



Koei Chemical Report 2022



Bringing 100 years of technology and trust,
now and to the future

KOEI



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Editorial policy

Editorial policy

This report is intended to provide information to help many stakeholders understand our activities to enhance corporate value. It comprehensively covers our business strengths, growth strategy, reports on business performance, corporate governance system, environmental and social initiatives, and other topics.

We strive to make these contents clearer and more reader-friendly by using graphs and pictures.

Reporting period

April 2021 to March 2022
(information for April 2022 and later is partially included.)

Issuance

October 1, 2022



Corporate Philosophy

“We aggressively act to grow our business by mobilizing all available intelligence and energy with prime importance on credibility and integrity.” and
 “We shall contribute to the development of society through providing valuable products, solutions and innovative technology.”

Basic Policy on Sustainability

Koei Chemical is committed to the following five goals, guided by our corporate philosophy, to contribute to the establishment of a sustainable society through business.

- 1 | We are committed to achieving our own sustainable growth by accelerating innovation in all departments to create both economic value and social value, while also contributing to the establishment of a sustainable society through business.
- 2 | We are committed to contribute to solving a variety of issues that are globally vital, such as establishing diverse and inclusive society and achieving the Sustainable Development Goals (SDGs), as well as doing business in compliance with accepted universal standards and principles, including those concerning human rights, labor, safety, the environment and anti-corruption.
- 3 | We are committed to work closely with various stakeholders through promoting spontaneous disclosure of information and open dialogue on the targets of our sustainability promotion initiatives and the progress of their implementation.
- 4 | We are committed to carry out initiatives toward promoting sustainability, led by our top management having taken firm pledges to this end and advanced by all officers and employees across Koei Chemical with a shared strong sense of mission and great enthusiasm.
- 5 | We are committed to assess and improve our activities continually and proactively for promoting sustainability by reviewing the progress of the activities periodically and from holistic viewpoints.

Koei Chemical’s policy on SDGs*

Koei Chemical will contribute to a sustainable society by achieving SDGs through diverse business activities.



*Sustainable Development Goals, which are adopted by the United Nations, are globally shared issues to be achieved by 2030.

What can we do through the power of chemistry? Koei Chemical's solid achievements in the past 100 years and

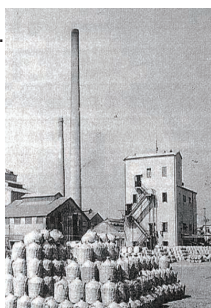
1917 – 1950s

Building the foundation of our business

We built the foundation that leads to our business today. We commenced operation of acetic acid production facility in Osaka in 1917 and diversified the product line. In 1934, we started production of Formalin.

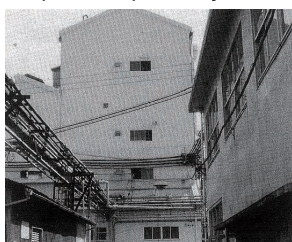
1931

- Started to produce acetone and butanol by fermentation.



1952

- Started to produce pentaerythritol.



- 1917** Koei Pharmaceutical Co., Ltd. is founded in Osaka in 1917, and commenced acetic acid production.
- 1926** Koei Pharmaceutical Co., Ltd. changes its name to Koei Co., Ltd.
- 1934** Commences formalin production.
- 1950** Commences m-aminophenol production.
Name changed to Koei Chemical Co., Ltd.
- 1959** Starts production of trimethylolpropane and formit.

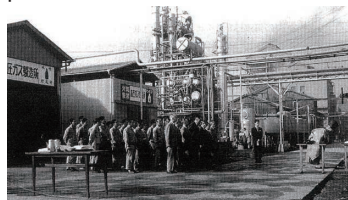
1960 – 1970s

Starting the operation of our basic products and expanding their production capacity

We started the production of pyridine derivatives and amines, which have still constituted our product line-up. In 1971, we opened a plant in Chiba for the production of pentaerythritol, pyridine derivatives, and amines.

1964

- Commences pyridine derivatives production in the Osaka Plant.



1966

- Expands the fine chemical facility for amines.



1971

- Starts production of formalin, trimethylolpropane, sodium hydrosulfite, and amines in the Chiba Plant.



- 1962** Commences amines production.
- 1963** "Inoue Award" from Tōryō Hochi Shinbunsha for the production of pentaerythritol.
- 1967** "Okochi Memorial Production Prize" from the Okochi Memorial Foundation for the production of pyridine derivatives.
The Chiba Plant is opened and commences pentaerythritol production.
- 1972** Commences pyridine derivatives production in the Chiba Plant.

1980 – 1990s

Accelerating product development and expanding capacity (Stage I)

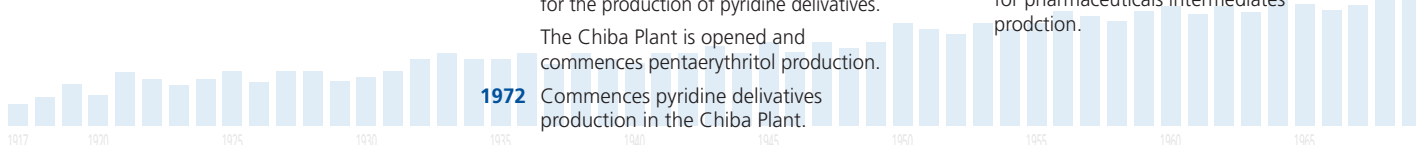
We started the production of 2-cyanopyrazine, which is intermediate for antituberculosis drug, and anti-ulcer drug intermediate. Besides, we established a multi-purpose plant in Osaka for diversifying into newly developed products such as intermediates for pharmaceuticals and agricultural chemicals.

1985

- Commences 2-cyanopyrazine production.



- 1980** Starts production of disposal heat pads.
- 1982** Constructs a multi-purpose plant to expand the capacity of fine chemical products such as amines and pyridine derivatives.
- 1990** "Industrial Technology Award" from the Osaka Industrial Research Association for the development of "CASCON-RESIN (functional modified epoxy resins)".
- 1992** "KCS Award in Chemical Technology" from the Kinka Chemical Society for the development of an anti-ulcer drug intermediate.
"Technological Prize" from the Adhesion Society of Japan for the development of epoxy resins adhesives.
- 1995** Constructs a multi-purpose plant for production of intermediates for pharmaceuticals and agricultural chemicals.
- 1997** "Catalysis Society of Japan Award (Industrial Field)" for the synthesis of pyridine using a zeolite catalyst.
Listed on the 2nd Section of the Osaka Securities Exchange.
Constructs a multi-purpose vapor-phase plant.
- 1998** "KCS Award in Chemical Technology" from the Kinka Chemical Society for the new synthetic method of intermediate chloro nicotiny insecticide.
- 1999** Constructs a new multi-purpose plant for pharmaceuticals intermediates production.



vision for the next 100 years

2000s

Accelerating product development and expanding capacity (Stage II)

We constructed and started the operation of new multi-purpose plants (CM I, CM II) in the Chiba Plant. In 2010, a new laboratory was opened in Chiba, which set a foothold for centralizing production and research functions in Chiba.

2006

- Starts the operation of a new multi-purpose plant (CM II Plant).



- Starts the operation of a new plant for agrochemical intermediates (CP II Plant).



2010

- Opens a new laboratory in the Chiba Plant to centralize production and research functions in Chiba.



- 2003** Relocates Head Office to Joto-ku, Osaka.
- 2004** Starts to dispatch our employee to Sumitomo Chemical Europe S.A./N.V.
- 2006** Relocates headquarters functions to Tokyo.

2010s

Selection and concentration of businesses

In 2016, we closed the Osaka Plant and concentrated its functions at the Chiba Plant. We proceeded with the selection and concentration of businesses by selling the pentaerythritol business and constructing a new multi-purpose plant (CM III Plant).

2013

- Relocates the Tokyo Head Office to the present address.



2017

- Starts the operation of a new multi-purpose plant (CM III Plant).



- Constructs a general-purpose office building.



- 2013** Changed listing to the 2nd Section of the Tokyo Stock Exchange.
- 2016** After the shut down Osaka Plant, we changes the location of the registered head office into Sodegaura-shi in Chiba Prefecture, where we operates Chiba Plant.
- 2017** Suspends the production and transfer the business of pentaerythritol.

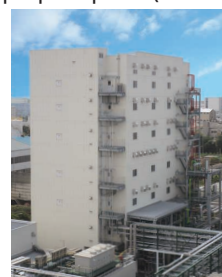
2020s

Developing solution business

In 2020, we have changed the company name in Japanese (the name in English has no change) with strong desire to make a leap forward beyond the framework of chemical manufacturing. In 2022, we started the operation of a state-of-the-art multi-purpose plant, CM IV Plant. We shall make a dramatic progress through expanding our solution business.

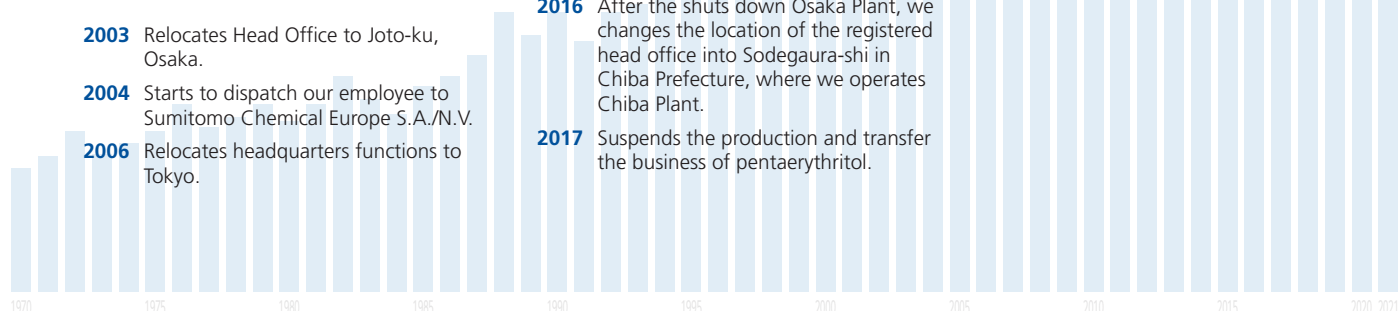
2022

- Starts the operation of a new multi-purpose plant (CM IV Plant).



- 2020** Name in Japanese changed by deleting the Japanese word "kogyo" meaning chemical manufacturing..

- 2022** Discontinues pentaerythritol distribution.
Transferred listing to the Standard Market of the Tokyo Stock Exchange.
Starts the operation of a new multi-purpose plant (CM IV Plant).



Based on the innovative technology we have developed, we will contribute further to solving social issues and aim

Promotion of the Corporate Business Plan knowledge and experience of over

Input

(Management resources)

Koei Chemical's strengths (core competence)

- ① Technical capabilities based on organic synthesis
- ② Multi-purpose facilities and high pressure hydrogenation facilities
- ③ Human resources that actively and boldly take on challenges and solve issues

Financial capital

Shareholders' equity	21,934 million yen
Shareholders' equity ratio	63.2%

Manufacturing capital

Multi-purpose facilities	4 lines
	(October 2022~)
High pressure hydrogenation facilities	5 lines
Vapor-phase reaction facilities	3 lines
Formalin production facilities	1 lines

Intellectual capital

R&D expenses	1,036 million yen
Domestic patents	68
Overseas patents	50

Human capital

Number of employees	401
(Of which researchers)	59
(Of which PhD holders)	17

Social capital

Corporate philosophy	» Page 2
Overseas sales ratio	55.8%

Core of the value creation

Material issues to be addressed as management priorities

Sumitomo Chemical Group's material issues for sustainable value creation

Material issues for social value creation

- Contribute to the environment
- Contribute to the food supply
- Contribute to healthcare
- Contribute to ICT

Material issues for future value creation

- Advance innovation
- Bolster competitiveness leveraging DX
- Human resources: DE&I*, growth & development, health

*Diversity, Equity & Inclusion

Foundation for business continuation

- Occupational safety and health, and operational safety and disaster prevention
- Respect for human rights
- Compliance
- Product safety and quality assurance
- Cybersecurity
- Anti-corruption

to enhance corporate value.

"KX2.0: Striving for transformation utilizing 100 years" (FY2022–FY2024)

process

Business activities of Koei Chemical

Corporate Business Plan

"KX2.0: Striving for transformation utilizing knowledge and experience of over 100 years"

- 1 Accelerate business growth strategy
- 2 Strengthen business foundations
- 3 Enhancement of human resources development

Business description

Production and sales of

- 1 Pharmaceuticals and agrochemicals
Intermediates and raw materials for pharmaceuticals, agrochemicals, etc.
- 2 Functional chemicals
Organometallic catalysts, ionic liquids, optical materials, and electronic related materials
- 3 Other
Resin products, industrial chemicals, etc.

Output

(Outcome of management activities)

Economic value (Targets for FY2024)

Net sales

21.4 billion yen

ROIC

8%

CCC

151 days

Payout ratio

Approx. 50%

New product sales ratio

20%

Social value

GHG emissions

50% reduction
(compared with 2013)
by FY2030

Achieve carbon neutrality
by FY2050

Improvement in energy efficiency etc.

1% reduction per annum
(from each previous year)

Percentage of female new graduate hires

20% or more

Employment rate of persons with disabilities

2.5% or more

KOEI Vision 2030

Net sales

30.0 billion yen

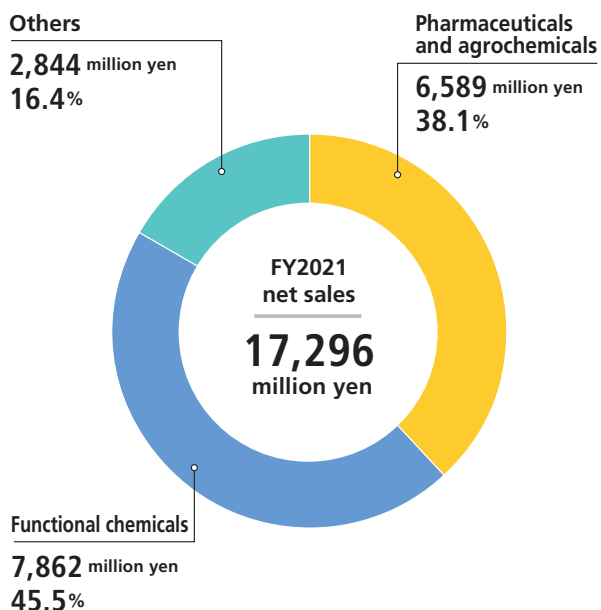
ROIC

10%

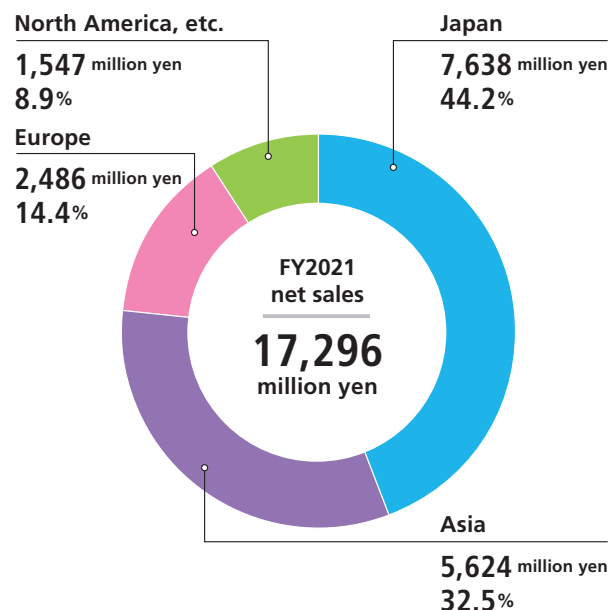
CCC

100 days

Sales breakdown by product group



Sales breakdown by region



Business description

Production and sales of

- Pharmaceuticals and agrochemicals
(Intermediates and raw materials for pharmaceuticals, agrochemicals, etc.)
- Functional chemicals
(Organometallic catalysts, ionic liquids, optical materials, electronic related materials, etc.)
- Other (Resin products, industrial chemicals, etc.)



