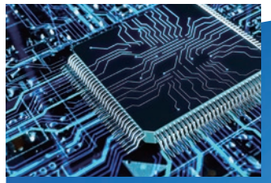
Integrated Report

2023

つむぐ技術、
つくる化学。






Kanto Denka Kogyo Co., Ltd.

Sustainability Department, Public Relations & Investor Relations Department

Yusen Building, 2-3-2, Marunouchi, Chiyoda-ku, Tokyo 100-0005, Japan　Phone: +81-3-4236-8801

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Kanto Denka Kogyo Co., Ltd.

Management Philosophy

Through the quest for constant corporate growth and acquisition of optimum profits while achieving harmony with nature, Kanto Denka Kogyo is working with all its shareholders, users and employees to create a successful company and a sustainable society.

To achieve this end, we are endeavoring to ensure our unique technologies and superior services meet the requirements of our users and build a trusted company based on the principles of sincerity, creativity, prompt response and harmony with nature.

Principles of Conduct

- Put the customer first at all times, and act courteously and with passion.
- Observe relevant laws and regulations as well as company regulations, and act openly.
- Practice 5S (Sort, Set, Shine, Standardize, and Sustain) & PDCA, and make a commitment to efforts to develop a safe and people-friendly work environment.
- Strive to improve our own abilities while nurturing the next generation, and aim to be professionals at what we do.
- Develop products, using creative technology, that our customers can use with a feeling of security.
- Proactively work to conserve and act in harmony with nature in order to develop a sustainable society.

Kanto Denka Kogyo Integrated Report

2023

Table of Contents

Editorial Policy

The Kanto Denka Kogyo Group has previously issued a Sustainability Report, but we have issued this integrated report so that we can comprehensively communicate financial and non-financial information to shareholders, investors, and other stakeholders with the aim of deepening their understanding of the Group's management plan and corporate activities to create medium- to long-term value.

This report was compiled with an emphasis on the connectivity and simplicity of information, referring to the IR Framework issued by the International Integrated Reporting Council (IIRC) and the Guidance for Co-creation of Value in order to provide an easy-to-understand overview of the Group's activities.

More information is available on our website.

- IR Information

https://www.kantodenka.co.jp/english/ir/

- Sustainability Initiatives

https://www.kantodenka.co.jp/english/sustainability/

Report Period:

Although this report has been compiled using data regarding activities that took place between April 1, 2022 and March 31, 2023, content concerning matters from April 2023 and after has also been included due to its importance and urgency.

Report Scope:

This report covers Kanto Denka Kogyo Co., Ltd. and its Group companies. However, specific activities, such as environmental performance data, refer to Kanto Denka Kogyo Co., Ltd. on a non-consolidated basis.

Published:

May 2024

Notes

- This report contains projections and forward-looking statements regarding our plans, strategies and performance. Please note that actual results may differ from these statements.
- Numerical values in this report are rounded down to the nearest unit as a general rule.

History of Kanto Denka Kogyo

Since our founding in 1938, Kanto Denka Kogyo has accumulated and developed knowledge centering on specialized technologies and know-how in electrolysis and other fields.

Here we introduce our unparalleled technological capabilities, sound and profitable management foundation, and the history of value creation that we have continued to expand and develop over many years.

From 1938: Founding and emergence of fundamental chemicals business

Our company was established in 1938 for the purpose of producing metallic magnesium, the raw material for the duralumin used in aircraft. After the end of World War II, we withdrew from the production of metallic magnesium, where demand had plummeted, and switch our core business to soda electrolysis products, which were manufactured as auxiliary raw materials. In the soda electrolysis business, which had become a new core business, we have manufactured a variety of products by effectively utilizing caustic soda, chlorine, and hydrogen obtained through soda electrolysis. In 1965, the Mizushima Plant started operation as our second plant in Japan. Since then, we have been supplying a wide variety of fundamental chemical products through a two-base system.

From 1970: Development of fluorochemical and ferrochemical businesses

In 1970, we established the first hydrofluoric acid electrolysis technology in Japan to extract fluorine from hydrogen fluoride on a commercial scale. At first, our core product was SF_6, which was mainly used to insulate circuit breakers and transformers, but we also have developed a variety of specialty gases for semiconductors starting with CF_4, contributing to the high integration and micronization of semiconductors. At the same time, we began manufacturing ferrochemicals such as copier carriers and the magnetic alloy powder MAP for metal tape, and the technology for manufacturing high-purity, fine metal powders flourished. These technologies became the cornerstone of our next generation of products.

From 1997: Entrance into battery materials business and overseas expansion

In 1997, we started manufacturing $LiPF_6$ and entered the battery materials business. Since then, we have expanded into battery additives such as $LiBF_4$ and played a role in improving the performance of lithium-ion secondary batteries. In recent years, we have licensed manufacturing technology to partner companies, contributing to the development of the global value chain in the battery industry, where demand is expected to grow rapidly as the trend toward EVs accelerates.

In 2000, we established Kanto Denka Korea Co., Ltd. and made our first move overseas. We have since expanded our sales network into China, Taiwan and Singapore. In addition, in order to respond to strong overseas demand, we established Kanto Denka Fine Products Korea Co., Ltd. as our first overseas production base in 2017, and Xuancheng KDK Technology Co., Ltd. as our second overseas production base in 2020. We will continue to expand our network to countries around the world that seek our technology and products.

Fundamental chemicals

- **1939** Started production of metallic magnesium and caustic soda
- **1945** Discontinued production of metallic magnesium
- **1950** Started production of trichloroethylene
- **1967** Started production of vinylidene chloride
- **1986** Completed conversion to ion-exchange membrane electrolysis
- **2005** Suspended soda electrolysis at Shibukawa Plant

Fluorochemicals

- **1970** Established hydrofluoric acid electrolysis technology
- **1971** Started production of SF_6
- **1981** Started production of CF_4
- **1986** Started production of WF_6
- **1987** Started production of NF_3
- **1997** Started production of ClF_3, and started hydrofluoric acid electrolysis at Mizushima Plant
- **2005** Started production of C_4F_6
- **2010** Started production of CH_3F and COS

Fluorinated gas ISO container

- **2023** Started production of KSG-14

Battery materials

Metallic magnesium electrolyzer

Trichloroethylene production facilities

- **1997** Started production of $LiPF_6$

Product MAP and metal tape using MAP

- **2017** Started production of $LiBF_4$

$LiPF_6$ production facilities

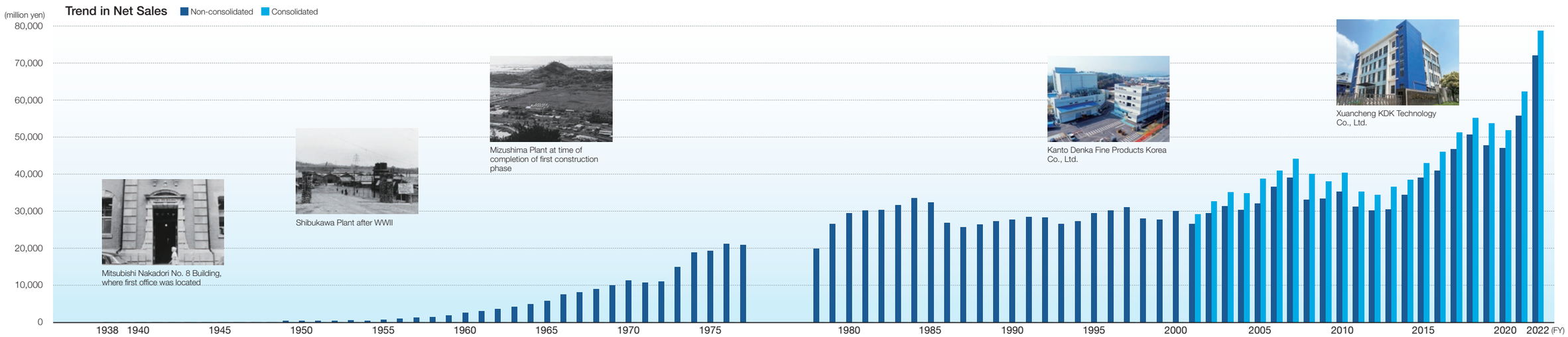
Ferrochemicals

- **1971** Partnered with Morishita Bengara Kogyo Co., Ltd. in iron oxide business
- **1977** Started production of reprographic carrier
- **1979** Started production of magnetic alloy powder MAP
- **1988** Started production of magnetite for pigments
- **2005** Discontinued production of magnetic alloy powder MAP
- **2023** Changed name of Morishita Bengara Kogyo Co., Ltd. to Kanto Denka Finetech Co., Ltd.

Offices / Plants / Overseas Bases

- **1938** Founded
- **1939** Started operations at Shibukawa Plant
- **1960** Opened Osaka Branch Office
- **1962** Opened Nagoya Office
- **1965** Started operations at Mizushima Plant
- **2000** Established Kanto Denka Korea Co., Ltd.
- **2004** Established Taiwan Kanto Denka Co., Ltd.
- **2011** Established Kanto Denka Kogyo (Shanghai) Co., Ltd.
- **2017** Established Kanto Denka Fine Products Korea Co., Ltd.
- **2018** Established Taiwan Kanto Denka Co., Ltd. (Singapore Branch)
- **2020** Established Xuancheng KDK Technology Co., Ltd.
- **2022** Opened Kumamoto Office

Trend in Net Sales



Mitsubishi Nakadori No. 8 Building, where first office was located

Shibukawa Plant after WWII

Mizushima Plant at time of completion of first construction phase

Kanto Denka Fine Products Korea Co., Ltd.

Xuancheng KDK Technology Co., Ltd.

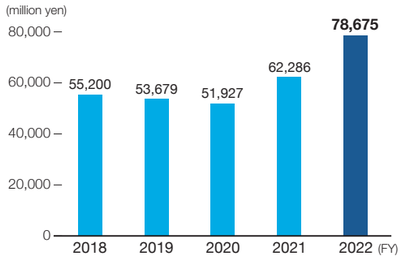
Financial and Non-Financial Highlights

Operating Results (Consolidated)

Net sales

¥78,675 million

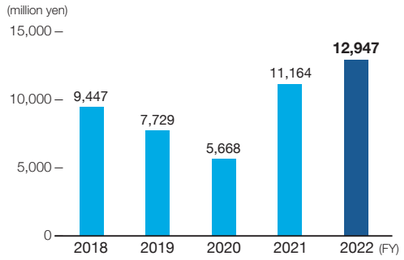
26.3% increase YoY



Operating income

¥12,947 million

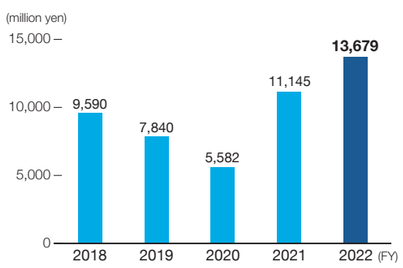
16.0% increase YoY



Ordinary income

¥13,679 million

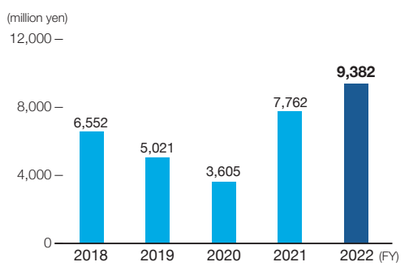
22.7% increase YoY



Net income attributable to owners of parent

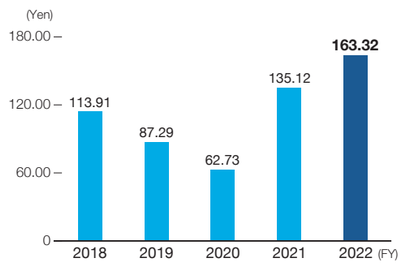
¥9,382 million

20.9% increase YoY



Profit per share

¥163.32

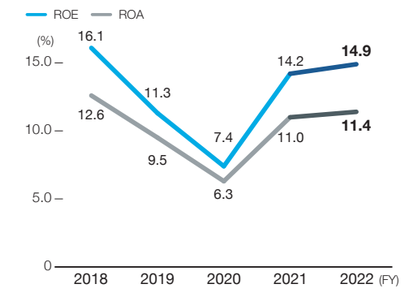


Return On Equity (ROE)

14.9%

Return On Assets (ROA)

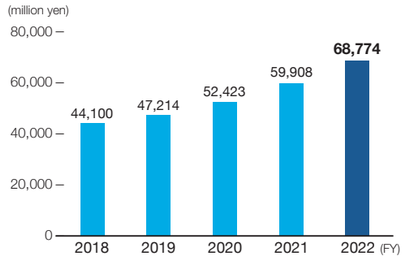
11.4%



Financial Position (Consolidated)

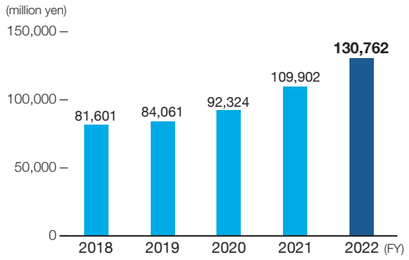
Net assets

¥68,774 million



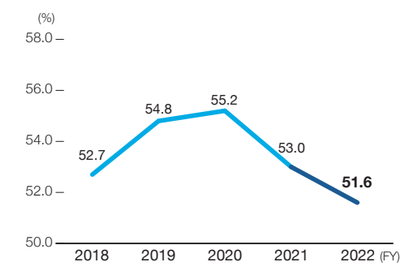
Total assets

¥130,762 million



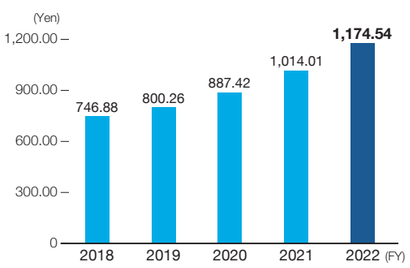
Equity rario

51.6%



Net assets per share

¥1,174.54



Non-financial Data (Non-consolidated)

Ratio of female directors on the Board of Directors

(as of June 29, 2023)

8.3% (1 of 12 people)

Employment rate of people with disabilities

(as of June 1, 2023)

2.03%

No. of major occupational accidents/equipment accidents

(Results in FY2022)

Major occupational accidents 1

Equipment accidents 0

Our employees by gender

(as of the end of March 2023)

Number of male employees: 673

Number of female employees: 71

Greenhouse gas emissions from energy sources

(Results in FY2022)

210,000 t-CO_2

Water intake

(Results in FY2022)

13,414,000 m^3

Value Creation Process

The Kanto Denka Kogyo Group aims to achieve sustainable growth and increase corporate value by steadily implementing the strategies and measures set forth in our Medium-Term Management Plan.

