



# Koei Chemical Report 2023



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

**KOEI**

SINCE  
1917

## Contents

Introduction	
1	Contents/Editorial policy
2	Corporate Philosophy/Basic Policy on Sustainability/Koei Chemical's policy on SDGs
3	The History of Koei Chemical
5	Value Creation Process
7	At a Glance
Message from the President	
9	Message from the President
Growth Strategy	
11	Roundtable Discussion with Executive Officers in charge
15	Corporate Business Plan (FY2022 – 2024)
16	Accelerate Business Growth Strategy
17	Strengthen Business Foundations
18	Enhancement of Human Resources Development
19	Sustainability Strategy
24	DX Strategy
Foundation for Value Creation	
26	Governance
28	Compliance
29	Risk Management
30	Responsible Care
32	Respect for Human Rights
33	Investment in Human Resources
Information	
35	Data on Responsible Care
39	Financial Data
41	Third Party Opinions
42	Company and Investor Information

## 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.

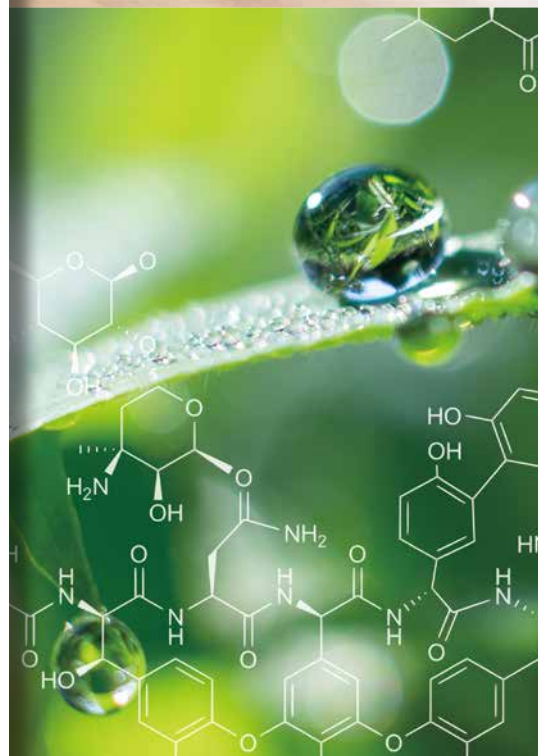
We strive to make these contents clearer and more reader-friendly by using graphs and pictures.

### Reporting period

April 2022 to March 2023  
(information for April 2023 and later is partially included.)

### Issuance

October 1, 2023



## 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

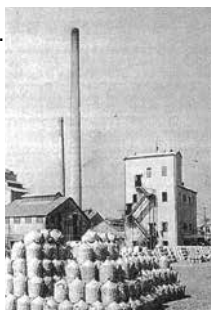
## 1917 – 1950s

### 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.

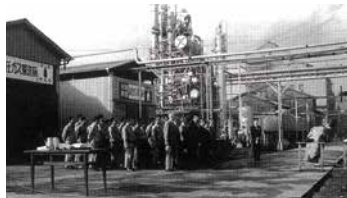
## 1960 – 1970s

### 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.  
Opens Dusseldorf Representative Office.
- 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.  
Starts the operation of a multi-purpose vaporphase plant (CP Plant).
- 1998** "KCS Award in Chemical Technology" from the Kinka Chemical Society for the new synthetic method of intermediate chloro nicotiny insecticide.
- 1999** Starts the operation of a multi-purpose plant (CM II Plant).

# vision for the next 100 years

## 2000s

### Accelerating product development and expanding capacity (Stage II)

We diversified into newly developed products with starting 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 I Plant).



- Starts the operation of a new vaporphase multi-purpose plant (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** Moves representative office from Dusseldorf to Brussels.
- 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 shuts 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).



### 2023

- Starts the operation of a pilot 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).
- 2023** Starts the operation of a pilot plant.

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

## "KX2.0: Striving for transformation"

### 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	22,054 million yen
Shareholders' equity ratio	56.4%

#### Manufacturing capital

Pilot facilities	1 lines
	(September 2023~)
Multi-purpose facilities	4 lines
High pressure hydrogenation facilities	5 lines
Vapor-phase reaction facilities	3 lines
Formalin production facilities	1 lines

#### Intellectual capital

R&D expenses	1,014 million yen
Domestic patents	65
Overseas patents	112

#### Human capital

Number of employees	409
(Of which researchers)	59
(Of which PhD holders)	21

#### Social capital

Corporate philosophy	» Page 2
Overseas sales ratio	58.3%

### 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

enhance corporate value.

## utilizing 100 years" (FY2022–Y2024)

### 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 »Page 16
- ② Strengthen business foundations »Page 17
- ③ Enhancement of human resources development »Page 18

#### 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

##### CO<sub>2</sub> emissions (Scope1 + 2)

##### 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**

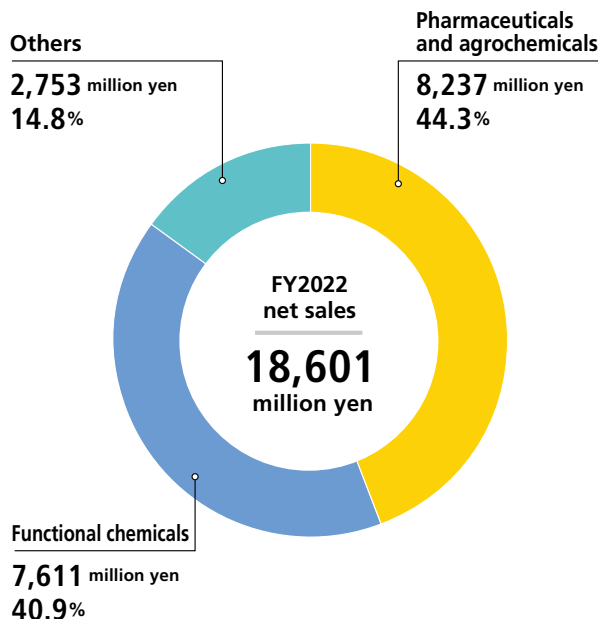
##### ROIC

**10%**

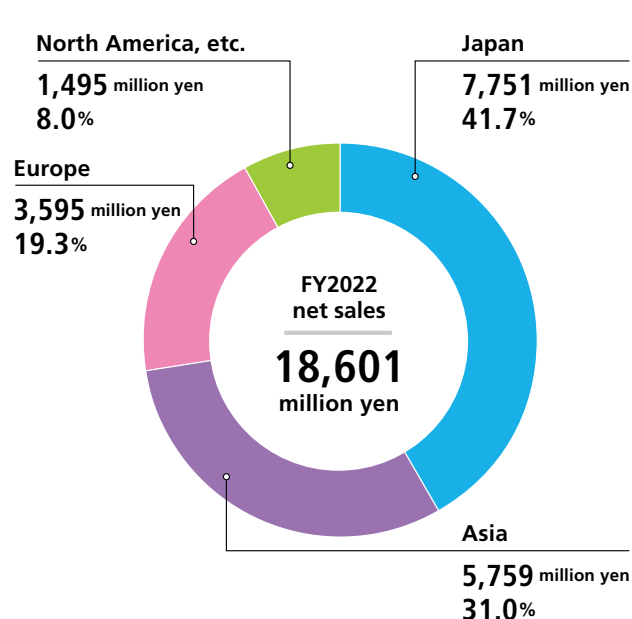
##### CCC

**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.)



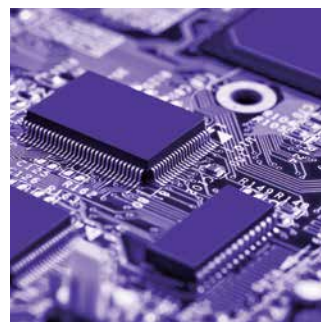
Raw materials for pharmaceutical intermediates



Raw materials for agrochemical intermediates



Ionic liquids (KOELIQ®)



Electronic related materials

## Performance (FY2022)

Net sales for FY2022 amounted to 18,601 million yen. This was a result of a revenue increase due to increased sales of pharmaceuticals-related products to Europe, and the effect of foreign exchange rates, while sales of functional chemicals decreased due to sluggish demand for electronic related materials, etc. Operating income amounted to 832 million yen and ordinary profit 855 million yen, mainly as a result of factors for higher profits such as the effect of foreign exchange rates, favorable results of selling price adjustments, and a decrease in borne fixed costs due to increase in inventories, despite the factors for lower profits such as rising raw material and fuel prices and an increase in depreciation costs associated with the launch of a new multi-purpose plant (CM IV plant).

## 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, 2023)

### Number of employees

409



We have been actively recruiting for the past several years, preparing for the new plant launch. Besides, we have continued our recruiting activities since last fiscal year for the purpose of strengthening our system for back office and R&D departments as well as manufacturing departments. We have increased our personnel by eight compared with 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 9 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 global issues through our distinctive value creation process based on the innovative technologies

Representative Director & President

We are now in the second year of our Corporate Business Plan, “KX2.0: Striving for transformation utilizing knowledge and experience of over 100 years.” Through our value creation process, or business, we will contribute to solving social issues such as reducing environmental impact and food problems, and to enhancing our corporate value, by strengthening our management foundations – governance, responsible care, and human investment initiatives - while thoroughly pursuing the capital efficiency we have set as a key management goal.

### Business environment and important tasks of Koei

Amidst heightened geopolitical risks, including Russia’s prolonged invasion of Ukraine and the “new cold war” between the United States and China, the global economy became increasingly fragmented. And the COVID-19 pandemic, which lasted for over three years, and other factors continued to cause global supply shortages and supply chain disruptions.

Since then, the economies of various countries have been experiencing economic overheating and inflationary trends, partly due to increased demand resulting from the COVID-19 pandemic. Many countries are raising interest rates in an effort to curb inflation, but the unexpectedly poor performance of the Chinese economy is becoming apparent, and the risk of a global economic recession is also a concern.

Faced with these current economic challenges, we will not be distracted by short-term changes in the business environment. Rather, we will aim to enhance our corporate value over the medium to long term by constantly reviewing and strengthening our value creation process while steadily promoting initiatives.

Meanwhile, we must deal urgently with global environmental problems such as the climate change issue. In the summer of 2023, air and sea water temperatures rose worldwide, causing natural disasters, crop failures, and disruptions in water transportation due to falling water levels in rivers levels. Moreover, demand for electric power has surged in response to the extremely hot summer, leading to increased dependence on coal-fired power generation.

Koei Chemical believes that we must fulfill our responsibility by contributing to these social issues leveraging our innovative technologies. We are working on the “material issues for sustainable value creation” set by Sumitomo Chemical Group. As for “reduction of CO<sub>2</sub> emissions,” one of our key performance indicators (KPIs), we are implementing initiatives toward achieving a 50% reduction in CO<sub>2</sub> emissions in FY2030 compared with FY2013, and achieving carbon net zero by FY2050. During the previous fiscal year, we supplied CO<sub>2</sub>-absorbing amine compounds to Kawasaki Heavy Industries, Ltd., and developed ionic liquids that can dissolve cellulose at room temperature with low environmental impact, and start joint research with academia and research institutions. We started new challenges to contribute to the reduction of CO<sub>2</sub> emissions and global environment burden through our proprietary technologies.

As an R&D-oriented company positioned upstream in the supply chain, our strength lies in our speedy and highly adaptable customer services. We aim to develop a solution business in which we propose solutions to customers' requirements for realizing a sustainable society, and aim to contribute to solving social issues with our customers through our business activities.

## Progress of our value creation process

Last year, we organized our initiatives to contribute to solving social issues and improving corporate value based on our innovative technology into a "value creation process."

Looking back at the value creation process in FY2022, "input" was the launch of full-scale operations of our new multi-purpose plant, CM IV, which boasts the largest capacity and highest efficiency among our plants. The plant has been operating steadily since its startup in October 2022, and we have high expectations for its contribution to the growth of our business.

## Material issues to be addressed as management priorities

With regard to the "Material issues to be addressed as management priorities," which serve as the core of the value creation process, we have seen progress in seven of the 10 KPIs in FY2022, as seen in this report. As for CO<sub>2</sub> emissions, we recognize a temporary increase through the launch of CM IV plant in FY2022, however, we are progressing steadily toward achieving a 50% reduction in CO<sub>2</sub> emissions in FY2030 compared with FY2013, by promoting energy conservation through the use of high-efficiency gas turbine cogeneration facility in collaboration with the Sumitomo Chemical's Chiba Works, as well as solar power generation and improvements in energy efficiency etc.

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

Our Corporate Business Plan "KX2.0: Striving for transformation utilizing knowledge and experience of over 100 years," the other key element of the value creation process, is now in its second year. In FY2022, the first year of the plan, we made progress largely as planned.

Initiatives to "accelerate business growth strategy" include the launch of CM IV plant operations and the establishment of a research pilot plant that will act as a bridge between research and manufacturing. Construction of the pilot plant is proceeding on schedule and operations will begin in October 2023. Its launch has made it possible to accelerate industrial production process development, and to supply small-quantity samples and small-quantity, high-value-added products. Moreover, we are strengthening collaboration with the Sumitomo Chemical Group to enhance the synergistic effect. In this sense, we already started process development for multiple products.