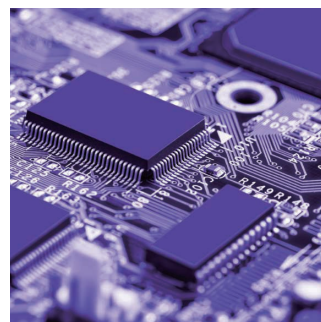
Raw materials for pharmaceutical intermediates



Raw materials for agrochemical intermediates



Ionic liquids (KOELIQ®)



electronic related materials

Performance (FY2021)

Net sales for FY2021 amounted to 17,296 million yen. This was a result of steady sales of catalyst-related products and agrochemical-related products, as well as increased shipments of optical materials-related products, while shipments of pharmaceuticals-related products decreased. Operating Income amounted to 508 million yen and ordinary profit 802 million yen, mainly as a result of rising raw material and fuel prices and increased costs due to our shut-down maintenance that took place twice during the fiscal year.

A leading company in the space of nitrogen-containing compounds <Why Koei Chemical?>



Why clients choose us: reason 1

A rich variety of products

We offer various nitrogen-containing compounds, including pyridines, pyrazines, and over 100 varieties of amine compounds. Efficient production switching allows for manufacturing a range of products. We also produce a wide range of ionic liquids using nitrogen-containing compounds as cations.



Why clients choose us: reason 2

Technical capabilities developed over 100 years

Our creative and pioneering research and development continues to gain high reputation in the chemical industry. We also have first-rate synthesis techniques that allow for developing processes using explicit compounds, and our organic synthesis processes are of an industrial level, meeting stringent requirements like extreme low temperature, water-free, and oxygen-free conditions.



Why clients choose us: reason 3

Custom synthesize

Using various production facilities for fine organic synthesis, high pressure hydrogenation, gas-phase reactions, and more, we construct an efficient manufacturing process and supply it as industrial products. We are ISO9001/14001 certified. We produce and ship all of our products to the highest standard of quality assurance.

Human resources capabilities as a source of value creation (As of March 31, 2022)

Number of employees

401



We have been actively recruiting for the past several years, preparing for the new plant launch. The number of employees is roughly the same as that in the previous fiscal year.

Researchers

59



Researchers account for 14.7% of all employees, which is at approximately the same level as an average of Japanese chemical industry companies (14%). Meanwhile, PhD holders account for 20.3% of all researchers, it is higher than the average (8%).

(Source) National Institute of Science and Technology Policy of the Ministry of Education, Culture, Sports, Science and Technology, *Japanese Science and Technology Indicators 2021* [Research Material-311/2021.8]

PhD holders

12

researchers

5

in other departments



Creation of business value that contributes to the essentials of society and businesses

Number of items we made annually

Approx. 150



We offer a wide range of products, including amines, pyridines, pyrazines, ionic liquids, pharmaceutical and agrochemical intermediates, and organometallic catalysts.

Reaction temperature

-60 - +450°C



Our Chiba Plant had its strength in production that uses vapor-phase reaction and high pressure reaction technologies. Recent introduction of facilities for extreme low temperature reactions and for production under water-free and oxygen-free conditions has enabled organic synthesis that meets stringent requirements.



Contribute to solve social issues based on innovative technologies

We started our new Corporate Business Plan in April 2022. Through the steady implementation of the plan and in collaboration with our stakeholders, we will strive to contribute to social issues through our business activities and to enhance corporate value, aiming to develop Koei Chemical KPIs (Key Performance Indicators, established in September 2021) for material issues for sustainable value creation.

Representative Director & President

Business Environment and important tasks of Koei

Even as the impact of COVID-19 infection spreading, Russia's invasion to Ukraine, the friction between the United States and China over Taiwan, and other geopolitical risks have risen to levels not been experienced in recent years. From the viewpoint of our own business environment, the fragility of the supply chain around the world is gradually being exposed, we are suffering from skyrocketing prices of raw materials and fuel and costs of logistics, domestic and overseas, at the same time, it has become a major challenge to secure stable suppliers. Under such circumstances, we keep making efforts to mitigate our business risks considering all possibilities in mind, but also, signify these turbulent circumstances as opportunities, we will aggressively seek the possibility of business expansion.

On the other hand, from a medium- to long-term perspective, we have identified our major theme in action on climate change. The chemical industry has both aspects of positive environmental impact through technological

innovation and negative environmental impact with high energy consumption. Considering action on climate change as the suitable opportunity to contribute to society, we believe that we are able to offer our own solutions to challenges leveraging the organic synthesis-based technologies that we have accumulated over the decades, such as the development of amine compounds as CO₂ absorbents and the development of ionic liquids for dissolving cellulose at room temperature. In addition to these technological challenges, we will make company-wide efforts to achieve goals which is certificated as Sumitomo Chemical Group, like SBT2030 (greenhouse gas reduction target for 2030) and carbon net zero for 2050.

As an R&D-oriented company positioned upstream in the supply chain, we operate a solution business, proposing solutions to customers' requirements, especially to their potential needs, by leveraging our strengths in speedy and highly adaptable customer services. Based on the innovative technologies that we have been developing until today, we aim to contribute to solving social issues through our business activities by creating new technologies and developing new applications.

Corporate Business Plan “KX2.0: Striving for transformation utilizing knowledge and experience of over 100 years”

This year is the first year of our new Corporate Business Plan “KX2.0: Striving for transformation utilizing knowledge and experience of over 100 years.” This slogan of “KX2.0: Striving for transformation utilizing knowledge and experience of over 100 years” inherits the spirit of the previous Corporate Business Plan “Transformation KOEI (KX)” and indicates our strong intentions to further accelerate our contribution to solving social issues and enhance our corporate value. Through steady implementing three basic policies of the Corporate Business Plan “accelerate business growth strategy,” “strengthen business foundations,” and “Enhancement of human resources development”, we will achieve business targets of 21.4 billion yen in sales and 8% ROIC (Return On Invested Capital) in FY2024, the final year of the plan.

Under “strengthen business foundations,” one of the plan’s three basic policies, we are committed to transformation in four areas: digital transformation (DX), management transformation (MX), governance transformation (GX), and sustainability transformation (SX). Through these four transformations, we will enhance our corporate value by promoting innovation in all divisions, including manufacturing, sales, R&D, and back office departments.

This year, our brand-new multi-purpose plant (CM IV) starts the operation. The CM IV plant is Koei’s largest multi-purpose plant. While our most pressing task in the immediate term is the smooth start-up of the CM IV plant, we believe for it would contribute significantly to the expansion of sales of pharmaceuticals and agrochemicals intermediates and functional chemicals such as organometallic catalysts and ionic liquids. To ensure that our multi-purpose plants, including the CM IV plant drive the achievement of the Corporate Business Plan, our all divisions including manufacturing, sales, and R&D will work together to fulfill the expansion of the pharmaceuticals intermediate and organometallic catalyst businesses, exploration of applications for ionic liquids, and the acceleration of new product development through synergies with the Sumitomo Chemical Group.

Contribution to creating a sustainable society

Sharing the “material issues for sustainable value creation” set by Sumitomo Chemical Group, Koei established Key Performance Indicators (KPIs) based on those material issues in September 2021.

In terms of contribution to the environment which is one of the material issues, we have set the reduction of CO₂ emissions and improvement in energy efficiency as KPIs. Regarding CO₂ emissions, we achieved a 41% reduction in FY2021 compared with FY2013, and we are steadily working toward a 50% reduction by FY2030. However, an extraordinary circumstance has contributed to the reduction in CO₂ emissions this year, the fact that

we carried out annual shut-down maintenance, which is performed once a year on a regular basis, twice in the previous fiscal year, it caused a decrease in production volume. Instead of being satisfied with the status quo, we will continue to place our efforts into reducing our CO₂ emissions further. To achieve our challenging target of carbon net zero by 2050, I believe that we also need to actively implement initiatives such as introducing innovative solutions. We will accelerate initiatives to this end, such as the development of new ionic liquids that dissolve cellulose at room temperature and of catalysts for manufacturing amines aiming for low-temperature, low-pressure conditions that will help to reduce environmental impact.

In addition to contribute to environment, we are committed to contributing to the realization of a sustainable society through our business activities through expanding sales of products for applications that can contribute to society, including contribute to the food supply, contribute to healthcare, and contribute to ICT, engaging in R&D efforts such as advance innovation, and adopting KPIs for other material issues, such as bolster competitiveness leveraging DX and Human Resources: Diversity, Equity and Inclusion, growth & Development, health.

Co-existence and co-prosperity with all stakeholders

I have stated since before that we value two-way communication to achieve co-existence and co-prosperity with all our stakeholders, including shareholders, investors, customers, business partners, local communities, and employees and their families.

In particular, I keep calling on employees to pursue their best performance through professionalism, a proactive attitude, and teamwork, so that they can grow together with the company. We continue to undertake various initiatives, establishing comfortable and open workplaces, enhancing human resources development through various training opportunities, enhancing HR systems to maintain employees’ motivation, and providing assistance for the health and wellbeing of employees and their families so that our employees can take pride in the work that they do.

To our shareholders and investors who support our business on the financial front, we will strive to further enhance our corporate value and meet their expectations. To this end, we will give our shareholders and investors more opportunities to deepen their understanding of our business and growth strategies and to give us their opinions and requests regarding management through enhancing investor relations initiatives, such as holding financial results briefings on a regular basis and publishing news releases.

We will further strive to build mutually beneficial relationships with our customers and business partners and to work together with them to achieve business growth.

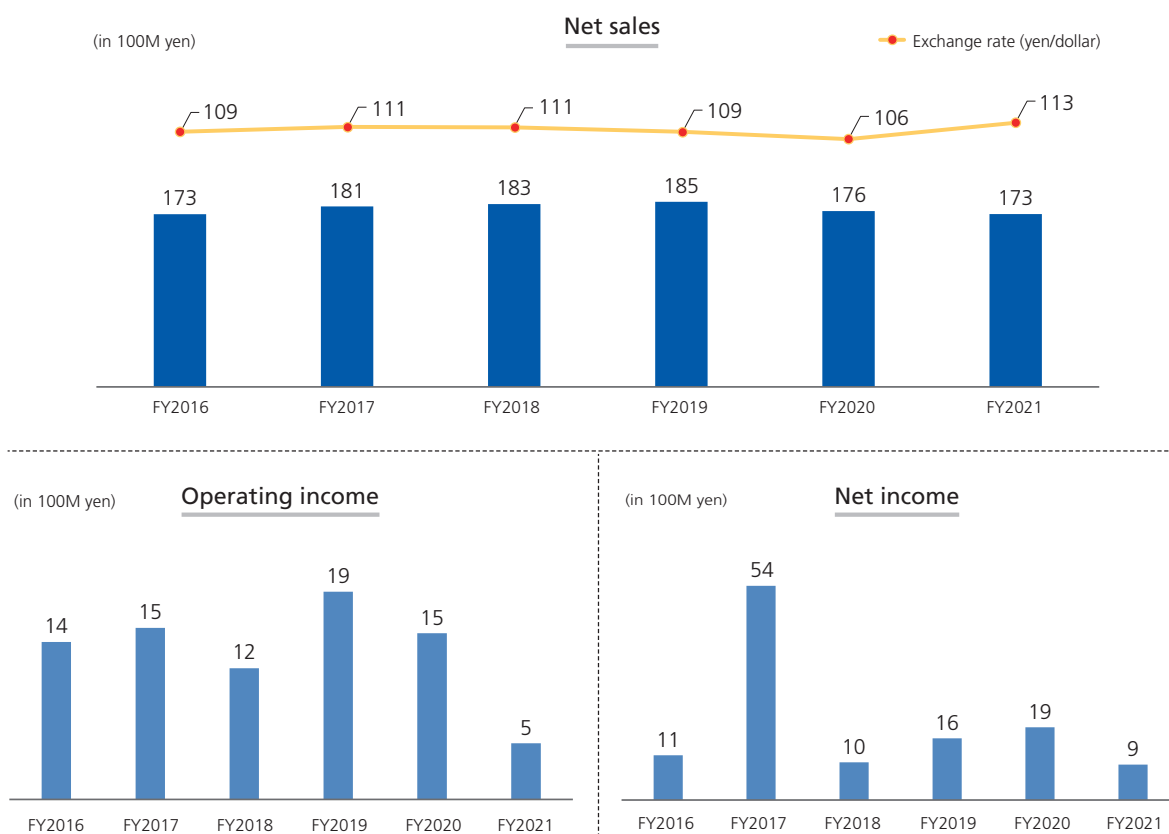
I would like to ask all of our stakeholders to keep paying close attention to Koei Chemical’s efforts and to continue to support us.

Koei has formulated its new Corporate Business Plan for FY2022–2024.

Under the Corporate Business Plan, we will strive to enhance corporate value, through addressing various tasks set forth in the basic policies of “accelerate business growth strategy,” “strengthen business foundations,” and “enhancement of human resources development.”

The plan’s slogan, “KX2.0: Striving for transformation utilizing knowledge and experience of over 100 years,” is imbued with our strong will to further speed up our contributions to solving social issues based on the innovative technologies that we have been developing until today and to place company-wide efforts into digital transformation (DX), management transformation (MX), governance transformation (GX), and sustainability transformation (SX).

Performances in Previous Periods of Corporate Business Plans (results)



Major Investment Projects Implemented for Future Business Expansion and Increased Competitiveness

Corporate Business Plan (FY2016–2018)	
Challenges	Achievements
◇ Key Projects <ul style="list-style-type: none"> Consolidation of production sites into Chiba. Construction of CM III plant (2 production lines). 	<ul style="list-style-type: none"> Osaka plant shut down in 2016 Operations started in 2017 (Line 1), and 2019 (Line 2)
◇ Business restructuring <ul style="list-style-type: none"> Transfer of pentaerythritol business to Perstorp. 	<ul style="list-style-type: none"> Transfer completed and Koei's production terminated in 2017. Sales agency with Perstorp expired in 2022.
Corporate Business Plan (FY2019–2021)	
Challenges	Achievements
◇ Key Projects <ul style="list-style-type: none"> Construction of CM IV plant Restructuring of basic products plants Accelerate new product development. 	<ul style="list-style-type: none"> Decision taken in 2020. Production started in October 2022 Amine plant (partial). Gas-phase reaction plant. Pursue development of low-temperature curing catalysts for polyurethane.
◇ Business restructuring <ul style="list-style-type: none"> Shift to high-value-added activities. 	<ul style="list-style-type: none"> DX initiatives started. HR organization structure, meeting/committees re-examined.

Challenges continuing further

Accelerate new product development.	<ul style="list-style-type: none"> Commercialize low-temperature curing catalysts for polyurethane. Additional applications/uses for ionic liquids.
Strengthen basic business.	<ul style="list-style-type: none"> Profitability analysis and future production planning for a gas-phase reaction plant.
Capital investments.	<ul style="list-style-type: none"> Realizing the return on the past capital investments.
Sustainability development.	<ul style="list-style-type: none"> Promote carbon net zero initiatives.
Human resources development.	<ul style="list-style-type: none"> Improve middle managers' management capabilities. Enhance junior/young employees' skills.

KX2.0: Striving for transformation utilizing knowledge and experience of over 100 years

Net sales ... 21.4 billion yen
ROIC 8%

Business environment

- (1) Increase in socio-economic activities as to COVID-19 impact mitigates.
- (2) Growth in frictions between the US and China; concerns over growing geopolitical risks.
- (3) Rise in raw materials/energy costs.
- (4) Acceleration in efforts to address social and environmental challenges as awareness of sustainability enhances worldwide.
- (5) Promoting DX-driven productivity improvement and pursuit of work-style reform.

