

# Long-Term Vision “DAICEL VISION 4.0”

## Realizing a Sustainable Society While Achieving Sustainable Business Expansion

The Daicel Group has formulated its Long-Term Vision “DAICEL VISION 4.0” and its Mid-Term Management Strategy “Accelerate 2025” based on this vision, and is taking steps toward its realization.

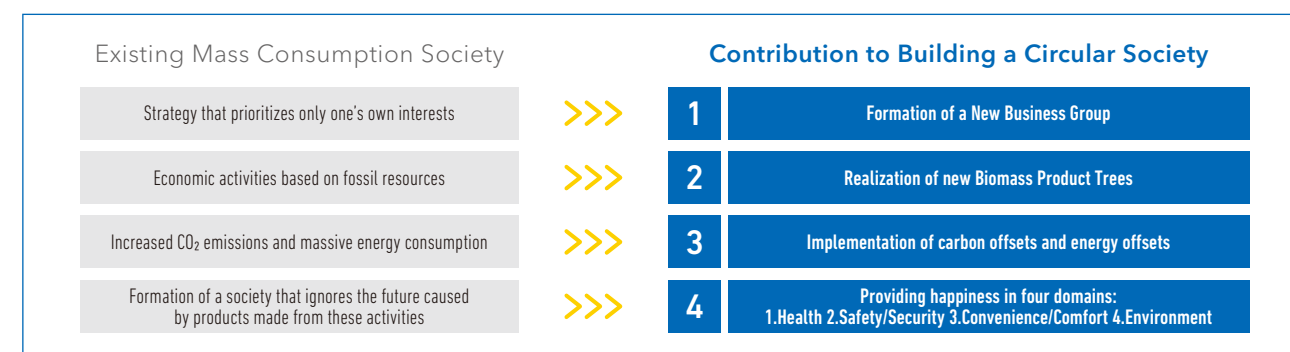
On this page, we will introduce the four structural transformations that the Group hopes to achieve in order to “contribute to building a circular society,” as stated in our Long-Term Vision.

## Goals of the Long-Term Vision

We believe that in order to achieve both a sustainable society and the growth of the Daicel Group in line with the Sustainable Management Policy, it is necessary to change the social structure that has taken mass production and mass consumption for granted.

Therefore, our Long-Term Vision is to contribute to the creation of a circular society through these challenges, while leveraging the strengths of our Group and working with partners that share our aspirations.

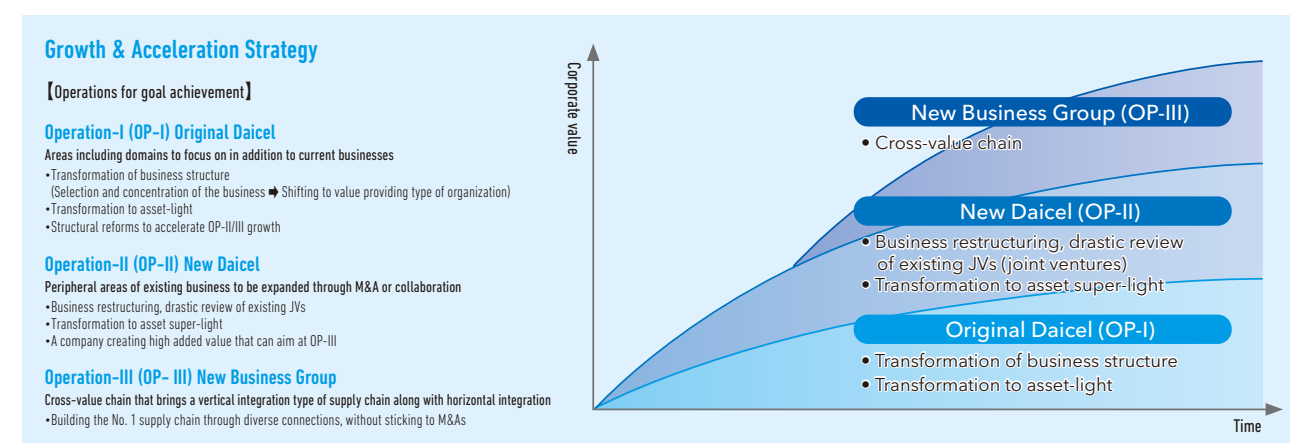
### Social shift to realize a circular society as stated in our Long-Term Vision and Mid-Term Management Strategy



## 1 Formation of a New Business Group

In order to change the social structure, it is essential to form a group (New Business Group) that can co-create new value for society and the environment. From a manufacturing perspective, we are just one of the processes that lead to our customers' end products. The supply chain is made up of a number of interconnected processes. By combining the strengths of the various companies, it is possible to create more efficient manufacturing than a single company could do by trial and error, and to create better products and more environment-friendly manufacturing methods. Our goal is for the supply chain to evolve into a unified value chain with the strength of co-creation to provide greater value to society. In addition to vertical partnerships connected by supply chains, diverse connections through horizontal business partnerships such as those among companies in the same industry are called cross-value chains, and the path to forming such a New Business Group is divided into three operations (OP below) that expand the scope of co-creation from Daicel alone to the Daicel Group to partners.