External Environment

- Technological innovation
- Economic trends
- International affairs
- Climate change

INPUT

Financial capital

- Consolidated total assets ¥130.7 billion
- Equity rario 51.6%
  (as of the end of March 2023)

Manufactured capital

- Capital investment ¥16.6 billion
  (FY2022)

Intellectual capital

- R&D bases 3 domestic bases
  (as of the end of March 2023)
- R&D expenses ¥1.1 billion
  (FY2022)

Human capital

- No. of employees (consolidated) 1,059
  (as of the end of March 2023)
- Education investment per person (Non-consolidated) ¥70,000
  (FY2022)

Social and relationship capital

- No. of conversations with institutional investors and securities analysts 129
  (FY2022)
- No. of Group companies 7 in Japan, and 5 overseas
  (as of the end of March 2023)

Natural capital

- Energy consumption in crude oil equivalent (Non-consolidated) 97,000 kl
- Water intake (Non-consolidated) 13,414,000 m³
  (FY2022)

Business Activities

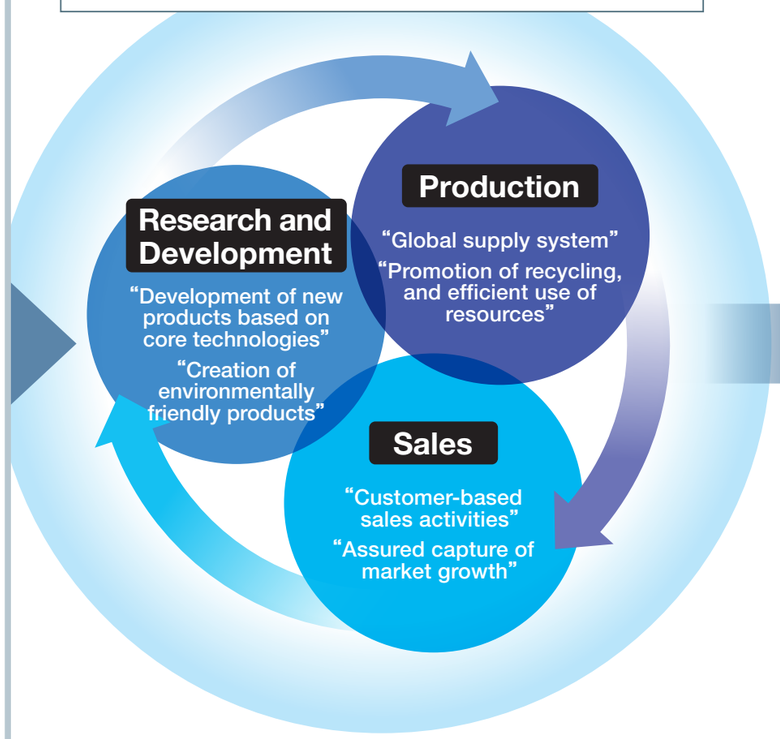
12th Medium-Term Management Plan

4 Key Strategies

- Promote expansion of the fine chemicals business
- Raise the level of the production technology
- Enhance human resource development
- Increase social value

6 New Strategies and Measures

- Business strategies
- Increasing capital efficiency
- Strengthening governance
- Human capital strategy
- Organizational strategy
- ESG strategy



Foundation for Value Creation

Corporate culture

- Giving the highest priority to safety
- Being a profitable company
- Development by and for everyone

Core technologies

- Electrolysis technology
- Fluorination technology
- Chlorination technology

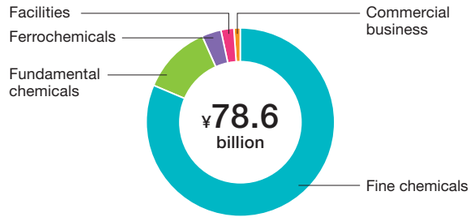
Areas of focus

- Environment and energy
- Electronics and telecommunications
- Life science

Management Philosophy
Principles of Conduct

OUTPUT (FY2022)

Net sales by segment



Fine chemicals High purification technology ¥63.9 billion

- Manufacture of specialty gases indispensable for the manufacture of semiconductors and liquid crystal panels
- Manufactures raw materials for lithium-ion secondary batteries used in electric vehicles and smartphones

Fundamental chemicals Chlorination technology ¥9.4 billion

- Play an essential role in the development of industrial activities as a basic raw material for industrial use

Ferrochemicals Coating technology ¥2.6 billion

- Manufactures raw materials for developers in copiers and printers and pigments

Facilities ¥1.9 billion

- Designs and manufactures chemical and general industry equipment, etc.

Commercial business ¥0.7 billion

- Sells industrial chemicals, etc.

OUTCOME

Impact on stakeholders

"Increase social value"
"Enhance human resource development"
"Give the highest priority to safety"
"Contribute to a sustainable society"

Our Vision for Ourselves in 2030

With a stable management foundation, we will provide a safe work environment with job satisfaction, support technologies that are cutting-edge on a global stage with our superior, original products, and grow to become an **"innovative, development-driven company"** to contribute to a sustainable society

We will continue to be an "innovative, development-driven company" that supports the world's most advanced technologies with unique and superior products, and strive to contribute to society.

Jun'ichi Hasegawa
President

We will make use of the technologies we have accumulated over our 85-year history to realize our vision

We were established in 1938 as a company that manufactures metallic magnesium for aircraft materials under the wartime regime, and auxiliary raw materials such as chlorine, caustic soda, and other materials. After the end of World War II, our company withdrew from the production of metallic magnesium as a munitions material, and supported the postwar high economic growth, centering on the soda electrolysis industry as a peacetime industry. In 1970, we applied soda electrolysis technology and established Japan's first proprietary hydrofluoric acid electrolysis technology. Since then, we have been providing the market with unique chemicals that utilize fluorine, chlorine, and hydrogen, which are efficiently obtained through electrolysis.

Our strength lies in our ability to develop original chemicals that effectively utilize these efficiently obtained elements. In the past, we started manufacturing and selling perchloroethylene for the first time in Japan in terms of effective use of chlorine in 1952. Effective use of hydrogen led to the development of the world's first direct oxidation process to produce cyclohexanone in 1955. In addition, the magnetic alloy powder "MAP" for metal tape, which is produced through the hydrogen reduction of high-purity iron oxide, took the world by storm in the 1980s. Today, specialty gases for semiconductors such as nitrogen trifluoride and hexafluoro-1,3-butadiene that effectively utilize fluorine, and battery materials such as lithium hexafluorophosphate and lithium tetrafluoroborate are the main products.

In addition, these superior product lines are highly appreciated by customers in Japan and overseas for our outstanding technical capabilities in terms of handling know-how and quality control. With these capabilities, we will continue to work together with our customers and move toward further new technological innovations. We always want to be the company that is chosen by customers for our technological capabilities.

Taking advantage of these strengths, we aim to be an "innovative, development-driven company" that supports the world's most advanced technologies with unique and superior products.

Looking back on our FY2022 results

FY2022 was the first year of the 12th Medium-Term Management Plan, "Dominate 1000 -Sustainable growth and fostering competitiveness-." The purpose of this plan is to promote the expansion of the fine chemicals business and foster competitiveness, and to strengthen the foundation for growth through the creation of new businesses.

By implementing the various measures set forth in the Medium-Term Management Plan, we were able to achieve record-high consolidated performance in FY2022. Net sales were ¥78.675 billion, due partly to the effect of price revisions, despite a slowdown in the second half of the fiscal year due to the impact of production adjustments by semiconductor manufacturers. In terms of profit, although there was a significant increase in raw material prices and an increase in fixed costs, thanks to the effect of price revisions that exceeded this, ordinary income was ¥13.679 billion, and net income attributable to owners of parent was ¥9.382 billion.

Q2 FY2023 financial results

For FY2023, we assumed that the recovery from production adjustments by semiconductor manufacturers would be in FY2024, and that the cost of sales would remain high due to the use of expensive raw materials purchased in the previous fiscal year in battery materials.

However, we have been significantly affected by the ongoing production adjustments beyond expectations at semiconductor manufacturers and the deterioration of the supply-demand environment for battery materials due to a temporary slowdown in growth in the electric vehicle industry. As a result, in the second quarter of FY2023, net sales were ¥34.840 billion, down 6.6% from the previous fiscal year. In terms of profit, due to the valuation loss on battery materials, etc., ordinary income was ¥137 million, down 98.1% from the previous fiscal year, and net income attributable to owners of parent was ¥257 million, down 95.0%.

Reviewing the Medium-Term Management Plan to enable sustainable growth

Under the 12th Medium-Term Management Plan, "Dominate 1000 -Sustainable growth and fostering competitiveness-," the Group worked to achieve consolidated net sales of ¥100 billion in FY2024. However, we have revised our plan in light of changes in the business environment surrounding companies and business performance.

When this plan was formulated, we expected significant growth in the fine chemicals business due to market expansion and active capital investment. However, due to significant changes in the market environment, the achievement of numerical targets for FY2024 has become uncertain.

In addition, in order to increase corporate value over the medium to long term, it has become even more important to accurately grasp the cost of capital, increase capital efficiency, and allocate management resources

with an awareness of sustainability.

In light of these circumstances, we determined that it is important to respond to major changes in the external environment, build a structure that enables sustainable growth, and enhance corporate value. Accordingly, we have decided to revise the plan by extending the final year by two years. We are confident that by implementing this revised plan, the Group will once again be on a medium- to long-term growth trajectory.

Further development of the fine chemicals business as a growth driver

Our diverse product lineup that makes effective use of fluorine is the source of our growth. I would like to talk about the growth strategies of the 12th Medium-Term Management Plan and its revision.

First, we have specialty gas products for semiconductors. Although we are currently experiencing a temporary slowdown in growth, we do not doubt that growth will continue in the medium to long term. We boast a wide range of cutting-edge etching gas products for semiconductor front-end processes that are becoming increasingly micronized, and we would like to continue to invest in expansion work in line with the growth rate of the market. In addition, we will strengthen our system for the stable supply of products by establishing manufacturing bases close to customer demand areas. In South Korea, Kanto Denka Fine Products Korea Co., Ltd. supplies carbonyl sulfide, carbon tetrafluoride, and chlorine trifluoride. In China, Xuancheng KDK Technology Co., Ltd. has started the production of ammonium fluoride for our raw materials, which is the first phase of construction, and plans to develop a supply system for tungsten hexafluoride, hexafluoro-1,3-butadiene, carbon tetrafluoride, and carbonyl sulfide in the future.

Next is battery materials. Although this business has high growth potential in the future, we believe that it is necessary to further increase capital efficiency in order to maintain our dominant position in the market. For lithium hexafluorophosphate, we will implement various measures to streamline production at the Mizushima Plant. In addition, as a measure to take advantage of the high growth rate of the market, we will develop a licensing business in which we transfer our manufacturing technology to foreign companies with technological capabilities. In FY2023, we granted a license to MEXICHEM FLUOR INC*. We will continue to actively respond to promising projects in the future.

* In this report, the company will occasionally to referred to as "MEXICHEM." MEXICHEM is the core company of Koura, which operates the fluorine business of the multinational Orbia Group.

Improving management efficiency through portfolio transformation

We will actively review our businesses for products with relatively low market growth potential.

In ferrochemicals, although profitability is high, we will work to further improve the efficiency of our business operations due to the shrinking market caused by the shift to paperless copiers and other products. Specifically, the manufacturing of carrier products, which was previously conducted at the Shibukawa Plant, will be transferred to the affiliated company Kanto Denka Finetech Co., Ltd. In addition to improving the efficiency of the ferrochemicals business, the site of the former carrier manufacturing plant at the Shibukawa Plant is expected to be converted mainly to the fluorochemicals business, thereby making more efficient use of management resources.

In the fundamental chemicals business, which has long supported our company, we will focus on supplying raw materials to the fine chemicals business, as the market for chlorine-based solvents, which are the mainstay of chlorine demand, is shrinking significantly amid aging facilities. In FY2023, we decided to halt production at aging manufacturing facilities for caustic soda flakes and to discontinue its sale.

Aiming for carbon neutrality in 2050

One of the core strategies in the 12th Medium-Term Management Plan is "Increase social value." In addition to pursuing economic value, we aim to increase social value through activities aimed at solving social issues, such as promoting sustainability activities, strengthening decarbonization initiatives, and promoting recycling.

The manufacture of fluorine and chlorine requires a large amount of electricity. Regarding electricity, we will promote the reduction of greenhouse gas emissions through independent efforts such as the introduction of renewable energy and energy-saving at facilities. In addition, we are also reducing greenhouse gas emissions by changing the power supply mix of electric power companies. Based on this, we had set a target of reducing energy-derived greenhouse gas emissions by 30% in FY2030 compared to FY2013, but we have revised this target to 50%. We also aim to achieve carbon neutrality by 2050.

Contributing to the creation of a sustainable society while maintaining harmony with the global environment

Many of our specialty gas products for semiconductors and battery materials products are chemical substances containing fluorine. Without these products, neither semiconductors nor batteries could be manufactured, making it difficult for humanity to live a civilized life. These substances are indispensable, but if they are used or disposed incorrectly, they can have a significant impact on life and the global environment. Through our responsible care activities, we have been working for many years to reduce industrial waste, promote recycling activities, reduce emissions of substances subject to the Pollutant Release and Transfer Register (PRTR) Act, and reduce greenhouse gas emissions.

Recently, attention has been focused on the international regulation of organic fluorine compounds (PFAS). Since PFAS are broadly defined as "fluorine compounds containing at least one fully fluorinated methyl or methylene carbon atom," some of our fluorinated specialty gas products may fall under this category. At this time, although regulations are under consideration, we believe the situation is fluid due to the fact that alternative substances have not yet been developed. However, since it is ideal to proceed with the conversion to chemical substances with a lower environmental impact, we will further focus on the development of environmentally friendly products with an awareness of the life cycle assessment (LCA) of products.

In addition, as an initiative to use resources more effectively, we have established the world's first technology to recycle lithium compounds from used lithium-ion secondary batteries with high-purity and use them horizontally in battery materials through joint development with Sumitomo Metal Mining Co., Ltd. We are currently conducting various studies for commercialization, and will contribute to the creation of a sustainable society through the realization of this business.

Promoting the construction of a system to enhance corporate value

Improving corporate value is not just about business growth. This can be achieved by implementing measures that enable all stakeholders to prosper together. In the revision of the 12th Medium-Term Management Plan, we have set out various measures to enhance our corporate value.

First, we need to increase capital efficiency. We will use ROIC, which has been newly added to our management indicators, to promote business strategies that enhance capital efficiency, and aim to create a system that will bring about sustainable growth. In addition, we will gradually reduce approximately 30% of our strategic shareholdings by FY2026. The proceeds from the sale will be used for business activities.

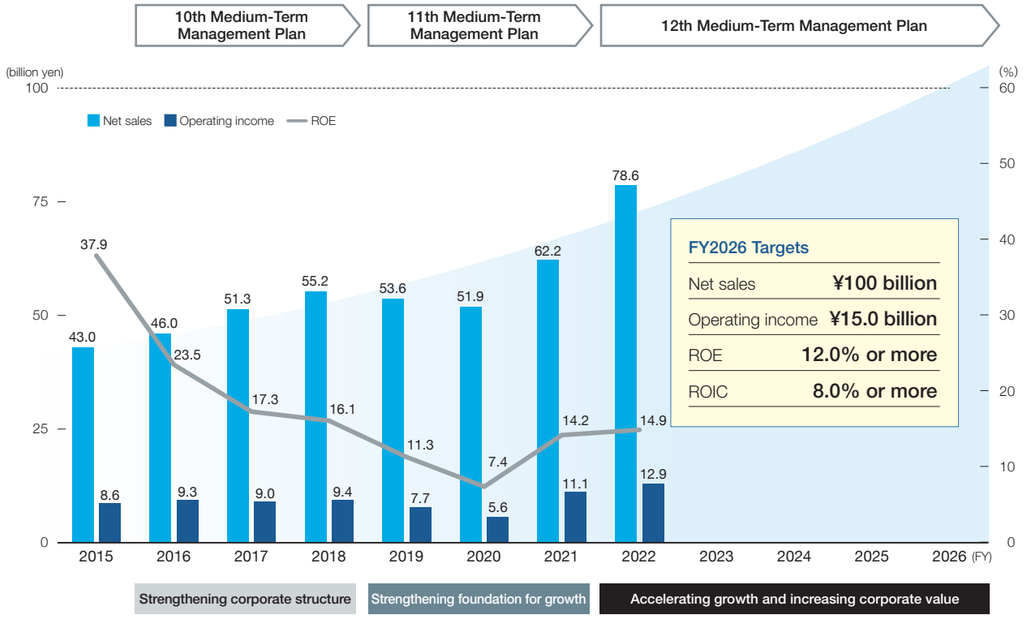
In addition, as a human capital strategy, we plan to introduce a new human resource development program from FY2024 in order to conduct human resource training that is linked to management strategies. At the same time, we will carry out activities aimed at achieving our previous goals in order to promote diversity and pursue employee well-being.

Other measures include revising the officer compensation system, enhancing investor relations, promoting digital transformation, and strengthening the legal and export trade management systems.

To all our stakeholders

Our mission is to supply the special materials needed for a sustainable society with the world's most advanced technologies. This can only be achieved with the understanding of all stakeholders involved in our company, including customers, shareholders, investors, local residents, and employees. With your understanding, we will strive to build a trusted Kanto Denka Kogyo and contribute to society. I hope you will continue to lend your understanding and support going forward.

Feature Medium-Term Management Plan



	10th Medium-Term Management Plan (2016–2018) **Next Stage 500**	11th Medium-Term Management Plan (2019-2021) **Journey to 1000**
Key strategy	● Strengthen the profitability of existing businesses ● Early creation of new businesses ● Stabilize management	● Promote expansion of the fine chemicals business ● Raise the level of the production technology ● Create new businesses promptly ● Strengthen the Group's collective capabilities ● Shift to ESG-conscious management while increasing corporate value
Reflection	● Achieved numerical targets other than operating income ● Maintained high profitability in the specialty gas business by improving the productivity of existing products and expanding production ahead of other companies ● Challenges remain in the restructuring of the research laboratory and the nurturing of innovative, development-driven human resources ● Improved equity ratio ● Strengthened the BCP by establishing a production base in South Korea	● Performance in the fine chemicals business was lower than expected, and both net sales and operating income fell short of numerical targets ● The specialty gas business maintained high profitability thanks to the introduction of new products to the market and the increase in production resulting from the stable operation of the production base in South Korea ● The improvement of analytical technology and quality assurance capabilities remains a challenge ● Challenges remain in creating an operating base for the new business and establishing unique and advantageous technologies
Numerical target	Net sales: Target ¥55.0 billion / Result ¥55.2 billion Operating income: Target ¥10.0 billion / Result ¥9.4 billion Equity ratio (non-consolidated): Target 50% or more / Result 55.4%	Net sales: Target ¥70.0 billion / Result ¥62.2 billion Operating income: Target ¥12.0 billion / Result ¥11.1 billion Equity ratio: Target 50% or more / Result 53.0% ROE: Target 15% or more / Result 14.2%
Next challenge	Strengthen the foundation for growth to enhance corporate value over the medium to long term and achieve sustainable growth	Accelerate growth and strengthen competitiveness in the core specialty gas and battery materials businesses

12th Medium-Term Management Plan (2022-2026) Dominate 1000 -Sustainable growth and fostering competitiveness-

We announced our 12th Medium-Term Management Plan in May 2022, but revised the plan in November 2023 in light of market trends and changes in the business environment. In addition to our existing key strategies, we will steadily implement new strategies and measures, as where we want to be in the year 2030, to achieve our vision.

