Strategy by Business Segment

Medical / Healthcare

Business Overview

The Life Sciences business includes the manufacture and sale of chiral columns (in which we have a large share of the global market) and separation services, which are used to analyze and acquire optical isomers in the development and manufacturing processes of pharmaceuticals. We are also working to expand our business domain into the biotechnology field. In the Healthcare business (Cosmetics and Health Foods), we aim to contribute to improving people's QOL*, and are developing high-quality cosmetic ingredients, marine-biodegradable spherical cellulose acetate particle (BELLOCEA®), and unique functional food ingredients produced from natural ingredients through extraction and bioconversion technologies.

Main Businesses	Main Products
Life Sciences	Chiral columns, chiral reagents, separation services, analytical services, reagents for genetic analysis research, pharmaceutical additives, new drug delivery devices
Healthcare	Cosmetic ingredients (polyglycerols, spherical cellulose acetate particle (BELLOCEA®), etc.), functional food ingredients (equol, konjac ceramide, and urolithin, etc.)

* QOL: Stands for Quality of Life and refers to not only physical wealth but also mental quality of life

Our Business Environment

Opportunities

- Increased activity in the development of new gene medicines and vaccines, triggered by vaccines for the novel coronavirus
- Growth of the cosmetics market in Asia
- Growth of the functional health foods market due to increasing health consciousness

Risks

- Hollowing out of the domestic pharmaceutical and medical equipment industries due to the shift of pharmaceutical and medical equipment production sites to emerging countries and the shift of R&D and clinical trial sites to overseas locations
- Market entry of competitors and replacement with new ingredients in healthcare products

Daicel's Strengths

【Life Sciences】 A leading company in optical isomer separation technologies	Separation technology developed over many years since the commercialization of chiral (optical isomer) columns* in 1982, and a global network of pharmaceutical companies and researchers * Chromatographic columns for separation of optical isomers (used for separation of active pharmaceutical components, etc.)
【Life Sciences】 Special Medical Materials business	We promote business synergies through collaboration between medical businesses within the Group, such as Polyplastics' POM and COC (have superior functionality and are used as medical materials) and the Life Sciences SBU's Actranza™ Lab (a new needle-free drug delivery device)
【Healthcare】 Unique manufacturing technology	In Cosmetics, it is possible to produce colorless, transparent polyglycerin with few byproducts and high water solubility. In Health Foods, we utilize our proprietary anaerobic fermentation technology* to manufacture on an industrial scale intestinal metabolites that some people cannot produce in their body * Fermentation technology in the absence of oxygen

Performance Targets, Capital Expenditures, Depreciation and Amortization, R&D

FY2023/3 Results		FY2026/3 Targets		Cumulative Total for FY2024/3 to FY2026/3 (Planned)		
Net sales	Operating income	Net sales	Operating income	Capital expenditures	Depreciation and amortization	R&D
16.6 billion yen	1.3 billion yen	17.0 billion yen	1.5 billion yen	7.0 billion yen	3.5 billion yen	8.2 billion yen

* FY2023/3 results reflect the change in segmentation of cosmetic ingredients 1,3-BG (Medical/Healthcare to Materials) and new drug delivery device R&D functions (Safety to Medical/Healthcare).

Growth Strategies

Main Businesses	Policies	Specific Measures
Life Sciences	Expand chiral separation business	●Expand sales of chiral columns in growing overseas markets ●Expand Separation Services and Analytical and Synthesis Services business in India and China ●Strengthen marketing and develop new products in the Genetic Analysis business
	Cultivate and strengthen new businesses	●Accelerate commercialization of new drug delivery devices by leveraging market channels built through chiral columns. Also, expand and strengthen the Medical Materials business
Healthcare	Expand sales by expanding appealing functions of existing products	●Strengthen marketing (evidence marketing) of konjac ceramide for brain function improvement and urolithin as a well-aging ingredient, using the results of human clinical trials ●Expand business through collaboration with strategic partners
	Create new ingredients	●Launch and expand business of spherical cellulose acetate particle (BELLOCEA®) in grades compliant with European regulations (OECD301F certification) ●Expanding our lineup of health food ingredients with a focus on intestinal metabolites