With regard to "strengthen business foundations" we are advancing initiatives in four areas: digital transformation (DX), management transformation (MX), governance transformation (GX), and sustainability transformation (SX). Looking at DX, we have 20 cross-functional projects underway in various fields, and are conducting e-learning for all officers and employees to improve company-wide DX literacy.

With regard to the "enhancement of human resources development," we are strengthening management, developing employees' capabilities and skills and cultivating new employees' fundamental skills, and undertaking a review of our HR systems. We are considering revamping our programs with a particular focus on raising the capability level of mid-career employees and cultivating new employees' skills. In February 2023, we conducted our first employee awareness survey. Our intent is to actively apply the results to the enhancement of human capital management by improving employee engagement, for instance.

## Output of the value creation process

As "output" for economic value, we have set the objectives of achieving net sales of 21.4 billion yen and a return on invested capital (ROIC) of 8% in FY2024, the final year of our current Corporate Business Plan. As Japan has reached a juncture where it is transitioning from a prolonged deflationary economy to an inflationary one, Japanese companies are placing top priority on improving capital efficiency. We recognize that we need to improve ROIC considerably from the current level, and we have kicked off an internal project to better define our ROIC improvement efforts. Linking ROIC to performance targets of officers and employees will allow us to implement the PDCA cycle meticulously, and the entire company will focus on achieving these targets together.

Among the types of capital, human capital has recently been the subject of attention. In this report, we actively disclose information including that related to human capital and, going forward, we will continue to improve related items based on specific targets.

## Co-existence and co-prosperity with all stakeholders

As we have said previously, through two-way communication with all stakeholders encompassing shareholders, investors, customers, business partners, local communities, and employees and their families, we will strive to meet the expectations of everyone connected to our business by further improving our performance and enhancing our corporate value. At the same time, we will raise the quality of our internal and external communications to an unprecedented level, with a clear growth story that will aid our stakeholders in gaining a deeper understanding of how we intend to grow.

I would like to ask all of our stakeholders to continue understanding Koei Chemical's efforts and supporting us.



**Noriyasu Sakamoto**

Executive Officer, General Manager  
of Research & Development Division

**Akihiko Egawa**

Director, Managing Executive Officer, in charge  
of Sales & Marketing Division, Logistics &  
Procurement Office, General Manager of Sales  
and Marketing Division

**Akira Oyama**

Executive Officer, General Manager  
of Production & Technology Division

## Manufacturing, sales, and R&D working together to achieve the goals of the Corporate Business Plan

### 1. Unified manufacturing, sales, and R&D support required for both proprietary and custom synthesis products

**Egawa:** We have established management goals of 30.0 billion yen in net sales and ROIC of 10% for FY2030 in KOEI Vision 2030, aiming to “contribute to the establishment of a sustainable society through business.” In the interest of achieving these goals, we launched our current Corporate Business Plan in FY2022, and have been promoting product development and business operations through integrated manufacturing, sales, and R&D efforts to accelerate business growth strategy, one of our basic policies.

FY2022 featured three symbolic initiatives.

The first was the supply of CO<sub>2</sub> absorbent amine compounds in March 2023 in response to a customer request, which proved extremely challenging.

Second, we have successfully developed an ionic liquid that dissolves cellulose under milder conditions than

before, resulting in a reduced impact on the environment, and started to provide lab samples in the fall of 2022.

The third is the start of operations of our new multi-purpose plant, CM IV, in October 2022. CM IV not only boasts the largest production capacity of any of our plants, but is also a highly efficient multi-purpose plant equipped with state-of-the-art facilities that are superior in terms of work and quality control, reflecting in the design of the facility the know-how accumulated through our multi-purpose plant operations to date.

**Sakamoto:** We have two types of R&D. One is the product-out type, in which we develop products based on our unique strengths, technology, and know-how, and the other is the market-in type, in which we develop products that satisfy customer and market needs. Looking at the initiatives introduced by Mr. Egawa, although the CO<sub>2</sub> absorbent amine compound is contract research, it is a market-in approach. Conversely, the cellulose-dissolving ionic liquid is a product-out approach that can create its own market.

For the product-out type, collaboration with the sales and manufacturing divisions is essential from the early stages in order to provide customers with valuable products in market development. Meanwhile, the market-in type, i.e. contract business, begins with sales. It also requires improvements to technology to meet customers' design requirements and the establishment of a production system that realizes high quality and stable supply. This also requires unified efforts by the manufacturing, sales, and R&D divisions.

**Oyama:** As a manufacturer, Koei Chemical's basic principle is to sustain safe and stable operations. Solidifying an operational structure will strengthen the Company's foundation and secure a foothold in the market. We believe that tying safe and stable operations to improvement in efficiency and rationalization will lead to the achievement of our Corporate Business Plan's goals.

Last year, we succeeded in smoothly executing the launch of the CM IV plant. Going forward, we would like to operate while optimizing our systems so that we can operate our lines of multi-purpose plants efficiently and effectively.

The CO<sub>2</sub> absorbent amine compound mentioned by Mr. Egawa and Dr. Sakamoto was an extremely high hurdle to supply. Through close coordination between R&D and sales, however, we were able to produce and deliver within a time frame that satisfied our customers.

To achieve our Corporate Business Plan's goals, we believe it is vital to further reinforce the cooperative framework between the manufacturing, sales, and R&D divisions, and to work concurrently on projects beyond the borders of the divisions. This should result in shortening the lead time and accelerating the production process.

## 2. The breakthrough of the CO<sub>2</sub> absorbent amine compounds stemmed from awareness of its contribution to society

**Egawa:** The development of the CO<sub>2</sub> absorbent amine compounds began with a request from a public institution in 2007, and its successful production was sparked by a request from Kawasaki Heavy Industries, Ltd.

Amine compounds are generally indispensable in CO<sub>2</sub> absorption, and this time Kawasaki Heavy Industries succeeded in developing an amine compound featuring higher CO<sub>2</sub> absorption performance and asked us for developing industrial production process and manufacturing. The R&D division verified the feasibility of process development, and the manufacturing division investigated the possibility of producing on a certain scale what the R&D division had successfully produced. It was

extremely challenging, but we were able to develop a production process and supply the product rapidly by leveraging our proprietary technology. This was truly a project that united the manufacturing, sales, and R&D divisions.

**Sakamoto:** To provide the product quickly, the R&D and manufacturing divisions worked together, while the divisions in charge of safety and environment also collaborated, making this a cross-functional, company-wide project.

Even though manufacturing, sales, and R&D were united, the fact is that every meeting was like an argument between researchers, sales reps, and manufacturing personnel. I think that actually must have been a good thing. Some people were talking about what customers demand, while others expressed concern over the short delivery period and were certain it could not be done.

As the three divisions continued to hold meetings in this manner, which were rife with arguments and debates, everyone began cooperating with one another. I think this was a moment when all the members of the team were united in their sense of unity towards its goal and their awareness of the need to contribute to the SDGs, and realized that providing high quality amine compounds to



Kawasaki Heavy Industries, which is working towards carbon neutrality, would lead to social contribution. Put another way, the people in charge exchanged honest opinions, shared their wisdom, and worked as a unit to resolve the issues.

**Oyama:** This was the most difficult project we have handled since we started our business. I think we were able to make a breakthrough because of the awareness of social contribution: every single person in the manufacturing division understood that we could contribute to reducing CO<sub>2</sub> emissions, and we were able to motivate our employees to get on with it.

**Egawa:** The Sales & Marketing Division's goal is to become a solution provider that offers solutions to problems. We also sell our strength in organic synthesis technology, so we tell our customers that they can contact us at any time if they are having difficulties in procuring hard-to-find compounds or considering rationalized formulations. As a provider of solutions, we believe our mission is to meet the demands of our customers.

We are currently receiving inquiries from various customers for our cellulose-dissolving ionic liquids and CO<sub>2</sub> absorbent amine compounds, indicating considerable interest.



### 3. Aiming for the rapid development of a production process of cellulose-dissolving ionic liquids through cross-departmental concurrent support

**Egawa:** There have been ionic liquids that can dissolve cellulose in the past, but we are convinced that if it can be dissolved under room temperature conditions, it will be an item with high market needs in terms of reducing global environmental impact, and we believe that rapid industrialization is vital. This is exactly the kind of project that should be promoted through collaboration between the manufacturing, sales, and R&D divisions, and we would like to work together to put this into practice in society.

**Sakamoto:** The ionic liquid we developed in 2013 dissolved cellulose at a high concentration of 20% or more at 100°C. We have since developed a liquid capable of dissolving cellulose at the same high concentration at 25°C. Cellulose is used as a material in clothing, and is originally a main component of plants. Wood scraps, for instance, were destined to be thrown away, but burning them causes the problem of CO<sub>2</sub> emissions. Our new ionic liquid, which dissolves cellulose at room temperature, enables the extraction and recovery of cellulose from scrap wood via pulp. This is a highly sustainable approach from a resource reutilization perspective.

The R&D division must consider industrialization at the same time as we new discoveries are made. We hope to proceed in unison, listening to the opinions of the manufacturing division.

**Oyama:** When I used the word “concurrent” earlier, I meant that the manufacturing division should be more involved when the R&D division is evaluating the viability of production process development. We believe that the conditions and issues for production process development should be communicated closely with the R&D department to build up the process. We hope to leverage the success of the CO<sub>2</sub> absorbent amine compounds to achieve a concurrent response with our cellulose-dissolving ionic liquid as well.

### 4. Human resource development is a challenge in view of the KOEI Vision 2030 goals.

**Oyama:** The fourth line of multi-purpose plant, CM IV, which became operational in 2022, is the largest in scale compared to existing three lines of multi-purpose plants (CM I, CM II, and CM III). Going forward, it can be said that Koei Chemical's mobility in terms of accepting new products and generating operating capacity has been significantly improved.

Meanwhile, it will be difficult to find new products with simple processes for manufacturing at multi-purpose plants. The key will be how to handle difficult processes safely, stably in a short period time. I am more convinced than ever that manufacturing, sales and R&D divisions need to work together to advance new products project.

**Sakamoto:** R&D division will launch operations of the pilot plant in fall of 2023. The pilot plant has been equipped some reactors with a capacity of 100 to 300 liters, a filtration dryer and ultra-low temperature reaction equipment. Pilot Plant is middle size between an experimental laboratory and a commercial production facility. We expect to be able to smoothly coordinate with the multi-plants by accelerating the establishment and rationalization of the production process at the pilot plant, thereby enabling efficient production. Moreover, this pilot plant is equipped with a large-scale column chromatography purification system, making possible the handling of kilo-level, high-purity products.

**Oyama:** To start the production at the pilot plant, we transferred suitable personnel from our manufacturing division to collaborate with production and R&D to develop a joint operational structure.

**Egawa:** Many of our new employees start their carrier from the laboratory, but I think we need to rotate them more actively than before to spread the knowledge they have gained in the laboratory to sales and manufacturing. Conversely, knowledge acquired in the sales and manufacturing can be applied in laboratory. This should also enhance our ability to demonstrate to our customers what their potential needs are as a solution provider.

**Sakamoto:** We do not believe that the unified efforts for manufacturing, sales, and R&D are what we can achieve in a brief interval. With the aim of fostering this culture, we would like to pass successful cases such as the CO<sub>2</sub> absorbent amine compounds on to the younger employees who will be the next generation's leaders.

As outlined in the one of the basic policies of our Corporate Business Plan, it is important to enhance and accelerate human resources development. We would like to put a system in place which motivated personnel are rotated to other divisions, and have the opportunity to gain new experiences, and then take the new experience back to their previous division.

Additionally, we would like to focus on increasing employees' motivation by changing their awareness. First of all, we want all Koei employees to be proud of the our high technological capabilities. This pride will make them become confident in determining what new results are and how to develop their own research to generate new results. I am certain this pride will also lead to improvement in their ability to negotiate contracts and manage intellectual property.

**Oyama:** As I noted at the beginning, the basic principle of our manufacturing division is to sustain safe and stable operations. This requires us to constantly secure human resources, moreover, we are also confident that the digital transformation (DX) initiatives we are pursuing will contribute to safe and stable operations and enhanced manufacturing efficiency.

When thinking about safe and stable operations, we must also consider scrap-and-build for facilities. We have to assess the product life cycle as well as trends in the market.

**Egawa:** We are now in the process of planting seeds more and more to promote innovation, with the aim of achieving our FY2030 goals of 30.0 billion yen in net sales and ROIC of 10%. Without being restricted by established concepts and past successes, we are on the lookout for promising opportunities, and commercializing and growing new groups of compounds to enhance the corporate value and realize our objectives.