Our strength + Key strategies + New strategies and measures

<Our vision for ourselves in 2030>
With a stable management foundation, we will provide a safe work environment with job satisfaction, support technologies that are cutting-edge on a global stage with our superior, original products, and grow to become an innovative, development-driven company to contribute to a sustainable society

Progress on Key Strategies of 12th Medium-Term Management Plan

Promote expansion of the fine chemicals business	The specialty gas business responded to market growth by increasing the capacity of existing products and launching new products. While the battery materials business is expanding capacity on its own, we have entered into a new licensing agreement with MEXICHEM for its $LiPF_6$ manufacturing technology in order to respond to the rapid expansion of global demand.
Raise the level of the production technology	Productivity has been improved through the creation of a database of production management information and the use of AI for operating data analysis. We have also introduced new analyzer to strengthen our quality assurance capabilities.
Enhance human resource development	The Human Resource Development Department, newly established in June 2023, plays a central role in reviewing our existing employee education system. In addition to the restructuring of position-based training, we plan to introduce new selective training that is linked to management strategies.
Increase social value	We launched a sustainability website to communicate our ESG-related initiatives. We also focused on the promotion of recycling, including the establishment of lithium recovery technology.

Background to Revision of 12th Medium-Term Management Plan

When the plan was formulated, we expected significant growth in the fine chemicals business due to market expansion and active capital investment. However, due to changes in the market environment, such as an adjustment phase in the semiconductor market and a temporary slowdown in growth in the EV market, the achievement of numerical targets for FY2024, the initial final year, has become unclear. In addition, in order to increase corporate value over the medium to long term, it has become even more important to allocate management resources with an awareness of the cost and profitability of capital. In light of these circumstances, we determined that it is important to build a structure that enables sustainable growth in response to major changes in the external environment and to enhance corporate value, and decided to revise the plan.

Policy on Revision of 12th Medium-Term Management Plan

We will refine our strengths in the development of fluorine, chlorine, and hydrogen that can be efficiently obtained through electrolysis technology, as well as unique chemicals that utilize them, and aim to accelerate growth further and achieve our vision for ourselves in 2030. To this end, in addition to steadily advancing our existing key strategies, we will implement new strategies and measures to achieve sustainable growth and enhance corporate value.

New Strategies and Measures

● Business strategies
[Specialty Gas / Battery Materials]
- Implement strategies for further growth

[Ferrochemicals / Fundamental Chemicals]
- Implement reforms aimed at improving profitability and optimizing business scale

● Increasing capital efficiency
- Newly adopt ROIC as a management indicator
- Reduce strategic shareholdings

● Strengthening governance
- Consider revisions to officer compensation system

● Human capital strategy
- Introduce a new human resource development program from FY2024

● Organizational strategies
- Proactively disseminate information with the Public Relations & Investor Relations Department, newly established in June 2023, taking the lead
- Considering establishing a dedicated department to lead productivity improvements using digital technology
- Work to develop and expand legal personnel and respond to the expansion of the overseas business and licensing business

● ESG strategy
- Reduction targets for greenhouse gas emissions from energy use (compared to FY2013, subject to Scope 1 and Scope 2)
FY2030 50% reduction

Message from the General Manager, Business Div.

Consolidated sales for FY2022 were ¥78.675 billion, up ¥16.388 billion or 26.3% compared to the previous fiscal year. In addition, operating income was ¥12.947 billion, up ¥1.782 billion or 16.0% compared to the previous fiscal year.

Despite the downside risks to the economy due to rising raw material and fuel prices and exchange rate fluctuations in Japan, and the prolonged situation in Ukraine and fluctuations in the financial and capital markets overseas, the economy as a whole was on a slow recovery from the downturn caused by the COVID-19 pandemic, and the fine chemicals division was particularly strong due to the increase in demand for semiconductors and battery materials, resulting in record profits for the Group.

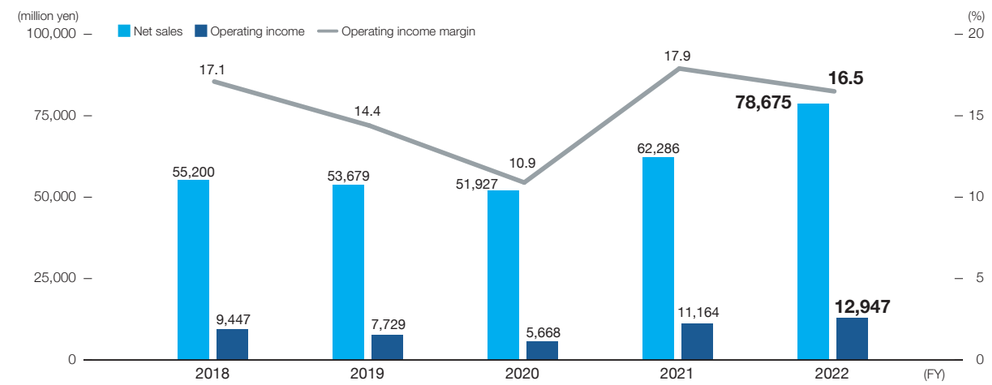
On the other hand, for FY2023, the business environment will be extremely severe, with various manufacturers announcing a series of production adjustments due to a decline in demand for semiconductors by a rebound from stay-at-home demand, and the growth of the EV market slowing in China, the country with the largest demand for battery materials.

Under these circumstances, the Group will strengthen the profitability of its fundamental chemical, fine chemical, and ferrochemical businesses, and work to develop new products that leverage its strengths in fluorine-related technologies.

In FY2021, to establish a structure that enables us to quickly commercialize the results obtained from semiconductor material development activities, we consolidated the operations related to semiconductor material development, which had been divided into business and new product development divisions, into the business division, and made independent as the Semiconductor Materials Development Department. We will promote the business that integrates sales and R&D to respond to the rapidly expanding semiconductor market.

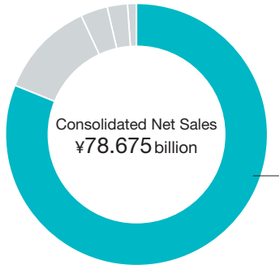
In addition, we have entered into a licensing agreement with MEXICHEM for the manufacturing technology of lithium hexafluophosphate, which is a raw material for lithium-ion secondary battery electrolytes. As demand for batteries is expected to grow over the medium to long term, we will work with our trusted business partners to meet market expectations rather than establish an independent supply system.

Net sales / Operating income / Operating income margin



Overview by Segment

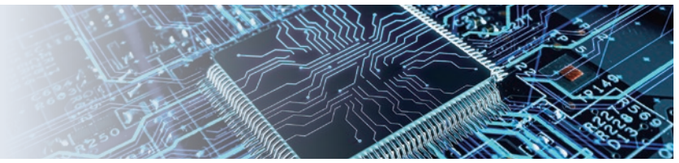
Fine Chemicals Division



Since establishing Japan's first hydrofluoric acid electrolysis technology in 1970, we have been leading the industry with world-class fluorine gas production capacity based on the experience and track record we have accumulated over more than half a century.

Fine Chemicals Segment Net Sales
¥63.943 billion
(Results in FY2022)

Fluorochemical Specialty Gas Products



Fluorochemical specialty gas products, including gases for semiconductor manufacturing, are making a significant contribution to the development of a digital society.

Medium-Term Management Plan Strategies and Measures ·····

Improving development capabilities
- Expand the range of development evaluation equipment
- Diversify to multiple development sites

Building a stable supply structure
- Diversify to multiple manufacturing sites

Overview of FY2022

In the first half of the fiscal year, there were fluctuations in product demand due to the situation in Ukraine and the continuation of China's zero-COVID policy, as well as uncertainties such as soaring prices of various raw materials. Despite this, market conditions continued to be strong from the previous fiscal year thanks to the revitalization of data center investment from the regularization of remote work and the spread of the metaverse, as well as an increase in demand for automotive semiconductors with the spread of EVs.

On the other hand, demand for memory and logic semiconductor materials decelerated in the second half of the fiscal year due to the sluggish sales of smartphones, PCs, tablets and other products from the end of stay-at-home demand.

By product, sales of nitrogen trifluoride, our key product, increased from the previous fiscal year due to the effect of price adjustments despite a decrease in sales volume.

Sales of tungsten hexafluoride and hexafluoro-1,3-butadiene increased from the previous fiscal year due to an increase in sales volume.

Strategies for FY2023

While customer manufacturers are making significant production adjustments with the sluggish demand for semiconductors that has continued since the previous fiscal year, we will improve profitability by strengthening sales capabilities for advanced products. In addition, we will strive to differentiate our products by adopting recycled materials and further reduce costs through improvement activities in preparation for future development.

In addition, we will establish development bases and expand our facilities, aiming to develop new products as soon as possible and bring them to the market.

As for the development of new products, we will focus on environmentally friendly products with low global warming potential (GWP), which are expected to become our mainstay products, and high-performance products that are expected to be used in next-generation semiconductor manufacturing equipment, and secure future profits through efficient investment.

Key Products

Cleaning Gas	Hexafluoroethane (C_2F_6) Nitrogen trifluoride (NF_3) Octafluoropropane (C_3F_8) Chlorine trifluoride (ClF_3) etc.
Etching Gas	Sulfur hexafluoride (SF_6) Carbon tetrafluoride (CF_4) Trifluoromethane (CHF_3) Hexafluoro-1,3-butadiene (C_4F_6) Octafluorocyclobutane (C_4F_8) Monofluoromethane (CH_3F) Carbonyl sulfide (COS) KSG-14 etc.
Material Gas	Tungsten hexafluoride (WF_6) Silicon tetrafluoride (SiF_4) etc.

Battery Materials

As the global trend toward decarbonization and the shift to EV accelerates, electrolytes and additives for lithium-ion secondary batteries are contributing to the creation of a sustainable society.

Medium-Term Management Plan Strategies and Measures

Capturing rapid market growth
- Expand licensing business

Building a business structure that is resilient to raw material prices
- Commercialize lithium recycling
- Improve inventory turnover rate

Overview of FY2022

In the first half of the fiscal year, market conditions remained steady overall, despite the impact of fluctuations in product prices in some areas, such as soaring raw material prices and production adjustments and the release of inventories by local manufacturers affected by lockdowns in China. For our products, from the perspective of economic security, we received many inquiries mainly from Japan, Europe and the United States.

On the other hand, growth in the EV market slowed in China, the country with the largest demand, owing to the termination of subsidies for new energy vehicles in the second half, especially in the fourth quarter. As a result, the market environment was extremely volatile, including a sharp drop in raw material and sales prices.

Sales of lithium hexafluorophosphate, our key product, increased from the previous fiscal year due to the effect of price adjustments.

Strategies for FY2023

While competing manufacturers in China are making large-scale investments one after another to capture the rapid growth of the market, we aim to maintain our dominant position in the market by achieving cost reductions and quality improvements integrated with our customers through aggressive technological development.

In addition, we will support the development of the battery value chain by focusing on the European, US, and Asian markets, which are expected to grow in the future, and building a robust supply system in collaboration with our business partners.

Key Products

Lithium-ion secondary battery electrolytes	Lithium hexafluorophosphate ($LiPF_6$) etc.
Lithium-ion secondary battery additives	Lithium tetrafluoroborate ($LiBF_4$) etc.

TOPICS Fine Chemicals Division Topics

New Product: KSG-14

We have released the new product KSG-14, a fluorochemical specialty gas.

KSG-14 is an etching gas that contributes to the improvement of micronization and productivity in the semiconductor manufacturing process, supporting the evolution of semiconductors.

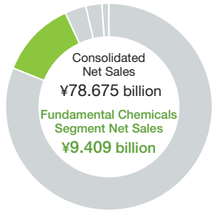
It also has high environmental performance and reduces the consumption of energy, water, etc. by improving productivity. In addition, its global warming potential (GWP) is very low, which helps to mitigate global warming.

Signing of Licensing Agreement on Battery Materials Manufacturing Technology

We have entered into a licensing agreement with MEXICHEM for the manufacturing technology of lithium hexafluophosphate ($LiPF_6$), which is a raw material for lithium-ion secondary battery electrolytes.

Through this partnership, we will contribute to the global movement toward carbon neutrality by combining our high-quality $LiPF_6$ manufacturing technology with MEXICHEM's advanced capabilities in North America.

Fundamental Chemicals Division



(Results in FY2022)

Caustic soda, chlorine, hydrogen, and inorganic and organic products made from them are used in various applications as basic industrial raw materials to make everyday life more comfortable.

Medium-Term Management Plan Strategies

Strengthening function for supplying raw materials to Fine Chemicals

Overview of FY2022

Although the high prices of raw materials and fuel persisted, the profitability of our business divisions improved and returned to the black by implementing price adjustments aimed at correcting profitability.

By product, sales of caustic soda and hydrochloric acid, which are our main inorganic products, and trichloroethylene and perchloroethylene, which are our main organic products, increased from the previous fiscal year due to the effect of price adjustments despite a decrease in sales volume.

Strategies for FY2023

We will reorganize our product portfolio, such as halting production of caustic soda flakes, for which fixed costs are increasing, strengthen our ability to supply chlorine-based raw materials for our own use, and optimize the scale of our business.

Facilities Division

(Results in FY2022)

We carry out construction work related to chemical facilities and general industries, and support the activities of the Group through facility design, construction, maintenance work, etc.

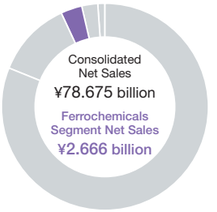
Overview of FY2022

Sales increased compared to the previous fiscal year due to an increase in contracted construction work. The number of orders received increased not only within the Group but also from external customers.

Strategies for FY2023

Leveraging our integrated system from sales to design, manufacturing, construction, and maintenance, the engineering technology created by close cooperation between each department, and the know-how as a specialized company in manufacturing plants cultivated over many years since our founding, we will manufacture plants that accurately capture the needs of our users and contribute to the Group's production activities and the earning of the trust of external customers.

Ferrochemicals Division



(Results in FY2022)

As copiers become more multifunctional and have higher image quality, we offer products that are optimized to meet the diversifying needs of users, and we hold approximately 40% of the market share.

Medium-Term Management Plan Strategies

Concentration and conversion of management resources

Overview of FY2022

Demand for developer products fell sharply in the previous fiscal year due to the semiconductor shortage and the impact of COVID-19, which led to a decline in the utilization rate of production bases in China and other Asian countries, but the current fiscal year has shown a gradual recovery.

By product, sales of carriers increased compared to the previous fiscal year due to progress in switching to new products.

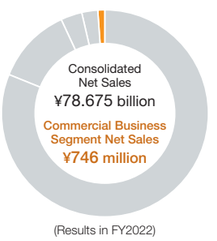
Sales of iron oxide decreased from the previous fiscal year due to a decrease in sales of colorants.

Strategies for FY2023

We will expand sales targeting the Asian market, mainly China, where demand for developers is expanding with the full-scale domestic production of copiers.

In addition, we will consolidate the manufacturing of ferrochemical products to Kanto Denka Finetech Co., Ltd. and other initiatives to streamline the utilization of management resources.

Commercial Business Division



(Results in FY2022)

We support the activities of the Group through the sales of fundamental and fine chemicals, the maintenance of containers, and the procurement of raw materials.

Overview of FY2022

Revenue decreased from the previous fiscal year due to a decrease in sales of chemical industry products.

Strategies for FY2023

By undertaking the procurement of raw materials and sales of products, we aim to make a comprehensive contribution to the Group from both production and sales activities.

In addition, through container maintenance work, we will contribute to maintaining and improving the quality and safety of the product containers that the Group supplies to customers.

Site Report

Shibukawa Plant

As a plant that is trusted by society, we place a first priority on safety and value our interactions with the people and communities around our plant.

Based on one of our slogans, “giving the highest priority to safety,” we are proactively working to reduce our environmental impact in order to achieve a sustainable society, while giving a first priority to safety. In recent years, the construction of overseas production bases has progressed, and the required role of this plant has changed from a single production base to a mother plant, that is, a plant that serves as a model in terms of production systems and technology. In order to fulfill this role, it is necessary for us to increase productivity through automation and the introduction of AI, and we also recognize that it is an important task to develop human resources that can support those overseas production bases. We will constantly strive for improvement so that we remain a plant that can be trusted by society and contribute to the development of the industry.

