programs

Prevention of Bribery and Corruption

The Daicel Group has signed the United Nations Global Compact and is determined to prevent all forms of corruption, including bribery (formulation of a basic Group policy on preventing corruption is underway as of August 31, 2021). Regardless of where we operate, we do not engage in any actions that may be perceived as bribery, and we maintain highly transparent relationships with politicians, governments (public servants), business partners, and all other stakeholders. As a general rule, we prohibit the giving and accepting of gifts, meals, and entertainment to or from business partners, except when it is deemed to be within the scope of sound business practices and social norms and is approved by the relevant division head.

Daicel educates its employees on preventing corruption through rank-based group training and e-learning. For employees who are to be transferred outside of Japan, we provide training on the Prevention of Bribery of Foreign Public Officials under the Unfair Competition Prevention Act, and precautions regarding local laws and regulations, including the extraterritorial reach of the US Foreign Corrupt Practices Act. We provide education catered to the needs of each company by organizing e-learning for the prevention of anticompetitive behavior for domestic Group companies, as mentioned above, while providing English language educational materials and confirmation tests for overseas Group companies.

Furthermore, the internal whistleblowing system also covers corruption and bribery, and suspicious cases are investigated and properly addressed under the system.

[> signing the United Nations Global Compact](#)

Information Management

The Daicel Group Conduct Policy declares our determination to properly manage corporate assets and information. Moreover, the Daicel Code of Conduct lays out rules for the handling of confidential information (8-2), control of personal information (8-4), and appropriate use of information systems (8-5). Accordingly, we practice proper and appropriate information management by formulating the Information Management Regulations as a basic guide for handling information.

In addition to defining the responsibilities of officers and employees in managing information, the regulations define the roles played by the heads of SBUs, companies, corporate departments and sites with regard to constructing and managing the information management system of their respective areas of responsibility as the person responsible for information management.

We have formulated the Confidential Information Management Regulations to maintain and appropriately manage confidential information while preventing leaks. The regulations lay out the basics of handling confidential information associated with Daicel's business activities, including technical, sales, management and personal information, and are being implemented under the leadership of the person responsible for information management.

[> Personal Data Protection Policy](#)

[> Information Security](#)

Tax Policy

Regardless of where we conduct business, the Daicel Group strives not only to comply with applicable laws and regulations, social norms, and internal regulations but also to act with social decency so as to earn the trust of society. When dealing with tax matters, we will thoroughly investigate tax risks associated with international business transactions, including transfer pricing, to ensure that our tax payments are made in a legally compliant and appropriate manner.

Priority Objectives and Results of Corporate Compliance Activities

Based on issues identified in FY2020/3, we set the Group-wide priority objectives for FY2021/3 as follows.

FY2021/3 Priority Objectives of the Daicel Group's Corporate Compliance Activities

① Early detection of workplace problems and nip them in the bud

For that:

② Let's create a workplace where all members can "Visualize, Voice, Listen and Respond"

③ Spreading awareness of Help Line (how to use, confidentiality, recovery from disadvantages and other)

As a means for quickly resolving the problems and issues that arise at each workplace, we have designated these priority objectives: understanding and sharing the content, status of progress, and issues related to work among all members ("Visualize"); speaking freely ("Voice"); and listening to others' opinions ("Listen and Respond"). The Corporate Compliance Program Division explained the purpose and background of these objectives to all employees and organizations. In response, each workplace created its own corporate compliance activity plan. To check the progress of these plans and exchange opinions on issues specific to each division and company, the Corporate Compliance Program Division held online and in-person meetings to exchange views with all Daicel divisions and organizations (including those outside of Japan) to assist them in running CAPD cycles for their corporate compliance activities.

Summary of Activities in FY2021/3

- Due to the special circumstances presented by the COVID-19 pandemic, a sustained effort will be needed to create workplaces where all members can "Visualize," "Voice," and "Listen and Respond."
- Efforts are underway to raise awareness of the Help Line System through various training sessions.

Priority Objectives for FY2022/3

Although the objectives we set have turned out to be similar to our goals for FY2021/3, they have taken on new significance amid ongoing changes in the internal and external environments. While handing down our valuable corporate culture cultivated over the years, we will ask each division to formulate their activity plans after carefully considering concrete initiatives for changing their approach and methods to reinforce the organization.

FY2022/3 Priority Objectives of the Daicel Group's Corporate Compliance Activities

- Detect workplace problems at an early stage to nip them in the bud
The effects of the COVID-19 pandemic have made it particularly difficult to visualize prevailing circumstances, which may lead to the risk of delays in detecting problems. We believe that early detection and early response is fundamental for all problem-solving and will consider methods for putting these into concrete practice.
- Creation of workplaces where all members can “Visualize, Voice, Listen and Respond.”
The effects of the COVID-19 pandemic have significantly reduced opportunities for communication among employees, and we expect this situation to continue for some time. The current circumstances have presented the major issue of finding ways to maintain a vibrant organizational culture that enables us to practice “Visualize, Voice, Listen and Respond.” Each organization will find creative ways to develop the necessary methods.

Initiatives for the Daicel Group Compliance Enhancement Period

In addition to the initiatives planned by each workplace, we also designated every August and September as the Daicel Group Compliance Enhancement Period. The following initiatives were carried out by Daicel and its Group companies (including those outside of Japan) in FY2021/3.

1. Small Group Discussions

We held small group discussions on the examples covering the issues that require the attention of all our Group employees.

We examined issues that require our attention by discussing the causes of their occurrence, countermeasures, and similar experiences to recognize and share diverse opinions while also developing an understanding of how important it is for us to “Visualize” and “Voice.”

① Harassment experienced while working at home

As the proportion of teleworking increases in response to the COVID-19 pandemic, we created sample cases and held discussions for renewing employee understanding of appropriate methods of guidance and the importance of acknowledging another person’s perspective.

② Falsification of data

We discussed the causes and environment that give rise to data tampering based on cases at other companies and about ways to prevent such falsification.

2. Educational Sessions

We conducted e-learning on compliance focused on the Daicel Group Conduct Policy revised in April 2020, the Daicel Code of Conduct, including clauses on prevention of corruption and anticompetitive behavior, and the Compliance Help Line System Operation Regulations. The session was attended by 4,992 employees of domestic group companies (attendance ratio: 99.6%).

3. Senryu* Contest

We encouraged our Group employees in Japan to submit their own senryu poem on compliance, then selected excellent examples for prizes from 715 submissions. The contest provided employees with an outstanding opportunity to reflect on compliance.

* Senryu: a humorous seventeen-syllable poem

Education and Training Programs

Daicel systematically provides corporate compliance training tailored to each position and role for new graduate recruits, recently promoted employees, managers, directors, presidents of Group companies, employees posted to outside of Japan Group companies, and others. We also organize seminars on specific themes in response to requests from individual divisions and Group companies.

In addition to the following activities, we uploaded a variety of compliance education materials each month to the intranet as we had in the previous fiscal year. They included the latest news related to compliance, case studies on facilitating group discussions, everyday examples of potential compliance violations depicted in four-panel cartoons, and compliance quizzes, which were effectively utilized during workplace classes both inside and outside Japan.

■ Group Training Programs in FY2021/3

Name	Target	Content	Number of Participants
Rank-based Training	New recruits	General course on corporate compliance (lectures, group discussions) (Lectures and Group discussions on topics including prevention of corruption and anticompetitive behavior)	68
	Newly appointed mid-level staff, Grade S2 & S3		102
	Newly appointed senior staff, Grade S4		77
	Newly appointed senior staff, Grade S5		78
	Newly appointed managers		35
Engineering compliance Training	Employees enrolled in our engineer development program	General course on engineering compliance (lectures, group discussions)	44

■ Other Training Programs in FY2021/3

Name	Target	Content
Training for Expatriate Employees	Employees posted outside of Japan	Competition law, bribery, discrimination, harassment, prevention of misconduct
Training for Directors	Daicel directors, presidents of domestic Group companies	Respect for human rights

Respect for Intellectual Property Rights

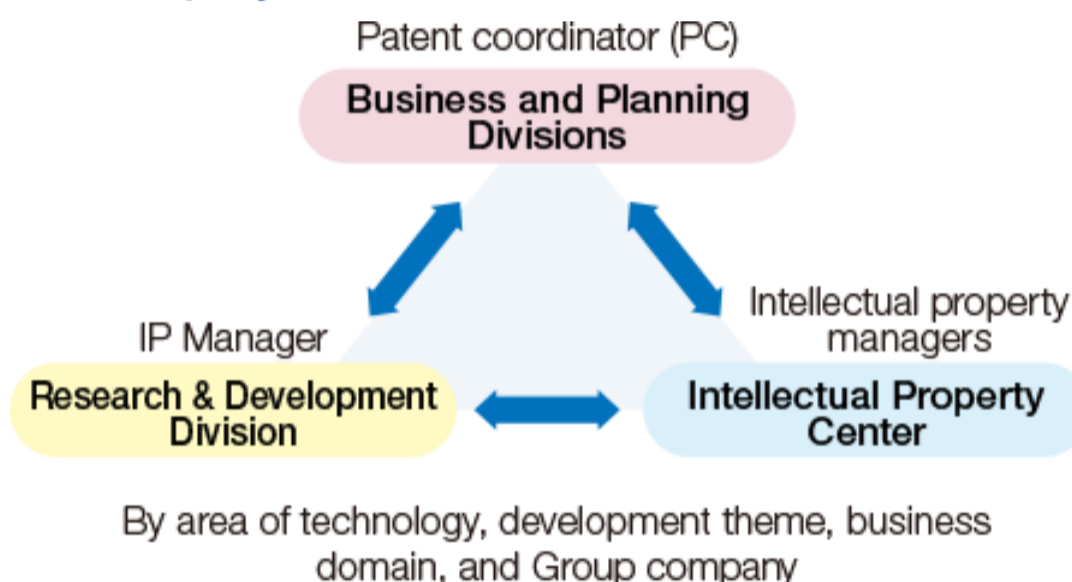
Basic Approach to Intellectual Property

Based on Code of Conduct of Daicel Corporation(8-3 Maintenance and protection of intellectual property (IP) rights), the Daicel Group respects intellectual property rights held by third parties, recognizes that the intellectual property rights held by the Company (patent rights, utility model rights, trademark rights, design rights, etc.) are important assets, and strives to maintain and protect those rights.

Internal System related to Intellectual Property

Under the slogan of “Proactive IP,” the Intellectual Property Center is engaged in activities for strengthening Daicel Group’s businesses by effectively using intellectual property through collaboration among the Business and, Planning Divisions, the Research & Development Division, and Intellectual Property Center divisions.

Internal System for Intellectual Property



Approximately 35 intellectual property activity teams in Daicel and its group companies are involved in the certification of inventions, decision-making on whether to file a patent application for an invention or keep it as confidential know-how, patenting, judgments on the necessity of patent maintenance, patent exploitation, examination and avoidance of possible infringement of other companies’ patents, and response to patent litigation.

Initiatives on Intellectual Property Management

Applying Patent Analysis to Operational Systems

Daicel conducts analysis and confirmation of patents when developing new businesses or products and while using the Patent Analysis and Confirmation System (PACS). In this process, we seek to prevent infringing on the intellectual property rights of third parties and to efficiently ensure reliable promotion of new technological developments that drive the success of the Company.

Educational System for In-house Engineers

The intellectual property Center and Human Resources Division collaborate under the human resource development program to enhance literacy on intellectual property among engineers.

- (1) Training for new recruits
- (2) Seminars for mid-level supervisors
- (3) Training for newly appointed managers
- (4) e-learning (patent search, analytical tools, patent seminars, and other programs)
- (5) Level III qualification for Certified Specialist of Intellectual Property Management was added to the requirement for promotion to technical manager.

Specific Examples of Activities Related to Intellectual Property

Participation in WIPO Green

The Daicel Group has registered its environment-related technologies with “WIPO GREEN,” an environment-related technology exchange platform operated by the World Intellectual Property Organization (WIPO), which is a specialized agency of the United Nations, aiming to contribute to “Sustainable Development Goals (SDGs).”

➤ [Participation in WIPO GREEN \(press release\)](#)

➤ [Details on Activities Related to Intellectual Property](#)

Compliance Help Line System (Internal Whistleblower System)

In line with the objectives of the Whistleblower Protection Act, Daicel has set up the Compliance Help Line System, through which employees can report compliance-related issues and receive consultation if they are unable to do so using the regular reporting line. These contact points have been set up at all Group companies both inside and outside Japan. We have sought to facilitate reports and consultations by employees by also providing a separate help line that can be used by officers and employees at domestic and overseas Group companies for reporting and consulting with the parent company (Daicel Corporation). In addition, we have made it possible for persons outside the Company to consult us on compliance issues via our corporate website.

These help lines have been set up to prevent and promote early detection of illegal acts and scandals. The user can report or seek consultation on any issue that violates the Daicel Group Conduct Policy. The contact points are available in the language of each region, 24 hours a day.

In operating the Compliance Help Line, we seek to protect whistleblowers by laying down relevant rules in the Corporate Compliance Management Regulations and Compliance Help Line Operation Regulations. These rules include: (1) protecting the personal information and privacy of individuals who report to or consult the help line; (2) prohibiting adverse treatment in response to having contacted the help line; and (3) providing feedback on the issue.

The Corporate Compliance Program Division confirms the facts of the report, and in the event that it identifies a problem, it provides the necessary response and follow-up, such as implementing corrective actions and formulating preventive measures.

