Sakai Chemical Group Integrated Report 2024

Sakai Chemical Industry Co., Ltd.

Chemicals make dreams come true

Mission

Chemistry for a Friendly Future

Creating materials that support the comfort and security of society through compassion and technological innovation.

Vision

Exciting Company

We will build an exciting company together.

CONTENTS

Editing policy

Target organizations: Sakai Chemical Industry Co., Ltd. and its domestic/overseas consolidated subsidiaries
(referred to as Sakai Chemical Group)

Reporting period: April 1, 2023 to March 31, 2024
The latest information at the time of publication is included as much as possible.

Publication date: October 2024

Reference guidelines

- Integrated Reporting Framework (IFRS Foundation)
- Guidance for Collaborative Value Creation 2.0 (Ministry of Economy, Trade and Industry)
- TCFD Final Report (Task Force on Climate-related Financial Disclosures)
- GRI Sustainability Reporting Standards (Global Reporting Initiative)

Notes regarding forward-looking statements

This report contains forward-looking statements. These statements are based on information available at the time of publishing, and therefore include risks and uncertainties. Please be aware that actual results may differ from the forward-looking statements due to changes in various factors.

History of Sakai Chemical Group

Sakai Chemical Group began business in 1918 as Sakai Refinery Factory in Sakai City, Osaka Prefecture.
Since then, the Group has continued to pursue constant technological innovation, and to provide products and services that contribute to a Chemistry for a Friendly Future.

1918

Zinc business
White pigment zinc oxide ZnO → Lithopone
$ZnS\ BaSO_4$ → Titanium dioxide TiO_2

1918

Founded
Began operation as Sakai Refinery Factory, a wooden zinc white factory with an octagonal brick chimney and two oxidation furnaces

1950s

Plastic additive business
From zinc stearate

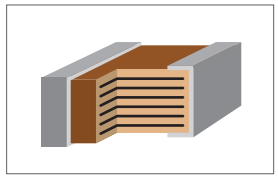
1970s

Catalyst business
Titanium dioxide as carrier

1980s

Cosmetics raw materials business
From ultrafine particle zinc oxide technology

1990s



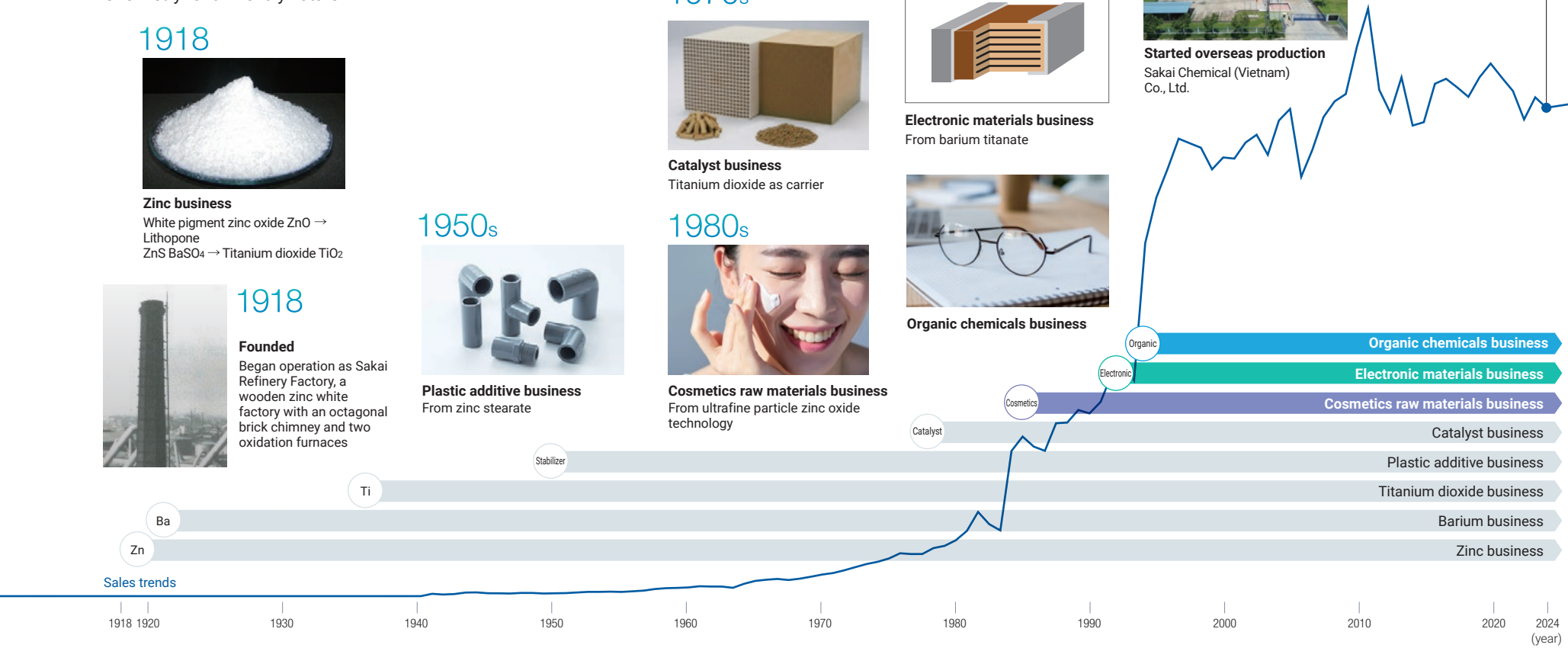
Electronic materials business
From barium titanate

Organic chemicals business

2000s

Started overseas production
Sakai Chemical (Vietnam) Co., Ltd.

Net sales for the fiscal year ended March 31, 2024
¥82,105 million



Founding period

1918	Founded Sakai Refinery Factory in a corner of the current Sakai Manufacturing Site premises
1918	Started production of zinc white (zinc oxide)
1920	Started production of various barium products
1932	Trade name was changed to the present Sakai Chemical Industry Co., Ltd.
1935	The first manufacturer to succeed in factory production of anatase type titanium dioxide
1936	Founded Sakai Trading Co., Ltd. (Expansion into such a trade business as raw material and products import business)

Growth period

1949 to 1950	Started production of vinyl chloride stabilizers and metal soaps
1950	Listed on the Osaka Securities Exchange (at that time)
1961	Listed on Tokyo Stock Exchange
1963	Onahama Factory was completed (To cope with the increasing demand for titanium dioxide)
1969	Completed construction of Yumoto Factory and Semboku Factory
1978	Started production of de-NOx catalyst
1991	Completed construction of Otsurugi Factory

Expansion of business domain

1992	Started commercial production of electronic ceramic materials
1994	Acquired all shares of Tomioka Chemical Co., Ltd. (entry into the organic chemicals business)
2007	Founded Sakai Chemical (Vietnam) Co., Ltd. / plastic additives business
2012	Acquired the whole stocks of Katayama Seiyakusyo Co., Ltd. (Expansion into active pharmaceutical intermediates and ingredients business)
2013	Established Kaigen Pharma Co., Ltd.
2018	Acquired the major stocks of Siam Stabilizers and Chemicals Co., Ltd. (Thailand)

The Sakai Chemical Group conducts nine businesses.
Among these, we have positioned the electronic materials business, cosmetic raw materials business, and organic chemicals business as growth businesses.

Inorganic chemicals

Titanium dioxide and zinc business

- Titanium dioxide
  * We will end production of pigment-grade titanium dioxide in fiscal 2025.
- Zinc oxide

→ See p. 33 for details

Used as a raw material

Used as a raw material

Catalysts
→ See p. 31 for details

Plastic additives
→ See p. 32 for details

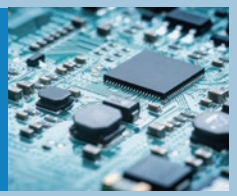
Contract processing business
→ See p. 33 for details

Used as a raw material

Used as a raw material

Growth businesses

Electronic materials
→ See pp. 25 and 26 for details



Cosmetics raw materials
→ See pp. 27 and 28 for details

Organic chemicals
→ See pp. 29 and 30 for details

Other businesses

- Barium salts

Uses barium sulfate as a raw material

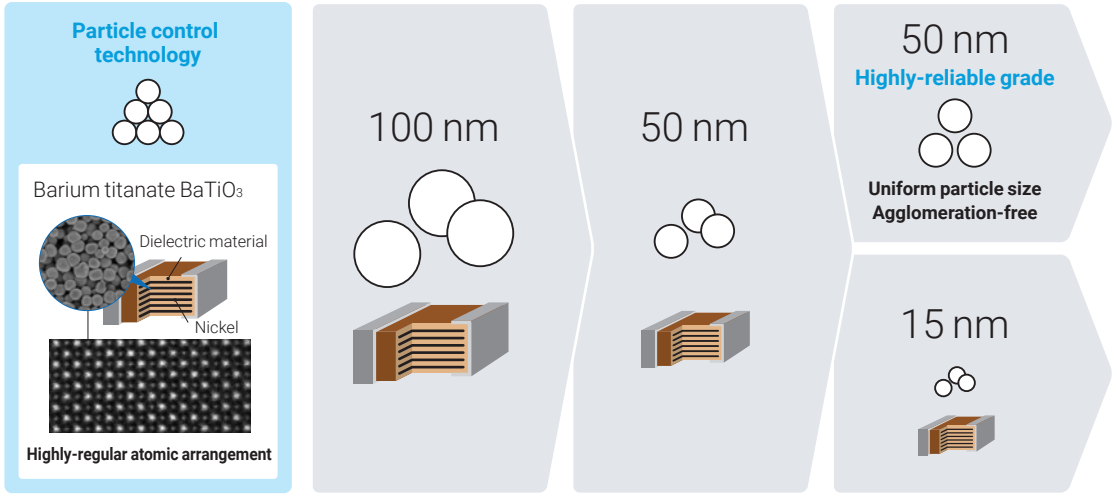
Medical business
→ See p. 34 for details

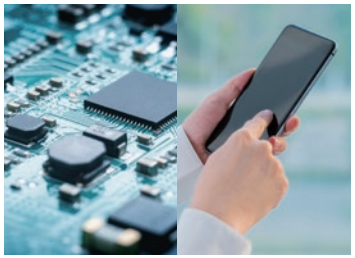
Hygiene materials
→ See p. 32 for details

1 Powder processing

Powder processing technology that supports electronic materials

Dielectrics such as barium titanate are used in capacitors for mobile phones and other devices. Sakai Chemical Industry Co., Ltd. supports information society through particle control technologies such as uniform particle synthesis, highly regular atomic arrangement, and agglomeration-free particles.



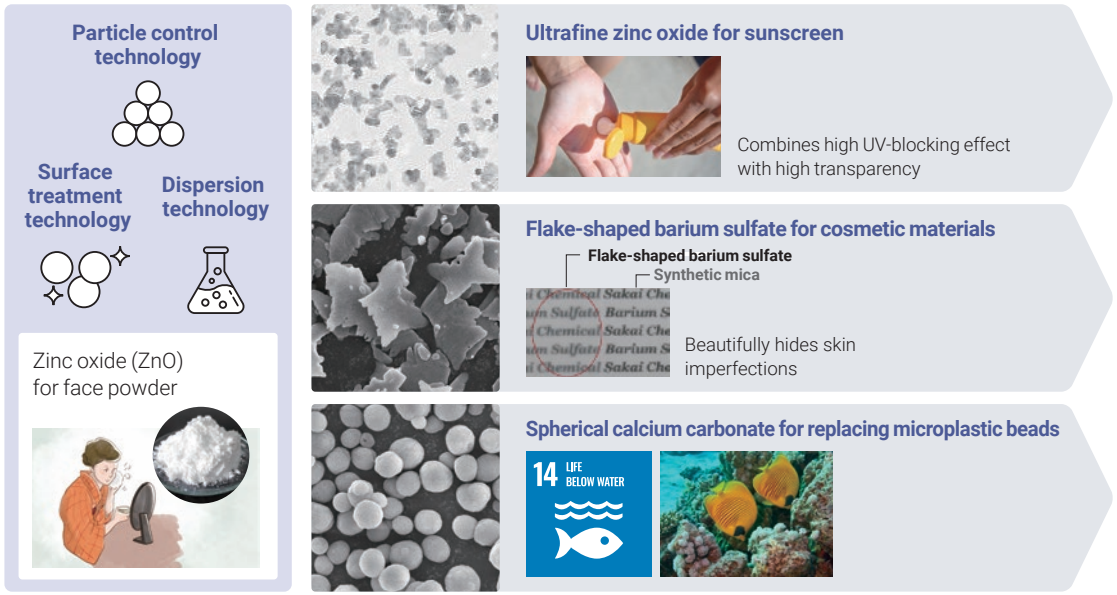


Supporting the miniaturization and high reliability of mobile phones and computers

Making the particles finer enables the miniaturization of capacitors. Improving the uniformity and monodispersity of the particles enables the manufacturing of capacitors with high performance and reliability.

Powder processing technology that supports cosmetic materials

Starting in 1918 from zinc oxide manufacturing technology for face powder, we have worked to refine particle size, particle shape, and dispersion technology. This technology supports a richer life by imbuing cosmetics such as sunscreens and foundations with a variety of functions.



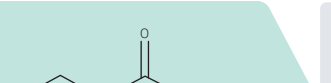
Environmentally-conscious development

Awareness toward sustainability is causing expectations for inorganic cosmetic materials to spread throughout the world.
The Sakai Chemical Group responds to these diverse needs through our special capabilities in powder processing technology.

2 Organic synthesis

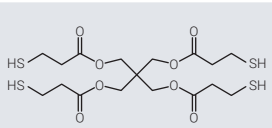
Organic synthesis technology excelling in sulfur compounds

Our Group is the only manufacturer of BMPA in Japan. BMPA has a high refractive index and high Abbe's number that are characteristic of sulfur compounds. BMPA is used in resin lenses. Multhiol is made flexible by incorporating sulfur compounds into polymers. It is used as an adhesive for electronic materials.



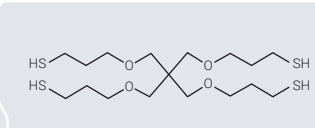
BMPA

The only Japanese manufacturer of β-Mercaptopropionic acid



PEMP

Ester-type multifunctional thiol



Multhiol

Ether-type multifunctional thiol

Sensitizer and crosslinking agent for resists for electronic materials
Adhesive for electronic materials

Expansion into the quantum dot field

Expansion into thiols derived from biomaterials

3 Manufacturing of pharmaceuticals

Advanced pharmaceutical manufacturing technology and expansion into medical equipment

Manufacturing of pharmaceuticals requires proper management of the manufacturing process and the consistent supply of high-quality products. Good Manufacturing Practice (GMP) is a standard that summarizes these requirements. The Sakai Chemical Group is creating new value through strict pharmaceutical manufacturing and quality management know-how based on GMP, and through strengthening its product development capabilities by leveraging relationships of trust with customers.

Management compliant with GMP

Strict operations are essential to create pharmaceuticals with assured quality and safety. These operations include management and recording of the manufacturing and development process, and confirmation of suitability.

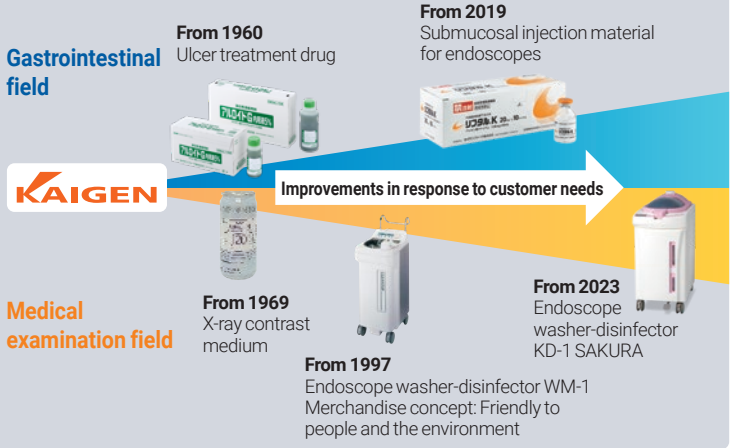
Flow until pharmaceutical is made: Target compound → Preclinical phase → Clinical trial phase I → Clinical trial phase II → Clinical trial phase III → Application to approval → Market launch

Katayama Seiyakusyo Co., Ltd. → **Pharmaceutical company**

Stable supply of high-quality pharmaceutical ingredients and intermediates at each phase

- Minimize human error
- Prevent contamination and quality deterioration
- Design systems that guarantee high quality

Product development capabilities that leverage relationships with customers



Toshiyuki Yagura

President and
Representative Director
Executive Officer

Chemistry for a Friendly Future

Since our founding, Sakai Chemical Industry Co., Ltd. has aimed to enrich people's lives through the power of chemistry. Our journey began back in 1918 with the production of zinc oxide. Since then, we have released numerous inorganic chemical materials such as barium salts and titanium dioxide. From the 1950s, we have expanded our business through various applications including plastic additives, pharmaceuticals, catalysts, cosmetic materials, and electronic materials. Through these applications, we have enriched the lifestyles of people in each era. Even so, as expressed by our company mission of "Chemistry for a Friendly Future," we are never satisfied with the status quo. Instead, we are always contemplating how chemistry can create an even brighter future. Gone are the days in which chemistry is used for convenience and efficiency; rather, chemistry is now expected to take on greater responsibility. How can our Group contribute to issues such as environmental problems, resource depletion, and the realization of a sustainable society? What kind of environment and society can we pass on to the next generation? The answers to these questions are at the foundation of "Chemistry for a Friendly Future."

The Sakai Chemical Group has reached a critical juncture in our history. We must transform our Group in conjunction with the major changes occurring throughout society. Our Board of Directors and executive officers have invested countless days in discussing the optimal direction to be taken by the Sakai Chemical Group going forward. The conclusion reached by directors and executives is that the Sakai Chemical Group must aim to be an "excellent company capable of contributing to society with Smart Material." This means we will use chemistry to find definitive answers to the three themes of "protecting nature (protecting the global environment)," "supporting the development of an advanced information society (working for a more equal society)," and "supporting people's health."

Our Group is always eager to take on new challenges. In order to fulfill our mission of "Chemistry for a Friendly Future," we work earnestly every day to develop materials that reduce environmental impact and production technologies that contribute to safe and secure manufacturing. Our Group also strives to contribute to the sustainable development of society as a whole by widely disseminating these materials and technologies. Of course, we are committed to bringing even greater benefits to society. In order to fulfill our responsibilities as a corporate citizen, we actively work to coexist with local communities, promote the growth and happiness of our employees, and educate the next generation. Our Group believes that "Chemistry for a Friendly Future" requires more than technology—indeed, the passion and initiative of people are essential for success.

CEO MESSAGE

Medium-Term Management Plan "Transformation: BEYOND 2030" Aiming to be an excellent company capable of contributing to society with Smart Material

In May 2024, the Sakai Chemical Group announced the Medium-Term Management Plan "Transformation: BEYOND 2030."

An essential step in formulating the plan was to image people's lives in the year 2050. For example, we envisioned a society where the virtual world and real world coexist. Of course, based on the premise that society is run by people, human interaction and communication would continue in such a dual society. We also envision a society in which lifestyles will continue to diversify, and where remote and real communication will coexist. With these scenarios in mind, we held in-depth discussions on contributions that the Sakai Chemical Group could make through chemistry. These discussions included the Board of Directors and executive officers.

As a result, we resolved to concentrating the Sakai Chemical Group's management resources in the three fields of "environment and energy," "electronics," and "life science and healthcare." We also committed to transitioning to a business portfolio that combines contributions to people's healthy lives with high profitability.

Based on this determination, we have defined Smart Materials as finished goods and services that meet certain evaluation criteria in the three fields mentioned above in terms of the degree of contribution to our ideal future and the degree of contribution through the Group's technology. The Sakai Chemical Group's long-term goal is to become an excellent company capable of contributing to society with Smart Material.

The first step to achieving this long-term goal is to dispose of our current low-profit businesses. In Transformation: BEYOND 2030, the Group set the immediate vision of "growing through the dual pillars of inorganic and organic chemistry and shifting to businesses that contribute to a society looking to the future," and we are resolutely working to replace our business portfolio.

Transformation: BEYOND 2030 calls for the Group to invest an increasing amount of management resources in our growth businesses: the electronic materials business, the cosmetic materials business, and the organic chemicals business. Conversely, we are considering measures to increase the efficiency of our titanium dioxide business. Specifically, in fiscal 2025, we will stop business related to pigment-grade titanium dioxide, which has particularly low profitability. On the other hand, through bold measures to improve the profitability of the zinc business, resin additives business, catalyst business, consigned processing business, hygienic materials business, and medical business, we will enable these businesses to generate stable cash flows for the future.

This replacement of our business portfolio is a painful but necessary decision for the Group. In particular, our employees will face a drastic change in their working environment and a reassessment of their career plans. In recognition of these challenges, our entire Group will work together and make every effort to successfully carry out these structural reforms. These efforts will include enhanced reskilling and career education for employees.

In terms of finances, Transformation: BEYOND 2030 defines the need to act with a strong focus on capital efficiency, thereby enabling the Group to quickly achieve an ROE that exceeds our cost of capital. Specifically, in addition to the aforementioned business portfolio replacement, we will implement measures such as reducing assets and reviewing our shareholder return policy. As for asset reduction, we will gradually reduce inventories with the aim of shortening the cash conversion cycle (CCC). We will also sell idle non-current assets.

Furthermore, we have changed our shareholder return policy in consideration of the balance between growth and return. We will revise the previous dividend payout ratio target of 30% or higher to a dividend on equity (DOE) of 3%. Moreover, we will consider additional shareholder returns if profit plans are exceeded.

The Group is also increasing opportunities for constructive dialogue with investors by publishing this report (integrated report) and enhancing IR/SR activities. We seek to optimize our capital cost by correctly understanding the expectations and opinions of investors, while at the same time ensuring that investors fully understand our business, management strategy, ESG initiatives, and other policies.

Through these efforts, the Sakai Chemical Group will achieve operating profit of ¥9 billion and an ROE of 8% in fiscal 2026. Going forward, the Group aims to achieve an ROE (return on equity) of 12% by 2030.

Positioning for the Medium-Term Management Plan "Transformation: BEYOND 2023"

Focusing intensively on shifting to high-value-added products as the **transformation stage to the future**

Human capital combined with core technologies Promoting total participation management in which all members of the Sakai Chemical Group are moving forward on the same page

As expressed by the name of the Medium-Term Management Plan "Transformation: BEYOND 2030," the Sakai Chemical Group now needs to enact a transformation. Our Group can only change if each and every employee also undergoes a personal transformation. Through Transformation: BEYOND 2030, we aim to become a strong company that is based on employees who believe in themselves and relationships of trust among employees, and that can grow sustainably. We will achieve these goals by having each employee of the Sakai Chemical Group take the initiative to solve individual and organizational problems.

First, we emphasize the importance of having management provide information to employees, forming closer relationships through dialogue, and encouraging each employee to consider the meaning and purpose of their work. The Group will establish a system that realizes diverse working styles for employees and a system for self-design of future careers.

In April 2024, based on a proposal from a group of employees, we launched the Human Capital Committee. The founding members of the Human Capital Committee recognized issues which needed to be addressed, obtained buy-in from colleagues, and took bold action from the same perspective as management. I fully support the Human Capital Committee's efforts and look forward to cooperating toward our goals.

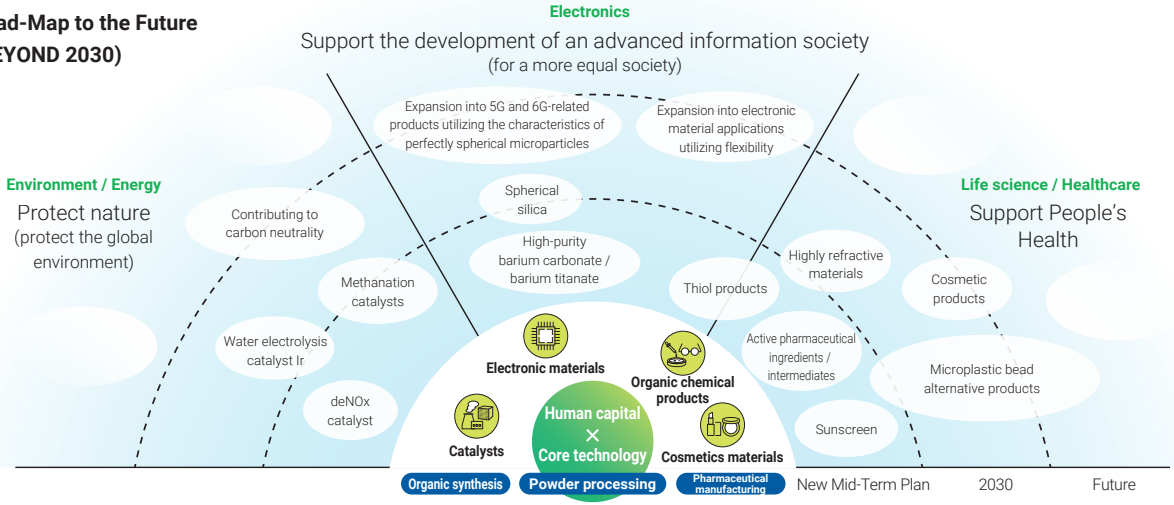
One specific initiative of the Human Capital Committee at Sakai Chemical Industry Co., Ltd. is *Syain kai* meetings, which give opportunities for employees to fulfill a leading role. *Syain kai* meetings are held monthly as a forum for dialogue between management and employees. Participants share the goals and current situation of the Company and its businesses. I hope that these employee-led *Syain kai* meetings will encourage employees to consider the relationship between their own work and the Company's performance.