Taisuke Yonemura
Executive Officer;
Shibukawa Plant Manager

Location
1497, Shibukawa, Shibukawa City, Gunma, Japan

Plant area
Approx. 138,000 m^2

Number of employees
321
(as of March 31, 2023)

Certifications

ISO 9001/JQA-1009 (certified in October 1995)
A majority of the products are ISO certified.

ISO 14001/JQA-EM0438 (certified in May 1999)

ISO 45001/JQA-OH0087 (registration updated in July 2020)
OHSAS-compliant management from 2005 to 2020

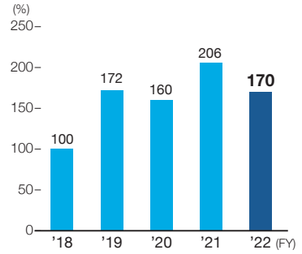
Products

<Ferrochemicals>
- Carrier
- Magnetite

<Specialty gas products>
- Carbon tetrafluoride
- Trifluoromethane
- Octafluorocyclobutane
- Nitrogen trifluoride
- Tungsten hexafluoride
- Monofluoromethane
- Hexafluoroethane
- Sulfur hexafluoride
- Carbonyl sulfide
- Fluorine gas mixture
- Difluoromethane
- Octafluoropropane
- Hexafluoro-1,3-butadiene
- Iodine pentafluoride

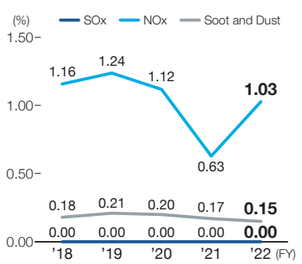
Trends in Final Disposal Amounts of Industrial Wastes

(Index with FY2018 as 100)



Trends in SOx, NOx, Soot and Dust Emissions

(Index* with FY1993 as 100)



* Emissions / plant shipment value

Mizushima Plant

Under the slogan of “building a plant that can be trusted and be proud of,” we will strive to meet the expectations of our stakeholders.

The Mizushima Plant produces fundamental chemicals and fluorochemical products. Especially for fluorochemical products, in addition to being the largest producer in Japan of lithium-ion battery electrolytes, one of the key materials important for achieving a future electric society, the plant also handles products with low global warming potential (GWP) values among fluorinated specialty gas products, which are indispensable in the production of semiconductors. With growing international environmental awareness, the plant is also playing a major role in the increasing importance of environmentally friendly products and production in Japan due to major changes in the supply chain. While maintaining good relationships with local residents and surrounding companies, we will strive to meet your expectations by aiming to be a plant that you can trust and be proud of.

Go Takikawa
Director and Executive Officer; General Manager,
New Products Development Div.; Mizushima Plant Manager

Location
4-4-8, Matsue, Kurashiki City, Okayama, Japan

Plant area
Approx. 185,000 m^2

Number of employees
229
(as of March 31, 2023)

Certifications

ISO 9001/JQA-2254 (certified in March 1998)
A majority of the products are ISO certified.

ISO 14001/JQA-EM0437 (certified in May 1999)

ISO 45001/JQA-OH0190 (registration updated in January 2020)
OSHMS-compliant management from 2006 to 2011, and OHSAS-compliant management from 2011 to 2020

Products

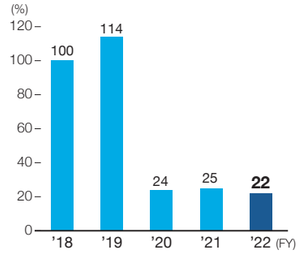
<Fundamental chemicals>
- Liquid caustic soda
- Hydrochloric acid
- Perchloroethylene
- Caustic soda flakes
- Trichloroethylene
- Sodium hypochlorite
- Vinylidene chloride

<Battery materials>
- Lithium hexafluorophosphate
- Lithium tetrafluoroborate

<Specialty gas products>
- Silicon tetrafluoride
- Organic fluorine compounds
- Chlorine trifluoride
- Hexafluoro-1,3-butadiene

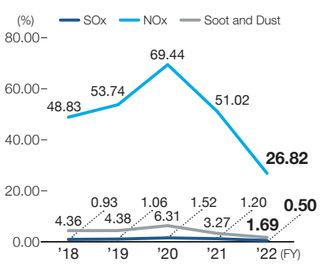
Trends in Final Disposal Amounts of Industrial Wastes

(Index with FY2018 as 100)



Trends in SOx, NOx, Soot and Dust Emissions

(Index* with FY1993 as 100)



* Emissions / plant shipment value

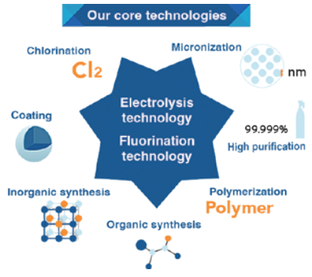
Research and Development

Go Takikawa
Director and Executive Officer
General Manager, New Products Development Div.; Mizushima Plant Manager

At the end of 2030, our vision is that "With a stable management foundation, we will provide a safe work environment with job satisfaction, support technologies that are cutting-edge on a global stage with our superior, original products, and grow to become an innovative, development-driven company to contribute to a sustainable society." Our core businesses in the semiconductor materials business and lithium-ion rechargeable battery materials business play an important role in contributing to society by creating products that are indispensable to supporting the rich lives of people.

In order to achieve further growth, we have established a system for consistently manufacturing and evaluating environmentally friendly products that meet customer and social needs. In the battery materials, we are developing technologies to recycle lithium from waste batteries and to enable the use of recovered lithium in a battery-to-battery model. Our goal is to be a company that thrives on environmental friendliness.

Research and Development Policy



Based on our core technologies of electrolysis and fluorination, we have developed and established original technologies related to chlorination, Micronization, High purification, organic/inorganic synthesis, coating, polymerization and more.

Semiconductor Materials

We are advancing the development of materials in various semiconductor fields, focusing on the development of products that significantly reduce global warming potential (GWP) and improve semiconductor processing performance. By expanding our in-house evaluation technology, we have established a material development system that meets customer needs, and we are working to establish multiple bases for development activities and open collaboration between the research and manufacturing divisions, which will lead to the early commercialization of new products. We are also developing non-PFAS products with consideration for the global environment and product safety using our fundamental technologies.

Battery Materials

In order to provide a stable supply of lithium-ion secondary battery materials, for which domestic production in Japan is increasingly important from the perspective of energy security, we are promoting the development of lithium recycling from waste lithium-ion secondary batteries ("LIBs"), and have been adopted by the New Energy and Industrial Technology Development Organization (NEDO) Support Project to Secure a Stable Supply of Specified Important Goods. Our goal is to recover electrolytes with a quality that can be reused, especially for electrolytes that require high purity. We are also developing next-generation battery materials using recycled lithium.

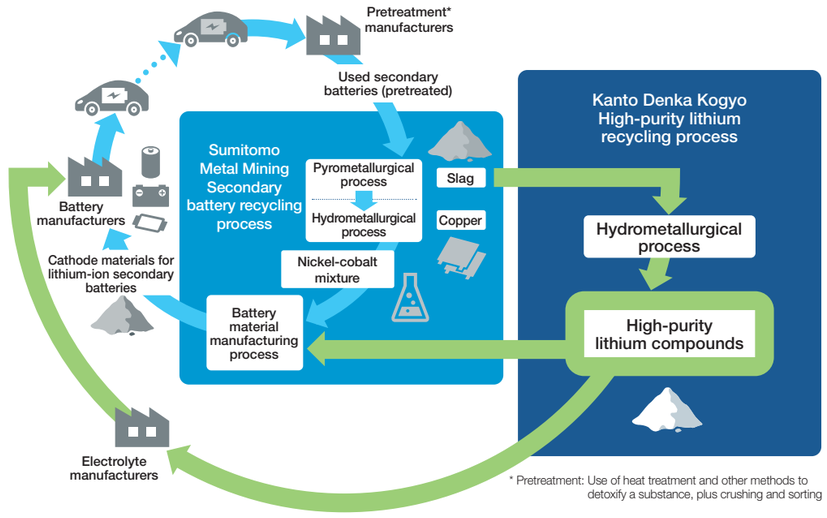
Market Research

In June 2023, we established the New Business Development Department and integrated the functions of the Market Development Department. As a result, we have established a system that enables us to quickly grasp customer and market needs and deploy them in development. In addition to collaborating with external research institutions, including universities, and promoting intellectual property activities, we will strive to gather information more proactively than ever.

Initiatives for the Effective Use of Resources

Through joint development with Sumitomo Metal Mining Co., Ltd., we have established the world's first technology to recycle lithium compounds from used LIBs with high-purity and use them horizontally in battery materials.

Process for Recycling High-Purity Lithium Compounds from Used LIBs



- Using our hydrometallurgical method, recycling generated slag containing lithium into high-purity lithium compounds that can be reused in LIBs
- Enabling a recycling system for lithium resources and contributing to the realization of a resource-recycling society

Together with Sumitomo Metal Mining Co., Ltd., we proposed and were adopted the "Development and Demonstration of a Storage Battery Recycling Process" (the "Project") for the "development of technology for storage battery recycling," which is one of the research and development items of the "Green Innovation Fund/Next-generation Storage Battery and Motor Development" project announced by the NEDO. The Green Innovation Fund project aims to achieve carbon neutrality by 2050, with the Ministry of Economy, Trade and Industry creating a two trillion yen fund for NEDO to continue to support companies committed to ambitious goals for 10 years, from research, development, and demonstration to social implementation. The "Next-generation Storage Battery and Motor Development" project aims to achieve decarbonization and industrial competitiveness in the automotive sector by conducting research and development related to high performance, resource saving, and recycling of storage batteries and motors. In the Project, we aim to create and expand a horizontal recycling business that recovers copper, nickel, cobalt, and lithium from spent LIBs using the non-ferrous metal smelting technology of Sumitomo Metal Mining Co., Ltd. and our lithium recovery technology. We will contribute to achieving a sustainable society through the realization of the Project.

Sustainability Policy and System

Sustainability Basic Policy

With the aim of achieving the SDGs (Sustainable Development Goals) adopted by the United Nations in September 2015, the Group will support the world's most advanced technologies on a global scale with its unique and superior products, and strive for sustainable development as an innovative, development-driven company. At the same time, the Group will earnestly address environmental and human rights issues in order to contribute to a sustainable society with ESG (environmental, social and governance) in mind.

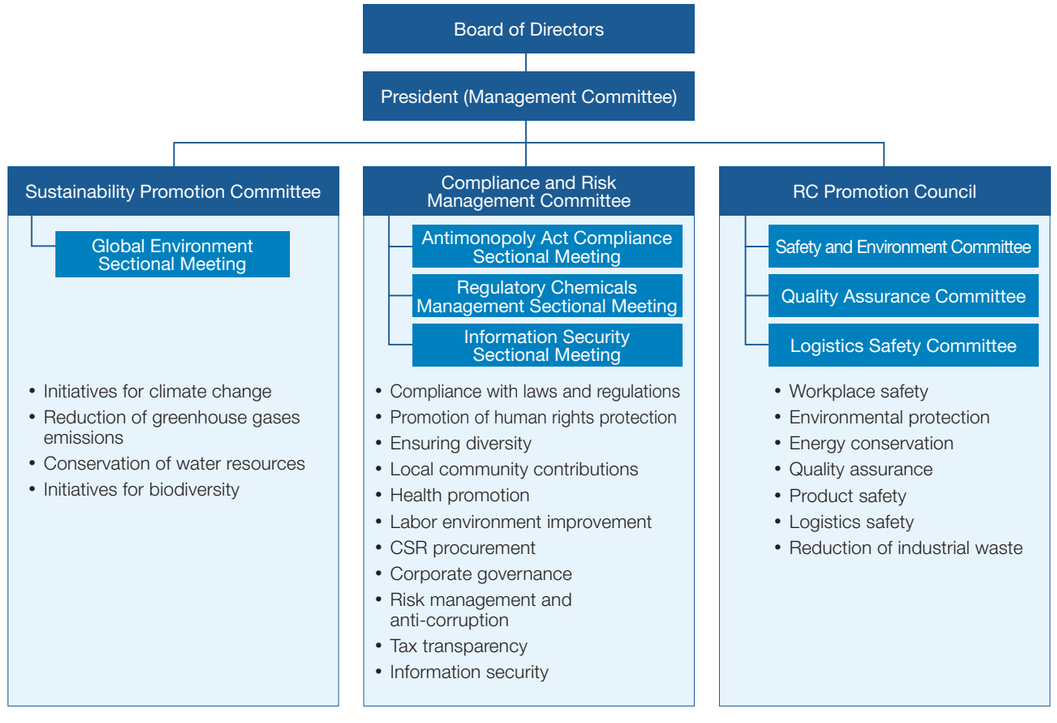
We will build a safe and rewarding work environment, promote the 3Rs (reduce, reuse, recycle) in harmony with nature, reduce the emission of environmentally hazardous substances, promote the reduction of industrial waste and the effective use of resources, increase our corporate value through activities aimed at solving social issues, and contribute to the creation of a sustainable society.

Sustainability Promotion System

The Group has placed sustainability at the core of its management policy, and has established the Sustainability Promotion Committee, chaired by the President, to promote sustainability. We will work on individual sustainability issues in cooperation with the Compliance and Risk Management Committee, also chaired by the President, and the Responsible Care (RC) Promotion Council.

In particular, we established the Global Environment Sectional Meeting under the Sustainability Promotion Committee to address important themes over the medium to long term such as the response to climate change and greenhouse gases emissions reduction, and other specific initiatives are made by each sectional meeting directly under the committee, including other issues of each committee. The committees in charge regularly report on the outline of goals, plans, and progress, and review the initiatives of each sectional meeting in response to changes in the external and internal environments, and make additions or deletions as necessary.

The contents of deliberations and decisions made by each committee are regularly reported (targeting at least twice a year) to the Board of Directors, and the approved contents are reflected in the Medium-Term Management Plan and annual plan.



Responsible Care

Responsible Care (RC) is a voluntary management activity carried out globally by companies in the chemical industry based on the principles of self-determination and self-responsibility. It involves implementing and improving safety, health, and environmental measures throughout the entire life cycle from the development to the manufacturing, distribution, use, and final disposal of chemical substances.

We have been a member of the Responsible Care Committee of the Japan Chemical Industry Association since its establishment, and we are actively promoting RC activities.

RC Philosophy

Recognizing that the preservation of the global environment is one of the common challenges facing humankind, we will, based on our own responsibility in our corporate activities, give consideration to the preservation of the environment and safety throughout the entire life cycle of our products, from development through manufacturing, distribution, use, and disposal.

RC Basic Policy

1. Carry out comprehensive environmental and safety management in such areas as environmental protection, operational safety and disaster prevention, occupational health and safety, chemical product safety, logistics safety, and international trade safety.
2. Ensure the safety of employees and areas in the vicinity of company facilities by working to achieve zero accidents and zero disasters.
3. Make efforts to save energy and resources and reduce the amount of industrial waste generated as a result of operations.
4. Ensure the development and introduction of products and manufacturing processes that take environmental and safety issues into account.
5. Strictly comply with laws, regulations and agreements related to the environment and safety, as well as establish and meet our own stricter voluntary standards in these areas.
6. Promote logistics safety and safe chemical handling for customers.
7. Carry out the Environmental and Safety Audits.
8. Collect information on the environment and safety related to products, and thoroughly disseminate the information among employees and provide information to customers.
9. Take care to ensure the protection of the environment and safety in overseas operations, technology transfers and the international trade of chemical products.
10. Promote mutual understanding of risk by widely publicizing the details and results of our environmental and safety activities to local communities, investors, related organizations and others through environmental reports and other materials.

Audit System

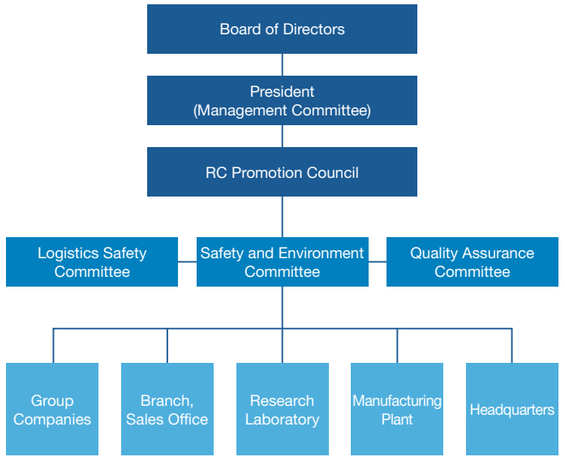
Our RC audit system consists of three types of auditing: self-auditing, in which each business site evaluates its own performance; site auditing, which is conducted by committees; and overall auditing, in which the RC Promotion Council discusses and assesses the results of site audits. Continuous improvements are fostered, as self-auditing results are reflected in the next RC objectives and plans, while overall auditing results are incorporated into management policies, objectives, and implementation plans for the following fiscal year. Since FY2018, site auditing conducted by the Safety and Environment Committee has been integrated with that conducted by the Quality Assurance Committee. We have introduced audit preparatory meetings and audit follow-up to implement an audit system that pays more attention to the PDCA process.