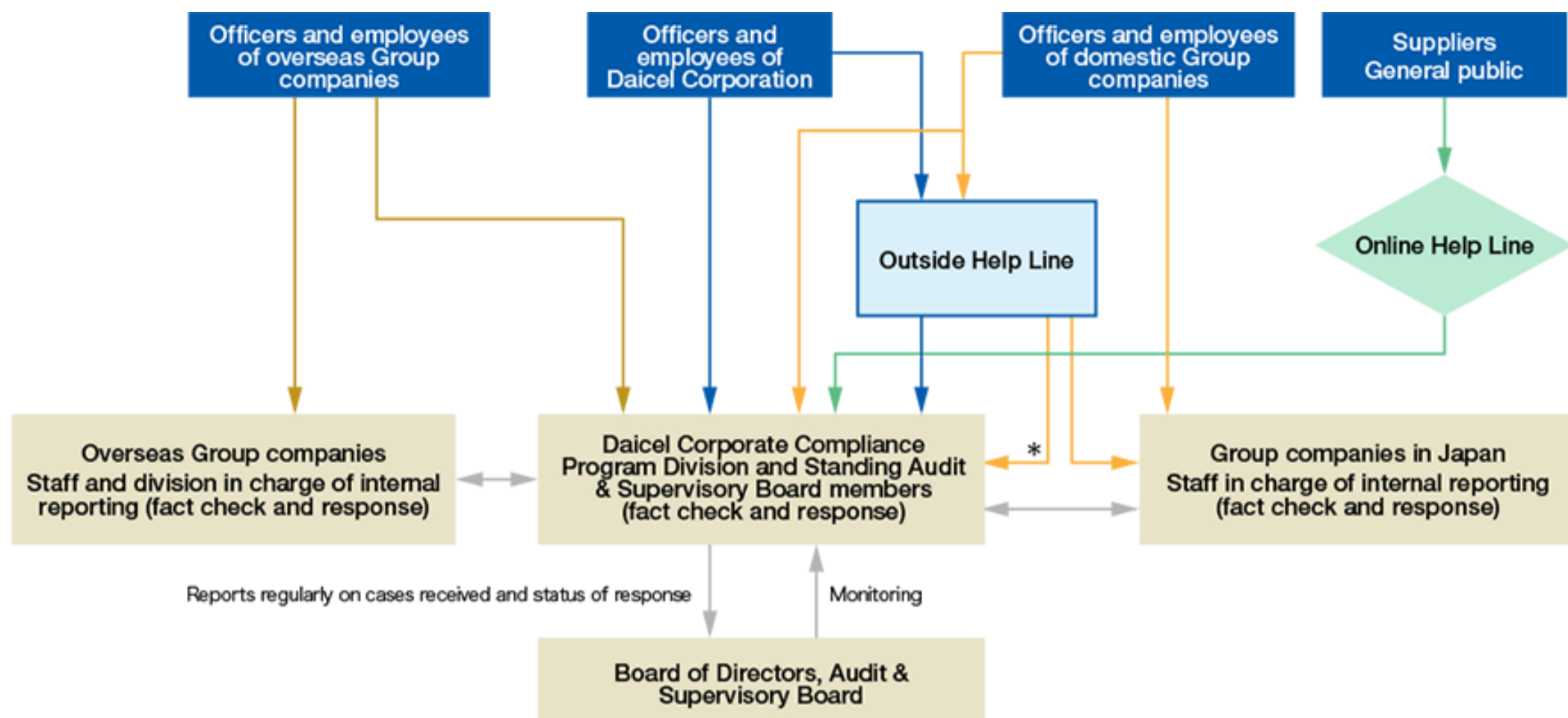
Reports and consultations received via e-mail or the corporate website are forwarded to Standing Audit & Supervisory Board members. Reports and consultations received by Group companies are handled by the respective company, with support from the Corporate Compliance Program Division where needed. Group companies submit a summary of cases handled to the Corporate Compliance Program Division. The division provides a regular report (around four times a year) to the Board of Directors and the Audit & Supervisory Board with respect to the status of response and results of reports and consultations received by the Group as a whole.

We seek to raise awareness of the reporting and consultation system on a regular basis at each workplace and by providing rank-based training and e-learning during the Daicel Group Compliance Enforcement Period.

In July 2020, the Daicel Group's Compliance Help Line was registered under the Japanese Consumer Affairs Agency's certification program for whistleblowing compliance management systems (self-adaptation declaration registration system). There were no cases of non-compliance in FY2021/3 that significantly affected management.

Target user	: All employees (including Group employees), individuals outside the Company (customers, suppliers, business partners, retired employees, members of the general public, and others)
Reporting content	: Matters that may be in violation of the Daicel Group Conduct Policy (Illegal acts, anticompetitive behavior, corruption, bribery, human rights violations, harassment, employment environment, environmental pollution, and other compliance violations)
Contact points	: ① Contact points at Daicel Corporation ② Contact points at Group companies ③ External contact points (consigned to specialized external institutions) ④ Contact points on the corporate website

■ Process Flow of Compliance Help Line System (Internal Whistleblower System)



■ Number of Reports and Consultations

(Reported cases including those which were not confirmed as fact)

	2018/3	2019/3	2020/3	2021/3
Reports and consultations	30 (13)	52 (35)	51 (39)	54 (25)
Including cases that significantly affected management	0 (0)	0 (0)	0 (0)	0 (0)
Not applicable	1 (0)	0 (0)	0 (0)	0 (0)
Total	31 (13)	52 (35)	51 (39)	54 (25)

* The total number of cases indicates ones reported to the Corporate Compliance Program Division from individuals across the Group.

* Figures in brackets represent the numbers of reports and consultations received from Group companies outside Japan.

➤ [Registration with the Consumer Affairs Agency's certification program for whistleblowing compliance management systems \(self-adaptation declaration registration system\) \(Japanese text only\).](#)

Daicel Group Conduct Policy

We, the Daicel Group, have established the following Conduct Policy in order to realize our Basic Philosophy. Every member of the Daicel Group shall fully understand and voluntarily consider this Conduct Policy and shall put it into practice in a tangible way through their daily activities.

1. We shall not only comply with all laws and regulations but also act with high ethical standards and sound judgment.
2. We shall contribute to the development of society as good corporate citizens.
3. We shall offer safe, high-quality products and services that satisfy and gain the trust of our customers.
4. We shall contribute to the development of local communities by complying with international rules and each country's laws and regulations and by respecting local cultures and customs.
5. We shall willingly and justly disclose reliable corporate information.
6. We shall conduct honest trade in accordance with the basic principles of fair and free competition.
7. We shall work positively to conserve the natural environment and to ensure safety.
8. We shall properly manage corporate assets and information.
9. We shall respect the diversity, personality and individuality of every member connected to Daicel Group and shall contribute to realize a healthy and sound society that is free from discrimination and harassment.

Daicel Code of Conduct

Introduction

This Code of Conduct gives shape to the Daicel Group Conduct Policy and clearly defines the code for carrying out corporate affairs for everyone working at Daicel.

It is not just a matter of having a thorough understanding of the Code of Conduct. Each and every one of us has to actively put this Code into practice in our own everyday activities to create a vibrant corporate culture within the Company and to create a company that gains society's trust.

However, the items stated in the Code of Conduct do not cover all cases. It is important for everyone to carry out their daily activities while giving full consideration to the Daicel Group Conduct Policy.

1. We shall not only comply with all laws and regulations but also act with high ethical standards and sound judgment.

1-1 Response with integrity to stakeholders

We shall respond with integrity, respect and gratitude to all people connected to Daicel - customers, shareholders, business partners, employees and local society.

1-2 Compliance with laws and ethics

Rigorously complying with legal rules and regulations, whether within or outside Japan, we shall act to be constantly trusted and respected by all in society by using sound social judgment in the performance of our duties.

1-3 Maintenance of effective internal systems and training

In order to further ensure that laws and corporate ethics are complied with, we shall constantly review and improve our internal rules and regulations to strengthen effective internal systems and shall thoroughly familiarize the entire organization through training sessions.

1-4 Response to antisocial influences

We, in cooperation with the police, industrial associations and regional entities, shall take a firm stand against anti-social influences and/or organizations that disturb civil order and safety.

We shall have no connections with them in any way, either directly or indirectly.

1-5 Report and whistleblowing

In case we recognize behavior that does not comply with this Code of Conduct, in order to resolve such behavior, we will immediately report to a superior or, when it is difficult to do so, report by utilizing the whistleblowing system such as the Compliance Help-Line System.

2. We shall contribute to the development of society as good corporate citizens.

2-1 Implementation of social contribution activities

We shall make social contributions from the viewpoint of trying to coexist in mutual prosperity with society through corporate activities, through cultural and sporting events, as well as by assisting in rescue and relief operations in the event of an emergency such as an accident or natural disaster.

2-2 Implementation of communication with society

We shall strive to promote the understanding of our corporate activities by active communication with society.

3. We shall offer safe, high-quality products and services that satisfy and gain the trust of our customers.

3-1 Offer of products and services that are of use to society

We shall always listen to the opinions of each of our customers, such as consumers and users and shall develop and offer products and/or services that are of use to society. We shall thereby contribute significantly to the realization of a society that is affluent and pleasant to live in.

3-2 Safety and quality assurances of products and services

With respect to the supply of our products and/or services, in compliance with relevant laws and regulations, we shall be aware that safety and quality assurances are a corporate social responsibility. We shall strive for those assurances throughout the entire product life cycle, from product development and manufacture to distribution, sales and use.

3-3 Provision of product quality information

With respect to the supply of our products and/or services, we shall provide easily understandable product quality information, guides to safe usage, etc., as appropriate.

3-4 Response to incidents involving products

In the event of a safety or quality problem arising with a product supplied to a customer, we shall promptly respond with integrity to contain and prevent a recurrence of the problem.

4. We shall contribute to the development of local communities by complying with international rules and each country's laws and regulations and by respecting local cultures and customs.

4-1 Compliance with international rules and the laws of each country

In conducting our international business affairs, we shall fully look into and comply with international rules and the laws of each country.

4-2 Coexistence with and contribution to the development of society at national and local levels

We shall respect cultures and customs in order to coexist with the national and local societies in which we operate our businesses, and contribute to their development. In addition, we shall integrate with national and local society by means of local procurement and employment.

5. We shall willingly and justly disclose reliable corporate information.

5-1 Disclosure of corporate information

We shall actively disclose to actors in the financial markets, such as shareholders and investors, information concerning our corporate finances and the status of our business activities in an appropriate, timely and clear manner.

5-2 Implementation of fair accounting procedures

We shall accurately and properly record and store information on our corporate trading, asset and expense status by using fair accounting procedures based on legal and generally accepted accounting standards.

5-3 Prohibition of insider trading

We shall not buy or sell securities such as stocks or corporate bonds for the purpose of making personal profit, etc., by using undisclosed important information gained through business activities.

6. We shall conduct honest trade in accordance with the basic principles of fair and free competition.

6-1 Compliance with competition laws

We shall not act in breach of competition laws such as antitrust laws and shall compete equitably and freely.

6-2 Compliance with laws relating to imports/exports

As an importer and exporter of technology and products, we shall examine and comply with the laws and regulations relating to imports/exports. The export of our technology and products shall in no way be illegally connected to the development and manufacture of weapons, munitions or narcotics.

6-3 Advertisements

We shall advertise on an equitable basis without defaming or denigrating other companies or their products and without using socially discriminatory language.

6-4 Highly transparent political and governmental relationships

We shall not engage in behavior that could be mistaken as corrupt but shall foster highly transparent relationships with government agencies and political bodies, whether in local or overseas activities.

6-5 Implementation of fair and honest procurement transactions

With respect to procurement transactions, we shall comply with the Corporate Procurement Transaction Guidelines and CSR Purchasing Guidelines, shall

conduct business fairly and honestly based on economically rational measures and shall not engage in the pursuit of personal profit.

6-6 Business entertainment, etc.

With respect to entertainment and gifts given to or received from clients, we shall act with a clear distinction between public and private matters within the scope of sound commercial practice and judgment.

7. We shall work positively to conserve the natural environment and to ensure safety.

7-1 Reduction of environmental impact

We shall address the reduction of environmental impact by such measures as preventing global warming through reduced energy consumption, activities aimed at saving natural resources, managing chemical substances, effective utilization of resources and reducing waste.

7-2 Realization of a sustainable society

Recognizing achievement of SDGs set by the United Nations as a common challenge for our business activities, we shall strive to realize a sustainable society that can balance environmental protection such as efforts on global environmental issues with economic development.

7-3 Creation of safe working environments

In compliance with relevant laws and regulations, we shall conduct our own assessments to promote all measures to ensure safety in our workplaces in all of our activities, including research and development, manufacturing and distribution.

8. We shall properly manage corporate assets and information.

8-1 Effective use of corporate resources

We shall not use corporate resources such as people, materials, financing, information and time for private purposes, and shall make effective use of them.

8-2 Handling of confidential information

We shall not acquire confidential information about our customers, business partners, etc. by illegal methods. We shall strictly control any confidential information on companies or third parties obtained in the course of business to prevent leakage and shall not disclose any such information without predetermined procedures. We shall not use such information for anything other than the purpose intended.

8-3 Maintenance and protection of intellectual property (IP) rights

We shall recognize that IP rights (covering patents, utility models, trademarks and designs) held by the Company are important assets and shall strive to maintain and protect them, and shall also respect IP rights owned by third parties.

8-4 Control of personal information

We shall strictly control any information of a personal nature acquired in the course of our business activities and shall not use it for any purpose other than the intended purpose. In addition, any disclosure shall be strictly managed by obtaining prior consent of the person concerned.

8-5 Appropriate use of information systems

We shall use in-house corporate information systems only for Company-authorized duties and shall pay particular attention to the prevention of theft or falsification of data.

We shall enforce all the necessary information security measures to prevent any unauthorized access and information leaks, etc.

8-6 Prohibition of behavior causing damage to the Company

We shall not gain profit for ourselves or third parties and shall not harm the reputation of the Company by using our business position, power or information acquired in the course of our business activities.

9. We shall respect the diversity, personality and individuality of every member connected to Daicel Group and shall contribute to realize a healthy and sound society that is free from discrimination and harassment.

9-1 Prohibition of human rights/discrimination, harassment

Our basic position shall be to respect humanity. We shall never violate human rights through such acts as discrimination on the grounds of race, ethnicity, nationality, creed, thought, religion, gender, sexual orientation, gender identification, illness, disability, etc., or through harassment. We also shall never conduct employment and work such as forced labor and child labor contrary to international norms in any country or region.

9-2 Vibrant corporate culture

We shall strive to foster a vibrant “Visualize, Voice, Listen and Respond” corporate culture by promoting honest and open communication between employees.

