Yoshimi Ogawa
President and CEO, Daicel Corporation

Accelerate Technological Innovations and Create a Bright Future Together With Diverse Partners

We will accelerate value co-creation through the supply chain, aiming to build a circular society and achieve sustainable growth of the Daicel Group.

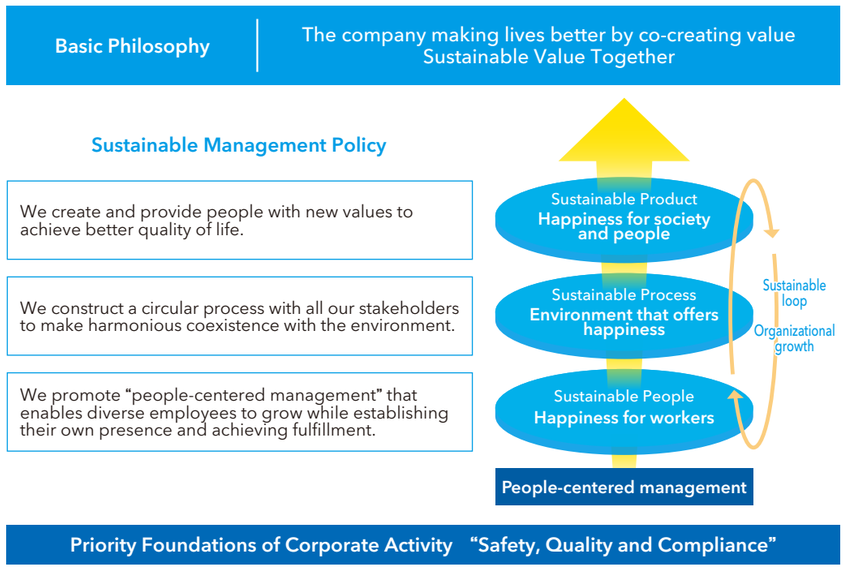
Introduction

Last year, inappropriate conduct regarding third-party certification was revealed with respect to certain products of our group company, causing great inconvenience and concern to our customers and other concerned parties. I would like to extend our sincerest apologies on behalf of the entire Daicel Group. We take seriously the thorough investigation conducted by outside experts and the recommendations suggested by them to prevent recurrence. We have implemented various measures, including organizational reforms, to prevent recurrence. We have renewed our Code of Conduct and Ethical Standards, with every employee reaffirming the sense of “Being a good member of society before being a business person.” Additionally, in order to ensure that the importance of safety, quality and compliance is the priority foundations of the group is permeated through each corner of the organization, we have compiled the past incidents of accidents and quality issues and these are carried by all the employees along with the new Code of Conduct and Ethical Standards. I believe it is of utmost importance that we reflect on this and other events found this time and do not let the lessons learned from them fade away. We look forward to your continued guidance and support.

Daicel’s Management Philosophy

In 1919, eight celluloid companies came together to form the Dainippon Celluloid Co., Ltd., the predecessor of our company. During World War I, the number of celluloid manufacturers increased due to a special procurement boom. This led to excessive felling of camphor trees in Taiwan, which was a major producer of camphor—a raw material used in plasticizers—and excessive competition further led to mass production of inferior products. Concerned by the situation, our first president, Mokichi Morita, preached resource conservation through planned felling of trees and improved international competitiveness through quality stability, leading to a merger that transcended conglomerates. As a materials manufacturer, we also focused on nurturing processing companies who are our users and on industrial development through co-existence and co-prosperity along the entire supply chain through the stable supply of products. The subsequent development of flame-resistant celluloid and the mass production of domestic photographic film was the creation of a value chain through functionalization and downstream production of products. Based on the idea that a company exists to contribute to society, Daicel has maintained its “desire to enrich people’s lives” and “spirit of co-existence and co-prosperity with other companies,” which is reflected in the current management philosophy, and a source of pride for the company.