In addition to human capital, core technologies are another important element to become an excellent company capable of contributing to society with Smart Material. Through its original businesses of zinc oxide and titanium dioxide, the Sakai Chemical Group has acquired a wealth of technology and know-how for handling inorganic and powdered substances. Going forward, the Group's main business will shift to electronic materials, cosmetic materials, and organic chemicals. Even so, the technologies we have accumulated so far will undoubtedly continue to fuel the growth of our businesses in the future.

It is also important to use core technologies to create new businesses. To develop new businesses, we need a healthy exchange of wisdom and opinions from diverse human resources. Accordingly, it is extremely important to ensure diversity, equity, and inclusion and psychological safety in the workplace. Furthermore, as part of creating an environment from which new businesses can be born, we will increase personnel exchanges between group companies and increase personnel transfers across departments such as sales, manufacturing, and corporate. This will facilitate the accumulation of diverse knowledge and experience within the organization and individual employees.

Fortunately, the seeds (technology and know-how) of new businesses are already beginning to sprout. Promising themes have emerged in the fields of environment and energy, electronics, and life sciences and healthcare. To help these budding themes grow big and strong, all employees of the Sakai Chemical Group will share common values, respect each other, and build closer relationships of mutual cooperation.

Road-Map to the Future (BEYOND 2030)



Robust management system for protecting quality, safety, and the environment throughout the Group

I believe that transformation has both offensive and defensive aspects. In terms of defense, I would particularly like to emphasize delivering safety and security to stakeholders. As an operator of chemical and medical businesses, quality, safety, and the environment are of utmost importance and take priority over everything else. However, in the past few years, there have been a series of serious problems and accidents related to quality and safety. Examples are a violation of the Pharmaceuticals and Medical Devices Act at Kaigen Pharma Co., Ltd., an explosion and fire at Sakai Chemical Industry Co., Ltd.'s Yumoto Factory, and a fire at a titanium dioxide factory. Once again, I would like to offer my sincere apologies for the concern and inconvenience caused by these incidents.

The Group recognizes the seriousness of these incidents. Accordingly, we have positioned the rebuilding of quality and safety management systems as a key issue for the Sakai Chemical Group, and are making every effort to prevent recurrence.

Kaigen Pharma Co., Ltd. was subject to administrative sanctions for violating the Pharmaceuticals and Medical Devices Act in December 2023. The company is currently working to reform its management structure, strengthen education for executives and employees, and establish a compliance management system. I also believe that the root cause of the recent quality issues lies in issues with group governance and corporate culture. In our previous approach, group companies acted independently in pursuit of business growth. Although this approach was effective in enabling rapid decision-making and detailed management judgment, it ultimately resulted in the Group losing control over quality and safety. Going forward, we will strengthen group governance and establish a system that enables Sakai Chemical Industry Co., Ltd. to demonstrate strong leadership, especially in terms of quality and safety.

The Group also needs to change our corporate culture. Recent quality misconduct occurred because we failed to uphold the basic principle of emphasizing quality even if it means stopping shipments. Management must continue to praise and encourage employees who stop shipments due to quality issues. Unfortunately, failure to provide such feedback was at the core of the quality issues. This series of scandals involving quality is not the fault of employees; rather, it is the responsibility of management. In response, management will continue to act and communicate appropriately, and to promote activities for fostering a culture of quality.

In regard to safety, Sakai Chemical Industry Co., Ltd. experienced a series of explosions and fires at its Yumoto Factory (May 2021) and its Onahama Manufacturing Site (March 2023). We will never forget the severity of these accidents. Everyone from management to on-site employees will work together to ensure thorough implementation of safety measures and to strengthen safety education. The Group will take every possible measure to prevent accidents. For example, we are upgrading our equipment for safer work without compromising productivity and adopting a preventive maintenance approach that updates equipment before abnormalities occur.

Efforts toward quality, safety, and the environment often conflict with short-term sales and profits. However, in the medium to long term, positioning these concepts as our top priority will lead to sustainable improvements in corporate value. That is why the management team must exercise leadership and continue to send a strong message to all stakeholders to prioritize quality, safety, and the environment, even if it means sacrificing immediate sales and profits.

Complete Quality/Safety Issue Recurrence Prevention

Rebuild a quality and safety management systems and strengthen group governance

	Kaigen Pharma Order to suspend business (violation of PMD* Act)	Yumoto Factory zinc dust plant explosion and fire accident	Onahama Manufacturing Site Titanium dioxide plant fire accident
Date of occurrence	December 22, 2023 (administrative disposition)	May 11, 2021	March 30, 2023
Cause	• Inadequate management and supervision system • Closed organizational culture (Kaigen Pharma)	• Accumulation of deposited particles • Damage to rotor	• Malfunction of special equipment
Individual measures	**Kaigen Pharma:** • Management structure reform • Reorganization of the entire company structure and system establishment • Resource management and job rotation • Strengthening education for executives and employees • Establishment of a compliance management system (Clarification of responsibilities and scope of duties of directors, internal reporting system promotion, and fostering a quality culture) **Sakai Chemical:** • Promotion and supervision of improvement plans (Increase the number of external directors dispatched to Kaigen Pharma to two for strengthened monitoring)	• Removal of dust accumulated during processing • Improvement of dust removal frequency	• Improvement of similar equipment for defect resolution
Entire company measures		(1) Thorough safety awareness: Thoroughly instilling awareness that "just because something hasn't happened yet doesn't mean it's safe" • Regular communication of top messages (not letting accidents be forgotten) (2) Safety measures: Implementation of safety and health activities by everyone from management to site workers • Resolution of issues identified in external risk assessments • Conducting training to demonstrate more effective risk management • Continuously review safety and health standards	

* PMD Act: Law concerning the assurance of quality, efficacy, and safety of pharmaceuticals and medical devices, etc.

Initiatives for diversity, equity, and inclusion
Creating an environment where diverse backgrounds, knowledge, and experience can be utilized

Finally, I would like to once again discuss our human resources and organization. I admire employees who possess motivation, ambition, and the courage to take risks. I would like to do everything in my power to support and encourage such employees. Until now, the Group had failed to provide enough opportunities for employees to realize their dreams and take on challenges. Going forward, I want to make significant changes to our operations and provide fair opportunities so that everyone can pursue meaningful work and challenges, regardless of gender, nationality, age, or career. For example, at Sakai Chemical Industry Co., Ltd., the opportunity to work overseas was mainly provided to managers. Non-managerial employees and young employees did not have such a chance. However, we have revised our personnel system to create a path for employees who wish to work overseas. At our overseas subsidiaries, we are promoting human resource development so that local hires can grow into important positions.

We also recognize that diversity of knowledge and experience is needed to revitalize the Group. At the management level, we have staffed the Board of Directors with outside directors who possess extensive experience in global management, quality control of electronic materials and pharmaceuticals, and corporate finance. This has increased its effectiveness of the Board. In terms of on-site measures, we are increasing the number of experienced technical personnel we hire and sending researchers to external research and academic institutions.

It is important to foster a culture of inclusion while pursuing diversity. We aim to create an organization that accepts all people, eliminates discrimination and exclusion, and allows everyone to participate equally. I believe that innovation is born from an environment in which diverse human resources can thrive. Therefore, we will promote interaction between employees with diverse backgrounds.

Changing the awareness of employees toward transformation
Pursuing an autonomous organization where each employee drives change

The Sakai Chemical Group is currently facing a tough business environment. However, I view challenge as a new opportunity, not as a headwind. Both management and employees are essential for taking advantage of this opportunity. Each individual must act as a leader, promote change, and take personal responsibility for driving change in the Group. No matter how small the theme, great value as a team is created when each employee takes the initiative to act.

Going forward, everyone in the Group will create the story of transformation. Employees will be faced with major changes that they have never experienced before. This may result in feelings of confusion and anxiety—perhaps even anger or sadness. Nevertheless, it is precisely when facing such difficulties that each employee must remember their purpose, take a central role, and provide leadership in their organization. To encourage such awareness, I will continue to engage in dialogue with employees and do my best to create an environment where each individual can maximize their abilities. The growth of our Group is extremely important. However, growth should not come at the expense of employees. Enabling employees to work with peace of mind and live fulfilling lives will lead to the sustainable growth of the Group.

The Sakai Chemical Group will become an autonomous organization in which each employee drives change. We will pursue the sustainable growth of the Company and the happiness of all stakeholders, including customers and employees, and create “Chemistry for a Friendly Future” in which everyone can feel pride.

External evaluations

The Onahama Manufacturing Site of Sakai Chemical Industry Co., Ltd. has received a gold rating for four consecutive years in a sustainability evaluation conducted by EcoVadis (France). The Sakai Manufacturing Site has received a silver rating for two consecutive years. In the 2023 survey, companies in the top 5% of all surveyed companies were awarded a gold rating, and companies in the top 15% were awarded a silver rating.

Materiality and key performance indicators (KPIs) for Sakai Chemical Group

Make People Happy

Issue of materiality	Our major initiatives	Key performance indicators (KPIs)	
		KPIs	Targets
(1) Foster human resources and create a corporate culture where employees can feel their growth	Building mechanisms that allow employees to take up new challenges and act on their own initiative	Work-employee engagement standard score	50 or above (FY2025)
(2) Create a comfortable working environment	Improving the working environment (in terms of atmosphere and time) Creating a vibrant workplace environment Promoting diversity	No. of people working long hours (over 60 hours per month) No. of injuries/deaths requiring 4 or more days off work No. of days of lost work Percentage of new hires with experience (experienced hire ratio) Percentage of female employees among core personnel Percentage of female employees among managers Percentage of employees taking annual paid leave Percentage of male employees taking parental leave	0 people/year (FY2030) 0 people/year 0 days/year 20% or more 20% or more (FY2030) 10% or more (FY2030) 80% or more (FY2025) 50% or more (FY2025)
(3) Contribute to local communities	Having close dialogue with local communities Supporting or participating in local associations	Participating in social contribution activities at cooperating membership groups	Implementing social contribution activities

Protect the Global Environment

Issue of materiality	Our major initiatives	Key performance indicators (KPIs)	
		KPIs	Targets
(4) Manage chemical substances appropriately, reduce environmental impact, and implement measures to improve product safety	Promoting energy conservation Transitioning to renewable energy Recovering and reusing useful substances	Scope 1 and Scope 2 CO_2 emissions reduction rate (versus FY2013 level) Ascertaining Scope 3 CO_2 emissions No. of serious environmental accidents	30% (FY2030) Determining scope and calculating values 0 cases/year
(5) Reduce industrial waste emissions	Promoting the 3Rs ("reduce," "reuse" and "recycle") Reconsidering raw materials, fuels, and the manufacturing processes Recycling industrial waste	Industrial waste reduction rate (versus the FY2021 level)	50% (FY2030)
(6) Give consideration to biodiversity	Reducing water usage and purifying wastewater	Reducing rate of water usage (compared to FY2021)	25% (FY2030)

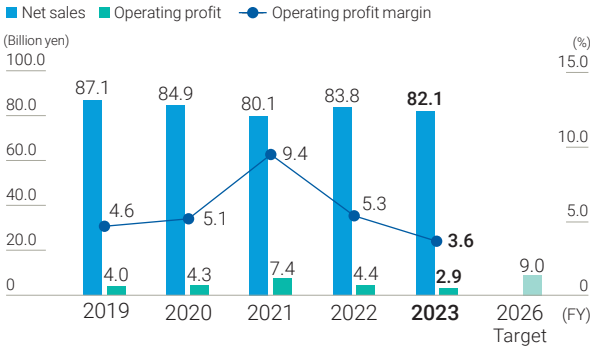
Solve Social Issues through Manufacturing

Issue of materiality	Our major initiatives	Key performance indicators (KPIs)	
		KPIs	Targets
(7) Create products and services that help solve environmental and social issues	Specific examples of microplastic bead alternative products, ammonia synthesis catalysts, and carbon recycling catalysts (all-solid-state battery materials, 5G-related materials, antibacterial and antiviral materials, etc.) Reducing environmental impact through continuous production	No. of developed products and services certified as Smart Material®	Launch five Smart Material products by FY2030
(8) Promote responsible procurement	Providing information to suppliers and asking for their cooperation; auditing business partners;, etc.	Holding CSR procurement surveys for business partners	Implementing CSR procurement surveys and improvements

Build a Transparent and Strong Management System

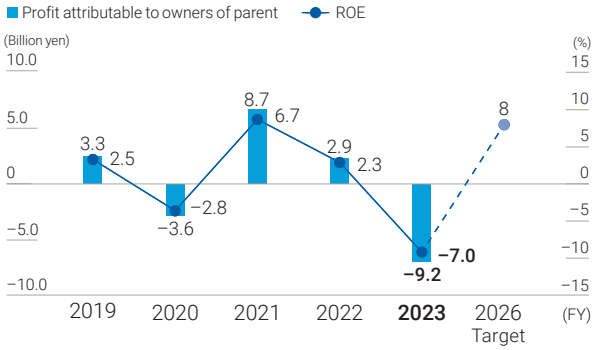
Issue of materiality	Our major initiatives	Key performance indicators (KPIs)	
		KPIs	Targets
(9) Increase the effectiveness of the Board of Directors	Implementing an annual questionnaire to evaluate the effectiveness of the Board of Directors Making improvements based on the questionnaire results Formulating plans to develop management human resources Operating the Nomination and Compensation Committee	Based on the results of the questionnaire on the effectiveness of the Board of Directors (1) No. of challenges identified (2) No. and total hours of discussion sessions on each challenge (3) No. of countermeasures devised (4) No. of countermeasures implemented	Identify challenges based on the results of the questionnaire on the effectiveness of the Board and make necessary improvements *Sakai Chemical Industry (non-consolidated)
(10) Understand risks and take countermeasures	Conducting risk and compliance education, training and awareness-raising activities Operating committees and subcommittees effectively	Number of serious compliance violations Ability to maintain a Company-wide risk management system	Achieve zero serious compliance violations throughout the year Maintain the effectiveness of the system
(11) Ensure timely and appropriate information disclosure	Stimulating IR and PR activities; enhancing PR for crisis management	Compiling and providing an integrated report or information equivalent to the content of such a report	Provide an integrated report or information equivalent to the content of such a report from FY2023

Net sales / Operating profit / Operating profit margin



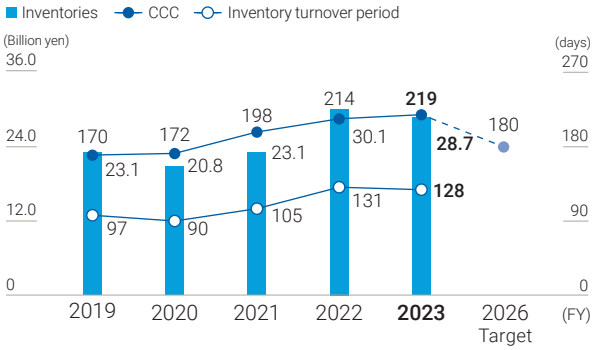
In fiscal 2023, we have maintained net sales by compensating for the decrease in sales volume with an increase in unit price. However, operating profit has decreased due to an increase in manufacturing costs caused by a decrease in factory utilization rate. Going forward, we will expand operating profit by significantly expanding our growth businesses.

Profit attributable to owners of parent and ROE



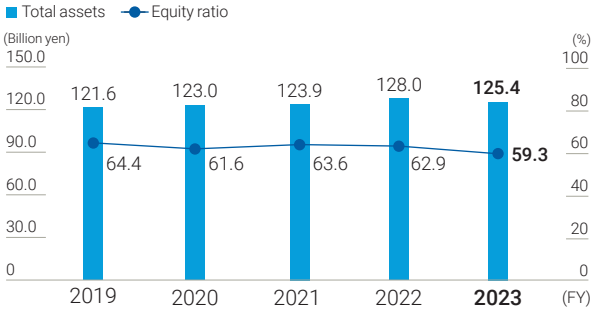
In fiscal 2023, profit attributable to owners of parent was negative due to the reversal of deferred tax assets and the recording of impairment losses.
ROE: Return on Equity

Inventory / Inventory turnover period / CCC



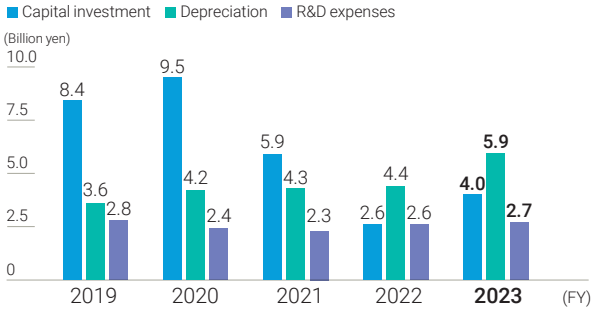
Inventory value has increased due to rising manufacturing costs caused by higher raw material prices. This has caused the CCC and inventory turnover period to worsen. Going forward, we will improve these indicators by reducing inventory.
CCC: Cash conversion cycle (accounts receivable turnover period + inventory turnover period - accounts payable turnover period)

Total assets and equity ratio



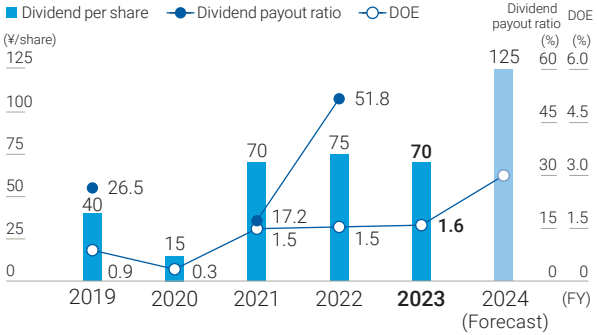
We are maintaining financial stability by keeping an equity ratio of approximately 60%.

Capital investment amount / Depreciation / Research and development expenses



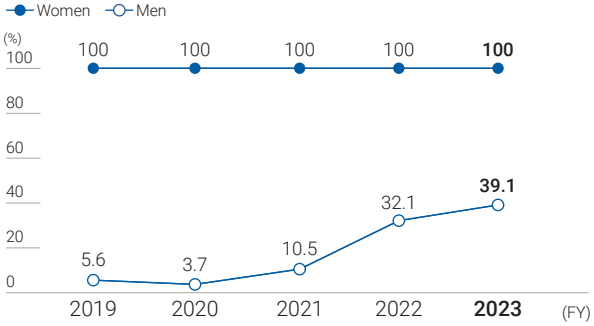
In fiscal 2019 and fiscal 2020, we made large capital investments in our growing electronic materials and cosmetic materials businesses.
Research and development expenses have remained relatively stable.

Dividend per share / Dividend payout ratio / DOE



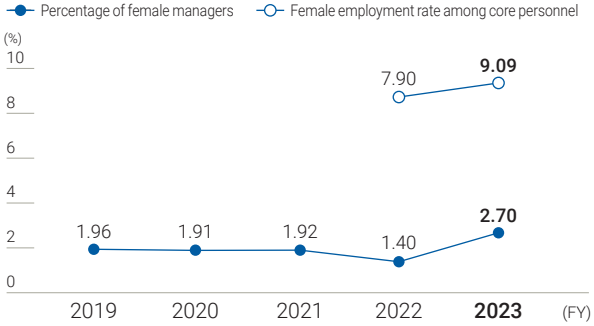
Previously, we had paid dividends at a dividend payout ratio of 30%. However, from fiscal 2024, we will pay dividends based on the guideline of 3% DOE.
In this way, we will continue to provide stable shareholder returns.
DOE: Dividend on Equity

Childcare leave usage rate for both men and women (non-consolidated)



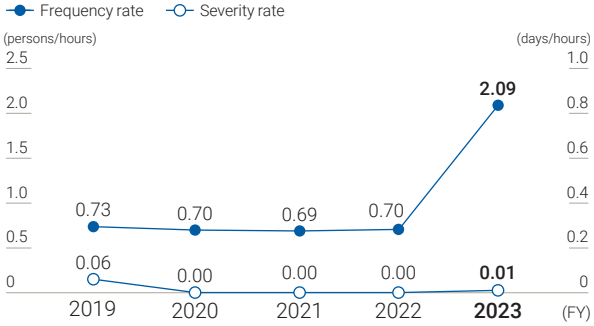
All eligible women are taking childcare leave.
As for men, the rate of taking childcare leave is increasing, due in part to increased understanding from the workplace.

Percentage of female managers / Percentage of female employees among core personnel (non-consolidated)



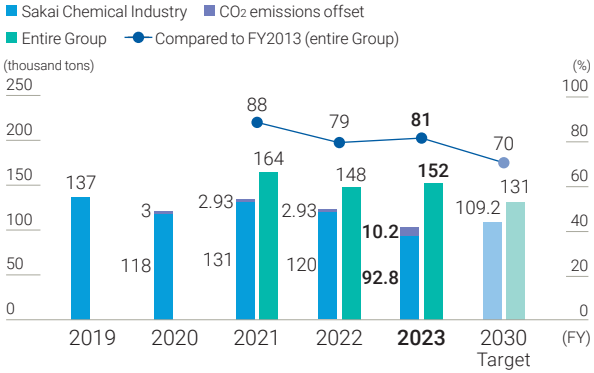
This rate remains low due to the small absolute number of female employees. We will establish a system that allows women to advance their careers, and will engage in appropriate promotion according to ability.
Core personnel: Mid-level employees and above (including managers)

Frequency rate / Severity rate (non-consolidated)



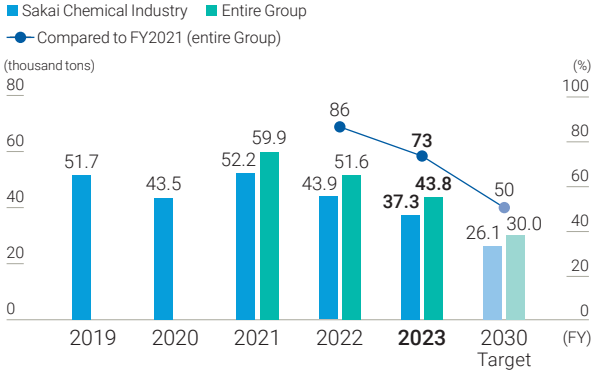
In FY2023, there were three accidents resulting in lost work time. This was an increase of two accidents from the previous fiscal year. Both the frequency rate and severity rate based on lost-time accidents increased compared to the previous fiscal year.
Going forward, we will work together from management to on-site employees to once again ensure safety measures, strengthen safety education, etc.

CO_2 emissions / CO_2 compared to 2013



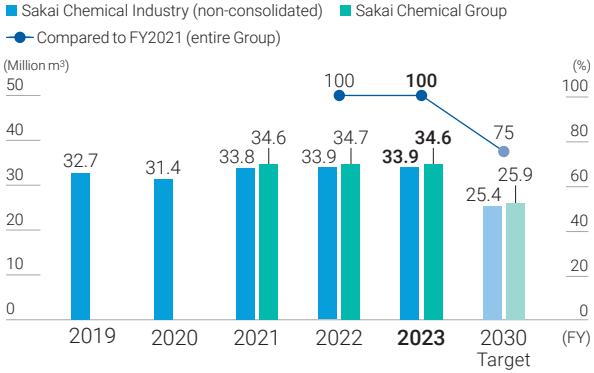
CO_2 emissions in FY2023 were 152,000 tons CO_2eq, an increase of 4,000 tons CO_2eq from the previous fiscal year. While expanding the use of carbon offset city gas and the use of renewable energy, we will continue to strive to reduce emissions throughout the entire Sakai Chemical Group.

Industrial waste emissions / Compared to 2021



Industrial waste emissions in FY2023 were 43,800 tons, a decrease of 7,800 tons from the previous fiscal year. The majority of emissions are waste sludge generated in the titanium dioxide production process. However, we expect to reduce emissions in fiscal 2025 by ending our pigment-grade titanium dioxide business.