RC Promotion System

In order to address RC, we have established the RC Promotion Council chaired by the President, and specific initiatives are carried out by the Logistics Safety Committee, the Safety and Environment Committee, and the Quality Assurance Committee, which are responsible for individual issues.

With regard to individual issues related to environmental conservation, occupational safety, product safety, and logistics safety, each committee regularly reports on the overview of targets, plans, and progress, in addition to reviewing changes in the external and internal environments, and makes additions or deletions as necessary.

The RC Promotion Council deliberates on the formulation of short-term (fiscal year) and medium-term policies, as well as the initiatives of each committee; the contents of deliberations are regularly reported (targeting at least twice a year) to the Board of Directors, and the approved contents are reflected in the Medium-Term Management Plan and annual plan.



Response to Climate Change: Disclosures Based on the TCFD's Recommendations

We endorsed the TCFD's recommendations in May 2022. After analyzing scenarios in accordance with the TCFD's recommendations and examining countermeasures based on those analyzes, we will continue to disclose information on our efforts to tackle climate change, and contribute to the realization of a more resilient management and a sustainable international society.

The Group has been striving to preserve the global environment through the development of environmentally friendly products and the reduction of greenhouse gas emissions. In our 12th Medium-Term Management Plan, we aim to be an innovative, development-driven company to contribute to a sustainable society by supporting technologies that are cutting-edge on a global stage with our superior, original products.

Governance

To address climate change, the Group has established a Global Environment Sectional Meeting under the Sustainability Promotion Committee, which deliberates and decides on climate change initiatives, including the reduction of greenhouse gas emissions. The contents of deliberations and decisions are regularly reported (targeting at least twice a year) to the Board of Directors, and the approved contents are reflected in the Medium-Term Management Plan and annual plan. In addition, the progress of these initiatives is monitored and managed by the Sustainability Promotion Committee, and the progress is continuously monitored.

P.23 Sustainability Promotion System

Strategy

The Sustainability Promotion Committee and the Global Environment Sectional Meeting take the lead in identifying risks and opportunities from climate change and assessing the degree of impact on business. In assessing risks and opportunities, we conduct scenario analysis using multiple scenarios published by the International Energy Agency (IEA) and the Intergovernmental Panel on Climate Change (IPCC). In the future, the following two worldviews will be assumed in the analysis and the impact as of 2030 will be considered.

Scenarios Set in Scenario Analyses and Sources

2˚C (1.5˚C) Scenario	4˚C Scenario
This scenario assumes that the impacts of policies and regulations will grow, resulting in more proactive efforts toward the transition to a decarbonized society so that the increase in average temperature will be limited to less than 2˚C by 2100 compared to the Industrial Revolution.	This scenario assumes that governments' climate change countermeasures will not go beyond current policies and regulations, and that the average temperature will rise by about 4˚C in 2100 compared to the Industrial Revolution, resulting in greater physical impacts such as abnormal weather disasters.
(Reference scenario) IPCC Fifth Assessment Report (AR5) RCP 2.6 IEA WEO2021 SDS, NZE2050	(Reference scenario) IPCC Fifth Assessment Report (AR5) RCP 8.5 IEA WEO2021 STEPS

2˚C (1.5˚C) Scenario Analysis

The analysis in the 2˚C (1.5˚C) scenario assumes that various policies and regulations will be introduced to transition to a decarbonized society, and the Group believes that the financial impact of the introduction of a carbon tax and the decline in sales of our products due to the decline in demand for products with a high global warming potential (high GWP products) may pose a risk.

On the other hand, due to the growing awareness of climate change, it is expected that the market for lithium-ion batteries, which are essential for electric vehicles (EVs) that are part of the realization of a decarbonized society, will expand, and along with that, the demand for materials essential for lithium-ion secondary batteries supplied by us will also increase, which we believe can be a great opportunity. Going forward, we will evaluate these risks and opportunities from both qualitative and quantitative perspectives and consider countermeasures.

Risks and Opportunities in Each Scenario

Factors	Time Horizon	Events	Classification	Response Measures
Carbon pricing	Long-term	Increased costs related to business operations due to the introduction of carbon pricing, including carbon taxes	Risk	• Energy-saving measures: Foster improvements in the intensity of our high energy-consuming facilities and promote the effective use of excess hydrogen (updating facilities, adopting EMS) • Reduce GHG emissions (adopt renewable energy and install detoxification equipment)
Changes in energy costs	Medium to long-term	Increased costs for purchasing electricity associated with the transition to renewable energy	Risk	• Energy-saving measures: Foster improvements in the intensity of our high energy-consuming facilities and promote the effective use of excess hydrogen (updating facilities, adopting EMS) • Transition to renewable energy
		Increased transportation costs due to soaring fossil fuel prices	Risk	• Modal shift
Changes in demand for environmentally friendly products	Medium to long-term	Decreased demand for high GWP products	Risk	• Promote the development of environmentally friendly products
		Growth of lithium-ion battery market	Opportunity	• Strengthen capacity to produce battery materials in response to market growth
		Increased demand for environmentally friendly products including low GWP gas products, etc.	Opportunity	• Promote the development of environmentally friendly products • Strengthen production capacity to address the growing demand for environmentally friendly products
Changes in raw materials costs	Medium to long-term	Rising procurement costs caused by complex factors	Risk	• Promote of recycling

<Definition of time horizons> Short-term: Less than 3 years; Medium-term: 3 years or more to less than 5 years; Long-term: 5 years or more

4˚C Scenario Analysis

In the analysis of the 4˚C scenario, it is assumed that abnormal weather events will become more frequent and severe, with the most significant risk for our Group being flood damage at domestic bases. In addition, the Group considers related losses caused by the suspension of business operations at its bases as a risk. Going forward, we will evaluate these risks from both qualitative and quantitative perspectives and consider countermeasures.

Risks and Opportunities in Each Scenario

Factors	Time Horizon	Events	Classification	Response Measures
Severity of extreme weather events	Short-term	Direct damages to the Company's bases caused by flooding or tidal surge	Risk	• Develop a risk management structure • BCP measures • Decentralization of production bases
		Indirect damages to the Company's bases caused by flooding or tidal surge (Damages caused by suspension of operations due to damaged bases)		
Drought	Long-term	Further shortage of semiconductors resulting from droughts, leading to reduced sales opportunities of specialty gases and diminished sales	Risk	• Sale of speciality gas to areas other than semiconductors • Strengthen competitiveness
		If the Shibukawa Plant consumes large amounts of industrial water, a water shortage could affect production activities, leading to diminished sales on reduced production capacity		• R&D and investment to enhance water usage efficiency

<Definition of time horizons> Short-term: Less than 3 years; Medium-term: 3 years or more to less than 5 years; Long-term: 5 years or more

Risk Management

In responding to climate change, the Sustainability Promotion Committee and the Global Environment Sectional Meeting clarify anticipated climate change risks, and then evaluate risks and opportunities using scenario analysis and other methods. In addition, we will respond to risks related to climate change measures such as energy conservation measures and other important ESG issues in cooperation with other committees as necessary. The Compliance and Risk Management Committee is in charge of working environment and governance, while the RC Promotion Council is in charge of environmental measures such as quality assurance and waste reduction, and continuously collects information and manages risks. The content of deliberations is reported to the Board of Directors on a regular basis, and the countermeasures discussed are reflected in business activities and risk management is carried out.

P.23 Sustainability Promotion System, P.38 Governance

Indicators and Targets

Existing Initiatives

We have been working to reduce greenhouse gas emissions from non-energy sources since 2009 with the introduction of abatement equipment, and have made significant progress. We are also working to reduce emissions of greenhouse gases from energy sources by improving production efficiency.

P.29 Response to Climate Change

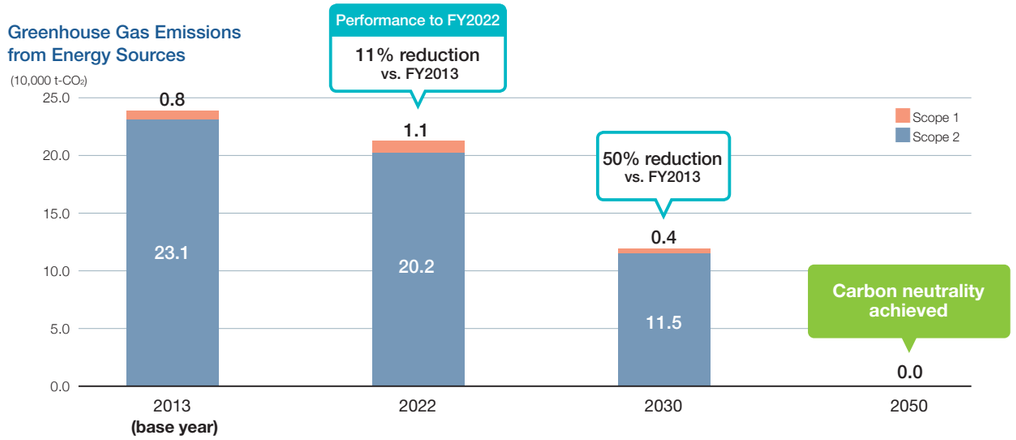
One of the key strategies of our 12th Medium-Term Management Plan "Dominate 1000" since FY2022 is to enhance social value, and we have been promoting sustainability activities, reducing energy-intensive products, and strengthening our commitment to decarbonization and recycling.

In order to contribute to the creation of a sustainable society, we have set a new long-term target of reducing greenhouse gas emissions from energy sources (Scope 1 and Scope 2 energy sources) by 50% by FY2030 as compared to FY2013, and accelerate the reduction of greenhouse gas emissions with the aim of achieving carbon neutrality by 2050.

Reduction Targets

2030 50% reduction vs. FY2013 **2050** Targeting carbon neutrality (virtually zero emissions)

Greenhouse Gas Emissions from Energy Sources



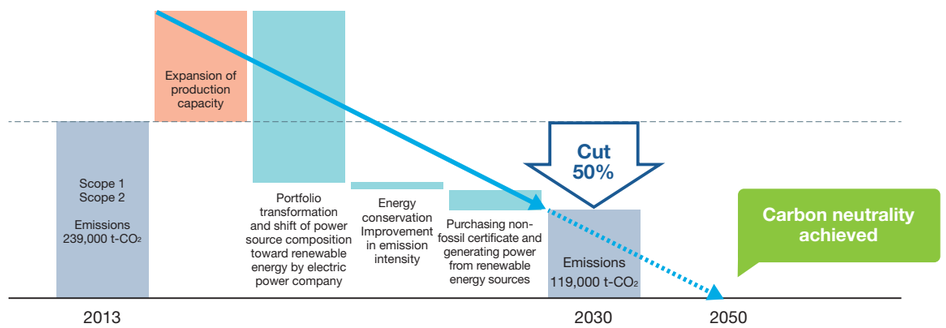
Vision and Major Initiatives for 2030

To "accelerate the expansion of precision chemicals by further advancing fine chemicals, promote the development of technology for greenhouse gas emission reduction and decarbonization, and become an innovative, development-driven company that contributes to a sustainable society" is our vision, and we will implement the following measures as our main initiatives.

Major initiative policies

(1) Improve greenhouse gas emission intensity while achieving growth in the fine chemicals business
(2) Introduction of renewable energy
(3) Using the product mix to reduce greenhouse gas emissions
(4) Promote the development of environmentally friendly products that contribute to Scope 3 reductions

Greenhouse Gas Emissions from Energy Sources Reduction Roadmap



Environment

Response to Climate Change

Basic Approach

In support of Agenda 21: "Global Plan of Action for Sustainable Development," adopted at the United Nations Conference on Environment and Development, the Group is promoting responsible care (RC) activities, a voluntary initiative to implement and improve comprehensive safety measures for chemical substances.

In May 2022, we endorsed the Task Force on Climate-related Financial Disclosures (TCFD) recommendations and are promoting the disclosure of information related to the conservation of the global environment, such as greenhouse gas emissions.

It is the responsibility of companies to ensure that their corporate activities do not affect the surrounding region and the global environment, and we will contribute to the realization of a sustainable society by identifying risks and opportunities related to climate change, conducting voluntary management activities to make continuous improvements, and actively disclosing information.

The 9th RC Action Targets

Target	Result
Reduce CO_2 equivalent greenhouse gas (GHG) emissions by **6**% compared to FY2021 (by FY2024) (2% reduction per year)	**12.1**% reduction in FY2022 compared to FY2021 (86.0% reduction compared to FY2013)

Reduction of Greenhouse Gas Emissions

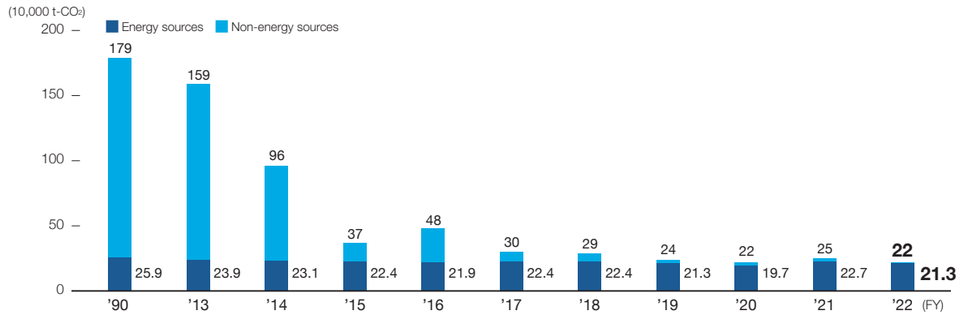
● Non-energy sources Scope1

We manufacture various compounds from fluorine, chlorine, and other substances obtained through electrolysis, and we consume a large amount of electricity in our production activities. In addition, there are several products with high global warming potential (GWP) in the conventional specialty gas product line, and the waste discharged from the process associated with the manufacture of these products accounted for the majority of our Scope 1 non-energy source greenhouse gas emissions at the beginning of RC activities. Therefore, in the early stages of RC, we focused on reducing mainly non-energy source greenhouse gas emissions.

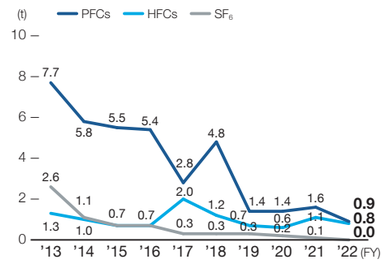
In order to respond to the above situation, we have continuously made improvements to reduce emissions from our processes through RC activities. In addition, since 2009, we have introduced abatement equipment to significantly reduce greenhouse gases emitted from our manufacturing processes (PFCs, HFCs, SF_6, and NF_3). As a result, we achieved a 99.3% reduction (CO_2 equivalent) in FY2022 compared to FY2013.

Abatement equipment for greenhouse gas

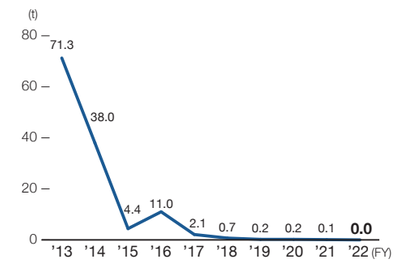
Greenhouse Gas Emissions



Emissions of PFCs, HFCs, and SF_6



Emissions of NF_3



● Energy sources for Scope 1 and Scope 2

For energy sources greenhouse gas emissions, while energy consumption was reduced through energy conservation and process improvement, energy consumption increased due to expansion of production capacity and other factors. As a result, energy sources greenhouse gas emissions remained constant.

Furthermore, in order to proactively address climate change, we set a new reduction target for energy sources greenhouse gas in 2022, aiming to achieve carbon neutrality by 2050, and set a target of reducing energy sources greenhouse gas emissions by 50% by 2030 compared to FY2013*. We have launched new initiatives, including the introduction of renewable energy and portfolio transformation.

In FY2022, we reduced energy sources greenhouse gas emissions by 11.1% compared to FY2013 by improving production efficiency. As a result, we have achieved an overall reduction of 86.0% (CO_2 equivalent) in greenhouse gas emissions.

* We had set a target of reducing emissions by 30% by FY2030 compared to FY2013, but revised the target upward in November 2023.