Here, the scope of co-existence and co-prosperity is not limited to the company, but includes co-existence with the global environment and nature, as stated in the philosophy of our first president. This is one of our major characteristics. Looking at the percentage of our chemical raw materials purchased, 20% are of crude oil origin, but the most common is methanol, which is a non-petroleum raw material in C1 Chemistry. The next largest volume is of wood-derived pulp, which is the raw material for cellulose acetate. We are thus closest to being a company which uses biomass as raw material. With these roots, we believe it is only natural for us to aim to build a circular society by realizing the “Biomass Value Chain Concept” and carbon neutrality (negativity) set forth in our Long-Term Vision and by aligning ecology and economy through the power of chemistry.



Aligning Ecology and Economy

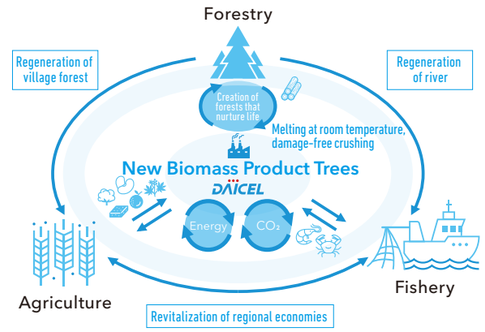
Ecology essentially means the study of life and habits of animals and plants. Being in harmony with nature begins with eliminating waste. While there are certainly many technical challenges involved in building a circular society and achieving carbon negativity, ecology and economy are inherently compatible. The reason why it is difficult to achieve a circular society is because ecology has an impossible number of processes. If we move from the current mass-production and mass-consumption society to one that produces and consumes only the amount that is truly necessary, ecology and economy will be compatible in the final goal, even if they conflict somewhat in the process. Otherwise, it won't be possible to make truly sustainable products. Even if it is not easy, we should see "opportunity for corporate growth" in solving problems in ecology to strike a balance between ecology and economy. Japanese companies have gained strength in the past by turning pollution and environmental problems into opportunities for improvement and innovation. To achieve a sustainable society, including carbon neutrality and resource circulation, it is necessary to change industrial structures and the way we use energy. We believe that our company's mission is to promote technological innovation to accelerate this movement.

Growth Opportunities for Technological Innovation

As an example of technological innovation to achieve both ecology and economy, Daicel has started to realize the "Biomass Value Chain (hereinafter referred to as "BVC") Concept" and "Microfluidic Devices" using its own strengths.

The BVC concept aims to establish a technology to systematically utilize forests, which cover approximately 70% of Japan's land area, as a renewable biomass resource under moderate conditions and to create a sustainable, circular industrial structure. Of course, we do not believe that cellulose acetate alone, which is made from wood, can replace petroleum-based plastics. It is essential to have an open attitude to widely share the technology and data on the use of biomass materials, not just wood, with our partners. If spread widely, this technology will also contribute to regional development. Companies establish innovative technologies and use that know-how to utilize locally-produced biomass as a resource. This will encourage individuals to experience the joy of manufacturing at an individual, household and community level, which will bring out a rapid change in their lifestyles. The BVC concept will be pursued on two fronts—one is establishing innovative technology and generating profits through added value and the other is spreading know-how on a not-for-profit basis.

Biomass Value Chain



"Microfluidic Device" technology has the potential to bring about significant changes in the manufacturing processes of the chemical industry. Since manufacturing processes of chemical plants generate impurities other than the target substances, a lot of energy is consumed in the refining processes required for purification. If only the target substance can be produced under ideal reaction conditions, it will eliminate the need for refining processes, which consume 80% of the energy. The microfluidic device developed by our company in collaboration with the National Tsing Hua University of Taiwan is an ultra-compact chemical plant, in which several chemical operations are allowed to be performed on ultra-fine channels on glass substrates to achieve ideal reactions. In FY2025/3, we plan to use this technology to manufacture polymers for photoresists used in semiconductor circuits. To start with, we will implement this method in the manufacturing of high-mix low-volume products and then expand the scope to mass-production. P.31 Sustainable Process

DX and an Open Mind — Foundation for Co-Creation with Other Companies

It is difficult for one single company to establish a harmonious balance between ecology and economy. For example, even within the same plant, if the supply chain from pre-processing to post-processing is not well-connected, the material balance collapses and mutual processes become irrelevant. On the other hand, if the processes are run in another company but the supply chain is well-connected, optimal operations of the entire supply chain can be achieved and large-scale wastage and loss can be averted, striking a harmonious balance between ecology and economy. DX and an open mind are the key to achieving optimal operations of the entire supply chain, which goes beyond the optimal operations of a single company.