Water usage / Compared to 2021

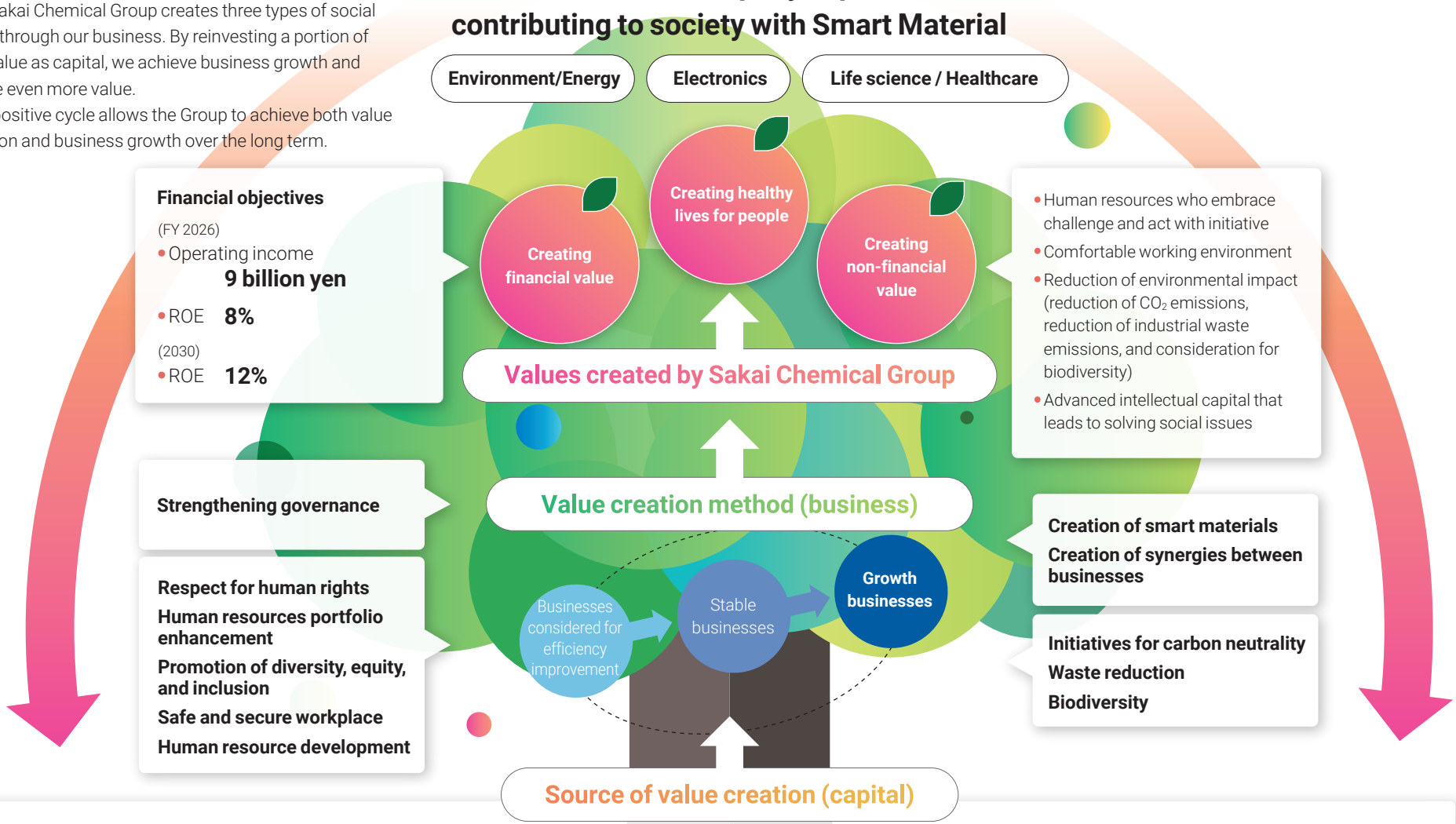


Water usage in FY2023 was 34.6 Million m^3.
More than 60% of the water used is seawater, which is mainly used in the production of titanium dioxide. However, we expect to reduce usage in FY2025 by ending our pigment-grade titanium dioxide business.

Striving to become an excellent company capable of contributing to society with Smart Material

An excellent company capable of contributing to society with Smart Material

The Sakai Chemical Group creates three types of social value through our business. By reinvesting a portion of this value as capital, we achieve business growth and create even more value.
This positive cycle allows the Group to achieve both value creation and business growth over the long term.



Financial capital
- Total assets (consolidated) **¥125,445 million**
- Net assets (consolidated) **¥75,466 million**

Manufactured capital
- No. of production bases (consolidated) (3 overseas) **24**
- Capital investment (consolidated) **¥4,435 million**

Intellectual capital
- No. of patents held (consolidated) **673**
- Research and development expenses (consolidated) **¥2,722 million**

Human capital
- No. of employees (consolidated) **2,390** *Including temporary employees
- Percentage of mid-career hires (non-consolidated) **45.5%**

Social and relationship capital
- Founded in 1918
- No. of affiliated companies* (including 9 overseas corporations) **17 corporations**
  * Including non-consolidated subsidiaries

Natural capital
- Water usage (consolidated) **34,600,000 m³**
- Energy consumption (consolidated) **75,000kL** (crude oil equivalent)

Value created by the Sakai Chemical Group

The Sakai Chemical Group places the highest value on creating healthy lives for people.
We believe that this initiative will result in the creation of both financial and non-financial value.

Creating healthy lives for people

Creating financial value

Financial goals

(FY2026)

- ROE **8%**
- Operating profit: **¥9 billion**

(2030)

- ROE **12%**

Financial capital

Manufactured capital

An excellent company capable of contributing to society with Smart Material

- Protect nature (protect the global environment)
- Support the development of an advanced information society (for a more equal society)
- Support people's health

Social and relationship capital

Natural capital

Creating non-financial value

- Human resources who embrace challenges and act with initiative
- Comfortable working environment
- Reduction of environmental impact (reduction of CO_2 emissions, reduction of industrial waste emissions, consideration for biodiversity)
- Advanced intellectual capital that leads to solving social issues

Intellectual capital

Human capital

Shareholder return

- Capital policy and shareholder return (from p. 19)

Reinvestment in further value creation

- Business strategy (from p. 25)
- Innovation strategy (from p. 35)
- Human resources strategy (from p. 43)

Creating healthy lives for people

Sakai Chemical Industry Co., Ltd. was founded in 1918 in Sakai City, Osaka Prefecture as a zinc oxide manufacturer. At the time, face powder used by women and theater actors contained lead. Chronic lead poisoning due to prolonged use of powder was a social problem. Attention was then placed on lead-free zinc oxide as a raw material for manufacturing face powder. Unfortunately, there were no companies in Japan that could produce high-quality zinc oxide at that time. In response, our founder Ginjiro Tanaka decided to produce high-quality zinc oxide domestically so that people would not suffer from lead poisoning. Despite facing many difficulties, Ginjiro made repeated improvements to the manufacturing method and finally succeeded in producing high-quality zinc oxide in Japan. Ginjiro's zinc oxide was well received by customers and contributed to solving the issue of lead poisoning in Japan.

Since then, the Sakai Chemical Group has spent over 100 years engaging with society and customers with the same level of passion as when our Group was founded. Through chemistry, we want to create healthy lives for people and contribute to a richer, happier society. Regardless of how much the world changes, the Sakai Chemical Group's raison d'etre will never change.

In 2024, the Sakai Chemical Group launched a new Medium-Term Management Plan, Transformation: BEYOND 2030. With the aim of creating a better way of life for people in 2050, we will continue to pursue the aspirations we have held since our founding by highlighting three ways in which chemistry can contribute: protecting nature (protecting the global environment), supporting the development of an advanced information society (toward a more equal society), and supporting people's health.

Creating financial value

Sustainable corporate growth is essential to continuing to create a better way of life for people. The Sakai Chemical Group will achieve growth by creating and quickly providing materials which will be well received by society and customers. By using limited capital more efficiently, we aim to achieve operating profit of ¥9 billion and an ROE of 8% in fiscal 2026, and an ROE of 12% in 2030.

Creating non-financial value

The Sakai Chemical Group will continue to produce better products, services and financial capital—but we will also do so much more. We strive to bring immense happiness to all our stakeholders, including our employees. We will work even harder for human capital initiatives such as preventing occupational accidents, improving engagement, and promoting diversity, equity, and inclusion. Furthermore, we take action to further strengthen the bonds we form with our business partners and local communities.

Natural capital is another major area of interest for the Sakai Chemical Group. When commercializing our developed products, we emphasize the importance of solving environmental and energy problems and reducing energy consumption and waste during manufacturing.

Capital policy

Achieving ROE that exceeds cost of capital

Hiroyuki Hattori
Director and Executive Officer
General Manager of Corporate Strategy Division
Sakai Chemical Industry Co., Ltd.

Shift to management that emphasizes capital efficiency

Based on the Medium-Term Management Plan "Transformation: BEYOND 2030," we will promote initiatives with a strong focus on capital efficiency in order to achieve an ROE target of 8% for fiscal 2026. Although we achieved an ROE of 8.7% in fiscal 2021, we faced the challenge of being unable to build a revenue structure that stably exceeds our capital cost. To realize such a structure, we will focus on the following specific key initiatives in "Transformation: BEYOND 2030."

1. Shift to high value-added products through business portfolio transformation
   - Accelerate development of growth businesses
   - End pigment-grade titanium dioxide business, withdraw from domestic lead-based stabilizers (both by fiscal 2025)

2. Reduce assets
   - Manage cash flow, improve CCC
   - Sell non-current assets that are not being effectively utilized

3. Improve capital efficiency
   - Actively invest in growth businesses, including M&A
   - Enhance shareholder returns

1. Shift to high value-added products through business portfolio transformation

Unlike previous management plans that sought to grow all aspects of our business, the Medium-Term Management Plan "Transformation: BEYOND 2030" focuses on which businesses to expand and which to downsize or withdraw from. The plan calls for active investment of management resources in growth businesses and in the seeds (technology and know-how) of highly profitable businesses that can contribute to the future. To achieve these goals, we need to streamline our low-profit businesses. In fiscal 2025, we will exit our pigment-grade titanium dioxide and domestic lead-based stabilizer businesses, and proceed with structural reforms to create a high-profit structure.

The impact of these structural reforms on our full-year consolidated financial results has been incorporated into our Medium-Term Management Plan "Transformation: BEYOND 2030." Going forward, we will promptly announce any revisions that occur.

2. Reduce assets

In the past, we emphasized P/L (profit and loss statement) indicators such as net sales and profits. However, we will now also emphasize B/S (balance sheet) and C/F (cash flow statement) indicators such as capital efficiency and cash efficiency.

In regard to cash efficiency, the cash conversion cycle (CCC) for fiscal 2023 was over 210 days. Although the chemical materials industry tends to have a long CCC, 210 days is still long compared to other companies in the same industry. We are working to achieve our target of 180 days. We will also reduce assets and improve cash efficiency, by expanding the scope of financing between group companies and selling non-current assets that are not being effectively used.

3. Improve capital efficiency

In the future, we will make more individualized decisions on business investments. We will refrain from capital investments with low return on investment. Instead, we will actively invest mainly in growth businesses that will drive future profit growth. In addition to realizing organic growth in our existing business, this investment strategy will realize growth spurts through M&A focused on growth businesses.

The Group will also strengthen shareholder return. Specifically, we will strengthen shareholder return by introducing DOE (dividend on equity), which will be described below, and by flexibly acquiring treasury shares.

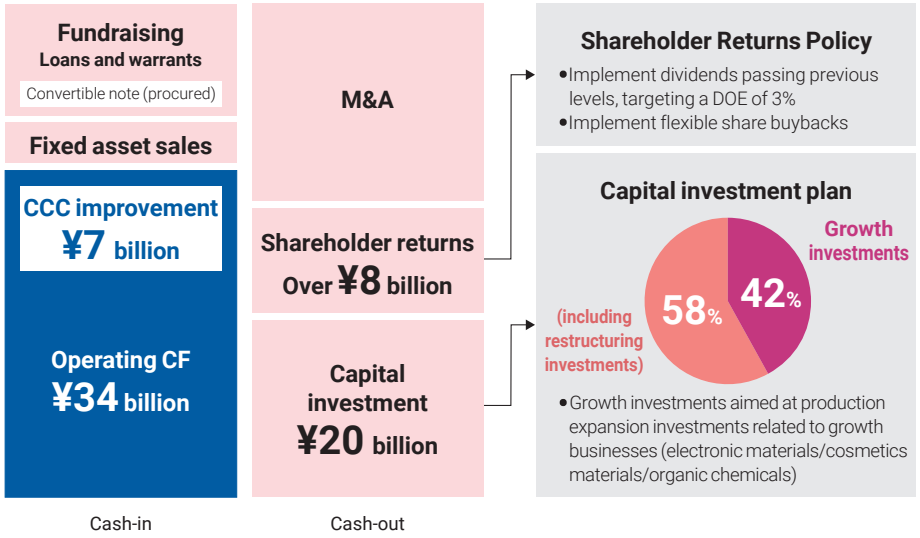
Capital allocation

Achieve well-balanced allocation of capital between growth and return

In terms of cash inflow, we expect to generate ¥34 billion in cash from operating activities. Of that amount, ¥7 billion will be generated by improving CCC. In terms of cash outflow, we will allocate ¥20 billion to capital investments. Of that amount, 42% (¥8.4 billion) will be allocated to growth investments.

We plan to allocate more than ¥8 billion to shareholder return. We also intend to allocate funds to M&A in growth businesses. However, we have yet to set a specific amount at this point in time. We will remain flexible in order to capture any good opportunities.

Capital Allocation (Three-Year Cumulative)

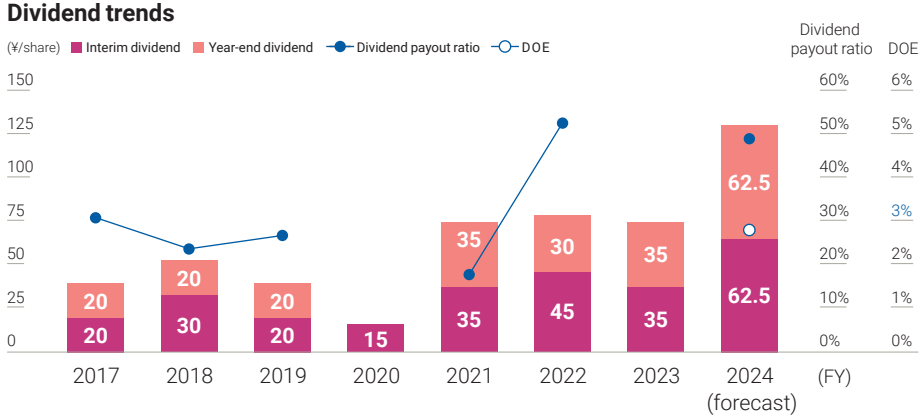


Shareholder return

Towards more stable and higher levels of shareholder return

Until now, the Group has returned profits to shareholders with a dividend payout ratio of 30% or higher as a guideline. Given our track record of returning a stable total dividend amount to shareholders, we have decided to introduce DOE from fiscal 2024. Amid a rapidly changing business environment, we aim to achieve a certain level of stable dividends by switching to a shareholder return policy based on DOE as a guideline. Our policy is to return profits to shareholders while improving ROE and capital efficiency. However, growth investments aimed at profit growth are also important, so we will pay higher dividends than before while maintaining a balance and targeting a DOE of 3%. If profits exceed our plan, we will consider additional shareholder return, such as flexible acquisition of treasury shares.

Dividend trends

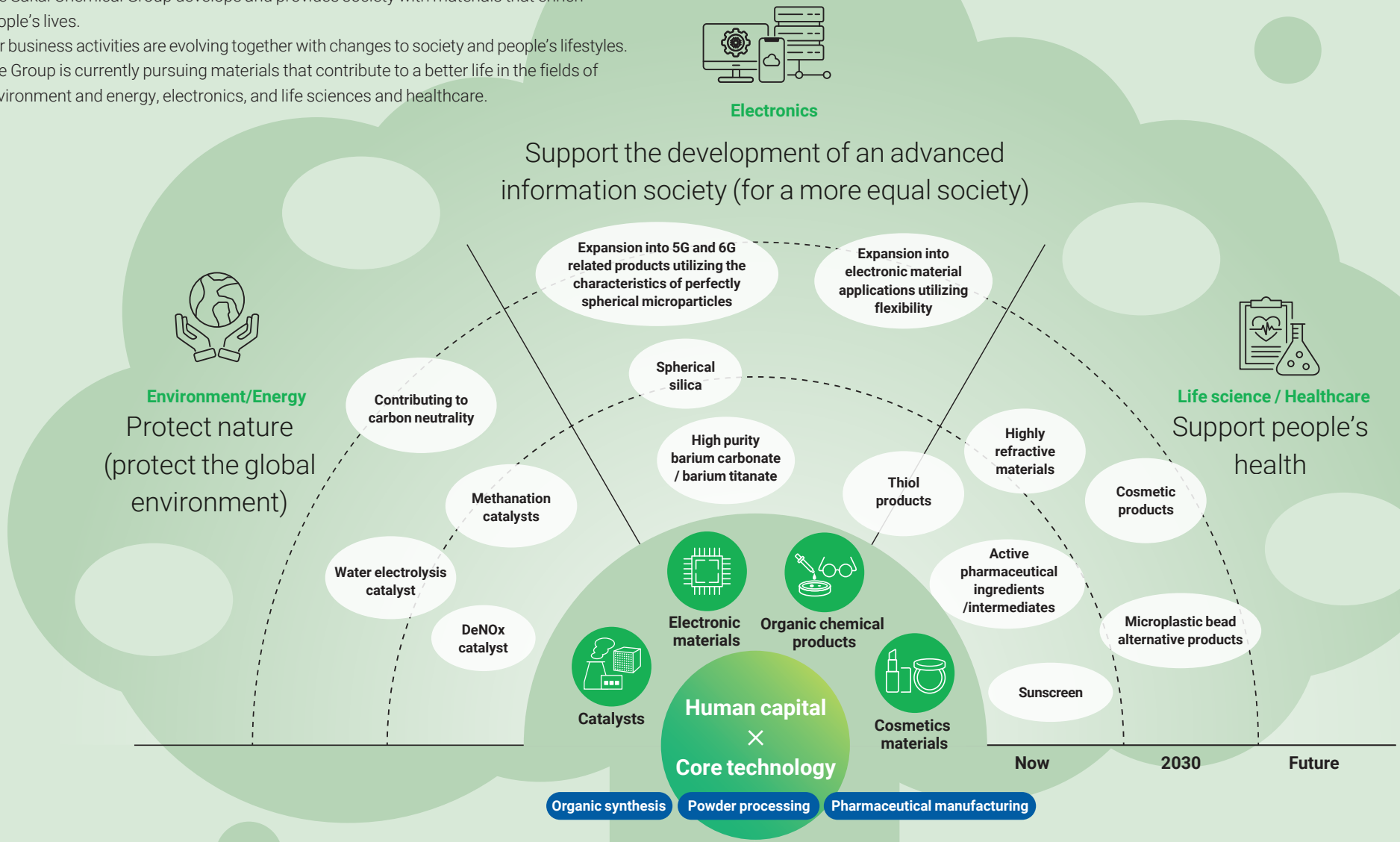


[For fiscal 2023]
Annual dividend of **¥70 per share (interim ¥35, year-end ¥35)**

[Basic policy for dividends of surplus from fiscal 2024 to fiscal 2026]
Revised our target dividend payout ratio to 30% or more and implemented profit return with a target **DOE of 3% (biannual)**

Value creation method (business)

The Sakai Chemical Group develops and provides society with materials that enrich people's lives.
Our business activities are evolving together with changes to society and people's lifestyles.
The Group is currently pursuing materials that contribute to a better life in the fields of environment and energy, electronics, and life sciences and healthcare.



Examining the future business of Sakai Chemical Group from the perspective of the external environment (megatrends)

In Japan, a declining birthrate and aging population will require our attention. After all, such conditions make it impossible to foresee meaningful growth in domestic GDP in the medium to long term. For example, the Ministry of Land, Infrastructure, Transport and Tourism made the alarming announcement that the number of new housing starts has fallen by more than 30% over the past 25 years. The Company handles countless chemicals used in household products. One example is stabilizers for polyvinyl chloride resin. However, in view of medium- to long-term trends, it is essential for us to recognize that the market for household-related products in Japan lacks potential. Overseas, the Chinese market is slowing down after having boasted a high GDP growth rate until now. Even so, we still expect a high rate of growth in markets in ASEAN and India. "Expanding sales in overseas markets" —this is now an essential strategy for the Company.

Although we can no longer reasonably expect growth in Japan, there are markets in which we foresee steady expansion in growth businesses. One such promising market is electronics (electronic materials). The Sakai Chemical Group conducts business in materials (high-purity barium carbonate and barium titanate) for multilayer ceramic capacitors (MLCCs). MLCCs are passive components which are essential to electronic circuits. Of course, electronic circuits always contain semiconductors, so trends in the semiconductor market are inherently linked to the MLCC market. According to the World Semiconductor Trade Statistics (WSTS), semiconductor shipments in 2023 were expected to be $526.8 billion. Compared to the previous year, this is a substantial drop of 8%. Nevertheless, that number is forecasted to grow to $611.2 billion in 2024 and $687.3 billion in 2025. This recovery will be driven by factors including the increasing popularity of electric vehicles, further use of computer systems in automobiles, and advances in generative AI. The majority of electronic materials produced by our company are used in MLCCs. Our estimates indicate that the capacitor market will enjoy annual growth of about 8% in the medium to long term, linked to the growth of the semiconductor market. We need to diligently keep pace with this high-growth market.

Shinji Ogama
Executive Officer
Deputy Head of Corporate Strategy Division
General Manager of Corporate Planning Department
Sakai Chemical Industry Co., Ltd.

In the life sciences and healthcare field, we foresee growth in the areas of cosmetic materials (sunscreen) and eyeglass lenses. Sakai Chemical is growing a business that produces materials for sunscreens (ultrafine zinc oxide and ultrafine titanium dioxide). Demand for sunscreen is increasing because people are more conscious of protecting their skin from the sun and caring for their skin. This is true both in Japan and overseas. Although demand for sunscreen had fallen significantly in recent years due to people staying at home during the COVID-19 pandemic, we estimate that demand will grow at an annual rate of about 5% going forward. The organic absorbers used in sunscreens to absorb UV rays are harmful to the environment. Therefore, absorbers are being replaced by inorganic scattering agents with lower environmental impact. Fortunately, Sakai Chemical offers a lineup of inorganic scattering agents, so this business environment is an opportunity for us to achieve growth exceeding the market.

We also offer a lineup of eyeglass lens materials with a high refractive index. According to the International Myopia Institute, there were 2.6 billion nearsighted people in the world in 2020, which was a 30% increase over the previous 10 years. It is estimated that the nearsighted population will reach 4.8 billion by 2050. While eyeglass lenses are expected to grow at an annual rate of around 3%, even higher growth is expected for high refractive index eyeglass lenses.

When considering our business portfolio from the perspective of SDGs and ESG, the Company needs to review our business structure, which consumes large amounts of energy and produces large amounts of products. Shifting our business portfolio toward high value-added products will enable capital-efficient management. It will also lead to an environmentally friendly business structure, which is an opportunity to grow the Company's products that benefit the environment. For example, we are developing products for promoting carbon neutrality, such as methanation catalysts and water electrolysis catalysts. The Company aims to balance contributing to our future profits by developing and growing environmentally friendly business.

Considering the external environment described above, we will expand sales in overseas markets and transform ourselves into an "excellent company capable of contributing to society with Smart Material" in the three fields of environment and energy, electronics, and life sciences and healthcare.

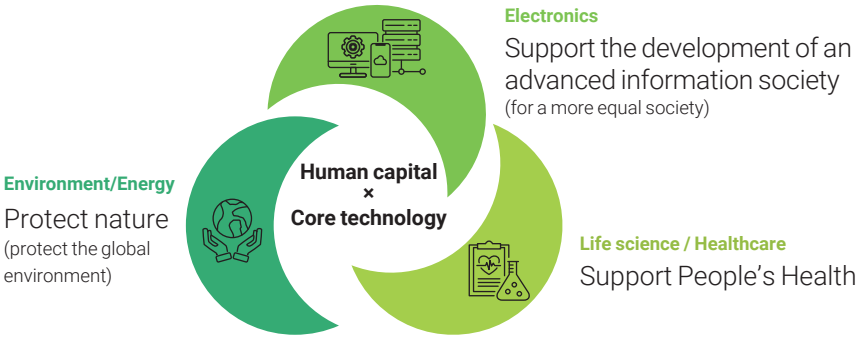
Business portfolio strategy

Business portfolio replacement for shift to high value-added products

Three years of business portfolio transformation

We formulated the Medium-Term Management Plan "Transformation: BEYOND 2030" as a three-year management plan running from April 2024 to March 2027. Unlike our previous Medium-Term Management Plans, Transformation: BEYOND 2030 envisions people's lives, society, and our corporate image in the future. The plan aims for a continued transformation by distinguishing between growing businesses and businesses that will be scaled back or disposed of in pursuit of that future vision. The name of the plan conveys our desire to continue transformation not only for the period of the Medium-Term Management Plan, but also beyond 2030.

During the process of formulating the Medium-Term Management Plan, the Sakai Chemical Group imagined what life would be like in 2050, beyond 2030. These four elements of our vision are: 1) coexistence of virtual and real spaces, 2) a society based on human involvement (interaction and communication between people do not disappear), 3) further diversification of lifestyles, and 4) communications via remote and in-person. With this future vision of life in mind, we thoroughly discussed what chemistry can do to create the lifestyle of 2050, and came to three conclusions. The first is to protect nature, the second is to support the development of an advanced information society, and the third is to support people's health. In other words, we aim to become an excellent company capable of contributing to society with Smart Materials for the three fields of environment and energy, electronics, and life sciences and healthcare.



Now, exactly how can we contribute to society in these three fields? As stated in our management mission, the Sakai Chemical Group has a number of unique "seeds" (technology and know-how) that can create materials that support the comfort and security of society. Currently, we only provide a few materials in one field. However, there is a growing possibility that we can expand our high-added-value seeds and thereby enhance practical applications of our technology and know-how. Furthermore, pooling the Group's strengths will make it possible to process and distribute these seeds. In this way, we intend to actively invest management resources in the seeds of highly-profitable businesses that contribute to the future of society. For this purpose, we must first reorganize our low-profit businesses.

Classifying the chemical business into three categories and redistributing management resources

During the previous Medium-Term Management Plan, we divided the chemical business into three categories: growth businesses, stable businesses, and businesses considered for efficiency improvement. We began redistributing management resources in these categories.

Growth businesses: Electronic materials, cosmetics raw materials, and Organic chemicals

Definition of business Businesses which are in major markets with high growth rates and for which a company possesses competitive advantages (technology, price, sales channels, brand, and other differentiating factors)

Mission Grow net sales faster than the market growth rate

Policy Active investment (investment of financial and human capital)

Stable businesses: Hygienic products, contract processing, plastic additives, zinc, and catalysts

Definition of business Businesses for which the major market is growing and for which a company possesses competitive advantages (technology, price, sales channels, brand, and other differentiating factors)

Mission Stably generate cash

Policy Tighten investment standards (restriction on new investment of financial and human capital)

Businesses considered for efficiency improvement

Definition of business Businesses with declining profitability and requiring efficiency

Mission Stabilize profits through transformation that includes factory consolidation, reduction in production scale, and business withdrawal

Policy Stabilize business or withdraw from business (eliminate businesses considered for efficiency improvement during the period of the current Medium-Term Management Plan)

Details of portfolio transformation

The plastic additives business and catalyst business, which are businesses considered for efficiency improvement, will be transitioned into stable businesses through revenue improvement measures. The pigment-grade titanium dioxide business will be discontinued in fiscal 2025. Zinc products have a certain level of revenue and will therefore be transitioned into stable businesses. The organic chemicals business, which is a stable business, will be transitioned to a growth business because it shares a role in driving growth together with inorganic chemicals.