9-3 Respect for individual ability

By realizing flexible work styles and respecting diverse values and qualifications, we shall enable everyone to display his or her abilities to the fullest possible extent. For this we shall establish various human resource development programs and fair and appropriate treatment methods.

9-4 Healthy workplace environment

We shall strive to create a healthy and sound workplace environment and to enhance the health of individuals by promoting all measures for health management including mental healthcare.

Risk Management

Basic Approach

Daicel recognizes the vital role of risk management and adheres to its Risk Management Regulations so that it responds appropriately to the risks inherent in its corporate activities and minimizes the impact should any such risks materialize.

Risk Management System

Initiatives of the Risk Management Committee

Daicel established the Risk Management Committee in 2006 to coordinate and promote risk management for Daicel Corporation and its Group companies. Chaired by the corporate compliance officer and comprising the heads of each corporate support division as members, the committee meets once a year for a regular meeting and convenes extraordinary meetings as needed.

Each organization submits risk activity reports to the committee. During its regular meeting, the committee reviews the progress of risk-related measures based on these reports and an inventory of potential risks, and it provides advice and support as necessary. Risks requiring a Company-wide response are addressed by setting up projects and implementing other measures. Given the business environment and social circumstances surrounding the Daicel Group, some risks require closer scrutiny. These are designated as focus points for the fiscal year, and each organization confirms and reviews their measures against these risks.

The committee reports on its discussions about the focus points for each fiscal year, progress on countermeasures addressing risks that could have major impact on management, focus points for the coming fiscal year, the status of business continuity plans (BCP), and other key issues during the Management Meeting and Board of Directors' Meeting at the end of each fiscal year.

Initiatives of the Corporate Divisions and Group Companies

Risk management conducted by each organization constitutes the backbone of these efforts for the Daicel Group as a whole.

Each organization implements risk management in accordance with the following procedure.

1. Identify and categorize risks that could have a major impact on an organization's ability to achieve its business targets (check)
2. Categorize risks into three stages according to their frequency and degree of impact and identify risks requiring a priority response (check)

3. Consider countermeasures for preventing the risks from materializing and for minimizing damage in the event they materialize; formulate plans (improve the content of the countermeasures based on consultation with the risk managers of each organization) (act/plan)
4. Implement countermeasures (do)
5. Re-evaluate the risks (check) and reconsider countermeasures based on the results (act)

Each organization*¹ follows a check-act-plan-do (CAPD) cycle*² by registering the risks and countermeasures into an intranet database and updating the information by entering the status of implementation twice a year. At the end of each fiscal year, they submit a risk activity report to the Risk Management Committee to provide updates on their risk inventory, including the status of implementation, newly identified risks, and the results of their review of the focus points for the fiscal year.

*1 Some Group companies not using the database submit information in a file format.

*2 Instead of a plan, do, check, and act (PDCA) cycle, the more widely known approach to continuous improvement, Daicel has adopted a CAPD improvement cycle to avoid the risk of overlooking crucial facts and realities that often lie hidden in the initial planning stage.

■ Targeted Risk Categories

1. Business strategy risks	8. Partners, outside contractors (domestic and international) risks	15. Accounting risks
2. International trade risks	9. Environmental risks	16. Accident and disaster risks
3. Intellectual property risks	10. Legal affairs and corporate ethics risks	17. Public relations risks
4. Purchasing and procurement risks	11. Information risks	18. Dishonesty and crime by an employee risks
5. Quality and product safety risks	12. Employment and human resources risks	19. External crime risks
6. Production and technology risks	13. Injury, illness or death of an officer or employee risks	20. Office work and administration risks
7. Marketing and sales risks	14. Finance, investment and credit risk	21. Audit risks

Focused Points

The “focused points”, is set by Risk Management Committee in consideration of the Daicel Group’s business environment and changes in social conditions. In FY2021/3, we set “Risk related to business continuity due to infectious diseases” and reconfirmed the risks, reviewed the countermeasures and strengthened the implementation of countermeasures as a group.

Due to the long-term spread of COVID-19, we set up a group countermeasures headquarters, providing instructions, guidance and support to each group company, and each group company also took its own measures along with the situations.

[> Preventive Measure against COVID-19](#)

Risk Assessment of Critical Cases

When deliberating on capital investments or investments and loan projects important to management strategy, we extensively consider the risk inventory and appropriateness of countermeasures during the Management Meeting and other gatherings. Moreover, Daicel operates under a Total Environmental, Health and Safety Assessment System (“Total EHS Assessment System”) for scrutinizing new plans across all our business activities, including R&D, production, consumption, and disposal, in order to take every possible precaution in terms of the environment and health and safety by comprehensively assessing risks in advance.

➤ [Total Environmental, Health and Safety Assessment System](#)

Information Security

➤ [Information Security](#)

Strengthening BCP Management

Daicel formulates and manages business continuity plans (BCPs) to minimize damage in the event of emergencies such as major disasters or a pandemic caused by a new virus as well as to maintain business operations or at least ensure the early resumption of business operations in the event of such contingencies. The BCPs are revised as necessary.

The Daicel Group includes all stages of a contingency within the scope of its BCPs, from “Preparedness” (BCP I) to “Initial contingency response” (BCP II) and “Resumption of operations” (BCP III). We plan and prepare measures under the following three categories to limit any decline in performance associated with a disaster or incurred damage and to quickly resume business.

BCP I : Development of infrastructure for software and hardware

Anti-seismic reinforcement, measures against liquefaction and inundation, system redundancy (operational and information systems), secure methods of telecommunications and information gathering, review of stockpiled materials including spare equipment and supplies, safe storage of raw materials and products, measures for crime prevention and security, and other initiatives.

BCP II : Initial response to contingencies

Systematic repetition of drills for fast and effective decision-making and taking action as an initial response to simulated disaster and damage scenarios; preparation and revision of procedural documents and manuals used in the event of emergencies and contingencies.

BCP III : Systematic planning for recovery of all operations

Assessment of damage at plants, suppliers, and customer locations toward formulating and executing optimal plans for the resumption of operations.

Daicel also provides the “Guidelines for formulating BCP” to explain the procedures for creating BCP for individual products or products family. The guidelines include plans and information required to maintain or resume business operations for products and production lines. Each business unit applies the guidelines to maintain business operations and ensure the early resumption of business in the event of a disaster or damage.

In FY2021/3, we implemented the following initiatives. For some products, we conducted disaster response drills across the supply chain from the standpoint of being able to respond accordingly with the BCP requirements for specific products in FY2021/3.

■ Initiatives for FY2021/3

Preparedness (BCP I)	Reaction analysis and risk assessment for self-reactive substances; identification of risks and confirmation of countermeasures against the risk of runaway reactions due to contamination* by acid and alkaline substances
Prevention of expanding damage (BCP II)	<ul style="list-style-type: none"> ● Considered installing a system for the early detection of leakage ● Re-evaluated risks associated with revised flooding maps for municipalities (revision of disaster prevention maps and revised estimates for monetary damage based on Japan's Fundamental Plan on National Resilience) ● Installed remote monitoring cameras as planned and formulated an installation plan for a remote fire extinguisher system ● Reinforced the Group-wide disaster response under the COVID-19 pandemic and established an information sharing system for all business bases
Post-disaster response (BCP III)	<ul style="list-style-type: none"> ● Revised the BCPs for specific products to reflect organizational reforms ● Conducted disaster response drills without disclosing the scenario in advance
Others	Conducted disaster response drills across the supply chain from the standpoint of being able to respond accordingly with the BCP requirements for specific products

* Contamination that occurs when foreign substances or impurities enter into the manufacturing process.

➤ [Emergency response system for large-scale disasters and disaster prevention drills \(Process Safety and Disaster Prevention\)](#)

Response to Materialized Risks

When risks materialize, the division responsible for the relevant risk category leads the response in line with the Emergency Risk Management Guidelines. The regulations designate the division responsible for each risk category as well as the divisions that will cooperate in the response and items to be reported to the responsible division. We also have the Disaster Response Rules based on the regulations and follow this rule in the event of an accident or disaster.

➤ [Process Safety and Disaster Prevention](#)

➤ [Details on preventive measure against the spread of COVID-19](#)

Information Security

Basic Policies

The Daicel Group has established an Information Systems Security Policy as a master guideline for information security.

Article 1 (Principles and Purpose)

All employees of the Daicel Group will seek to maintain information system security in accordance with the Information Systems Security Policy and related regulations.

Article 2 (Rules)

Employees of the Daicel Group will comply with the following rules. Information system assets are defined as all information system equipment, facilities, software, and information under the management of the Daicel Group.

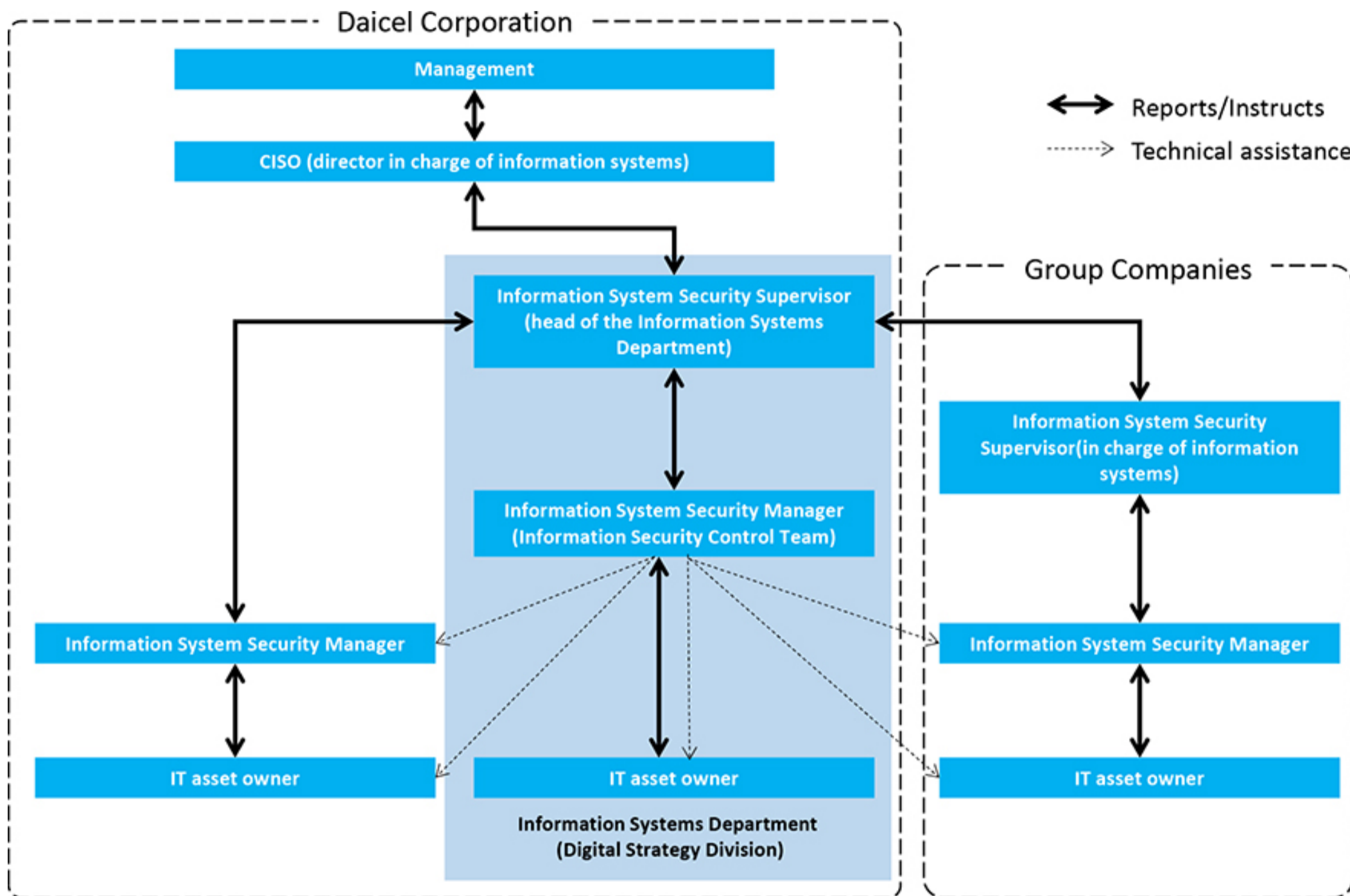
- Exercise appropriate management to prevent damage, theft, information leakage, and tampering with regard to information system assets.
- Maintain public trust in the Daicel Group by using information system assets appropriately.
- Ensure the smooth execution of operations by making appropriate use of information system assets.
- Avoid causing damage both inside and outside the Daicel Group as a result of inappropriate use of information system assets, information leakage, or tampering.

System for Maintaining Information Security and Responding Security Incidents

To comply our Information Systems Security Policy, Daicel has established a system for maintaining information security and responding security incidents in accordance with the basic regulations on information system security by appointing a supervisor or manager in every Daicel department and Group company under the CISO.

In addition, an information security control team has been set up in the IT department to execute tasks such as managing normal security operations and direct instructions/supports to the departments and IT asset owner faced with security incidents.

■ System for Maintaining Information Security and Responding Security Incidents



Rules concerning information security that govern the behavior of information system users are laid out in the regulations for these users. The rules on information security and contact points to be applied in the event of system anomalies have been compiled in a handbook that is distributed to all employees in an effort to maintain information security by all managers and users of information systems.

Countermeasures

Information system assets to be managed, such as enhancements in the teleworking environment for realizing diverse work styles and the introduction of AI and IoT technologies for raising productivity, are continuously increasing. On the other hand, attack surface of the hacker, such as the growing sophistication of cyberattacks, are also increasing. Daicel is implementing the following measures to maintain the status of compliance with the rules laid out in our Basic Policies amid continuously changing internal and external circumstances.

- Prevention, detection and recovery of the incidents
- Revision based on the CAPD cycle

Prevention, Detection and the Recovery of the incidents

In parallel with measures for preventing incidents, we also seek to minimize damage by providing speedy detection and recovery of the incidents, based on the philosophy of defence in depth. We are also taking gradual steps to implement measures in response to changes in communication channels and methods of information sharing, such as direct access to the cloud services from home and other remote workplaces.