Key points of growth strategy

Steady Growth in India by Responding to Customer Needs

The Group operates its Optical Isomer Separation business, focused on chiral columns, top share of global market, in five regions around the world: Japan, the U.S., Europe, China, and India. One of these, the India-based Daicel Chiral Technologies (India) Pvt. Ltd. (hereinafter "DCTI") has experienced a compound annual growth rate (CAGR) of more than 20% over the past five years. This is due to the growth of the generic drug market in India and the expansion of the Service business to meet the needs of client pharmaceutical companies, which accounts for approximately 70% of DCTI's sales revenue. DCTI has many employees who come from pharmaceutical companies, and by actively utilizing their knowledge, expertise, and ideas, DCTI has expanded their Services business to meet the needs of their clients. Currently, they offer three types of services to pharmaceutical companies: purification (separation) services to isolate and purify compounds required by customers; analytical services to develop and validate*1 analytical methods and perform various analytical tests such as IVBE studies*2 and E&L studies*3; and synthesis services to synthesize stable isotope labeled standards and impurity standards in response to customer requests. Each service is expanding target areas in not only low-molecular drugs but also mid-molecular drugs such as peptide drugs and nucleic acid drugs, which are expected to be next-generation drugs. Behind the strong customer trust in DCTI's Service business is the Daicel brand developed through chiral columns, as well as the fact that GMP (control standards for production and quality) -compliant analytical services are provided at a facility certified by the U.S. FDA (Food and Drug Administration), which has significantly contributed to DCTI's growth.

We are determined to seize growth opportunities in the Indian generic drug market, which is expected to grow at an average annual rate of 5 to 6% (according to our research), and aim for further business growth by deploying the business model established by DCTI to our base in China, where investment in the pharmaceutical industry is continuing to expand.

●Exterior view of DCTI's headquarters building

●DCTI's laboratory

*1 Analytical method validation: Validation aimed at assuring the validity, usefulness, and reproducibility of the analytical methods used
*2 IVBE (In vitro bioequivalence) studies: A test to prove that drugs with the same active ingredients (e.g., original drugs and generic drugs) are bioequivalent
*3 E&L studies (E&L "Extractables & Leachables" studies): Safety evaluation studies required when applying for approval of drug containers and packaging, medical devices, etc.

Strategy by Business Segment

Business Overview

In the Display/Optical business, we manufacture and sell cellulose acetate for optical films (TAC), which has a high global market share, functional films suitable for various displays from smartphones and tablets to in-vehicle displays, and plastic lenses (optical lenses) for sensing applications that are highly heat-resistant, compact, and highly functional. The IC/Semiconductor business manufactures and sells high-performance photoresist materials, solvents for electronic materials, and silver nano ink used in semiconductor and display manufacturing processes. In addition, we are also working on practical implementation demonstrations of various sensors using organic semiconductors.

Main Businesses	Main Products
Display/Optical	Cellulose acetate for optical films (TAC), high-performance films, optical lenses
IC/Semiconductor	Photoresist materials, solvents for electronic materials, silver nano ink, organic semiconductors

Our Business Environment

Opportunities

- Semiconductor market expansion due to the full-fledged arrival of the IoT, AI, and 5G era
- Expansion of the display market with the spread of new technologies such as high resolution, high durability, bendable and foldable, and curved surface structure
- Diversification of sensor technologies and creation of new markets and technologies in the electronics industry, such as the metaverse and autonomous driving

Risks

- In the semiconductor materials market, lower prices due to the emergence of oversea products, and restrictions on available markets due to intensifying trade friction between the U.S. and China
- Production contraction due to disruptions in the semiconductor supply chain caused by conflicts and other geopolitical factors
- Shrinking domestic market due to customers' overseas relocation of development and production sites