DX helps us visualize the amount of energy required in real time and, is therefore, indispensable for eliminating energy loss and achieving carbon neutrality while manufacturing what is needed. As a means to achieve this, Daicel established the "DAICEL Production

Innovation" in 2000, and then the Autonomous Production System, which is an evolved version of DAICEL Production Innovation using AI. One of the reasons why corporate alliances have not been successful in Japan in the past is because of the lack of unified data resources and data architecture. DAICEL Production Innovation makes it possible to unify the information from all the companies connected in the supply chain and visualize the data with aligned resources. With the concept of "Virtual Company," the entire supply chain is viewed as one company, which has functions and facilities such as procurement, production and sales. We intend to optimally manage and administer these functions and facilities and optimize the entire supply chain, which will help in striking a harmonious balance between ecology and economy.

Even in the field of research and development, working with an open mind allows us to understand each other's true needs and the technologies required to meet them, which significantly reduces the time required for development. In that case, I think there is a way of thinking that patents should be used for a minimum amount of royalties at first, and then distributed accordingly once its benefits are established.

Co-creation can be in many forms such as forming business alliances or mergers; however, having a loose governance system may also serve the purpose. I believe now is the time to freely discuss about how to work that out. Keeping an open mind is the first step to achieving open innovation.

Mid-Term Management Strategy Review

FY2023/3 saw a delay in the recovery of automobile production due to insufficiency of semiconductor supply as well as a decline in the demand for electronic devices. However, although these conditions were unfavorable, there was a tailwind in foreign exchange, and we were able to achieve the sales targets set under the Mid-Term Management Strategy. We will investigate and find out if our achievements were a result of actual ability or a tailwind, and plan our next actions accordingly.

Under our current strategy, we have divided our operations into three categories to fully utilize the assets and achieve maximum efficiency in resource recovery. In the first category of operations, we restructured our existing businesses and changed our organizational structure to have a more market-oriented approach, that is, meet the needs of our customers. We also withdrew operations, closed down sites and sold off businesses at a rapid rate in line with our portfolio management. Under category two, we drastically examined our relationships with our long-standing, joint-venture partners, and made Polyplastics Co., Ltd. our wholly owned subsidiary in 2020. We have almost completed our plans for the first half of the Mid-Term Management Strategy and will focus on forming a virtual company, which is our operation category three, in FY2024/3.

Thoughts on Mid-Term Management Strategy Update and Issues to Be Tackled in the Second Half

Various social condition have caused sudden changes in the business environment. We believe it is important to constantly update our strategy according to the changes in the business environment. With that in mind, we reviewed our actions and progress and updated our Mid-Term Management Strategy in May 2023. We have been accelerating our operations to keep up with the speed of the world and hence, this review gave each one of us in the Group an opportunity to pause and reflect.

One of the challenges to be tackled in the latter half of the Mid-Term Management Strategy is to ensure reliable operation of the raw material (carbon monoxide) plant for acetic acid, which is a large-scale investment. Due to Russia's invasion of Ukraine, we were unable to procure coal for the plant from the initially-planned location and had to revise our operations plan. With this review, we sought to not only adapt our operations to different types of coal but also increase the number of available types of coal, and increase the stability in raw material procurement and production. We thus intend to convert this crisis into an opportunity by making our operations more flexible.

Another challenge is to identify opportunities for new businesses and M&As. Although we need to work on increasing the endurance of new businesses, the overall response feels positive. We have also identified the potential of metal adsorption technology to recover rare metals and other metals using fine cellulose. Nanodiamond is also a material that can be chemically modified to impart organic and inorganic properties. Using our detonation technology, we are conducting joint research to develop a method for synthesizing nanodiamonds on a large scale, and also working on developing technologies to use nanodiamonds as a catalyst for CO_2 reduction. In addition, we are looking to expand our businesses in the field of life sciences. Through the development of new technologies and exploring new combinations of materials, we are paving our way to achieve carbon neutrality and even carbon negativity by 2050.