P.22 Mid-Term Management Strategy



## 2 Realization of New Biomass Product Trees

Cellulose acetate, which has been our forte, is an environment-friendly biomass material, but its production process requires a large amount of energy. To address this issue, we have created a technique to extract cellulose from wood under environment-friendly conditions by utilizing “technology for melting wood” and to produce cellulose acetate from cellulose that does not react easily, using less energy, through joint research with universities. In addition to cellulose, it is now possible to extract reactive substances such as hemicellulose and lignin contained in wood, which have not been utilized in the past. We are taking on the challenge of creating a new product tree that is environment-friendly in both products and manufacturing processes, leveraging the Group's existing businesses and insights from throughout the years.

We are working on real world implementation of this technology as one means of changing from a society that massively consumes finite fossil fuels to one that recycles the forests that cover approximately 70% of Japan's land as renewable resources.

P.26 Sustainable Product

## 3 Implementation of Carbon Offsets and Energy Offsets

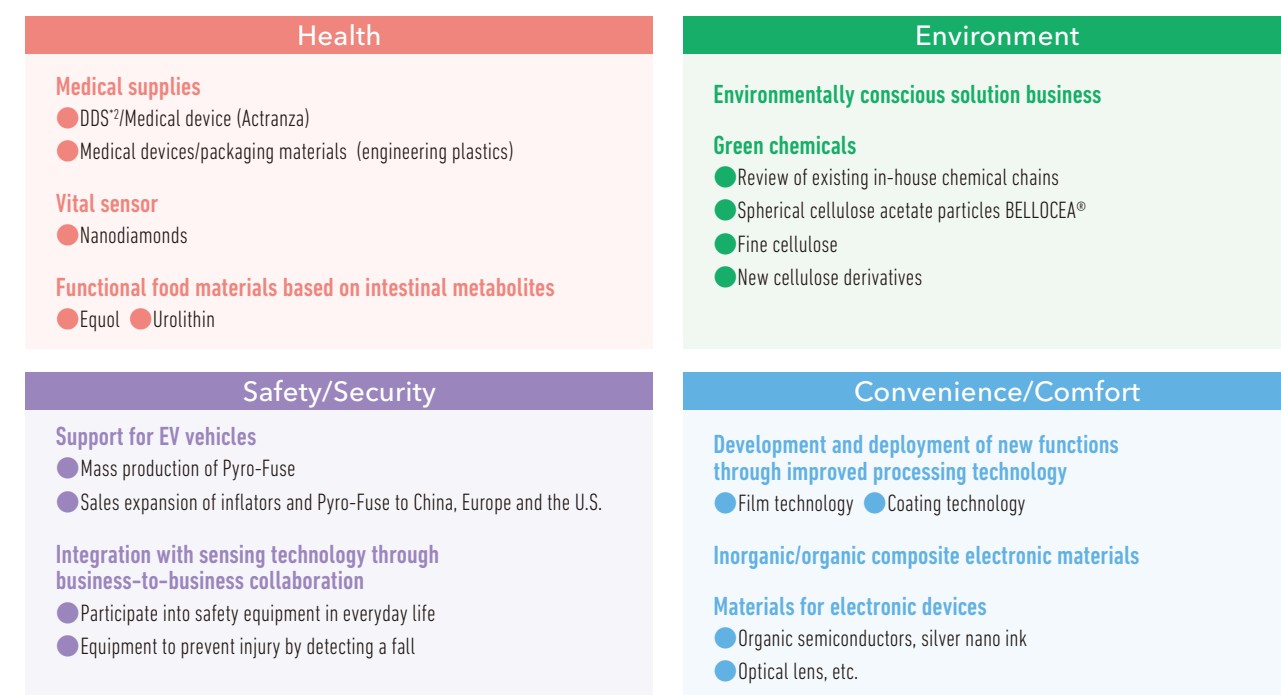
The chemical industry, which operates heavy and bulky plants, is generally considered an “energy-intensive industry.” The Daicel Group believes that in addition to creating products that benefit people and society, the manufacturing process must also be friendly to people and the earth. We are working to achieve carbon and energy offsetting through energy conservation based on DAICEL Production Innovation, as well as through innovations in manufacturing processes and new technologies that enable the reuse and effective utilization of carbon emissions.

P.28 Sustainable Process

## 4 Providing Happiness in Four Domains

The Daicel Group has defined four focus areas that it offers from the angle of leveraging the Group's strengths to help solve social issues. In the course of implementing our Mid-Term Management Strategy, we are moving beyond the framework of our existing SBUS<sup>1</sup> to identify specific new commercial products and markets that we will develop within our four focus areas.

P.38 Strategy by Business Segment



<sup>1</sup>SBU: Strategic business unit <sup>2</sup>DDS: Drug delivery system

# Sustainable Management and Materiality

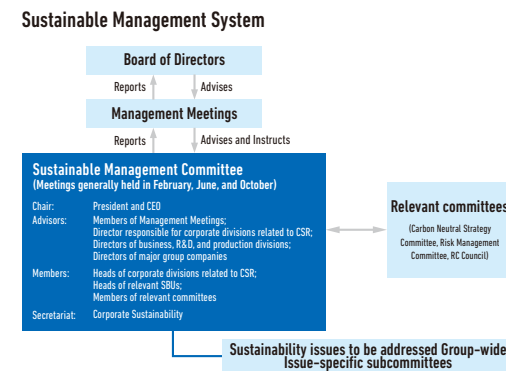
Based on our “Sustainable Management Policy,” we will focus on “safety, quality, and compliance” as the most important foundations of our business. Through integrity, tireless efforts, and self-transformation, we will achieve both the realization of a sustainable society and the expansion of the Group’s business. [P.05 Sustainable Management Policy](#)

## Sustainable Management System

The Group has established a Sustainable Management Committee (usually convened three times a year), which is chaired by the President and CEO, and comprising the heads of CSR-related divisions as committee members, and all senior managing executive officers, directors of business, R&D, and production divisions, and officers of major Group companies as advisors. Based on materiality, the committee discusses issues such as contribution to the development of a circular society, response to climate change, and respect for human rights at the management level. In addition, issue-specific subcommittees are working to strengthen initiatives and further enhance information disclosure for each theme related to sustainability, such as LCA, supply chain, and CSR.