## Corporate Business Plan (FY2022-2024)

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

Net sales ... 21.4 billion yen  
ROIC ..... 8%

### Business environment

- (1) Recovery of personal consumption following the Japanese government's reclassification of COVID-19 to Class 5
- (2) Increased geopolitical risks exemplified by intensifying friction between the United States and China and the situation in Ukraine
- (3) Soaring prices of raw materials and other commodities on the international market, and disruptions in supply chains
- (4) Acceleration in efforts to address the social and environmental issues as awareness of sustainability enhances worldwide
- (5) Promotion of DX-driven productivity improvement and pursuit of work style reform

### Outlook for Major Product Areas

Basic Products	Specialty Products and New Business
<p>(1) Pyridines and pyrazines:</p> <ul style="list-style-type: none"> <li>Antituberculosis drug intermediates: Stable demand expected.</li> <li>electronic related materials: Demand expansion expected over the medium-to-long term.</li> <li>Raw materials/intermediates for crop protection products: Demand outlook and cost competitiveness to be reexamined.</li> </ul> <p>(2) Amines:</p> <ul style="list-style-type: none"> <li>Raw/materials/intermediates for crop protection products: Steady demand foreseen.</li> <li>Expanded demand expected for CO<sub>2</sub>-absorbing applications.</li> </ul>	<p>(1) Organometallic catalysts and Pharmaceuticals/crop protection products intermediates:</p> <ul style="list-style-type: none"> <li>Expansion in custom synthesis business expected.</li> </ul> <p>(2) Ionic liquids/low-temperature curing catalysts for polyurethane:</p> <ul style="list-style-type: none"> <li>Acceleration of new product development.</li> </ul> <p>(3) Synergy with Sumitomo Chemical Group to be expanded:</p> <ul style="list-style-type: none"> <li>Pharmaceuticals/crop protection products intermediates.</li> <li>Optical materials, organometallic catalysts, etc.</li> </ul>

### Basic policies

#### 1. Accelerate business growth strategy



#### 2. Strengthen business foundations



#### 3. Enhancement of Human resources development



### KOEI Vision 2030

(Amount: 100M yen)

#### Corporate Business Plan (FY2022-2024)

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

Item	FY2022		FY2023		FY2024
	Results	Corporate Business Plan	Results	Corporate Business Plan	Corporate Business Plan
Net sales	186	195	208	204	214
Operating income	8	11	9	15	21
Net income	7	8	6	10	15
EBITDA	33	36	39	45	53

(Preconditions)

Exchangerate (yen/\$)	136	125	130	110	110
(yen/€)	142	135	140	130	130
Naphtha price (yen/KL)	76,800	82,000	70,000	50,000	50,000

\*EBITDA: Earnings before interest, taxes, depreciation and amortization

FY2030

Net sales

30.0 billion yen

ROIC

10%

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



- CO<sub>2</sub> absorbents: Supply of CO<sub>2</sub> absorbent amine compounds to Kawasaki Heavy Industries, Ltd.  
 >> Refer to TOPICS on page 23 for more information.
- Next-generation amine catalyst: Catalyst formulation is nearing completion and implementation is under consideration.
- Polyetheramine (bio-derived): KOLFAMIN registered as a trademark and samples provided to multiple companies.

## Specialty Products and New Business: Expansion



- CM IV plant: Launched operations on October 1, 2022 (as planned).
- Organometallic catalysts: While overall demand declined, certain new products demand increased.
- Strengthening collaboration with the Sumitomo Chemical Group: Considering industrial production process development of multiple products.
- Cellulose-dissolving ionic liquids: Industrial production process is nearing completion, and we are also investigating applications other than cellulose dissolution.

## Business portfolio enhancement



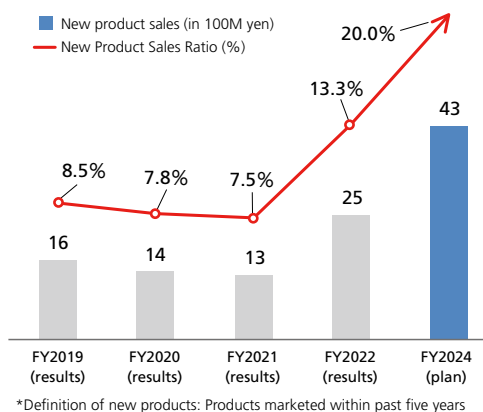
- Currently considering optimal production for gas-phase reaction plant.
- Considering the possibility of collaboration with third parties.

## CM IV plant operations

In October 2022, we launched operations of our new multi-purpose plant, CM IV, as planned. We had three lines of multi-purpose plants (CM I, CM II, and CM III). CM IV, the fourth line of multi-purpose plant, is the largest among them.



### New Product Sales Growth



## Construction of the pilot plant (scheduled to start operations in fall 2023)

The pilot plant will be equipped with a reactor of 100 to 300 liters in capacity, a filtration dryer, and other equipment to establish new product manufacturing processes and accelerate evaluation for rationalization.

Utilizing this pilot plant, we intend to expand businesses of our proprietary products and in the field of custom synthesis of pharmaceuticals/crop protection products intermediates and organometallic catalysts, as well as in new fields including kilogram-scale manufacturing of high-value-added products, which we previously were not able to handle.



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

- 20 DX projects in progress in the PLANT, R&D, SCM, and OFFICE.
- All officers and employees have taken the training of Aidemy Business to improve their IT literacy.

» Refer to pages 24 and 25 for more information.

## 2) Management transformation

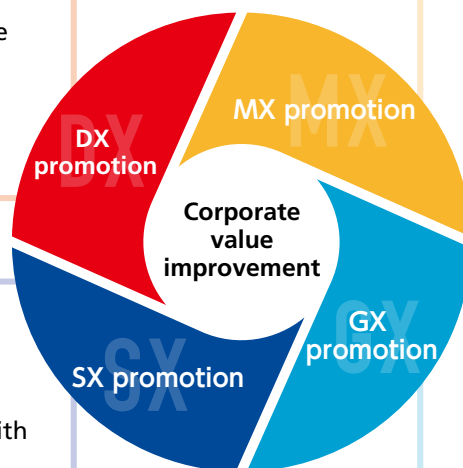
- ROIC: +0.5 pt (1.4% → 1.9%)
- Cash conversion cycle (CCC): Lengthened by 28 days (153 days → 181 days)
- Publish Koei Chemical Report

## 4) Sustainability transformation

- Determined to introduce solar power generation
- Employment rate of persons with disabilities: 3.6% in FY2023 (KPI target: 2.5% or more)  
\*As of June 1, 2023
- Percentage of female new graduate hires: 40.0% in FY2023 (KPI target: 20% or more)  
\*As of April 1, 2023

## 3) Governance transformation

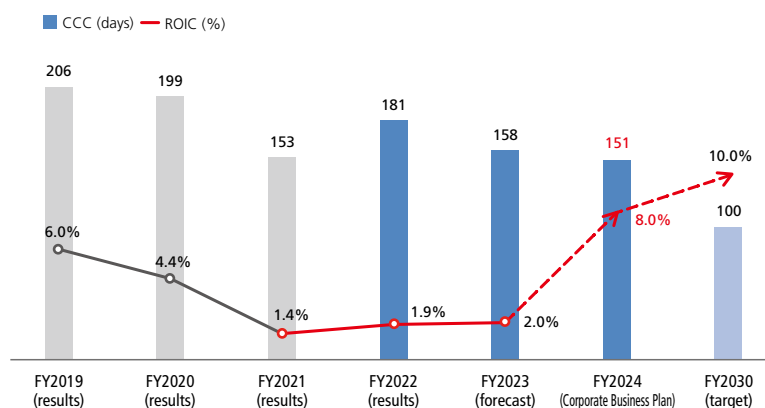
- Following reorganization of various committees, they are being operated appropriately.
- Introduced audits on current themes and spot audits to improve quality of auditing.



## Management Targets (ROIC and CCC)

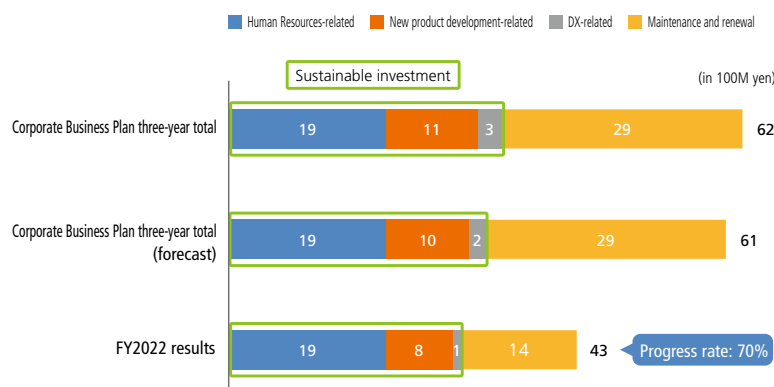
We will aim for better management efficiency with new management indicators.

※ROIC : (Return on invested capital)  
※CCC : (Cash conversion cycle)



## Capital Investment (on a decision-making timing basis)

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



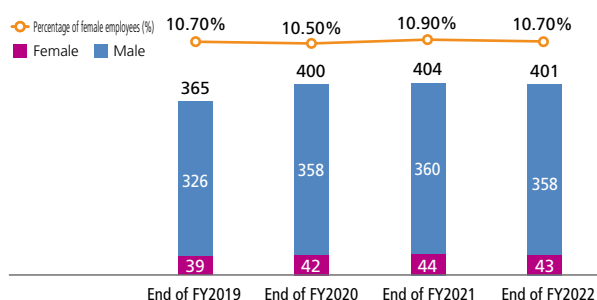
## Enhancement of Human Resources Development

The Corporate Business Plan will address the three initiatives at right. The aim of these initiatives are to maximize the performance of each individual employee 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. Moreover, we will utilize the results of the employee awareness survey conducted in February 2023 for the improvement of their engagement, and will flexibly review our HR system to achieve a sense of purpose in their work.

## Recruitment of diverse human resources

### (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. As shown in the following graph, it is presently about 10%. We will set KPIs and targets based on the Act on Promotion of Women's Participation and Advancement in the Workplace, to expand opportunities for female employees, and actively increase the percentage of female employees.



Our target is to raise the percentage of female new graduate hires to 20% or more. We aim to boost the employee retention rate and increase the percentage of female employees across the entire company in the medium and long term.

In FY2023, we succeeded in hiring one female employee for a research position and three for clerical positions, thus comfortably achieving our goal.

### KPIs ● Percentage of female new graduate hires

#### Employment of new graduates in April 2023

	Male	Female
Salespeople	1 (100%)	0 ( 0%)
Researchers	2 ( 67%)	1 (33%)
Chemical plant operators	2 (100%)	0 ( 0%)
Clerical workers	1 ( 25%)	3 (75%)
Total	6 ( 60%)	4 (40%)

In order to increase the female employee retention rate, we are focusing on enhancing our childcare leave system and holding health seminars for female employees, as well as actively recruiting female operators, and are focusing on creating a comfortable workplace and environment for female employees and on efforts to eliminate gender gaps by job type. Furthermore, we aim to actively promote female employees to management positions and increase

### 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



the percentage of female employees in management positions in the medium to long term.

### (2) Employment rate of persons with disabilities

#### KPIs ● Employment rate of persons with disabilities

As of June 1, 2023 (as submitted to the public employment security office)

Number of basic workers for calculation (a)	Legally mandated number of workers with disabilities	Number of employees with non-severe disabilities (count value)
416	9	9
Number of employees with severe disabilities (count value)	Number of employees with disabilities (b)	Employment rate of persons with disabilities (b/a)
6	15	3.61%

We have been focusing on employment of persons with disabilities, and in April 2022, we established the Salad Bowl Farm to further actively promote employment of persons with disabilities. We have been employing the persons with disabilities as farm staff, and new member joined in December 2022.

➡ Refer to page 23 for historical KPI trends.

### (3) Utilization of foreign personnel

We have four foreign personnel who are active in the laboratory and other sections. We plan to hire one more foreign personnel in FY2023. Going forward, we will also actively recruit people who will be able to participate actively in our operations, regardless of nationality or gender.

### (4) 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 began considering in FY2022 the amendment to this program based on the extension of the mandatory retirement age. Our goal will be a program that encourages retired personnel to demonstrate their experience, skills and other strengths over the long term.











Hideo Wada

Director, Managing Executive Officer, in charge of Corporate Planning & Finance Office, Sustainability

## Koei Chemical's Approaches to Sustainability

In our current Corporate Business Plan (FY2022–2024), we have set sustainability transformation as one of our basic policies to strengthen business foundations. At the Sustainability Committee which serves as an advisory committee to the Board of Directors and the Sustainability Promotion Council established within the Executive Council, which were established in FY2022, we are reporting the results of KPIs and discussing how to strengthen specific measures. Moreover, we disclose the result of each KPIs (shared with material issues to be addressed as management priorities of Sumitomo Chemical Group) from FY2022, and will work continuously on improving the KPIs and verifying issues. With regard to carbon net zero, we will continue and reinforce our existing activities to realize our target of a 50% reduction in FY2030 compared with FY2013, and we have decided to introduce the solar power generation system at our Chiba Site. Furthermore, we will also consider procuring renewable-derived fuels and materials and purchasing emission credits, and will develop technologies and products that will help reduce environmental impact. And we will strive to expand the diversity by hiring persons with disabilities and raising the percentage of female employees, and actively promoting female employees to management positions, while also pushing forward with disclosure on matters related to sustainability and human capital.