The diagram below shows the numerical values of operating profit before and after the business portfolio transformation. We will significantly expand growth businesses, and will eliminate businesses considered for efficiency improvement by either withdrawing from those businesses or transitioning to stable businesses. We will restructure our businesses so that growth businesses account for 63% of operating profit.

Policy for chemical business

Growth businesses

In addition to the electronic materials business and the cosmetic raw materials business, we will position the organic chemicals business as a new growth driver and aim to increase revenue through growth investments in existing businesses and the use of M&A.

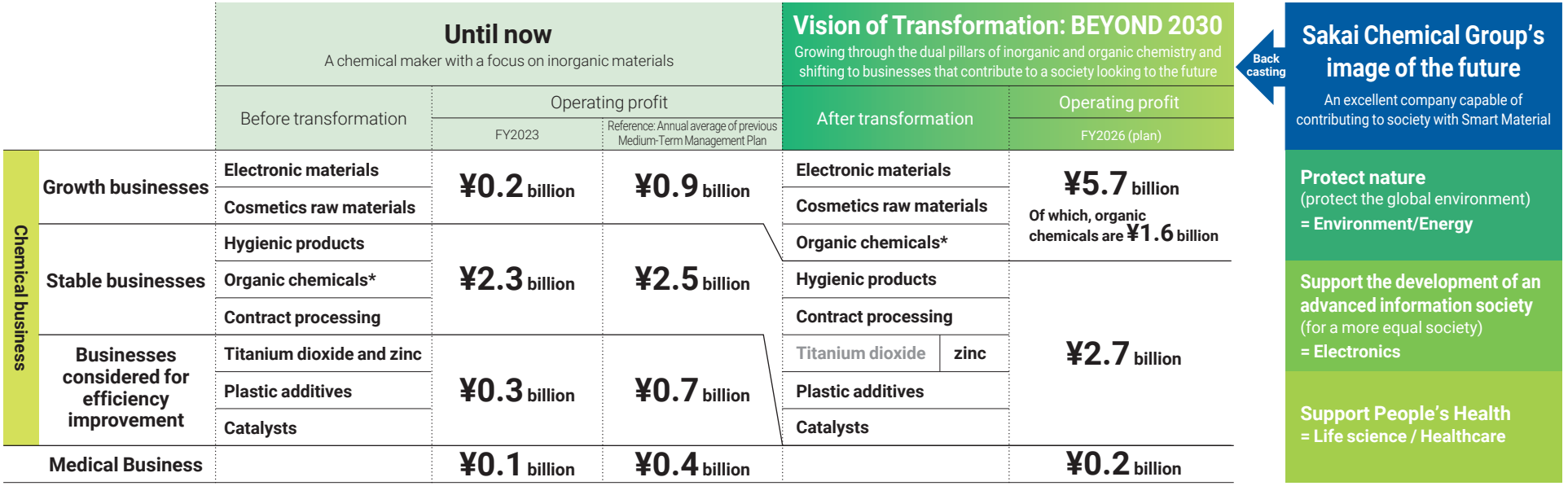
Stable businesses

The hygienic materials business and the contract processing business are expected to continue to generate solid profits, so we will continue them as businesses that ensure stable cash flows.

Businesses considered for efficiency improvement

For the titanium dioxide business, we had been aiming to eliminate losses by revising prices. However, we have decided to end the business of pigment-grade titanium dioxide products in fiscal 2025. In conjunction with these changes, we will implement structural reforms across the entire company. In the plastic additives business, we will withdraw from domestic production of lead-based stabilizers in fiscal 2025. This withdrawal is due to low profitability. We will transition the plastic additives business to a stable business by shifting to non-lead stabilizers and focusing on profitable overseas markets, especially ASEAN. In the catalyst business, we will transition to a stable business by consolidating production bases and revising prices.

Moreover, from the next Medium-Term Management Plan onward, we will accelerate the development of next-generation catalysts that contribute to carbon neutrality in the environment and energy field. Through these strategies, we will eliminate businesses considered for efficiency improvement within three years.

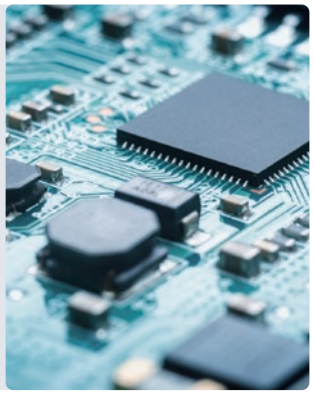


Note) Excluding "Other" from the chemical business.
* Changed to growth business from FY2024.

Business strategy

Electronic materials | Electronics

Achieving growth speed that surpasses the market through reliable technical capabilities



Market growth potential

The Company's electronic materials business manufactures and sells dielectrics and dielectric materials for multilayer ceramic capacitors (MLCCs). The MLCC market is expected to expand significantly due to digitalization, the shift to electric vehicles, and advances in generative AI. Going forward, we forecast an annual growth rate of about 8% (the Company's estimate). In the Strategy for Semiconductors and the Digital Industry published by the Ministry of Economy, Trade and Industry in 2023, MLCCs are described as "an important area of industrial policy in which Japanese companies have high competitiveness." Improvements to the business environment surrounding MLCCs are expected as a policy of the Japanese government. The Company expects the market for dielectrics and dielectric materials that we manufacture and sell to grow in line with the expansion of the MLCC market.

Market environment

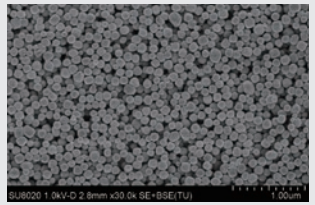
The market for dielectrics and dielectric materials has a relatively small number of entrants in terms of both customers and competitors. The top few MLCC manufacturers that are the Company's customers are all mega-corporations that account for more than 80% of the world market share. Consequently, the Sakai Chemical Group is exposed to significant pressure of purchasing power. On the other hand, there are many Japanese companies among MLCC manufacturers. This gives us the advantage of being able to frequently meet and talk with customers on a regular basis.

The Company has several competitors in dielectrics and dielectric materials. Even so, competition is not a major threat at this time because supply and demand are expected to tighten in the future due to the increase in demand for dielectrics. Furthermore, the Sakai Chemical Group still possesses an advantage in terms of technical capabilities and relationships with customers.

Competitive advantages

The competitive advantages of the Company's electronic materials business are "flexibility and speed of products development," "integrated response from procurement to manufacturing and sales (supply chain strengths)," and "good customer relationships cultivated over many years."

Development of fine, high-purity, and highly-homogeneous materials



Flexibility and speed of products development

In recent years, the demand for higher-performing electronic devices has led to an ever-increasing need for fine, more pure, and more homogeneous materials. The Sakai Chemical Group uses powder processing technology that we have accumulated over many years to flexibly and quickly develop the materials needed by our customers.

Integrated response from procurement to manufacturing and sales (supply chain strengths)

Barium chloride is the main raw material for dielectrics and dielectric materials. Although barium chloride must be imported from overseas, Sakai Chemical Industry Co., Ltd. has developed various procurement routes to ensure a stable supply of raw materials. Furthermore, with the acquisition of Sakai Trading Co., Ltd. as a wholly owned subsidiary in 2023, the Company has accelerated the diversification of our suppliers, thereby building a strong, flexible supply chain with a high level of competitive advantage.

Good customer relationships cultivated over many years

For many years, the Company has maintained close and highly-trusting relationships with our customers. Combined with our technical capabilities and strengths in our supply chain, these relationships ensure that customers come to us first when needing assistance.

Multilayer ceramic capacitors (MLCCs) and dielectrics

Dielectrics (barium titanate) are the main material in MLCCs. Dielectrics have the ability to store large amounts of electricity. The Sakai Chemical Group has developed fine, uniformly shaped spherical dielectrics which contribute to improving the performance of MLCCs. We also manufacture high-purity barium carbonate as a dielectric material.

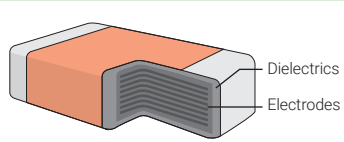


Image of MLCC

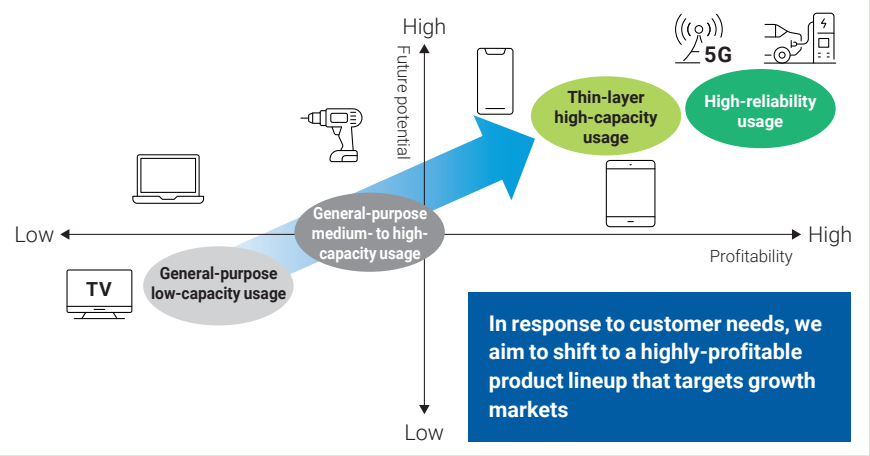
Business strategy

We will focus on shifting to high value-added products and growing our business at a speed that surpasses market growth.

Sales strategy

Rather than simply aiming to increase the sales volume of existing products, we will focus on changing our sales mix. Increasing opportunities to propose high-end products to customers will lead to the adoption of high value-added products. Furthermore, we will solidify our revenue base by shifting to fair prices for existing products.

Vision of the electronic materials business (dielectrics and dielectric materials)



Development strategy

Sakai Chemical Industry Co., Ltd. manufactures dielectrics using a unique method called the hydrothermal synthesis process. This process has advantages over other companies' manufacturing processes in terms of high uniformity and crystallinity of particles. It is also compatible with miniaturization. The Company will continue to refine these unique features and respond to the growing needs for finer size, high purity, and high homogeneity. In particular, we will focus on enhancing our high-end product lineup and strongly promote initiatives to improve our sales mix.

Moreover, the Company will explore all possible measures in order to acquire new technologies and know-how; for example, conducting joint research with universities and academic institutions and strengthening the recruitment of experienced R&D personnel. We also regularly consider collaborations and M&A with other companies in an effort to capture every single good opportunity.

In the medium to long term, the Company is promoting development with the aim of entering fields for semiconductor-related materials. We aim to enter markets other than MLCCs, such as semiconductor-related fields. Our first step in achieving entry will be to develop applied products in our technical fields of expertise such as silica and organic chemicals.

Procurement and inventory management

Barium chloride is a raw material for dielectrics and dielectric materials. Many of the countries where barium chloride is produced are regions with relatively high country risk. These risks include sudden increases in raw material prices, tight supply, and delayed supply. To prepare for these risks, the Company is working with our subsidiary Sakai Trading Co., Ltd. to secure suppliers in multiple countries. We also manage inventory levels with a margin of error which accounts for the procurement difficulty and procurement period.

Yasuhiro Okamoto
Director and Executive Officer
Electronic Materials Business
Sakai Chemical Industry Co., Ltd.

Business strategy

Cosmetic raw materials

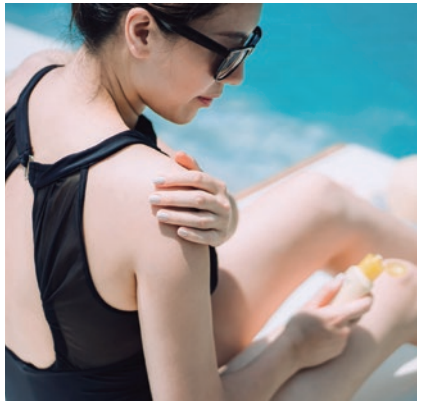
Life sciences and healthcare

Creating unique cosmetic raw materials which bring beauty, health and spiritual richness to the world

Market growth potential

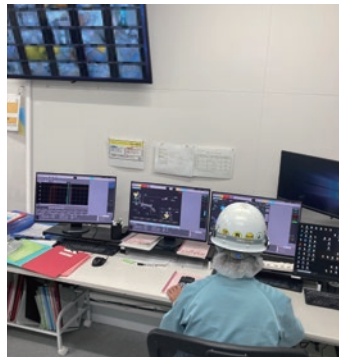
The global cosmetics market is expected to grow at an annual rate of 5% heading toward 2030. In Japan, demand for cosmetics has expanded thanks to inbound demand. However, the COVID-19 pandemic has made significant market growth difficult. Overseas, market growth is expected due to growing interest in skin care; for example, sun protection, brightening, and anti-aging. Another factor in increasing demand and accelerating market growth is that men have also begun to use cosmetics.

The use of organic UV absorbers in sunscreens and microplastic beads (MPB) in makeup products has become problematic due to growing environmental awareness. Going forward, inorganic fillers are expected to replace organic UV absorbers, and materials with low impact on the ecosystem are expected to replace MPBs. Consequently, Sakai Chemical Industry Co., Ltd.'s products can be expected to grow at a rate greater than the market growth rate.



Competitive advantages

The competitive advantages of Sakai Chemical Industry Co., Ltd. in cosmetic raw materials come from two sources: "use of powder processing technology to create unique cosmetic raw materials" and "high-level manufacturing management and quality control systems."



Unique cosmetic raw materials

Zinc oxide and titanium dioxide for materials in sunscreens are treated with microparticulation technology, surface treatment technology, and easy dispersion technology. Although microparticulate powders are difficult to handle, these technologies improve the handling properties of powder when used in sunscreens. Zinc oxide also contributes to the high transparency of sunscreens.

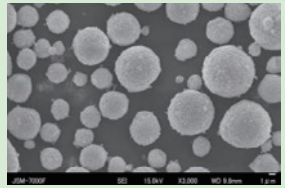
In the case of materials for makeup products, applying shape control to various fillers makes it possible to create spheres or plates. It also enables the creation of fillers in unique shapes such as spheres that are an accumulation of plates. This makes it possible to impart various functions to makeup products.

High-level manufacturing management and quality control systems

Our fine particle zinc oxide and titanium dioxide products are manufactured and inspected under a GMP management system, and have passed inspections by the U.S. FDA.

MPB alternative products: Barimaru and Calmaru

The product lineup offered by Sakai Chemical Industry Co., Ltd. includes Barimaru (spherical barium sulfate) and Calmaru (spherical calcium carbonate). These products are offered as an alternative to MPB, which raises concern due to its adverse impact on the ecosystem. In this way, the products help reduce environmental burden.



Barimaru, a spherical barium sulfate composite powder

Business strategy

The Sakai Chemical Group positions cosmetic raw materials as a growth business. We aim to achieve growth that surpasses market growth and to further expand profits.

With this goal in mind, we have established a new organizational structure integrating development and sales. Utilizing this new structure enables the Company to further deepen our materials for sunscreens, while at the same time working to expand sales of materials for makeup products. We will establish a new position as a cosmetic materials manufacturer both in Japan and overseas, and increase our brand power.

Materials for sunscreens

The Company will accelerate and deepen our overseas expansion of materials for sunscreens, which are the core of cosmetic raw materials. The key to doing so is enabling joint development through relationships with major overseas customers. When making new proposals to customers, the Company will work to expand our business to customers who are facing challenges in building their business. For example, we propose an easily-dispersible types of ultrafine zinc oxide particles to customers who are experiencing handling difficulties, or a supply of a dispersion to customers who cannot use a powder.

Making cosmetics using the Company's materials

Materials for makeup products

The Company will expand our materials for makeup products as a new pillar of our cosmetic raw materials business. In addition to providing plate-shaped fillers and spherical fillers that can be differentiated through shape control technology, we also offer a lineup of inorganic fluorescent materials for cosmetics created by applying the know-how we have cultivated for industrial applications. In order to grow sales of these many unique materials and expand the scale of our business, we will also increase production concurrently. The Company plans to complete construction of a cosmetics multi-plant in February 2026.

Through our makeup product strategy, we will increase the variety and diversity of unique proposals for makeup product usage in addition to sunscreen usage. By fostering even deeper relationships with customers, the Company plans to increase overall profits for cosmetic materials.

Organizational structure that supports growth

In 2023, we reviewed our organizational structure and launched the Cosmetic Innovation Department to integrate sales and development. The department is tasked with strengthening the connection between sales and development, consolidating and sharing market information, customer information, and development status more efficiently, and establishing a system for quickly making valuable material proposals from the customer's perspective.

Previously, when overseas customers made product inquiries and the performance evaluation of the specified product was poor, the Company was unable to respond further. This prevented us from building relationships with the customers. In one case, the customer was surprised that we offered a certain type of zinc oxide because our products were not well known. We recognized that such a situation is unacceptable.

However, by reviewing our organizational structure, we built a foundation for continued strategic and proactive proposals and consistently leaving strong impressions on customers. Going forward, the Company will place greater focus on marketing activities, development of high-performance materials, and active material proposals. We will also emphasize making in-depth proposals on formulations and focus on branding.

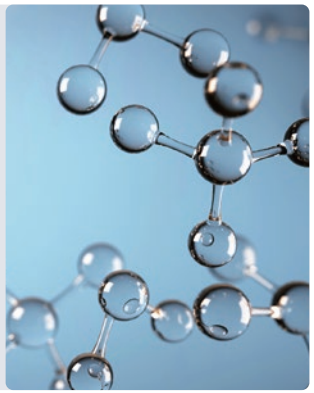
Koichiro Magara
Director and Executive Officer
In charge of Cosmetic Innovation Business
Sakai Chemical Industry Co., Ltd.

Business strategy

Organic chemicals

Electronics
Life sciences and healthcare

Realizing an expansion strategy in the organic chemicals field through active investment



Market growth potential

The Sakai Chemical Group's organic chemicals business includes thiol products, which are representative sulfur compounds, as well as active pharmaceutical ingredients (APIs) and pharmaceutical intermediates.

Thiol products manufactured by Sakai Chemical Industry Co., Ltd. (until March 31, 2024, SC Organic Chemical Co., Ltd.) are mainly used as raw materials in eyeglass lenses and concrete. Eyeglass lens applications are expected to grow at an annual rate of about 3%. The main application of high refractive index lenses is expected to grow at an even higher rate. To meet future demand, the company is considering increasing its production capacity.

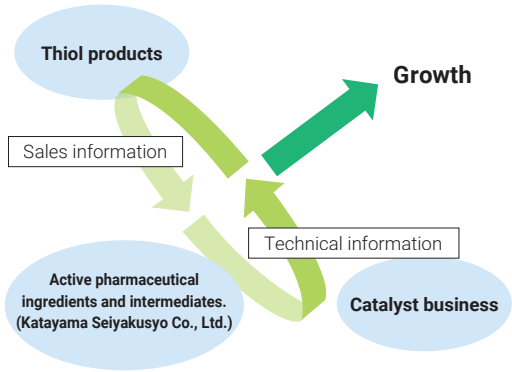
APIs and intermediates are manufactured by Katayama Seiyakusyo Co., Ltd. The company's main customers are pharmaceutical companies that produce new drugs. We manufacture under a management system that is compliant with GMP (Good Manufacturing Practice) and provide safe, high-quality pharmaceuticals to patients through pharmaceutical companies. This field has an annual growth rate of about 6% and is expected to grow faster than the market growth rate. Therefore, we are positioning it as an area of further focus in the future.

Competitive advantages

The competitive advantage of thiol products is their uniqueness. There are few thiol manufacturers worldwide. In particular, Sakai Chemical Industry Co., Ltd. is the only manufacturer of β-Mercaptopropionic acid in Japan. By utilizing this advantage and continuing to provide products that meet customer demands, we have established a solid position. On the other hand, our high reliance on β-Mercaptopropionic acid remains an issue. Going forward, the Company will focus on developing highly original new products while optimizing our investment strategies.

Synergies within the Sakai Chemical Group

By handling thiol products and APIs/intermediates in the same segment, we are strengthening the integration of scattered technologies and sales information. This integration will promote the proposal of new value. The two research teams have already begun engaging in communication, and they look forward to growing together. Furthermore, since catalysts are essential for organic synthesis, we are also collaborating with the catalyst business of Sakai Chemical Industry Co., Ltd. to develop technologies for efficient control of new reactions.



Thiol products used as raw materials for adhesives

Various thiol products made from our main product, β-Mercaptopropionic acid, take advantage of high reactivity to contribute to reducing the energy required for curing adhesives.

Business strategy for thiol products

Expansion strategy

The future growth of thiol products depends on optimizing transaction costs and investment strategies. We are currently considering various options, including marketing, while formulating a future vision for our organic chemicals business.

Development strategy

One of Sakai Chemical Industry Co., Ltd.'s unique developments is a material called Multhiol. Existing thiol products have issues with water resistance. However, we imparted Multhiol with water resistance and impact resistance by revising its chemical structure. We believe that this new functionality will enable us to offer innovative value in adhesives for electronic devices, etc.

Business issues

Sakai Chemical Industry Co., Ltd. merged and absorbed SC Organic Chemical Co., Ltd. on April 1, 2024. For the time being, the Company will focus on increasing efficiency and streamlining our organizational structure. We will also work to quickly strengthen our quality assurance system.

Business strategy for pharmaceutical ingredients and intermediates

Katayama Seiyakusyo Co., Ltd. has been conducting integrated manufacturing of products through organic synthesis for over 100 years. Since the 1980s, Katayama Seiyakusyo has been engaged in contract manufacturing of APIs and intermediates by utilizing our organic synthesis technology.

The pillar of our business expansion strategy in this field is becoming a Contract Development and Manufacturing Organization (CDMO). In addition to the conventional production of ingredients for clinical trials and post-approval pharmaceutical production, we provide a wide range of support for the development processes of pharmaceutical companies; for example, from development of synthetic routes in the early stages of pharmaceutical development to increasing scale with an eye toward industrialization. In order to raise awareness for these features, we actively exhibit at exhibitions and other events attended by many pharmaceutical company representatives.

In the summer of 2024, we will relocate our research laboratory, which is the core of our technology development, to a new building in the Hirakata Plant. This move will further strengthen the company's function as a CDMO. At the same time, we are also investing in equipment to improve the production capacity of the plant, and building a new warehouse in order to respond to the increase in consigned projects going forward.

In terms of technology, we are also focusing on acquiring continuous production technology, which is attracting attention as a new manufacturing technology for APIs and intermediates. This technology not only enables production that was difficult with conventional technology, but also reduces the burden on employees working at the plant. Moreover, it improves production efficiency, saves energy, and reduces the number of staff required. By proactively taking on new challenges such as those discussed above, we will continue to contribute to the healthy lives of people around the world as your best partner in pharmaceutical development.

New building in the Hirakata Plant to house the research laboratory

Keiichi Tabata
Executive Officer
Organic Chemicals Business
Sakai Chemical Industry Co., Ltd.

Business strategy

Value creation method (business) | Environment and energy

Focusing on efficiency in manufacturing divisions

Nickel catalysts

Market environment

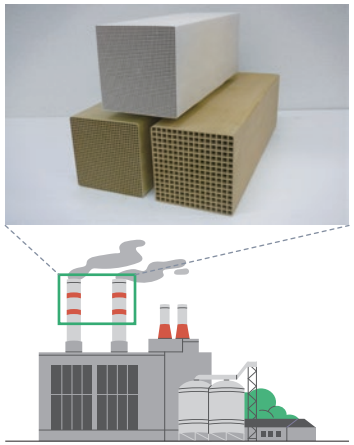
Nickel catalysts are used in the hydrogenation of organic compounds. They are also widely used in processes such as adding hydrogen to resins and in the processing of foods such as chocolate. The market for nickel catalysts is characterized by a slow growth rate and a small number of customers and competitors. Furthermore, it is difficult to expand business in the short term because sales must be slightly adapted to fit each customer. However, due to the high barriers to entry, relatively stable profits can only be expected once a relationship with a large customer has been successfully established.

Competitive Advantages

In the nickel catalyst business, the Company has spent many years building good relationships with customers who have competitive products. Due to the high barriers to entry in the nickel catalyst business, long-term relationships with customers create an advantage because replacement with competitor products is not easy.

De-NOx catalyst

Market environment



De-NOx catalysts are used to reduce and remove nitrogen oxides generated during power generation and waste incineration. In Japan, demand for power plants and waste incineration facilities is declining due to the shrinking population. However, demand is strong in countries and regions experiencing rapid economic growth, such as ASEAN countries. Overseas market growth is expected, although risks may be posed by regulations related to public works and special practices. Sakai Chemical Industry Co., Ltd. will continue to expand our business in search of new opportunities in overseas markets.

Competitive advantages

The main raw material for de-NOx catalysts is the Company's custom-made grade titanium dioxide, which is molded into a honeycomb form under optimal blending conditions with other raw materials. The Sakai Chemical Group's competitive advantage is our technology and know-how. In terms of overseas business expansion, the Sakai Chemical brand reputation as a "Japanese company with superior technical ability" has earned the Company the trust of local government agencies. This gives us a competitive advantage over local competitors.