The Board of Directors also oversees the status of the Group’s sustainability promotion by receiving regular reports from the Sustainable Management Committee, including the progress of KPIs (Key Performance Indicators) related to materiality.

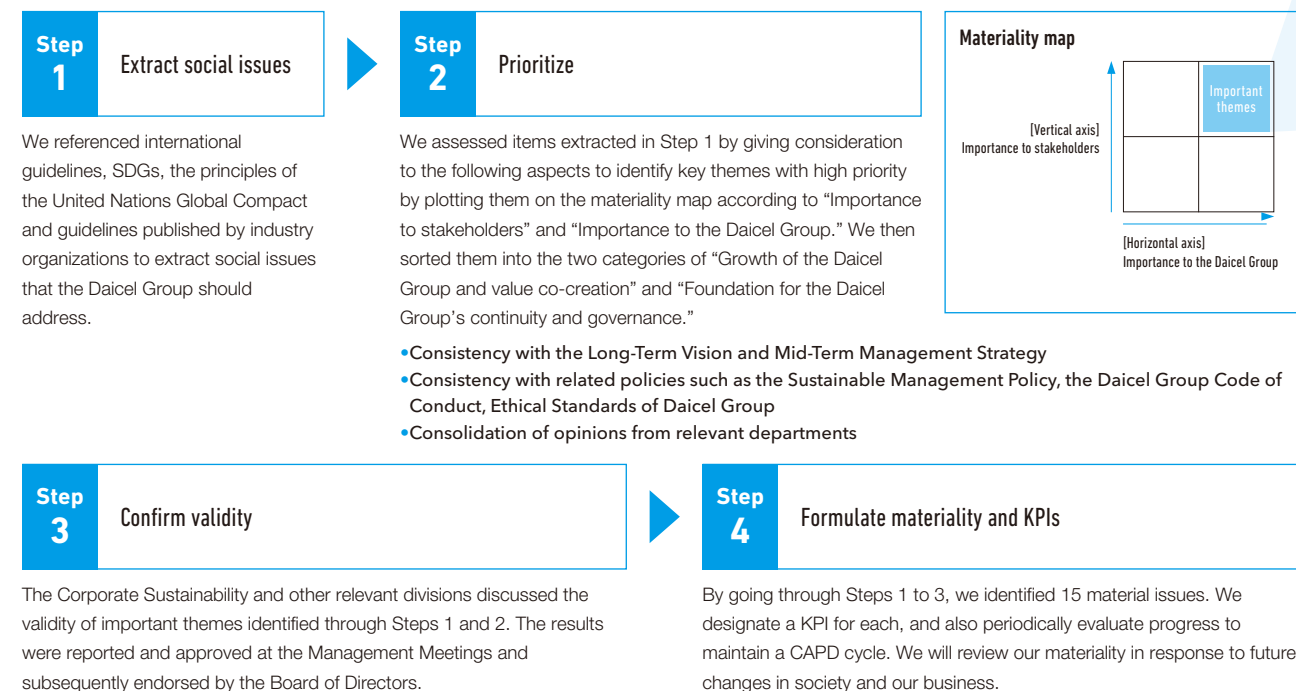
In FY2023/3, the Sustainable Management Committee convened three times, primarily to discuss the selection of materiality and its KPIs, as well as measures to address climate change and human rights issues, and reported its findings to the Board of Directors.



## Background and Approach to Materiality Identification

In FY2021/3, the Daicel Group has identified materiality as a key issue for achieving its Long-Term Vision and Mid-Term Management Strategy. Based on the three perspectives of products, manufacturing processes, and people in the Sustainable Management Policy, we identified how the Daicel Group can contribute to solving social issues represented by the SDGs by leveraging its strengths, while also addressing the most important foundations of safety, quality, and compliance, which are the prerequisites for such solutions. Daicel will contribute to the realization of a sustainable society in its own way by implementing the CAPD cycle\* in line with materiality.

## Materiality Identification Process



\* Instead of a Plan, Do, Check, and Act (PDCA) cycle, the most widely known approach to continuous improvement, the Daicel Group 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.

## Materiality List

### 1. Materiality aimed at achieving growth of the Daicel Group and value co-creation

In terms of products, manufacturing processes, and people under the Sustainable Management Policy, we have clearly identified areas where we will leverage our strengths to proactively create value in solving social issues represented by the SDGs.