Daicel's Strengths

Provide market-oriented solutions that meet customer and market needs	Providing the electronics market with a variety of solutions and value from materials to modular parts through a wide range of material design and production technologies, including synthesis, compounding, coating, printing, and resin molding
【Display/Optical】 Addressing customer needs through meticulous functional design	We combine product specificity and price competitiveness for TAC, functional films, and optical lenses through functional design using materials and formulations that meet customer needs
【IC/Semiconductor】 Continuation of stable supply and response to increasingly sophisticated demands	Possesses the technical capabilities and stable supply capacity to continuously meet the high level of quality requirements of the semiconductor industry. Based on the relationship of trust built through this track record, we can develop products in close contact with our customers and respond to new, increasingly sophisticated, requirements. In addition, mass production of organic semiconductors is currently being demonstrated for application to displays and sensors

Performance Targets, Capital Expenditures, Depreciation and Amortization, R&D

FY2023/3 Results

Net sales	Operating income
29.6 billion yen	-0.6 billion yen

FY2026/3 Targets

Net sales	Operating income
50.0 billion yen	5.5 billion yen

Cumulative Total for FY2024/3 to FY2026/3 (Planned)

Capital expenditures	Depreciation and amortization	R&D
12.0 billion yen	10.5 billion yen	11.5 billion yen

Growth Strategies

Main Businesses	Policies	Specific Measures
Display/Optical	Strengthening TAC's profitability	●Expanded use of low LCA pulp* by improving TAC manufacturing process, and enhanced profitability by promoting discontinuance of cotton linters, quality improvement, inventory reduction, and cost reduction ●Expanded market share in the TAC film market by improving quality and taking advantage of wood pulp as a raw material
	Making high-performance films multifunctional and expanding their business	●Accelerate development of materials and technologies by utilizing wet and dry coating technologies and clean rooms of Daicel Beyond Ltd. ●Accelerate collaboration with strategic partners
	Optical Lens business expansion	●In addition to cutting-edge markets such as AR/VR devices, strengthen marketing in the existing plastic lens market by taking advantage of features such as high shape flexibility, high heat resistance, and low cost
IC/ Semiconductor	Strengthen Semiconductor business in line with cutting-edge needs	●Increase production capacity of solvents for electronic materials, mainly for semiconductors, in FY2024/3. Expansion of lineup of high-purity, high-quality products ●Sales of photoresist materials for EUV applications expanded in addition to the mainstay immersion ArF applications. Plan to produce polymers for semiconductor resists using microfluidic devices in FY2025/3
	Strengthen market penetration of electronic components and FPD materials	●Strengthen sales expansion of MLCC and color resist materials (solvents and polymers) overseas (China, South Korea, Taiwan) ●Strengthen marketing of silver nanomaterials for the printed electronics market by taking advantage of their features such as low-temperature sintering and low resistance
	Mass production of organic semiconductors, commercialization of film sensors	●Providing various solutions by measuring temperature, vibration, acceleration, etc. using flexible, ultra-thin, highly sensitive, and low-cost sensors

* Low LCA pulp: Relatively low cost and low environmental impact pulp with less chemical processing (LCA=Life Cycle Assessment)

Key points of growth strategy

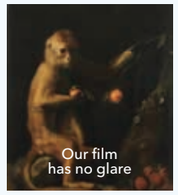
Daicel's AG Film Creates New Markets with Its Unique Technology