● Overall supply chain for Scope 3

As part of our response to climate change, we have calculated the amount of greenhouse gas emissions throughout the supply chain (Scope 3), from the purchase of raw materials to their use and disposal by customers, and also are working to reduce greenhouse gas emissions throughout the supply chain.

P.44 Scope 3 Emissions by Category in FY2022

The 9th RC Action Targets

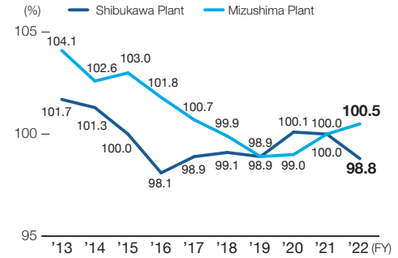
Target	Result
Reduce energy consumption per plant production volume (crude oil equivalent) by **3**% compared to FY2021 (by FY2024) (1% reduction per year)	FY2022 results compared to FY2021 Shibukawa Plant **1.3**% reduction Mizushima Plant **0.5**% increase

Improvement of Energy Consumption per Unit of Production

We continue to implement proactive activities such as improving power-hungry facilities and reducing steam intensity. In FY2022, intensity at the Shibukawa Plant improved through efficient operation with reduced operating load, and at the Mizushima Plant, intensity deteriorated due to the impact of large fluctuations in the utilization rate of electrolysis facilities.

Trends in Energy Consumption per Unit of Production

(Index with FY2021 as 100)



Introduction of solar power generation equipment at domestic manufacturing plants

In FY2023, we installed solar power generation equipment at our Shibukawa and Mizushima Plants. We will further accelerate the reduction of greenhouse gas emissions by creating and using renewable energy while promoting energy conservation and improvements of energy per unit, and aim to achieve carbon neutrality by 2050.

Reduction of Pollutant Emissions and Effective Use of Resources

Basic Approach

We handle a wide variety of chemical substances, which we manage thoroughly in order to reduce environmental risks. We also promote the 3Rs (Reduce, Reuse, Recycle) to promote waste reduction and the promote effective use of resources.

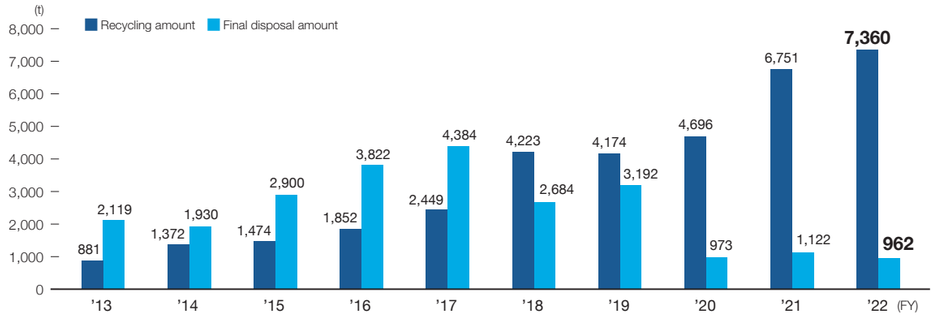
The 9th RC Action Targets	
Target	**Result**
Reduce final disposal of industrial waste by **9**% compared to FY2021 (by FY2024) by improving the recycling rate (3% reduction per year)	**14.3**% reduction in FY2022 compared to FY2021

Reduction of the Final Disposal of Industrial Waste

We have reduced the final disposal of industrial waste by promoting the recycling of waste generated from FY2018 onward. In FY2022, industrial waste emissions increased by 5.9% compared to the previous year due to increased production, but we were able to increase the amount of recycling and reduce the final disposal amount by 14.3% compared to the previous year.

Going forward, we will consider specific measures to recover resources from waste, and we will work to reduce waste itself by building facilities for this purpose.

Amount of Industrial Waste Treated



The 9th RC Action Targets	
Target	**Result**
Reduce emissions of PRTR designated chemical substances under the JCIA method by **3**% compared to FY2021 (by FY2024) (1% reduction per year)	**13.7**% reduction in FY2022 compared to FY2021

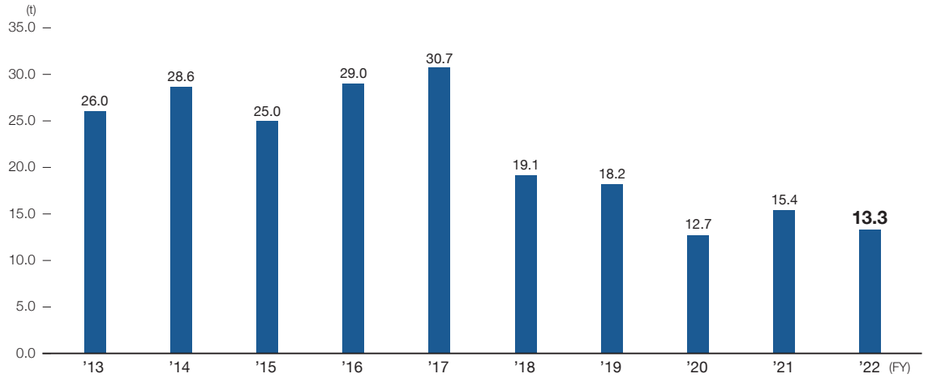
Reduction of Emissions of PRTR Target Substances

In accordance with the Act on the Assessment of Releases of Specified Chemical Substances in the Environment and the Promotion of Management Improvement, businesses are obligated to monitor and report to the government the amount of chemical substances released or transferred (Pollutant Release and Transfer Register (PRTR) system), and Kanto Denka Kogyo uses the JCIA method* to manage the chemical substances we handle. In FY2022, the number of PRTR target substances that we handled was 29, and the amount handled decreased by 24.9% to 187,000 tons due to the reduction in the production of chlorine-based solvents, and emissions into the environment decreased by 13.7% to 13.3 tons. This equates to 71 grams of unit emissions per ton handled.

* The JCIA method covers a greater number of substances than PRTR target substances under the law and requires more stringent management.

Abatement equipment for environmental pollutants

Emissions of PRTR Target Substances



Reduction of Emissions of Air Pollutants

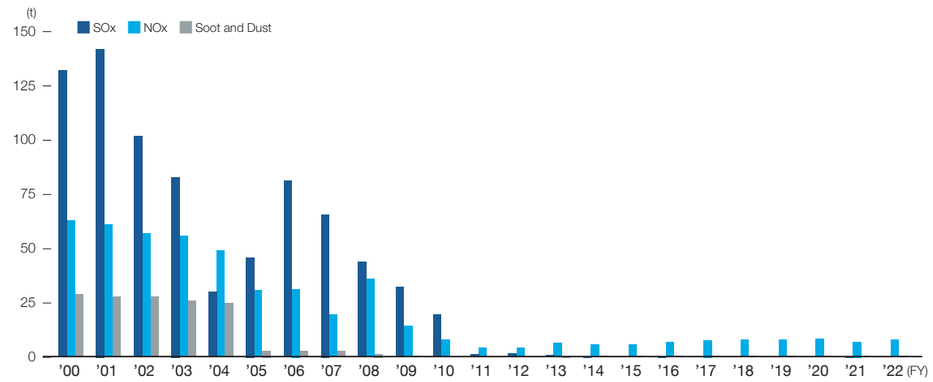
We are working to reduce the emissions of atmospheric pollutants, namely sulfuroxides (SOx), nitrogen oxides (NOx), soot and dust through fuel conversion and stable operation of abatement equipment. Going forward, we will continue to enhance facility management and operations management so that we can maintain low emissions levels.

Emissions of Air Pollutants

(t)

	FY2020	FY2021	FY2022
SOx	0.37	0.41	**0.28**
NOx	8.30	7.11	**8.21**
Soot and Dust	0.71	0.58	**0.53**

Emissions of Air Pollutants



Reduction of Water Pollutant Emissions

To prevent environmental impact, we conduct thorough wastewater management based on in-house standards that are stricter than those stipulated by environmental laws and regulations.

Amount of Pollutants in Wastewater

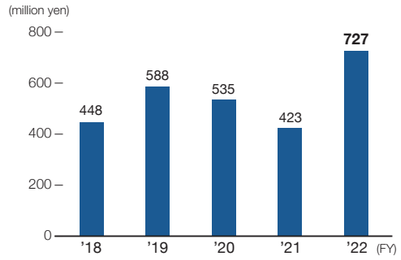
(t)

	FY2020	FY2021	FY2022
COD	28.44	22.57	**23.73**
Total nitrogen	37.85	22.49	**23.76**
Total phosphorus	0.92	0.92	**0.92**

Investment in Environmental Measures

To conserve the environment, we continuously invest in necessary environmental measures such as promoting resource and energy saving, and reducing greenhouse gas emissions, PRTR target substances, and the final disposal of industrial wastes.

Trends in Investment in Environmental Measures



Conservation of Water Resources

Basic Approach

Our manufacturing plants, which are located in Shibukawa City in Gunma Prefecture and Kurashiki City in Okayama Prefecture, have been confirmed as having low water risk by Aqueduct Water Risk Atlas of World Resources Institute (WRI) and do not operate in water-stressed areas. We are working to reduce our environmental impact through thorough wastewater management, as well as promoting the use of recycled cooling water to reduce water intake.

There have been no violations of permits, standards, or regulations regarding water quality or quantity for over 10 years.

Initiatives for Domestic Manufacturing Plants

Shibukawa Plant

With the exception of a few byproducts, the products manufactured at the Shibukawa Plant do not contain any water, and the water withdrawn is mainly used for cooling and heating in the manufacturing process, and almost all of it is discharged into rivers under strict water quality control by reducing the amount of water withdrawn through recycling.

Mizushima Plant

The Mizushima Plant, like the Shibukawa Plant, uses most of its industrial water for cooling its facilities.

Cooling water is circulated using cooling towers to reduce the amount of water taken.

The Mizushima Plant is a member of the Okayama Prefecture Industrial Water Council, which promotes the sound development of the industrial water supply business in Okayama Prefecture.

Water Intake at Shibukawa Plant

(1,000 m³)

		FY2020	FY2021	FY2022
Water intake	Service water	300	306	**327**
	Industrial water (rivers)	11,384	11,447	**11,153**
	Ground water	1,279	1,279	**888**
	Total	12,963	13,033	**12,367**

Water Intake and Discharge at Mizushima Plant

(1,000 m³)

		FY2020	FY2021	FY2022
Water intake	Service water	42	48	**60**
	Industrial water (rivers)	843	953	**987**
	Total	885	1,001	**1,047**
Water discharge (ocean)		829	903	**950**
Water consumption volume*		56	98	**97**

* Water consumption volume = water intake - water discharge

Conservation of Biodiversity

Basic Approach

We believe that biodiversity initiatives are important for the realization of a sustainable society.

Initiatives for Domestic Manufacturing Plants

At the Shibukawa Plant, we participate in the activities of the NPO Shibukawa Regional Manufacturing Council, which works to beautify the local environment and prevent global warming by growing flowers and greenery such as hydrangeas, the flower of Shibukawa City. In FY2022, a total of 44 people participated in environmental beautification activities for 12 days, although some activities were restricted due to the spread of COVID-19. In addition, we participate in activities held twice a year to conserve woodlands and plant trees in the local forest adjacent to Onoike Ajisai Park, and at the Mizushima Plant, we participate in efforts to secure local biodiversity through donations to a fishing cooperative.

S Social

Respect for Human Rights

As a good member of society, we will fulfill our corporate social responsibility and contribute to the realization of a sustainable society by building good relationships with our stakeholders.

The Group supports and respects the International Code of Conduct on Human Rights, and the Board of Directors has established the Kanto Denka Kogyo Group Human Rights Policy on respect for human rights, workers' rights, prevention of human rights violations, education, and response to human rights violations, and will promote actions and respect for human rights in accordance with the principles of this policy for business partners and customers.

"Kanto Denka Kogyo Group Human Rights Policy" Page
https://www.kantodenka.co.jp/english/sustainability/social/human_rights.html

Initiatives for Employees

Recruitment of Diverse Human Resources

Basic Approach

In this rapidly changing business environment, we believe that the key to future corporate growth lies in securing diverse human resources and developing and appointing them and working now to recruit, develop, and appoint diverse human resources, including women, foreign nationals, mid-career hires, and people with disabilities, and improve the internal environment.

Ensuring and Nurturing Diversity

In the past, recruitment of main career track positions was biased toward men, so the ratio of female managers is now extremely small. Currently, we are focusing on hiring women, recruiting women for main career track positions and training them as managers.

In addition to hiring non-Japanese and mid-career employees on an ongoing basis, we established the Business Support Department in June 2021 to promote the employment of people with disabilities and improve the internal environment.

In order to ensure that employees work with high motivation regardless of age and that the company treats them accordingly, we have extended the retirement age to 65 years old from FY2022 while maintaining the salary system. We also have a system for re-employment until the age of 70 if such experience is necessary.

Target

(1) **Double** the ratio (2%) in FY2020 of women in management positions by 2030.

(2) To achieve the above, aim for a ratio of women to new graduates in main career track positions of **30%** or more.

- Ratio of Female Managers
  1.4% (as of the end of March 2023)
- Ratio of Female Main Career Track New Graduates
  26% (FY2018-FY2022)
- Employment Rate of People with Disabilities
  2.03% (as of June 1, 2023)

Improvement of Internal Environment (Education and Training)

Basic Approach

In addition to creating a safe and rewarding work environment, we are working to ensure a workplace environment that respects human rights and is free from harassment and other misconduct.

Initiatives to Promote Health

By conducting medical examinations and supporting smoking cessation for employees, we ensure their physical and mental health and create a safe and clean work environment.

In addition, we are focusing on physical as well as mental health, and have established a Mental and Physical Health Contact Point and assigned a mental health representative at each business site. We conduct an annual stress check for all employees, and the results of workplace analyses are fed back to supervisors and used for workplace management.

Employee Training System

Regardless of the type of job, we provide training to acquire the skills and knowledge necessary to carry out the roles required of each level of our company's employees, and to improve the overall level of the Company. In June 2023, we established the Human Resource Development Department to support and develop employees who continue to study tirelessly.

Work-Life Balance

We have introduced a flextime system, and are promoting the reduction of overtime work, the use of paid leave, and the use by male employees of childcare leave in order to achieve a better work-life balance for our employees.

Target
(1) Annual paid leave acquisition rate **80**% or more (2) Childcare leave acquisition rate Women: **90**% or more, Men: **1** person or more

- Annual paid leave acquisition rate **78.1**% (FY2022)
- Childcare leave acquisition Women: **100**%; Men: **5** persons (FY2022)

Internal Environment Improvement (Safety Initiatives)

Basic Approach

Based on our slogan, "giving the highest priority to safety," we have established our own Safety Behavior Criteria, heightened the safety awareness of all workers working in on-site, and engaged in safety activities with the participation of all employees with the aim of achieving zero accidents and zero disasters.

"Safety Behavior Criteria" Page

https://www.kantodenka.co.jp/english/sustainability/social/safety.html

We have established the Safety and Environment Committee to implement voluntary management activities related to the environment and safety on a company-wide basis.

In accordance with the Industrial Safety and Health Act, each business site holds monthly meetings of the Health and Safety Committee, etc. to discuss matters related to health and safety, and to work together with labor and management to improve health and safety.

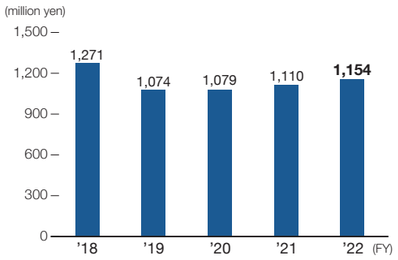
In addition, the President and other company management and labor union representatives hold labor-management meetings twice a year to exchange opinions.

Investment in Safety Measures

Investments are focused on building a foundation to support safety measures. We continue to invest in safety in line with the "giving the highest priority to safety" principle. We are committed to improving working environments and systematically upgrading facilities.

The 9th RC Action Targets	
Target	**Result**
Zero major occupational accidents (zero occupational accidents by employees and partner company contractors), and zero equipment accidents	In FY2022, there was one major occupational accident and zero equipment accidents

Trends in Investment in Safety Measures



Minister of Economy, Trade and Industry Award for High-Pressure Gas Safety (Excellent Production Facility)

The Mizushima Plant received the FY2022 Minister's Award for High-Pressure Gas Safety (Excellent Production Facility) from the Minister of Economy, Trade and Industry.

With this award, the Mizushima Plant was recognized for its outstanding safety measures in relation to the structure, equipment, and manufacturing methods of each facility in the production of high-pressure gas.

Internal Safety Education

At the Shibukawa and Mizushima plants, we constantly conduct meetings before work begins and carry out safety training according to the work content, and strive to eliminate unsafe conditions and behaviors.