Classification	Materiality	Relevant SDGs
Sustainable Product	Contribute to beauty and health <a href="#">P.38</a>	<ul style="list-style-type: none"> <li>Providing solutions for the pharmaceutical and medical markets</li> <li>Providing sustainable cosmetic raw materials and health food</li> </ul>
	Contribute to the smart society <a href="#">P.40</a>	<ul style="list-style-type: none"> <li>Providing solvents for semiconductor processing and polymers for resists</li> <li>Providing functional films that contribute to higher functionality of displays</li> </ul>
	Provide safety and security for society <a href="#">P.42</a>	<ul style="list-style-type: none"> <li>Providing products that ensure safety and security of mobility</li> </ul>
	Provide environment-friendly materials and technology <a href="#">P.26</a>	<ul style="list-style-type: none"> <li>Providing materials and technology that reduce environmental impact such as environment-friendly plastics</li> </ul>
Sustainable Process	Contribute to the development of a circular society <a href="#">P.26, 28</a>	<ul style="list-style-type: none"> <li>Building Biomass Value Chain</li> <li>Reuse of waste and CO<sub>2</sub></li> </ul>
	Respond to climate change <a href="#">P.28</a>	<ul style="list-style-type: none"> <li>Reduction of GHG emissions through production innovation, energy innovation, and process innovation</li> </ul>
Sustainable People	Promote diversity and inclusion <a href="#">P.34</a>	<ul style="list-style-type: none"> <li>Work environment where everyone can work with vigor regardless of gender, age, nationality or disability</li> </ul>
	Support personal growth <a href="#">P.34</a>	<ul style="list-style-type: none"> <li>Personnel development for honing expertise</li> <li>Framework to support employees who take on challenges</li> <li>Building highly fair evaluation system</li> </ul>

### 2. Materiality related to the foundation for the Daicel Group’s continuity and governance

We established respective considerations of prime importance for value creation, including safety, quality, and compliance, for E (environment), S (society), and G (governance).

Classification	Materiality	Relevant SDGs
Environment	Reduce environmental impact	<ul style="list-style-type: none"> <li>Promotion of waste reduction and recycling</li> </ul>
Social	Ensure process safety and disaster prevention, occupational health and safety	<ul style="list-style-type: none"> <li>Elimination of process incidents</li> <li>Minimization of damages based on crisis assessments</li> </ul>
	Ensure chemical safety and enhance product quality	<ul style="list-style-type: none"> <li>Reinforced quality management to prevent recurrence of quality defects</li> <li>Centralized management and sharing of chemical substance information</li> </ul>
	Respect human rights	<ul style="list-style-type: none"> <li>Establishment and implementation of human rights due diligence</li> <li>Development of a framework for corrective and remedial action against human rights abuses, and employee education</li> </ul>
	Foster a corporate culture that meets employee needs	<ul style="list-style-type: none"> <li>Shorter working hours and improvement in the annual paid leave acquisition ratio</li> <li>Employee health promotion</li> <li>Support for flexible work styles</li> </ul>
	Promote sustainable procurement	<ul style="list-style-type: none"> <li>Improved level of CSR across the supply chain</li> </ul>
Governance	Strengthen foundation for Group governance and compliance <a href="#">P.56, 63</a>	<ul style="list-style-type: none"> <li>Reinforce corporate governance</li> <li>Enforce thorough compliance</li> <li>Strengthen risk management</li> </ul>

## Materiality Monitoring

Along with established KPIs and targets, the progress of the identified materiality items is monitored through periodic evaluations by the Sustainable Management Committee and supervision by the Board of Directors. [P.48](#) for a list of KPIs and results.

Our sustainability website provides comprehensive disclosure of our sustainability efforts, including detailed information on materiality. <https://www.daicel.com/en/sustainability/>

Site Map \* Items in blue frame are also summarized in this report. The ★ mark indicates the materiality of our group.

Sustainability Management	Environmental Report	Social Report	Governance
<b>Materiality</b> <b>Responsible Care Activities</b> <b>Policy List</b>	Environmental Management ★ Respond to Climate Change ★ Reduction and Recycling of Industrial Waste Emission Management of Chemical Substances Water Resource Preservation Environmental Management and Prevention of Air Pollution Preserving Biodiversity	★ Respect for Human Rights Responsibility for Customers and Product Safety ★ Enhancing Product Quality ★ Chemical and Product Safety ★ Process Safety and Disaster Prevention Distribution Safety Creating Attractive Workplaces ★ Occupational Health and Safety Policy and Guidelines on Human Resources Initiatives to Help Employees Maintain Mental and Physical Health ★ Support for Human Resource Development ★ Promote Diversity and Inclusion ★ Foster a Corporate Culture That Meets Employee Needs ★ Sustainable Procurement Contribution to Local Communities and Society	★ Corporate Governance ★ Corporate Compliance ★ Risk Management Information Security List of Data Collection Boundaries Scope of Reporting for Human Resources and Governance Data Scope of Data Calculation for Environmental and Occupational Safety Performance List of Declarations and Certifications Status of Environmental Management System Certification Status of Quality Management System Certification ESG Data GRI Standards Content Index Participation in Initiatives and External Recognition