Business strategy

In the short term, the Company will thoroughly streamline our manufacturing divisions, reduce costs, and ensure profits. For nickel catalysts, we will optimize production capacity by consolidating production bases, and increase plant operating rates to reduce manufacturing costs per unit. For de-NOx catalysts, the Company will increase production efficiency and reduce fixed costs by maximizing the use of existing facilities.

In terms of sales, we will increase sales and profits by further ensuring that the Company's nickel catalysts meet the needs of our valued customers. For de-NOx catalysts, we will increase sales by expanding overseas (mainly in Asia) and by expanding services associated with our products. By steadily implementing these measures, we will quickly improve the efficiency of our catalyst business and transition it to a stable business.

In the medium to long term, we will transform our catalyst business into a growth business centered on products specialized in the environmental field.

Starting from the environmentally friendly catalyst Ir/ENETIA which we successfully developed in January 2024, the Company is focusing on developing products that contribute to a hydrogen society and carbon neutrality.

However, it will take some time to commercialize these developments. Therefore, until the Company has developed a new products group specialized for the environmental field, we will free up more cash through special measures such as tightening our investment standards for existing nickel catalysts and de-NOx catalysts. At the same time, we will boldly allocate resources to investing in the development of catalyst products for the future.

Business strategy

Plastic additives

Increasing overseas market share through technology transfer

Market environment

Demand for vinyl chloride in Japan is declining due to factors such as a drop in the number of housing construction starts. In the Vietnamese market, demand is approaching 1 million tons per year and is expected to surpass the Japanese market in the near future.

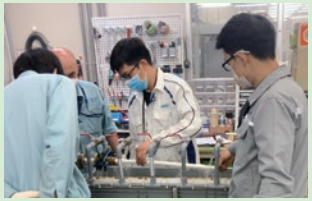
The ASEAN region is expected to continue to see sales growth for stabilizers for vinyl chloride.

Competitive advantages

The competitive advantages of the Sakai Chemical Group are the technology and know-how of non-lead stabilizers that we have cultivated through many years of business experience. The Company will maximize its competitive advantages through intra-group collaboration with Sakai Chemical (Vietnam) Co., Ltd. and Siam Stabilizers and Chemicals Co., Ltd., which have production bases in Vietnam and Thailand. These bases are promoting production without the use of lead.

Business strategy

The Company will accelerate our shift to overseas markets and transform our plastic additives business into a stable business. In the Japanese market, we will exit our business for lead-based stabilizers and promote sales of highly profitable finished goods regardless of use as plastic additives. In overseas markets, the Company will increase the number of customers in the ASEAN region by utilizing our know-how in developing and improving stabilizers. With this goal in mind, we will strengthen development capabilities by transferring our technology to staff at Sakai Chemical (Vietnam) Co., Ltd. and Siam Stabilizers and Chemicals Co., Ltd.



A joint training session on stabilizer development

Hygienic materials

Global expansion of hygienic materials for diapers

Market environment

Sakai Trading Co., Ltd sells materials for infant diapers, which are becoming increasingly popular overseas, and adult diapers, for which demand is expanding in Japan due to the aging population. We also sell superabsorbent polymer, the main raw material for diapers, to overseas markets. The overseas diaper market is expected to grow at 5.7% per year.

Competitive advantages

Drawing upon 30 years of experience in material sales, the Company has established a system for joint development with suppliers. Our extensive experience in handling merchandise complaints and our trading company functions have earned us the trust of our customers, and the Company is recognized as a reliable supplier.

Business strategy

In Japan, demand for adult diapers is growing as the population ages. There is also increased demand for toilet mats for pets. Globally, the penetration rate of disposable diapers is 50%. Particular growth is expected in Southeast Asia and North Africa. Amidst these market circumstances, the Company established the diaper film manufacturer PT. S&S Hygiene Solution in 2012 as a joint venture between Sakai Trading Co., Ltd. and PT. Multi Spunindo Jaya. In recent years, the Company has been steadily improving our technical capabilities, increasing our production capacity, and developing products that can be used for multi-color printing.

PT. S&S Hygiene Solution

PT. S&S Hygiene Solution employees and their families

Business strategy

Contract processing

Gaining customer trust through speed and technical capability

Market environment

The Company's contract processing business is easily impacted by economic conditions. In recent years, the soaring prices of raw materials and fuel have created difficult conditions. On the other hand, the market is separated to a certain degree depending on the handled technology and equipment. Companies that have established a unique position can thrive in the consignment business.

Competitive advantage

Resino Color Industry Co., Ltd. creates unique results through its knowledge and experience in pigments, as well as a high level of dispersion technology. Nippon Color Ind. Co., Ltd. possesses an extensive lineup of equipment, especially spray dryers, which gives the company the competitive advantage of being able to meet a wide range of needs.

Business strategy

Taking advantage of the flexible business scale and unique technologies of Resino Color Industry Co., Ltd. and Nippon Color Ind. Co., Ltd., we will maximize equipment turnover and ensure profits.

Through speed and reliable technical capabilities unrivaled by large corporations, Resino Color Industry Co., Ltd. has been securing continuous orders. Going forward, the company will engage in more proactive sales activities to develop new customers, including overseas companies.

Nippon Color Ind. Co., Ltd. will expand its business opportunities by promoting its technical capabilities through an expanded website and YouTube. By taking on multiple processes as a whole, rather than just single processes, the company aims to contribute to the development and commercialization of its customers.

Zinc

Expansion into a variety of fields through a wide range of particle sizes

Market environment

Zinc oxide is mainly used as a vulcanization accelerator for rubber products such as automobile tires. There are many competitors in the usage of zinc oxide, and price competition is intensifying. Zinc oxide also has high added-value functions such as heat dissipation, antibacterial, and antiviral properties, and growth is expected in markets other than rubber applications.

Competitive advantage

The competitive advantage of the Sakai Chemical Group is our wide lineup of particle sizes, from ultrafine to large. This wide range of sizes is enabled by the powder processing technology that Sakai Chemical Industry Co., Ltd. has cultivated over many years. This wide lineup allows for expansion into many different fields.

Business strategy

In the zinc business, the Company will increase the sales ratio of high value-added products through our advantage in diverse particle sizes. Specifically, we will focus on dissipation applications for heat materials, an area for which demand is growing in the electronics field. Also, in the life sciences and healthcare fields, we will focus on sunscreen applications, an area for which awareness is increasing among consumers and the general public, as well as antibacterial and antiviral applications.

Business strategy

Medical | Life sciences and healthcare

Giving top priority to fostering a culture of quality

Key themes

In December 2023, administrative disciplinary action (order for cessation and order for improvement) was taken against Kaigen Pharma Co., Ltd. under the Act on Securing Quality, Efficacy and Safety of Products Including Pharmaceuticals and Medical Devices. The Sakai Chemical Group takes these orders seriously and is striving to regain trust from stakeholders by complying with laws/regulations and supplying finished goods with reliable quality (for details, see "Risk Management" on page 55).

Among these efforts, the most important reform is fostering a culture of quality. Top management will lead by example and instill a culture of quality within the Company. We are aware that organizational culture cannot be transformed overnight. Therefore, we are committed to implementing reforms through unremitting efforts centered on the management team.

Market environment

Kaigen Pharma Co., Ltd.'s main products are X-ray contrast agents and Alloid G, which is a treatment for peptic ulcers. These products are affected by official drug prices set by the government for ethical drugs. In recent years, another factor pushing up costs is rising raw material and fuel prices.

On the other hand, there have been no new entrants to the market for Kaigen Pharma's main products, and the competitive environment is stable. Although the macro environment is changing due to a decline in the Japanese population and changes in the way group medical examinations are conducted, we will prioritize quality and aim to generate stable cash flows by increasing the number of high-profit products.

Endoscope washer-disinfector SAKURA

Competitive advantages

The competitive advantages of the Sakai Chemical Group in the medical business are our strong sales channels and the Kaigen brand.

For many years, we have maintained roughly half of the domestic market share for X-ray contrast agents. The Group also possesses close connections with medical examination facilities. In the over-the-counter drugs category, the Group offers Kaigen, a cold medicine affectionately known as *Fujin-san* (Wind God) in Japanese, in reference to the medicine's mascot. Kaigen is particularly well-known in the Kansai region of Japan, and the Group is conducting sales activities that leverage the brand's power. We are also cultivating new brands in the beauty field.

Business strategy

First, the Group will do our utmost to foster a culture of quality. Furthermore, we aim to regain trust and maintain our market share by steadily supplying products that ensure quality, efficacy, and safety so that everyone can use them with confidence.

The Group will position the medical examination, gastrointestinal, and beauty fields as our new business foundations. By investing cash earned from existing products, we will continue to explore themes in the life science and healthcare fields with an eye to the next generation, and will take on the challenge of planning and developing businesses and merchandise. Specifically, we will focus on improving and expanding sales of medical devices, developing chemical devices (medical devices composed of chemical substances) such as Liftal K, and promoting businesses centered on the beauty field. In terms of medical devices, the Group launched SAKURA, a renewed version of our previous KD-1 (endoscope washer-disinfector), in June 2023. In addition to the existing gastrointestinal field, we also aim to popularize endoscope washer-disinfectors that use environmentally friendly electrolytic acid water in the otolaryngology field. In the beauty field, we are protecting our brand image by specializing in sales to medical clinics and cosmetic medical institutions. Based on the concept of "caring for brighter, clearer skin," the Group aims to further expand sales and develop the brand that has emerged around SolPro, a UV protection supplement (drinkable capsule) that currently sells extremely well.

Innovation strategy

Growth through new business creation projects and Smart Materials

Koichiro Magara
Director and Executive Officer,
Head of Research & Development Division
Sakai Chemical Industry Co., Ltd.

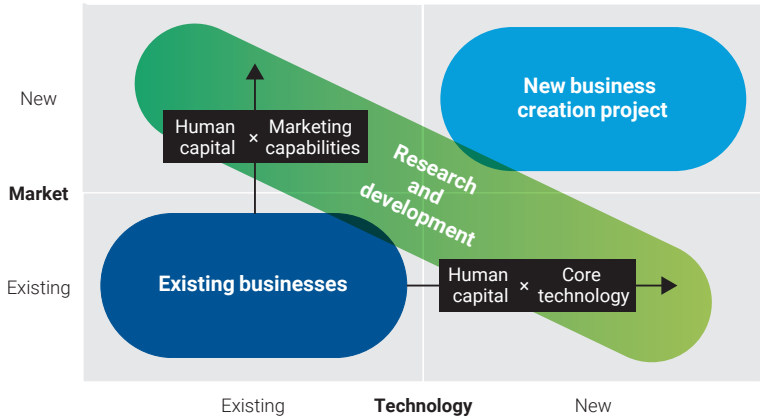
Over the next three years, the Sakai Chemical Group will focus on our electronic materials business, cosmetic raw materials business, and organic chemicals business. To achieve our goal of becoming an excellent company capable of contributing to society with Smart Material, it is essential for us to create new businesses to augment existing businesses. Until now, the Company had based development on materials used as our products. In the future, we will accelerate our solution-based business for solving customer issues based on the core technologies of the Sakai Chemical Group. With this goal in mind, the Company will strengthen marketing activities aimed at collecting information from the market. Based on the collected information, we will challenge ourselves to create innovation through two pillars: research and development utilizing the core technologies of the Sakai Chemical Group and projects for creating new businesses. The Company will reform our organization to create new businesses that will lead the Sakai Chemical Group going forward. We will focus our management resources on strengthening marketing and short- and medium-term priority themes.

We will also build relationships with customers through research and development, pursue expanding markets into the next business domain, and lead the way in creating Chemistry for a Friendly Future.

Smart Materials

The Sakai Chemical Group aims to be an "excellent company capable of contributing to society with Smart Material" in the three fields of environment and energy, electronics, and life sciences and healthcare. In these three fields, Smart Materials are products and services that meet evaluation criteria in two areas: "degree of contribution to our ideal future" and "degree of contribution through the Sakai Chemical Group's technology." The degree of contribution

Initiatives for innovation



of each developed product and service is evaluated and reviewed by our Research and Business Steering Committee, and the Sustainability Committee certifies it as a Smart Material. We have set the following KPIs to achieve by 2030: sales of ¥2 billion in research and development products and services, gross profit margin of 50%, and launch of five products and services certified as Smart Materials.

Instead of simply pursuing profits, the Sakai Chemical Group places importance on solving environmental and energy problems, as well as reducing energy consumption and waste during manufacturing.

Fostering awareness toward commercialization

People are at the heart of creating innovation. It is important to cultivate promoters who plan strategies and lead projects to commercialization.

At the Sakai Chemical Group, our basic human resource development policy is to heighten awareness toward commercialization. Cultivating themes and progressing through the research and development stage at the Research and Business Development Department is an experience that increases awareness toward commercialization. Of course, a sales perspective is also required. Accordingly, as an initiative for fostering a culture of awareness toward commercialization, the Company has placed diverse human resource in our Research and Business Development Department, which we established in 2021.

New business creation project (Kachi-Pro)

With the aim of creating new businesses that are not limited by existing businesses, we have launched a project named Kachi-Pro for implementing the unprecedented concept of *kachi* creation marketing. *Kachi* is a Japanese word which means both "value" and "victory." *Pro* is an abbreviation for "project." Our goal is to capture 30% of the ¥10 billion global market by 2030 and create three businesses with an operating profit margin of 30%. We are refining our selection of promising themes based on Sakai Trading Co., Ltd.'s agility in entering new businesses and Sakai Chemical Industry Co., Ltd.'s knowledge of chemistry. With capital investment (including M&A) in mind, we will discuss monthly progress with our president and achieve steady business creation.

Leveraging group synergy

When pursuing the creation of new businesses, we gather a huge amount of information and search for business seeds every day.

We will continue to cooperate with many parties to give birth to wonderful businesses.

Norimune Hirata
Sakai Chemical Industry Co., Ltd.

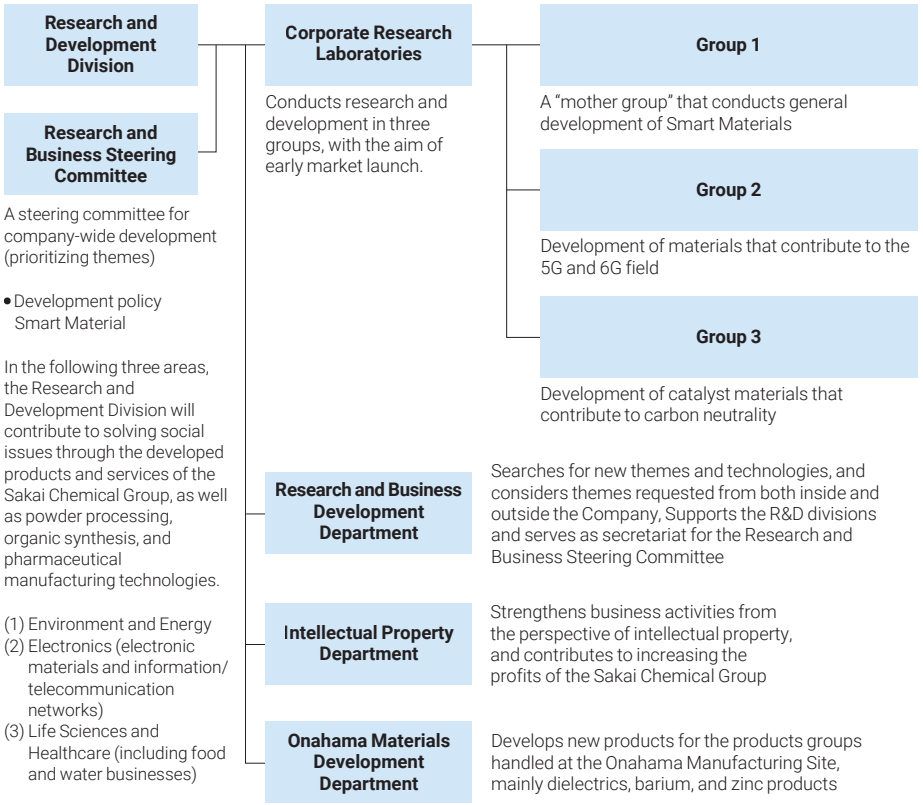
Hiromasa Kawaminami
Sakai Trading Co., Ltd.

Organizational structure of the Research and Development Division

Sakai Chemical Industry Co., Ltd. serves as the innovation center for research and development in the Sakai Chemical Group. In 2021, we established a new Research and Business Development Department. The main aim of the Company's organizational change is to transform from an organization that conducted development based on seeds, such as materials, to one that conducts development based on information on needs from the market. Previously, we had mainly received information on needs from the sales divisions. However, by integrating part of the sales divisions into the Research and Development Division and collaborating with the Research and Business Development Department, we are able to more smoothly incorporate information from outside the Company.

The Research and Business Steering Committee determines the priorities of R&D themes and selects focus areas. Currently, the areas of focus are 5G and 6G materials, catalyst materials related to carbon neutrality, and organic materials related to organic sulfur compounds. The Company has created a system in which three groups will promote development on themes identified by the Research and Business Development Department. For 5G and 6G materials, the Research and Business Development Department will propose themes and the Corporate Research Laboratories will assign dedicated personnel to advance development. Business growth is expected in the area of catalyst materials related to carbon neutrality. The Company has supplemented the dedicated personnel at the Corporate Research Laboratories with additional personnel from the catalyst business, and established a system in which the Research and Development Division leads development. For organic materials related to organic sulfur compounds, we established a system for accelerating R&D by integrating SC Organic Chemical Co., Ltd. into Sakai Chemical Industry Co., Ltd.

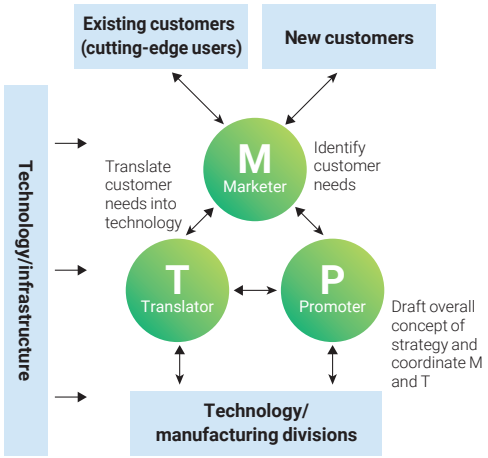
Research and Development Division organization chart (research and development structure)



Strengthening marketing

Previously, our development had focused on existing products of Sakai Chemical Industry Co., Ltd. However, the Company is now identifying the necessary materials according to market demands and exploring themes in which the Sakai Chemical Group's technologies can be utilized. By incorporating a marketing perspective, we will strengthen the functional collaboration of MTP (M: Marketer, T: Translator, P: Promoter). The Research & Business Development Department fulfills a central role in this transformation. The department formulates business strategy hypotheses and increases their accuracy through verification activities with existing and potential customers. At an early stage, the department considers hypotheses for business strategy. Based on technological trends and customer trends, we will confirm the situations of our customers, the products and services we offer, the added value we can provide to our customers, and barriers to entry for our competitors. Confirming these areas enables the department to create research themes that utilize the Company's strengths.

MTP concept

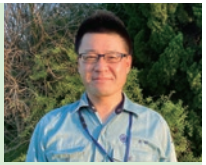


Role	
M Marketer	**Understand the market and needs** ● Obtain insight into market changes ● Establish contact points with new customers ● Understand the market/industry and customer needs
T Translator	**Translate into technology** ● Translate customer needs in an easy-to-understand manner from a technical perspective ● Convert company merchandise and technologies into added value and differentiation
P Promoter	**Strategic prioritization and involvement of other divisions** ● Control overall activities through unique discernment ● Maintain a high-level perspective on business and management ● Plan and promote business model transformation

Source: Diagram created based on Knowledge Creation and Integration (April 2016 issue, page 63), Nomura Research Institute

Commercialization and innovation

The Research and Business Development Department is considering commercialization for over 30 development themes and selecting the most promising ones. The department also organizes corporate networking events to explore the seeds (technology and know-how) of innovation by combining our customers' technologies and issues with the technologies of the Sakai Chemical Group.

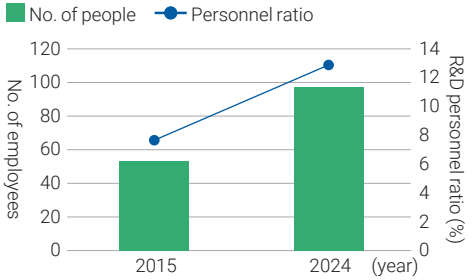


Yuichi Kimura
Sakai Chemical Industry Co., Ltd.
Research and Business Development Department

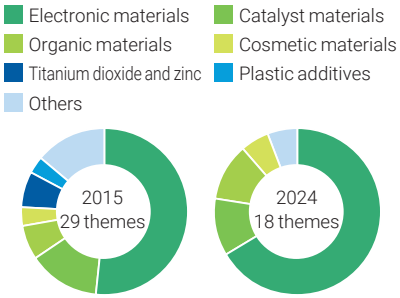
Trends in R&D investment and development theme portfolio

In order to focus investment on specific themes which should be addressed, Sakai Chemical Industry Co., Ltd. has consolidated the development organizations of its business divisions into the Research and Development Division and assigned priorities to themes. Compared to fiscal 2015, we increased the number of employees in the R&D divisions by 5% and narrowed down the number of themes to two-thirds.

Trends in R&D personnel



Trends in research themes



Stage gate management system

The Corporate Research Laboratories uses the stage gate method to manage R&D themes. The institute sets and reviews requirements for passing each stage. From fiscal 2023, the institute set stricter timescales and continues to set the number of stage changes as a KPI to prevent stagnation in stages.

Theme progress management using the stage gate method

If a theme clears the requirements for each stage (development stages), it can proceed to the next stage.

Development stages	Name	Content (excerpt)
ST-0	Explore themes, create ideas, and conduct research	Investigate whether or not the theme is feasible with the Company's technology and products Prior technology: research patents and identify markets (estimate)
ST-1	Consider themes to be raised, conduct beaker test	Conduct preliminary experiments, performance evaluations, and competitive product research and comparison; set target performance; estimate production cost
ST-2	Conduct lab experiments and small-scale manufacturing tests	Provide samples to customers and collect feedback; extract mass production specifications and issues; design mass production equipment
ST-3	Consider increase in scale and begin full-scale development: perform bench plant testing	Establish quality standards for mass-produced products with scaled-up prototypes
ST-4	Consider transfer to actual production and conduct full-scale development: transfer to plants	Identify manufacturing and technical issues/measures for full-scale production

Voice of researchers

Toward the realization of a 5G/6G society

Hiroki Tanikawa

Corporate Research Laboratories
Sakai Chemical Industry Co., Ltd.

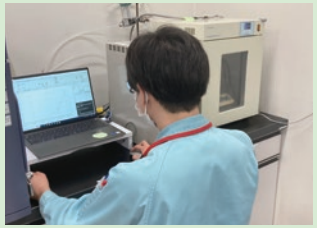
The evolution of semiconductor technology is essential to realizing the high-speed communications that support society. The institute is contributing to the evolution of semiconductor technology through powder processing technology. High-speed communications require even lower transmission loss, so we are working to lower the dielectric tangent of powder.

Aiming for carbon neutrality

Yuki Kohama

Corporate Research Laboratories
Sakai Chemical Industry Co., Ltd.

The institute is developing a water electrolysis catalyst that uses renewable energy to generate hydrogen from water. Through the Sakai Chemical Group's catalysts, we seek to achieve "affordable and clean energy." Our team is working every day to realize a hydrogen society.



SAKAINNOVATION Presentation

The Sakai Chemical Group holds the SAKAINNOVATION Presentation every year with the aim of creating new innovations through interaction within the Group. In 2023, eight oral presentations and 23 poster presentations were held. Experience with various technologies and initiatives leads to collaboration within the Group, and helps sprout the seeds (technology and know-how) of many innovations.

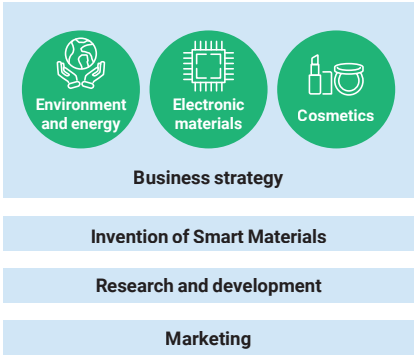
Presentation being held

Intellectual property strategy

Sakai Chemical Industry Co., Ltd. works to promote the establishment of intellectual property rights, manage intellectual property based on business strategy, manage intellectual property risk, and utilize intellectual property information. One effort to align business strategy and intellectual property management is the intellectual property meetings that are held regularly with the research and development team. These meetings are held to check whether or not the patents held are consistent with our business strategy. From 2023, we will focus on patent mining by using the CyberPatent Desk system provided by Cyber Patent, Ltd.

Initiatives related to intellectual property

Chemistry for a friendly future



Total management of intellectual property (IP)

- IP management based on business strategy (IP meetings)
- IP risk management
- Utilization of IP information
- Promotion of establishing IP rights
- Strengthening IP literacy (seminars and IP Times)
- Utilization of IP information

Strengthening intellectual property intelligence

To strengthen intellectual property intelligence, the Company is working to enhance intellectual property education, train personnel on using databases, and publish the Intellectual Property Times. We held three training sessions to promote the use of the CyberPatent Desk system that the Company had already introduced in fiscal 2023.

Before visiting customers, we conduct trend surveys of customer patent applications. This aids us in creating innovation with customers. The Intellectual Property Times is a newsletter which aims to make people more familiar with intellectual property. We launched the newsletter in 2022 and have currently published 10 issues.

Example of page in the Intellectual Property Times

Source of value creation (capital)

Effective and efficient use of limited capital will make it possible to create even more value for society.
The Sakai Chemical Group is working to create such value through a unified management and workforce.