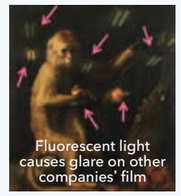
AG (anti-glare) film improves the visibility of display screens by reducing the glare caused by ambient light such as fluorescent lamps by diffusely reflecting incident light using uneven surfaces formed by special coating technology, etc. The surface gloss indicates the degree of scattering of light reflected on the film surface. While ordinary AG film reduces the glare caused by ambient light as the gloss value decreases, it has the disadvantage that the display becomes blurred white and the crispness of the black and white display deteriorates (contrast decreases). Our AG film can achieve both 2% low gloss and high contrast with our proprietary technology. Ordinary AG films use fine particles to form uneven surfaces, and the diffuse reflection of these particles is one of the causes of white blurring of the display and reduction of contrast. Our AG films use a proprietary technology called the phase separation coating technology (which does not use fine particles) to achieve high contrast. This functionality has been utilized to create a new market for matte displays, responding to new needs such as game monitors that require minimal glare of ambient light to enhance immersion, and monitors that require realistic representation of paintings and other artworks through their matte texture.

In addition to this AG film, Daicel has a lineup of films with a wide variety of functions, and we intend to utilize the wet and dry coating technologies of the new company, Daicel Beyond Ltd., to make our high-performance films more multifunctional and expand our business.

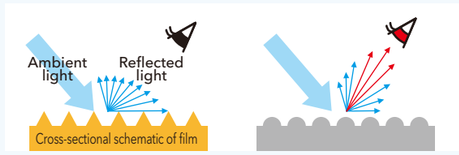
●Comparison of glare caused by ambient light

(photos taken with the film on the same PC monitor)





●Special surface shape prevents glare



Our film

Abruptly uneven pattern
Reflected light scatters well
Easy to see without light reaching the eyes
Surface gloss 2%

Other companies' film

Gently uneven pattern
Reflected light does not scatter much
Light reaches eyes and visibility deteriorates
Surface gloss 30%

Strategy by Business Segment

Safety

Business Overview

The main products of the Safety Business are automobile airbag inflators (gas generation devices), which protect the lives of occupants and pedestrians by inflating airbags within milliseconds after a collision. Our automobile airbag inflators are highly regarded as the key component of airbag systems. The instant-activation safety mechanism developed for inflators is named One Time Energy®, and is being used in applications other than airbags. Pyro-Fuse, which can safely and instantaneously interrupt high voltage and large currents in an emergency, is one example, and is expected to be deployed in various industries where automation is advancing due to the spread of electric vehicles and AI.

Main Businesses	Main Products
Mobility	Automobile airbag inflators
Industry	Pyro-Fuse, gas generators for seat belt pretensioners (PGG)

Our Business Environment

Opportunities

- Recovery and growth of global automobile production
- Growing need for enhanced automotive safety in emerging countries (e.g., mandatory 6 airbags in India)
- The rise of Chinese electric vehicle manufacturers
- Advancement and proliferation of technologies such as electric vehicles and renewable energy aimed at achieving carbon neutrality

Risks

- Automotive supply chain disruptions due to semiconductor and other product shortages
- Changing function and performance needs as self-driving and other active safety technologies evolve
- Changes in the industry landscape due to the spread of electric vehicles

Daicel's Strengths

Inflator technology accumulated over the years	After launching automobile airbag inflators in 1988, we commenced fully integrated production beginning with gas generant and have won people's trust and contributed to their safety ever since
Toyota Production System meets DAICEL Production Innovation	For excellent quality and productivity, we applied the Toyota Production System to our production system, which is based on the DAICEL Production Innovation methodology
Image Analysis System	We use an image analysis system developed together with Hitachi, Ltd. to realize product quality assurance by "all point management," instead of "representative management." Through adept quality control, we build strong trust-based relationships with customers

Performance Targets, Capital Expenditures, Depreciation and Amortization, R&D

FY2023/3 Results

Net sales	Operating income
84.0 billion yen	0.5 billion yen

FY2026/3 Targets

Net sales	Operating income
111.0 billion yen	15.0 billion yen

Cumulative Total for FY2024/3 to FY2026/3 (Planned)

Capital expenditures	Depreciation and amortization	R&D
29.0 billion yen	21.5 billion yen	16.5 billion yen

* FY2023/3 results reflect the change in segmentation of new drug delivery device R&D functions (Safety to Medical/Healthcare).