# Mid-Term Management Strategy “Accelerate 2025”

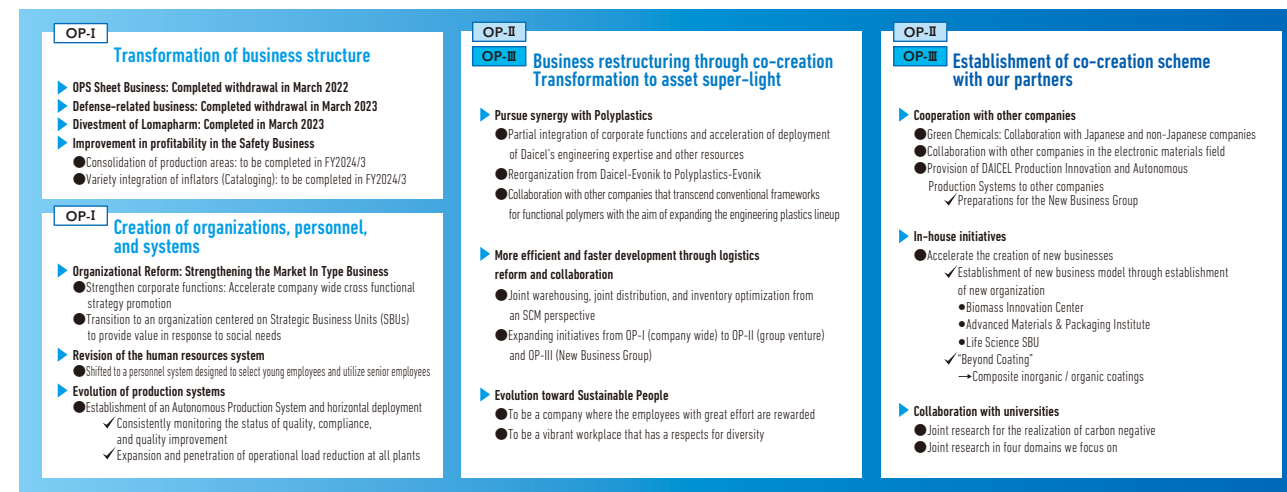
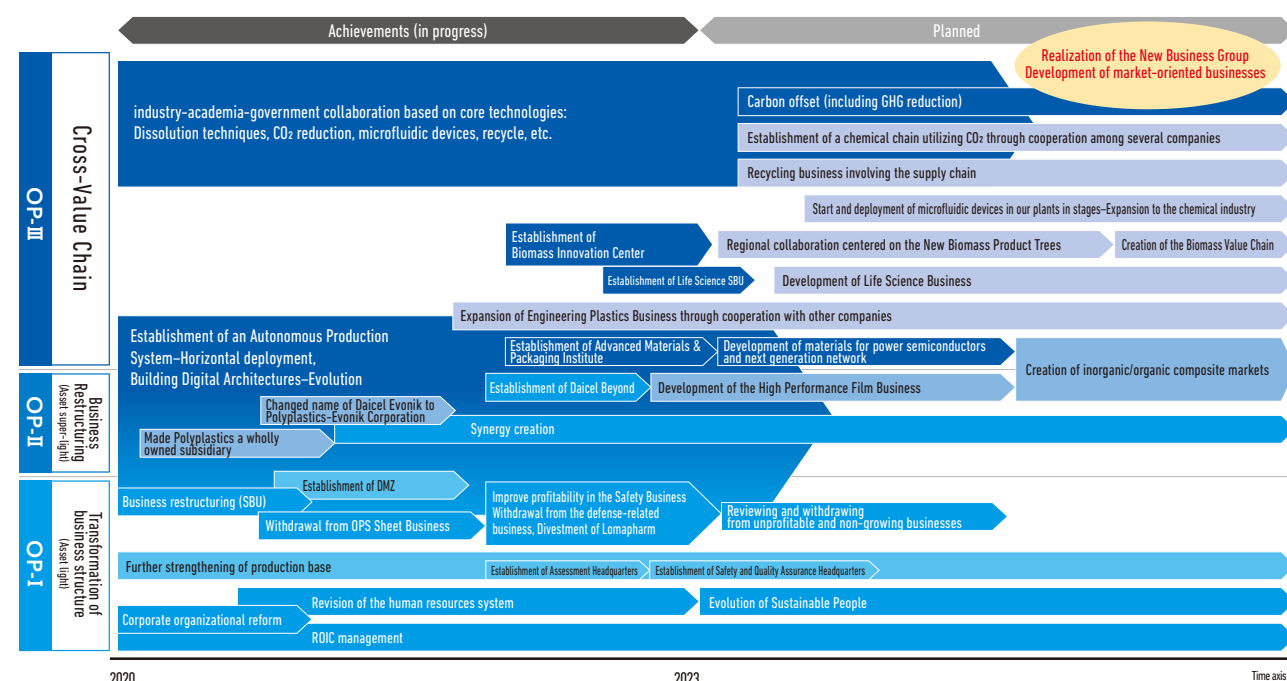
We are working on the steady implementation of each measure outlined in our Mid-Term Management Strategy to improve the Daicel Group’s profitability and business creation capabilities while expanding the scope of value co-creation. We had confirmed the progress of each measure and taken into account the current business environment, and announced an updated version of our Mid-Term Management Strategy in May 2023.

[Presentation Materials of Mid-Term Management Strategy \(updated\)](https://www.daicel.com/en/news/assets/pdf/20230511_8.pdf)  
[https://www.daicel.com/en/news/assets/pdf/20230511\\_8.pdf](https://www.daicel.com/en/news/assets/pdf/20230511_8.pdf)

## Mid-Term Management Strategy (Updated)

In order to expand the scope of value co-creation from Daicel stand-alone to the Daicel Group to our partners, we are implementing the measures of our Mid-Term Management Strategy by dividing it into three operations (hereinafter OP).