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

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

KPI	FY 2021 result	FY 2022 result	change
CO <sub>2</sub> emissions (Scope 1 + 2)	41% reduction	32% reduction	↓
Improvement in energy efficiency etc.	0.1%	-0.8%	↓
Sales of raw materials and intermediates for crop protection products	2.0 billion yen	2.7 billion yen	↑
Sales of raw materials and intermediates for pharmaceuticals	4.4 billion yen	5.5 billion yen	↑
Sales of electronic related materials	5.2 billion yen	4.5 billion yen	↓
New product sales ratio	7.5%	13.3%	↑
Cumulative savings from cost rationalization	0.6 billion yen	0.7 billion yen	↑
Digital literacy assessment	1.5	1.9	↑
Percentage of female new graduate hires* <sup>1</sup>	12.5%	14.3%	↑
Employment rate of persons with disabilities* <sup>2</sup>	2.3%	3.1%	↑

\*1: As of April 1, 2023

\*2: As of June 1, 2023

## Contribute to the environment

- Climate change mitigation and adaptation
- Contribute to recycling resources
- Sustainable use of natural capital

### KPI

#### CO<sub>2</sub> emissions (Scope 1 + 2) [Target: 50% reduction compared with 2013]

➤ FY2022 result: **32% reduction**

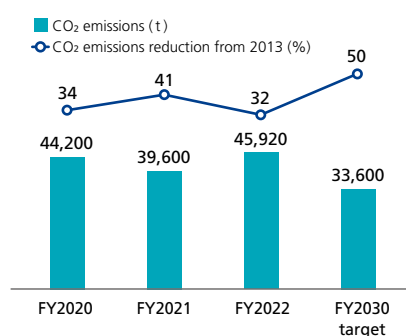
#### Improvement in energy efficiency etc.

➤ FY2022 result: **0.8% reduction**

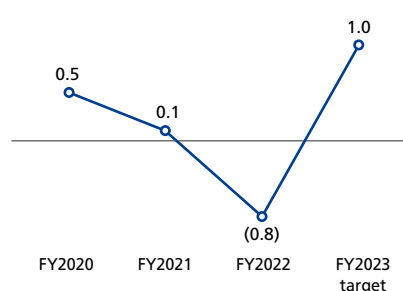


In order to prevent global warming, the world needs to reduce the emission of CO<sub>2</sub> and other greenhouse gases. Through our efforts to date to promote energy conservation through the modification of production processes and the collection and utilization of exhaust heat, and centralize our bases and shift to high-value-added products through a review of the business portfolio, as of FY2022, we had achieved a 32% reduction in CO<sub>2</sub> emissions compared with FY2013. Though CO<sub>2</sub> emissions increased in FY2022 compared with FY2021, this is due to the extraordinary circumstance of shut-down maintenance having been performed twice in FY2021. Going forward, we will pursue energy-saving measures as collaborative projects with Sumitomo Chemical in our aim for further improvements.

#### CO<sub>2</sub> emissions

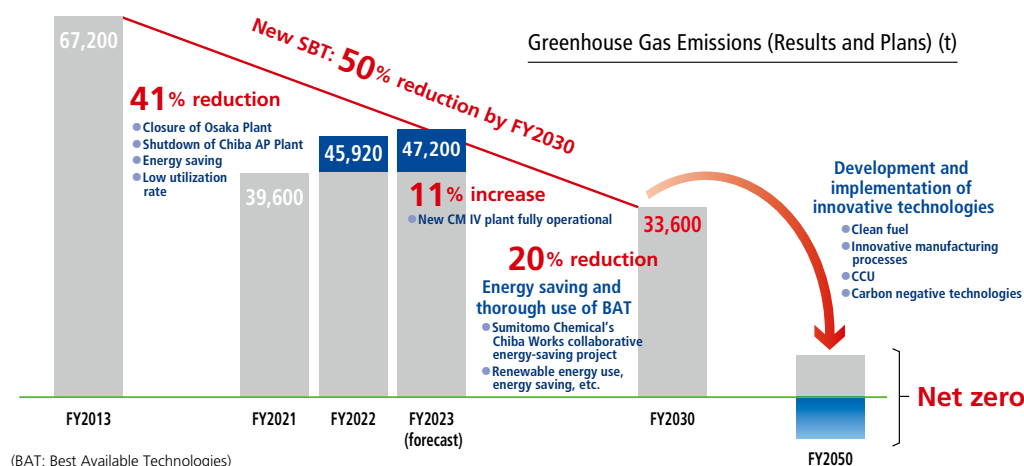


#### Rate of Improvement in energy efficiency etc. (%)



## Future approaches to carbon net zero

In order to achieve carbon net zero by 2050, our target is a 50% reduction in CO<sub>2</sub> emissions by FY2030 compared with FY2013. In our efforts to become carbon net zero, we consider it an important issue to contribute to resources recycling by utilizing our research and technological development capabilities that we have cultivated over the year. Our main planned initiatives are as outlined below.



### Main planned initiatives

- Collaborative energy-saving project with the Sumitomo Chemical's Chiba Works involving the introduction of a high-efficiency gas turbine energy generation equipment (scheduled to start in the second half of FY2023)
- Installation of a solar power generation system at the Chiba Site (scheduled to begin receiving electricity in March 2024)
- Change to high-efficiency transformers for the Chiba Site's power receiving equipment (scheduled for completion in March 2024)
- Additionally, continue to promote energy saving through such means as improvements in productivity

## Contribute to the food supply

- Advance sustainable agriculture

KPI

### Sales of raw materials and intermediates for crop protection products

➤ FY2022 result:  
2.7 billion yen

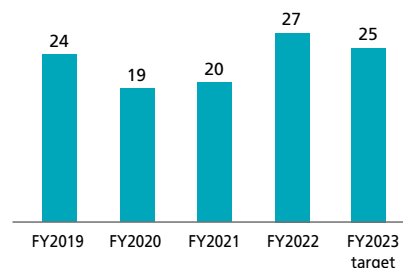


Our basic products, including amines and pyridines, are used as raw materials and intermediates for crop protection products. We deliver these products to manufacturers in Japan and overseas.

In FY2022, they accounted for 15% of total net sales. Although our sales for crop protection products has increased of about 35% temporarily compared with previous year by the timing of shipments, 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

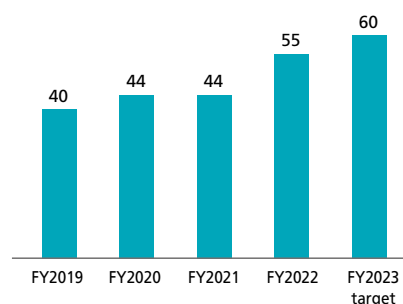
➤ FY2022 result:  
5.5 billion yen



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 FY2022, these products accounted for 30% of total net sales and increased about 25% year on year. This is mainly attributable to our success in selling large-volume pharmaceutical intermediates as planned, and we expect to see growth continuing in FY2023 and beyond.

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



## Contribute to ICT

KPI

### Sales of electronic related materials

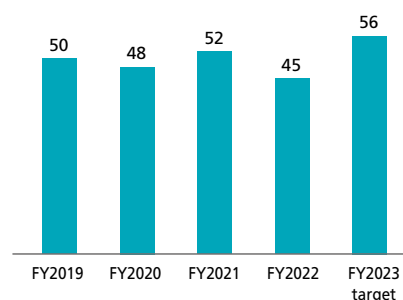
➤ FY2022 result:  
4.5 billion yen



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 FY2022, these products accounted for 24% of total net sales, down about 13% year on year on decline sales of ionic liquid and other products. From FY2023, we are aiming for the further expansion of optical materials-related products through a recovery in demand and the strengthening of collaboration with the Sumitomo Chemical Group. We expect to see medium- to long-term growth.

Sales of electronic related materials (100M yen)



## Advance innovation

### KPI

#### New product sales ratio

➤ FY2022 result: **13.3%**

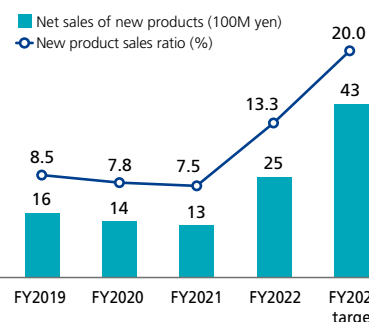
#### Cumulative savings from cost rationalization

➤ FY2022 result: **0.7 billion yen**

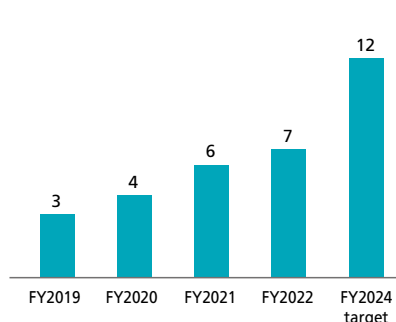


The trends in the new product sales ratio and the cumulative savings from cost rationalization are shown in the graphs below. Both KPIs are growing steadily, because of the sales expansion of large-volume pharmaceutical intermediate. We will continue to promote the rationalization of existing products and aim to expand new product sales, in particular, for pharmaceutical intermediates, organometallic catalysts, and optical materials-related products.

#### 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

➤ FY2022 result: **1.9**



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 FY2022 was 1.9 points, an improvement of 0.4 points from the previous year, and we are steadily achieving results. We will aim for sustained improvements in our digital literacy going forward.

#### Self-assessment

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*	2.0	7	Governance/systems	3.0
2	Commitment by business management	4.0	8	Secure HR recruitment	2.0
3	Mindset/corporate culture	0.0	9	Ownership of the business operation department	2.0
4	Promotion/support systems	4.0	10	Analysis and assessment of IT assets	2.0
5	HR Development/secure HR recruitment	1.0	11	Categorization of IT assets and planning thereof**	1.2
6	Reflection of outcomes in business	3.0	12	Ability to follow up on changes	1.0

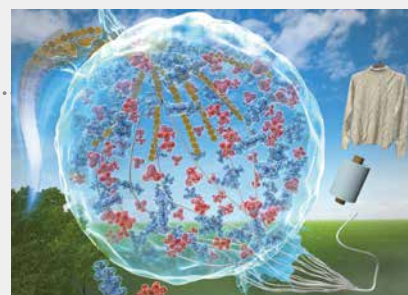
\*No. 1 is the average value evaluated by subdividing into two items and \*\*No. 11 into four items. Rounded to two decimal place.

## TOPICS

### Contribute to the environment

#### Launched joint research into spinning of fibers of regenerated cellulose with Shinshu University

We have succeeded in developing ionic liquids that can dissolve cellulose at the world's highest concentration, and are in the process of developing a variety of applications. As one of the applications, we have started a joint research with Shinshu University on the establishment of a spinning process for fibers of regenerated cellulose. By effectively utilizing cellulose, one of a biomass resources, we will contribute to the resource recycling process.



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

### KPI

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

▶ FY2023 result: **40.0%**

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

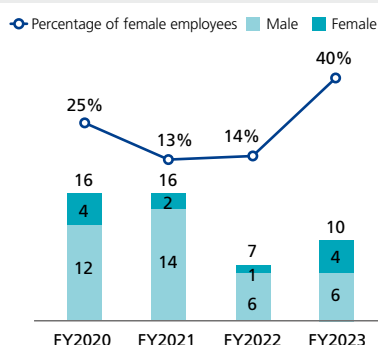
▶ FY2023 result: **3.6%**



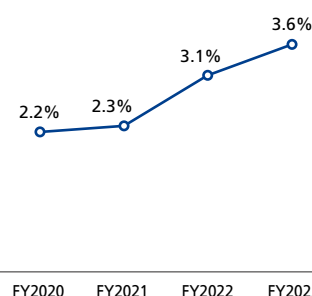
Our target for the percentage of female new graduate hires is 20% or more, and we aim to raise the employee retention rate and increase the percentage of female employees in the medium to long term. Though we failed to achieve this target in FY2021 and FY2022, we were able to significantly exceed the target in FY2023 by expanding the job opening types available. We will continue to strive to build a company and systems that is attractive to women.

In addition, we have achieved our target for the employment rate of persons with disabilities through the employment of persons with disabilities associated with the opening of the Salad Bowl Farm in FY2022. We will continue our efforts to maintain and improve this employment rate of persons with disabilities.

#### (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

#### Contribute to the environment

#### Supply of CO<sub>2</sub> absorbent amine compounds to Kawasaki Heavy Industries, Ltd.

At the request of Kawasaki Heavy Industries, Ltd., we have been consigned with the industrial production process development and manufacturing of CO<sub>2</sub> absorbent amine compounds developed independently by Kawasaki Heavy Industries. At the Integrated Test Center (ITC) in Wyoming, the United States, Kawasaki Heavy Industries is working with the Japan Carbon Frontier Organization (JCOAL) on the Ministry of the Environment's "Development project of integrated demonstration base and supply chain for environmentally friendly CCUS (demonstration of separation and recovery technology using solid absorbents)." Koei Chemical produced and supplied the amine compounds for that test. We will continue to contribute to carbon net zero by developing compounds that also incorporate our proprietary amines and by continuing to supply other companies with amine compounds as requested.



Image of Kawasaki Heavy Industries demonstration of separation and recovery technology utilizing solid absorbents

### Message from an Outside Director

#### Koei Chemical's Approaches to Sustainability

Yoko Hatta Outside Director (Audit & Supervisory Committee Member)

We have been engaged in a vast range of fields, encompassing everything from pharmaceutical raw materials and intermediates to crop protection raw materials and electronic materials. Through our business activities, we are working to create both economic and social value toward realizing a sustainable society. As expressed in our corporate philosophy, "We shall contribute to the development of society through providing solutions and innovative technology," we are refining our contributions that only we can make and making solid progress for promoting human resource development and innovation initiatives that will serve as the foundation for future value creation and communication with internal and external stakeholders through the Sustainability Promotion Council established in FY2022. It has been one year since I became an outside director of Koei Chemical, and I have high expectations for the growth of Koei Chemical and its contribution to society.