■ Prevention and Detection of Problems and Recovery of Operations

Stage	Main Measures
Prevention	<ul style="list-style-type: none">● Install firewalls to separate mutual access points between office networks, control networks, and external networks● Reject unauthorized communications and illegal communications that have been identified● Prevent operations via private devices and unauthorized cloud services● Prevent information leakage caused by the loss of devices taken outside the Company● Obtain information from relevant institutions● Provide information to employees and periodically conduct education and training (drills designed to respond to targeted attacks and other training)
Detection	<ul style="list-style-type: none">● Enlist a specialized vendor to monitor illegal communication on a 24-hour, 365-day basis and receive notifications of anomalies● Implement long-term storage of logs of critical systems and automatically detect anomalies● Establish contact points to address anomalies, loss of devices, and other emergencies
Recovery	<ul style="list-style-type: none">● Respond in accordance with the system for maintaining information security● Regularly back up critical servers● Contract with a specialized vendor on receiving support in incident response

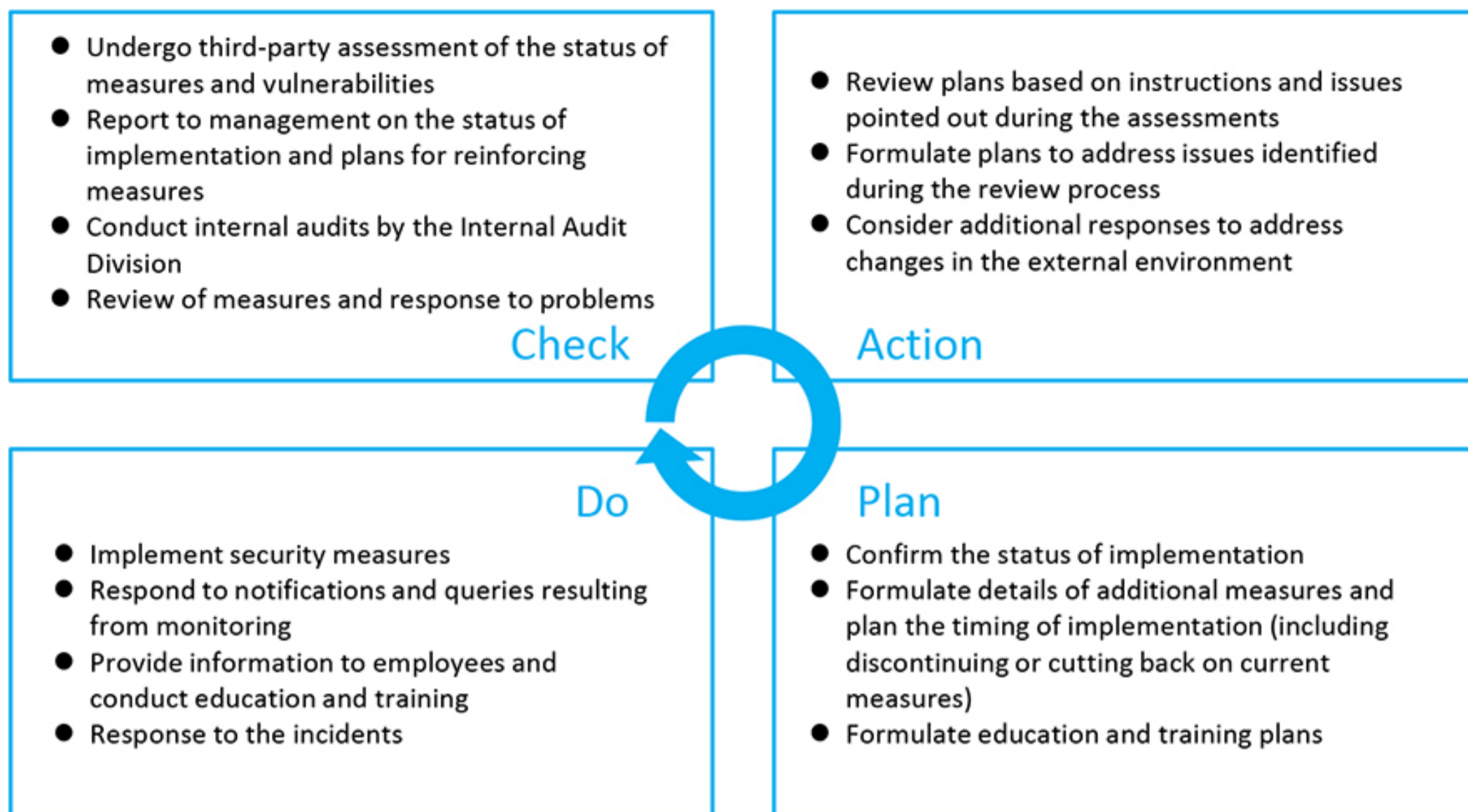
As in our response to information security incidents, we respond to natural disasters that may cause large-scale system suspensions by designating recovery targets for each system in accordance with their relative importance, and we take action to achieve those targets. These measures include reviewing the location and facilities of contracted data centers as well as efforts based on system design such as the replication and operational design.

[> Strengthening BCP Management for Areas Other than Information Systems](#)

Revision Based on the CAPD Cycle

To prevent any loss in the effectiveness of measures due to outdated content and inappropriate operation, we regularly undergo internal and external checks and incorporate the resulting instructions and issues in planning and implementing the measures.

■ CAPD Cycle



Status of Compliance with the Basic Policies

In FY2021/3, there were no violations related to information security and cyber security, such as violations of regulations by Daicel Group employees. No issues of material importance were pointed out during third-party assessments, and we have gradually formulated countermeasures to address any other issues identified by the assessments.

Responsible Care Activities

To practice the spirit of Responsible Care (RC), the Daicel Group established the Daicel Group Basic Policies for Responsible Care and is promoting across-the-board RC activities to contribute to the sustainable development of society.

Daicel Group's Responsible Care

RC activities are undertaken by businesses that engage in the manufacture or handling of chemicals to preserve the environment and ensure health and safety at every stage of their operations, from product development, manufacture, distribution, and use to disposal. With chemical manufacturers around the world taking part in these efforts on a voluntary basis, the disclosure of results and dialogue with society are also positioned as key RC activities. Recognizing RC activities as one of the important social responsibilities of the Daicel Group, the RC Council, operating directly under Daicel's president, is committed to promoting the activities.

In 1995, the Daicel Group established its Basic Policies for Responsible Care (RC) based on "The Guiding Principles for the Improvement of Environmental, Health and Safety Conditions" of the Japan Chemical Industry Association (JCIA) and supplemented the items on the preservation of biodiversity in 2011. In 2017, the Basic Policies for Responsible Care were updated in response to the revision of the JCIA's guiding principles.

Daicel Group's Basic Policies for Responsible Care

1. In accordance with management policy, we will comply with laws and regulations and strive to safeguard the environment, health, and safety. For this purpose, we share specific implementation plans among all employees and put them into action.
2. We will strive to continually improve environmental, health, and safety performance and the security of facilities as well as processes and technologies throughout the entire chemical lifecycle, from development to disposal, and inform society of the results of such efforts.
3. We will further reduce our consumption of resources and energy and strive to reduce, reuse, and recycle waste.
4. We will protect the environment and people's health and safety by driving continual improvement in chemical product safety and stewardship throughout the supply chain.
5. We will practice risk-based chemical management throughout the entire chemical lifecycle, from development and production to use, consumption, and disposal and strive to strengthen our chemical management systems by continual improvement.
6. We will influence the employees and the value chain stakeholders to promote the safe management of chemicals within their own operations.
7. We will strengthen our stakeholder relationships by understanding and responding to stakeholder concerns and expectations about safer operations and products as well as openly communicating about our performance and products.

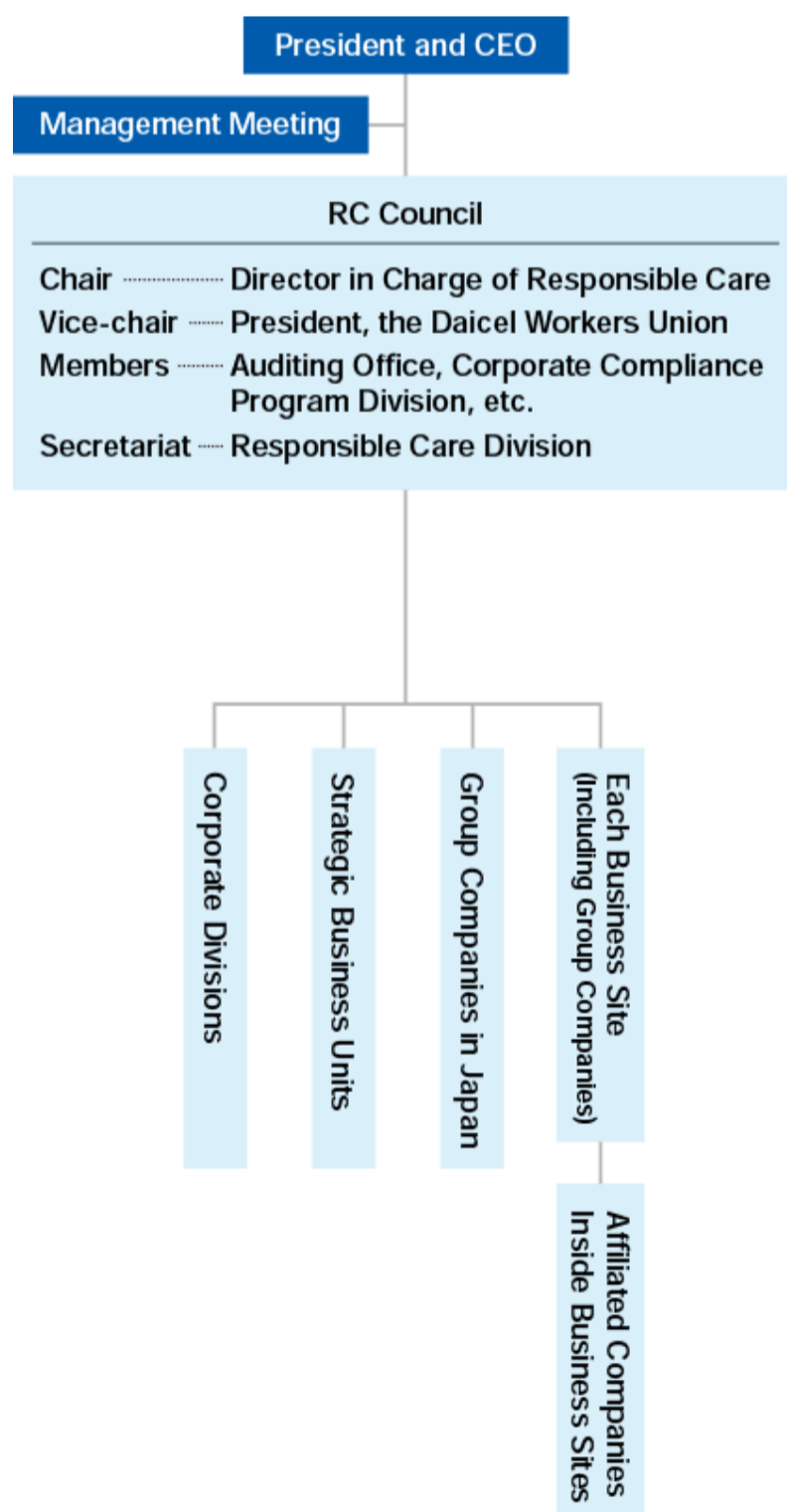
8. We will put the Daicel Group's overall efforts into continually improving initiatives for the environment, health, and safety in order to meet stakeholder expectations.
9. We will contribute to the sustainable development of society by developing and providing unique and innovative technologies and other solutions.
10. We will promote biodiversity-friendly activities in order to pass on the wealth of nature to future generations.

Our Structure for Responsible Care

The Daicel Group is implementing RC activities on the following fronts: occupational health and safety, process safety and disaster prevention, environmental preservation, chemical and product safety, distribution safety, and "Communication with Society." The Daicel Group promotes these activities under the RC Council, which meets on a regular basis.

The council is chaired by a director placed in charge of RC by appointment by the president, who bears ultimate responsibility for RC activities. The council comprises the president of the Daicel workers union and heads of administrative divisions appointed by the chairperson as well as the Responsible Care Division, which serves as the secretariat for the council.

■ Our Structure for Responsible Care



Roles of the RC Council

In addition to formulating basic policies, the RC Council receives reports on RC activities from each department at the end of the fiscal year and in turn reports to the Planning Meetings attended by management to propose targets and action plans for the next fiscal year, which are subsequently approved by the Management Meetings. The council reports the status of the initiatives to the Management Meetings and conducts RC audits in accordance with the Rules on Responsible Care Audits.

■ Roles of the RC Council

Roles	Details
1. Formulation of basic policies and targets	Formulate the Basic Policies for Responsible Care and set targets for the entire Group to steadfastly promote RC activities.
2. Development of implementation systems	Consider the necessary revisions to implementation systems to ensure effective operation of the CAPD cycle, including setting targets, formulating implementation plans, and implementing and assessing the results of implementation.
3. Deliberation and drafting of long- and medium-term plans	The council determines RC related issues for the long-term plan and drafts for the RC medium-term plan by deliberating and deciding on important issues related to the entire Group and reviewing proposals submitted by the Responsible Care Division.
4. Planning and drafting of annual implementation plans	The council deliberates and decides on policies concerning important issues related to the Daicel Group. Following approval by the council, the issues are discussed at the Planning Meetings, and the council then receives approval by the Management Meetings.
5. Monitoring and advising on the status of implementation	<p>(1) The council provides advice and guidance to the Responsible Care Division to effectively promote its activities.</p> <p>(2) The council provides appropriate advice and guidance for practical operations on educational training and document management related to RC issues as needed.</p>
6. Assessment of RC audit results	Responsible Care Audits
7. Establishment, amendment, and abolition of regulations	The council provides advice and guidance on the status of efforts for the organized development of important regulations and rules related to facilitating the promotion of RC activities and codification based on relevant management regulations.
8. Commendation of good deeds and contributions to RC activities	The council commends good deeds and contributions to RC activities.