Financial capital

Total assets (consolidated)

¥125,445 million

Net assets (consolidated)

¥75,466 million

Manufactured capital

No. of production sites (consolidated)
(including 3 overseas production sites)

24

Capital investment (consolidated)

¥4,435 million

Intellectual capital

No. of patents held (consolidated)

673

R&D expenses (consolidated)

¥2,722 million

Human capital

No. of employees (consolidated)

2,390

*Including temporary employees

Percentage of mid-career hires (non-consolidated)

45.5 %

Social and relationship capital

Established in 1918

No. of affiliated companies
(including 9 overseas corporations)

17

*Including non-consolidated subsidiaries

Natural capital

Water usage (consolidated)

34,600,000 m³

Energy consumption (non-consolidated)

75,000 kL (crude oil equivalent)

On-site initiatives for value creation

On-site initiatives for human capital

The Diversity Working Group (WG), which started as an off-site activity at the end of 2018, focuses on minorities such as female managers and employees. Thus far, the WG has held various roundtable discussions and seminars.

We launched the Human Capital Committee in April 2024. The committee is composed of diverse members such as executives, participants in subcommittee activities, and WG members. As its first initiative, the Human Capital Committee holds a monthly *Syain kai* meeting, in which employees share information to work proactively toward solving individual and organizational issues. Through such activities, we aim to be an Exciting Company where everyone feels motivated to work and experiences personal growth while balancing work and life.

Miho Kishi
Human Capital Committee
Sakai Chemical Industry Co., Ltd.

Smart Materials on-site

The Sakai Chemical Group has set "solving social issues through manufacturing—creating products and services that help solve environmental and social issues" as one of our materialities. As an indicator for this materiality, the Group has set a target development number for products certified as Smart Materials.

Smart Materials are products and services in the three fields of environment and energy, electronics, and life sciences and healthcare that meet evaluation criteria in two areas: "degree of contribution to our ideal future" and "degree of contribution through the Sakai Chemical Group's technology." As an example of Smart Materials, we are engaged in the development of products and technology using inorganic powder synthesis technology and the development of new resin materials. We are also working to deepen our material evaluation and analysis technology.

Satoshi Sakaguchi
Corporate Research Laboratories
Sakai Chemical Industry Co., Ltd.

On-site initiatives to protect the global environment

Reducing environmental impact while growing our business is the ultimate challenge for the Sakai Chemical Group, which uses a large amount of energy, chemicals, and water resources in our business activities.

I am in charge of building and promoting the operation of our environmental management system. Ultimately, it is the people working on-site who actually devise and implement measures such as reducing CO_2 emissions and waste. I believe that helping people understand the significance of working to reduce the environmental impact and encouraging them to implement these measures in each department's goals will lead to the achievement of Group goals.

Rather than just communicating goals, we promote initiatives by sharing and consulting on each other's issues and situations with the secretariats of each group company and base, and with factory personnel.

Mayu Ota
Quality, Environment and Health & Safety Management Department
Sakai Chemical Industry Co., Ltd.

Promotion of SDGs on-Site

In 2022, the Company obtained RSPO (Roundtable on Sustainable Palm Oil) certification for fine titanium dioxide particles, which use additives derived from palm oil and are a cosmetic materials product. This helps realize the SDGs by preventing excessive deforestation due to palm oil production and the associated negative impact on biodiversity, respecting the human rights of local workers, and improving working conditions.

RSPO certification is also necessary for the growth of the cosmetics materials business. In the cosmetics industry, acquisition of RSPO certification has become standard in the EU market. It is also becoming increasingly widespread in the Japanese market.

In addition to our acquisition of RSPO, we will continue to accelerate the growth of our cosmetics materials business by promoting the SDGs.

Thuyen Tamoi **Aya Nishimura**
Cosmetic Innovation Department
Sakai Chemical Industry Co., Ltd.

Business and human rights

Fulfilling our corporate responsibility to respect human rights

All people are born with the inherent right to personal safety and freedom, and to pursue happiness as human beings. We must never sacrifice the happiness of others for our own happiness. Our Group believes that respecting human rights is of the utmost importance as we work to solve social issues through our business activities. We have stated this belief in the Sakai Chemical Group Basic Human Rights Policy. Based on this Basic Human Rights Policy, we have established the Human Rights Subcommittee as a subordinate organization of the Sustainability Committee. The Human Rights Subcommittee identifies human rights issues that should be addressed as a priority (a process known as "scoping"). The entire Sakai Chemical Group is working to address these human rights issues.

Please refer to the Company's website for the full text of the Basic Human Rights Policy.
https://www.sakai-chem.co.jp/en/sustainability_human_rights_policy.php

Meeting of the Sustainability Committee

Due diligence for human rights

The Group is working to identify negative impacts related to human rights and strive to prevent their occurrence or reduce the risk of their occurrence. In fiscal 2023, we identified and assessed human rights risks for our domestic and overseas group companies. We set high-priority human rights risks for each of the three themes shown in the table on the right.

The identified high-priority human rights risks have been reviewed by external experts.

High-priority human rights risks of Sakai Chemical Group

Theme	High-priority human rights risks	Major stakeholders	Initiatives
Human rights in the supply chain	(1) Human rights issues throughout the supply chain	Workers in the supply chain, customers, employees, local communities	• Implement human rights education • Develop procurement policies
	(2) Responsible mineral procurement	Workers in the supply chain, local communities	• Implement checklist for supplier audits
	(3) Responsible palm oil procurement	Workers in the supply chain, local communities	• Acquire RSPO certification for cosmetic materials products
Occupational health and safety	(4) Health and safety	Employees, workers in the supply chain, customers, local communities	• Develop Basic Safety and Health Policy • Implement disaster prevention training
	(5) Proper storage and management of chemical substances	Employees	• Safety promotion activities • Quality control
Diversity and human rights in the workplace	(6) Mental health	Employees, workers in the supply chain	• Education on mental health • Follow-up by industrial health staff and mental health specialists • Implementation of stress checks
	(7) Promotion of diversity	Employees	• Diversity awareness survey • Seminars and workshops • Promotion of women's participation

Comments from external expert (summary)

The Board of Directors has adopted three themes, after the management proactively engaged in the process of identifying such areas. 1) The Company is conducting CSR assessment for business partners and ensuring understanding for CSR through awareness-raising activities for employees. 2) The Company is strengthening measures such as implementing human rights training for the Health and Safety Committee. 3) The Company is developing training targeting employees in various life stages, such as those who are balancing work with pregnancy, childbirth, and caregiving, and those who are going through menopause. I look forward to concrete measures for eliminating gaps and creating a comfortable workplace.

Please refer to the Company's website for the full comment.
https://www.sakai-chem.co.jp/en/sustainability_human_rights_policy.php

Emi Omura
Attorney

Responsible procurement

Based on our Basic Procurement Policy, we aim to conduct responsible and sustainable procurement. To achieve this goal, it is essential that our business partners understand our policy. Therefore, we strive to build good relationships and mutual understanding.

Please refer to the Company's website for the Basic Procurement Policy.
https://www.sakai-chem.co.jp/en/sustainability_procurement_policy.php

Wataru Ibaraki
Sakai Chemical Industry Co., Ltd.
Executive Officer
Head of Sales & Marketing Division

Initiatives for responsible mineral procurement

Conflict minerals are a source of concern because they may be used as a source of funding for inhumane armed groups. In response, in accordance with the Sakai Chemical Group's Responsible Mineral Procurement Policy, we have our suppliers complete a supplier audit checklist (paper audit) as necessary to confirm that they are not involved in conflict minerals. The importance of responsible mineral procurement has been growing in recent years. Responsible procurement accounts for risks such as child labor and environmental destruction. The Sakai Chemical Group will continue to raise awareness among our suppliers and ask for understanding toward our policy.

Please refer to the Company's website for the Responsible Mineral Procurement Policy.
https://www.sakai-chem.co.jp/en/sustainability_mineral_procurement_policy.php

Special feature: Initiatives for the environment and human rights
Acquire RSPO certification for cosmetic materials products

Sakai Chemical Industry Co., Ltd. has obtained RSPO certification for its ultrafine titanium dioxide, a cosmetic materials product that uses additives derived from palm oil. We are able to trace the production location and acquisition route for palm oil, products using palm oil, and shipping destination. Going forward, the Company will continue to ensure transparency throughout our supply chain and promote responsible procurement that considers the environment and human rights.

Supply chain risk (country risk)

Some of the raw materials used by the Company are imported from regions with relatively high country risk. The business performance and financial position of the Company could be impacted if the prices of these raw materials were to rise, or if there were to be a shortage or delay in supply. Therefore, we make every effort to secure sources of imported raw materials from multiple countries and suppliers. We also manage inventory levels by considering the procurement difficulty and required procurement period.

Human rights education

The Sakai Chemical Group provides the necessary education to ensure that all executives and employees have a correct understanding of human rights and can effectively reflect that knowledge in our business activities.

In fiscal 2023, we conducted training on the human rights due diligence system for fiscal 2024 for all employees of all domestic group companies.

	No. of participants	No. of employees targeted	Participation rate
Group total	1,752	1,782	98%
Sakai Chemical Industry Co., Ltd.	855	870	98%
(Administrative Department)			98%
(Sales Department)			94%
(Procurement Department)			90%
(Manufacturing Department)			99%
(Research Department)			99%

* Employees who have not attended the training include those on childcare leave or leave of absence

Building a remedy system

The Company became a full member of the Japan Center for Engagement and Remedy on Business and Human Rights (JaCER). JaCER is an organization working to establish a non-judicial grievance handling platform based on the United Nations Guiding Principles on Business and Human Rights and to support and promote grievance handling for participating companies from an expert perspective.

JaCER's website regularly discloses anonymous information on the content and status of reports. The Company is working to establish a more effective remedy system starting with the use of the JaCER grievance reporting form.

Human resources strategy

Creating a new Sakai Chemical Group through autonomous managers and employees

Akira Morioka
Executive Officer
Head Of Administration Division
Sakai Chemical Industry Co., Ltd.

We announced our Medium-Term Management Plan "Transformation: BEYOND 2030" in May 2024. The plan states reforms including the enormous decision to end the pigment-grade titanium dioxide business. This decision reflects the need to break free from convention and create a new Sakai Chemical Group.

Similarly, our human resources strategy must no longer be an extension of the past; instead, the strategy needs to be revised by incorporating new ideas. We will take this opportunity to implement various reforms.

I believe that "management by all" is an important element in achieving our mission of Chemistry for a Friendly Future.

Management by all and human resources strategy

"Management by all" means that all members of the Sakai Chemical Group incorporate the organization's goals and challenges into their own work and act with initiative. In other words, it means being autonomous, taking personal responsibility for various challenges, and continuing to act with motivation. Human resources who proactively address organizational challenges and social issues are essential for future growth of the Company. Rather than waiting for "someone" to take action, employees should consider their own capabilities, embrace challenges for achieving goals, and take action.

"Transformation: BEYOND 2030" is not a plan for "someone" to enact; rather, each employee should take personal responsibility for a portion of this ambitious goal, consider their own capabilities, and take action to achieve their personal goals. "Management by all" is an attitude in which each employee takes on challenges leading to a goal, reviews their approach in the event of failure, and continues to give their best effort.

Going forward, we will work to solve the following human resources issues.

1. Strengthening the development of a succession system for human resources and the organization

The Group will create a human resources portfolio to sharpen the human resources strategy of each section. Based on this human resources portfolio, we aim to enable each section to flexibly assign personnel and invest in training with an eye toward a succession system.

Furthermore, as the declining birthrate and aging population in Japan makes it increasingly difficult to secure personnel, there is an even greater need to develop and retain personnel. The Group will develop a menu of education programs tailored to each purpose; for example, hierarchical education, selective education, and specialized education. Through this menu, we will accelerate the creation of a talent management system in order to implement job rotations that encourage growth through action.

2. Transforming the employee mindset: Cultivating a business-creation mindset

Giving birth to new businesses and building a foundation for the future are essential aspects of the Group's development. Although it is important to maintain legacy products and businesses, our legacy alone will not enable significant growth for the future. In addition to expanding growth businesses such as electronic materials and cosmetic raw materials, we also need to quickly shift our organic chemicals business into a growth business. Not all employees will be directly involved in new businesses. Nevertheless, it is important for all employees to continue challenging themselves to promote transformation and creation in their respective positions and fields. Creating a culture that respects and nurtures this sense of business creation is inherent in our vision of an Exciting Company.

わくわくカンパニー®

Management by all: Roles of each level

Roles of executive management

Executive management (executive officers) checks the results of management by all against each indicator and evaluates the degree of achievement for expected effects. Based on that evaluation, executive management supports the smooth operation of each headquarters and SBU (strategic business unit). Executive management engages in two-way communication with employees, thereby taking the lead in creating a work environment full of trust and respect. In particular, executive management focuses on caring for managers by ensuring that managers are in an environment that facilitates fulfillment of their new roles and have sufficient resources. Through these efforts, executive management supports the foundation of management by all.

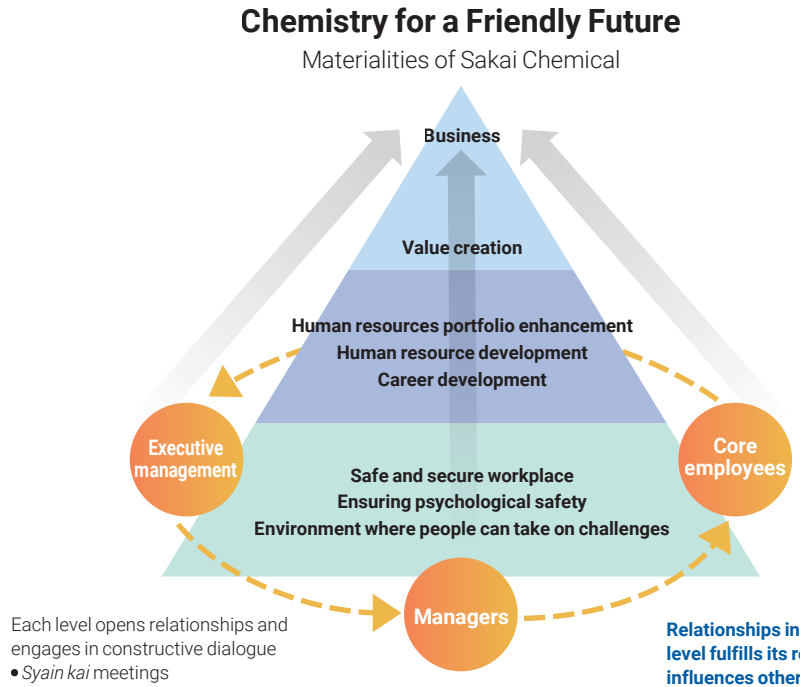
Roles of managers

Managers must recognize the importance of a psychologically safe workplace, create an environment where subordinates feel comfortable expressing their opinions, and stimulate communication. In terms of goal management, managers assist in translating management policies and business goals into concrete goals which are aligned with the goals of the organization and subordinates.

Managers also support the growth of their subordinates. Therefore, they must adjust the growth vector desired by their subordinates and the growth vector pursued by the organization. To fulfill these roles, managers must improve their leadership and communication skills. The Company will continue to plan and implement various types of skill education and measures for managers.

Roles of core employees (general employees)

Core employees (general employees) other than managers are responsible for identifying and improving issues in daily work. In order to devise and implement solutions to identified issues, core employees must improve their ability to perform work, plan, and solve problems. Ultimately, core employees are expected to contribute to the future operation of the Company as the next generation of managers, practical experts, and creative human resources. The Company and supervisors will support the efforts of such human resources.



Five important values

(1) Stimulate communication to convey the true meaning and purpose of work
(2) Executive management should define judgment criteria that enable employees to act proactively rather than passively
(3) Expand the scope of each employee's interests (scope of work)
(4) Foster a culture of immediately addressing problems and voicing opinions
(5) Create an environment that encourages action even when there is a possibility of failure, and advocates for new challenges to improve business performance

Improving engagement

Unfortunately, employee engagement scores remain low at Sakai Chemical Industry Co., Ltd. Upon investigating the cause, that overall engagement scores were being decreased by low scores for "empathy with the corporate philosophy and vision" and "trust with management." The Company took this result seriously. From fiscal 2023, we started holding roundtable discussions (town meetings) in which management and employees can engage in dialogue. In fiscal 2024, as a measure for further stimulating dialogue, we started *Syain kai* meetings where employees are the stars and can reach their fullest potential. Every month, we hold *Syain kai* meetings to openly share information such as the Company's business situation, management issues, and the background of each measure, as well as to introduce employees who are vibrant and active. Through such efforts, the Company is working to foster a sense of unity.

Scene of *Syain kai* meetings where employees are the stars

Why are we holding *Syain kai* Meetings?

Improving job satisfaction

Share the goal being pursued. Understand how the goal relates to your work.

Learn about the Company's current situation in regard to the goal

Understand the initiatives of SBUs and headquarters

Introduction to the concept of "shining" employees who move energetically toward goals

Information on goals and the current situation is shared at *Syain kai* meetings. Employees need to participate while considering the relationship between their work and the Company's current situation and goals.

***Syain kai* meetings are an opportunity to communicate with department members (including supervisors) about the relationship between your work and the Company's performance**

Safe working environment

Creating a safe and secure working environment is also an essential element in improving engagement. In addition to statutory meetings, the Company is striving to enhance safety and health in a variety of ways. For example, we are promoting safety and health activities throughout the Company, sharing information on small group activities and periodic safety activities, and distributing articles on in-house education, safety, and health.

Human resource development

Enhancing systems and programs for developing human resources is also important for improving engagement. Sakai Chemical Industry Co., Ltd. is currently encouraging and supporting self-development and self-improvement by establishing a system to encourage the acquisition of public qualifications and a system that subsidizes the development of management skills for obtaining MBA or MOT degrees.

The Company also plans to introduce a talent management system. This system will promote career development for each employee by comprehensively managing their work experience, level of proficiency, qualifications, self-reports, and aptitude test results. At the same time, the Company will review our company-wide education system, organize the basic knowledge and skills required by rank, and work to systematize education programs and curricula that will enable each employee to independently acquire knowledge and skills.

Diverse working styles

Sakai Chemical Industry Co., Ltd. has introduced a Global-Area System that allows employees to select their place of work. This system allows flexible response to life stages and accompanying lifestyle changes of employees and their families; for example, diversifying values, childcare/caregiving, and participation in social contribution activities.

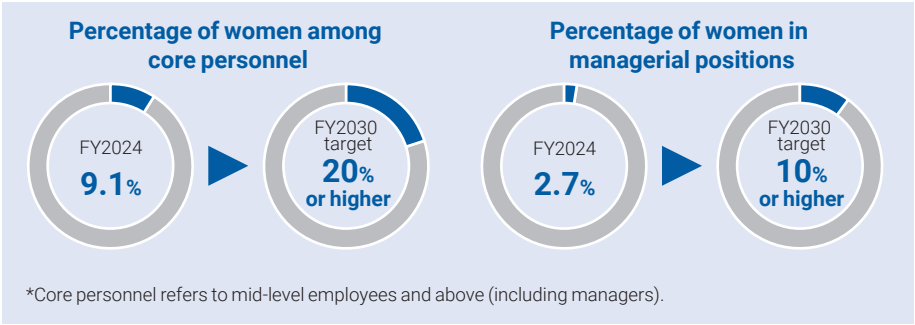
The Company is also working to create an environment for more flexible working styles by relaxing the requirements for taking accumulated leave and introducing new systems such as teleworking and staggered work hours.

Diversity, equity, and inclusion

When using traditional methods and personnel structures, there are limitations to being able to keenly sense changes in the external environment and quickly change the internal environment. Furthermore, the labor force in Japan is steadily declining and the competition to acquire talent is intensifying. The keys to future growth are securing the required human resources and enabling people with diverse backgrounds to thrive.

Promotion of women's participation

The current challenge in promoting diversity at Sakai Chemical Industry Co., Ltd. is the low absolute number of female employees. In recent years, we have been increasing the number of women we hire through both regular and mid-career recruitment. Furthermore, as part of creating an environment in which women can thrive, we provide diversity education and awareness-raising for all employees, including executives and managers. Examples include in-house training sessions on common women's health issues and conditions, as well as seminars for mid-level female employees to foster and enhance career awareness. The Company will continue to proactively hire and assign women so that they can play active roles in the future, and encourage appropriate promotion of women according to their abilities.



*Core personnel refers to mid-level employees and above (including managers).

Promotion of participation by seniors

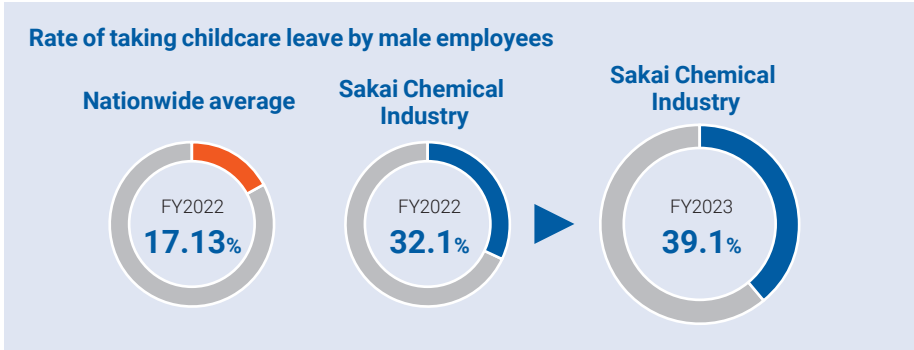
Although the population of young people in Japan is decreasing, the healthy life expectancy of the elderly is increasing. It is therefore, necessary to create an environment in which seniors can remain active for a long time. The upper limit for the senior-aged employee system at Sakai Chemical Industry Co., Ltd. is 66 years old. We have also established a system to broaden the scope of activities available to senior-aged employees; for example, allowing employees who have transitioned into the senior-aged employee system from managerial positions to continue in their roles as department or section managers and paying them a separate allowance for managerial responsibilities.

Childcare support

Sakai Chemical Industry Co., Ltd. has established systems for childcare leave, nursing care leave, and accumulated paid vacation. We encourage employees to use these systems.

The number of men taking childcare leave has been improving every year, with the usage rate in fiscal 2023 being 39.1%. Increasing the number of male employees taking childcare leave leads to increased opportunities for women to play active roles. Therefore, Sakai Chemical Industry Co., Ltd. has set a goal of increasing the rate at which male employees take childcare leave to 50% or higher by fiscal 2025.

Raising awareness is important to achieving this goal. With this in mind, we feature the experiences of employees who have taken childcare leave and their supervisors in our internal newsletter. We also hold information sessions to deepen understanding of the childcare leave system. Currently, the Company is working to address the issue of how to respond when shift workers are taking childcare leave. We are considering measures such as ways to reduce the burden on the workplace.



Protecting the global environment Responding to climate change (disclosure based on TCFD recommendations)

1 Governance

In response to environmental changes that can pose risks to our corporate management, including climate change, we assess the levels of risks and opportunities, discuss appropriate countermeasures, and decide to implement such countermeasures under the oversight of the Board of Directors.

The Company seeks to mitigate our impact on climate change and other environmental issues, and contribute to solutions to social issues. To achieve these goals, our Sustainability Committee (chaired by the President) meets at least twice a year to deliberate on targets and strategies related to climate change while taking into consideration our business, thereby managing the progress of our climate-related initiatives.

2 Strategy

(Short term: shorter than one year; medium term: one to five years; long term: five to 30 years)

(1) 2°C scenario: Decarbonization and carbon-recycling technologies will spread widely, and demand for sustainable products will grow.

Type	Environmental Changes	Expected Situations	Term Length	Major Countermeasures
Transition Risks	CO_2 emission regulations	Growing need for fuel decarbonization Cost increase due to a switch to low-carbon emissions materials and processes	Medium term	• Using LNG combined with carbon credits • Further enhancing the efficiency of energy use • Introducing renewable energy more widely • Introducing carbon-recycling technology more widely • Reconsidering the business portfolio and manufacturing processes with a view to reducing environmentally harmful emissions from the manufacturing processes
	Switch to low-carbon emissions products	Decline in demand for fossil fuel and petrochemical products (such as plastic products)	Short term	
	Changes in customer behavior	Increased demand for low-carbon emissions products within the supply chain	Long term	
Business Opportunities	Increased demand for products that help mitigate climate change	Growing demand for carbon recycling, carbon-free fuel, carbon-absorbent products, and products related to power generation and storage	Long term	• Developing decarbonization products (secondary battery materials, materials for water electrolyzers, carbon-absorbent materials, carbon recycling catalysts, and synthetic ammonia catalysts) • Enhancing the functions of electronic and energy materials (small-size, minute-particles [for higher durability] materials with uniform granularity distribution)
	Development of next-generation technologies	Electrification of mobility Use of hydrogen and ammonia as energy sources	Medium term	

(2) 4°C scenario: Low-carbon, decarbonization, and carbon-recycling technologies will not spread. This will heighten the physical risks associated with greater severity of extreme weather events and a rise in average temperatures.

Type	Environmental Changes	Expected Situations	Term Length	Major Countermeasures
Physical Risks	Greater severity of extreme weather events	Heavier wind and flood damage to our production bases Droughts and health damage in the summer, which can lead to suspension of production activities, delayed or disrupted logistics, and consequently massive damage to corporate activities in general	Short term	• Formulating a business continuity plan (BCP) for each production base in line with the scenario • Considering optimal locations for production and diversifying raw material suppliers • Enhancing measures to reduce health damage (such as heatstroke) • Introducing unmanned operations by accelerating robotization and automation
	Rise in average temperatures	Increase in the cost of countermeasures against heatstroke and air-conditioning Decline in labor productivity in the event of a lack of appropriate countermeasures	Long term	
Business Opportunities	Growing demand for products that help adapt to climate change	Increased demand for healthcare products Increased demand for heat-insulating and heat-barrier products Wider spread of remote work Increased demand for antibacterial and antiviral materials	Short term	• Boosting sales of skincare products, including sunscreen • Developing heat-insulating and heat-barrier materials • Boosting sales of antibacterial and antiviral materials • Boosting sales of 5G- and 6G-compatible products • Developing materials related to wastewater and water purification
	Diversification of raw material suppliers	Greater opportunity of replacement demand due to BCP measures	Long term	

3 Risk Management

The Sakai Chemical Group identifies materialities related to the environment, society, and governance, and implements risk management through company-wide management of materialities. The Sustainability Committee discusses response to climate change as a topic of extremely high importance to both our stakeholders and the Company. We are taking initiative to act because we recognize response to climate change as an essential requirement for the survival and operation of the Company.

