# Creating a Sustainable Future



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# **Corporate Policy**

# Realizing a brighter tomorrow for society Corporate Mission through the power of chemistry.

Management Approach Making our dream a reality through reliable technology and new inventions.

Taking the first step to overcoming barriers and issues we face.



Protecting ourselves and our colleagues. Safety Guidelines

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# With our distinctive chemical material products, we will realize a sustainable society and enhance our corporate value via Sustainable Management.

Realizing a brighter tomorrow for society through the power of chemistry is the corporate mission of the KH Neochem Group. We are a chemical manufacturer that globally supplies distinctive materials to various industrial fields. These materials play an important role in a wide range of fields, and include refrigeration lubricant raw materials used in environmentally friendly air conditioners, cosmetic ingredients that help to improve quality of life (QOL), high-purity solvents essential for the manufacture of semiconductors, and basic chemicals that are raw materials in products such as coatings and plastics. Ultimately, they manifest in familiar objects all around you and continue to enrich your daily lives. We promote Sustainable Management that combines contributing to a sustainable society through our business and ensuring ongoing growth in our own corporate value as well.

*KH Neochem Report 2024* shows how the value system we have built over the past 76 years connects with our corporate behavior. This report gives voice not only to management but also to many of our employees; it describes how our materials contribute to solving social issues, and also tells you about the strategies and issues we are currently working on.

I sincerely hope that this report will give you a better understanding of the KH Neochem Group.

# Key points in KH Neochem Report 2024

**1.** Connections between our value system and corporate behavior

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Michio Takahashi Representative Director, President & CEO



Contributing to curbing global warming through refrigeration lubricant raw material for environmentally friendly air conditioners Contributing to improving QOL through cosmetic ingredients with highly moisturizing and low irritant properties

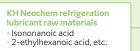
Air conditioners are vital for our daily lives.

In this circumstance, KH Neochem products play a quiet, yet vital role. A special refrigeration lubricant is used in the outdoor units of air conditioners.

Our "refrigeration lubricant raw materials" make the oil's special function a reality.

They are especially used in environmentally friendly air conditioners, which help to curb global warming.

▶P23



Used as a lubricant for air conditioner outdoor units



Moisturizing ingredients are employed in skincare cosmetics. KH Neochem manufactures these essential cosmetic ingredients. These products were developed by considering market feedback, which highlighted diversifying needs, for ingredients characterized by strong moisture retention properties, low odor, and low skin irritation. We harnessed our outstanding manufacturing technology and know-how to create products that improve the quality of life of people around the world.

KH Neochem cosmetic ingredients • 1,3-butylene glycol Used as a cosmetic moisturizing ingredient



Contributing to an advanced information society through high-purity solvents essential to the semiconductor manufacturing process



through basic chemicals that meet diverse needs 00

The semiconductor manufacturing process is becoming increasingly sophisticated.

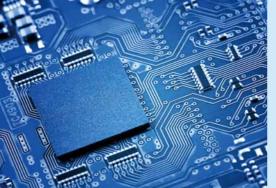
KH Neochem high-purity solvents are used as raw materials for photoresists and other applications. Incorporating customer feedback has enabled us to accumulate high

purification technology and know-how. By utilizing these, we are taking on the challenge of achieving the

world's most advanced level of impurity management at the parts per trillion level. We continue to take on new challenges to give form to solutions to customer needs, such as materials for next-generation semiconductors and optical materials. ▶P25

KH Neoc





Homes and automobiles shape an enriched way of life. KH Neochem products are used for these, supporting people in every aspect of their lives.

Solvents are used in color, and plasticizer raw materials soften plastics.

These are then used to create coatings, inks, resins, and other products to help create a more comfortable everyday life.





# Contributing to richer lives for people





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Value Creation

KH Neochem Report 2024 8

The Source of Value

# Strengthening Manufacturing and Human Capital

Our products include those with high market shares globally and those that only we can manufacture. Because of this, we must strengthen our manufacturing capital by improving our equipment maintenance strategy and accelerating digital transformation.

It is our people that make these endeavors possible.

We are responsible for globally vital supply chains, so we will create "robust plants" with strong technical capabilities, run by people with a broad perspective and a strong sense of our mission.



# Safety Management

All of KH Neochem works together on Comprehensive Safety Check Initiative 2022 to promote our safety guidelines, "Protecting ourselves and our colleagues."