By experiencing dangerous situations in safety with this risk awareness equipment installed at both plants, it is possible to accumulate such knowledge and experience. In addition, we recommend active participation in not only education on high-altitude work and practical methods for pointing and calling, but also external safety and health training sessions as well as the training of KYT and RST trainers*.

* KYT: "Kiken Yochi Training" (training to predict risk)
RST: "Rodosho (former Ministry of Labour) Safety and Health Education Trainer"

Risk experience training on overcurrent

Implementation of Various Training

Every year, we conduct joint disaster prevention drills with the public fire brigade, as well as emergency call drills, safety confirmation drills, evacuation drills, fire drills, and emergency response drills for each department to prepare for emergency situations.

Joint disaster prevention drill

Interaction with the Local Community

Basic Approach

We believe that it is essential for the stable operation of our plants that we contribute to society as a member of the local community and earn the trust of the local residents. We regularly hold information exchange meetings to explain our disaster prevention and environmental initiatives and to gain their understanding of our plant operations.

Cooperation with Local Communities

Both the Shibukawa and Mizushima plants participate in crime prevention associations and safe driving managers' councils, and work with the police to maintain public safety and traffic safety in the community. In addition, in order to improve the environment around the plants, regular cleaning activities are carried out by employees mainly in the General Affairs Section.

Clean-up activities around the Mizushima Plant

Initiatives for Business Partners

Quality Assurance

Basic Approach

In order to provide the quality and safety required by our customers, we will develop human resources with a higher awareness of quality, and implement improvements in quality, productivity, and operational reliability through the participation of all employees.

We have established a Quality Assurance Committee to fully understand the significance and purpose of quality assurance throughout the company and to maintain close communication between departments.

The Shibukawa and Mizushima plants have acquired ISO9001 certification, which is the foundation of our quality assurance system, and have been audited by an auditing agency to verify the validity and manage our quality management system.

Introduction of Cutting-edge Analysis Technologies

We are proactively investing in the adoption of cutting-edge analysis technologies, implementing high-sensitivity analytical instruments to improve analytical accuracy, automating analytical work in order to assess high-quality products more correctly and in a more multi-faceted manner, and testing new analysis technologies.

We also focus on quality education, and in addition to internal education and training, we have analysis engineers actively participate in seminars by external specialized organizations in order to acquire and hone skills in advanced technologies.

Supply Chain

Basic Approach

In order to gain the trust of society through sustainability promotion activities and to contribute to the creation of a sustainable society, we also promote sustainable procurement in our purchasing activities.

Kanto Denka Kogyo Purchasing Guidelines

In addition to prioritizing transactions with suppliers that meet our standards, we have formulated the Kanto Denka Kogyo Purchasing Guidelines, and aim to raise the level of the entire supply chain by sharing values with suppliers and improving activities to realize a sustainable society.

In addition, we will perform face-to-face audits to provide an opportunity for mutual growth through active exchange of opinions and information sharing.

"Kanto Denka Kogyo Purchasing Policy" Page
https://www.kantodenka.co.jp/english/sustainability/social/supply_chain.html

Logistics Safety

Basic Approach

As part of our environmental safety measures, we promote comprehensive logistics-related environmental and safety management to protect the safety, health and environment of our employees and citizens. We have established the Logistics Safety Committee to ensure the safety of logistics throughout the company, and have established the Distribution Safety Sectional Meeting consisting of our company and logistics companies in both the Shibukawa and Mizushima regions as a place for collaboration with logistics companies.

Training session on safe cargo handling operations

Cooperation with Logistics Companies and External Disaster Prevention Organizations

In the Distribution Safety Sectional Meeting, as a place for mutual growth between logistics companies and the Company, we actively exchange opinions and share information for the safe and secure transportation of products. We also hold on-site training sessions on safe cargo handling and joint safety patrols of logistics facilities in our plants, and contribute to the improvement of logistics quality.

In addition, in order to reduce risks in the transportation process of our products and to ensure comprehensive safety in logistics, we have established a system to promptly respond to leaks and fires during transportation of raw materials and products in cooperation with external disaster prevention organizations.

Energy Conservation Measures in Logistics

We are working to reduce our environmental impact through improving efficiency and energy conservation in logistics by promoting modal shifts, reducing the number of transport times by increasing the size of transport containers, and introducing container round use, which promotes the round trip use of import and export cargo containers.

G Governance

Basic Approach

Our corporate goal, to "contribute to the creation of a sustainable society while enhancing corporate value," is the basis of our corporate philosophy, and to achieve this goal, we are working to build good relationships with our stakeholders, including shareholders, local communities, users, and employees, and are committed to improving our corporate governance.

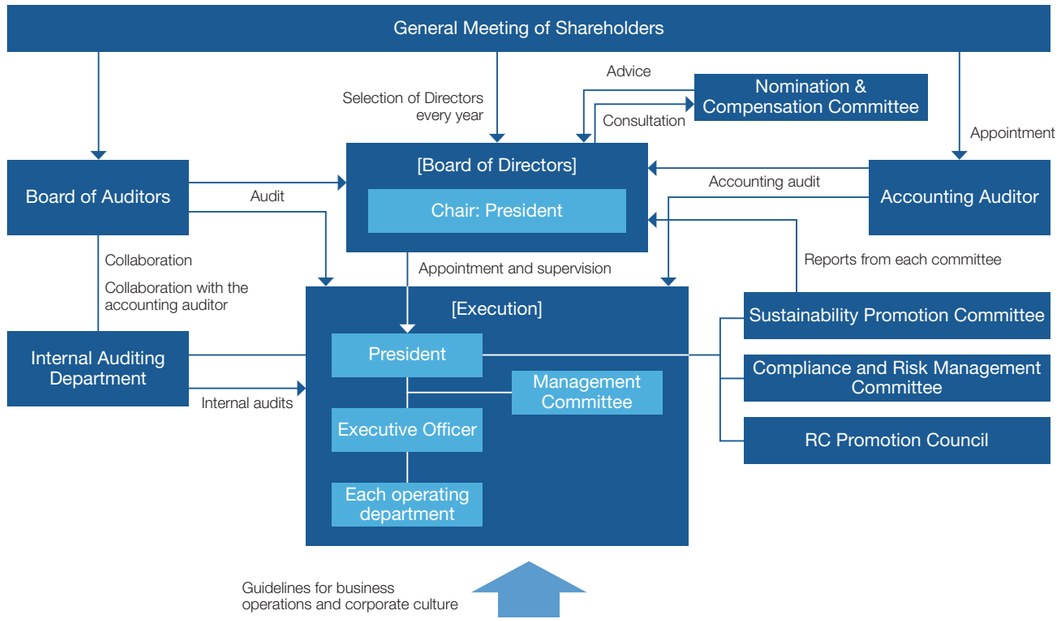
Outline of the Corporate Governance System

The Company holds a regular meeting of the Board of Directors once a month to make decisions on important matters and supervise the execution of duties by Directors. In order to further strengthen the functions of the Board of Directors and improve management efficiency, the Management Committee, which is attended by the Directors and Executive Officers who execute the Company's business, meets once a month to flexibly make decisions on basic and important matters related to business execution.

The Compliance and Risk Management Committee, chaired by the President and with the participation of outside attorneys, has been established as an organization to oversee overall compliance. Each Group company has appointed a compliance promotion officer to ensure collaboration. In addition, the Kanto Denka Kogyo Group Compliance Manual has been formulated as a code of conduct for officers and employees, and all officers and employees are thoroughly familiarized with it, and a consultation and reporting system for compliance has been established. The Committee also manages antitrust laws and strategic materials.

As for internal audits, the RC Promotion Council, chaired by the President, conducts audits in the areas of safety and health, environment, product safety, and logistics, while the Internal Auditing Department conducts internal audits of overall operations.

Corporate Governance System Diagram



Management philosophy and Principles of Conduct that translate the philosophy into concrete actions

Status of Auditors and Audits by Auditors

The Company has adopted a company with auditors system consisting of four Auditors, two of whom are Outside Auditors.

The Board of Auditors consists of four members: two full-time Auditors (one of whom has expertise in finance and accounting) and two part-time Auditors, and regularly reports and discusses important matters related to auditing. In order to ensure the effectiveness of audits, full-time Auditors attend the Management Committee and other important meetings to ensure a system for auditing the execution of duties by Directors.

In addition, the Auditors receive explanations on the contents of accounting audits from the Internal Auditing Department and other internal audit departments as well as Ernst & Young ShinNihon LLC, and cooperate with them by exchanging information.

Internal Reporting System

Officers and employees are obliged to report any violations of compliance within the Company. The parties reported to are the General Manager of the Legal & General Affairs Department, the General Manager of the Personnel Department, the General Manager of Administration Department of each plant, the Board Director in charge of the Legal & General Affairs Department, the Board Director in charge of the Personnel Department, the full-time Auditors, and the legal counsel. The Company will keep the details of reports confidential and will not treat whistleblowers disadvantageously. The same applies when a report is received from an external party such as a business partner.

Implementation Status of Corporate Governance Measures

Policy and Procedure for Appointing and Dismissing Upper Management and Designating Candidates for Directors and Auditors by the Board of Directors

The Company elects Directors and Auditors from a diverse range of individuals who possess outstanding character, insight, and a wealth of experience. In terms of selection procedures, the Nomination & Compensation Committee, of which the majority of members are independent Outside Directors, is consulted with on the selection of candidates for Directors, and then the Board of Directors will make a decision. Candidates for Auditors will be decided by the Board of Directors after obtaining the consent of the Board of Auditors for the appointment proposal. In addition, in cases where serious misconduct has occurred and the involvement of such misconduct is recognized, or in cases where the Company is unable to achieve its performance targets over a long period of time, the Company will not reappoint senior management.

Independence Judgment Standards for Independent Outside Directors and the Qualities of Independent Outside Directors

The Company selects candidates for Outside Directors who are Independent Directors in accordance with the independence standards established by the Tokyo Stock Exchange. The four Independent Outside Directors are involved in corporate management, corporate legal affairs, corporate accounting, and research and development, and play an important role in the decision-making process of the Board of Directors by applying their experience and broad insight to management and expressing their opinions from a professional perspective.

Analysis and Evaluation of Overall Effectiveness of the Board of Directors

With regard to the effectiveness of the Board of Directors in FY2022, we conducted self-evaluations and analyses using the following methods with the help of external organizations.

From January to February 2023, we conducted a questionnaire survey of all Directors and Auditors who are members of the Board of Directors. We have ensured anonymity by having them respond directly to external parties. The following is a summary of the results.

Based on the responses to the questionnaire, the number of items for deliberation by the Board of Directors and the time required for deliberation were generally positive, and we recognize that the effectiveness of the Board of Directors as a whole is ensured. At the same time, issues were raised regarding the basic sustainability policies and initiatives to improve them, as well as enhancing discussions on potential risks, countermeasures, and crisis management systems for the entire Group, and issues for further improvement of the functions of the Board of Directors were also shared.

In the future, based on the evaluation of effectiveness, our Company's Board of Directors will respond to issues after thorough examination, and continue to promote initiatives to enhance the functions of the Board of Directors.

Policy and Procedure for Deciding on Remuneration for Upper Management and Directors by the Board of Directors

Remuneration for Directors shall be determined by paying attention to the balance between fixed and variable remuneration, as well as between short-term and medium- to long-term remuneration, in order to provide sound incentives for improving business performance and increasing corporate value. Specifically, remuneration for Directors excluding Outside Directors consists of monthly remuneration (fixed portion), bonuses for Directors (performance-linked portion, short-term remuneration), and stock-based remuneration (medium- to long-term remuneration), while remuneration for Outside Directors consists of monthly remuneration only. The remuneration of Directors are determined by the Board of Directors after consulting the Nomination & Compensation Committee, of which the majority of members are Independent Outside Directors. In addition, we are currently adopting total shareholder return (TSR) as evaluation criteria and revising the stock compensation ratio so that the system can be designed to further enhance corporate value.

Strategic Shareholdings

We may acquire and hold shares of our business partners when deemed necessary for maintaining and strengthening stable and long-term business relationships with them.

The acquisition and reduction of the shares of business partners are determined by management decisions based on discussions among the officers in charge and related departments, taking into consideration their relationship with us.

Regarding strategic shareholdings, we comprehensively examine whether it is appropriate to hold shares in light of the purpose of holding them, the benefits and risks associated with holding them, and regularly report to the Board of Directors.

Regarding the exercise of voting rights for strategic shareholdings, our Company will appropriately exercise voting rights for proposals in accordance with our internal Voting Rights Exercise Standards.

In the 12th Medium-Term Management Plan, which was revised in November 2023, we proposed to reduce strategic shareholdings in order to increase capital efficiency as a measure to increase corporate value. We will gradually reduce approximately 30% of our strategic shareholdings by FY2026, and use the proceeds from the sale for business activities.

Policies and Procedures for Constructive Dialog with Shareholders and Investors

With regard to dialog with shareholders and investors at our Company, the Public Relations & Investor Relations Department, under the director in charge of investor relations, exclusively oversees actual operations, and investor relations is handled after consultation with the President, each director, and related departments. In addition, the President serves as a speaker and holds financial results briefings for analysts, and the materials are posted on our Company's website.

Information obtained through dialog with shareholders and investors is fed back to management and the Board of Directors on a regular basis.

We manage insider information in accordance with rules on internal information management and regulations on insider trading. Also, the period before the financial results announcement is considered a silent period, during which we restrict dialog and interviews with investors.

"Corporate Governance" Page (Japanese Only)
https://www.kantodenka.co.jp/ir/governance.html

Risk Management

Objectives of Risk Management

The purpose of this policy is to respond to and plan countermeasures for an emergency* from among possible risks in the course of our business activities, and to take prompt and appropriate action in the event of an emergency, in order to protect and save lives, ensure the safety of officers and employees, restore the trust of local residents and business partners, quickly restore operations, and preserve company assets.

* An emergency refers to the occurrence, or the possibility of occurrence, of damage to employees or local residents, loss of trust in business partners, or a decrease in company assets due to compliance issues, plant accidents, natural disasters, overseas terrorism, etc.

Risk Management System

To promote compliance and conduct risk management, we have established the Compliance and Risk Management Committee, which meets at least twice a year. This committee is chaired by the President and consists of the Board Director in charge of Legal & General Affairs Department, the chairpersons of each sectional meeting under the committees, and the chairpersons of each committee under the RC Promotion Council, etc.

In the event of an emergency, the Emergency Response Headquarters, headed by the President, will be responsible for crisis management.

In addition, we have established an emergency response manual to identify possible risks, and have formulated countermeasures. In the event of an emergency, we will take prompt and appropriate action to prevent the spread of damage, ensure the safety of our officers and employees, secure the trust of our customers and local residents, quickly restore operations, and protect the Company's assets.

BCP (Business Continuity Plan) Initiatives

Because the Group supplies unique products with our original technologies to countries all over the world, we recognize that it is our social responsibility to continue to provide a stable supply of products.

In addition to promoting the decentralization of production bases, including those overseas, we have formulated a BCP to protect human lives, preserve facilities, and promptly resume operations in the event of an emergency.

Information Security

The Group complies with laws, regulations, and internal rules to properly manage the information about customers and our group that we handle in our corporate activities.

In order to protect information assets from various threats such as information leakage or falsification caused by information systems, the Information Security Sectional Meeting is established under the Compliance and Risk Management Committee to systematically promote the understanding and analysis of the information security risks of the entire Kanto Denka Kogyo Group, the study and implementation of continuous and systematic risk reduction measures, and the analysis of their effectiveness.

The Group has established the Information Security Basic Policy, Information Security Guidelines, Internal Information Management Rules, etc., and implements various security measures. We are striving to thoroughly manage information by means of both hardware and software, such as by continuously providing education to all officers and employees.

Status of Officers

(as of June 29, 2023)

Jun'ichi Hasegawa
President
(In charge of Internal Auditing Department)

Yasunari Yamaguchi
Director and Managing Executive Officer
General Manager, Technical Division
(In charge of Purchasing Department)

Kazuki Niimi
Director and Executive Officer
(In charge of Accounting & Finance Department, and Information Systems Department)

Yuki Abe
Director and Executive Officer
General Manager, Business Division

Hideki Matsui
Outside Director

Masaharu Sugiyama
Outside Director

Hitoshi Habuka
Outside Director

Yuko Kariya
Outside Director

Kunihiko Uramoto
Director and Executive Officer
(In charge of Sustainability Department, Legal & General Affairs Department, Public Relations & Investor Relations Department, Personnel Department, and Business Support Department)

Ryoji Masujima
Director and Executive Officer
(In charge of Corporate Planning Department and Overseas Business Development Department)
General Manager, Corporate Planning Department

Go Takikawa
Director and Executive Officer
General Manager, New Products Development Division; Plant Manager, Mizushima Plant

Kenichi Yako
Director and Executive Officer
(In charge of Overseas Plants)
Representative Director, Kanto Denka Fine Products Korea Co., Ltd.