Outlook for Major Product Areas

Basic Products

- (1) Pyridines and pyrazines:
 - Antituberculosis drug intermediates: Stable demand expected.
 - electronic related materials: Demand expansion expected over the medium-to-long term.
 - Raw materials/intermediates for crop protection products: Demand outlook and cost competitiveness to be reexamined.
- (2) Amines:
 - Raw/materials/intermediates for crop protection products: Steady demand foreseen.
 - Expanded demand expected for CO₂-absorbing applications.

Specialty Products and New Business

- (1) Organometallic catalysts and Pharmaceuticals/crop protection products intermediates:
 - Expansion in custom synthesis business expected.
- (2) Ionic liquids/low-temperature curing catalysts for polyurethane:
 - Acceleration of new product development.
- (3) Synergy with Sumitomo Chemical Group to be expanded:
 - Pharmaceuticals/crop protection products intermediates.
 - Optical materials, organometallic catalysts, etc.

Basic policies

1. Accelerate business growth strategy



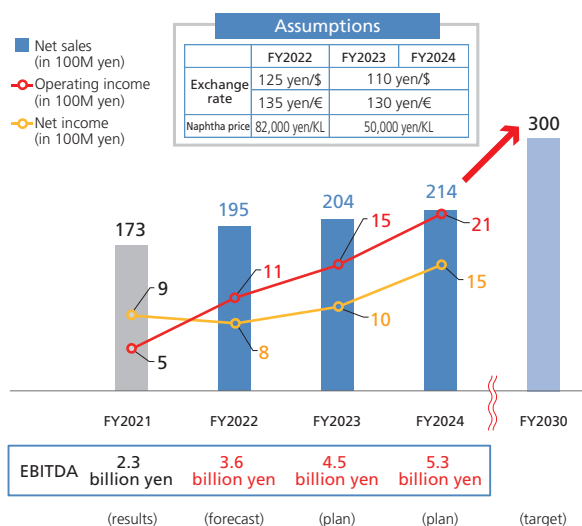
2. Strengthen business foundations



3. Enhancement of Human resources development



Performance Targets

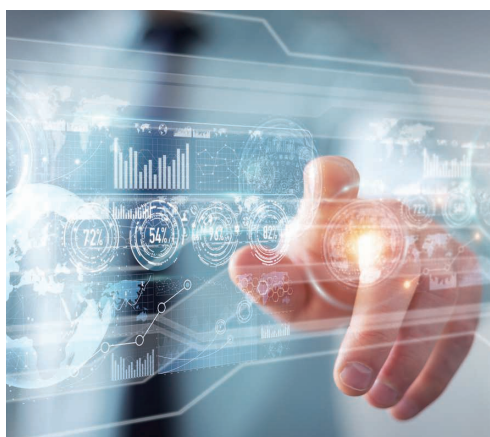


Basic products: Enhance competitiveness & Develop high-value added uses



- Expand sales of amines and pyridines and expedite new products commercialization.
- Accelerate development of new applications (e.g., CO₂ absorption).
- Pursue business expansion via collaboration with third parties.
- Improve competitiveness through fundamental cost reduction and productivity enhancement measures.

Specialty Products and New Business: Expansion



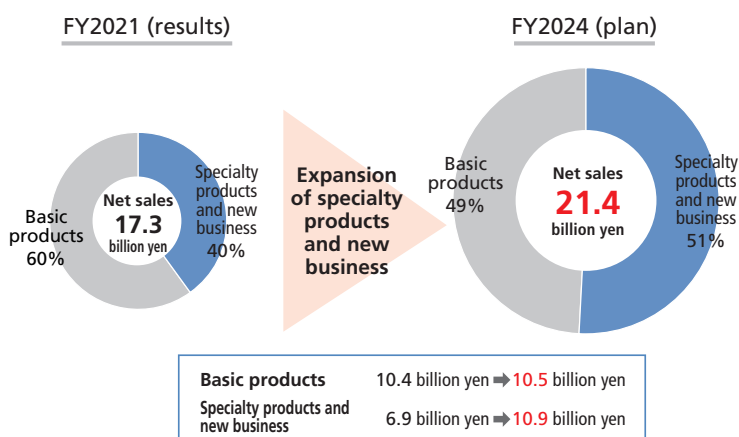
- Achieve smooth startup of CM IV plant (scheduled to start October 2022)
- Find new applications for ionic liquids.
- Early commercialization of low-temperature curing catalysts for polyurethane and accelerate development of applications.
- Expand organometallic catalyst and pharmaceuticals/crop protection products intermediates business.
- Accelerate new product development through stronger collaboration with Sumitomo Chemical Group.
- Explore new business fields (e.g., optical/electronic/battery materials, environmental impact reduction).
- Construct new business models through combination of existing and new technologies.

Business portfolio enhancement

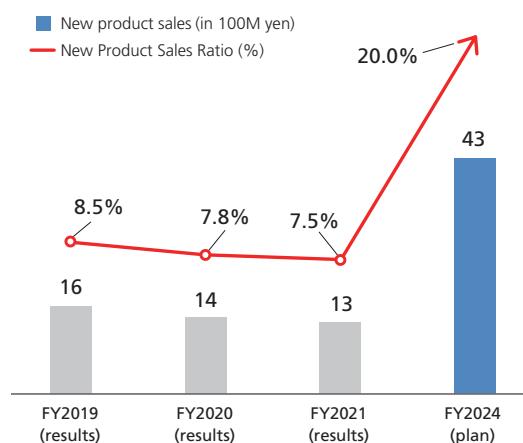


- Review of product priorities in light of profitability and strategic importance as well as the implementation of PLCM (product life cycle management) for maximizing profits.

Expansion of specialty products and new business



New Product Sales Growth



*Definition of new products: Products marketed within past five years

The aim of strengthening business foundations is to improve corporate value by making cross-functional initiatives within the entire Company in the following four areas.

1) Digital transformation

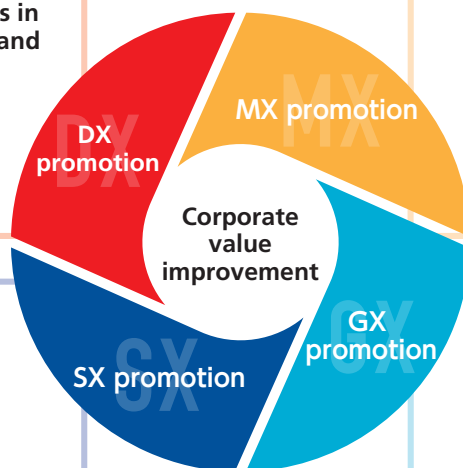
- (a) Enhance productivity and strengthen competitiveness in Manufacturing, R&D, SCM and Office areas.
- (b) Data scientists/engineers' skill development.

2) Management transformation

- (a) Enhanced use of new management indicators
 - Return on invested capital (ROIC)
 - Cash conversion cycle (CCC)
- (b) Strengthen PR and IR activities.
- (c) Pursue organizational development.

4) Sustainability transformation

- (a) Improve KPIs for corporate value creation.
- (b) Create and implement a plan and schedule for carbon neutrality.

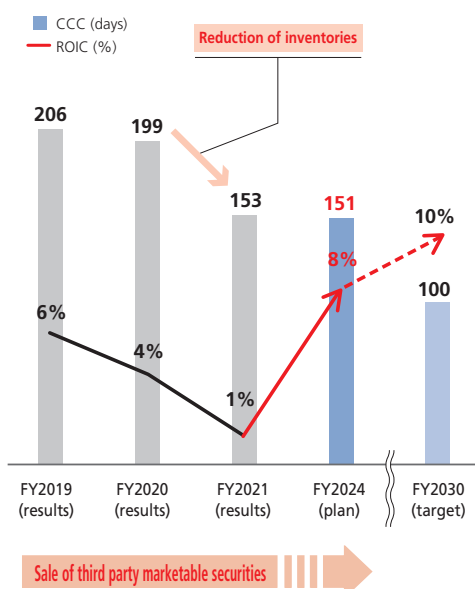


3) Governance transformation

- (a) Adapt to the new Corporate Governance Code (CGC).
- (b) Improve governance structure and relevant rules.
 - Reorganization and enhancement of internal committees.

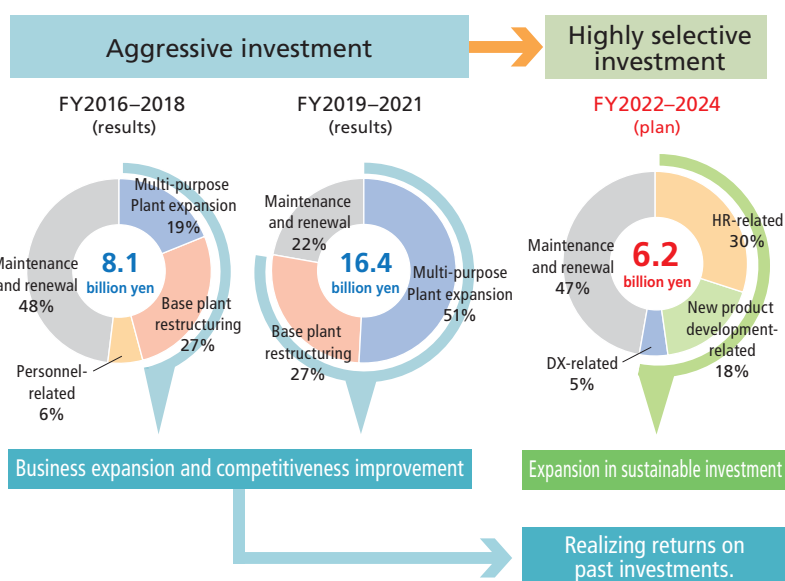
Management Targets (ROIC and CCC)

We will aim for better management efficiency with new management indicators.



Capital Investment (on a decision-making timing basis)

Under the capital investment plan, we will strive to strengthen competitiveness by maintaining and renewal our existing plants and developing new products, while focusing on the realization returns of past business expansion investments.



Fundamental directions for enhancement of human resources development

The Corporate Business Plan will address the three initiatives at right. The aims of these initiatives are to maximize the performance of individual employees and, ultimately, lead to improvement of overall performance of the entire Company and the achievement of our management goals. Our ongoing tasks will be to strengthen managers' management skills, to develop employees' capabilities and skills, and to cultivate new employees' fundamental skills. We value the fair evaluation of employee performance, which will ease the corporate culture and raise the motivation of employees. We will undertake a flexible review of our HR systems to aim our employees can achieve a sense of purpose in their work.

1. Strengthening management	(a) Enhance management training (b) Continue assessor training (c) Establish workshops, etc. for manager-level employees	
2. Developing employees' capabilities and skills and cultivating new employees' fundamental skills	(a) Review and strengthen development programs in manufacturing, R&D, and sales	
3. Review of HR systems	(a) Establish career development system (b) Establish dual ladder system (c) Set challenge goals, review and educate on evaluation criteria	

Promotion of diversity, equity, and inclusion

(1) Active recruitment (women's empowerment, utilization of foreign personnel, employment of persons with disabilities)

[1] Women's empowerment

Although we have always hired new personnel in an equal and fair manner regardless of gender, the ratio of female workers actually remains low. Accordingly, we have set KPIs and targets based on the Act on Promotion of Women's Participation and Advancement in the Workplace, and from now on, we will make active efforts to increase the number of female personnel and provide more opportunities for them to advance.

[2] Utilization of foreign personnel

We have three foreign personnel working actively in multiple sections, with one more scheduled to join the Company in FY2022. Going forward, we will also actively recruit people who will be able to participate actively in our operations, regardless of nationality or gender.

[3] Employment of persons with disabilities

In May 2022, as part of our provision of employment opportunities for diverse personnel, we established the Salad Bowl Farm, where two newly recruited employees with disabilities are engaged in hydroponic cultivation. We will continue to provide opportunities for diverse personnel to advance.

(2) Reemployment program for retired persons

In accordance with the Act on Stabilization of Employment of Elderly Persons, we have introduced a reemployment program that allows personnel to work until the age of 65 after reaching the mandatory retirement age of 60. As part of our efforts for the utilization of diverse human resources, we will consider the amendment of this program based on the extension of the mandatory retirement age from FY2022. Our goal will be a program that encourages retired personnel to continue demonstrating their experience, skills and other strengths.

(3) Diverse and flexible work styles

[1] Flextime system

From the perspective of work-life balance, that is, the balance between work and private life, including childcare, nursing care, and medical treatment, we have introduced a super flextime system and a work-from-home system to further promote the creation of an environment in which our personnel can manage their time effectively.

[2] Reducing annual scheduled total working hours

With the aim of reducing actual total working hours, we worked together with the labor union to achieve staged reductions of annual scheduled total working hours in 2020 and 2021. As a result, the annual scheduled total working hours have been

shortened by 24 hours from 2019 levels to 1,891 hours for daytime workers, and by 21 hours to 1,883 hours for shift workers.

(4) Efforts to reduce long work hours

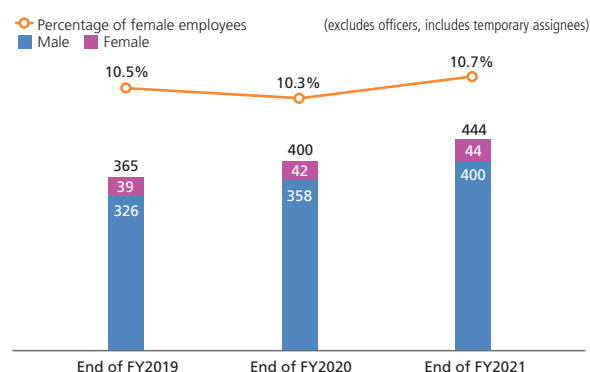
We have a system of self-management of overtime based on the belief that it is important for individual employees to be conscious of how they work and spend their time on their work as they see fit. To encourage each person to manage their own overtime, they report their overtime hours worked individually to the managerial personnel. We also strive to ensure proper time management by using the PC based management system and the access control system.

We have also instituted "No-Overtime Day" every Friday and strive to raise awareness among employees about reducing overtime through internal announcements, e-mail, and other means.

In the case long working hours are anticipated, employees are asked to see an industrial physician or an occupational health nurse appropriately.

(5) Company-wide percentage of female employees

As shown in the graph, female employees account for approximately 10% of our workforce. The reason why we set KPI and our target of the percentage of female new graduate hires into more than 20% is to increase the percentage of female employees across the entire Company in the medium to long term. Initiatives to increase female employee retention rates include the enhancement of the childcare leave system and holding health seminars targeted at female employees. Currently, we are actively engaged in the recruitment of female operators, and in addition to working to create a comfortable workplace and environment for women, we are conducting initiatives to remove gender gaps by job type. We are also actively pursuing the promotion of women to management positions and aim to increase the percentage of female managers in the medium to long term.



Message from the Responsible Officer

Koei Chemical's Approaches to Sustainability

Keiko Fukahori

Director, Managing Executive Officer, in charge of Research & Development Division, Sustainability









To date, Koei Chemical has engaged in Responsible Care and CSR initiatives, and we are now intensifying our approaches to sustainability initiatives as a member of the Sumitomo Chemical Group. Last fiscal year, we launched a project team to promote sustainability, shared material issues for sustainable value creation with the Sumitomo Chemical Group, and established Koei Chemical's KPIs. In FY2022, we have established a Sustainability Committee as an advisory committee to the Board of Directors, and on the executive side, we have established a sustainability promotion council within the Executive Council. Through these bodies, we will work to strengthen our concrete measures based on reports of results, with the aim of accelerating our approach to sustainability. Within those approaches, regarding carbon net zero, we will continue our efforts for improvement in energy efficiency by 1% per annum. The energy-saving, high-efficiency gas turbine cogeneration facility, a collaboration with Sumitomo Chemical's Chiba Works, will start operations in the fall of FY2023, but at present, there is still a considerable gap from our target of a 50% reduction by 2030. As we proceed, we will identify the order of priority of measures to bridge that gap, including procurement of renewable-derived fuels and materials and the purchase of emission rights. We are also working on the development of technologies and products that will help to mitigate environmental impact, such as energy-saving catalysts and ionic liquids capable of dissolving cellulose at room temperature. Also, as a diversity initiative, we established the Salad Bowl Farm in May, 2022 and are promoting the employment of persons with disabilities.