## 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.

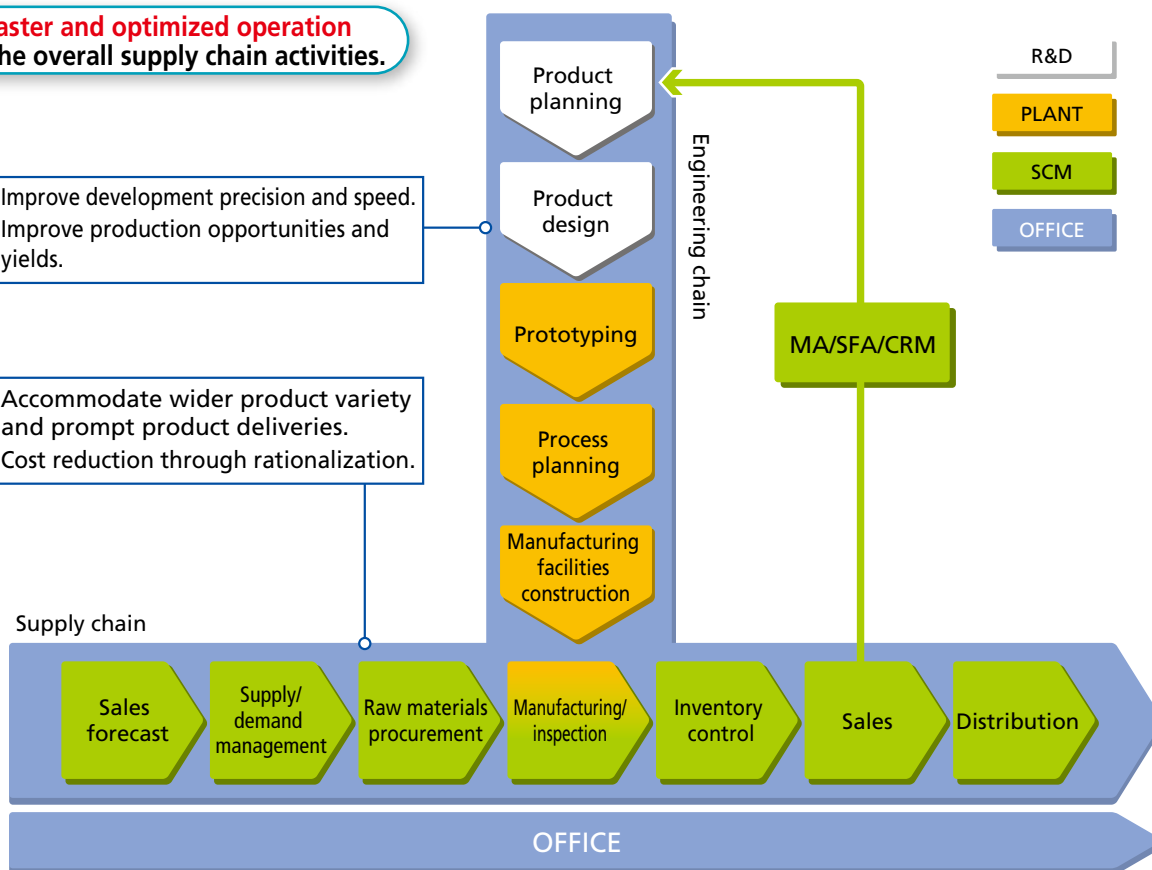
Vision	
<b>PLANT</b>	Improved production opportunities with maximized production capacity.
<b>R&amp;D</b>	Faster and more advanced R&D through data-driven research.
<b>SCM</b>	Faster and optimized operation of the overall supply chain activities.
<b>OFFICE</b>	More employee-friendly operations with digital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



### Continuing efforts for data scientists/engineers' skill development

As an initiative to cultivate data scientists/engineers who will strongly promote our DX activities, we introduced "Aidemy Business," an e-learning service provided by Aidemy Inc. in FY2022. We have established curricula for the management team and personnel at all levels to continue taking courses.

Moreover, as part of efforts to improve the digital literacy of all employees, we regularly provide education on information security and Office tools to improve skills.

## Status of DX strategy initiatives

### ① PLANT

With the aim of improving production opportunities through maximized production capacity, we are working to strengthen the review and feedback for each production, and are currently studying the creation and operation of various formats as a preparatory step for digitization. We are also continuing our efforts from FY2022 to optimize business processes and rules throughout our plants.



### ② R&D

In the interest of ensuring faster and more advanced R&D through data-driven research, we are working to develop a DX environment, such as an environment for storing research data in the form of big data and a database for research technology succession, as well as to acquire in-house case studies using materials informatics (MI) and to train data engineers who are qualified to utilize the accumulated big data.



### ③ SCM

We are constructing the One KOEI Platform, a next-generation information sharing platform, using cloud services provided by Salesforce Japan Co., Ltd. as a mechanism for integrated management of all information and cross-departmental information sharing in order to ensure faster and optimized operation of the overall supply chain activities.

We will implement many of the DX-related projects we are currently advancing on the One KOEI Platform.



### ④ OFFICE

For the purpose of more employee-friendly operations with digital technology, we are promoting the digitization of fax-related operations and various internal procedures as part of our efforts to promote the paperless work, while also attempting to establish telework as a work style option.

Moreover, we are regularly conducting training to enhance Office tool skills as part of efforts to improve the digital literacy of all employees.



### ⑤ Taking root of DX activities

Currently, as specific efforts to realize our DX, we have launched and are promoting a number of projects in the areas of PLANT, R&D, SCM, and OFFICE. In order to ensure the smooth operation of these projects and to complete them without delay, it is necessary to work together on DX activities. To help foster a mindset to DX among employees, we hold biannually internal events everyone participates in, Koei Digital Festival, each spring and fall.



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.
2016	Introduced an effectiveness evaluation of the Board of Directors. Transformed the structure into a company with an Audit and Supervisory Committee.
2019	First female director appointed. Established an Outside Directors Meeting system.

2020	Number of Directors/Audit and Supervisory Committee Members is increased from three to four.
2021	Introduced an Executive Officer structure, making 1/3 of Board consisting of the Independent and Outside Directors.
2022	Established the Sustainability Committee as an advisory body to the Board of Directors
2023	Changed policy partially for determining individual compensation for bonuses for directors and officers.

### 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.

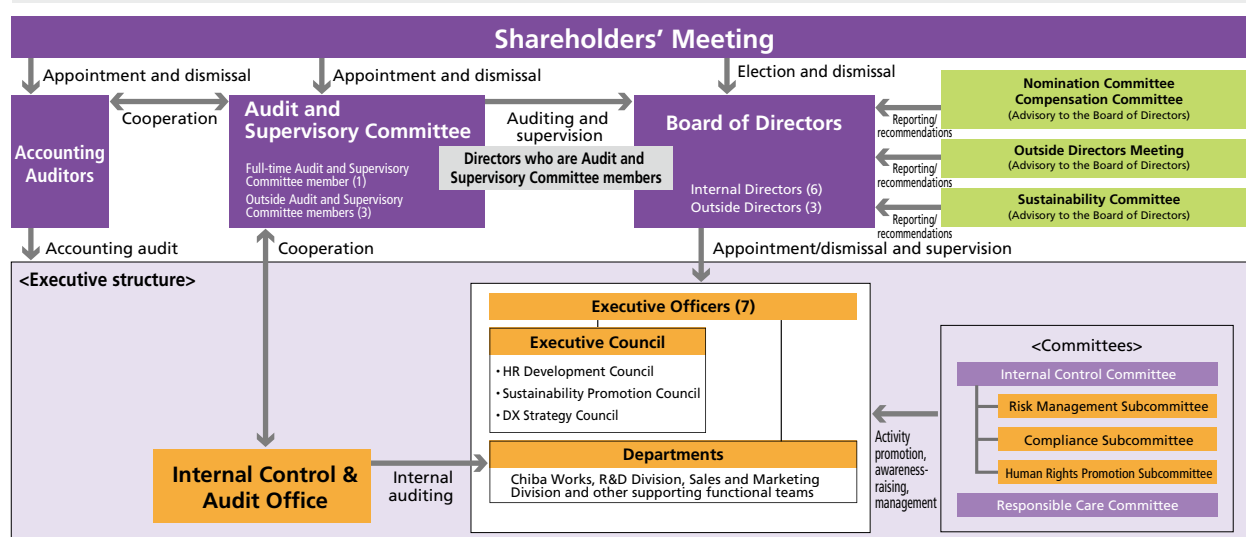
### Corporate governance system

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, three outside directors are registered as Independent Officers with the Tokyo Stock Exchange.

#### Corporate governance system (as of July 1, 2023)



## Strengthening of corporate governance system

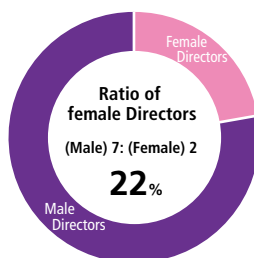
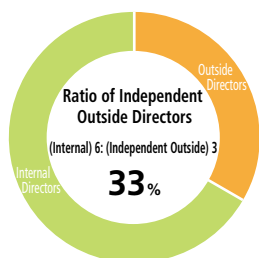
On April 1, 2022, Koei launched its new Corporate Business Plan FY2022–FY2024, “KX2.0: Striving for transformation utilizing knowledge and experience of over 100 years.” In our efforts to realize our corporate philosophy within the initiatives designed to achieve that plan, we have undertaken a further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

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.

### [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, three Outside Directors were elected at the 162st Ordinary General Meeting of Shareholders. With this move, the Board of Directors now comprises 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.



**Total Directors: 9**



**Internal Directors: 6**



**Independent Outside Directors: 3**

### [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.

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.

## Message from an Outside Director

I have served as an Outside Director of Koei Chemical for seven years. During my tenure, Koei Chemical has implemented various measures to strengthen corporate governance, including the transition to a company with an Audit & Supervisory Committee, a Board of Directors effectiveness evaluation, the introduction of voluntary Nomination and Compensation Committees, and the establishment of the Outside Directors Meeting and the Sustainability Committee. Along with the progress of efforts to reinforce the corporate governance system, we feel that the role and importance of Outside Directors at Koei Chemical are growing year by year.

In addition to auditing executive directors’ duties and supervising internal control, we will continue to make the necessary recommendations to ensure that stakeholders’ opinions, including those of minority shareholders, are appropriately reflected in the Board of Directors.



Ken Takiguchi  
Outside Director (Audit & Supervisory Committee Member)

## 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

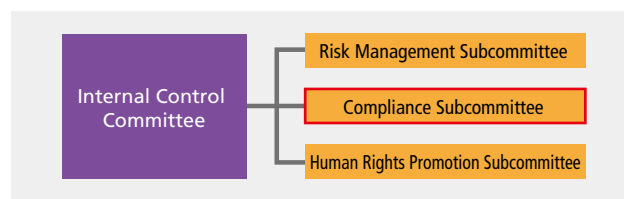
assignees, contract employees, temporary workers, and all other persons engaged in Koei's business activities under Koei's control and supervision for the observation of laws and ordinances, company regulations, and social ethics. It also indicates the standards that officers and personnel should maintain 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.



## Compliance promotion system

We have established an Internal Control Committee as an organization to promote compliance. The Committee, chaired by the President, establishes the Charter for Business Conduct based on compliance and conducts an investigation in case that there is a risk of compliance violations. If compliance violations are found, the Internal Control Committee establishes measures to handle and control the situation, prevents recurrence and improves the compliance system, and gives recommendations or instructions including personnel actions or reassignment. In this manner, we are promoting compliance.

The Compliance Subcommittee, a subcommittee of the Internal Control Committee, proposes policies for handling compliance risks and makes sure that they are disseminated throughout the Company, as well as supports compliance in each line.



## 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.

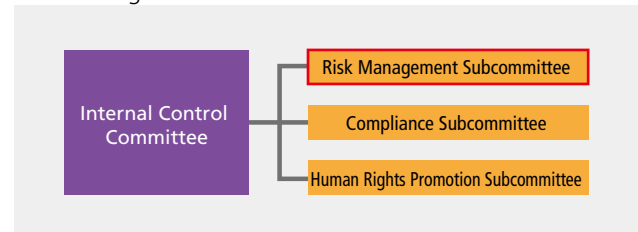


### Risk management promotion system

We identify various risks that may hinder our sustainable business at an early stage and appropriately respond to them, and also have in place and operate a risk management system to respond to risks that have materialized.

The Internal Control Committee has been established as an organization that governs risk management, which is chaired by the Representative Director & President. The Committee manages risks in seven categories as comprehensive risks: accident and disaster risks, information security risks, legal violation and compliance risks, tax and financial risks, personnel and labor risks, business risks, and political and social risks. The Committee identifies critical risks on a regular basis, establishes

risk management policies and action plans, and then supervises, evaluates, and manages the status of each department's efforts. In addition, the Risk Management Subcommittee has been established as a subcommittee of the Internal Control Committee, to deliberate on policies for handling individual risks.