In order to transform ourselves into OP-I, “a company that creates businesses that accurately grasping social needs,” we have made steady progress in transforming our business structure, reforming our organization, and reallocating resources through portfolio management. In addition, to achieve OP-II, “a group that can co-create with other companies,” we are working to strengthen profitability and business creation capabilities by maximizing intra-group synergies through a fundamental review of existing joint ventures, including the conversion of Polyplastics into a wholly owned subsidiary. In the future, to realize OP-III “establish co-creation scheme with partners,” we will continue to strengthen our new core technologies under industry-academia-government collaboration, that are the keys to realize a New Business Group and develop market-oriented businesses.

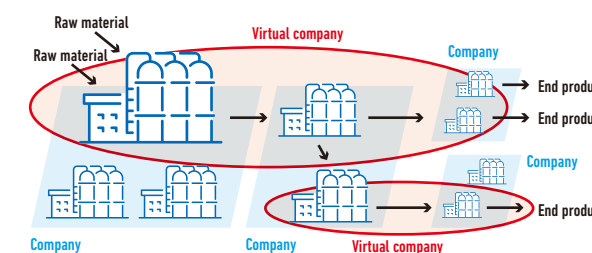


## Effects of Realizing a New Business Group (Virtual Company)

We have started to establish virtual company, a concept that considers multiple companies in a supply chain as one company, as a measure to materialize the “formation of a New Business Group” set forth in our Long-Term Vision. In order for both ecology and economy to co-exist in the chemical industry, we must create optimal solutions by collaborating with other companies in the supply chain to address challenges such as carbon neutrality, which cannot be solved by a single company alone, and to improve competitiveness in terms of cost and quality.

The challenge for the conventional chemical industry is that upstream process facilities are built larger than downstream process facilities, creating a capacity gap that leads to energy waste, losses, and inventories. What will be important is the establishment of a system that synchronizes information across company boundaries enabling production of required quantities when necessary. DAICEL Production Innovation has achieved optimal production by unifying terms across departments and plants, visualizing necessary information including operational know-how, and synchronizing information within plants and between plants located far apart. Expanding the scope of its application to other companies connected in the supply chain will lead to the reduction of excess inventory and associated energy use, as well as production and logistics costs. Needless to say, the introduction of DAICEL Production Innovation will also contribute to the improvement of each company’s production efficiency and product quality. As a result, it will improve the competitiveness and corporate value of the entire supply chain, as well as just the company itself.

We estimate that if we were to achieve this in one of our core businesses, part of the benefit would be a 20% reduction in inventory and a 30% reduction in GHG emissions from the production angle. To achieve this goal, we have begun to establish a co-creation scheme with partners, both in terms of commitment among company leaders and information coordination through the use of DX (DAICEL Production Innovation and Autonomous Production System).



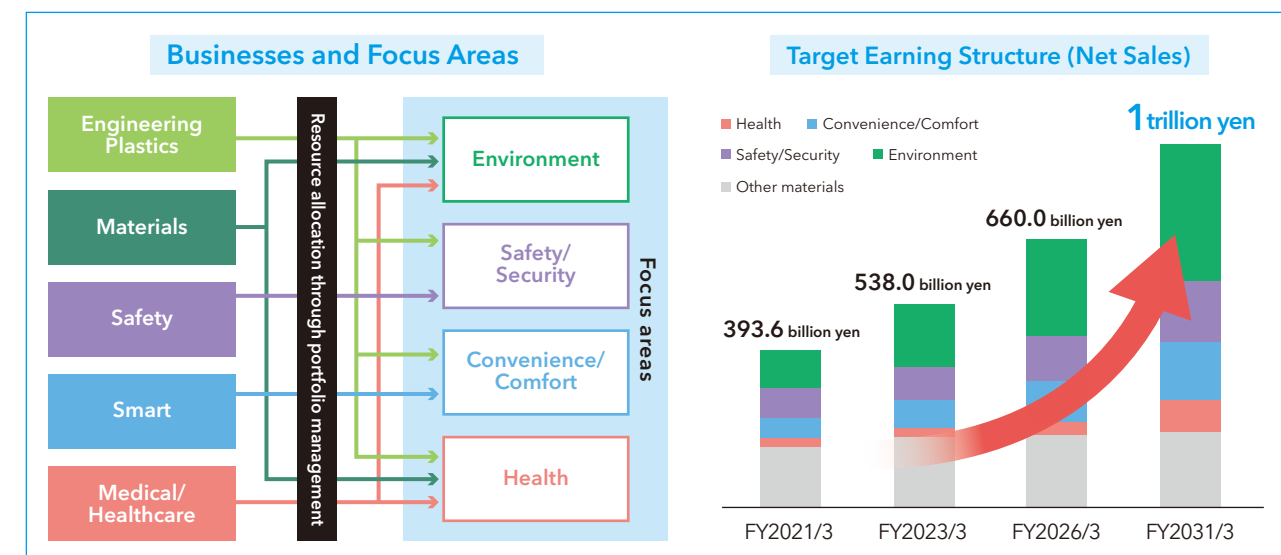
### Potential for supply chain collaboration across the border of companies