Material issues to be addressed as management priorities and Koei Chemical's KPIs

We Share material issues for sustainable value creation with Sumitomo Chemical Group, and has established the key performance indicators (KPIs) of our own, shown in the table below to address each of those material issues. By raising awareness of sustainability promotion among

all employees and managing and disclosing the status of approaches to those KPIs, we will contribute to the realization of a sustainable society. We will also promote dialogue with internal and external stakeholders and further enhance our activities to promote sustainability.

Material issues	KPI
Material issues for social value creation     	Contribute to the environment <ul style="list-style-type: none"> Climate change mitigation and adaptation Contribute to recycling resources Sustainable use of natural capital <ul style="list-style-type: none"> CO₂ emissions (Scope 1 + 2) (Target: 50% reduction compared with 2013) Improvement in energy efficiency etc.
	Contribute to the food supply <ul style="list-style-type: none"> Advance sustainable agriculture <ul style="list-style-type: none"> Sales of raw materials and intermediates for crop protection products
	Contribute to healthcare <ul style="list-style-type: none"> Sales of raw materials and intermediates for pharmaceuticals
	Contribute to ICT <ul style="list-style-type: none"> Sales of electronic related materials
	Advance innovation <ul style="list-style-type: none"> New product sales ratio Cumulative savings from cost rationalization
Material issues for future value creation   	Bolster competitiveness leveraging DX <ul style="list-style-type: none"> Digital literacy assessment
	Human resources: DE&I*, growth & development, health <ul style="list-style-type: none"> Percentage of female new graduate hires (Target: 20% or more) Employment rate of persons with disabilities (Target: 2.5% or more)
Foundation for business continuation	
<ul style="list-style-type: none"> Occupational safety and health, and operational safety and disaster prevention Respect for human rights 	<ul style="list-style-type: none"> Product safety and quality assurance Cybersecurity Compliance Anti-corruption

*Diversity, Equity & Inclusion

Contribute to the environment

KPI

CO₂ emissions (Scope 1 + 2)
[Target: 50% reduction compared with 2013]

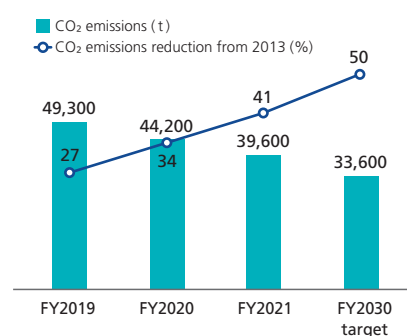
➤ FY2021 result:
41% reduction

Improvement in energy efficiency etc.

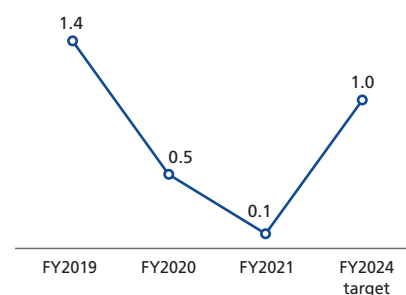
➤ FY2021 result:
0.1% reduction



In order to prevent global warming, the world needs to reduce the emission of CO₂ and other greenhouse gases. Through our efforts to date to promote energy conservation through the modification of production processes and the collection and utilization of exhaust heat, and centralize our bases and shift to high value-added products through a review of the business portfolio, as of FY2021, we had achieved a 41% reduction in CO₂ emissions compared with 2013. However, while on the one hand, CO₂ emissions declined significantly due to the decline in production volumes resulting partly from the extraordinary circumstance of shut-down maintenance being performed twice in FY2021, the rate of improvement in energy efficiency etc. decrease. Going forward, we will pursue energy-saving measures as collaborative projects with Sumitomo Chemical in our aim for further improvements.

CO₂ emissions

Rate of Improvement in energy efficiency etc. (%)



TOPICS Launch of joint research of catalyst for amine production with Osaka University Graduate School

Koei produces amine compounds that are essential to CO₂ absorbents. Amine is produced under harsh conditions of high temperature and pressure. Through joint research with Associate Professor Takato Mitsudome of the Osaka University Graduate School of Engineering Science, we aim to establish new process under lower temperature and pressure, which will enable us to reduce hydrogen and energy use and establish green and sustainable amine production technology.



Contribute to the food supply

KPI

Sales of raw materials and intermediates for crop protection products

➤ FY2021 result:
2.0 billion yen

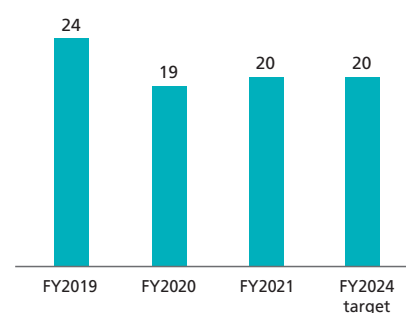


Our basic products, including amines and pyridines, are used as raw materials and intermediates for crop protection products. We deliver these products to manufacturers in Japan and overseas.

In FY2021, they accounted for 12% of total net sales, and sales of these products increased by around 10% year on year. However, sales are expected to level out for the immediate future due to intensifying competition.

Going forward, we will strengthen our competitiveness through streamlining of existing products and productivity improvements and strive to expand demand, while at the same time further promoting new product development in an effort to improve sales performance.

Sales of raw materials and intermediates for crop protection products (100M yen)



Contribute to healthcare

KPI

Sales of raw materials and intermediates for pharmaceuticals

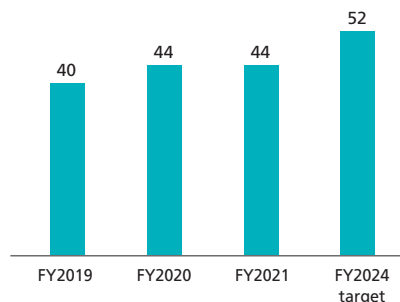
➤ FY2021 result: **4.4 billion yen**



For many years, we have delivered antituberculosis drug intermediates and other pharmaceutical intermediates, and core products, including amines and pyridines, to pharmaceutical manufacturers in Japan and overseas.

In FY2021, these products accounted for 26% of total net sales, with only a marginal increase in sales of 0.4% year on year. As we anticipate large orders for pharmaceutical intermediates from FY2022, we expect to see major growth toward FY2024.

Sales of raw materials and intermediates for pharmaceuticals (100M yen)



Contribute to ICT

KPI

Sales of electronic related materials

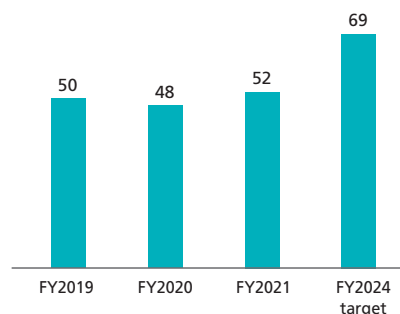
➤ FY2021 result: **5.2 billion yen**



The electronic related materials category comprises semiconductor-related products, ionic liquid products, and optical materials-related products. Despite major fluctuations in demand, this category is expected to grow steadily on the whole.

In FY2021, these products accounted for 31% of total net sales, with optical materials-related products contributing to a 9% increase in sales year on year. From FY2022, we are aiming for the further expansion of optical materials-related products through the recovery of demand for semiconductor-related products and the strengthening of collaboration with the Sumitomo Chemical Group, and we expect to see major growth in this category toward FY2024.

Sales of electronic related materials (100M yen)



Advance innovation

KPI

New product sales ratio

➤ FY2021 result: **7.5%**

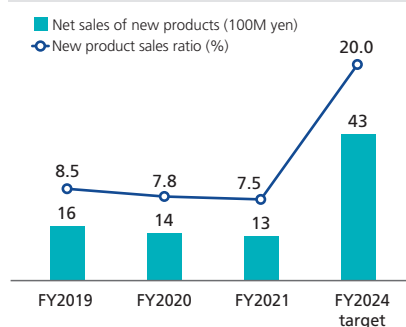
Cumulative savings from cost rationalization

➤ FY2021 result: **0.6 billion yen**

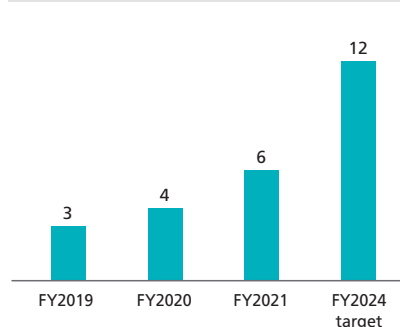


The trends in the new product sales ratio and the cumulative savings from cost rationalization are shown in the graphs below. Cumulative savings from cost rationalization is growing steadily. The new product sales ratio has fallen slightly, but toward FY2024, we will aim to expand sales of organometallic catalysts, pharmaceutical intermediates, and optical materials-related products in particular.

New product sales ratio (%)



Cumulative savings from cost rationalization (100M yen)



*Definition of new products: Products marketed within past five years

Bolster competitiveness leveraging DX

KPI

Digital literacy assessment

➤ FY2021 result: **1.5**



To measure the level of the Company's digital literacy, Koei Chemical uses a proprietary 5-point scale to assess a total of 12 items, divided into (1) six items concerning Ideal approaches to business management and systems for promoting DX, and (2) six items concerning Development of IT systems as a foundation for achieving DX.

Based on this assessment, our digital literacy score in FY2021 was a low 1.5, but we are steadily achieving results and will aim for sustained improvements.

Digital literacy assessment

FY2021 digital literacy assessment score ... **1.5**

Ideal approaches to business management and systems for promoting DX			Development of IT systems as a foundation for achieving DX		
No.	Evaluation items	Self-assessment	No.	Evaluation items	Self-assessment
1	Strategies and visions*	1.5	7	Governance/systems	2
2	Commitment by business management	2	8	Secure HR recruitment	2
3	Mindset/corporate culture	0	9	Ownership of the business operation department	2
4	Promotion/support systems	3	10	Analysis and assessment of IT assets	2
5	HR Development/secure HR recruitment	1	11	Categorization of IT assets and planning thereof**	1
6	Reflection of outcomes in business	2	12	Ability to follow up on changes	1

*No. 1 is further divided into two sub-items and **No. 11 into four sub-items for self-assessment.

Human resources: diversity, equity & inclusion, growth & development, health

KPI

Percentage of female new graduate hires (Target: 20% or more)

➤ FY2022 result: **14.3%**

Employment rate for persons with disabilities (Target: 2.5% or more)

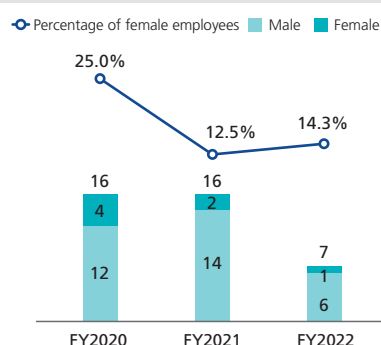
➤ FY2022 result: **3.1%**



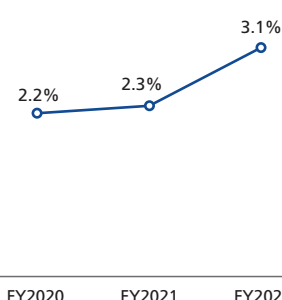
Our target for the percentage of female new graduate hires is 20% or more, but in the medium to long term, we aim to raise the employee retention rate and increase the percentage of female employees across the entire Company. We achieved this target in FY2020, but the percentage was below the target in FY2021 and FY2022. We will continue in our aim to build a company and systems that will appeal to women.

Further, with the employment of persons with disabilities due to the establishment of the Salad Bowl Farm, we have achieved our target for the employment rate of persons with disabilities from FY2022. We will continue our efforts to maintain and improve this employment rate.

(1) Percentage of female new graduate hires [Target: 20% or more]



(2) Employment rate of persons with disabilities [Target: 2.5% or more] (as of June 1 each year)



TOPICS Establishment of the Salad Bowl Farm

We established the Salad Bowl Farm as an initiative to further promote employment of local persons with disabilities. We are working to create a working environment where it is easy for each individual to participate actively, such as setting work content and roles to match the attributes of the individual employees' disabilities and establishing systems for detailed follow-up. We will continue in our aim to realize a sustainable society through the employment of diverse human resources.



Current state of greenhouse gas emissions reduction and recognized issues

For the prevention of global warming, Koei Chemical, as a member of the Sumitomo Chemical Group, the world's first general chemical company to obtain certification under the SBT Initiative, has designated emissions of CO₂ and other greenhouse gases (Scope 1+2) as a KPI and, with a target of a 50% reduction from FY2013 level by FY2030, aims to achieve carbon net zero by 2050.

Through our efforts to date in the promotion of energy conservation through the modification of production

processes and the collection and utilization of exhaust heat, and the centralization of business bases and the shift to high-value-added products through a review of the business portfolio, as of FY2020, we had achieved a 34% reduction in CO₂ emissions compared with FY2013 level. However, due to an increase in production volumes with the commencement of operations at the new plant in FY2022, CO₂ emissions are expected to increase temporarily.

Future approaches to carbon net zero

It is difficult to achieve such a challenging target by simply continuing the current efforts, thereby indicating the need to introduce new solutions and other active measures. One example of such measures is the pursuit of a collaborative project with Sumitomo Chemical, our parent company, in which our Chiba Plant will shut down the existing cogeneration facilities and make up for the resulting shortfall in electricity and steam with supply from a highly efficient gas turbine power generation facility to be newly

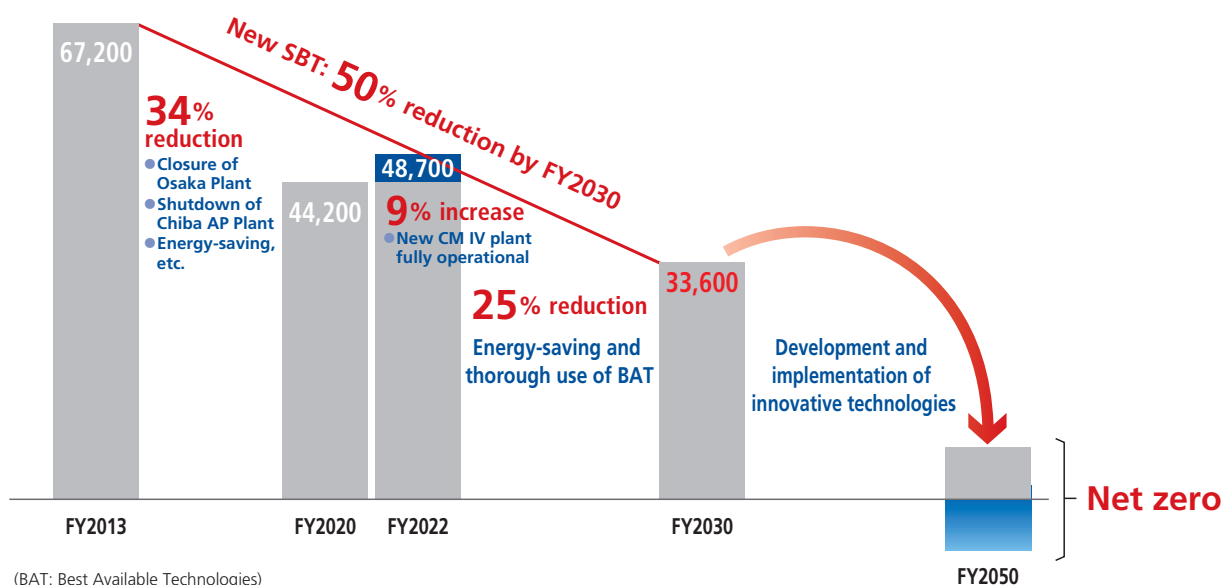
installed at Sumitomo Chemical's own Chiba Works next door to ours (scheduled for completion in autumn 2023).

In our approach to carbon net zero, we have positioned contribution to resources recycling by leveraging the research and technological development capabilities we have cultivated to date as a material issue. Our main planned initiatives, including the development of new ionic liquids that can dissolve cellulose with low energy consumption, are listed below.