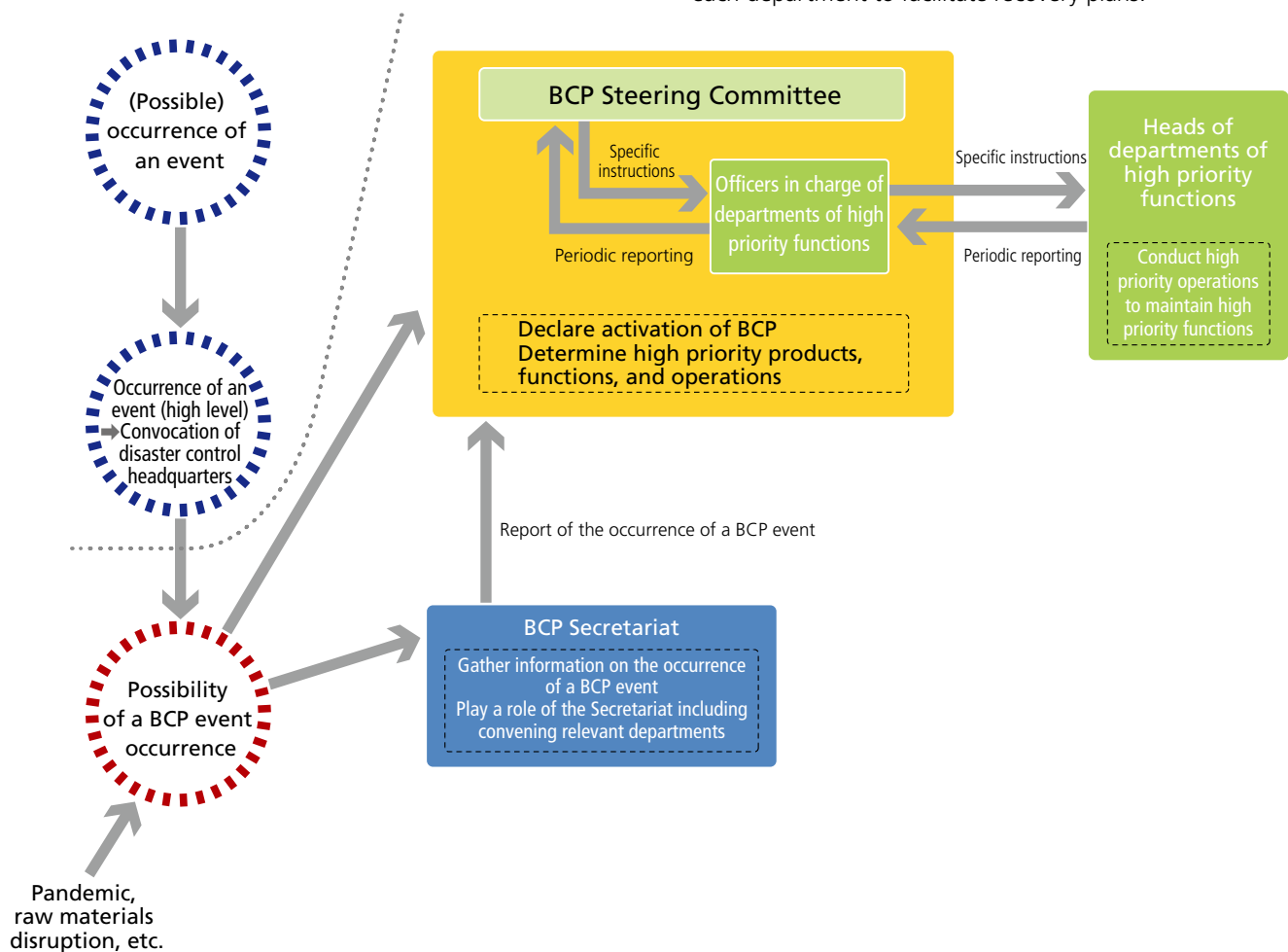


### Development of BCP management system

Koei Chemical has established a BCP (Business Continuity Plan) basic plan and developed a BCP management system for the purpose of ensuring that our customers' and our businesses will continue by taking appropriate measures to provide our customers with a stable supply of products in the event that the supply of our products may be disrupted or our business activities may be seriously hindered due to various unforeseen circumstances and human or physical

damages including large-scale disasters, pandemics, and raw materials disruptions.

In the event of possible occurrence of a BCP event that may make business continuity difficult, the BCP Steering Committee comprised of members of the Executive Council shall determine whether to activate the BCP. When the BCP is activated, the BCP Steering Committee shall ensure that our business will continue by directing and supervising each department to facilitate recovery plans.



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

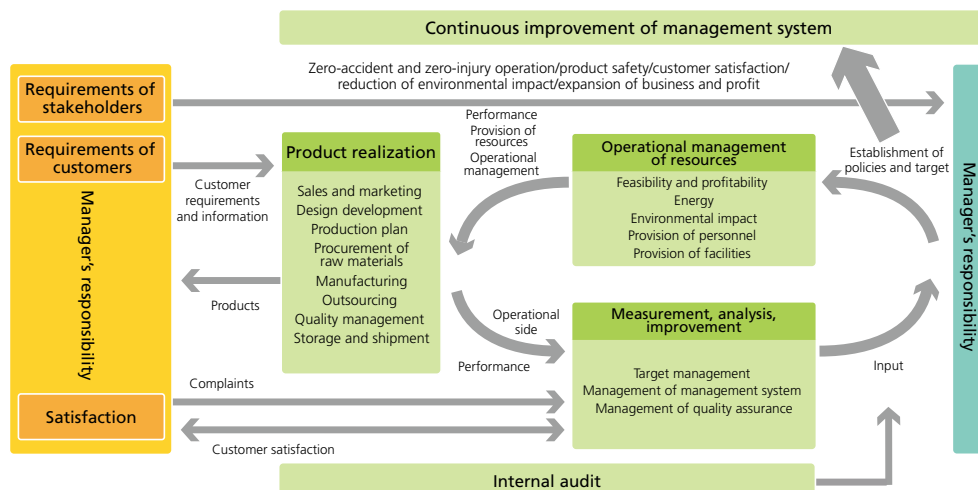
We declared the implementation of Responsible Care in 1995. Having recognized this policy, officers and employees are making continuous efforts to improve the management system in compliance with laws and regulations. In addition, an officer who is in charge of safety, the environment, and product quality 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



Safety workshop

improvement thereof, the promotion of Hi-yari-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.

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.



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 according to the destination of our products, including compliance with the CLP and China GHS. In addition, we ask logistics traders who transport our products to carry a card that contains information on emergency handling and contact (yellow card) to ensure logistics safety.

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, including procedures, etc. for handling hazards, by laboratory and the sites in an integrated manner. Employees are provided with protective equipment necessary for handling chemical substances, and a person in charge of managing protective equipment is appointed for each department to ensure appropriate management.



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 or issue occurs, the department in charge and the Quality Assurance Department find causes out through various way, for example, “naze-naze” analysis (5 Why Analysis) and take recurrence prevention measures. In addition, information on those actions is shared within the Company through the Quality Maintenance Task Force, which is one of our plant reform activities. In this way, we roll out recurrence prevention measures to eliminate similar complaints.

Please see pages 35 to 38 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 regarding respect for human rights in the supply chain

We conduct procurement activities based on Sumitomo Chemical Group Human Rights Policy and Policy for Responsible Procurement of Minerals/Raw Materials. We define raw materials that involve a high risk of causing a negative impact on human rights in the supply chain (including Tantalum, Tin, Gold, Tungsten, Cobalt, etc.) as high-risk raw materials, and conduct appropriate human rights due diligence on suppliers of high-risk raw materials.

Under the current circumstances in which procurement activities are required to place greater emphasis than ever

before on sustainability-related factors such as the natural environment, labor environment and human rights through business activities, we are developing a specific sustainable procurement policy to promote sustainability and respect for human rights throughout the supply chain.

We will promote these initiatives with the understanding and cooperation of our suppliers who are important partners to us.

## Investment in Human Resources

Koei Chemical has continued to recruit people with technology-related backgrounds to enhance the R&D system, which is necessary for further business expansion. In addition, we will also secure human resources necessary to strengthen our sales competitiveness, develop new products, and promote rationalization, as well as increasing employment of persons with disabilities from the perspective of utilizing diverse human resources.

Since the construction of the new multi-purpose plant to increase production capacity, we have considerably enhanced our recruitment activities, mainly for plant operators. Cultivating new employees' fundamental skills is a major point to our business expansion.

### 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 and its underconstructing. 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 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.

### Health promotion activities

In FY2022, we also promoted various activities that lead to the improvement of the health of employees while taking into consideration the prevention of the spread of COVID-19. In addition to mental health training programs for line-care and self-care, we carried out events to help employees become aware of the state of their own health and review their lifestyle habits, including support for quitting smoking, bone density measurement, and in-body measurements session, and provided advice from occupational health nurse based on the results.

In addition, we proactively offered meetings with occupational health nurse, including meetings between him/her and new employees or employees with findings in health checkups, and meetings with industrial physicians as necessary.

### 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 FY2022: 38

### Results of education and training

#### 1. Main training contents

##### (1) Technical education

Grade	Training course title	Total
New employees	Basic technical training for new employees	6
Beginner OP	Operation simulation course	3
Beginner OP to mid-level OP	Chemical safety simulation training	21
Mid-level OP	Mid-level technician training (Step 1)	8
Beginner OP to team leaders	Workplace leader training (Step 1)	6
Mid-level OP	Autonomous maintenance operators 2nd class (correspondence course)	9
Beginner OP to team leaders	Autonomous maintenance operators 1st class (correspondence course)	6
Beginner OP to team leaders	Technical seminar	206
Chiba Site employees	Safety simulation training room	107
Foremen and deputy managers	OM training course Step 1 (OM 18 term)	1
Foremen and deputy managers	Back office leader (Step 1)	8
Others	Chemical process, energy saving-related	22
	Seminars by the Japan Dyestuff and Industrial Chemicals Association, etc.	153
	Chemicals safety-related	83
	R&D-related	83
	Intellectual property (basic)	3
	Intellectual property (specification preparation)	2
	IT skills improvement (Aidemy Business)	133
	Targeted attack e-mail training	417
	Grade-based security education	414
	SE training	1

\*OP = Operator, OM = Operation Manager

## (2) Business skills, safety and health

Training course title	Total
Compliance training	439
Compliance Promotion Month	439
Antimonopoly Act compliance training (e-learning)	135
Training for promoted employees (GIII level)	11
Training for promoted employees (GIV level)	5
Training for promoted employees (new managers)	5
Training for promoted employees (Follow-up training for GIV level)	5
Training for promoted employees (Follow-up training for new managers)	5
Training for new graduates	7
Follow-up training for new graduates	7
Brother-sister system reflection training (for new employees)	14
Brother-sister system reflection training (for mentors)	14
Training for new experienced staff	6
Training for persons who have been offered jobs	19
Language training(skype)	51
Learning Agency (web)	232
Mental health training program	588
Stress check results briefing (line managers)	62
Seminar for female employees	18
In-body measurements session	199
Support for personnel who wish to quit smoking	4
Bone density measurement	124
Industrial health internship	4
Health lesson by nursing students (interns)	22

## 2. Costs and hours of training

- Training costs  
Approximately **180,000** yen/year/person
- Training hours  
Approximately **26** hours/year/person  
(Off-JT only, not including OJT)

## Human capital

### Human capital disclosure data

In order to proceed in the direction of disclosing information on human capital, we are promoting information disclosure in our annual securities report and on our website, in accordance with the Act on Promotion of Women's Participation and Advancement in the Workplace, starting in FY2022. Disclosure items are as follows.

#### Ratio of competition in hiring by gender

Male	Female
7.3 times	6.4 times

#### Percentage of female employees in each grade (as of April 1, 2023)

	Female (a)	Total (b)	Percentage (a/b)
Total	49	417	11.8%
Officers	2	14	14.3%
Managers	3	89	3.4%
Deputy manager-level	9	51	17.7%

#### Average overtime hours per month for workers by employment management category (2022 results)

	Male	Female	Total
General personnel	22.1 h	13.5 h	20.9 h
Reemployment/other	12.3 h	1.7 h	9.7 h
Total	21.7 h	12.8 h	20.4 h

#### Percentage of paid leave taken by employment management category (2022 results)

	Male	Female	Total
Managerial personnel	56.3%	43.1%	55.7%
General personnel	81.9%	70.8%	80.4%
Reemployment/other	82.2%	85.6%	82.6%
Total	75.3%	69.6%	74.6%

#### Difference in average years of service between men and women (as of the end of March 2023)

Male	Female
14.9 years	12.6 years

#### Percentage of continuous employment by gender of workers hired before and around the 10th fiscal year

Male	Female
76.2%	66.7%

#### Percentage of childcare leave, etc. taken and average length thereof by gender (FY2022)

	Male	Female
Percentage of childcare leave, etc. taken	50%	100%
Average length of childcare leave, etc.	66.7 days/person	Ongoing childcare leave

#### Difference in wages between men and women

All workers	Of which full-time workers	Of which part-time workers
81.2%	85.1%	38.7%
	Of which managerial personnel	Of which reemployed after retirement
	103.3%	45.9%
	Of which general personnel	Of which temporary workers
	92.1%	159.1%

## Environmental accounting report

### Environmental accounting (FY2022)

Environmental preservation cost (Unit: Millions of yen)

Category	Major items	Investment	Cost
① Business area cost (Breakdown)		387	1,299
Environmental measure cost	Prevention of air pollution, water pollution, land pollution, etc.	22	882
Global environment preservation cost	Prevention of global warming, energy saving, etc.	36	217
Resource circulation cost	Resource saving, efficient water use, rainwater use, disposal, reduction, elimination, and recycling of industrial waste	329	200
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	107
④ R&D cost	R&D for products that contribute to environmental preservation	0	104
⑤ Social activity cost	Greening, beautification, levy on pollution load, support of environmental activities performed by local communities	1	7
⑥ Environmental deterioration cost	Land pollution, restoration of the natural environment to its original state	0	0
Total		388	1,517

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: FY2022 (April 1, 2022 to March 31, 2023)

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	396
② Effects of resource saving	347
③ Effects of energy saving	26
Total	769

## GHG emissions

### GHG emissions Scopes 1 and 2

(Unit: ton-CO<sub>2</sub>e)

	Emissions		
	FY2020	FY2021	FY2022
Scope 1 (fuel and waste oil combustion)	32,640	28,788	29,657
Scope 2 (Use of electricity and steam supplied by other companies)	11,593	10,794	16,263

- For Scope 1, direct CO<sub>2</sub> emissions associated with combustion of fuel, waste oil, etc. are calculated.
- For Scope 2, indirect CO<sub>2</sub> emissions associated with use of electricity and steam supplied by other companies are calculated.