Growth Strategies

Main Businesses	Policies	Specific Measures
Mobility	Improve profitability by enhancing cost competitiveness	●Cataloging of inflators (type integration) ●Development of new composition gas generator and shift the production method ●Consolidation of production bases to raise cost-competitiveness ●Saving labor by automating the production line ●Promote standardization and in-house production of production lines and local procurement ●Shorten lead time and reduce equipment costs by promoting localization of line establishment
	Expansion of market share (Target 25% global market share in FY2026/3)	●Deepen cooperation with airbag module manufacturers ●Strengthening relationships with Chinese companies ●Tapping into demand in India (mandatory 6 airbags), established a production base in India ●Development and launch of new catalog products in response to changing performance requirements
Industry	Electric vehicles (EV) and new business creation outside the automotive market	●Mass production of Pyro-Fuse for EVs, sales to Europe and the U.S. ●Secure entry into the domestic market for Pyro-Fuse for EVs and strengthen marketing in the Chinese market, which is expected to expand ●Strengthen marketing for applications outside the automotive market
New Businesses	Identifying social issues from a global perspective and promptly commercializing them	●Restructuring of global research and marketing structure ●Incorporation of new technologies such as sensing and injury analysis through collaboration among companies, etc. ●Promote development and early commercialization of devices that support daily safety

Key points of growth strategy

One Time Energy® Contributes to the Safety of EVs Which Are Rapidly Becoming More Popular

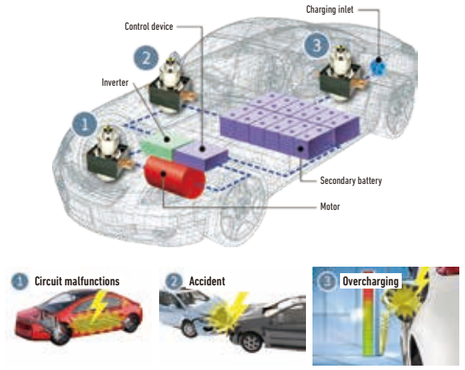
Electric vehicles, which are projected to spread rapidly, are equipped with high-voltage batteries. The batteries used in EVs are projected to increase in capacity in proportion to the increase in cruising range and high-speed charging, and preventing electric shock to passengers and secondary disasters in the event of a traffic accident or breakdown is an important issue.

To solve it there is a rapidly growing need for current interrupters that can instantly and accurately interrupt circuits in an emergency and prevent damage by isolating the battery.

We develop and manufacture Pyro-Fuse, taking advantage of our technology that enables integrated manufacturing of airbag inflators including the initiator (ignition part including gas generator) mechanism and our high reliability with a total of 1 billion units shipped, and we have already started supplying them in the U.S. Currently, there is a need for current interrupting technology for even higher voltages and currents for EVs especially in Europe (which is a leading market), but product specifications have not been established for this market, which is in its infancy. Within a short development lead time, R&D is being conducted to meet the different product specification requirements of each company, with the aim of mass production in the European market in FY2025/3. Moving forward, we will establish standard specifications for our products and develop a product lineup that can meet a wide range of needs consistent with the trend toward EVs aiming to expand the adoption of our products in the U.S. in FY2027/3 and beyond. In the domestic market, where development will be in full swing, we will leverage our strong relationships with customers to enter the market, and in the Chinese market we will strengthen marketing by deepening cooperation with local offices.

With the strengths of the high reliability of our products and our strong relationships with our customers, we will contribute to people's safety and peace of mind in new markets with rapid growth potential.