Main planned initiatives

- Development of new ionic liquids that can dissolve cellulose under more moderate conditions than previously
- Development of metallic nanoparticle catalysts for the realization of highly safe production processes for amine compounds, which are indispensable as CO₂ absorbents, under lower temperature and pressure conditions than previously (joint research with Osaka University Graduate School)
- Production of polyether diamine using polyols derived from CO₂ solidified biomass

Greenhouse Gas Emissions (Results and Plans) (t)



DX objectives and vision

Having decided on the improvement of productivity and strengthening of competitiveness as our digital transformation (DX) objectives, we have formed a company-wide taskforce (DX Strategy Team) as a step toward achieving those objectives. We have also established the vision for each field, namely the production plants (PLANT), R&D, SCM, and back-office divisions (OFFICE), that we will aim toward in our DX strategy in the Corporate Business Plan. Through initiatives based on this DX strategy, we will strive to optimize and speed up our entire supply chain and engineering chain, while also accelerating innovation, in our aim to achieve the Corporate Business Plan.

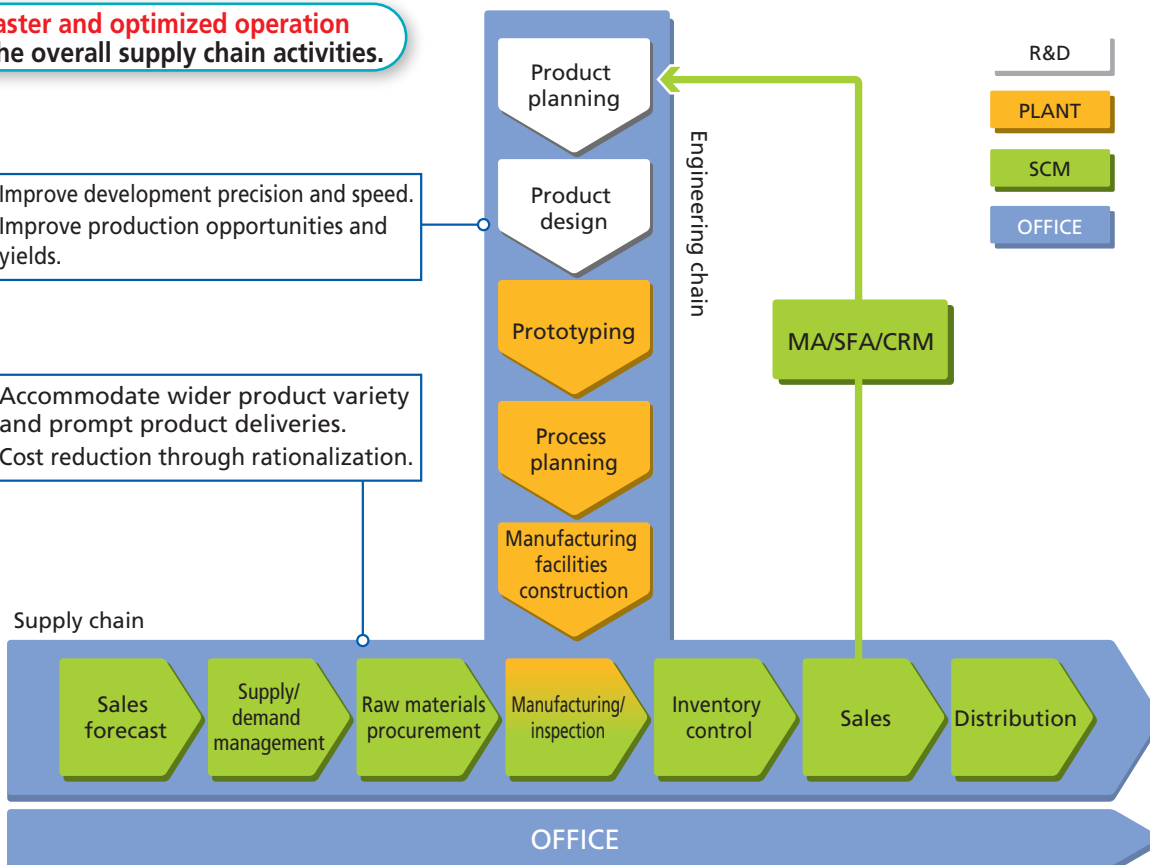
Vision	
PLANT	Improved production opportunities with maximized production capacity.
R&D	Faster and more advanced R&D through data-driven research.
SCM	Faster and optimized operation of the overall supply chain activities.
OFFICE	More employee-friendly operations with digital technology.

Improve productivity and competitiveness

Faster and optimized operation of the overall supply chain activities.

- Improve development precision and speed.
- Improve production opportunities and yields.

- Accommodate wider product variety and prompt product deliveries.
- Cost reduction through rationalization.



Introduced e-learning program "Aidemy Business" as part of promotion of Data scientists/engineers' skill development.

As an initiative to develop personnel who understand the latest digital technologies and approaches and who will promote Koei's DX forcefully, we have introduced "Aidemy Business," an e-learning service delivered by Aidemy Inc. In the belief that improving the digital literacy of the management team, and not just that of the DX Strategy Team, is vital for the promotion of DX, all executive officers of Koei are taking this e-learning course.

In order to respond to the expectations of stakeholders, we strive to establish and operate an effective corporate governance system and continuously strengthen and improve the system.

Initiatives to strengthen the corporate governance system

2015	Nomination Committee/Compensation Committee established.	2020	Number of Directors/Audit and Supervisory Committee Members is increased from three to four.
2016	Introduced an effectiveness evaluation of the Board of Directors. Transformed the structure into a company with an Audit and Supervisory Committee.	2021	Introduced an Executive Officer structure, making 1/3 of Board consisting of the Independent and Outside Directors.
2019	First female director appointed. Established an Outside Directors Meeting system.	2022	Established the Sustainability Committee as an advisory body to the Board of Directors

Basic policy on corporate governance

In the expectation of fair corporate activities, Koei positions compliance as a critical core of management. In terms of our business management system, we have established the Board of Directors and the Audit & Supervisory Committee, as well as the Management Committee, Internal Control Committee, and other necessary committees, which are intended to supplement and reinforce the function of the

Board of Directors. Our businesses are being operated under the supervision of these organizations. We also endeavor to enhance corporate value through efficient management in pursuit of the best possible corporate governance, and continue to engage in measures to strengthen and enhance corporate governance in line with the following policies.

- In addition to respecting the rights of shareholders, we will strive to establish an environment that will realize the smooth exercise by shareholders of those rights and to ensure substantive equality of shareholders.
- We recognize that working together with our many different stakeholders, including employees, customers, business partners, creditors, and local communities, is essential to the sustainable growth of the company, and, in addition to actively fulfilling our corporate social responsibilities, we will strive to foster a corporate culture that will be trusted by society.
- As part of our establishment of platforms for constructive dialogue with our stakeholders, we will indicate highly reliable and appropriate management policies and business strategies that are based on changing social and economic circumstances. The Board of Directors will also execute its roles and missions appropriately, including conducting highly effective supervision of the execution of operations.
- We will strive for constructive dialogue with stakeholders, with whom we share a recognition of the company's sustainable growth and the mid-to-long-term enhancement of corporate value.

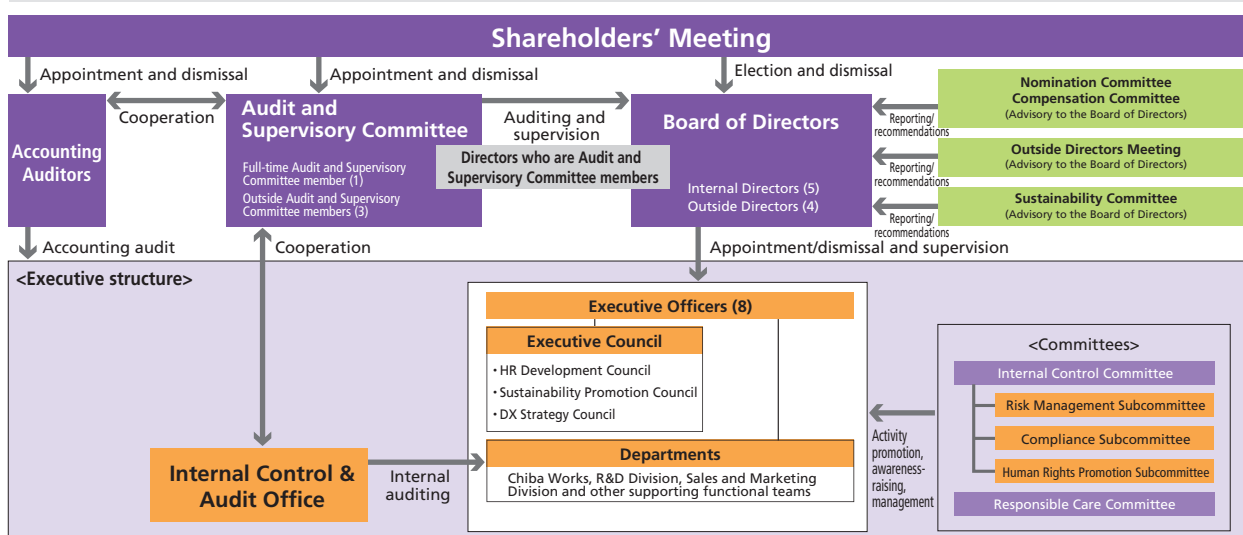
Corporate governance system

In accordance with the resolution passed at the 155th Ordinary General Meeting of Shareholders held on June 24, 2016, Koei Chemical transitioned from a company with a board of corporate auditors to a company with an audit & supervisory committee. By establishing the Audit & Supervisory Committee, the majority of which are outside directors, and through the appointment of several

outside directors, the supervisory function of the Board of Directors has been further strengthened, leading to the further enhancement of our corporate governance system.

In addition, in order to further strengthen the supervisory function, four outside directors are registered as Independent Officers with the Tokyo Stock Exchange.

Corporate governance system (as of July 1, 2022)



Strengthening of corporate governance system

On April 1, 2022, Koei launched its new Corporate Business Plan FY2022–FY2024, “KX2.0: Striving for transformation utilizing knowledge and experience of over 100 years.” In our efforts to realize our corporate philosophy within the initiatives designed to achieve that plan, we have undertaken a further review of our corporate governance system, which included making changes

[1] Composition of Board of Directors

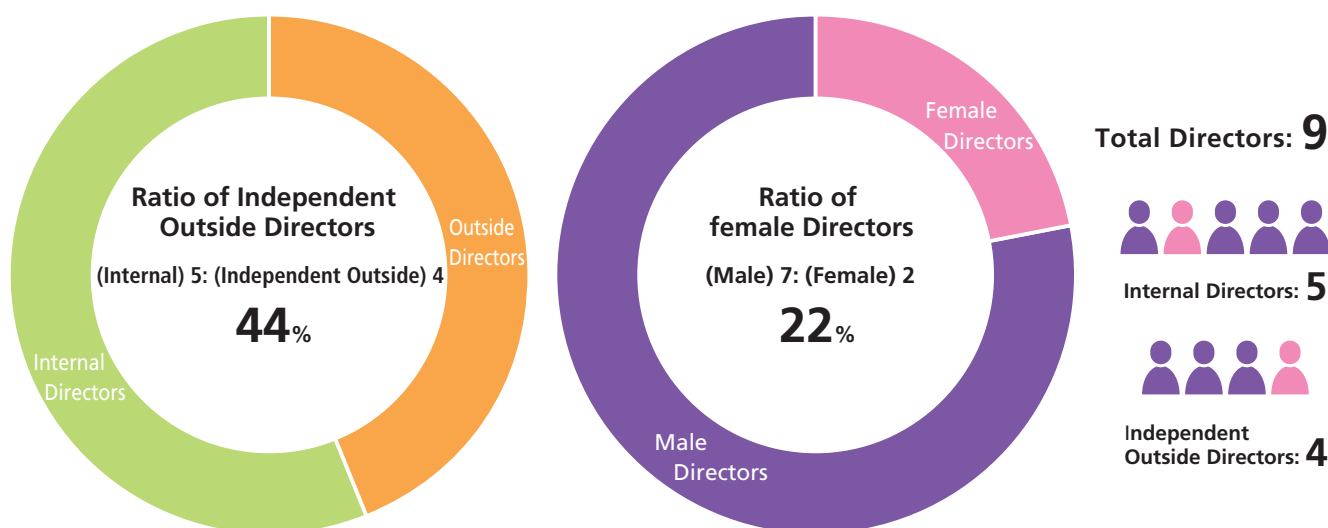
With the objective of building a corporate governance system that strengthens the supervisory function of the Board of Directors and heightens its independence from controlling shareholders, four Outside Directors were elected at the 161st Ordinary General Meeting of Shareholders, increasing the ratio of Independent Outside Directors. With this move, the Board of Directors now comprises five Internal Directors and four Independent Outside Directors (until last fiscal year, there were

to the composition of the Board of Directors, establishing a new Sustainability Committee, and enhancing the Internal Control Committee. We will continue to examine the status of our corporate governance as required, based on social trends and other developments, and implement and improve our policies at the appropriate time and in an appropriate manner.

six Internal Directors and three Independent Outside Directors).

The Board of Directors’ composition maintains a balance of Directors who possess the knowledge, experience, and skills necessary for the realization of the new Corporate Business Plan FY2022–FY2024, “KX2.0: Striving for transformation utilizing knowledge and experience of over 100 years,” and ensures diversity, including gender and professional background.

Composition of Board of Directors



[2] Establishment of new committee: Sustainability Committee

In recent years, sustainability has been increasingly recognized as a key management issue for the enhancement of corporate value. Koei has also positioned the pursuit of sustainability as a factor in the strengthening of its management foundations. For the strategic and ongoing promotion of responses to sustainability issues, we have established a Sustainability Committee as an advisory committee to the Board of Directors. We have

also established a Sustainability Promotion Council inside the Executive Council. This Council will consider concrete policies and measures for sustainability within the executive structure.

The Sustainability Committee will debate, deliberate, and supervise while incorporating various stakeholders’ viewpoints. In this way, we will raise the effectiveness of our sustainability promotion activities.

[3] Enhancement of Internal Control Committee

As a structure to ensure the properness of business operations as set forth in the Companies Act, Koei has established a Basic Policy on Internal Control Systems. The Internal Control Committee examines the Company’s various measures regarding internal control under this Basic Policy and the various measures concerning the internal control reporting system for financial reporting, and reports its opinions of those examinations to the Board of Directors.

This fiscal year, we have enhanced the Internal Control Committee as part of our initiatives to strengthen the

corporate governance system. We have established a Risk Management Subcommittee, Compliance Subcommittee, and Human Rights Promotion Subcommittee under the Internal Control Committee to implement and promote the various measures under the internal control system. This has created a structure under which the Internal Control Committee will implement and promote measures regarding internal control, including matters on risk management, compliance, and respects for human rights.

Compliance

In our corporate philosophy, not only do we aim to grow our business and contribute to the development of society by providing valuable products and developing innovative technology, but we also declare that we will earn the trust of society and pursue our business activities through the actions of all officers and personnel, placing prime importance on credibility and integrity. The observation of laws, regulations and social ethics (compliance) is a prerequisite for achieving these aims. In that respect, Koei positions compliance as the most critical core of management.

To achieve the thorough implementation of compliance by all officers and personnel, we have established the Koei Chemical Charter for Business Conduct (Compliance Manual). This Compliance Manual sets forth the various rules to be observed by officers, employees, temporary

assignees, contract employees, temporary workers, and all other persons engaged in Koei's business activities under Koei's control and supervision for the observation of laws and ordinances, company regulations, and social ethics. It also indicates the standards that officers and personnel should maintain and unwritten ethical standards in the form of conduct guidelines along 26 key themes. The Compliance Manual is updated when required to ensure that it continues to respond to changes in social requirements, laws, and regulations.