# **Achieving Stable Operations**

We are improving our maintenance strategy to heighten equipment reliability and promoting the introduction of predictive diagnostic systems through digital transformation in order to reduce unplanned operation loss due to sudden equipment issues.

# Evolution of Production Planning and Engineering

We are bolstering our efforts to improve productivity and decarbonize through the introduction of advanced plant control systems and CO<sub>2</sub>-capture systems for greater safety, stability and efficiency.

# Human Capital P

# Strengthening Human Resources

We are working to further improve our capabilities in developing professional human resources who will support sustainable growth by training successors, introducing a job-based personnel system and supporting career development.

# A Culture that Respects Diverse Values

We promote diversity and inclusion, foster a corporate culture where everyone can thrive, and strive to create a highly productive workplace for energetic employees.

# Creating Workplaces where it is Easy to Work

We provide flexible work styles and excellent work-life balance, including a high rate of employees who take annual paid leave, while also systematically investing in improving the workplace to promote the creation of a safe and healthy working environment.

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Value Transformation

# Chemistry that Transforms CO<sub>2</sub> into Value

Natural Capital (CO<sub>2</sub>) x Intellectual Property (Oxo Technology) We employ our core oxo technology and CO<sub>2</sub> as a raw material to manufacture, refrigeration lubricant raw materials, which are essential for environmentally friendly air conditioners. Our distinctive materials help reduce global GHG emissions to create a

sustainable future. KH Neochem has taken on the challenge of employing chemistry that

transforms CO<sub>2</sub> into value.

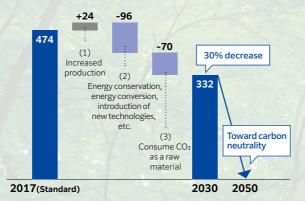
# Contributing to a carbon neutral value chain for technology and products



# **Roadmap for KH Neochem Carbon Neutrality**

We aim to be carbon neutral by 2050. As a milestone toward achieving this, our goal is to reduce GHG emissions by 30% by 2030 relative to FY2017 levels. We expect to increase production of products with growth potential moving forward (1), but we aim to do so by reducing CO<sub>2</sub> emissions in the production process (2), and using CO<sub>2</sub> as a raw material (3).

# KH Neochem greenhouse gas (GHG) emissions (1,000t-CO2)

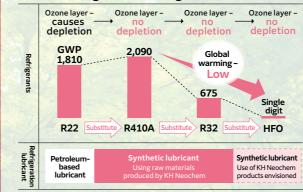


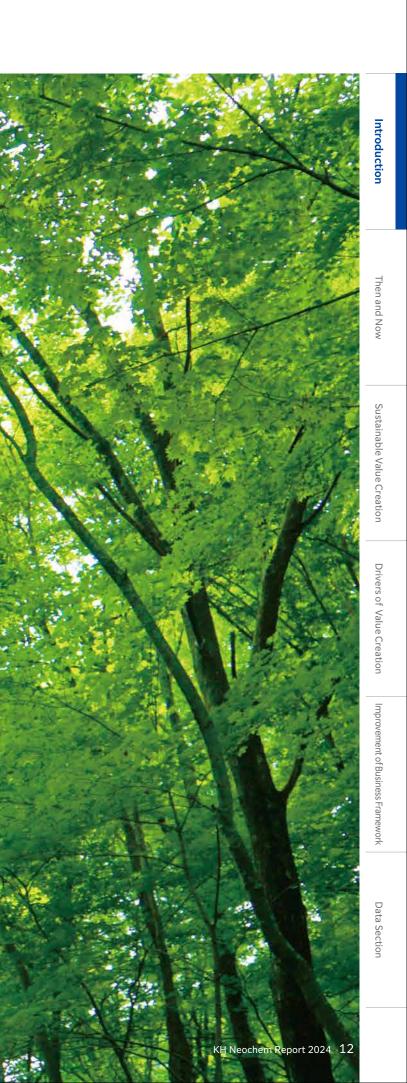


# Distinctive Products >P23

The refrigerants used in air conditioners have a high environmental impact, leading to concerns regarding their effects on global warming. Global environmental regulations have led to substituting ozone-safe refrigerants for those previously used, but moving forward, there will be an even greater shift to refrigerants with lower global warming potential (GWP). Our refrigeration lubricant raw materials are highly compatible with these low GWP refrigerants, thus contributing to global warming prevention.