4 Metrics and Targets

To achieve targets, we use the CO_2 emissions reduction rate as a KPI and implement reduction measures for the short, medium, and long term. These measures include promoting energy-saving activities and introducing renewable energy sources. Sakai Chemical Group has set a long-term CO_2 emissions reduction target with a view to achieving carbon neutrality by 2050.

Protecting the global environment
Initiatives to reduce environmental impact

"Protecting the global environment" is one of the themes pursued by the Sakai Chemical Group.

We have identified materialities which we must address in order to realize a society where future generations can continue to enjoy the blessings of nature. We also set CO_2 emissions, industrial waste emissions, water usage, and the number of serious environmental accidents as key performance indicators (KPIs) for those materialities, and set target values. The Group will strive to understand our environmental impact and steadily implement our motto of "Chemistry for a Friendly Future" while engaging in PDCA.

* Please see page 14 for target values and trends of CO_2 emissions, industrial waste emissions, and water usage.

Ascertain greenhouse gas (GHG) emissions in the supply chain

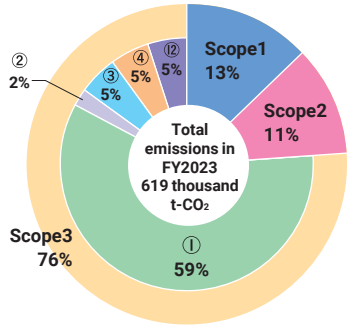
The Sakai Chemical Group began to ascertain greenhouse gas emissions (Scope 3) upstream and downstream in the supply chain from fiscal 2023. This is in addition to greenhouse gas emissions from the Group (Scope 1, Scope 2). The Group is implementing initiatives to reduce greenhouse gas emissions throughout our supply chain.

Scope 1: Direct emissions from fuel use and industrial processes within a company
Scope 2: Indirect emissions from the use of energy such as electricity and heat purchased by a company
Scope 3: Emissions from other companies related to a company's business activities that occur in the supply chain, such as raw material procurement, logistics, and sales

CO_2 emissions (thousand t-CO_2)

Scope	Category	Category overview	Emissions
1	—	Direct emissions	77
2	—	Indirect emissions	70
3	①	Purchased goods and services	367
	②	Capital goods	11
	③	Fuel- and energy-related activities	27
	④	Upstream transportation and distribution	33
	⑤	Waste generated in operations	2
	⑥	Business travel	0
	⑦	Employee commuting	1
	⑫	End-of-life treatment of sold products	31
	Scope 3 (subtotal)		472
	Scope 1, 2, 3 (total)		619

Percentage of CO_2 emissions



Siam Stabilizers and Chemicals Co., Ltd. won the Environmental and Safety Governance Award 2023 (Gold Star Level)

Our group company Siam Stabilizers and Chemicals Co., Ltd. (SSC) is based in Thailand. The company won the Environmental and Safety Governance Award 2023 (Gold Star Level) from the Industrial Estate Authority of Thailand in recognition of excellent environmental governance at the company.

The award is run by the Industrial Estate Authority of Thailand and evaluates performance criteria in environmental, economic, and social aspects.

Mangrove forest clean-up project

In addition to past activities, the company was presented with the award in recognition for its involvement in the local community, such as participating in a mangrove forest clean-up project.

The company will continue efforts to realize a sustainable society.


Commemorative photo after the award ceremony:
SSC President Someya and Factory Chief Kitti

Responsible care initiatives

Responsible Care is a voluntary initiative by businesses that manufacture and handle chemicals to understand and reduce impact on the environment, health, and safety. Responsible Care targets the entire lifecycle of chemicals, from development to manufacturing, distribution, use, consumption, recycling, and disposal. In addition to complying with laws and regulations, Responsible Care ensures appropriate initiatives for the environment, health, and safety by publishing the results of activities and promoting communication with the local community and society.

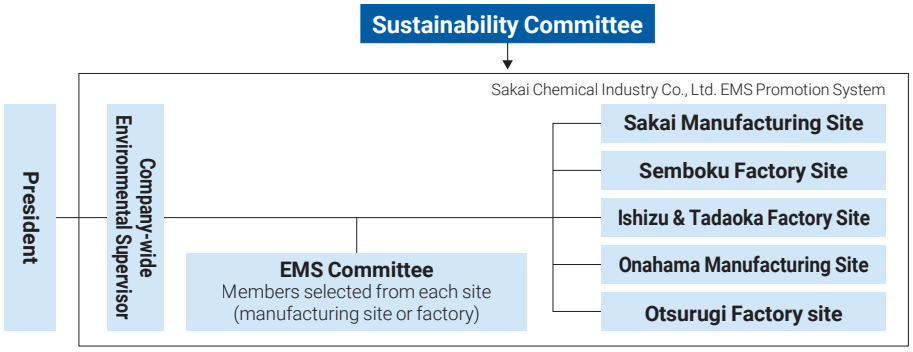
Sakai Chemical Industry Co., Ltd. is a member of the Japan Chemical Industry Association and promotes Responsible Care.

Environmental preservation

Sakai Chemical Industry Co., Ltd. has established and maintains an environmental management system (EMS) based on ISO 14001. The purpose of this system is to conduct effective environmental conservation activities; specifically, reducing the environmental impact of the Company's activities, preventing pollution, and actively conducting business activities that are in harmony with nature.

Promotion structure

We hold meetings of our EMS Committee, which has the mission of confirming and reviewing the effectiveness of company-wide EMS, and grasping the status of environmental initiatives at each site. Furthermore, EMS Site Committees chaired by the environmental managers of each site discuss issues/countermeasures and share information within the sites.



Check by an environmental consultant

In fiscal 2022, an environmental consultant checked the status of our compliance with environmental laws and regulations. In fiscal 2023, we worked to address the issues identified in that check. The Company will continue efforts to reduce environmental risks by checking and improving the compliance status of our organization.

We received third-party feedback and advice from specialized perspectives, which helped us to reduce environmental risks. This was a useful opportunity to ensure compliance with laws and regulations, as well as to develop an environmental mindset. We will continue to utilize this experience in our future efforts.

Takeru Niitsuma
Environment Protection Section, Onahama Manufacturing Site Sakai Chemical Industry Co., Ltd.

Fiscal 2023 goals and results

In order to achieve the materiality goals of the Sakai Chemical Group, the Sakai Chemical Industry Co., Ltd. has set environmental goals and is working to achieve those goals. The degree of achievement for fiscal 2023 is as follows.

○: Target achieved ×: Target not achieved

Type		Targets	Results	Assessment	FY2024 target
Initiatives to mitigate climate change	CO_2 emissions reduction	Reducing CO_2 emissions by 30% (versus the FY2013 level) by FY2030	32% reduction	○	Continuing to strive for the same target
	Energy conservation	Reducing energy intensity by 1% year on year	0.5% increase	×	Continuing to strive for the same target
Resource recycling initiatives		Reducing industrial waste by 25% (versus the FY2021 level) by FY2025	29% reduction	○	Industrial waste emissions improved from previous year
Initiatives to prevent pollution and reduce environmentally hazardous substances		Meeting numerical regulation standards	Minor and temporary exceedance of standard values (in three indicators)	×	Compliance with legal and ordinance standards
Biodiversity initiatives		Conducting environmental impact post-assessment on the occasion of the construction of an in-house disposal site Continued introduction of Carbon Offset City Gas	• No progress on construction of the Company's in-house disposal site • Carbon Offset City Gas newly introduced at Otsurugi Factory	○	Water usage improved from previous year
Environmental compliance initiatives		Zero serious environmental accidents	Zero serious environmental accidents	○	Continuing to strive for the same target

* Assessment based on values calculated in accordance with the former Act on Rationalizing Energy Use and the Act on Promotion of Global Warming Countermeasures

Occupational safety and health

Sakai Chemical Industry Co., Ltd. promotes safety and health activities based on the following concept as stated in our Basic Safety and Health Policy: "Under the strong leadership of top management and supervisors, all of us will work together to achieve the goal of 'zero accidents and zero illnesses.'" Sakai Chemical Industry Co., Ltd. is also earnestly involved in the safety and health activities of group companies. We are striving to create workplaces that protect the safety of employees across the entire Group.

New occupational safety and health activities

To achieve zero accidents and zero illnesses, it is important that each individual contributes to creating an ideal workplace and achieving goals.

After repeated discussion, top management at Sakai Chemical Industry Co., Ltd. has decided to implement five new activities. The head of each business site announces a "My Safety Declaration" to all employees. This declaration states the ardent desire to achieve zero accidents and zero illnesses.

Ideal state

A workplace where each person is interested in their coworkers, where everyone warns each other about unsafe conditions and unsafe work, and where everyone is grateful for such information. (Transformation from dependent to independent safety activities)

Goals

The Company will achieve and embody safety activities with total participation as stated in our Basic Safety and Health Policy as "under the strong leadership of top management and supervisors, all of us will work together to achieve the goal of 'zero accidents and zero illnesses.'"

1 The three safety leaders set an example (lead by example)

(1) The three safety leaders issue a "My Safety Declaration" and take an oath
(2) The three safety leaders conduct surprise patrols

2 Establish clear safety rules (standards, regulations, manuals, etc.)

Establish and develop basic rules for safety and health

3 Create and implement a specific education system

(1) Systematize company-wide safety education
(2) Use of e-learning

4 Aim for permanent measures by improving equipment

(1) Eliminate equipment factors extracted from cases
(2) Eliminate equipment factors indicated during safety patrols and external audits

5 Stimulate safety and health activities

(1) Give presentations on safety and health activities
(2) Each committee proposes countermeasures to repeated cases, etc.

"My Safety Declaration" by the three safety leaders* at each site of Sakai Chemical Industry Co., Ltd. (FY2023)

Onahama area		Kansai area	
Chairperson Okamoto	I always greet everyone I meet, both day and night, regardless of how many times I greet people during a day.	Chairperson Tabata	I always check both ways when stopping at a stop sign.
Vice Chairperson Tokunaga	When using a crosswalk, I am always sure to stop, point and call out.	Vice Chairperson Fukada	I always wear a set consisting of a helmet and safety glasses.
Vice Chairperson Takahashi	I always wear safety glasses.	Vice Chairperson Iwakura	I ensure that safety glasses are worn.

* At Sakai Chemical Industry Co., Ltd., the chairperson and two vice chairpersons of the Health and Safety Committee at each site are called the "three safety leaders."

Promoting safety and health activities at group companies

The Sakai Chemical Group holds biannual group safety meetings to share various information and exchange opinions. In fiscal 2023, in light of the number of industrial accidents, the Group held an emergency safety meeting and we once again requested the thorough implementation and establishment of point and call, hazard prediction, and the 5S methodology (sorting, set-in-order, shining, standardizing, sustaining the discipline).

In terms of education, we have started health and safety education, including for group companies. We are working to raise safety awareness throughout the Group with the goal of creating safe-work environment without accidents.

Process safety and disaster prevention

Process safety and disaster prevention are important pillars in promoting Responsible Care. Sakai Chemical Industry Co., Ltd. periodically conducts disaster prevention drills at each of our business sites to enable fast response in the event of an emergency.

At the Sakai Manufacturing Site, we held an evacuation drill and a comprehensive disaster prevention drill in conjunction with the "Osaka 8.8 Million Person Drill." During the drills, participants checked the movement to evacuation sites, the safety confirmation system, and the communication function of emergency IP radios.

At the Onahama Manufacturing Site, we held a firefighting drill as part of joint disaster-preparedness drills with the Onahama Fire Department and the Onahama Joint Disaster Prevention Council. In the drill, the Sakai Chemical Industry Co., Ltd. self-defense fire brigade began initial firefighting activities and then handed over activities to the firefighters that rushed to the scene. The drill covered activities to fight a fire up until the spraying of water by fire engines. The drill helped ensure that firefighting activities can be carried out smoothly in the event of an emergency.

Sakai Manufacturing Site: Comprehensive Disaster Prevention Training

Onahama Manufacturing Site: Joint disaster prevention training with the Onahama Fire Department and the Onahama Joint Disaster Prevention Council

Safety in logistics

To prepare for any accidents or disasters in the process of transporting chemicals, we ascertain legal and regulatory trends both in Japan and overseas, ensure appropriate management of hazardous chemical substances during transportation, and establish rules for emergency measures.

To ensure the safe transportation of products, we hold monthly safety and quality meetings with participation from logistics companies. In addition to thorough safety management, we share information and hold discussions on maintaining the quality of products handled by the Company. We also hold a safety seminar once a year to ensure thorough safety measures.

Sakai Chemical Industry Co., Ltd.
Sakai Logistics Section

To prepare for accidents in the process of transporting chemicals, we have created an emergency contact card ("Yellow Card"), which carries information about what the driver, firefighters, the police, and other persons involved must do in the event of an accident. Copies of the card have been distributed to logistics companies.

Product stewardship

We manage the risks of danger and toxicity to the environment, health, and safety throughout the entire product lifecycle, from raw materials procurement to production, logistics, sales, use, and disposal.

To ensure that our products can be used safely by customers, Sakai Chemical Industry Co., Ltd. uses safety data sheets (SDS) and chemSHERPA to provide the latest information on chemical substances in products. We also periodically obtain information on applicable laws and regulations, and share that information throughout the Sakai Chemical Group.

Responding to amendment of laws on industrial safety and health

In order to prevent industrial accidents caused by chemical substances, the Ordinance on Industrial Safety and Health was partially revised in April 2023. Sakai Chemical Industry Co., Ltd. has established and began operation of a system to respond to this revision. We are also supporting this response by introducing case studies to each company in the Sakai Chemical Group.

(1) Appointment of "Chemical Substance Manager" and "Protective Equipment Usage Manager"
(2) Implementation of risk assessment of target substances and establishment of a system/start of operation to record assessment
(3) Start of deliberation on the results of risk assessment
(4) Establishment of a system and start of operation of a system to appropriately provide the latest SDS at the time of delivering products

An SDS is an important document for communicating information on the hazards, harmfulness, and handling of chemical substances (products). The Quality Assurance Department is working to improve the efficiency of our maintenance and management by utilizing SDS creation support tools so that the latest SDS can be quickly provided to customers.

Sakai Manufacturing Site
Quality Assurance Department
Sakai Chemical Industry Co., Ltd.

Communication with the public

14th Responsible Care Sakai-Semboku Regional Dialogue (February 9, 2024)

Takayo Nogami
Sakai Chemical Industry Co., Ltd.
Sakai Manufacturing Site
Environment Protection Section

A meeting for dialogue with the local community was held at Sakai Chemical Industry Co., Ltd. The meeting was co-hosted by chemical manufacturers who are based in the Sakai and Semboku regions and who are members of the Responsible Care Committee. In addition to hearing reports on activities, the dialogue meeting also gave local residents an opportunity to tour the factory. The Company received many questions and opinions from participants. The dialogue was a meaningful opportunity to deepen mutual understanding.

Sakai Science Education Festa (July 13, 2024)

Mizuki Honda
Sakai Chemical Industry Co., Ltd. Cosmetic Innovation Department

We held a chemistry experiment for local children to learn about the theme of sunscreen. The children wore white lab coats and learned about measuring and mixing. The children were interested and amazed in the effect of sunscreen materials. Going forward, we would like to continue to carry out similar initiatives to convey the fun of chemistry to children who will lead the future.

Iwaki-Odori Dance Onahama Tournament (August 4, 2023)

Tatsuro Hisa
Onahama Manufacturing Site, Otsurugi Factory
Sakai Chemical Industry Co., Ltd.

To express our gratitude to the local community and help revitalize the region, the Company participates in various local events. We also sponsor the operation of events.
We participated in the 2023 Iwaki-Odori Dance Onahama Tournament. Our dancers brought energy to the tournament and won first prize!

Special Feature

Undergoing evaluation of sustainability activities and being interviewed by EcoVadis

Companies need to address a myriad of issues including environmental measures, occupational safety and health care, and human rights measures across the entire supply chain, as well as procurement activities based on the above. Such efforts are essential to attain true sustainability.

Sakai Chemical Industry Co., Ltd. checks the level of our daily activities through third-party evaluation by EcoVadis. EcoVadis is an organization headquartered in France that evaluates sustainability from four aspects: environment, labor and human rights, ethics, and sustainable material procurement. The aim of EcoVadis is to improve the environmental and social practices of companies. The following table shows trends in the Company's score over the four years since our first evaluation in 2020. The gradual improvement in our score is evidence of the results of daily, steady efforts being made on-site. In January 2024, during an interview by EcoVadis, we explained why we started evaluation and our thoughts on sustainability.

* Details of the interview are available via the URL or QR code below.

	Sakai Manufacturing Site						
Update work period	Status period	Evaluation	Overall score	Environment	Labor and human rights	Ethics	Sustainable material procurement
FY2020	FY2021	Gold	67	70	70	60	50
FY2021	FY2022	Gold	68	70	70	60	60
FY2022	FY2023	Silver	68	70	70	60	60
FY2023	FY2024	Silver	69	70	70	70	60

	Onahama Manufacturing Site						
Update work period	Status period	Evaluation	Overall score	Environment	Labor and human rights	Ethics	Sustainable material procurement
FY2020	FY2021	Gold	71	80	70	60	50
FY2021	FY2022	Gold	72	80	70	60	60
FY2022	FY2023	Gold	72	80	70	60	60
FY2023	FY2024	Gold	74	80	70	70	70

[Website]
The Sustainability Climb: How EcoVadis Supported Sakai Chemical Industry's Key Goals | EcoVadis

Environmental and safety data (scope of data collection: Sakai Chemical Industry Co., Ltd.)

Energy and CO_2 *1

(FY)

		Unit	2019	2020	2021	2022	2023
Energy	Energy consumption amount	Crude oil equivalent kL	68,700	59,900	70,800	64,600	57,000
	Of which, off-site PPA electricity purchase amount*2	kWh	—	—	—	—	939,000
	Of which, credit energy*3	Nm^3	—	1,024,332	1,024,332	1,024,332	3,375,403
	Energy intensity compared to previous fiscal year	%	104.9	103.2	98.5	103.8	100.4
CO_2	CO_2 emissions amount (Scope 1 + Scope 2)	Thousand t-CO_2eq	137	121	134	123	103
	CO_2 emissions amount (Scope 1)	Thousand t-CO_2eq	91	77	91	82	64
	CO_2 emissions amount (Scope 2)	Thousand t-CO_2eq	45	43	42	40	38
	CO_2 offset amount*3	t-CO_2	—	2,930	2,930	2,930	10,234

Waste

(FY)

		Unit	2019	2020	2021	2022	2023
Industrial waste	Industrial waste emissions amount	Tons	51,700	43,500	52,200	43,900	37,300
	Of which, amount consigned for recycling	Tons	276	314	287	318	321
	Of which, amount consigned for thermal recycling	Tons	626	813	911	623	648
	Of which, amount consigned for other intermediate processing	Tons	843	403	299	253	284
	Of which, amount in in-house landfill	Tons	47,800	39,700	48,400	40,400	34,200
	Of which, amount consigned for external landfill	Tons	2,170	2,250	2,310	2,270	1,840
Waste plastic	Waste plastic emissions amount	Tons	577	475	461	407	404
	Of which, amount consigned for recycling (processing ratio)	Tons	0	0	2 (0.4%)	0	7 (1%)
	Of which, amount consigned for thermal recycling (processing ratio)	Tons	331 (57%)	298 (63%)	344 (75%)	308 (76%)	333 (83%)
	Of which, amount consigned for other intermediate processing (processing ratio)	Tons	193 (34%)	178 (37%)	115 (25%)	98 (24%)	64 (16%)
	Of which, amount consigned for landfills (processing ratio)	Tons	52 (9%)	0	0	0	0

Water

(FY)

		Unit	2019	2020	2021	2022	2023
Water	Water intake amount*4	Million m^3	32.7	31.4	33.8	33.9	33.9
	Wastewater amount	Million m^3	32.8	31.5	33.8	33.9	34.9

Environmentally hazardous substances

(FY)

		Unit	2019	2020	2021	2022	2023
Atmosphere	NOx emissions amount	Tons	71	65	62	38	42
	SOx emissions amount	Tons	66	47	53	31	28
	Fluorocarbon emissions amount	t-CO_2	81	53	68	52	70
Water pollution	COD/BOD*5	Tons	230	210	170	240	190
	Total nitrogen emissions amount	Tons	930	880	1,100	700	1,100
	Total phosphorus emissions amount	Tons	0.08	0.07	0.05	0.05	0.06
PRTR substances	Emissions to the atmosphere	Tons	2.1	3.2	3.6	3.3	2.4
	Discharge into water bodies	Tons	280	160	290	260	210
	Discharge into soil	Tons	0	0	0	0	0
	Amount transferred	Tons	420	330	390	340	300

*1 Calculations are based on the former Act on Rationalizing Energy Use and the Act on Promotion of Global Warming Countermeasures. Calculations are for business locations that are required to report under the Act on Rationalization of Energy Use and Shift to Non-fossil Energy. Values for the Ishizu Factory are included from fiscal 2022 onwards.

*2 PPA stands for Power Purchase Agreement. It is a business model in which the PPA operator installs solar power generation equipment on the Company's premises free of charge and Sakai Chemical Industry Co., Ltd. purchases the generated electricity. In June 2022, we signed a memorandum of understanding for energy services with Tokyo Gas Co., Ltd. and introduced solar power generation equipment under a PPA model at the Otsurugi Factory of Onahama Manufacturing Site.

*3 We procure carbon offset city gas from Tokyo Gas Co., Ltd. for the Matsubara Factory (cosmetic materials) and Otsurugi Factory (electronic materials and catalysts), both of which are located at the Onahama Manufacturing Site. Please refer to page 54 for an explanation of carbon offset city gas.

*4 The water intake amount includes tap water, groundwater, industrial water, and seawater.

*5 COD (chemical oxygen demand) is converted to be equivalent to the BOD (biochemical oxygen demand) of river discharge.

Environmental and safety data (scope of data collection: Sakai Chemical Industry Co., Ltd.)

PRTR-listed substances

(FY)

	Unit	Emissions amount						Amount of movement		
		Atmosphere			Water discharges to water bodies			Amount of movement (sewage, waste)		
		2021	2022	2023	2021	2022	2023	2021	2022	2023
Thiourea	Tons	0	0	0	250	220	170	35	31	31
Manganese and its compounds	Tons	0	0	0	35	37	34	300	230	210
Molybdenum and its compounds	Tons	0	0	0	3.9	5.0	4.1	0.73	0.74	2.3
Nickel compounds	Tons	0	0	0	0.65	0.45	0.72	14	13	10
Toluene	Tons	3.2	3.5	2.3	0	0	0	37	55	25

Safety*1

(FY)

		Unit	2019	2020	2021	2022	2023
Safety	No. of work-related accidents	Cases	1	1	1	1	3
	Frequency rate	People/1 million total working hours	0.73	0.70	0.69	0.70	2.09
	Severity rate	Days/1,000 total working hours	0.06	0.00	0.00	0.00	0.01

*1 The figures listed above are based on work-related accidents of Sakai Chemical Industry Co., Ltd. employees, and do not include work-related accidents of on-site contractors (partner companies).

Carbon Offset City Gas

Carbon Offset City Gas that contributes to the global environment is considered to achieve zero emissions on a global scale. Zero emissions are achieved by offsetting greenhouse gas emissions throughout the value chain with CO2 credits created through forest conservation, etc. We purchase carbon offset city gas that contributes to the global environment. Furthermore, we are a participant of the Carbon Offset City Gas Buyers Alliance, which is run by Tokyo Gas Co., Ltd.

Input → Output results (Sakai Chemical Industry Co., Ltd., FY2023)

Input

Raw materials
Purchase amount
234,000 tons

Energy
Consumption amount
57,000 kL
(crude oil equivalent)

Water
Water intake amount
33.9 million m³

* Energy consumption amount is calculated based on the former Act on Rationalizing Energy Use.
* "Water" above includes supply water, ground water, industrial water, and seawater.
* Output production volume is the production volume used in the periodic report specified by the Act on Rationalization of Energy Use and Shift to Non-fossil Energy. It does not include by-products.
* CO_2 emissions are calculated in accordance with the Act on Promotion of Global Warming Countermeasures.
* The value of the chemical oxygen demand (COD) includes an equal conversion of the biochemical oxygen demand (BOD) of rivers.

Output

Products
Production volume
59,000 tons

Emissions to the atmosphere
CO_2 103,000 tons
SOx 28 tons
NOx 42 tons
Fluorocarbons 70 t-CO_2eq
PRTR-listed substances 2.4 tons

Discharges to water bodies
Water discharge 34.9 million m³
COD/BOD 190 tons
Total nitrogen 1,100 tons
PRTR-listed substances 210 tons

Waste
In-house disposal 34,200 tons
External disposal 3,100 tons
PRTR-listed substances 300 tons

Risk management **Group governance**

Rebuilding quality and safety management systems

Akira Morioka
Executive Officer, Head of Administration Division
Sakai Chemical Industry Co., Ltd.