Speak-up reporting system

We have established a whistle-blowing hotline that allows officers and personnel to report compliance violations or the risk thereof if they detect the occurrence inside Koei Chemical or an affiliated company (speak-up reporting system). We use sufficient caution with respect to the privacy of whistle-blowers and consulters, and have arrangements in place to

ensure that they will never be treated disadvantageously on the grounds of having made a report/consultation under this system. We have also set up an external whistle-blowing hotline (external attorney) in addition to the internal hotline to make the speak-up reporting system easier to use. We also educate personnel about the system.

Compliance education

We are placing efforts into compliance education with the objective of fostering a consciousness of compliance among all officers and personnel. In addition to compliance training held every year for all officers and personnel, we have also established Compliance Promotion Month, during which everyone participates in the identification of compliance risks that are peculiar to each division and proposes countermeasures to those risks. Compliance has also been included in our new employee induction training and grade-based training, as part of our meticulous efforts to educate our employees.

In addition, to raise awareness of compliance-related issues among all officers and personnel, compliance awareness

posters are displayed, and a "Compliance News" column is published in the Company's newsletter. This column uses illustrations and text to provide easy-to-understand explanations and commentary on the details and preventive measures of compliance risks that are common to the whole Company, including topical issues and issues that could arise in familiar surroundings.



Message from an Outside Director



Shingo Yoro
Outside Director (Audit &
Supervisory Committee Member)

The Independent Outside Directors (Audit & Supervisory Committee Members) have a broad range of responsibilities. In addition to being members of the Audit & Supervisory Committee, which is primarily responsible for auditing operations, we participate in decision-making in the Board of Directors, and we also have status as independent directors for the protection of general shareholders. Since my appointment to this role two years ago, the environment concerning audits and governance has changed markedly, including the introduction of Key Audit Matters (KAM) and the revision of the Corporate Governance Code. Remaining cognizant of the fact that Koei Chemical is a listed subsidiary, based on my experience as a legal professional, I will devote my efforts not only to the protection of minority shareholders but also to ensuring that diverse stakeholders' opinions are reflected in corporate governance.

The global chemical industry is working voluntarily to protect environment, safety and health through every process from the development of chemical substances, their manufacture, distribution and use to final consumption and disposal, as well as engaging in communication with the public by openly disclosing performance. These initiatives are known as “Responsible Care.”

As a member company of the Japan Chemical Industry Association (JCIA) working for responsible care, we have formulated the Policy on Responsible Care Activities (Safety, Health, Environment and Quality). We aim to further promote safety, health, environment, and quality throughout the life cycle of our products under this policy.

Policy on Responsible Care Activities (Safety, Health, Environment and Quality) (Revised on April 1st, 2022)

Koei Chemical’s core philosophy is as follows;

“We aggressively act to grow our business by mobilizing all the available intelligence and energy with prime importance on credibility and integrity.”

“We shall contribute to the development of society through providing valuable products, solutions and innovative technology.”

In accordance with this core philosophy, we will work on the following matters regarding safety, health, environment and quality as our top priorities in order to contribute to the sustainable development of society and our own growth.

1	We will maintain safe and stable operations by realizing zero-accident, zero-injury performance and “Making safety our first priority.”
2	We will ensure the safety of our employees, neighboring communities, and other stakeholders through risk-based continual improvement of our performance in occupational safety and health, industrial safety and disaster prevention, and other related areas, as well as the security of our facilities, processes and technologies.
3	We will work to ensure environmental and human health and safety throughout the life cycle of our products by promoting continual improvement in chemicals safety and product stewardship across the supply chain, and enhancing our chemicals management system.
4	We will work to protect the environment through continual improvement of our environmental performance throughout the life cycle of our products, from development to disposal, and address climate change and related issues.
5	We will supply high-quality products and services that satisfy customers’ needs and ensure safety in their use.
6	We will not only comply with all domestic and international laws, regulations, and ordinances, but also work to use best practices through our voluntary initiatives.
7	We will disclose information and engage in dialogue with society to ensure that we meet society’s expectations, respond to its interests, and remain accountable to the same.
8	We will contribute to sustainable development of society by improving our performance, expanding business opportunities, as well as developing and providing innovative technologies and other solutions to address social challenges.

Efforts for responsible care activities

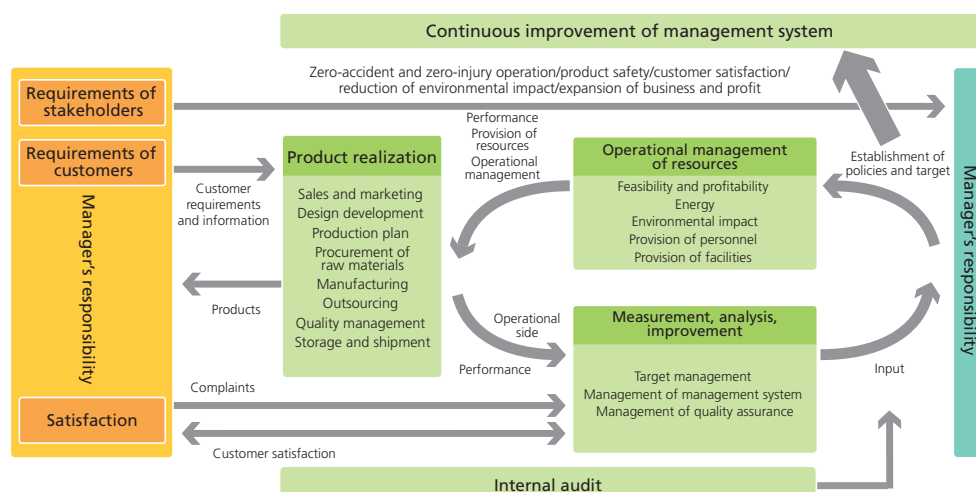
We declared the implementation of Responsible Care in 1995. Having recognized this policy, officers and employees are making continuous efforts to improve the management system in compliance with laws and regulations. In addition, an officer who is in charge of safety, the environment, and product quality oversees all the duties regarding safety and health, environmental protection, security and disaster prevention, quality assurance, and chemical safety.

We have established the Responsible Care Committee, which is chaired by the President, as the supreme decision-making organization that promotes Responsible Care activities. The Responsible Care Committee meetings are

held twice a year. The Committee reviews the results of activities performed during the previous fiscal year and approves plans to be implemented for the current fiscal year to ensure continuous improvement of the management system. In addition, we perform internal audits on a regular and as-needed basis to check the effectiveness of the activities.

We have acquired ISO certification, which is the international standard relating to environmental and quality management systems, as one of the tools to promote Responsible Care activities. We also focus on the overall improvement of system performance.

Cross correlation chart of major processes



Safety, security and disaster prevention

Based on the basic principle of “making safety our first priority,” we strive to ensure worker safety and health with the aim of making safety and stable operation our strength.

More specifically, we perform activities to periodically discuss and consider issues regarding safety and health, and determine measures mainly through the Safety and Health Committee and the safety and environment promotion members’ meeting.

In addition, we perform concerted safety activities by organizing various campaigns with the aim of eliminating both minor and major disasters. During the campaign period, the identification of dangerous sites and the improvement thereof, the promotion of Hiyari-Hatto (near-accident situations) prevention activities, the strengthening

of risk detection, the promotion of the pointing and coding method and other necessary measures are conducted by safety and environment promotion members, which are representatives appointed in each workplace.

Moreover, we have established the Safety and Environment Promotion Task Force for plant reform activities. These activities are being strengthened by positioning the Task Force as an important pillar of reform activities.

Both the President and Plant Directors, which are the top members of the plant, inspect the relevant workplace and are actively involved in various initiatives such as ensuring Japanese 5S methodology, raising safety awareness, and eliminating safety issues. In this manner, ensuring safety is treated first and foremost.



Safety workshop



Disaster training

Chemicals safety

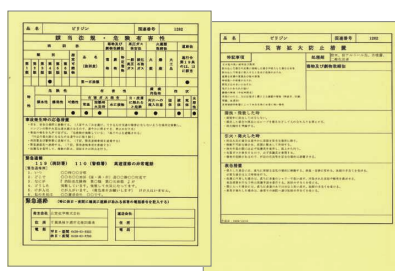
We have prepared GHS-compliant safety data sheets (SDS) and product labels for all products to display and provide users with necessary information on dangers and hazards. Providing SDS and labels is a statutory obligation in Japan and overseas, with which we appropriately comply. We also ask logistics traders who transport our products to carry a card that contains information on emergency handling and contact (yellow card).

Chemicals need to be managed in accordance with risks. Risk assessment is a method to identify potential dangers and

hazards in the workplace, and reduce or remove them. We identify dangers and hazards of the substances that we handle at the phase of research and experimentation with reference to literature study and tests. For substances produced officially in a plant, various assessments through the evaluation of the magnitude of risks of chemicals and facilities are required. The data is examined by not only the department in charge of safety, but also in cooperation with the laboratory and the plant divisions.



Product label



Yellow card

Quality assurance

We have built our quality assurance system in accordance with our basic policy of “supplying high-quality products and services that satisfy customers’ needs and ensure safety in their use.” In order to satisfy our customers, we consider it important to deliver products that meet customer demands with quality that provides customer satisfaction in a timely manner. To this end, quality assurance activities are promoted at each stage through the concerted efforts of divisions including sales, design/development, purchasing, production, quality assurance and logistics.

When a quality-related complaint, problem or issue occurs, the department in charge and the Quality Assurance Department will find causes out through various way, for example, “naze-naze” analysis (5 Why Analysis), take recurrence prevention measures, and roll them out to eliminate complaints of the quality-related information. Information on those actions is shared within the Company through the Quality Maintenance Task Force, which is one of our plant reform activities, thereby improving our quality assurance system.

Please see pages 29 to 32 for detailed data on responsible care.

Respect for Human Rights

Koei Chemical has put in place this Human Rights Policy ("Policy") to demonstrate its commitment to international standards on human rights. All officers and employees ("Personnel") of Koei Chemical will uphold this Policy.

Our Position on Human Rights

(1) Compliance with Standards, Laws and Regulations

We support and respect international standards on human rights, such as the Universal Declaration of Human Rights and International Labor Organization (ILO) Declaration on Fundamental Principles and Rights at Work, and promote respect for human rights. We comply with applicable laws and regulations in countries and regions where we operate, and where local laws and regulations conflict with international standards, we will seek ways to honor the principles of internationally recognized human rights.

(2) Respect for Human Rights in Our Business Activities

We do not discriminate against individuals based on employment status, age, sex, ethnic or social origin, ancestry, nationality, disability, religion, beliefs, marital status, or any other status. We do not tolerate any form of harassment, including sexual harassment or workplace bullying. We also respect fundamental labor

rights including freedom of association and the right to collective bargaining, and prohibit forced labor or child labor.

We are committed to respecting human rights in our business activities and also strive to avoid contributing to infringement of human rights. In order to prevent and mitigate human rights risks related to our business activities, we will take necessary measures, including ensuring compliance with the Compliance Manual (the Koei Chemical Code of Business Conduct) and other relevant policies and guidelines. We are also committed to understanding our impact on local communities and aim for harmonious coexistence with these communities. We expect our business partners, including our suppliers, and other relevant stakeholders to act in line with the principles in this Policy, and we will seek ways to work with them to promote respect for human rights.

Our Approach to Human Rights Issues

(1) Providing Education and Raising Awareness

We will provide appropriate education and training to our Personnel so that this Policy is understood and effectively implemented.

(2) Human Rights Due Diligence

We will identify adverse human rights impacts, and seek to prevent or mitigate such impacts through our human rights due diligence framework.

(3) Responding to Identified Human Rights Impacts

We will engage with relevant stakeholders in order to address actual or potential adverse human rights impacts.

(4) Remedy

Where we identify that we have caused or contributed to adverse human rights impacts, we will endeavor to remediate such impacts through appropriate processes.

(5) Grievance Mechanisms

We have grievance mechanisms in place in the form of the Speak-Up Reporting System (whistle-blowing channels) in order to address concerns about activities that may adversely impact human rights or any other concerns raised about our business activities. These channels are available for anyone having involvement in Koei Chemical's business activities, including their business partners as well as Koei Chemical Personnel and their families. We will continuously seek to optimize our grievance mechanisms.

(6) Disclosure

We will report on our efforts to respect human rights through our website, CSR Report, and other relevant channels.

Initiatives for human rights due diligence and high-risk raw material procurement

We conduct business activities based on Sumitomo Chemical Group Human Rights Policy and Policy for Responsible Procurement of Minerals/Raw Materials. We define those raw materials that involve a high risk of having a negative impact on human rights in the supply chain (including but not limited to Tantalum, Tin, Gold, Tungsten, Cobalt, Mica, Graphite, Pulps etc.)

When making purchases, we strive to identify items that contain high-risk raw materials. We have conducted human rights due diligence of suppliers of such items and confirmed the absence of any issues. We will continue to promote these initiatives in accordance with Sumitomo Chemical Group's policies.

Investment in Human Resources

Koei Chemical has been recruiting the human resources for further business expansion. We recruit not only people with technology-related backgrounds to enhance the R&D system but also we are increasing the number of sales division personnel, and employees who work for the new multi-purpose plant as well. Furthermore, we are preparing new company dormitory for single employees and carrying out a variety of health promotion activities. Such initiatives aim to offer employees stable lives and create an environment where everyone can work in good health and with enthusiasm.

We also support our employees develop and acquire skills. We support them by offering a range of education and training programs. We will work on human resources development especially to develop employees' capabilities and skills, and to cultivate new employees' fundamental skills.

Preparation of new company dormitory for single employees

Koei Chemical has decided to rent an apartment building to offer new company dormitory for single employees. This makes two apartment buildings of company dormitory units available for single employees, including one building already we have owned. All employees who wish to live in company dormitory will be able to do so regardless of gender. The new company dormitory units are scheduled to be available from February 2024.

The Corporate Business Plan implemented from April this year focuses on enhancement of human resources development as one of its basic policies. By preparing new company dormitory for single employees as part of relevant initiatives, we hope to facilitate communication between colleagues and foster a sense of unity, which creates a pleasant working environment and by extension improves employee engagement.

Support for acquisition of national certifications

In order for each employee to improve their productivity and performance level, we are promoting the support of national certifications.

We offer on-demand classes to support exam preparation, as well as pay incentives according to the level of qualifications.

- Number of employees who used the bonus system in FY2021: 60

Health promotion activities

Due to the need to prevent the spread of COVID-19, we were unable to carry out health promotion events in FY2021 as planned. All health events, however, still took place under necessary countermeasures, while we kept a close eye on the status of infections. For example, we carried out support for quitting smoking, as well as mental health training programs for line-care and self-care, by increasing the number of session slots to avoid making crowds.

To continue to offer meetings with occupational health nurse, online and telephone meetings were introduced in addition to in-person meetings. New employees and employees with findings in health checkups thus saw occupational health nurse and also industrial physicians as necessary.

We will continue to consider and implement measures to maintain and promote health.

Results of education and training

Results of group education and training for FY2021

Technical education

Training course title	Total participants	Target
Basic technical training for new employees	17	New employee operators
Safety simulation course	3	Beginner operators
Chemical safety simulation training	47	Beginner to mid-level operators
Mid-level technician training	6	Mid-level operators
Workplace leader training	6	Mid-level operators to team leaders
SS (Supervisor Skill) training	2	Team leaders
SV (Supervisor) training	1	Team leaders to foremen/deputy managers
OM (operation manager) training course	1	Foremen and Deputy Managers
Back office leader training	11	Back office department management employees
Safety simulation training room	131	Manufacturing section employees, Engineering Department, researchers, etc.
Technical seminar	226	Beginner operators to team leaders
Autonomous maintenance operators (correspondence course)	20	Mid-level operators to team leaders

Group training programs for business skills, mental health, health and hygiene, etc.