## Combined refrigerants and refrigeration lubricants





# **Then and Now**

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Photo: Ena Mitsui (Kawasumi · Kobayashi Kenji Photograph Office)





# Implementing our Corporate Policy: Our Basic Principles

# Corporate Mission

# Realizing a brighter tomorrow for society through the power of chemistry.

## Comment -

Delivering materials that are essential to people's lives around the world

I introduced our materials, which are essential to people's lives, at exhibitions outside Japan, leading to new business deals. This experience has been incredibly beneficial for my growth. Delivering our products to people around the world contributes to realizing a brighter tomorrow.

> Ma Zhongting Sales & Marketing

# Management Approach

# Making our dream a reality through reliable technology and new inventions.

### Comment

Taking on the challenges of solving social issues through new technology

We are working to improve our production process from a technological standpoint. Moving forward, we will take on the challenge of contributing to solving social issues such as achieving carbon neutrality by incorporating new technology.

Yoshihito Kato Technology Development Center

# **Basic Behavior**

# Taking the first step to overcoming barriers and issues we face.

## Comment

Resolving issues one by one to develop new business

When it comes to new business themes we have undertaken from the idea stage, overcoming challenges such as technology, intellectual property and marketing, then seeing the business become a reality is motivating.

Kohei Ito Innovation Strategy

# Safety Guidelines

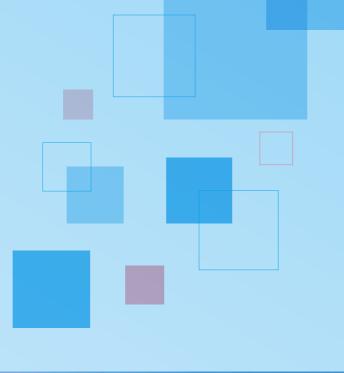
Protecting ourselves and our colleagues.

## Comment

Achieving safe and stable operations through equipment maintenance

We ensure biennial inspections required for chemical plants, while also contributing to safe and stable operation through planned maintenance, repair, and improvement of equipment.

> Tomoaki Kitami Chiba Plant











# Introduction

Then and Now

# History of KH Neochem: Cultivating Our Corporate Policy

# We have worked to support people's lives while contributing to the global environment through manufacturing for 76 years.

Since our founding in 1948, we have endured through many transitions, fulfilling our Corporate Mission by turning both our dreams and those of our customers into reality, all based on the reliable manufacturing that is in our DNA.

# Honoring 76 years of history since our founding

# Further evolution as an independent company



# Basic Behavior Taking

# Taking the first step to overcoming barriers and issues we face.

# Challenge is in our genes

# **Pioneering spirit**

In 1948, we became the first in Japan to successfully mass produce acetone and butyl alcohol through fermentation.

Since its founding in 1949, our Kyowa Hakko Kogyo chemicals business has evolved and continued to be passed down as a part of the heritage of our current company.

# Introduction of new manufacturing methods and technologies

We transitioned from fermentation to petrochemical manufacturing methods in 1961.

Since then, we have established the Yokkaichi Plant, refined our synthesis technologies, including oxo, and strengthened our competitiveness.

# **Evolution** is in our genes

# Two oxos

In 1988, we took over operations and business of the Chiba Plant, which possessed high-pressure oxo reaction technology, from Nissan Petrochemicals (as it was known at that time). This plant, in combination with Yokkaichi Plant and its low-pressure oxo technology, made us an oxo manufacturer with both.



The Chiba Plant in the 1990s

# Compliance with environmental regulations

One of KH Neochem's major products is refrigeration lubricant raw materials. We can trace its beginnings to the Montreal Protocol, which was implemented in 1989 based on the Vienna Convention. We have continued to refine our technology and evolve with the times to help protect the ozone layer and curb global warming.

# Reorganizing our capital structure and a new first step

In 2011, with support from Japan Industrial Partners, KH Neochem became independent from what was then known as the Kyowa Hakko Kirin Group. In 2016, we became listed on the First Section of the Tokyo Stock Exchange (as it was known at the time) and announced our long-term vision, which was the first step of a new direction.

# Accelerating value creation

We flexibly incorporate technology from outside the company to propel innovation. We harness the challenge and evolution in our genes to accelerate value creation.

# Management Approach

Making our dream a reality through reliable technology and new inventions.