In the past few years, there have been a series of quality and safety-related accidents and problems, such as the explosion and fire at Sakai Chemical Industry Co., Ltd.'s Yumoto Factory, the fire at the titanium dioxide factory of the Onahama Manufacturing Site, and the scandal at Kaigen Pharma Co., Ltd. These incidents have significantly damaged the trust placed in the Company by society. I would like to offer my sincere apologies. The Group recognizes the seriousness of these incidents. Accordingly, we have positioned the rebuilding of quality and safety management systems as a key issue for the Sakai Chemical Group, and are working to prevent recurrence through measures such as strengthening governance.

Progress in rebuilding the quality control system

Following Kaigen Pharma's being subject to a business improvement order for violating the Pharmaceuticals and Medical Devices Act, we formulated an improvement plan that includes corrective measures and measures to prevent recurrence. This plan was based on guidance from administrative authorities and recommendations on preventing recurrence from the Special Investigation Committee.

We also established an Improvement Plan Promotion Headquarters with the President and Representative Director of Kaigen Pharma as the director and the Head of Manufacturing and Sales as the deputy director. We are currently engaging in various initiatives for developing sustainable measures to prevent recurrence and for ensuring a stable supply of pharmaceuticals and other products that can be used with confidence.

The Sakai Chemical Group will properly manufacture and inspect products that comply with the statutory inspections required by law and the specifications and quality agreed upon with customers. We constantly strive to provide safe, high-quality, and reliable products and services.

Progress in rebuilding the safety management system

We deeply apologize for the inconvenience caused to many people, including those affected by the accident, local residents, and customers. We are determined to never let such an accident happen again, and are continuing our activities to prevent accidents.

Sakai Chemical Industry Co., Ltd. has set "fires and explosions" as a major risk for our entire group and is working to reduce that risk. In addition, we designated the date of the explosion and fire in the zinc dust manufacturing plant at the Yumoto Factory as Safety Declaration Day. Every year, our president sends a message to all employees on that day.

In addition to ongoing efforts against fires and explosions, we also conduct safety patrols at the factories of each domestic group company. During these patrols, we confirm that measures are being taken against past workplace accidents and that thorough efforts to prevent recurrence are being implemented.

Causes of quality and safety issues and measures to prevent recurrence

	Kaigen Pharma Co. Ltd. Business suspension order and business improvement order resulting from violations of the Pharmaceuticals and Medical Devices Act*		Yumoto Factory zinc dust plant, Sakai Chemical Industry Co., Ltd. Explosion and fire accident	Onahama Manufacturing Site, Sakai Chemical Industry Co., Ltd. Titanium dioxide plant fire accident
Date of occurrence	December 22, 2023 (administrative disposition)		May 11, 2021	March 30, 2023
Cause	• Inadequate management and supervision system • Closed organizational culture (Kaigen Pharma)		• Accumulation of deposited particles • Damage to rotor	• Malfunction of special equipment
Individual measures	Kaigen Pharma Co. Ltd. • Management structure reform	Sakai Chemical Industry Co., Ltd. • Promotion and supervision of improvement plans (Increase the number of external directors dispatched to Kaigen Pharma to two for strengthened monitoring)	• Removal of dust accumulated during processing • Improvement of dust removal frequency	• Improvement of similar equipment for defect resolution
Entire company measures	• Reorganization of the entire company structure and system establishment • Resource management and job rotation • Strengthening education for executives and employees • Establishment of a compliance management system (Clarification of responsibilities and scope of duties of directors, internal reporting system promotion, and fostering a quality culture)		(1) Thorough safety awareness: Thoroughly instilling awareness that "just because something hasn't happened yet doesn't mean it's safe" • Regular communication of top messages (not letting accidents be forgotten) (2) Safety measures: Implementation of safety and health activities by everyone from management to site workers • Resolution of issues identified in external risk assessments • Conducting training to demonstrate more effective risk management • Continuously review safety and health standards	

* Pharmaceuticals and Medical Devices Act: Act on Securing Quality, Efficacy and Safety of Products Including Pharmaceuticals and Medical Devices

Risk management **Compliance** **Crisis response** **Business risks**

Compliance and risk management system

Sakai Chemical Industry Co., Ltd. has established the Compliance and Risk Management (CR) Committee as an organization directly overseen by our president. The committee promotes compliance and risk management activities. Furthermore, the Compliance Promotion Subcommittee and Risk Management Subcommittee operate as subordinate organizations of the CR Committee.

Diagram of promotion structure for compliance and risk management at Sakai Chemical Industry Co., Ltd.

Risk management activities

From among the risks that have a significant impact on business operations, we determine and manage company-wide important risks each fiscal year. For fiscal 2024, we have selected three themes as significant company-wide risks: information management, establishment of an initial response system in the event of an emergency, and proper management of chemical substances (toxic and hazardous substances).

Compliance promotion

We believe that each employee's high awareness of compliance and continued engagement in business activities in a fair and honest manner will contribute to improving corporate value. Based on this concept, we have implemented various training sessions, video viewing sessions, compliance handbook reading sessions, and other opportunities for raising awareness. We will continue to implement these sessions in fiscal 2024. Our main activities in fiscal 2023 were as follows.

■ **Whistleblowing**
There were seven whistleblowing reports. We dealt with all the reports appropriately in accordance with the regulations.

■ **Information security incidents**
There were 10 reports, none of which were serious.

■ **Corruption incidents**
There was one report and it was not serious.

■ **Compliance training**
Training for core employees: 587/662 people (89%), training for managers: 133/133 employees (100%)

BCM (business continuity management) and BCP (business continuity plan)

Sakai Chemical Industry Co., Ltd. has set a basic policy for BCM. We also formulated BCMS (Business Continuity Management System) regulations and a BCP. We emphasize effectiveness in operation and have strengthened training such as safety confirmation drills and drills for using stockpiled materials. In particular, from the perspective of prioritizing human life, we review safety confirmation methods and conduct repeated training.

Basic Business Continuity Management (BCM) Policy

1. **Always put the security of people's lives first.**
2. **Strive to prevent secondary disasters so as not to inconvenience local communities.**
3. **In the event of a disaster, work for the recovery of affected areas in collaboration with local communities, local governments, business partners, etc.**
4. **In the event of a disaster, reduce the risks of customers going elsewhere, losing market share, lowering corporate value, etc., through actions such as avoiding suspending important operations or, even if business activities are suspended, by striving to resume the operations within the target recovery time.**

Information management

Sakai Chemical Industry has established a company-wide information management system and formulated information-related rules such as Information Management Rules, which define the basic method of managing confidential corporate information, and Information Security Rules, which define the appropriate handling of electronic information assets. Furthermore, we periodically hold education and training on security.

We will continue to implement technical, administrative, operational, and employee-focused measures to address diversifying information security risks

Corporate governance

Interview with outside directors

Yoshikazu Ito
Outside Director

Hiromi Wada
Outside Director

Mitsunori Matsuda
Outside Director

Hisao Miyagawa
Outside Director

We interviewed four outside directors in regard to the effectiveness of the Board of Directors, nominations and successor development for directors, and issues for sustainable growth

Q. How will you improve the effectiveness of the Board of Directors going forward?

Ito: At meetings of the Board of Directors, we hold thorough, fair, and reasonable discussions of each and every agenda item. I believe that discussion heightens the effectiveness of the Board of Directors. We must also constantly consider the optimal composition of the Board of Directors while recognizing the strengths and weaknesses as a team.

Q. What are your thoughts on the nomination of directors and the development of successors?

Ito: Nomination of directors and the development of successors are important management issues. However, we must consider human resources in a broader way. It is important to establish various mechanisms for the certification and development of core human resources, and to recognize people who have the ability and motivation to garner expectations from others.

It is also essential to establish a human resources committee that will continuously follow up on core human resources. These are also important issues for consideration by the Nomination and Compensation Committee. Therefore, we will continue in-depth discussion on these issues in the future.

Yoshikazu Ito
Outside Director
Chairman of the Nomination and Compensation Committee
Ito has been involved in production technology and quality control for many years at a food manufacturing company that requires strict quality control, and possesses a wealth of management experience as a top executive.

Q. What are your thoughts on the compensation system?

Ito: The Nomination and Compensation Committee proposed revising the compensation system for directors and other officers with an eye toward our Medium-Term Management Plan "Transformation: BEYOND 2030." The new system adds non-financial items to the existing evaluation of operating profit margin and cash generating ability.

We believe that this revision is progress in terms of consistency with the Company's current situation and management plans. Going forward, we must continue to flexibly change our system in response to the demands of the times.

Q. In your opinion, what are the key issues for the sustainable growth of the Sakai Chemical Group?

Ito: Under our Medium-Term Management Plan "Transformation: BEYOND 2030," we are working to address the Sakai Chemical Group's key issues. In order to advance our transformation to the next stage, it is key to develop the dynamism for expanding from a materials-centered company to consumer products (B2C) company, to strengthen our customer orientation, and to reform our profitability. Although there has been increased discussion among directors in regard to consumer products, we have not yet been able to determine a clear direction for the Company or to consider specific projects. Therefore, we will continue discussing consumer products as a key issue.

Hiromi Wada

Outside Director

Member of the Nomination and Compensation Committee

Wada possesses management experience through being involved in software development and quality control at a general electric manufacturer, and serving as director of a development center.

Q. What do you think about discussions held at meetings of the Board of Directors?

Wada: Meetings of the Board of Directors have an atmosphere in which everyone feels free to voice their opinion. Discussions are held freely and openly. However, we often ran out of time in the midst of passionate discussion. In response to this problem, since fiscal 2023, we started creating separate time apart from board meetings. This separate time allows for thorough discussion, which is beneficial in terms of effectiveness.

Q. What are your thoughts on the nomination of directors and the development of successors?

Wada: The Company's current program for developing human resources is insufficient, particularly in terms of utilizing external talent.

Currently, the Company mainly promotes employees who are familiar with its businesses and have a track record of running those businesses. Of course, such employees are valuable human resources who deserve promotion. However, this cannot be the only path for successor development if the Company expects to achieve further business development through the active participation of diverse human resources. I would like to see the Company transform into one that makes use of diverse human resources, including management experts and experts in organization and human resource development in a broad sense.

Q. In your opinion, what are the key issues for the sustainable growth of the Sakai Chemical Group?

Wada: I believe that the key is ultimately human resources. I think it's necessary to make use of diverse human resources and increase productivity. The Sakai Chemical Group has created many products based on insights gained in R&D, as well as the challenges and needs of customers as identified by its sales team. Maximizing these strengths will lead to further enhancement of corporate value. It is essential to improve operational efficiency and streamline operations. It is also key to increase the productivity of each and every employee.

To achieve these goals, I believe that it is important for management to determine the best course of action and the appropriate changes to be made.

Q. What is your evaluation for the effectiveness of the Board of Directors?

Matsuda: I feel that the effectiveness of the Board of Directors has improved dramatically over the past two years. Outside directors speak freely from their respective experiences and external perspectives, as well as from a medium- to long-term viewpoint. The president and other executive directors in the Company listen sincerely to different opinions. There is a positive attitude of being willing to adopt good ideas, even if those ideas are different. I believe that board meetings function effectively for discussing management issues.

Q. What are your thoughts on the compensation system?

Matsuda: There has been a shift from evaluation and compensation based on evaluations that were biased toward single-year earnings to a system that reflects a medium- to long-term perspective, a shareholder perspective, ESG, and other factors. In general, I believe that the new form of evaluation is appropriate.

I cannot definitively state that the current level of compensation is sufficient; however, once the Company has achieved its Medium-Term Management Plan and is at a stage where it can aim even higher, I believe that compensation should be revised to a level appropriate for an excellent company for all officers, managers, and general employees.

Q. In your opinion, what are the key issues for the sustainable growth of the Sakai Chemical Group?

Matsuda: The bulk business of titanium dioxide and inorganic chemicals has long supported the profits of the Sakai Chemical Group. This bulk business is approaching the end of its lifecycle, and the entire Group is undergoing a transformation in its business model. In order to continue providing value into the future, the current management team has begun the challenge of building a new business model that utilizes DNA of a company that has existed for over 100 years.

To succeed, it is essential that all Group employees take personal responsibility and participate in the challenge. I believe that reforming corporate culture based on changes in the awareness of each and every employee is currently the most important issue.

Mitsunori Matsuda

Outside Director

Member of the Nomination and Compensation Committee

Matsuda possesses extensive management experience through work in CMC (Chemistry, Manufacturing and Controls) management and organizational management for many years at pharmaceutical companies where strict quality control is required.

Hisao Miyagawa

Outside Director

Miyagawa possesses extensive practical experience in capital markets and a wealth of knowledge and research achievements in business administration, particularly in corporate finance theory.

Q. Director Miyagawa, you were appointed as an outside director of the Company in fiscal 2024. Upon taking on the position, what aspects of the Sakai Chemical Group's management are you focusing on?

Miyagawa: There are two main approaches to business strategy: one that focuses on a company's management resources and one that focuses on industry positioning. The Sakai Chemical Group has clear strengths in terms of management resources, such as human resources and technological capabilities. However, I am focusing on the strategic nature of positioning; that is, how to compete in the industry. Positioning is akin to the concept of finding space and attacking, which is a common strategy in sports such as soccer and rugby. Going forward, it will be important for the Sakai Chemical Group to clarify to shareholders and investors how its competitive advantage, as seen from our positioning, creates a system that generates profits.

A manufacturer is a complete corporate entity that encompasses all the elements of business administration—from purchasing and processing to commercialization and sales. By paying close attention to the flow of money and goods, it will surely be possible to identify various spaces to utilize the Group's strengths; in other words, strategic concepts. I will carefully consider such concepts moving forward. From a third-party perspective, it is an interesting corporate group with a promising future.

Q. What are your aspirations as an outside director?

Miyagawa: From an academic standpoint, I am considering the application of scientific thinking and perspectives to management. Specifically, I will consider governance from the following scientific perspectives.

The first perspective is "clarifying causal relationships." Does the Company's organization clearly state the basis for its decision-making? Has the correctness of those causal relationships been sufficiently considered?

The second perspective is the "principle of reproducibility." Science clarifies experimental methods and data for reproducing results. This guarantees that anyone can freely try to reproduce the desired results. Is information open in the Company's organization? Is everyone given a fair chance to use that information to accomplish something?

The third perspective is "guaranteeing criticism and refutation." Scientific theories are constantly exposed to criticism and refutation. Theories develop through repeated experiments. The same is true in corporate organizations. Is free criticism and refutation always guaranteed in the Company's organization? Are there people on-site who can properly criticize and refute? Is criticism and refutation taken seriously? Are proper objective explanations provided in response?

Organizations that can answer these three questions are less likely to have governance problems. Conversely, no matter how well-established a system is, problems will arise if these questions cannot be answered. Systems are not the only important element of governance; indeed, the organizational culture is also key. Although it may seem that culture does not change, there is actually a surprising amount of room for improvement in some areas.

Science provides people with the opportunity and power to think. However, science is not all-knowing. Scientific thinking provides people with the courage and wisdom to think and make decisions on their own while supported by basic principles. I hope to utilize this kind of thinking and culture in the discussions at the Company.

Nomination and Compensation Committee

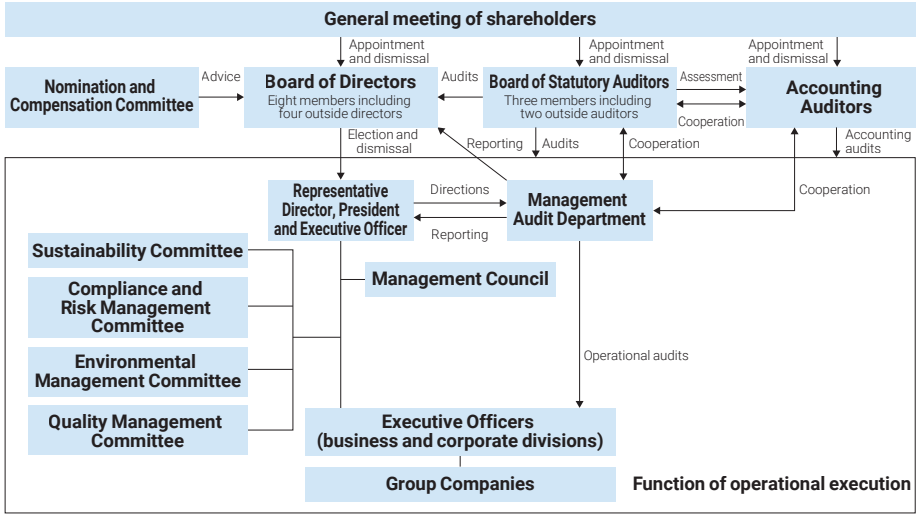
The Company has established a Nomination and Compensation Committee consisting of five members, the majority of whom are independent directors. A chairperson is selected from among the independent outside directors.

The Nomination and Compensation Committee mainly deliberates on the following matters and proposes the contents of its deliberations to the Board of Directors.

(1) Matters related to the appointment and dismissal of directors, etc.
(2) Matters related to succession planning and training for directors, etc.
(3) Matters related to compensation for directors, etc.
(4) Other matters that the directors deem necessary regarding the appointment and dismissal of directors, etc., compensation, etc.

Corporate governance system

Sakai Chemical Industry Co., Ltd. has adopted the form of a company with an audit and supervisory board. We recognize the enhancement of corporate governance as an important management issue. Accordingly, we aim to increase corporate value by conducting business activities under a transparent and fair management system and pursuing the interests and satisfaction of stakeholders.



As of June 30, 2024

Skill matrix of the Board of Directors

Skills	Yagura	Okamoto	Hattori	Magara	Ito	Wada	Matsuda	Miyagawa	Definitions of skills
(1) Corporate management	○				○		○		Skills in detecting current trends and implementing structural changes, including business reforms, business expansion, and the selling of businesses, based on one's experience of serving as CEO of a Sakai Chemical Industry subsidiary or another company
(2) R&D and production technology		○		○	○	○	○		Skills in creating new businesses based on one's mastery of R&D, manufacturing, quality control, etc.
(3) Business strategy and marketing	○			○		○		○	Skills in working as a person responsible for business strategy based on one's mastery thereof
(4) Finance and accounting			○		○			○	Skills in accurately assessing the Company's business performance, making right investment decisions, and communicating effectively with the capital market
(5) Human resources and organizational administration	○				○	○	○		Skills in organizational development and personnel management based on one's mastery of human resources and organizational administration
(6) Legal affairs and risk management	○		○						Skills in addressing obvious business and management risks based on one's mastery of legal affairs concerning corporate activities
(7) ESG and the SDGs	○	○	○	○		○		○	Skills in addressing obvious business and management risks based on one's mastery of legal affairs concerning corporate activities

Compensation for directors (and other officers)

The basic policy for the compensation system for directors and auditors is to promote the sharing of value with shareholders, provide objectivity and transparency to fulfill accountability, consider a level of compensation for securing and retaining excellent human resources, and promote the sustainable growth of the Sakai Chemical Group and the increase of corporate value in the medium to long term.

Compensation system for directors

Application	Base compensation	Bonus (proportion assuming a 100% payment rate)	Restricted stock compensation
Executive directors	50%	30%	20%
Directors (excluding outside directors)	60%	30%	10%
Outside directors	100%	–	–
	• The amount of base compensation is determined according to the position and responsibilities of each director, and is paid monthly • From the perspective of ensuring independence, the compensation of outside directors consists of base compensation only	• The amount of payment varies depending on the performance in each business year and the degree of achievement of the Medium-Term Management Plan • The amount of payment is determined based on the final evaluation of three evaluation items, within a range of 50% to 130% of the prescribed amount according to position • In principle, the bonus payment amount will be zero if there is a consolidated or non-consolidated ordinary loss	• The transfer restriction period is 20 years, and the transfer restriction of the allocated stock is lifted when the director resigns • The number of shares allocated is determined according to the amount of monetary compensation claims decided by the Board of Directors according to each director's position and responsibilities • The total amount of monetary compensation claims shall be within ¥120 million per year, separate from the base compensation • The total number of restricted stocks shall be within 100,000 shares

Evaluation items	Initiatives	Evaluation weight
(1) Performance indicators (consolidated and non-consolidated)	Operating profit margin, operating profit amount, operating CF earned amount	60%
(2) Non-financial items	Initiatives for the four areas listed in materialities	20%
(3) Priority themes	Initiatives for priority themes set for each fiscal year	20%

Compensation for corporate auditors

Compensation for corporate auditors consists of base compensation only. This is because corporate auditors are responsible for auditing the performance of duties across the entire Sakai Chemical Group.

Please see our website for more details. URL https://www.sakai-chem.co.jp/jp/ir/governance/

Directors, corporate auditors, and executive officers (as of June 30, 2024)

Mitsunori Matsuda
Director
(Outside/Independent)

Yoshikazu Ito
Director
(Outside/Independent)

Toshiyuki Yagura
President and Representative Director
Executive Officer

Koichiro Magara
Director
Executive Officer

Hiroshi Ushio
Full-time Corporate Auditor
(Outside/Independent)

Hisao Miyagawa
Director
(Outside/Independent)

Hiromi Wada
Director
(Outside/Independent)

Hiroyuki Hattori
Director
Executive Officer

Yasuhiro Okamoto
Director
Executive Officer

Teruya Takamatsu
Full-time Corporate Auditor

Tomonori Yasuda
Corporate Auditor
(Outside/Independent)

Director

Toshiyuki Yagura
President, Representative Director, and Executive Officer
(60 years old) Tenure: 4 years

Overall General Manager
In charge of Internal Control over Financial Reporting

Hiroyuki Hattori
Director and Executive Officer
(60 years old) Tenure: 4 years

In charge of Compliance, Legal, and Risk Management
Appointed as Head of Corporate Strategy Division, General Manager of Accounting & Finance Department

Yoshikazu Ito
Director
(64 years old) Tenure: 3 years

Outside
Independent Director

Mitsunori Matsuda
Director
(65 years old) Tenure: 2 years

Outside
Independent Director

Yasuhiro Okamoto
Director and Executive Officer
(61 years old) Tenure: 8 years

Head of Onahama Manufacturing Site
Appointed as Head of Production Technology Division

Koichiro Magara
Director and Executive Officer
(57 years old) Tenure: 0 years

In charge of Cosmetic Innovation
Appointed as Head of Research & Development Division

Hiromi Wada
Director
(63 years old) Tenure: 3 years

Outside
Independent Director

Hisao Miyagawa
Director
(64 years old) Tenure: 0 years

Outside
Independent Director

Corporate Auditor

Teruya Takamatsu
Corporate Auditor
(64 years old) Tenure: 4 years

Hiroshi Ushio
Corporate Auditor
(61 years old) Tenure: 0 years

Outside
Independent Director

Tomonori Yasuda
Corporate Auditor
(54 years old) Tenure: 0 years

Outside
Independent Director

Executive Officers

Hiroshi Tokunaga
(55 years old) Tenure: 1 year

Deputy Head of Onahama Manufacturing Site
Plant Manager of Factory No. 1, Onahama Manufacturing Site

Shinji Ogama
(53 years old) Tenure: 1 year

In charge of IR
Deputy Head of Corporate Strategy Division
General Manager of Corporate Planning Department

Keiichi Tabata
(56 years old) Tenure: 1 year

Head of Sakai Manufacturing Site

Akira Morioka
(56 years old) Tenure: 0 years

Head of Administration Division

Wataru Ibaraki
(57 years old) Tenure: 1 year

Head of Sales & Marketing Division
General Manager of Functional Materials Sales Department

Hiroshi Nakao
(53 years old) Tenure: 0 years

Deputy Head of Research & Development Division
General Manager of Research & Business Development Department, Research & Development Division

(From left to right) Hiroshi Tokunaga, Keiichi Tabata, Wataru Ibaraki, Shinji Ogama, Akira Morioka, Hiroshi Nakao

Sakai Chemical Industry Co., Ltd.

https://www.sakai-chem.co.jp/en/

5-2 Ebisujimacho, Sakai-ku, Sakai City, 590-8502

Editor's Note

Thank you for reading the Sakai Chemical Group Integrated Report 2024.

In April 2023, we launched the Integrated Report Publishing Committee to create the first integrated report for the Sakai Chemical Group. The integrated report was planned, produced, and edited by members in their 30s and 40s from various departments. The report strives to express the transformation, challenge, and action of the Sakai Chemical Group.

The publishing process was also a journey to explore why the Group has low corporate value, and how we can create more social and economic value.

We engaged in repeated dialogue with various stakeholders, including directors, executive officers, and group company executives in regard to topics such as company-wide strategies, business strategies, financial strategies, human resources strategies, environment and society, and governance. Through this dialogue, we verbalized and shaped the value creation story of the Sakai Chemical Group.

We are sure that this integrated report has many shortcomings. However, we hope that we have been able to convey at least a little of the spirit of transformation held by the Sakai Chemical Group, including our challenges and failures. Going forward, we will continue to create greater value for society through dialogue with our stakeholders. We can't wait to hear your opinion!

All members of the Integrated Report Publishing Committee

Integrated Report Publishing Committee (Sakai Chemical Industry Co., Ltd.)

Chairperson	Director and Executive Officer	Hiroyuki Hattori ①
Members	Information Systems Department	Yasuyuki Tsuji ②
	Corporate Research Laboratories	Akiyo Ozawa ③
	Inorganic Chemicals Sales Department	Yuji Wakagi ④
	Onahama Manufacturing Site Matsubara Factory	Hirotaka Kawagishi ⑤
	Quality, Environment and Health & Safety Management Department	Mayu Ota ⑥
	Human Resources and General Affairs Department	Takeshi Yabuuchi ⑦
Administrative Office	Compliance and Risk Management Department	Kimihiko Yoshida
	Compliance and Risk Management Department	Akio Nakashima
	Corporate Planning Department	Kenji Mori