Training course title	Total participants
Compliance training	415
Compliance Promotion Month	415
Subcontract Act training	61
E-learning for preventing collusion and bribery	103
Brother-sister system reflection training (for new employees)	16
Brother-sister system reflection training (for mentors)	13
Training for promoted employees (GIII level general personnel)	13
Training for promoted employees (GIV level general personnel)	7
Training for promoted employees (new managers)	6
Follow-up training for promoted employees (GIII level general personnel)	12
Follow-up training for promoted employees (GIV level general personnel)	5
Follow-up training for promoted employees (new managers)	6
Management training for managerial personnel (G1 and 2 level managers and employees in equivalent positions)	56
Management training for managerial personnel (G3 level and above general managers and employees in equivalent positions)	39
Training for general managers on the formulation of the new Corporate Business Plan	40
Training for new graduates	16
Follow-up training for new graduates	16
Training for new experienced staff	5
Language training*1	28
Mental health training program (line-care)	181
Mental health training program (self-care)	404
Stress check results briefing (line managers)	49
Seminar for female employees on changes in bone health	16
Food education training program (line managers)	46
Food education training program (general personnel)	357
In-body measurements session	44
Support for personnel who wish to quit smoking	4
Industrial health internship*2	7

*1 Participants took online English conversation classes

*2 Accepted students from the Faculty of Nursing, Wayo Women's University

Environmental accounting report

Environmental accounting (FY2021)

Environmental preservation cost

(Unit: Millions of yen)

Category	Major items	Investment	Cost
① Business area cost (Breakdown)		272	959
Environmental measure cost	Prevention of air pollution, water pollution, land pollution, etc.	137	567
Global environment preservation cost	Prevention of global warming, energy saving, etc.	44	228
Resource circulation cost	Resource saving, efficient water use, rainwater use, disposal, reduction, elimination, and recycling of industrial waste	91	163
② Upstream/downstream cost	Green purchasing, recycling of products, etc., recycling of containers and packaging materials, etc.	0	0
③ Administration activity cost	Environmental training, monitoring and measurement of environmental impacts, ISO14001 maintenance and management	0	112
④ R&D cost	R&D for products that contribute to environmental preservation	0	89
⑤ Social activity cost	Greening, beautification, levy on pollution load, support of environmental activities performed by local communities	0	3
⑥ Environmental deterioration cost	Land pollution, restoration of the natural environment to its original state	0	0
Total		272	1,163

Note: Cost amounts are the sum of depreciation costs, repair costs, labor costs, material and service costs and business consignment expenses, etc.

Scope of calculations: Koei Chemical alone

Period covered: FY2021 (April 1, 2021 to March 31, 2022)

Preconditions of calculation: ● Calculations are based on the Ministry of the Environment's Guidelines.

● Costs are calculated based on actual results.

● Economic benefits are only actual benefits. The deemed benefits are not included.

Economic effect of environmental preservation measures

(Unit: Millions of yen)

Details of effects	Amount
① Effects of recycling activities	196
② Effects of resource saving	255
③ Effects of energy saving	28
Total	479

GHG emissions

GHG emissions Scopes 1 and 2

(Unit: ton-CO₂e)

	Emissions		
	FY2019	FY2020	FY2021
Scope 1 (fuel and waste oil combustion)	36,025	32,640	28,788
Scope 2 (Use of electricity and steam supplied by other companies)	13,249	11,593	10,794

• For Scope 1, direct CO₂ emissions associated with combustion of fuel, waste oil, etc. are calculated.

• For Scope 2, indirect CO₂ emissions associated with use of electricity and steam supplied by other companies are calculated.

GHG emissions Scope 3

(Unit: ton-CO₂e)

	Emissions		
	FY2019	FY2020	FY2021
1. Purchased products and services	59,142	44,298	42,591
3. Fuel and energy-related activities not included in Scope 1 or 2	8,326	7,490	6,939
4. Transportation and distribution (upstream)	2,942	2,100	2,478
5. Waste from business	1,236	1,829	1,229

• For Scope 3, indirect GHG emissions associated with supply chain corporate activities are calculated.

• The above four categories are covered in the calculation.

Possession of equipment related to PCB and fluorocarbons

		FY2019	FY2020	FY2021
PCB-containing equipment pieces	Small-amount PCB	0	0	0
	High-concentration PCB	0	0	0
Freezers that use fluorocarbons as coolants*	CFC	0	0	0
	HCFC	1	1	1
	HFC	2	2	2

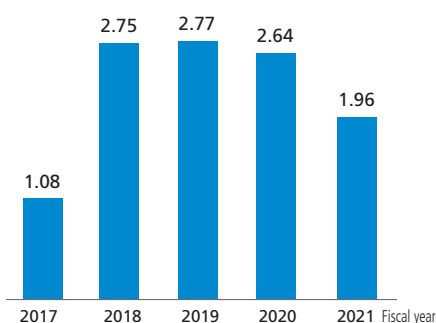
*The numbers cover business-use freezers and air conditioning facilities incorporated in the production process.

PRTR reports

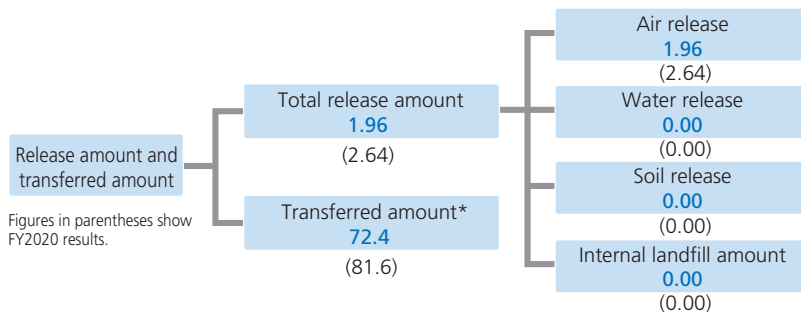
The PRTR system is prescribed in Article 5 of the Act on Confirmation, etc., of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof (generally known as the "PRTR Act"), which took effect in March 2000. PRTR

(Pollutant Release and Transfer Register) is a system for identifying, compiling and publicly disclosing information on what amount of chemical substances specified by government ordinance have been emitted into the environment or have been transferred off-site with waste.

Trend of total release amount [t/year]



Actual release amount and transferred amount for FY2021 (tons/year)



*The transferred amount is the volume entrusted to intermediate waste treatment service operators (little emission to public sewage system)

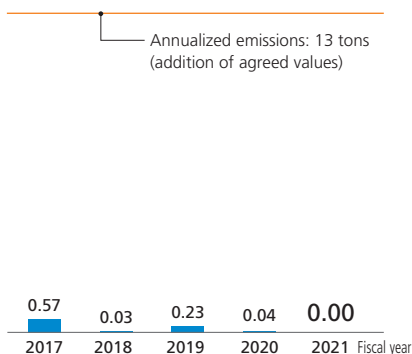
Air release of SO_x, NO_x, and dust Water release of COD, nitrogen, and phosphorus

The environmental impact on air and water areas is as follows.

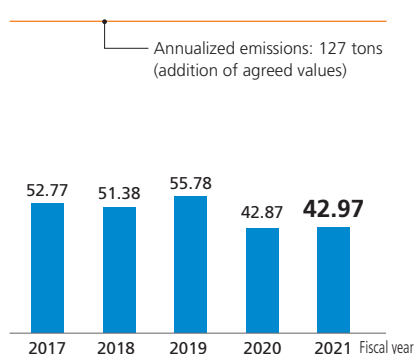
For SO_x, the volume detected through annual analysis is small and lower than the emission standards.

We have set agreed values which are stricter than the requirements under laws with local communities. Appropriate control is performed based on the agreed values.

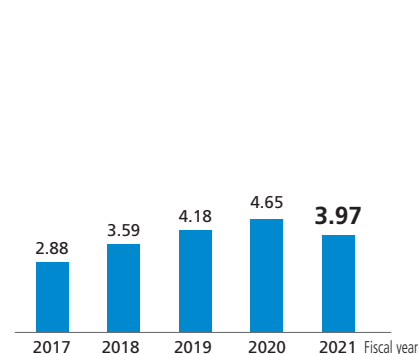
Trend of SO_x emission (t)



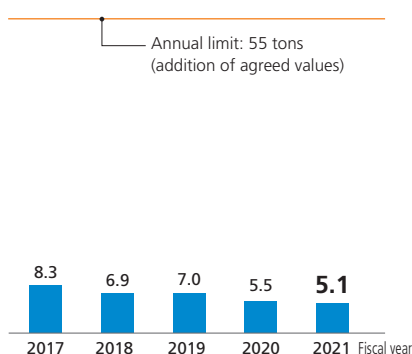
Trend of NO_x emission [t / year]



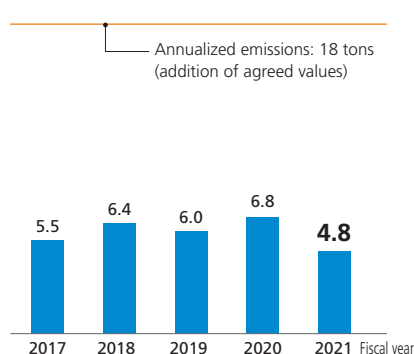
Trend of dust emission (t)



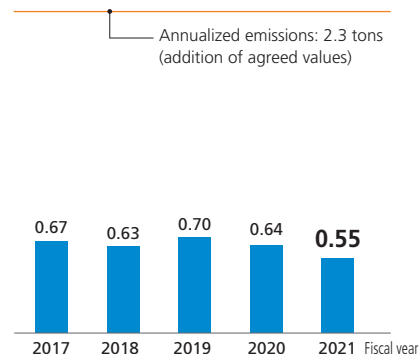
Trend of COD emission (t)



Trend of nitrogen emission (t)



Trend of phosphorus emission (t)



Efforts to reduce industrial waste

Regarding waste generated through business activities, we actively promote the “3Rs” (reduce, reuse and recycle) to reduce the environmental impact.

The volume of waste discharged for FY2021 is shown in the following chart. The volume of industrial waste

generated decreased by 6% compared to the previous fiscal year, and the recycle rate was 24%.

We will make continuous efforts to reduce environmental impact through recycling, such as a method of using incineration residues as cement materials.

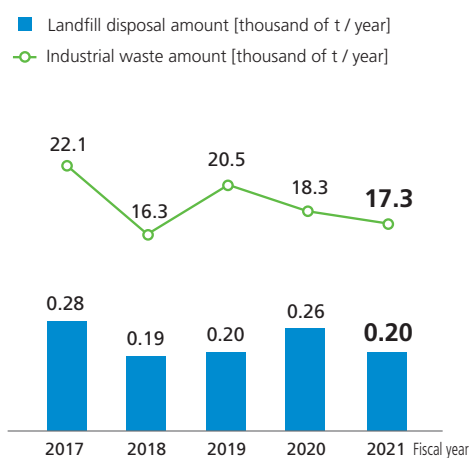
Actual results for FY2021	
Targets of initiatives	Actual results
Through business activities: <ul style="list-style-type: none"> Reduction of industrial waste amount Reduction of landfill disposal amount 	<ul style="list-style-type: none"> Waste generated through business activities: 17,316 tons (18,338 tons for the previous fiscal year, down by 6%) Landfill disposal amount: 197 tons (264 tons for the previous fiscal year, up by 25%)
Promotion of recycling <ul style="list-style-type: none"> Increase of effective usage rate 	<ul style="list-style-type: none"> Recycling amount: 4,218 tons Recycling rate: 24% (4,497 tons for the previous fiscal year, recycling rate: 25%)

Although the industrial waste amount is decreasing each year, the landfill disposal amount fluctuates with the change of production items.

We will make continuous efforts to promote the reduction of environmental impact by cutting not only the industrial waste amount but also the landfill disposal amount.

We have disclosed information on the maintenance and management of industrial waste facilities (incinerators) on our website since 2011 in accordance with the Enforcement Regulations of the Waste Management Law (URL: <https://www.koeichem.com/en/company/rc.html>).

Trend of industrial waste by fiscal year



Hazardous* and non-hazardous waste (FY2021)

(Unit: Thousand tons)

	Industrial waste generated	Internally recycled		Internally reduced		Industrial waste taken out	Internally landfilled	Externally reduced	Externally recycled		Externally landfilled
		Reused/ Recycled	Thermal recycled	Incinerated	Other				Reused/ Recycled	Thermal recycled	
Non-hazardous waste	0.28	0	0	0.0	0	0.28	0	0.01	0.18	0.04	0.04
Hazardous waste	17.0	3.57	0	10.2	0	3.24	0	0.08	0.46	2.53	0.16

*Waste oil (including waste organic solvents), waste alkali, and waste acid

Water resources

Water usage / Total amount of water discharge (thousand of tons)

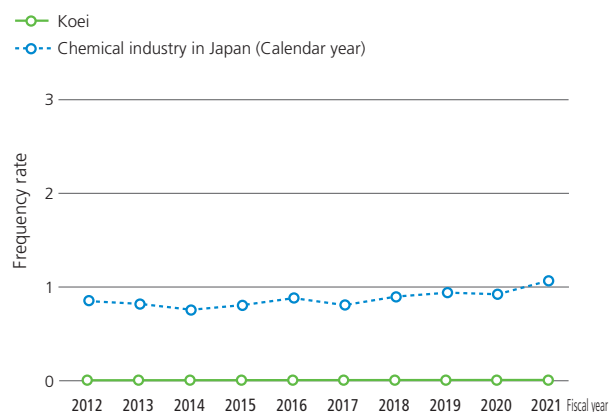
	FY2017	FY2018	FY2019	FY2020	FY2021
Total amount of water discharge	2,173	1,906	2,601	2,864	2,004
Water usage	2,753	2,450	3,154	3,406	2,458
Industrial water	547	497	512	489	400
Drinking water	13	13	14	14	14
Seawater	2,193	1,940	2,628	2,904	2,045

Safety and health data

With regard to work-related accidents, there were no industrial injuries in FY2021.

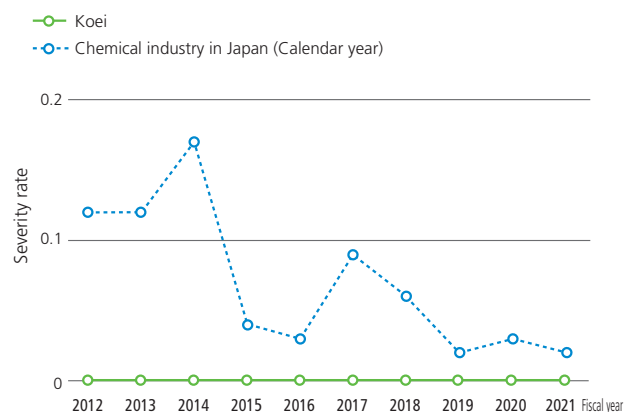
The number of zero-injury days reached 4,784 (as of March 31, 2022), which is equal to over 13 years. As shown in the following graphs, frequency rates of industrial injuries and severity rates of industrial injuries remain zero.