P.28 Sustainable Process

Human Resources Are the Most Important Management Resource

I believe the second half of our Mid-Term Management Strategy is when the Group's capabilities will be truly tested. Human resources are our most important resource, which are indispensable in realizing a sustainable society and supporting the growth of the company through various measures. We promote "people-centered management" that enables diverse employees to grow while establishing their own presence and achieving fulfillment. One of the ways we do this is through "delegation of authority" and "personnel selection." During the development of our Autonomous Production System, we asked a young employee in the 30s to think of a production system that looked 10 years into the future. He took on the responsibility and worked in collaboration with the University of Tokyo. I said "I leave it to you" and he proceeded with the project proactively, reporting to me regularly, and achieving excellent results. This is when I newly realized the importance of delegating responsibility and praising the results.

When I was a student, I cycled across the U.S. to test myself. I met a lot of different people, some of whom thought I was a hero for taking up such a challenge. But when I saw local people volunteering at the church on weekends, I realized that it is such people who fulfill their duties in their daily, honest lives who are truly the great ones. The same is true for companies, and it is of utmost importance that the employees who fulfill their obligations honestly also get to exercise their rights. In FY2023/3, we reformed our personnel system by collaborating with the Workers' Union. We introduced a compensation system that encourages employees to take on challenges and evaluates the process and results of their work, along with a multiple-track job grade system. Employees also have rights and duties, and if company life accounts for one-third of an employee's life, it would be more fulfilling to have multiple options for work and career, and to have options for choosing how you want to live and work. With a strong desire to fulfill this, we reviewed our entire human resource system, including the multiple-track job grade system. With regard to the compensation system, we introduced the Restricted Stock Compensation System for managers to allow each employee to gain a manager's perspective and work with eyes on the mid-term and long-term results. This means increased compensation as well as funds for a second life. We believe that people-centered management not only entails protection of jobs, but also entails having a capacity to give employees more options.

P.34 Sustainable People

Improvement of Profitability and Growth

We need to improve our management indicators to accelerate growth and increase our corporate value. The ROIC, in particular, is still low. Although we have stepped up our capital expenditure and our invested capital is increasing, we are determined to recover the investments and obtain profits. With that in mind, we shall maintain the sales and profit growth by promoting the sales and improving the profitability and growth of our main businesses, while also aiming to increase the EBITDA and achieving the target of 10% ROIC by FY2027/3. We also plan to further improve shareholder returns based on a total return ratio of 40% or more.

Although chemical plants are still heavy and bulky, the implementation of microfluidic devices in the future will shorten the payback period of investment. Once this is realized, materials industries such as ours will be able to shorten their payback period in the same way as the assembly industry. This will also help in striking a balance between the ecology and economy. We hope to show that being environment-friendly also increases the efficiency of economic capital.

Although we have set a target of 1 trillion yen in sales for FY2031/3, we are aiming for a multi-trillion-yen joint venture. We will promote coexistence and co-prosperity in the supply chain as we increase Daicel's corporate value, make lives better through value co-creation, and create a bright future.

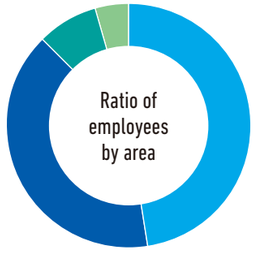
At a Glance

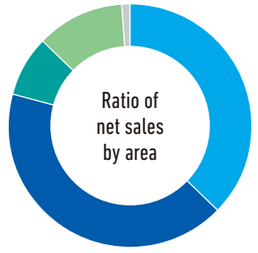
We support the worldwide monozukuri manufacturing through the power of chemistry. (As of March 31, 2023)

1919
Company founded

76 companies in 14 countries and regions
Number of Group companies

11,207
Consolidated number of employees





538.0 billion yen
Consolidated net sales

47.5 billion yen
Consolidated operating income

Medical / Healthcare

▶ P.38

We provide safe, high-quality healthcare materials and solutions for pharmaceutical development to a society that values quality of life.