●Anticipated use points in automobiles



Interrupts current in an emergency to prevent accidents

Strategy by Business Segment

Materials

Business Overview

The Materials Business provides a wide variety of materials to a wide range of industries. We are the only manufacturer in Japan of acetic acid, which has a wide variety of applications. In our Acetyl business, we provide acetic acid and other chemicals made from acetic acid, cellulose acetate, which is made from cellulose from wood and cotton and acetic acid, and acetate tow, which is spun from this. In the Chemical business we manufacture and sell various chemical products such as alicyclic epoxy, peracetic acid derivatives such as caprolactone, and 1,3-butylene glycol (1,3-BG), an ingredient for cosmetics, based on our organic synthesis technology developed over many years and using globally unique reaction technology.

Main Businesses	Main Products
Acetyl	Acetic acid, acetic acid derivatives (ethyl acetate, acetic etc.), cellulose acetate, acetate tow, ketene derivatives, and ethylamine
Chemical	Alicyclic epoxy, caprolactone derivatives, 1,3-butylene glycol (1,3-BG)

Our Business Environment

Opportunities

- Expectations for biomass materials and marine biodegradable materials
- Recovery in demand for various products as economic activity resumes
- Growth of the global electronic materials market, especially in Asia
- Popularization of electric vehicles
- Increased demand for heat-not-burn tobacco

Risks

- Fluctuations in raw material and fuel prices
- Demand fluctuations in acetate tow for tobacco applications
- Rise of competing manufacturers, especially in emerging countries

Daicel's Strengths

Optimized plant operation through DAICEL Production Innovation	Utilize the "Autonomous Production System," an evolution of DAICEL Production Innovation. Optimized plant operation results in energy savings, reduced GHG emissions, stable supply, and increased cost competitiveness in the production process
【Acetyl】 Establishing an acetyl chain as the only acetic acid manufacturer in Japan	In addition to manufacturing and selling acetic acid and derivatives made from acetic acid, we have established a recycling structure whereby we recover, refine, and reuse acetic acid byproducts from customers and our group plants. Maintain a strong acetyl chain in Japan
【Chemical】 Achieving the world's largest market share for alicyclic epoxy through our unique manufacturing methods	Produce high-quality alicyclic epoxy using the world's only distinctive manufacturing process. High quality and high performance, with a manufacturing process that does not contain chlorine, which corrodes and cracks metals, and is applicable to electronic/electrical materials and mobility materials for EVs, etc.

Performance Targets, Capital Expenditures, Depreciation and Amortization, R&D

FY2023/3 Results

Net sales	Operating income
160.8 billion yen	20.7 billion yen

FY2026/3 Targets

Net sales	Operating income
182.0 billion yen	30.5 billion yen

Cumulative Total for FY2024/3 to FY2026/3 (Planned)

Capital expenditures	Depreciation and amortization	R&D
41.0 billion yen	57.0 billion yen	12.0 billion yen

* FY2023/3 results reflect the change in segmentation of cosmetic ingredient 1,3-BG (Medical/Healthcare to Materials).

Growth Strategies

Main Businesses	Policies	Specific Measures
Acetyl	Development of cellulose acetate applications	●Developing new applications for cellulose acetate by utilizing natural materials ●Accelerate development through collaboration with internal and external partners
	Expansion of acetate tow supply capacity, strengthening the supply chain	●Expand supply capacity by fully utilizing existing facilities. Meeting increasing demand for heat-not-burn tobacco applications ●Strengthen supply chain through stable procurement of ingredients and inventory reduction by expanding use of low LCA pulp
Chemical	Expansion of peracetic acid derivatives (caprolactone derivatives and epoxy) business	●Further expand sales of caprolactone derivatives in high-value-added markets such as paint protection film (PPF) for automobiles and materials for EVs ●Strengthen marketing of alicyclic epoxy, the world market share leader, by focusing on insulation materials (materials for EVs, power semiconductors) and next-generation display applications ●Promote integrated operation of material creation plus functional analysis plus technical services to strengthen customer responsiveness. North American technical service site to be operational in FY2024/3

Key points of growth strategy

Strengthening the Competitiveness of Cellulose Acetate

In the production process of cellulose acetate (our main product), we have been combining the adoption of the Autonomous Production System based on DAICEL Production Innovation and the use of raw pulp in a more environment-friendly and sustainable manner to enhance product competitiveness and optimize inventories.