Frequency Rates of Industrial Injuries



$$\text{Frequency rate} = \frac{\text{Number of industrial injury casualties}}{\text{Total actual working hours (million hours)}}$$

Severity Rates of Industrial Injuries

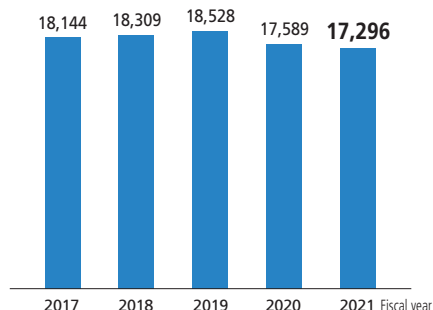


$$\text{Severity rate} = \frac{\text{Total number of working days lost}}{\text{Total actual working hours (thousand hours)}}$$

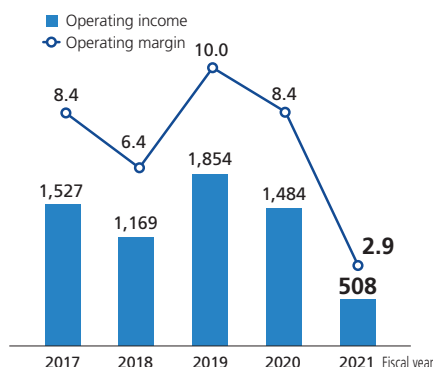
Acquisition of management system certifications

Standard	Applicable location	Certificate number	Certification date	Certification body
ISO9001:2015 (Quality)	Chiba Plant, Research Laboratory, Tokyo Head Office	JCQA-1810	July 26, 1996	Japan Chemical Quality Assurance Ltd. (JCQA)
ISO14001:2015 (Environment)	Chiba Plant, Research Laboratory, Tokyo Head Office	JCQA-E-0969	March 12, 1999	Japan Chemical Quality Assurance Ltd. (JCQA)

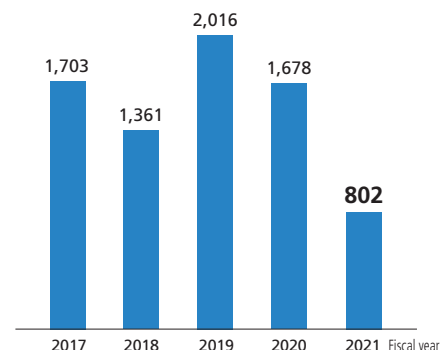
Net sales (Millions of Yen)



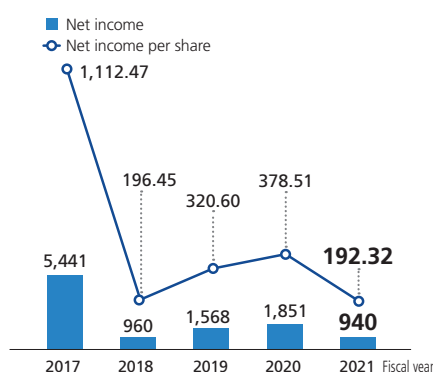
Operating Income (Millions of Yen) / Operating margin (%)



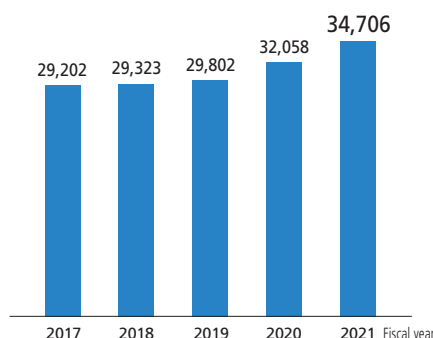
Ordinary profit (Millions of Yen)



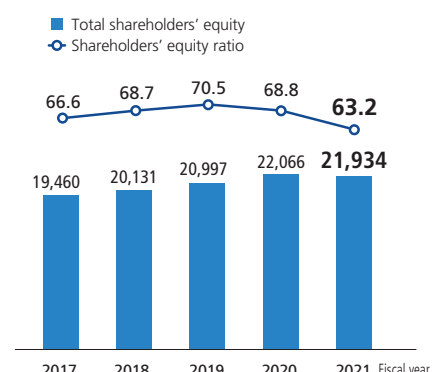
Net income (Millions of Yen) / Net income per share (Yen)



Total assets (Millions of Yen)

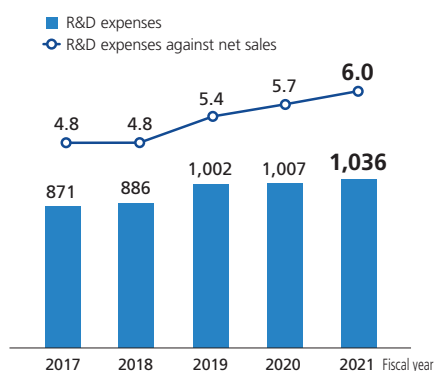


Total shareholders' equity (Millions of Yen) / Shareholders' equity ratio (%)

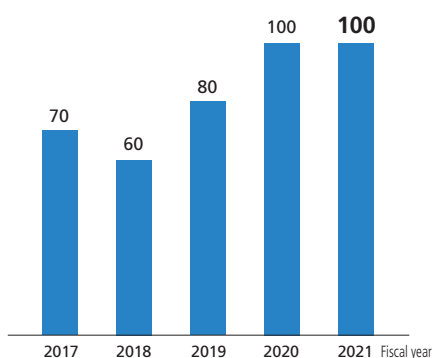


		2017	2018	2019	2020	2021 (Fiscal year)
Net sales	(Millions of Yen)	18,144	18,309	18,528	17,589	17,296
Operating income	(Millions of Yen)	1,527	1,169	1,854	1,484	508
Operating margin	(%)	8.4	6.4	10.0	8.4	2.9
Ordinary profit	(Millions of Yen)	1,703	1,361	2,016	1,678	802
Net income	(Millions of Yen)	5,441	960	1,568	1,851	940
Net income per share	(Yen)	1,112.47	196.45	320.60	378.51	192.32
Total assets	(Millions of Yen)	29,202	29,323	29,802	32,058	34,706
Total shareholders' equity	(Millions of Yen)	19,460	20,131	20,997	22,066	21,934
Shareholders' equity ratio	(%)	66.6	68.7	70.5	68.8	63.2

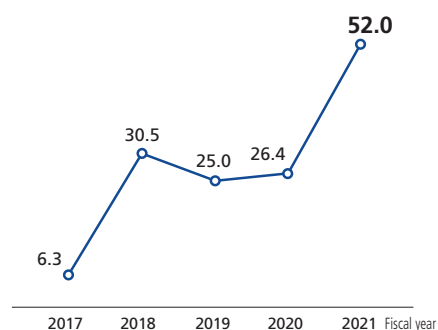
R&D expenses (Millions of Yen) /
R&D expenses against net sales (%)



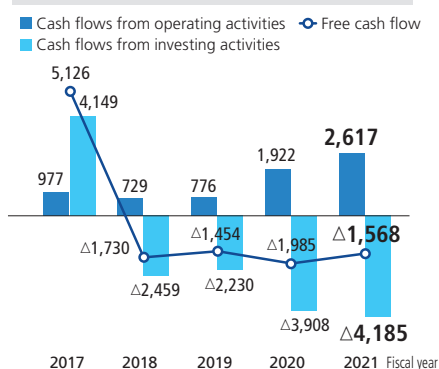
Dividend per share (Yen)



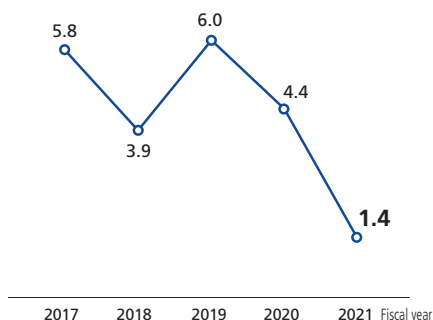
Payout ratio (%)



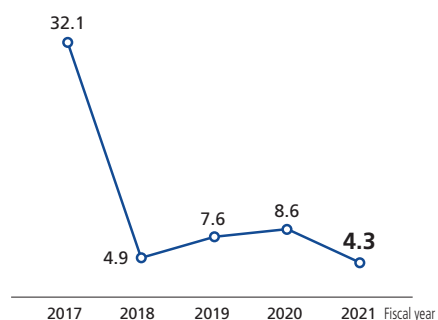
Cash flows from operating activities (Millions of Yen) /
Cash flows from investing activities (Millions of Yen) /
Free cash flow (Millions of Yen)



Return on invested capital (ROIC) (%)



Return on equity (ROE) (%)



	2017	2018	2019	2020	2021 (Fiscal year)
R&D expenses (Millions of Yen)	871	886	1,002	1,007	1,036
R&D expenses against net sales (%)	4.8	4.8	5.4	5.7	6.0
Dividend per share (Yen)	70	60	80	100	100
Payout ratio (%)	6.3	30.5	25.0	26.4	52.0
Cash flows from operating activities (Millions of Yen)	977	729	776	1,922	2,617
Cash flows from investing activities (Millions of Yen)	4,149	△2,459	△2,230	△3,908	△4,185
Free cash flow (Millions of Yen)	5,126	△1,730	△1,454	△1,985	△1,568
Return on invested capital (ROIC) (%)	5.8	3.9	6.0	4.4	1.4
Return on equity (ROE) (%)	32.1	4.9	7.6	8.6	4.3

Dr. Kazuhiro Bai, Specially Appointed Professor in the College of Business & Graduate School of Business at Rikkyo University, read the Koei Chemical Report 2022 and offered his opinions.



Specially Appointed Professor
College of Business & Graduate School of Business, Rikkyo University

Dr. Kazuhiro Bai

Profile

Serving at Rikkyo University since 2018. Visiting professor in the Business Administration Program of Bond University (Australia) in 2008. His works include *Outlook of CSR Accounting*, Moriyama Shoten; *Introducing CSR Accounting*, Japanese Standards Association; *First Step to CSR Management for Corporate Employees*, co-author, Dai-ichi Hoki; "Deployment of Financial Reporting Theory based on Global Governance"; *CSR Management Control*; *Essentials for a Going Concern: Five Principles to Overcome Environmental Change*; *Corporate Ethics and Sustainability of Society*, co-author, Reitaku University Press, and many more.

In the Koei Chemical Report, Koei Chemical Company, Limited ("Koei Chemical") has summarized its initiatives for the enhancement of corporate value from April 2021 to March 2022 in its aim to solve social issues based on creative technologies. I will list below my outside party opinions in the viewpoint of researching lasting corporate management and CSR accounting, which aims to quantify CSR activities.

Points to be commended

There are two points to be commended in Koei Chemical's report for this year. Firstly, I focus on a point that, compared with last year's report, they seek to organize the value creation process systematically, new contents and more detailed explanations have been added. Specifically, a distinctive feature of the report was that data has been organized along a three-stage timeline, from "Input" to "Core of the value creation process" to "Output." This presents Koei Chemical's efforts to accelerate its contributions to solutions to social issues based on its creative technologies and to promote the Corporate Business Plan "KX2.0: Striving for transformation utilizing knowledge and experience of over 100 years" in its efforts to enhance corporate value (Pages 5-6). Further, the "Output" stage has been divided into "economic value" and "social value," and numerical targets have been established in the form of "financial information + non-financial information" to encourage the promotion of value creation activities within the company (Page 6). The structure of the report, in which Koei Chemical's value creation process is stated in the introduction section of the report with simple and easy-to-understand explanations, is highly commendable in that it is strongly imbued with the company's will to contribute to the solution of social issues. The second point to be commended is that, based on the Corporate Business Plan, the report states the basic policies for its growth strategy ("accelerate business growth strategy," "strengthen business foundations" and "enhancement of human resources development"), which are important factors for the enhancement of corporate value, in its endeavors to expand growth strategy factors to promote its contribution to the solution of social issues (Page 12). In particular, the report describes Koei Chemical's ventures into

digital transformation (DX), enhancement of management capability (MX), strengthening governance (GX), and pursuing sustainability (SX), which make up its policy of "strengthen business foundations," and its development of frameworks for working to enhance corporate value while promoting innovation as a united force across the entire company. This is a distinctive feature of the company's initiatives and one that is worthy of particular attention (Pages 14-28). This is because the report clearly shows Koei Chemical's passionate resolve to enhance corporate value by incorporating sustainability action, whose connections to business activities can be difficult to glean, into its Corporate Business Plan. To summarize this year's report, it consists of contents that indicate the company's path toward new information disclosure in its challenge to solve social issues, while its Corporate Business Plan remains as the foundation. My view is that this report provides great expectations for future developments.

Points to be improved

Koei Chemical's reports are evolving every year, and I believe that in terms of individual matters, most of the points requiring mention have been resolved. For this reason, I would like to discuss the future outlook as an area in which I would hope to see improvement going forward. Taking a general view of the company's initiatives, the process for incorporating into business activities actions to encourage sustainable value creation that will contribute to solutions to social issues and connecting them to the enhancement of corporate value has been organized in a well balanced manner. The next step I look forward to seeing is for the strengthening of profit distribution policies to be positioned within the company's growth strategies in more concrete form, to realize a virtuous circle between sustainable growth and profit distribution, which is a theme attracting much attention of late. I also recommend that the company consider the relationship between this theme and its corporate value enhancement. I hope that my recommendations will be used as reference to lead to the further development of the company's initiatives.

Response to Third Party Opinions



Takashi Ohata
Executive Officer (in charge of
General Affairs & Personnel
Office, and Internal Control &
Audit Office)

I deeply appreciate Dr. Kazuhiro Bai's valuable remarks again this year.

Koei Chemical launched its Corporate Business Plan "KX2.0: Striving for transformation utilizing knowledge and experience of over 100 years" in April this year. Dr. Bai has commended this year's report for indicating the Company's path toward new information disclosure in our challenge to solve social issues, while keeping our Corporate Business Plan as our foundation, and for providing great expectations for future developments. I also appreciate his praise for the way in which our reports are evolving every year.

As Dr. Bai has proposed, we will factor the development of strategies that reflect a virtuous circle of growth and profit distribution and linking those strategies to corporate value enhancement into the next steps to be considered, and we will unite across the entire Company toward the sustainable creation of added value and the enhancement of corporate value.

(As of March 31, 2022)

Corporate data

Company name: KOEI CHEMICAL COMPANY, LIMITED
Location of head office: 1-8, Nihonbashi-Koamicho, Chuo-ku, Tokyo 103-0016, Japan
URL: <https://www.koeichem.com/en.html>
Date of establishment: June, 1917
Capital: 2,343 million Yen
Number of employees: 401
Business description: Manufacture and sales of raw materials and intermediates for pharmaceutical/agrochemical products, paints, dyes, and various synthetic resins, etc.

Stock Information

Fiscal year-end: March 31
Ordinary general meeting of shareholders: Held in June
Stock Data: Authorized number of shares16,000,000
Issued number of shares4,900,000
Number of shareholders2,938

Board of Directors and Senior Management

(As of October 1, 2022)

Representative Director & President	Ray Nishimoto	Managing Executive Officer	Hidetada Kawai
Director/ Managing Executive Officer	Keiko Fukahori	Managing Executive Officer	Hiromitsu Kokami
Director/ Executive Officer	Hideo Wada	Executive Officer	Noriyasu Sakamoto
Director	Motoyuki Sakai	Executive Officer	Akihiko Egawa
Outside Director	Hideo Higashi	Executive Officer	Takashi Ohhata
Director (Audit & Supervisory Committee Member)	Kenji Kondo		
Outside Director (Audit & Supervisory Committee Member)	Ken Takiguchi		
Outside Director (Audit & Supervisory Committee Member)	Shingo Yoro		
Outside Director (Audit & Supervisory Committee Member)	Yoko Hatta		

Business locations

Branch Offices, etc. Tokyo head office
1-8, Nihonbashi-Koamicho, Chuo-ku, Tokyo 103-0016, Japan
TEL 81(3)6837-9300 FAX 81(3)6837-9307
Sales & Marketing: TEL 81(3)6837-9290 FAX 81(3)6837-9310
Chiba plant · Research laboratory
25, Kitasode, Sodegaura-shi, Chiba 299-0266, Japan
TEL: 81(438)63-5511 FAX: 81(438)63-5546
Brussels Representative Office
c/o Sumitomo Chemical Europe S.A./N.V.
Woluwelaan 57, B-1830 Machelen, Belgium

Major Shareholders

Name	Number of shares (in thousands)	% of total shares held
Sumitomo Chemical Co., Ltd.	2,731	55.84
Kinkisangyou Shinkumi Bank	240	4.91
Osamu Taneda	103	2.11
Masahiro Iso	43	0.90
Koei Chemical Employee Shareholder Plan	43	0.89
Shigeharu Sakamoto	40	0.82
Maruishi Chemical Trading Co., Ltd.	33	0.69
Gakuji Ooshio	30	0.63
Koji Yamasaki	26	0.54
Munetaka Nishikawa	23	0.48

NOTE: The Company's treasury shares (8,883 shares) were excluded in the calculation of the percentage of total shares held.

Bringing 100 years of technology and trust,
now and to the future



KOEI CHEMICAL CO., LTD.

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