### GHG emissions Scope 3

(Unit: ton-CO<sub>2</sub>e)

	Emissions		
	FY2020	FY2021	FY2022
1. Purchased products and services	44,298	42,591	44,618
3. Fuel and energy-related activities not included in Scope 1 or 2	7,490	6,939	7,288
4. Transportation and distribution (upstream)	2,100	2,478	2,343
5. Waste from business	1,829	1,229	1,630

- For Scope 3, indirect GHG emissions associated with supply chain corporate activities are calculated.
- The above four categories are covered in the calculation.

## Renewable energy usage

(Unit: kWh)

	FY2020	FY2021	FY2022
Solar power (in-house power generation)	24,110	23,700	24,320

## Possession of equipment related to PCB and fluorocarbons

		FY2020	FY2021	FY2022
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	4

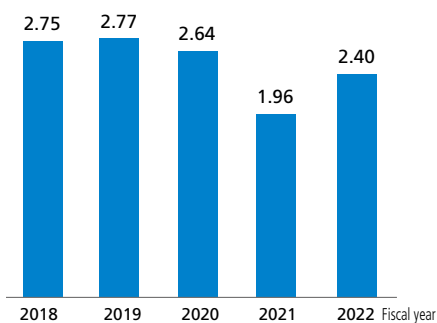
\*The numbers cover business-use freezers and air conditioning facilities incorporated in the production process.

## PRTR reports

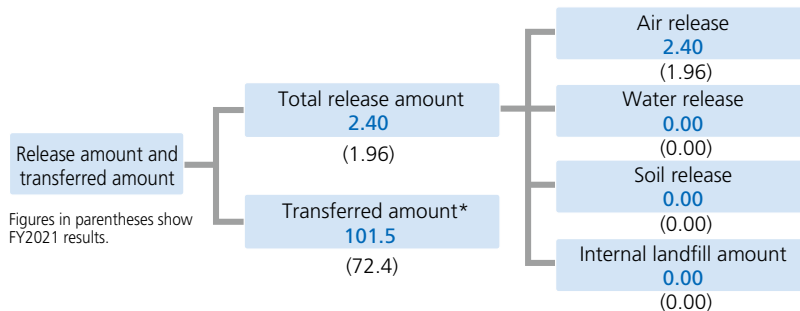
The PRTR system is prescribed in Article 5 of the Act on Confirmation, etc., of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof (generally known as the "PRTR Act"), which took effect in March 2000.

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 FY2022 (tons/year)



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

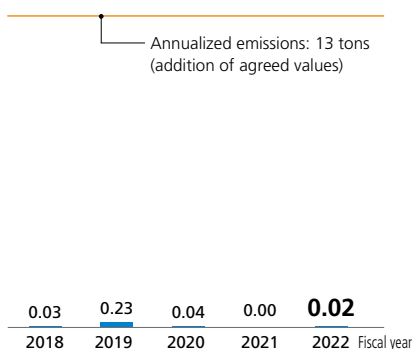
## Air release of SOx, NOx, and dust Water release of COD, nitrogen, and phosphorus

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

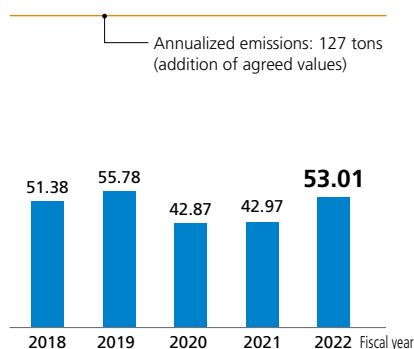
For SOx, the volume detected through annual analysis is small and lower than the emission standards.

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.

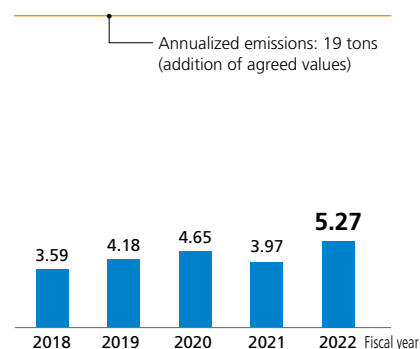
Trend of SOx emission (t)



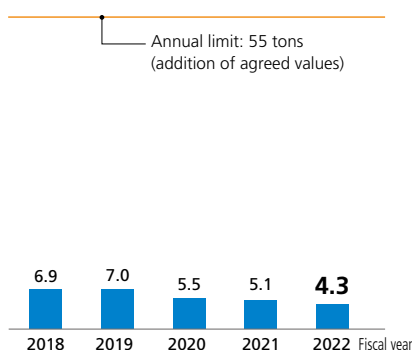
Trend of NOx emission [t / year]



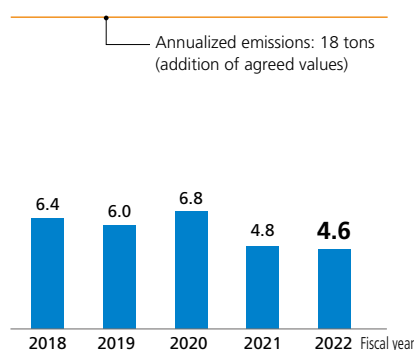
Trend of dust emission (t)



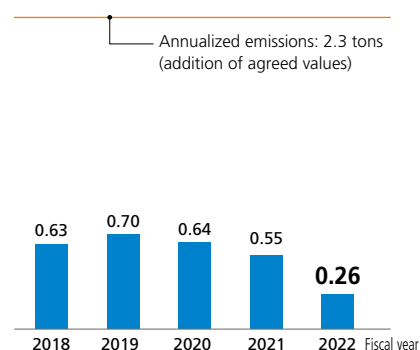
Trend of COD emission (t)



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 FY2022 is shown in the following chart.

The volume of industrial waste generated increased by 16% compared to the previous fiscal year, and the recycle rate was 37%.

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 FY2022

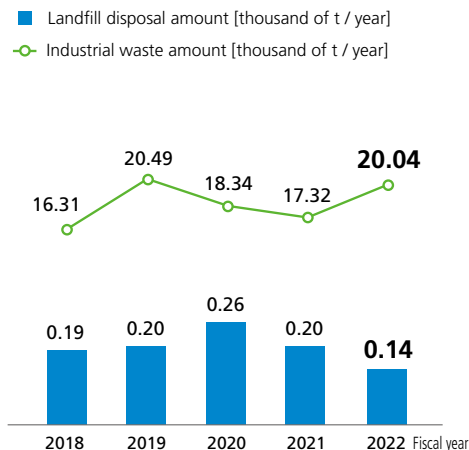
Targets of initiatives	Actual results
<p>Through business activities:</p> <ul style="list-style-type: none"> <li>Reduction of industrial waste amount</li> <li>Reduction of landfill disposal amount</li> </ul>	<ul style="list-style-type: none"> <li>Waste generated through business activities: 20,037 tons (17,316 tons for the previous fiscal year, up by 16%)</li> <li>Landfill disposal amount: 144 tons (197 tons for the previous fiscal year, down by 27%)</li> </ul>
<p>Promotion of recycling</p> <ul style="list-style-type: none"> <li>Increase of effective usage rate</li> </ul>	<ul style="list-style-type: none"> <li>Recycling amount: 7,338 tons</li> <li>Recycling rate: 37% (4,218 tons for the previous fiscal year, recycling rate: 24%)</li> </ul>

The industrial waste amount generated and the landfill disposal amount fluctuate 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 (FY2022)

(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	0.13	0	0	0	0	0.13	0	0.01	0.06	0.04	0.02
Hazardous waste	19.9	0	4.71	12.4	0	2.75	0	0.10	0.30	2.23	0.13

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

## Water resources

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

	FY2018	FY2019	FY2020	FY2021	FY2022
Total amount of water discharge	1,906	2,601	2,864	2,004	1,858
Water usage	2,450	3,154	3,406	2,458	2,353
Industrial water	497	512	489	400	442
Drinking water	13	14	14	14	13
Seawater	1,940	2,628	2,904	2,045	1,898

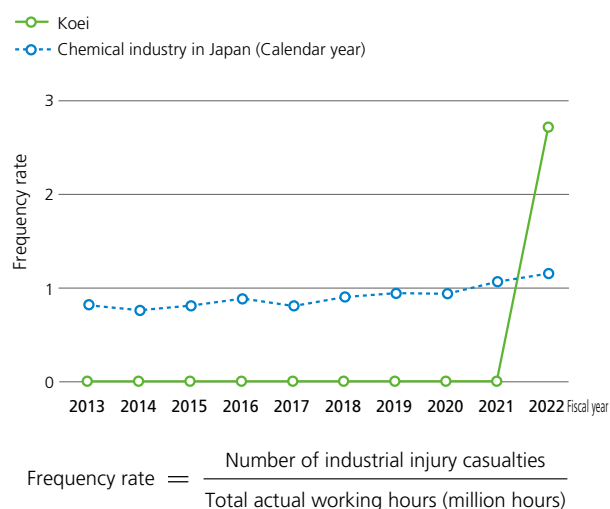
## Safety and health data

With regard to work-related accidents, there were two industrial injuries in FY2022. Both were injuries such as lower-back pain caused by unreasonable posture and movement. We are working on recurrence prevention by encouraging self-management through educating workers on heavy materials handling operations and conducting radio exercises before starting work every morning to prevent lower-back pain.

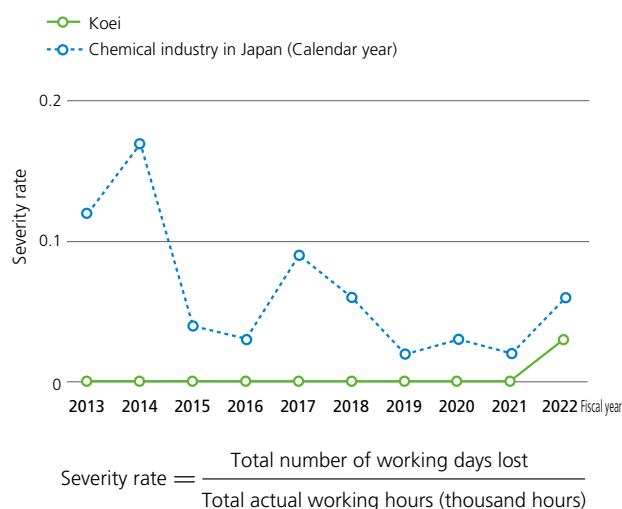
The number of zero-injury day were 47 days (as of March 31, 2023), and we have made a new start in our efforts to maintain zero injuries. We will continue our daily safety activities.

Despite being minor, injuries occurred. We conduct RC zero-accident audits even on minor injuries to find the cause and implement additional measures, while making efforts to undertake horizontal deployment on the prevention of the occurrence of similar injuries to achieve zero-injuries.