1. Improved quality and productivity through the Autonomous Production System

Cellulose acetate is made from pulp that is naturally derived and varies in quality. Therefore, precise adjustment of operating conditions by an operator was necessary for each ingredient variety. However, the adoption of the Autonomous Production System has made it possible to continuously adjust operating conditions to optimize product quality while taking cost balance into account. Differences in pulp material quality are compensated for by optimizing operating conditions to achieve both high quality product supply and high productivity. P.36

2. Quality improvement through improved manufacturing methods, stable procurement of ingredients, and inventory reduction

Because naturally derived pulp is difficult to dissolve, it does not react uniformly in the production process due to poor crushing, resulting in the issue of the formation of impurities in the product. This had a negative impact on productivity in the post-processing of acetate tow production, such as clogging of filter cloths for filtration and yarn breakage in the spinning process. We have introduced a two-step pulp crushing process to improve reactivity by breaking the pulp material into smaller pieces, reducing the amount of acid used, and reducing impurities to improve quality and spinnability in the subsequent process.

Furthermore, the combination of the two-step crushing method and dope filtration* has expanded the range of usable ingredients to low LCA pulp, which has less environmental impact during production and is more readily available. In the past, the raw pulp used by Daicel was limited to special grades, resulting in excessive inventory for the company. However, by combining product quality regardless of ingredient type with the adoption of the Autonomous Production System, two-step crushing and dope filtration, it is possible to expand the range of ingredients to low LCA pulp. By strengthening the supply chain from ingredient procurement to product supply, comprehensive benefits can be expected, including inventory reduction through product type integration and improved cash flow.

●Crushing from sheet pulp (pre-process for cellulose acetate production)

* Dope filtration: Removal of impurities by filtration process in the pre-refining process

Strategy by Business Segment

Engineering Plastics

Business Overview

Polyplastics is a leading manufacturer of engineering plastics with special features such as mechanical strength, heat resistance, and chemical resistance, contributing to making automobiles lighter and more electrified, and to the higher performance of electronic devices. Daicel Miraizu offers a diverse range of commercial products to various industries, including AS and ABS resins, which have a wide range of applications from daily necessities to automobiles, various polymer alloys and resin compound products, as well as water-soluble polymers noted for use in EVs, which have rapidly gained popularity in recent years.

Main Businesses	Main Products
Polyplastics	Polyacetal (POM), polybutylene terephthalate (PBT), polyphenylene sulfide (PPS), liquid crystal polymer (LCP), and cyclic olefin copolymer (COC)
Daicel Miraizu	AS resin, ABS resin, various polymer alloys, plastic compounds, water-soluble polymers, and barrier films for packaging

Our Business Environment

Opportunities

- Recovery and growth of global automobile production
- Proliferation of electric vehicles and autonomous driving technology
- Changes in infrastructure, devices, and services due to next-generation communications
- Growing interest in the circular economy

Risks

- Supply risks associated with rapid recovery of economic activity
- Soaring raw material prices and procurement concerns due to greenflation
- Rise of competing manufacturers, especially in emerging countries
- Various regulations in Europe, including environmental ones

Daicel's Strengths

Ability to develop new applications and group synergies	As a group of engineering plastics experts, we work with customers to develop applications that meet the needs of key industries (e.g., electrical and automotive industries) and society as they change with the times. In addition, we provide optimal solutions across the group by combining the extensive product lineups of Polyplastics, Daicel Miraizu, and Polyplastics-Evonik
【Polyplastics】 Expansion of technical solutions system in major regions	Our Technical Solutions Centers in the major regions of Japan, China, Taiwan, Thailand, the United States, and Germany are linked together. This makes them able to provide uniform solutions worldwide for everything from material formulation and design to support for molding and processing
【Daicel Miraizu】 Detailed proposals to meet customer needs	Proposals from Daicel Miraizu combine flexible selection of base resins and compounding technology to meet customers' individual needs