Responsible Care Audits

A group comprising the director in charge of RC and division leaders of the RC Council and the Responsible Care Division is responsible for conducting RC audits in accordance with the Rules on Responsible Care Audits. All Daicel's business sites and the Fuji Plant of Polyplastics Co., Ltd. are subject to an annual RC audit, while other Group companies undergo an RC audit once every three years. RC audits are conducted each year under a theme that focuses on a common Groupwide issue, and along with an assessment of the theme, the audits also confirm the progress of the RC implementation plan and examine issues linked to achieving the plan. Findings from RC audits are reflected in targets and plans for the following fiscal year, thereby supporting continuous improvement.

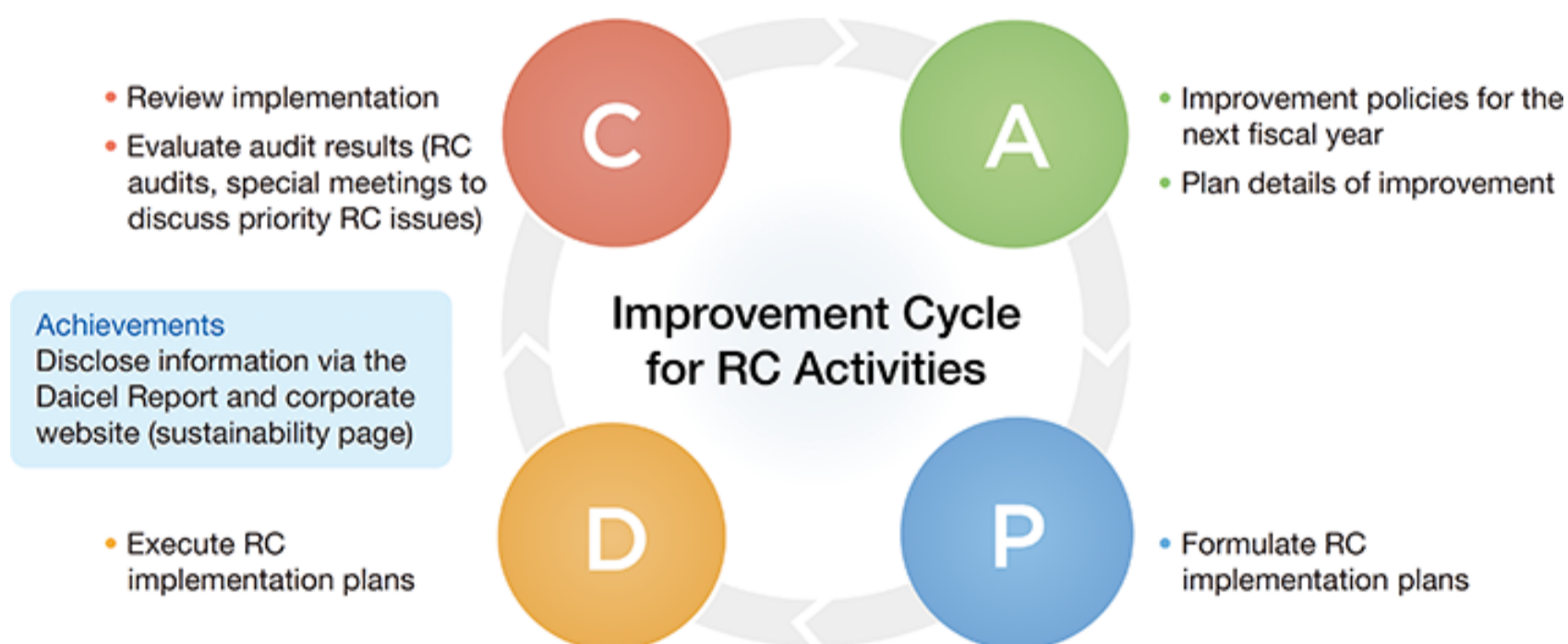
In FY2021/3, seven business sites of Daicel Corporation, Daicel Logistics Service Co., Ltd., and the Fuji Plant of Polyplastics, Co., Ltd. Underwent remote audits due to the COVID-19 pandemic. RC audits were conducted in two parts. Issues that materialized in special meetings for discussing priority RC issues were examined in the first part, and RC issues anticipating delegation of authority to each site were audited in the second.

Special Meetings to Discuss Priority RC Issues

Representatives of the Responsible Care Division periodically tour each business site of Daicel and those of domestic Group companies and hold annual special meetings to discuss priority RC issues. To help promote RC activities across the Group, the meeting aims to confirm progress in RC implementation plans at each business site, assessing countermeasures in place to prevent problems in terms of occupational and facility safety and disaster prevention, and discussing the status of their initiatives to address environmental concerns.

In FY2021/3, the meeting was conducted remotely due to the COVID-19 pandemic.

■ CAPD cycle



Promotion of Responsible Care Activities

Periodic Exchange Meetings for Supervisors of Environmental and Safety Divisions across the Group

Individuals charged with supervising the Environment and Safety divisions of each Daicel's business site and the Fuji Plant of Polyplastics Co., Ltd. as well as members of the Responsible Care Division hold monthly meetings.

Participants exchange information and conduct discussions on RC-related issues such as occupational health and safety, process safety and disaster prevention, and environmental preservation as well as regulatory trends, and they exchange information about problems related to occupational incidents while also overseeing the progress of safety measures.

While these meetings were previously held two or three times a year, we decided to meet on a monthly basis starting in FY2021/3 to reinforce Groupwide measures on safety and environmental management and to address gaps in communication occurred during the COVID-19 pandemic.

Responsible Care Promotion Conference

RC activities are voluntary initiatives in the chemical industry for ensuring environmental conservation, health and safety and constitute a key component of CSR activities. The Daicel Group holds a Responsible Care Promotion Conference at the start of each fiscal year to ensure that employees maintain a high level of awareness as they engage in RC activities. The conference is attended by members of Daicel management, company chiefs, presidents of Group companies, Daicel trade union representatives, and representatives of each department. During the conference, the president, along with the Responsible Care chairperson and vice chairperson, delivered presentations to announce, spread, and promote understanding of the annual RC activity policies and RC implementation plans.

While the conference was canceled in FY2021/3 to help prevent the spread of COVID-19, members of management reported on ensuring safety and quality through the corporate intranet. In FY2022/3, the conference was held remotely from the Tokyo head office. In part two, Toshifumi Kokubun, who is a professor at Tama University and a director at The Center for Rule-making Strategies, gave a lecture titled, "The need for management reform in anticipation of economic security policies to be adopted by countries in response to the expected U.S.-China Cold War."

TOPICS

RC Awards

Each year, the RC Council recognizes good deeds and contributions to RC activities. Awards were presented to 13 individuals in FY2020/3 and to two in FY2021/3. While the ceremony ordinarily takes place during the Responsible Care Promotion Conference, the awards were presented at RC conventions of each business site due to the COVID-19 pandemic.

TOPICS

KAIZEN Case Study Meeting

The Daicel Group holds KAIZEN (continuous improvement) Case Study Meetings to foster a spirit of continuous improvement among all Group employees under the theme of “be aware, think and act. While we refrained from holding the meeting in FY2021/3 in consideration of COVID-19, we promoted what we refer to as “close-call initiatives” as well as “before-or-after activities” for the 3S methodology, namely Seiri (Sorting), Seiton (Setting-in-Order), and Seisou (Shining). We will continue KAIZEN initiatives by placing a top priority on ensuring safety and quality.

Internal Training and Education

So that all Daicel Group employees can understand the importance of RC activities and take action, we provide the relevant in-house training and education.

[> Support personal growth](#)

Total Environmental, Health and Safety Assessment System

The Daicel Group operates a Total Environmental, Health and Safety Assessment System (“Total EHS Assessment System”) as a means for evaluating risk in its business activities. Under the system, a prior assessment of diverse risks associated with all business operations in new plans—including R&D, production, consumption, and disposal—is initiated in order to ensure thorough consideration of environmental, health, and safety issues in new plans.

The Group’s Total EHS Assessment System has the following features:

1. The system evaluates the new plan based on prescribed standards for eight items: legal compliance, chemical safety, environmental preservation, occupational health and safety, operational safety at facilities, product safety, distribution safety and safety of production outsourcing, and purchasing and sales.
2. A new plan indicates all new changes that include the establishment and modification of facilities as well as changes in matters related to manufacturing, etc.
3. The system defines two types of assessment: Corporate Total EHS Assessment, which covers new plans that may cause a significant impact on management, and Division Total EHS Assessment, undertaken by each division. After evaluating new plans based on their scale and risk with an overall assessment rank (I and II), the Group determines items subject to assessment and designates individuals to serve as assessment executors and final evaluators in accordance with the overall assessment rank.
4. With regard to the adoption of a new process and/or increased production volumes, we carry out a Technical Assessment and Equipment Design Assessment, underscoring the importance of design specifications for technologies and facilities. After discussing the results of these assessments, a Corporate Total EHS Assessment is undertaken

To reinforce its product safety assessment, the Daicel Group began conducting a Product Crisis Assessment in FY2016/3. The assessment identifies and monitors the risks associated with current product safety measures while also assessing the status of incident responses. In FY2018/3, the Group initiated the Product Safety Advisory Meetings, inviting a team of third-party specialists to conduct risk assessment.

In FY2021/3, the Working Group on Self-reactive Substances, led by the Responsible Care Division, and in-house experts conducted a reassessment of the risks of abnormal and runaway reactions at plants handling chemical substances with polymerizing or self-reactive properties.

The number of Corporate Total EHS Assessments that evaluate new plans deemed to have a significant impact on management, including those undertaken to assess new plans for overseas production bases, has reached approximately 1,000 since the system was introduced.

Based on Total EHS Assessments that evaluate new plans, including all revisions, and stringent implementation of CAPD in the course of normal operations by each business site, we have implemented a mechanism for the consistent and effective handling of risks related to safety, the environment, health, and other areas.

Risk Assessment Based on Total EHS Assessment System Criteria/Rank I Cases



Examples of New Projects

- New product launches
- New businesses
- Establishment, expansion, and renovation of facilities
- Changes in matters related to manufacturing (raw materials, processes, etc.)
- New contracts, changes at distributors, customers, and sales applications
- Acquisition and transfer of properties and equipment
- New contracts and changes in manufacturing outsourcing, purchasing, and sales
- New or changes in waste management

■ Breakdown of Total EHS Assessment System

Categories of the Total EHS Assessment System	
Legal compliance	Evaluate compliance with laws and regulations and with individual agreements between business sites and relevant government organs
Chemical Safety	Evaluate hazards posed by all chemical substances handled
Environmental Preservation	Evaluate environmental preservation activities
Occupational Health and Safety	Evaluate compliance in the context of preventing labor accidents
Operational Safety at Facilities	<ul style="list-style-type: none">● Evaluate the risk of explosion and fire from the facility standpoint● Assess the results of other evaluations and fitness of relevant facilities
Product Safety	Evaluate products for risk of causing bodily injury
Distribution Safety	Evaluate distribution safety
Safety of Production Outsourcing, Purchasing, and Sales	Evaluate from the perspectives of the environment, safety, and prevention of health problems

Responsible Care Global Charter

The International Council of Chemical Associations (ICCA), an international RC activity organization, put in place the Responsible Care Global Charter in 2005 with the aim of promoting sustainable development within the chemical industry while contributing to society as a whole through RC activities. In complete agreement with the goals and principles of the charter, Daicel became a signatory in 2008. In order to more specifically detail the issues requiring attention with respect to the management of chemical product safety, improvements in the quality of life through the delivery and use of chemical products, and contributions to sustainable development in an easier to understand manner, the ICCA revised the charter in 2014. That same year, Daicel again declared its support of the revised version of the Responsible Care Global Charter and confirmed its participation as an ongoing signatory.

■ Declaration of Support for the Responsible Care Global Charter



Websites of each RC Activity

Responsible Care Management

➤ [Responsible Care Activities](#)

Environmental Preservation

➤ [Environmental Management](#)

➤ [Response to Climate Change](#)

➤ [Reduction and Recycling of Industrial Waste](#)

➤ [Management of chemical substance emissions](#)

➤ [Water Resource Preservation](#)

➤ [Environmental Management and Prevention of Air Pollution](#)

➤ [Preserving Biodiversity](#)

➤ [Environmental Accounting](#)

Process Safety and Disaster Prevention

➤ [Process Safety and Disaster Prevention](#)

Occupational Health and Safety

➤ [Occupational Health and Safety](#)

Chemical and Product Safety

➤ [Chemical and Product Safety](#)

Distribution Safety

➤ [Distribution Safety](#)

Communication with Society

➤ [Local Communities and Contribution to Society](#)

Sustainability

Human Development Center



Purpose and Overview of the Human Development Center

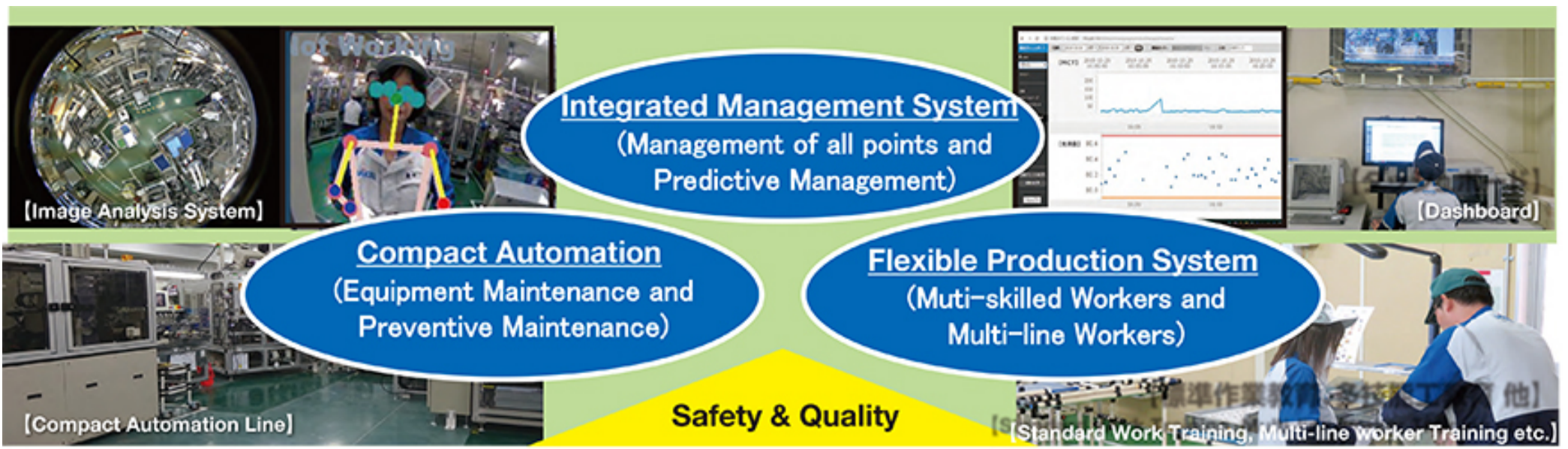
Safety Strategic Business Unit, has for a long time been involved in pyrotechnic devices. The company applies this expertise in the development, manufacturing, and sales of products such as inflators for automobile airbags and micro gas generators for seatbelt pretensioners (PGG), and it conducts its business operations on a global scale. Its manufacturing style is more what's referred to as "assembly-based;" this is very different from the style applied in chemical plant manufacturing, which is known as "process-based." The Daicel Safety Systems (DSS) Human Development Center was established as a facility specialized in the development of human resources for assembly-based manufacturing. To keep pace with its globally expanding operations, it became a function of the company's headquarters in 2018, when it was renamed the Human Development Center. Also, it plays an integral role in developing the human resources who drive the growth of the Safety Systems business.