Takeaki Yajima
Full-time Auditor

Masatomo Hayashi
Full-time Auditor

Naozumi Furukawa
Outside Auditor

Kenichi Ikeda
Outside Auditor

Expertise and Experience of Directors

Position	Name	Gender	Expertise and Experience						
			Corporate Management / Management Strategy	Globalization	Sales / Marketing	Technology / R&D	Sustainability	Finance / Accounting	Legal Affairs / Risk Management
President	**Jun'ichi Hasegawa**	Male	●	●	●		●		
Director and Managing Executive Officer General Manager, Technical Division	**Yasunari Yamaguchi**	Male	●			●	●		
Director and Executive Officer	**Kazuki Niimi**	Male	●					●	
Director and Executive Officer General Manager, Business Division.	**Yuki Abe**	Male	●	●	●				
Director and Executive Officer	**Kunihiko Uramoto**	Male	●				●	●	●
Director and Executive Officer General Manager, Corporate Planning Department	**Ryoji Masujima**	Male	●	●			●		●
Director and Executive Officer General Manager, New Products Development Division; Plant Manager, Mizushima Plant	**Go Takikawa**	Male	●			●			
Director and Executive Officer Representative Director, Kanto Denka Fine Products Korea Co., Ltd.	**Kenichi Yako**	Male	●	●		●			
Outside Director	**Hideki Matsui**	Male							●
Outside Director	**Masaharu Sugiyama**	Male						●	
Outside Director	**Hitoshi Habuka**	Male				●			
Outside Director	**Yuko Kariya**	Female	●			●			

(Note) The above list is not intended to be an exhaustive list of the expertise and experience possessed by each candidate.

Total Amount of Remuneration, etc. for Directors and Auditors (Results in FY2022)

Officer Remuneration	Total Amount of Remuneration, etc. (million yen)	Total Amount by Type of Remuneration, etc. (million yen)			Number of People
		Fixed Remuneration	Performance-linked Remuneration	Non-Monetary Remuneration	
Directors (Outside Directors)	276 (21)	185 (21)	80 (−)	10 (−)	12 (4)
Auditors (Outside Auditors)	52 (11)	52 (11)	− (−)	− (−)	4 (2)
Total	328	237	80	10	16

(Note) 1. The above figures include one Director who retired at the 115th General Meeting of Shareholders held on June 29, 2022.
2. The total amount of remuneration, etc. for Directors does not include employee salaries.
3. The remuneration for Auditors consists solely of monthly remuneration from the viewpoint of emphasizing independence and objectivity to management, and the remuneration amount for Auditor is determined through discussion with the Auditors.

Status of Executive Officers

Hiromi Oya
Senior Executive Officer

Yasushi Koseki
Executive Officer

Taisuke Yonemura
Executive Officer

Akira Muranushi
Executive Officer

Shotaro Murase
Executive Officer

Five Years of Key Financial Data (Consolidated)

		March 2019	March 2020	March 2021	March 2022	March 2023
Profit and Loss/Financial Position (million yen)						
Net sales		55,200	53,679	51,927	62,286	**78,675**
Operating income		9,447	7,729	5,668	11,164	**12,947**
Ordinary income		9,590	7,840	5,582	11,145	**13,679**
Net income attributable to owners of parent		6,552	5,021	3,605	7,762	**9,382**
Net assets		44,100	47,214	52,423	59,908	**68,774**
Total assets		81,601	84,061	92,324	109,902	**130,762**
Per Share Information						
Net assets per share	(yen)	746.88	800.26	887.42	1,014.01	**1,174.54**
Profit per share	(yen)	113.91	87.29	62.73	135.12	**163.32**
Dividend per share	(yen)	13	14	14	22	**33**
Dividend payout ratio	(%)	11.4	16.0	22.3	16.3	**20.2**
Financial Indicators						
Equity ratio	(%)	52.7	54.8	55.2	53.0	**51.6**
Return on equity (ROE)	(%)	16.1	11.3	7.4	14.2	**14.9**
Price earnings ratio (PER)	(times)	6.5	8.9	14.3	8.0	**6.3**
Return on invested capital (ROIC)	(%)	11.0	8.2	5.4	9.3	**9.3**
Cash Flow (million yen)						
Cash flows from operating activities		10,664	9,102	11,984	11,176	**7,291**
Cash flows from investing activities		(9,315)	(10,612)	(9,872)	(11,120)	**(16,627)**
Cash flows from financing activities		3,616	(90)	4,350	2,416	**4,424**
Cash and cash equivalents at end of period		18,090	16,321	23,339	26,372	**21,987**
Other						
Number of employees	(persons)	859	892	927	982	**1,059**

Key Sustainability Information (Non-consolidated)

<The 9th RC Action Targets>

RC Action Target for FY2022–2024 (three-year plan)		Results in FY2022	
1 Actions for zero accidents and zero disasters 0 incidents	• Major occupational accidents (four or more lost workdays) 0 (employees and partner company contractors) • Equipment accidents 0	**Major occupational accidents 1** **Equipment accidents 0**	Although the target was not achieved, we will continue to implement risk reduction activities through thorough risk management with the aim of achieving zero incidents. Since October 2022, the Shibukawa and Mizushima plants have introduced a weekly "dedicated safety time" to encourage managers and supervisors to enter workplaces and concentrate on safety activities with workers, thereby further raising safety awareness.
2 Energy-saving measures 3% reduction	Reduce energy consumption (crude oil equivalent) per plant production volume by 3% compared to FY2021 (1% reduction per year).	**Shibukawa Plant 1.3% reduction** **Mizushima Plant 0.5% increase**	The Shibukawa Plant achieved its target by continuing to engage in energy-saving activities. The plant will continue to improve our energy-saving activities. Although the Mizushima Plant is also improving thanks to continued energy-saving activities, the target was not achieved due to deterioration after changes in operating conditions caused by equipment consolidation.
3 Reduction of the final disposal of industrial waste 9% reduction	Reduce final disposal of industrial waste by 9% compared to FY2021 by improving the recycling rate (3% reduction per year).	**14.3% reduction**	Although the total amount of industrial waste is on the rise, the Shibukawa and Mizushima plants were able to improve their recycling rates and reduce the final disposal of industrial waste to achieve the target.
4 Reduction of PRTR target substance emissions 3% reduction	Reduce emissions of PRTR-designated chemical substances under the JCIA method by 3% compared to FY2021 (1% reduction per year).	**13.7% reduction**	At the Shibukawa Plant, the conversion rate has improved due to improvements in equipment, resulting in a reduction in emissions. The Mizushima Plant achieved the target because the amount of environmental pollutants handled and emissions decreased due to the reduction in production of some products.
5 Reduction of greenhouse gases emissions 6% reduction	Reduce CO_2 equivalent greenhouse gas emissions by 6% compared to FY2021 (2% reduction per year).	**12.1% reduction**	Although emissions increased due to an increase in the emission factor of electric power companies, we enhanced the collection equipment in individual processes and installed multiple abatement systems that use combustion treatment. This allowed us to successfully achieve the reduction target.

<Scope 1 and Scope 2 Emissions in FY2022>

($t\text{-}CO_2$)

Scope 1	20,502
Scope 2	201,619
Total	222,121

<Scope 3 Emissions by Category in FY2022>

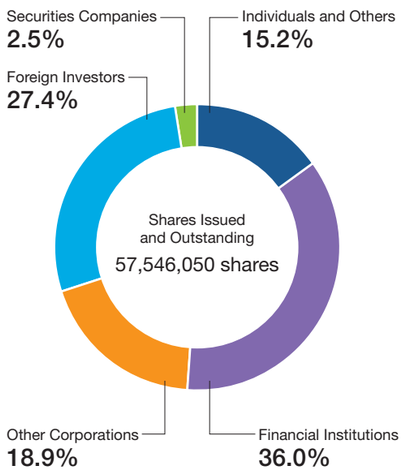
Category	Relevant Activities	Emissions ($t\text{-}CO_2$)
Category 1	Purchased goods and services	123,822
Category 2	Capital goods	29,276
Category 3	Fuel- and energy-related activities (not included in Scope 1 or Scope 2)	41,311
Category 4	Upstream transportation and distribution	44,270
Category 5	Waste generated in operations	6,053
Category 6	Business travel	362
Category 7	Employee commuting	1,633
Category 8	Upstream leased assets	0
Category 9	Downstream transportation and distribution	0
Category 10	Processing of sold products	61,921
Category 11	Use of sold products	180,906
Category 12	End-of-life treatment of sold products	2,272,581
Category 13	Downstream leased assets	0
Category 14	Franchises	0
Category 15	Investments	0
Total		2,762,135

Stock Information

(as of March 31, 2023)

- **Securities Code** 4047
- **Stock Exchange Listings** ..... Prime Market of the Tokyo Stock Exchange
- **Transfer Agent** ..... 1-4-1, Marunouchi, Chiyoda-ku, Tokyo
  Sumitomo Mitsui Trust Bank, Limited
- **Authorized Shares** ..... 200,000,000 shares
- **Shares Issued and Outstanding** ... 57,546,050 shares
- **Number of Shareholders** ..... 10,581 persons
- **Share Unit** ..... 100 shares

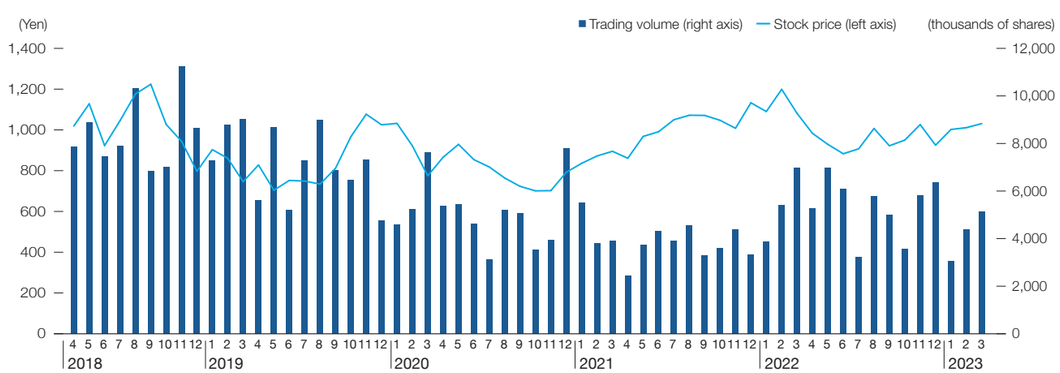
Distribution of Shareholders (Ratio of shares)



Major Shareholders (Top 10)

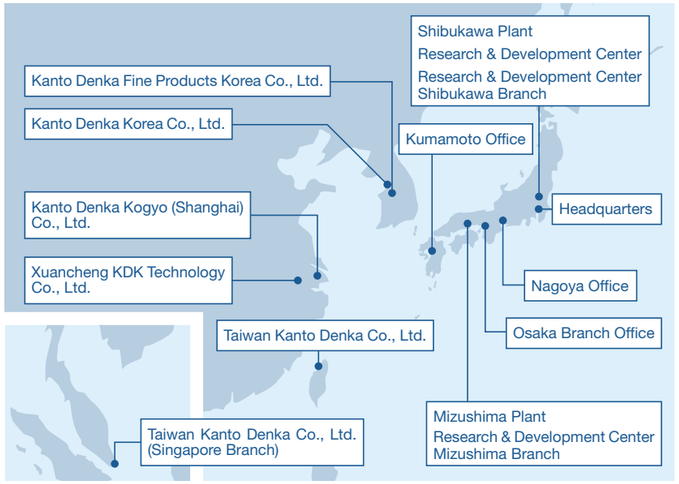
Name of Shareholder	Investment in Our Company	
	Number of Shares (thousands)	Investment Ratio (%)
The Master Trust Bank of Japan, Ltd. (Trust account)	5,807	10.10
GOLDMAN SACHS INTERNATIONAL	4,348	7.56
Asahi Mutual Life Insurance Company	3,570	6.21
Zeon Corporation	3,550	6.17
Custody Bank of Japan, Ltd. (trust account)	3,208	5.58
The Gunma Bank, Ltd.	1,600	2.78
J. P. MORGAN SECURITIES PLC FOR AND ON BEHALF OF ITS CLIENTS JPMSP RE CLIENT ASSETS - SEGR ACCT	1,526	2.65
The Chugoku Bank, Limited	1,400	2.43
Mizuho Bank, Ltd.	1,202	2.09
ADEKA Corporation	1,148	2.00

Trend in Stock Price and Trading Volume



Company Information

- **Company Name:**
  Kanto Denka Kogyo Co., Ltd.
- **Headquarters:**
  Yusen Building, 2-3-2,
  Marunouchi, Chiyoda-ku, Tokyo
  100-0005, Japan
  Phone: +81-3-4236-8801
- **Established:**
  September 22, 1938
- **Capital:**
  ¥2.877 billion
- **Employees:**
  Consolidated: 1,059
  Non-consolidated: 744



Network

Manufacturing Plants

Shibukawa Plant
1497, Shibukawa, Shibukawa City, Gunma
377-8513, Japan
Phone: +81-279-23-3211

Mizushima Plant
4-4-8, Matsue, Kurashiki City, Okayama
712-8533, Japan
Phone: +81-86-455-5231

Operating Bases

Osaka Branch Office
Seiwa Umeda Building, 2-12-7, Sonezaki,
Kita-ku, Osaka City, Osaka 530-0057, Japan
Phone: +81-6-6366-0681

Nagoya Office
Nagoya Mitsui Building Main Wing 1-24-30,
Meiekiminami, Nakamura-ku, Nagoya City,
Aichi 450-0003, Japan
Phone: +81-52-571-1371

Kumamoto Office
5-8-34, Kusunoki, Kita-ku, Kumamoto City,
Kumamoto 861-8003, Japan
Phone: +81-96-276-6561

Research & Development Bases

Research & Development Center
425, Kanai, Shibukawa City, Gunma
377-0027, Japan
Phone: +81-279-23-2712

Research & Development Center Shibukawa Branch
1497, Shibukawa, Shibukawa City, Gunma
377-8513, Japan
Phone: +81-279-22-3533

Research & Development Center Mizushima Branch
4-4-8, Matsue, Kurashiki City, Okayama
712-8533, Japan
Phone: +81-86-455-5234

Group Companies

Japan

Kanden Kosan Co., Ltd.
PMO Nihonbashi Mitsukoshi-mae, 3-4-5,
Nihonbashi Honcho, Chuo-ku, Tokyo
103-0023, Japan
Phone: +81-3-3548-3130

Jobi Engineering Co., Ltd.
Yamaman Building, 1-12, Kanda Sudacho,
Chiyoda-ku, Tokyo 101-0041, Japan
Phone: +81-3-3254-7541

Kanto Denka Finetech Co., Ltd.
2397, Shijuku-cho, Iga City, Mie
518-0823, Japan
Phone: +81-595-21-2636

Kanden Shibukawa Sangyo Co., Ltd.
1497, Shibukawa, Shibukawa City, Gunma
377-8513, Japan
Phone: +81-279-22-1705

Kanto Denka Sangyo Co., Ltd.
1497, Shibukawa, Shibukawa City, Gunma
377-8513, Japan
Phone: +81-279-25-3467

Gunma Tekkojyo Co., Ltd.
1497, Shibukawa, Shibukawa City, Gunma
377-8513, Japan
Phone: +81-279-23-1441

Kanden Mizushima Sangyo Co., Ltd.
4-4-8, Matsue, Kurashiki City, Okayama
712-8052, Japan
Phone: +81-86-455-1692

Overseas

Kanto Denka Korea Co., Ltd.
329, 27, Seochojungang-ro 24-gil, Seocho-gu,
Seoul, Republic of Korea
Phone: +82-2-3471-2361

Taiwan Kanto Denka Co., Ltd.
17F-8, No.118, Ciyun Rd., East Dist,
Hsinchu City 30072, Taiwan (R.O.C.)
Phone: +886-3-577-1575

Taiwan Kanto Denka Co., Ltd. (Singapore Branch)
11 Beach Road #03-01 Crasco Building
Singapore 189675
Phone: +65-3157-5974

Kanto Denka Kogyo (Shanghai) Co., Ltd.
Room3506, The Place Tower B,100 Zunyi Road,
Changning District, Shanghai 200051, China
Phone: +86-21-6278-7004

Kanto Denka Fine Products Korea Co., Ltd.
176, 5 Sandan 1-ro, Susin-myeon, Dongnam-gu,
Cheonan City, Chungcheongnam-do, Republic of Korea
Phone: +82-41-569-4562

Xuancheng KDK Technology Co., Ltd.
No.15, Meizigang Road, Xuancheng high technology Industrial Development Zone, Anhui,
242000, China
Phone: +86-563-3032-099