Performance Targets, Capital Expenditures, Depreciation and Amortization, R&D

FY2023/3 Results		FY2026/3 Targets	
Net sales	Operating income	Net sales	Operating income
238.1 billion yen	25.3 billion yen	294.0 billion yen	29.0 billion yen

Cumulative Total for FY2024/3 to FY2026/3 (Planned)		
Capital expenditures	Depreciation and amortization	R&D
100.0 billion yen	46.0 billion yen	23.5 billion yen

Growth Strategies

Main Businesses	Policies	Specific Measures
Polyplastics	Increase supply capacity and expand product portfolio	●POM expansion FY2025/3 90,000 tonnes ●LCP expansion FY2025/3 5,000 tonnes ●COC expansion FY2025/3 20,000 tonnes ●Expansion of engineering plastics product lineup through collaborations with Polyplastics-Evonik and other companies
	Strengthen marketing to increase market share	●Development of products for the CASE market that are expected to grow significantly ●Strengthen marketing to Chinese automakers and other Chinese markets ●Expand sales in the U.S. and European markets (target 10% share of POM and LCP in the U.S. and Europe in FY2026/3)
	Creation of environmental business	●Development of products using sustainable polymers and biomass materials ●Development of mechanical and chemical recycling technologies ●Establishment of manufacturing process for POM and LCP with low environmental impact and low GHG emissions
Daicel Miraizu	Product development with a focus on "environment," "safety and security," and "comfort"	●Accelerate the creation of synergies within the Group, including collaboration with Polyplastics in the development of recycled resin products ●Increased supply of CMCs*1 for LiBs*2 through productivity improvement efforts to meet growing demand

*1 CMC (Sodium carboxymethylcellulose): CMC Daicel, made from cellulose (a natural material), is a water-soluble polymer developed with Daicel's proprietary technology *2 LiB: Lithium-ion battery

Key points of growth strategy

Innovative Solution Making "Carbon Negative" Possible

Engineering plastics, which have been made from raw materials derived from fossil resources, need to switch to sustainable raw materials in order to achieve carbon neutrality by 2050 and be carbon negative beyond then. To this end, Polyplastics is developing new solutions starting with its core product, POM.

POM is a resin that is ideal for sustainable raw material conversion, and its raw material, methanol, can be produced by fermentation of biomass materials, which is why biomethanol is proliferating. Polyplastics has also begun manufacturing and marketing DURACON®bG-POM, which utilizes biomethanol. Furthermore, since the chemical formula for methanol is CH_3OH, it can be produced with carbon dioxide or carbon monoxide and hydrogen, and we are beginning to develop innovative POMs that take advantage of this property.

This new development is "POM conducive to carbon recycling" made from CO_2 and H_2 captured from manufacturing processes within the Daicel Group. This POM is a lower PCF (product carbon footprint) product because the CO_2 emissions of the raw material (that which is recycled) can be deducted from the CO_2 emissions of the manufacturing process. It is also effective in combating climate change because it reduces CO_2 emissions into the atmosphere. This "POM conducive to carbon recycling" is slated to be manufactured and sold by FY2028/3.

With carbon recycling technology that uses CO_2 as a resource, we can glimpse the materialization of methanol from CO_2 in the atmosphere as well as in manufacturing processes. By using this methanol, we will work to create carbon-negative products with a PCF of less than 0. We will also work to reduce CO_2 emissions by saving energy in the manufacturing process and using renewable energy.

We will continue to shift from raw materials derived from fossil resources to sustainable raw materials for all Polyplastics products. We will continue to strongly promote group-wide efforts to provide innovative solutions to achieve carbon neutrality and beyond that to create a carbon-negative society.