World market leader

Chiral columns

Chromatographic columns for separation of optical isomers. Contributing to the provision of safe medicine by separating active pharmaceutical components

BELLOCEA®
(spherical cellulose acetate for cosmetics)

Its marine biodegradability is expected to contribute to solving the marine plastic waste problem in the cosmetics industry

FY2023/3 results*
Net sales **16.6 billion yen**
Composition ratio **3.1%**

Smart

▶ P.40

We provide new solutions to the electronic materials market that makes life more enjoyable and fosters technical innovation.

World market leader

Cellulose acetate for LCD optical films (TAC)

Utilizing its superior optical characteristics, transparency, and smoothness, it is used as a protection film for LCDs

Solvent for electronic materials

High purity, low metal solvent production and quality control system with a proven track record in semiconductor process applications

Net sales **29.6 billion yen**
Composition ratio **5.5%**

Safety

▶ P.42

We provide safety and security to a wide range of industries with One Time Energy® technology developed through our airbag inflator business, which boasts a high global market share.

Japanese market leader

Automobile airbag inflators

Supplying the key component for automobile airbag systems that protect passengers in the event of a collision

Pyro-Fuse

Supporting safe daily living by expanding One Time Energy® technology (developed in the course of producing inflators) to industrial applications other than automobiles

Net sales **84.0 billion yen**
Composition ratio **15.6%**

Materials

▶ P.44

We provide value to a wide range of industries on the strength of our diverse product lineup centered on the acetyl chain and unique manufacturing methods.

Japanese market leader

Acetic acid

The only manufacturer of acetic acid in Japan. Acetic acid is an environment-friendly ingredient for plastic products, providing solutions as an environ-ment-friendly material

World market leader

Alicyclic epoxy

The world's only manufacturing process that contains no impurities and no chlorine, so it is widely used in electrical materials applications where reliability and durability are required. It is also attracting a great deal of attention for EV applications

Net sales **160.8 billion yen**
Composition ratio **29.9%**

Engineering Plastics

▶ P.46

We provide high-function, high-value-added solutions to a wide range of industries with our technological capabilities cultivated over the years as a pioneer in engineering plastics.

World market leader

Polyacetal (POM)

Used in a wide range of applications such as automobiles, electronics and electrics, and industrial equipment, contributing to the development of the major industries of each era

World market leader

Liquid crystal polymer (LCP)

Used in many ultra-compact precision connectors for the latest IT devices, such as tablets and smartphones, which are becoming smaller and smaller, and support public infrastructure

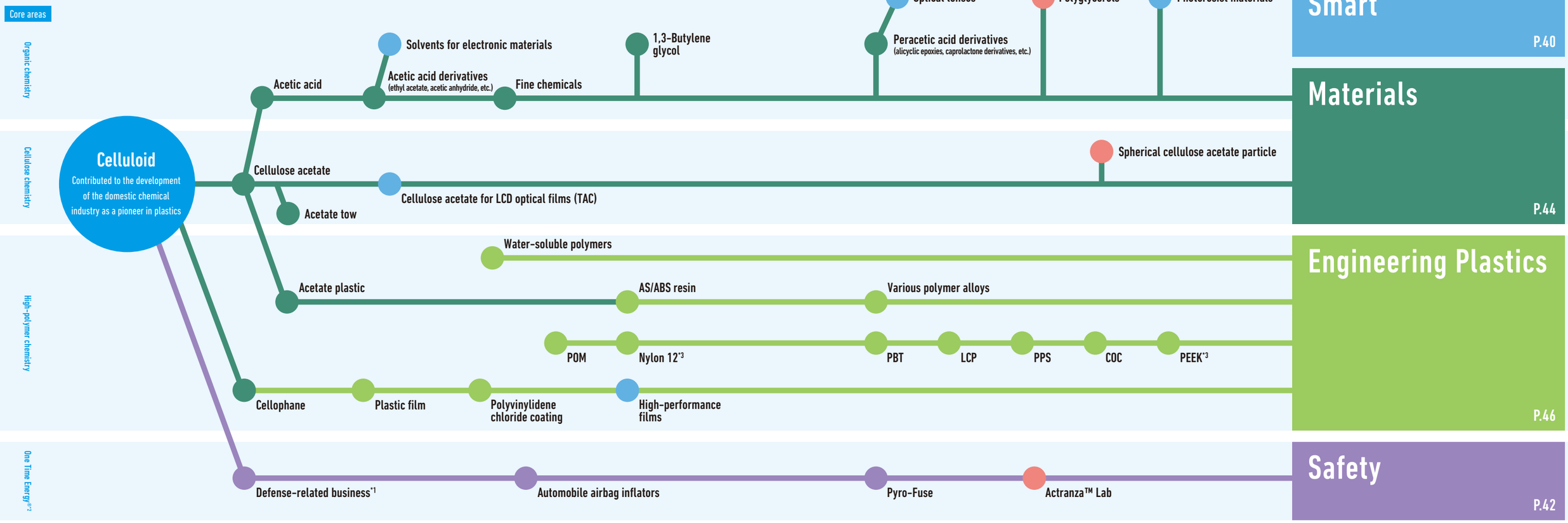
Net sales **238.1 billion yen**
Composition ratio **44.2%**