Harima Plant Deputy General Manager
Human Development Center Division Manager
Multiple Production Company
Takao Mimura



Human Development Center (Harima Plant)



“Human will shift to creative work” by role-sharing between human, machine and manufacturing systems



Daicel Group's
Human Resources Policy

People are the Foundation for Our Success

The Three Core Principles of Our Human Resources Policy

Will

We encourage the strong will and courageous decisions of each individual.

Diversity & Inclusion

We continue to evolve through the interaction of our diverse personalities.

Integrity

We do the right thing and proudly follow the right path.



The Kanji characters used in its Japanese name signify the following intentions:

- ① Collaborate across organizational and regional boundaries and grow together
- ② All employees regardless of rank help each other to reach new heights together
- ③ Provide learning opportunities for those who provide training and those who receive training

The Human Development Center focuses on the following four missions based on these aspirations as well as the Group’s human resource policy entitled, “People are the Foundation for Our Success,” a belief in the infinite power of our human resources and the Group’s reliance on realizing the full potential of this power.

- ① DSS Human Resource Development Specialized in Manufacturing Skills
- ② Manufacturing Training for the Technology Development in the Safety Systems Division
- ③ Developing Global Talent
- ④ Safety Training at the Harima Plant

Human Resource Development for DSS-style Manufacturing

DSS manufactures inflators for automobile airbags, and the Harima Plant is its primary manufacturing site in Japan. Under its motto, “Safety and Quality,” the company strives to strengthen and grow its manufacturing capability while basing its activities on these goals: 1) build an automated assembly line for highly efficient manufacturing, 2) develop multi-skilled workers for a flexible production line, and 3) leverage the latest IoT technology for an integrated management system. The company is therefore focused on developing human resources who contribute to achieving these goals.

The Human Development Center has established its own structure for educational programs, including (1) position-specific programs such as training for new employees, operators, supervisors, and leaders; (2) specialized programs encompassing manufacturing knowledge and skills specific to each job type; and (3) development of certification or qualification systems for specialized or key processes. The educational programs cover the knowledge and skills required for manufacturing processes, including standard procedures based on TPS (Toyota Production System), IE (Industrial Engineering), statistical quality control, problem-solving skills, and equipment maintenance. Trainees acquire this knowledge and the related knowledge and skills through classroom lectures and hands-on experience.

In addition to the standard training rooms, we have three specialized rooms for these lectures: Assembly Dojo, Maintenance Dojo, and Safety Dojo. We use the term “Dojo” to encourage participants to view these facilities as places where they can deepen self-awareness and develop the discipline necessary for independently acquiring and practicing the targeted skills.

Assembly Dojo

This dojo provides training for inflator assembly and also develops trainers for this process.

New employees and contractors receive training here using simulation devices as part of their onboarding process. This ensures they have the standard level of knowledge and skills before engaging in production line operations, thus ensuring safety, quality, and operability. In addition, the space is equipped with various simulation devices, each tailored for specific product types and procedures. The devices are used to develop multi-skilled workers and contribute toward building a flexible production line. The dojo also provides training and certifications for operator trainers as well as certifications for critical roles such as visual inspectors, among other services. It consists of a lecture area for classroom lectures and a practice area, equipped with simulators and focused on practical application lectures. In short, this is a place where trainees not only can acquire new knowledge and skills but also receive certifications.



Practical application lecture using simulation devices at the Assembly Dojo

Maintenance Dojo

The focus in this dojo is on the knowledge and skills required for facility maintenance. Trainees are offered basic information about electrical and mechanical engineering as well as practical application lectures on machining processes such as drilling and tapping, electrical wiring, soldering, and sequence programs.

Two types of training are conducted. The Line-Keeper Development Program (six months) is intended to train key maintenance persons for the manufacturing division. The Machine-Keeper Development Program (eight days) helps trainees develop their daily maintenance knowledge and gives them troubleshooting skills for common problems.

In the final phases of the Line-Keeper Development Program, trainees create end-to-end processes from scratch, assembling a training device from component parts, creating a sequence program for the device, and confirming its operation. Through the exercise, they learn about the focus areas for adjusting devices and acquire the practical skills for maintaining them.

In addition, trainees also go through other exercises, such as troubleshooting for intentionally introduced failures in simulation devices and teaching X-Y robots and multiple axis robots. Through these exercises, the dojo passes on the knowledge and skills to the next generation and improves facility maintenance competency.



Maintenance Dojo training using electric components kits



Assembling a training device during Maintenance Dojo training

Safety Dojo

The focus here is on safety, and training at the dojo is part of the site training for the Harima Plant. It is offered to everyone working there, including approximately 1,200 people such as employees, and Group company employees. A total of 4,000 people each year have attended the training since its launch in May 2017.

The Safety Dojo works toward these goals: 1) provide a sacred place where trainees learn from past incidents and gain self-discipline, 2) provide opportunities for trainees to become accustomed to factory rules and regulations, and 3) enable trainees to cultivate their awareness and accurate understanding of safety.

The dojo consists of two areas: one where materials and photos of past incidents at Harima plants are exhibited, and a training area with simulators where trainees attend lectures. There are five zones in the training area: 1) the factory rule zone, where trainees get accustomed to factory rules such as those related to customary greetings, dress codes, and pointing-and-calling procedures; 2) the basic behavior zone, where trainees learn safety basics using simulators that replicate the experience of risks; 3) the operation zone, 4) the practice zone, and 5) the safety pledge zone, where trainees chant the safety slogan.



Safety Dojo training areas

Since the business site handles explosives, the dojo is equipped with devices that simulate explosions caused by static electricity. Trainees learn about the risks of these situations and the importance of removing electrostatic charges. The dojo is also equipped with devices that simulate entanglements, residual air pressure, and ascending or descending stairs. During the sessions, trainees are divided into 77 teams, each consisting of 20 people, and each team is led by an instructor. Rather than trying to explain difficult concepts with words alone, the dojo encourages trainees to experience risks directly by using simulators and other equipment.

The goal in this dojo is to cultivate what we refer to as a “safety-first work culture” at the Harima Plant together with all of its workers. We try to achieve that by having each employee diligently conduct basic manufacturing activities, such as customary greetings and 3S (seiri (tidying), seiton (putting everything in order), and seisou (cleaning)) activities and triggering changes in their behavior. These changes ultimately become the standard and lead to a workplace free from occupational accidents.



Practicing a pointing-and-calling procedure at a pedestrian crossing during a Safety Dojo training session

Developing Global Talent

Safety Strategic Business Unit, operates five manufacturing sites in the U.S., China, South Korea, Thailand, and Poland. While each location develops its own training and development programs, the Human Development Center trains and certifies trainers specialized in critical processes and develops special skills to ensure that the same level of quality and safety are being incorporated into manufacturing practices worldwide. Currently, there are 21 certified trainers across the globe, and each one trains and certifies new trainers locally at the various business sites.

We opened four dojos, one for each of safety, quality, maintenance, and assembly, at Daicel Safety Systems (Jiangsu) Co., Ltd. (DSSC) in China, the largest of our manufacturing sites, in February 2019, and two dojos, for safety and maintenance training, at Daicel Safety Systems (Thailand) Co., Ltd. (DSST) in Thailand in January 2021.

We conduct training and development programs tailored to local cultures and the scale of each business site based on our relentless pursuit of safety and quality and by instilling Daicel's monozukuri spirit.



Training and Certification Program for Trainers

Native Forests for Life Initiative

What Are Native Forests for Life?

Native Forests for Life is an initiative aimed at revitalizing indigenous forests to preserve ecosystems adapted to the environments of regions and help mitigate the effects of disasters by creating forests that can withstand earthquakes, floods, and other disasters. The late Dr. Akira Miyawaki was a leader in forest development who advocated planting trees that adapt to local natural environments (potential natural vegetation).

His unique method of planting a large variety of tree types (Miyawaki method) is now used by many companies and organizations.

Daicel Group's Creation of Native Forests for Life



The Miyawaki method is not just about planting different varieties of trees; another of its important characteristics is the participation of people from local communities, including children. He believes that people grow through the creation of forests.

Some grow from doing—planting and implementing the creation of native forests for life—while others grow from actively learning about ecology. Planting seeds, cultivating saplings, watering them, and nurturing them into a forest: these all help foster talent and are related to building business and societies. In addition, the method of interspersing various types of trees to closely resemble the natural makeup of forests parallels the promotion of a dynamic global workforce of diverse people.

In short order, the sapling surpasses the height of the person who planted it and goes on to surpass the life of the person as well. Similarly, the business also surpasses the abilities of the person who launched it. The creation of the Native Forests for Life initiative helps foster talent, and fostering talent helps the business to grow and forge ahead into the future. This is related to the vision the Daicel Group is aiming for. More than anything, we will be the best partner of our customers and local communities.

Reasons for the Native Forests for Life Initiative

① Restoring natural vegetation through mixed planting

Natural forests consist of a wide variety of wooden species. Like one of these forests, we aim to become a stronger organization, with each staff member playing a role and supporting each other through forest development activities.

② Strengthening cooperation with local communities

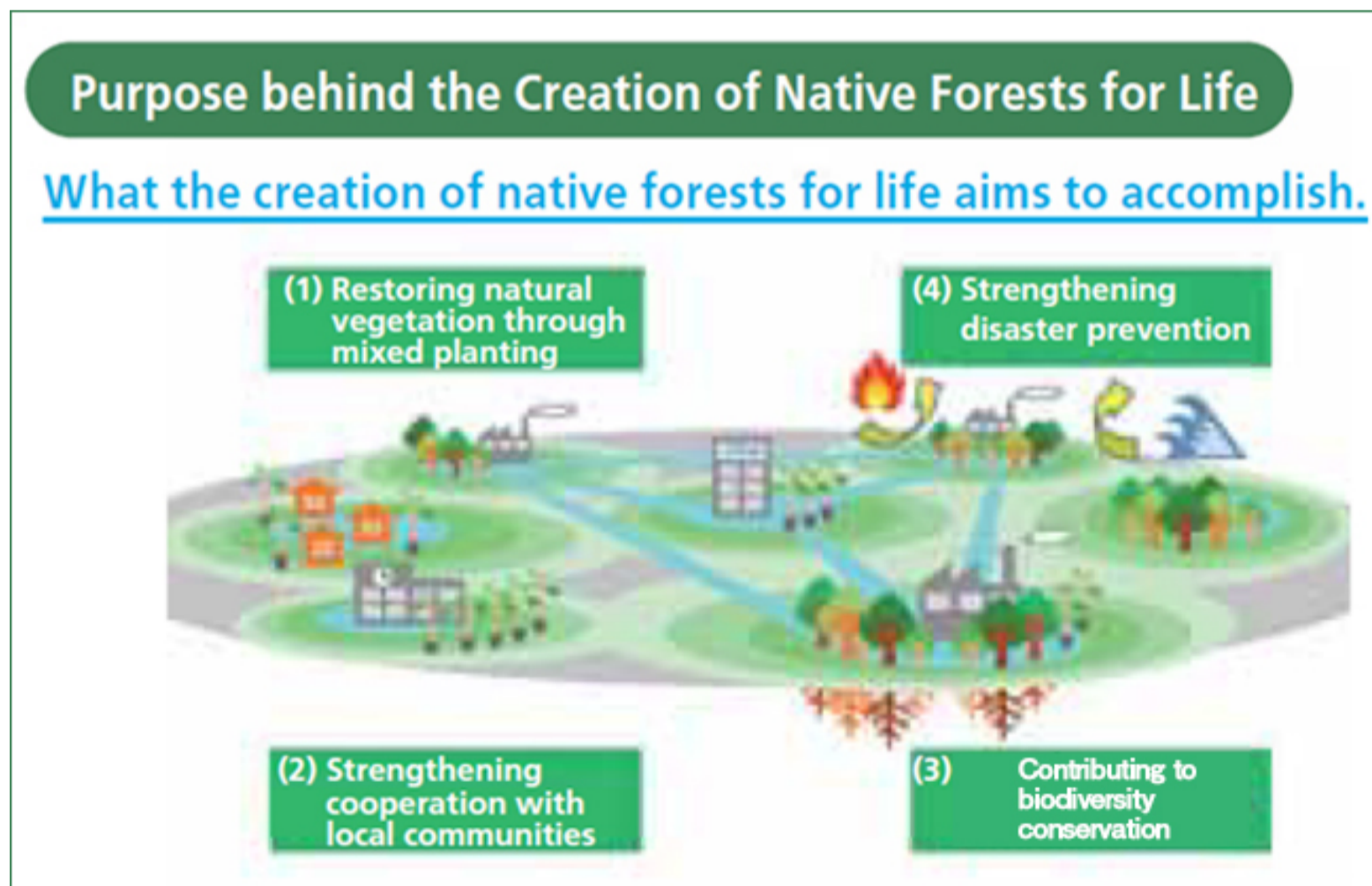
Through tree planting activities, we build ties with people in neighboring communities and help them understand our manufacturing activities and business operations by interacting with them through tree planting.