Frequency Rates of Industrial Injuries



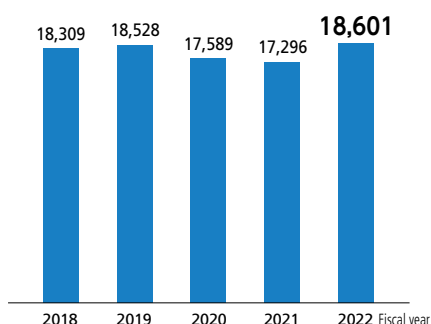
Severity Rates of Industrial Injuries



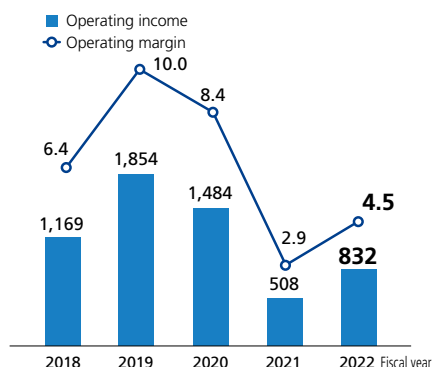
## Acquisition of management system certifications

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)

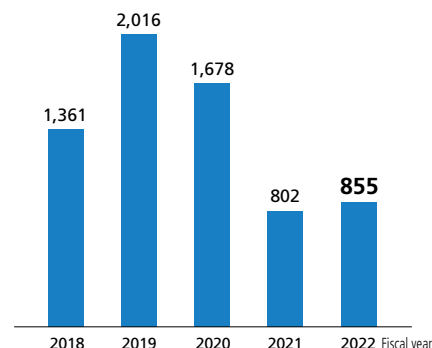
### Net sales (Millions of Yen)



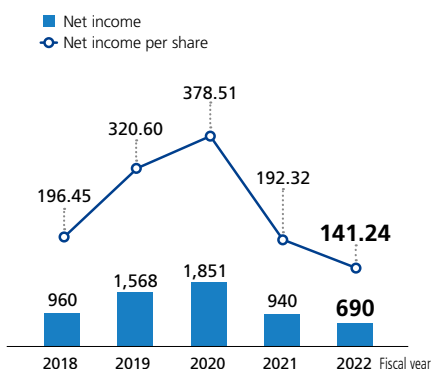
### Operating Income (Millions of Yen) / Operating margin (%)



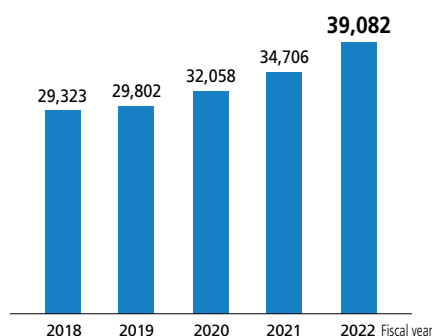
### Ordinary profit (Millions of Yen)



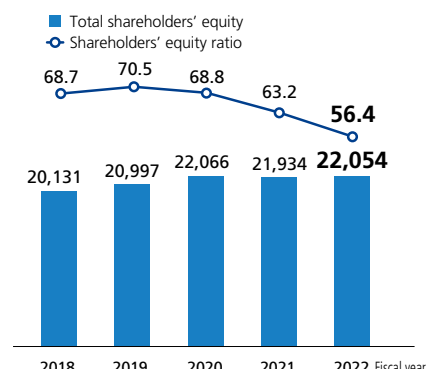
### Net income (Millions of Yen) / Net income per share (Yen)



### Total assets (Millions of Yen)

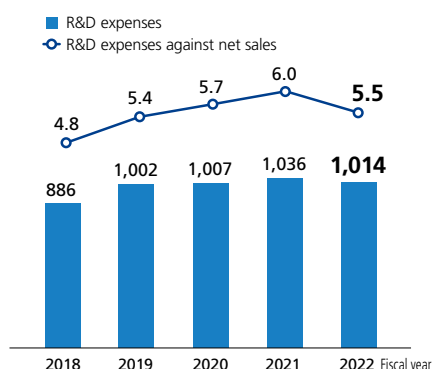


### Total shareholders' equity (Millions of Yen) / Shareholders' equity ratio (%)

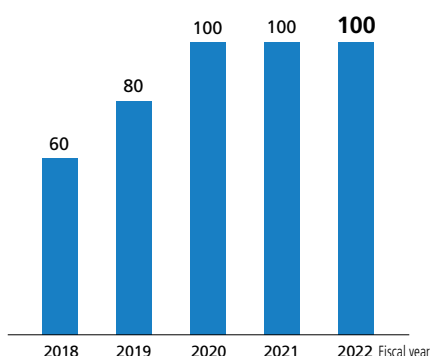


		2018	2019	2020	2021	2022 (Fiscal year)
Net sales	(Millions of Yen)	18,309	18,528	17,589	17,296	18,601
Operating income	(Millions of Yen)	1,169	1,854	1,484	508	832
Operating margin	(%)	6.4	10.0	8.4	2.9	4.5
Ordinary profit	(Millions of Yen)	1,361	2,016	1,678	802	855
Net income	(Millions of Yen)	960	1,568	1,851	940	690
Net income per share	(Yen)	196.45	320.60	378.51	192.32	141.24
Total assets	(Millions of Yen)	29,323	29,802	32,058	34,706	39,082
Total shareholders' equity	(Millions of Yen)	20,131	20,997	22,066	21,934	22,054
Shareholders' equity ratio	(%)	68.7	70.5	68.8	63.2	56.4

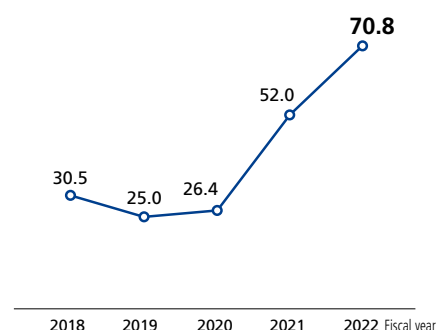
**R&D expenses** (Millions of Yen) /  
**R&D expenses against net sales** (%)



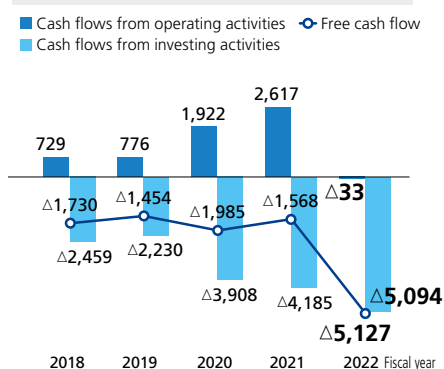
**Dividend per share** (Yen)



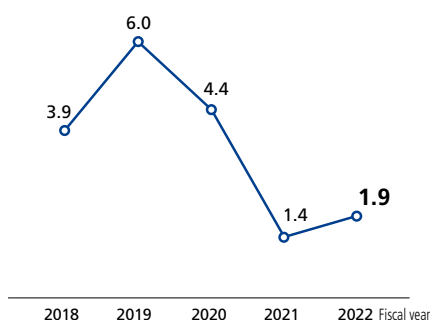
**Payout ratio** (%)



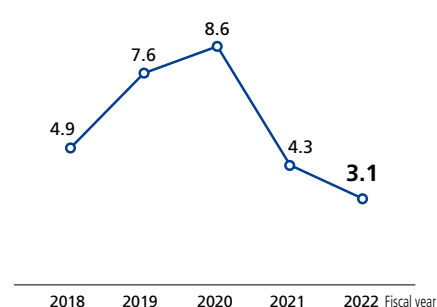
**Cash flows from operating activities** (Millions of Yen) /  
**Cash flows from investing activities** (Millions of Yen) /  
**Free cash flow** (Millions of Yen)



**Return on invested capital (ROIC)** (%)



**Return on equity (ROE)** (%)



	2018	2019	2020	2021	2022 (Fiscal year)
R&D expenses (Millions of Yen)	886	1,002	1,007	1,036	1,014
R&D expenses against net sales (%)	4.8	5.4	5.7	6.0	5.5
Dividend per share (Yen)	60	80	100	100	100
Payout ratio (%)	30.5	25.0	26.4	52.0	70.8
Cash flows from operating activities (Millions of Yen)	729	776	1,922	2,617	△33
Cash flows from investing activities (Millions of Yen)	△2,459	△2,230	△3,908	△4,185	△5,094
Free cash flow (Millions of Yen)	△1,730	△1,454	△1,985	△1,568	△5,127
Return on invested capital (ROIC) (%)	3.9	6.0	4.4	1.4	1.9
Return on equity (ROE) (%)	4.9	7.6	8.6	4.3	3.1

Dr. Kazuhiro Bai, Visiting Professor in the College of Business & Graduate School of Business at Rikkyo University, read the Koei Chemical Report 2023 and offered his opinions.



Dr. Kazuhiro Bai

Visiting Professor  
College of Business & Graduate School of Business, Rikkyo University  
Ph.D. (Business Administration)

#### Profile

Serving at Rikkyo University since 2018; having served as Specially Appointed Professor in the College of Business & Graduate School of Business, Rikkyo University. 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 2022 to March 2023 in its aim to achieve the SDGs and realize a sustainable society through various business activities. 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 I focused on in the Koei Chemical's report for this year. Firstly, I focus on a point that, in the "Roundtable Discussion with Responsible Officers" (Pages 11–14), efforts to promote cross-functional product development and business operations are presented. In the discussion, symbolic initiatives of collaboration between manufacturing, sales, and R&D, and human resources development as a challenge in view of the targets of KOEI Vision 2030 are discussed (Pages 13–14). These are examples of activities to accelerate business growth strategy, as indicated in the basic policies of the Corporate Business Plan "KX2.0: Striving for transformation utilizing knowledge and experience of over 100 years." They are challenges that are difficult to achieve without collaboration across business boundaries by manufacturing, sales, and R&D. It is highly commendable that cross-functional collaboration in which difficult issues are inherent has been achieved, and that management is practiced in a manner that incorporates material issues from "corporate philosophy" of contributing to solving global issues through Koei Chemical's unique value creation process, to the "Corporate Business Plan" to "basic policies" to "business growth strategy." Another point I focused on this time is that Koei Chemical develops its activities considering the power of "people" such as human resources development and respect for human rights to be the source of its value creation (Pages 8, 18, 32–34). In particular, Koei Chemical's efforts to push ahead with investment in human resources such as "continuing to recruit people with technology-related backgrounds," "securing human resources

necessary to strengthen sales competitiveness, developing new products, and promoting rationalization," and "expanding employment of persons with disabilities" have been visualized in the form of the value creation process from "Input" to "Core" to "Output." I believe that this contributes to Koei Chemical's aim of co-existence and co-prosperity with all its stakeholders (Pages 5–6, 33–34). As stated in the message from the President, this is a series of initiatives aimed at enhancing corporate value over the medium to long term by maximizing the value of human resources as corporate "capital" in such a way, which is highly commendable (Page 10). To summarize the above, this year's report noticeably reflects Koei Chemical's initiatives with its eyes focused on the targets of the SDGs, as substantial descriptions of human capital, a source of sustainable value creation, are seen on almost every page. My view is that this is a highly complete report that provides great expectations for future development.

#### Points to be improved

As I mentioned last year, the Koei Chemical's reports have evolved over the past few years, and I believe that it is nearly complete in terms of structure. For this reason, I would like to discuss again the outlook on its content as an area in which I would hope to see improvement. I understand that the Koei Chemical's report is oriented toward integrated reporting. Integrated reporting positions the recipients of the report as provider of financial capital, and must represent a flow that visualizes value creation capabilities through close linkage of relevant financial information with other information (non-financial information). Most of Koei Chemical's efforts are in the practical phase. By improving the accuracy of visualization of non-financial information while exploring the connection between financial and non-financial information, the normative nature of the report is expected to increase more than ever before. I hope that what I mention will be used as reference to lead to the further development of the company's initiatives.

### Response to Third Party Opinions

I deeply appreciate Dr. Kazuhiro Bai's valuable remarks.

Dr. Bai has commended this year's report as highly complete one that provides great expectations for future development as it contains description of our initiatives with our eyes focused on the targets of the SDGs on almost every page, including cross-functional business operations and activities that consider the power of "people" as the source of value creation. I appreciate his praise for our report.

Dr. Bai noted that, as a future challenge, we need to improve the accuracy of visualization of non-financial information linked to financial information to increase the normative nature of the report more than ever before. We will make further efforts to visualize our ability to create sustainable value, with a strong awareness of the linkage between financial and non-financial information.



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

(As of March 31, 2023)

## 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:** 409  
**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 shares .....16,000,000  
Issued number of shares .....4,900,000  
Number of shareholders .....2,881

## Board of Directors and Senior Management

(As of October 1, 2023)

Representative Director & President	<b>Ray Nishimoto</b>	Executive Officer	<b>Noriyasu Sakamoto</b>
Director/ Managing Executive Officer	<b>Hideo Wada</b>	Executive Officer	<b>Takashi Ohhata</b>
Director/ Managing Executive Officer	<b>Akihiko Egawa</b>	Executive Officer	<b>Akira Oyama</b>
Director	<b>Keiko Fukahori</b>	Executive Officer	<b>Toshikazu Ura</b>
Director	<b>Ichiro Kosaka</b>		
Director (Audit & Supervisory Committee Member)	<b>Kenji Kondo</b>		
Outside Director (Audit & Supervisory Committee Member)	<b>Ken Takiguchi</b>		
Outside Director (Audit & Supervisory Committee Member)	<b>Shingo Yoro</b>		
Outside Director (Audit & Supervisory Committee Member)	<b>Yoko Hatta</b>		

## 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
Gakuji Ooshio	56	1.16
Masahiro Iso	43	0.90
Shigeharu Sakamoto	43	0.89
Koei Chemical Employee Shareholder Plan	37	0.77
Maruishi Chemical Trading Co., Ltd.	33	0.69
Yutaka Horie	30	0.61
Koji Yamasaki	26	0.54

Note: Shareholding ratio is calculated excluding treasury stock (8,883 shares).

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



## **KOEI CHEMICAL CO., LTD.**

### **General Affairs and Human Resources 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

<https://www.koeichem.com/en.html>