* Figures for other segments are not included in net sales and composition ratio. FY2023/3 sales reflect the change in segmentation of cosmetic ingredients 1, 3-BG (Medical/Healthcare to Materials).

Value Creation, Past and Present

Strengths of the Daicel Group in terms of product and technology lineage

Since its foundation, Daicel has developed a wide range of products and technologies based on four technological fields: “cellulose chemistry” as its starting point, “organic chemistry” that established the acetyl chain, “high-polymer chemistry” cultivated through the development of various resins, and “pyrotechnics technology” that evolved into One Time Energy®. Based on these core technologies, the Group has developed its current business areas and is moving forward to contribute to the creation of a circular society. On this page, we will introduce the connections from the early days of the Company to the development of our current products and technologies, as well as the strengths of our Group that we have developed over the years.



Strength 1 Pioneer in Biomass Chemistry

Since our founding in 1919, we have always been involved in biomass chemistry, the production of chemicals from plant-derived raw materials. The Company’s celluloid business, our founding business, is based on cotton and wood pulp, and camphor from camphor trees is used as a plasticizer. Cellulose acetate, for which flammability has been overcome, is still one of our main products. After the oil shock of the 1970s, we were among the first to switch to raw materials that were not rely on petroleum in a national project called C1 Chemistry, which aimed to eliminate the dependence on petroleum. Today, plant-derived chemistry is attracting renewed attention in order to ensure the sustainability of society, including the global environment. Daicel creates products based on renewable resources that contribute to the enrichment of people’s lives and the earth. P.26

Strength 2 Unique Technology Cultivated Since the Company’s Founding

1. Acetyl Chain

We are the only acetic acid manufacturer in Japan and have built a series of distinctive acetyl chains that produce acetyl chemicals, cellulose acetate, and other acetic acid derivatives, giving our business a strong global position.

2. Cellulose Acetate

Utilizing the knowledge of handling natural materials and property control technology that we have accumulated over many years, we are developing highly functional products in a wide range of fields, centered on cellulose acetate, such as acetate fiber, filter materials, liquid crystal panel film materials, and cosmetic materials.

3. Engineering Plastics

As a specialized manufacturer of engineering plastics, we maintain a broad product lineup centered on Polyplastics Co., Ltd., and have gained a large global market share by providing solutions to our customers, drawing out the best features of these products.

4. One Time Energy®

The pyrotechnics business developed because cellulose nitrate, the raw material for celluloid, can be used as an explosives raw materials. We have expanded this technology, which began in the defense-related business, to civilian products and are currently contributing to the safety of people’s lives by applying it to a wide range of fields, including automobile airbag inflators, pyro-fuse, and drug delivery devices.