#### 20% reduction in inventory, 30% reduction in GHG emissions

Angles	Keywords	Merits
Production	Continuous monitoring management Small lots Reducing time to stop and restart operation Synchronization of production plans	<ul style="list-style-type: none"> <li>• Enhancing product quality</li> <li>• Inventory reduction</li> <li>• Energy conservation</li> </ul>
Development	Co-creation	<ul style="list-style-type: none"> <li>• Reduction in development period</li> <li>• Reduction in cost of development</li> <li>• Reduction of frequency of customer evaluations</li> </ul>
Distribution	3PL Lead time reduction	<ul style="list-style-type: none"> <li>• Reduction of third-party warehouses</li> <li>• Reduction of on-site logistics</li> <li>• Inventory optimization</li> </ul>
Energy	Load equalization Elimination of capacity gap between energy supply and production CO <sub>2</sub> reduction	<ul style="list-style-type: none"> <li>• Acceleration of self-consignment system</li> <li>• Overall optimization of energy usage through process synchronization</li> </ul>

## Focus Areas and Targeted Profit Structure

The Long-Term Vision identifies four focus areas where social trends and needs are growing and where the Group can demonstrate its strengths. We have classified our businesses into four portfolios: “Next Generation,” “Growth,” “Foundation,” and “Reform,” and we will strive to grow existing and new businesses in the four focus areas while allocating management resources unevenly as appropriate.



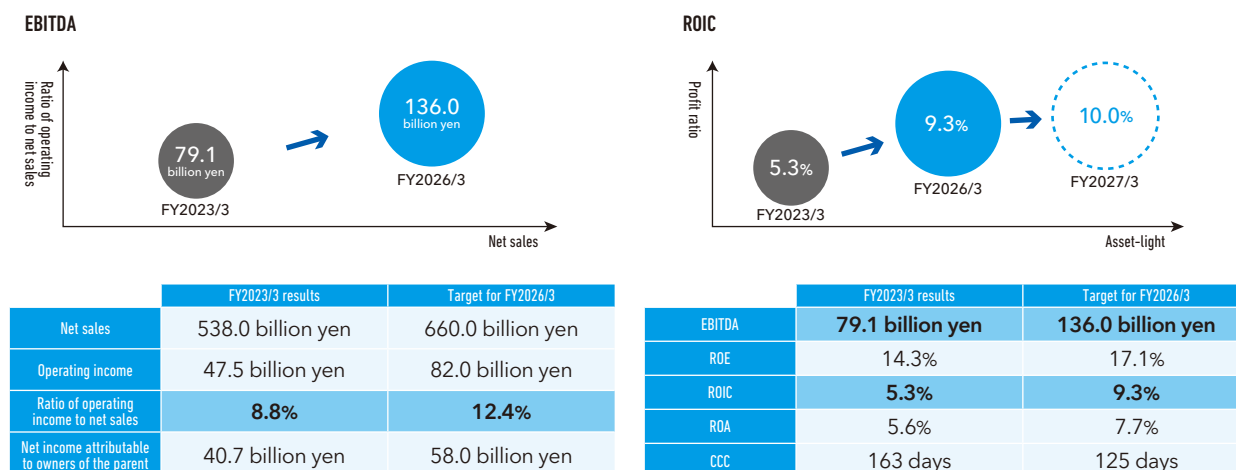


# Financial Strategy

Through balance sheet control and optimal cash allocation, we will achieve our management targets and work to sustainably improve corporate value.

## Financial Performance and Targets

Taking current business performance and changes in the external environment into consideration, we updated our Mid-Term Management Strategy and announced new financial targets for its final year, FY2026/3, in May 2023.



During the period of the Mid-Term Management Strategy, the Group will continue the trend of increased sales and profits by improving the profitability of the Materials Business as a foundation business of our business portfolio, expanding sales in growth businesses such as the Safety Business and Engineering Plastics Business, and reducing costs from top to bottom throughout the Group. We are aggressively investing to expand production capacity in growth businesses, and plan to invest 190.0 billion yen in growth over the three years through FY2026/3, aiming to further increase EBITDA\*.

Although assets have been increasing in line with the progress of growth investments, we aim to improve capital efficiency by implementing measures to become asset-light, and to achieve ROIC of 9.3% in FY2026/3, the final year of the Mid-Term Management Strategy, and 10% in FY2027/3.

\* EBITDA: Earnings before interest, taxes, depreciation and amortization; ROE: Return on equity; ROIC: Return on invested capital; ROA: Return on assets; CCC: Cash conversion cycle

## Basic Approach of Financial Strategy

### Balance Sheet Control

We will control total assets of balance sheet, which has been expanding as we invest in growth and increase sales, to both maintain a sound financial base and improve capital efficiency.

In order to control the increase in working assets including inventories, we will deploy our Autonomous Production System to each plant and take measures utilizing DX, such as improving the accuracy of forecasting required inventory through AI, continuous point management of quality through online analysis, and flexible inventory management through smaller lots. In addition, for cellulose acetate (product) and pulp (raw material), which account for a large proportion of inventories, we will accelerate inventory reduction by integrating raw material and product varieties through improved manufacturing methods (P.44 Materials Business). This will hold working assets in FY2026/3 (the final year of the Mid-Term Management Strategy) to the same size as in FY2023/3, and a cash conversion cycle of 125 days (FY2023/3: 163 days) will be achieved. In addition, we will pursue “asset-lighting” measures, such as careful selection of investment projects, accelerated reduction of cross-shareholdings (38.9-billion-yen reduction over the Mid-Term Management Strategy period), and reduction and optimization of liquidity on hand, to prevent balance sheet expansion and improve asset efficiency.