③ Contributing to biodiversity conservation

We help realize a low-carbon society while striving to preserve the global environment.

④ Strengthening disaster prevention

We create forests that will, in turn, prevent fires from spreading, mitigate the fallout of natural disasters, and reduce noise from human activity.



Recent Events Related to the Native Forests for Life Initiative

The Creation of Native Forests for Life Committee, chaired by the president, was created in March 2016. On April 9, 2016, we hosted a tree planting ceremony at the Harima Plant as a kickoff event for the Native Forests for Life initiative for the entire Daicel Group. Since then, similar tree planting ceremonies have been held at various sites, including the Arai, Ohtake, and Harima plants, with the family members of employees, representatives from partner companies, and residents of neighboring communities invited to take part in the tree planting. In November 2019, we held tree planting ceremonies at the Aboshi Plant, Hirohata Plant, and Innovation Park to commemorate our 100th anniversary, with about 1,500 participants planting 10,300 seedlings.

The Native Forests for Life Initiative has also been incorporated into Daicel's training for new recruits, who learn about the purpose and background of the initiative and conduct tree planting as part of hazard prediction activities at the Nishiharima Training Center.

■ Past Tree Planting Ceremonies

Business site	Date	Location of tree planting	Number of trees planted	Number of species	Number of participants
Harima Plant	March 30, 2021*	Around the No. 3 parking lot	1,682	36	61
Harima Plant	April 28, 2020*	South of the No. 1 Workshop, near the road to the Functional Testing Center	1,890	36	55
Himeji Area (Aboshi Plant Hirohata Plant Innovation Park)	November 2, 2019	Shiohama (along the border of the parking lot)	10,300	36	1,500
Harima Plant	March 29, 2019	North property border	1,399	36	138
Daicel Chemical (China)	March 10, 2019	Changxing Island, Shanghai	13	1	25
Harima Plant	December 21, 2018	East property border	1,410	36	183
Ohtake Plant	April 14, 2018	Areas surrounding the office building site	2,000	36	517
Harima Plant	March 19, 2018	Nanodiamond Testing Center	456	27	117
Arai Plant	September 30, 2017	Areas surrounding the truck gate	1,272	30	335

Harima Plant	April 9, 2016	Areas surrounding parking lot No. 1	2,052	36	543
--------------	---------------	-------------------------------------	-------	----	-----

* Tree planting activities organized since April 2020 have been limited to employees of the Daicel Group, with thorough COVID-19 prevention measures in places, including social distancing and mask wearing.



At the 100th Anniversary Tree Planting Ceremony

Independent Assurance Statement

August 16, 2021

Mr. Yoshimi Ogawa
President and CEO
Daicel Corporation

1. Purpose

We, Sustainability Accounting Co., Ltd., have been engaged by Daicel Corporation (hereinafter “the Company”) to provide limited assurance on greenhouse gas (GHG) emissions of the Company in FY2021/3, which are 1,469 thousand t-CO_{2e} (Scope1), 38 thousand t-CO_{2e} (Scope2 Market-Based) and 1,121 thousand t-CO₂ (Scope3 Categories 1,2,3,4,5,6 and 7). The purpose of this process is to express our conclusion on whether the GHG emissions were calculated in accordance with the Company’s standards. The Company’s management is responsible for calculating the GHG emissions. Our responsibility is to independently carry out a limited assurance engagement and to express our assurance conclusion.

2. Procedures Performed

We conducted our assurance engagement in accordance with International Standard on Assurance Engagement 3000 (ISAE 3000) and 3410 (ISAE3410). The key procedures we carried out included:

- Interviewing the Company’s responsible personnel to understand the Company’s standards
- Reviewing the Company’s standards
- Performing cross-checks on a sample basis and performing a recalculation to determine whether the GHG emissions were calculated in accordance with the Company’s standards.

3. Conclusion

Based on the procedures performed, nothing has come to our attention that causes us to believe that the GHG emissions have not been calculated in all material respects in accordance with the Company’s standards.

We have no conflict of interest relationships with the Company.



Takashi Fukushima
Representative Director
Sustainability Accounting Co., Ltd.

The Daicel Group aspires to realize its Basic Philosophy of becoming “the company making lives better by co-creating value,” and it continues to engage in activities to achieve its sustainable growth and that of society. We upheld the goal of “contributing to the creation of a circular economy” in our Long-Term Vision and Mid-Term Management Strategy announced in FY2021/3, and we clearly stated our commitment to enhancing our corporate value with a focus on attaining sustainability in the three areas of Sustainable Product, Sustainable Process and Sustainable People.

Through this website and our integrated report, we report to our shareholders, investors and all other stakeholders on both the financial and non-financial aspects of the Daicel Group’s business activities as well as our approach to initiatives on sustainability and related achievements. To encourage a deeper understanding of the Daicel Group, we sought to expand and improve the content of our communication tools. Daicel Report 2021, published in October 2021, and the Sustainability section of this website contain a featured article that offers an overview and progress report on our Mid-Term Management Strategy, and we also disclosed our new materiality, which was determined by mapping society’s needs according to their level of importance to the Daicel Group. Moreover, since FY2020/3, we have begun disclosing ESG data in greater detail through the Sustainability section.

As these reports are important tools for communicating with our various stakeholders, we keep in mind during the editing process that they must be easy to read and understand and proactive in terms of reporting on our initiatives.

Reporting Period

FY2021/3 (April 2020 to March 2021)

Note: The reporting period for environmental and occupational safety and health data for overseas Group companies is from January through December 2020, except for the environmental data of overseas subsidiaries of Polyplastics Co., Ltd.

Entities within the Scope of Reporting

The report covers initiatives of Daicel Group companies and those of other companies as noted.

The following terms are used in the report.

- Daicel / We / Our: Daicel Corporation
- Group companies: Subsidiaries of Daicel Corporation
- Daicel Group / The Group: Daicel Corporation and its Subsidiaries

The following terms are used in the report on environmental and occupational safety and health.

- Daicel Group / The Group: Business sites of Daicel Corporation and its Subsidiaries
- Daicel’s business sites: Daicel Corporation’s plants and research institutes as well as domestic Group companies operating on the premises of Daicel’s business sites (not including the headquarters)
- Domestic Group companies: business sites of the domestic Group companies operating outside the premises of Daicel’s business sites
- Overseas Group companies: business sites of Daicel’s overseas Group companies.

The scope of the Group companies for reporting varies depending on the content of the initiatives.
Refer to the following websites for more details.

➤ [Scope of reporting for human resources and governance data](#)

➤ [Scope of reporting for environmental and occupational safety and health data](#)

Dates of Website Update and Publication of the Report

Sustainability section of our website: October 2021 (next update: October 2022 / last update: September 2020)

* We also update the website as necessary.

Daicel Report 2021: October 2021 (next edition: October 2022 / previous edition: September 2020)

Guidelines Used for Reference

Sustainability section of our website

- GRI Sustainability Reporting Standards 2016 / 2018 / 2019 / 2020

Daicel Report 2021

- International Integrated Reporting Framework, International Integrated Reporting Council
- Guidance for Integrated Corporate Disclosure and Company-Investor Dialogues for Collaborative Value Creation, Ministry of Economy, Trade and Industry (METI)
- GRI Sustainability Reporting Standards 2016 / 2018 / 2019 / 2020

Scope of Reporting for Human Resources and Governance Data

The Daicel Group consists of a total of 75 companies.(As of March 31, 2021)

In this report, initiatives of the Daicel Group are reported. Reports about Daicel Corporation or other Group company are noted in each text.

The scope of the Daicel Group varies depending on the content of initiatives. Regarding the initiatives of ① to ③ below, the scope of the Daicel Group reporting is as shown in the table below.

- ① Corporate Ethics (Compliance) and Risk Management Initiatives
- ② Initiatives reported in Creating Attractive Workplaces (Except ③ and Initiatives of Occupational Health and Safety)
- ③ Initiatives of the Healthcare Committee reported in Initiatives to Help Employees Maintain Mental and Physical Health, under Creating Attractive Working Place

Consolidated Companies

Company Name	Region	City	①	②	③
DAICEL CORPORATION	Domestic	Tokyo	○	○	○
Polyplastics Co., Ltd.	Domestic	Tokyo	○	○	○
PTM Holdings, Inc.	Domestic	Tokyo	-	-	-
Daicel Miraizu Ltd.	Domestic	Tokyo	○	○	○
Daicel Pack Systems Ltd.	Domestic	Tokyo	○	○	○
Daicel Value Coating Ltd.	Domestic	Tokyo	○	○	○
Daicel Membrane-Systems Ltd.	Domestic	Tokyo	○	○	○
PI-CRYSTAL, Inc.	Domestic	Chiba	○	-	-
Daicel Pyrotechnics Ltd.	Domestic	Gunma	○	○	-
Dainichi Chemical Co.,Ltd.	Domestic	Fukushima	○	○	-
Daicel Arai Chemical Ltd.	Domestic	Niigata	○	○	○
DM Novafoam Ltd.	Domestic	Nagano	○	○	-

PolyplaServise Co., Ltd.	Domestic	Shizuoka	○	○	-
Kyoei Shokusan Co.,Ltd.	Domestic	Osaka	○	○	-
Daicel Logistics Service Co.,Ltd.	Domestic	Osaka	○	○	○
Daicel Safety Systems Inc.	Domestic	Hyogo	○	○	○
Kyodo Sakusan Co.,Ltd.	Domestic	Hyogo	○	○	-
Daicel Aboshi Sangyo Co.,Ltd.	Domestic	Hyogo	○	○	○
Daicel Ohtake Sangyo Co.,Ltd.	Domestic	Hiroshima	○	○	○
Daicel Safety Systems (Jiangsu) Co., Ltd.	East Asia	Jiangsu	○	○	-
Daicel Safety Technologies (Jiangsu) Co., Ltd.	East Asia	Jiangsu	○	○	-
PTM Engineering Plastics (Nantong) Co., Ltd.	East Asia	Jiangsu	○	○	-
Polyplastics (Nantong) Ltd.	East Asia	Jiangsu	○	○	-
Daicel Nanning Food Ingredients Co., Ltd.	East Asia	Guangxi Zhuang Autonomous Region	○	○	-
Daicel Chiral Technologies (China) Co., Ltd.	East Asia	Shanghai	○	○	-
Polyplastics Trading (Shanghai) Ltd.	East Asia	Shanghai	○	○	-
Polyplastics (Shanghai) Ltd.	East Asia	Shanghai	○	○	-
Shanghai Daicel Polymers, Ltd.	East Asia	Shanghai	○	○	-
Daicel Trading (Shanghai) Ltd.	East Asia	Shanghai	○	○	-
Daicel (China) Investment Co., Ltd.	East Asia	Shanghai	○	○	-
Polyplastics China Ltd.	East Asia	Hong Kong	○	○	-
Daicel Polymer (Hong Kong) Ltd.	East Asia	Hong Kong	○	○	-
Polyplastics Taiwan Co., Ltd.	East Asia	Taipei	○	○	-
Daicel Micro Optics Co. Ltd.	East Asia	Hsinchu	○	○	-
Daicel Safety Systems Korea, Inc.	East Asia	Yeongcheon	○	○	-
Polyplastics Korea Ltd.	East Asia	Seoul	○	○	-

Special Devices (Thailand) Co., Ltd.	South and Southeast Asia	Saraburi	○	○	-
Polyplastics Marketing (T) Ltd.	South and Southeast Asia	Bangkok	○	○	-
Daicel Polymer (Thailand) Co., Ltd.	South and Southeast Asia	Bangkok	○	○	-
Daicel Safety Systems (Thailand) Co., Ltd.	South and Southeast Asia	Prachinburi	○	○	-
Daicel Safety Technologies (Thailand) Co., Ltd.	South and Southeast Asia	Prachinburi	○	○	-
Polyplastics Asia Pacific Singapore Pte. Ltd.	South and Southeast Asia	Singapore	○	○	-
Daicel (Asia) Pte. Ltd.	South and Southeast Asia	Singapore	○	○	-
Polyplastics Asia Pacific Sdn. Bhd.	South and Southeast Asia	Kuala Lumpur	○	○	-
Daicel Safety Systems India Pvt. Ltd.	South and Southeast Asia	Gurugram	○	○	-
Daicel Chiral Technologies (India) Pvt. Ltd.	South and Southeast Asia	Hyderabad	○	○	-
Daicel Safety Systems Americas, Inc.	North and Central America	Arizona	○	○	-
Daicel America Holdings, Inc.	North and Central America	California	○	○	-
Daicel ChemTech, Inc.	North and Central America	New Jersey	○	○	-
Chiral Technologies, Inc.	North and Central America	Pennsylvania	○	○	-
Daicel Arbor Biosciences (official name: Biodiscovery LLC)	North and Central America	Michigan	○	○	-
Polyplastics USA, Inc.	North and Central America	Michigan	○	○	-

Polyplastics Marketing Mexico, S.A. de C.V.	North and Central America	Mexico City	○	○	-
Lomapharm GmbH	Europe	Emmerthal	○	○	-
Polyplastics Europe GmbH	Europe	Raunheim	○	○	-
Topas Advanced Polymers GmbH	Europe	Raunheim	○	○	-
Daicel (Europa) GmbH	Europe	Raunheim	○	○	-
LCP Leuna Carboxylation Plant GmbH	Europe	Leuna	○	○	-
Daicel Safety Systems Europe Sp. z o. o.	Europe	Żarów	○	○	-
Chiral Technologies Europe S.A.S.	Europe	Illkirch Cedex	○	○	-