Strength 3 DAICEL Production Innovation

DAICEL Production Innovation supports the manufacturing foundation we have as a chemical manufacturer. By visualizing the approximately 8.4 million pieces of plant operation know-how possessed by skilled operators and incorporating them into the operation support system, production efficiency has been improved by a factor of three.*4 Furthermore, in 2020, we developed the Autonomous Production System, an evolution of this system using AI. In addition to safety and quality, the system contributes to the reduction of CO_2 emissions by optimizing energy use, and prevents problems by predicting equipment irregularities in advance in pursuit of the ultimate in production efficiency. P.36

*1 Withdrawn from the business *2 The pyrotechnic technology developed in the course of producing inflators is defined as One Time Energy®, which produces optimal energy safely, reliably, instantaneously, and only once.

*3 Products of Polyplastics-Evonik Corporation *4 Results at Daicel’s Aboshi Plant

Value Creation Process

Under its Basic Philosophy and priority foundations of corporate activity (safety, quality, and compliance), the Daicel Group will continue to contribute to the happiness of people and society by expanding the scope of value co-creation based on its Sustainable Management Policy.

Basic Philosophy

The company making lives better by co-creating value

P.04

Trends in Social Change

- Global population growth and ongoing aging of society
- Pursuit of safety and security
- Depletion of resources and effective use of resources
- Uncertain world situation
- Evolution of digital technologies (IoT, AI)
- Response to climate change, prevention of environmental pollution
- Global social change, diverse values

Addressing social issues, and providing people with new values to achieve better quality of life

Goals

Daicel will contribute to building a circular society and achieve both a sustainable society and the growth of our Group

INPUT

(Invested capital for FY2023/3)

Human capital

Number of employees	11,207
Number of R&D Personnel	1,228
Ratio of overseas employees	52.5%
Ratio of female employees	29.4%

Intellectual property

R&D expenses	21.9 billion yen
Number of patents owned*	Approx. 5,100
Number of trademarks owned	Approx. 1,900

Financial assets

Total assets	765.6 billion yen
Equity Ratio	38.6%

Manufacturing capital

Capital expenditures	56.3 billion yen

Optimal plant operation with DAICEL Production Innovation, and the Autonomous Production System

Social capital

Number of group companies	76 companies

- Trust with customers and business partners cultivated over many years
- Cooperative links with partners in industry, government, and academia

Natural capital

Energy consumption (in crude oil equivalent)	753 thousand kL
Water intake	101 million tonnes

Pioneer in Biomass Chemistry

Unique technology cultivated since the company's founding

Pursuit of production efficiency through DAICEL Production Innovation

Our strengths P.14–

×

Mid-Term Management Strategy

Accelerate 2025

P.22

People-centered management

Sustainable Management Policy

×

Businesses P.38–

- Medical/Healthcare
- Smart
- Safety
- Materials
- Engineering Plastics
- Other

Forming a New Business Group to expand the scope of value co-creation

Contributing to happiness of people and society
Sustainable Product

Achieving goals with environmentally and people friendly methods
Sustainable Process

Giving employees a sense of fulfillment
Sustainable People

OP-Ⅰ
A company that creates businesses that address social needs

OP-Ⅱ
A group that can co-create with other companies

OP-Ⅲ
Establishment of a co-creation scheme with partners

Long-Term Vision

DAICEL VISION 4.0

Contribute to building a circular society

P.18

OUTPUT/OUTCOME

(FY2023/3 results)

Financial Outcome in Value Creation

Net sales	538.0 billion yen
Operating income	47.5 billion yen
EBITDA	79.1 billion yen
ROIC	5.3%
Total return ratio	51.7%

Sustainable Product

- Providing happiness through our business and products
  - Medical/Healthcare P.38
  - Smart P.40
  - Safety P.42
  - Materials P.44
  - Engineering Plastics P.46
- Exploring Possibilities with Technology for Melting Wood P.26

Sustainable Process

- Daicel Group's Challenge to Achieve Carbon Neutral P.28

Sustainable People

- Implementation of "People-Centered Management" P.34

Priority Foundations of Corporate Activity — **Safety, Quality, and Compliance**

* Figures for FY2022/3 are for Daicel on a non-consolidated basis, but for FY2023/3 the boundary has been expanded to include the number of patents and trademarks owned by the Daicel Group.