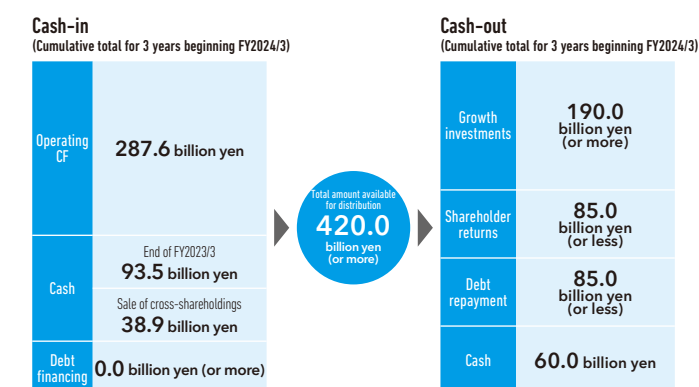
As of March 31, 2023		Target for the end of March 2026	
Assets	Liabilities and Equity	Assets	Liabilities and Equity
<b>Current assets</b> 406.6 billion yen Cash and deposits 93.5 billion yen Working assets 278.7 billion yen	<b>Liabilities</b> 455.2 billion yen Interest-bearing debt 222.0 billion yen	<b>Current assets</b> 370.0 billion yen Cash and deposits 49.0 billion yen Working assets 280.0 billion yen	<b>Liabilities</b> 380.0 billion yen Interest-bearing debt 240.0 billion yen
<b>Non-current assets</b> 300.1 billion yen Cross-shareholdings 58.9 billion yen	<b>Net assets</b> 310.4 billion yen	<b>Non-current assets</b> 350.0 billion yen Cross-shareholdings 20.0 billion yen	<b>Net assets</b> 360.0 billion yen
<b>765.6 billion yen</b>	<b>765.6 billion yen</b>	<b>740.0 billion yen</b>	<b>740.0 billion yen</b>

With regard to the capital structure, we will achieve the net DE ratio of 0.5 by the end of FY2026/3 through the repayment of interest-bearing debt to further strengthen the financial base. On the other hand, we will also focus on the efficiency of shareholders' equity. In terms of shareholder returns, we will strive to further strengthen returns to shareholders by paying out dividends and making appropriate share buybacks based on a total payout ratio of 40% or more, which is the target of this Mid-Term Management Strategy. We believe that the continued improvement in earnings per share (EPS) due to the sustained profit growth trend and the implementation of equity controls will have a positive impact on various stock price indices.

## Cash Allocation

We will maximize cash inflow through the promotion of asset-light and strengthening the profitability of each business, and allocate it in a balanced manner to growth investments, shareholder returns, and debt repayment.

In addition to strengthening profitability, we will properly manage business assets, reduce non-business assets, reduce liquidity on hand, and use the cash generated to invest in growth, return profits to shareholders, and repay debt. For growth investments, we will allocate 190.0 billion yen, mainly for investment in increased production in the Engineering Plastics Business. Cash outflows of up to 85.0 billion yen each are planned for shareholder returns and debt repayment. In the event of unplanned growth investments, M&A and other projects that will lead to further expansion of cash generation capacity in the future, we will flexibly control cash-in and cash-out to ensure that we seize opportunities to improve corporate value.



## Growth Investments and Their Effects

We will focus on the Engineering Plastics Business of Polyplastics as a main growth investment target in the Mid-Term Management Strategy, which became a wholly owned subsidiary in October 2020. The wholly-owned subsidiary gave us greater freedom to develop geographic markets and enable us to speedily pursue our growth strategies, such as investments in capacity expansion of mainstay products and expansion of new product lineups. Our Mid-Term Management Strategy is to increase production of POM, LCP, and COC, which is expected to have a cumulative effect of 30.0 billion yen in EBITDA from its start by FY2026/3 and 178.0 billion yen in EBITDA by FY2031/3. We are also working to maximize synergies within the Daicel Group by promoting the scaling out of DAICEL Production Innovation, integrated operation of the plastics businesses, and mutual utilization of R&D resources.

### Increased Production Investment Effectiveness Targets

Investment	Initial plan		Forecast		Effect (EBITDA)*	
	Start of operation (fiscal year)	Increased production capacity (MT/year)	Start of operation (fiscal year)	Sales expansion strategy	FY2026/3 (billion yen)	FY2031/3 (billion yen)
POM	2026/3	90,000	2025/3	<ul style="list-style-type: none"> <li>Increased production in China to meet domestic demand</li> <li>Active use of next-generation methanol as a raw material</li> <li>Develop new non-automotive applications/markets, such as medical applications</li> </ul>	16.0	78.0
		60,000	2026/3			
LCP	2025/3	5,000	2025/3	<ul style="list-style-type: none"> <li>Maintain top market share by further expanding sales to meet the growing demand for 5G millimeter wave compatibility</li> <li>New market expansion with 5G composite materials (hybrid with inorganic compounds)</li> </ul>	5.0	36.0
		5,000	In the planning stage			
COC	2024/3	20,000	2025/3	<ul style="list-style-type: none"> <li>Growing demand in the packaging and medical fields</li> <li>Expanding sales to EU countries by leveraging unique recyclability</li> </ul>	9.0	64.0
<b>Total</b>					<b>30.0</b> (Initial plan 20.0)	<b>178.0</b>

\* Cumulative benefits (EBITDA) from start of operation