Other Affiliated Companies

Company Name	Region	City	①	②	③
Special Devices Japan Ltd.	Domestic	Tokyo	-	-	-
Daicel-Evonik Ltd.	Domestic	Tokyo	○	○	-
Daicel-ALLNEX Ltd.	Domestic	Tokyo	○	○	-
Kyoudou Polymer Co., Ltd.	Domestic	Tokyo	-	-	-
Toyo Styrene Co., Ltd.	Domestic	Tokyo	-	-	-
Nagano Novafoam Sangyo Ltd.	Domestic	Nagano	○	○	-
Toyoshina Film Co.,Ltd.	Domestic	Nagano	-	-	-
Toyama Filter Tow Co., Ltd	Domestic	Toyama	-	-	-
Hirohata Terminal Company Ltd.	Domestic	Hyogo	-	-	-
Hayashi Shipping,Co.Ltd	Domestic	Hyogo	-	-	-
Ningbo Da-An Chemical Industries Co., Ltd.	East Asia	Zhejiang	-	-	-
Xi'an Huida Chemical Industries Co., Ltd.	East Asia	Shaanxi	-	-	-
Shanghai Da-Shen Cellulose Plastics Co., Ltd.	East Asia	Shanghai	-	-	-
Polyplastics Marketing (India) Private Limited	South and Southeast Asia	Mumbai	○	○	-
Chrom Tech Ltd.	Europe	Buckinghamshire	-	-	-

Scope of Data Calculation for Environmental and Occupational Safety Performance

- Daicel's business sites: Daicel's plants and research institutes as well as the business sites of domestic Group companies operating on the premises of Daicel's plants (not including the headquarters)
- Domestic Group companies: business sites of the domestic Group companies operating outside the premises of Daicel's business sites
- Overseas Group companies: business sites of Daicel's overseas Group companies

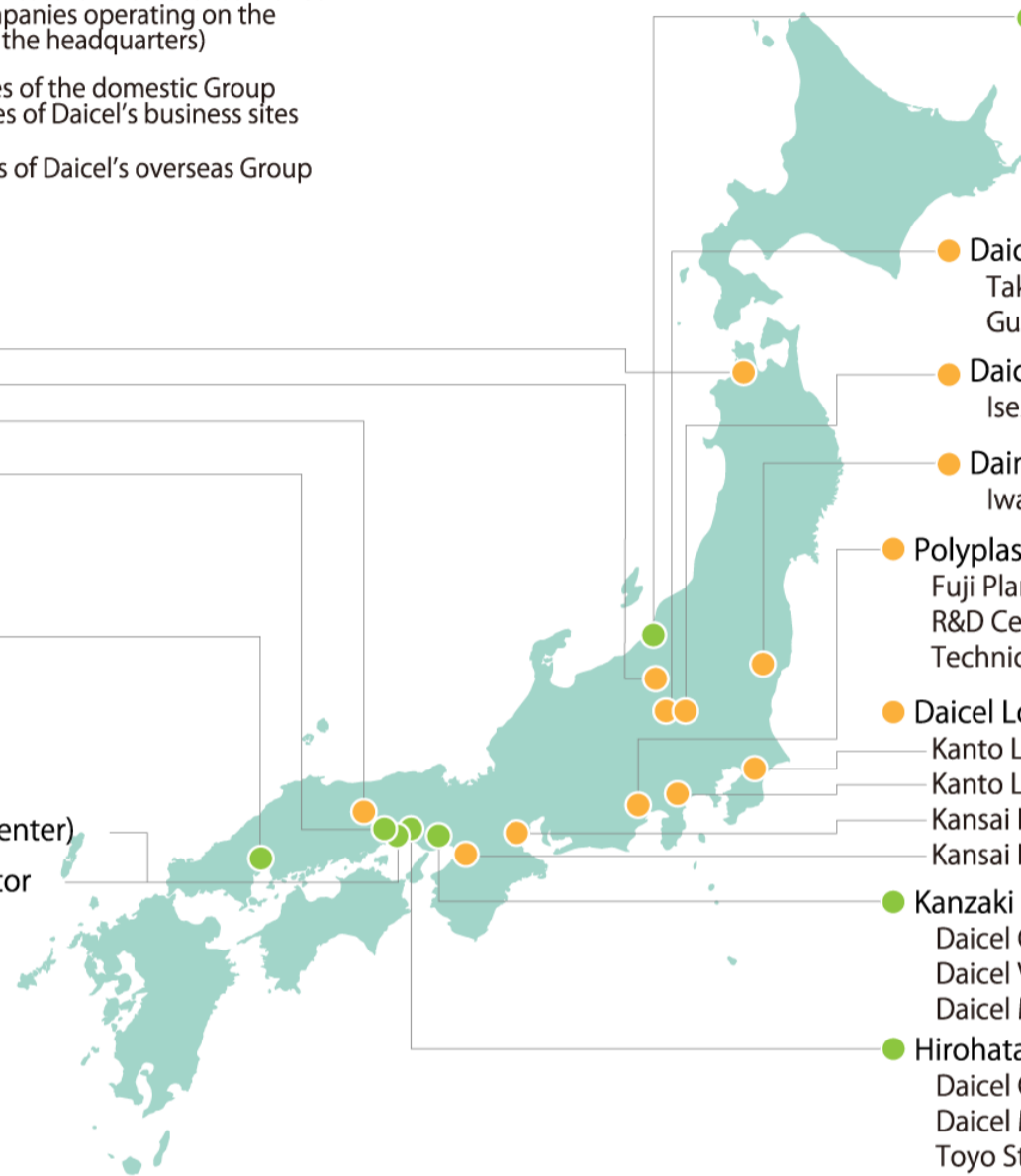
- DM Novafoam Ltd.
Aomori Plant
Nagano Plant
Okayama Plant

- Harima Plant
Daicel Corporation
Daicel Safety Systems Inc.
Daicel Logistics Service Co.,Ltd.

- Ohtake Plant
Daicel Corporation
Daicel-Allnex Ltd.
Daicel Ohtake Sangyo Co.,Ltd.
Daicel Logistics Service Co.,Ltd.

- Innovation Park (Central Research Center)

- Aboshi Plant,Himeji production Sector
Daicel Corporation
Daicel-Evonik Ltd.
Daicel Miraizu Ltd.
Daicen Membrane-Systems Ltd.
Daicel Aboshi Sangyo Co.,Ltd.
Daicel Logistics Service Co.,Ltd.
Kyodo Sakusan Co.,Ltd.



- Arai Plant
Daicel Corporation
Daicel Miraizu Ltd.
Daicel-Allnex Ltd.
Daicel Arai Chemical Ltd.
Daicel Logistics Service Co.,Ltd.

- Daicel Pyrotechnics Ltd.
Takasaki Plant
Gunma Giant Shooting Practice Rangeo

- Daicel Pack Systems Ltd.
Isesaki Plant

- Dainichi Chemical Co.,Ltd.
Iwaki Plant

- Polyplastics Co., Ltd.
Fuji Plant
R&D Center Fuji
Technical Solution Center Fuji

- Daicel Logistics Service Co.,Ltd.
Kanto Logistics Center Chiba Business Office
Kanto Logistics Center Atsugi Business Office
Kansai Logistics Center Yokkaichi Business Office
Kansai Logistics Center Amagasaki Business Office

- Kanzaki Plant
Daicel Corporation
Daicel Value Coating Ltd.
Daicel Miraizu Ltd.

- Hirohata Plant,Himeji production Sector
Daicel Corporation
Daicel Miraizu Ltd.
Toyo Styrene Co., Ltd.

- Jiangsu Province
Daicel Safety Systems (Jiangsu) Co., Ltd.
PTM Engineering Plastics (Nantong) Co., Ltd.
Polyplastics (Nantong) Ltd.

- Shanghai
Shanghai Daicel Polymers, Ltd.
Daicel Chiral Technologies (China) Co., Ltd.

- France
Chiral Technologies Europe S.A.S.

- Germany
LCP Leuna Carboxylation Plant GmbH
TOPAS Advanced Polymers GmbH
Lomapharm GmbH

- Poland
Daicel Safety Systems Europe Sp. z o. o.

- India
Daicel Chiral Technologies (India) Pvt. Ltd.

- Thailand
Daicel Safety Systems (Thailand) Co., Ltd.
Daicel Safety Technologies (Thailand) Co., Ltd.
Special Devices (Thailand) Co., Ltd.



- Kentucky
Daicel Safety Technologies Americas, Inc.
- Pennsylvania
Chiral Technologies, Inc.

- Michigan
Daicel Arbor Biosciences (official name: Biodiscovery LLC)
- Arizona
Daicel Safety Systems Americas, Inc.

- South Korea
Daicel Safety Systems Korea, Inc.

- Kaohsiung
Polyplastics Taiwan Co., Ltd.

- Guangxi Zhuang Autonomous Region
Daicel Nanning Food Ingredients Co., Ltd.

- Malaysia
Polyplastics Asia Pacific Sdn. Bhd.

Participation in Initiatives and External Recognition

Participation in Initiatives

#Here We Go 2030

Challenge for Raising the Ratio of Female Executives to 30% by 2030

This is an initiative announced by Keidanren (Japan Business Federation) in November 2020 to promote active participation in the workplace by diverse people. “The NEW Growth Strategy” focuses on diversity and inclusion as the key drivers for achieving sustainable growth and upholds the goal of raising the ratio of female executives to 30% or more by 2030.



[> Promotion of Diversity and Inclusion](#)

[> Keidanren “Challenge Initiatives for 30% of Executives to be Women by 2030”](#)

Japan Clean Ocean Material Alliance (CLOMA)

This platform was set up with the aim of addressing the emerging concerns regarding marine plastic by seeking sustainable use of plastic products, as well as developing, introducing, and popularizing alternative products that will lead to waste reduction. The alliance plans and promotes activities across industries for the business community as a whole, and it seeks sustainable development through materials in a united effort between the public and private sectors.



Clean Ocean Material Alliance

United Nations Global Compact

In this voluntary initiative, companies and organizations participate in the creation of a global framework for realizing sustainable growth by demonstrating responsible and creative leadership as a good member of society. Under the Global Compact, companies are required to embrace and support essential values in the fields of human rights, labor, the environment, and anti-corruption.

WE SUPPORT



[> Sustainability Promotion](#)

Sustainable Development Goals (SDGs)

The SDGs are common goals of the international community proposed under the 2030 Agenda for Sustainable Development, which was unanimously adopted by member countries during a United Nations summit meeting held in September 2015. The SDGs consist of 17 goals and 169 targets aimed at creating a sustainable and better world by 2030, and participants have pledged to realize a society that leaves no one behind.

SUSTAINABLE DEVELOPMENT GOALS



[> Sustainability Promotion](#)

Responsible Care

In the chemical industry, each company that handles chemical substances engages in activities for preserving the environment and ensuring safety and health at every stage of operations, from product development and manufacturing to distribution, use, final consumption and recycling, as well as disclosing the results of their activities and holding dialogues and communicating with society. These activities are called Responsible Care (RC) activities.



[> Responsible Care Activities](#)

External Recognition

Certified as a “White 500” Organization under the 2021 Certified Health and Productivity Management Outstanding Organizations Recognition Program

The name of this program is a comprehensive term for large enterprises that have been certified as organizations engaging in excellent health and productivity management in collaboration with insurers.

Companies are certified under the framework, jointly led by Japan’s Ministry of Economy, Trade and Industry (METI) and the Nippon Kenko Kaigi, to recognize organizations that are practicing particularly excellent health and productivity management.



[> Certified for the Second Consecutive Year as an Organization under the 2021 Certified Health and Productivity Management Outstanding Organizations Recognition Program](#)

[> METI: Certified Health & Productivity Management Organization Recognition Program](#)

“Eruboshi” Three-Star Certification

The “Eruboshi” certification recognizes companies that meet certain requirements, such as excellence in implementing initiatives on female participation and advancement, from among those that formulate and submit their action plan as business owners. Three stars signify the highest level of Eruboshi certification, given to companies that meet all five criteria, including the ratio of executives and work hours, and publish the results each year in a database of companies that promote women’s careers.



[> Obtained the Eruboshi \(Three-Star\) Certification](#)

[> Ministry of Health, Labor and Welfare: Eruboshi Certification of Outstanding Enterprises](#)

“Leading Company with Active Women Participation” Certification from Osaka City

Osaka City certifies companies and organizations that actively create workplace environments that are friendly to women based on a set of criteria under its “Leading Company with Active Women Participation” program. Through the certification, the city aims to develop social recognition for these companies to broadly promote their initiatives.



[> Certified as a Leading Company with Active Women Participation by Osaka City](#)

[> Plaza for Supporting Brilliant Women—To the Future... Ready... Go!](#)

Whistleblowing Compliance Management System Certification

Under the Whistleblowing Compliance Management System (WCMS; a registration system for self-declaration of conformity), a business owner will evaluate its whistleblowing system. If it complies with the set of standards, a designated registration institution will confirm compliance upon request from the business owner and register the results, thereby giving permission to use the WCMS mark.



Selected as a Constituent of the MSCI Japan ESG Select Leaders Index

The MSCI Japan ESG Select Leaders Index is comprised of companies that score relatively highly in terms of environment, social and governance (ESG) aspects from among the constituents of the MSCI Japan IMI Top 500 Index.

2021 CONSTITUENT MSCI JAPAN
ESG SELECT LEADERS INDEX

Selected as a Constituent of the MSCI Japan Empowering Women (WIN) Index

The MSCI Japan Empowering Women (WIN) Index is comprised of companies that excel in promoting gender diversity within their sectors. They are selected by MSCI from among the constituents of the MSCI Japan IMI Top 500 Index by calculating gender diversity scores from multiple perspectives based on data related to female employment disclosed under the Act on the Promotion of Female Participation and Career Advancement in the Workplace.

2021 CONSTITUENT MSCI JAPAN
EMPOWERING WOMEN INDEX (WIN)