# **Sincerity** is in our genes

# A culture that values customer feedback

We continue to manufacture coatings, resins and other industrial use products, but have also expanded our products and technologies into new fields such as refrigeration lubricants, semiconductors and cosmetics. This is all thanks to employees who sincerely work to give shape to needs discovered through customer feedback. Continuing to build in this way is in our genes.





Safety Guidelines Protecting ourselves and our colleagues.

**Safety** is in our genes

# Safety first

There will never be a time when we are finished implementing safety measures. We will never be overconfident or complacent, and will always work harder to protect ourselves and those around us. We will always continue to be strong in this resolve.

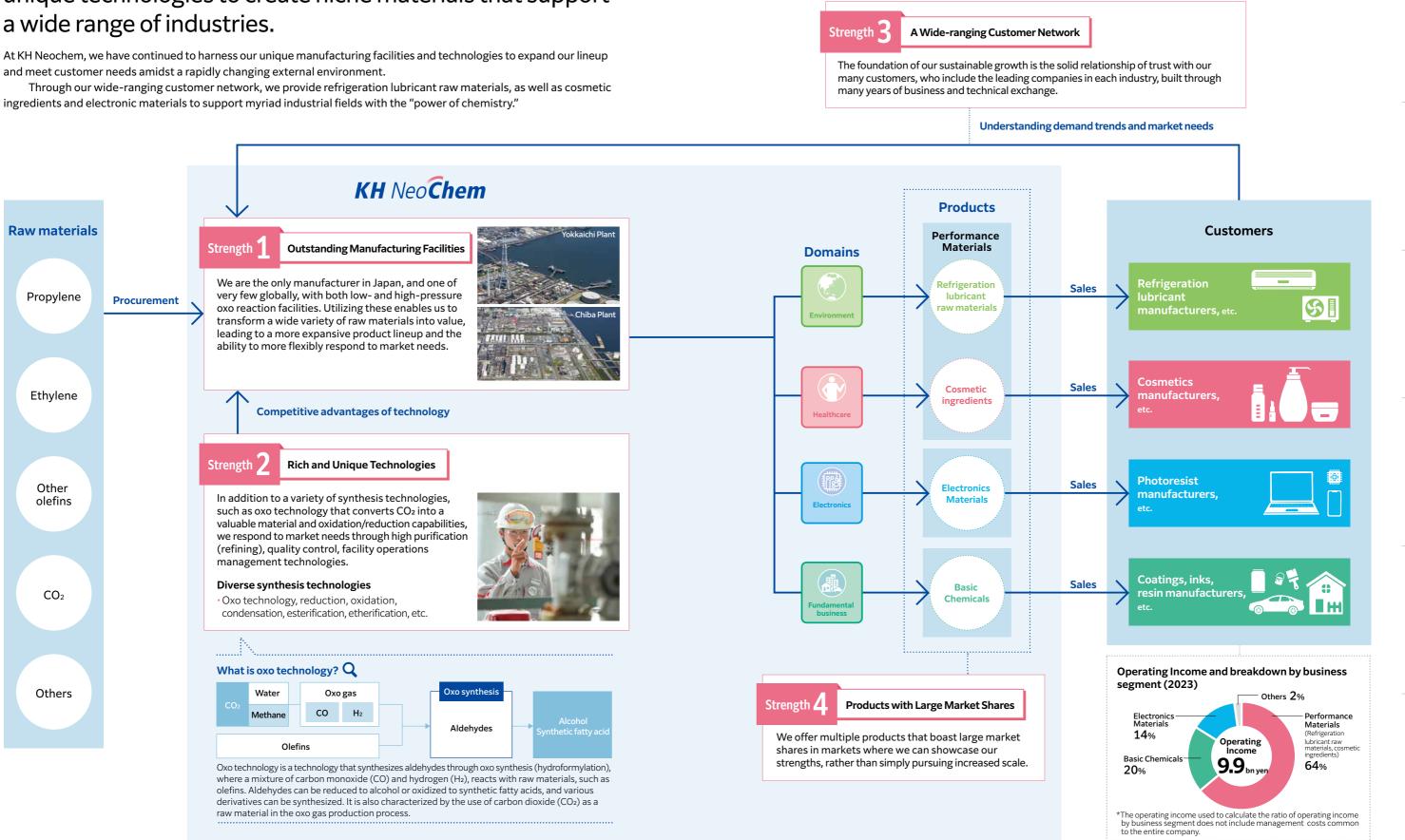




# **Overview of KH Neochem: Features and Strengths**

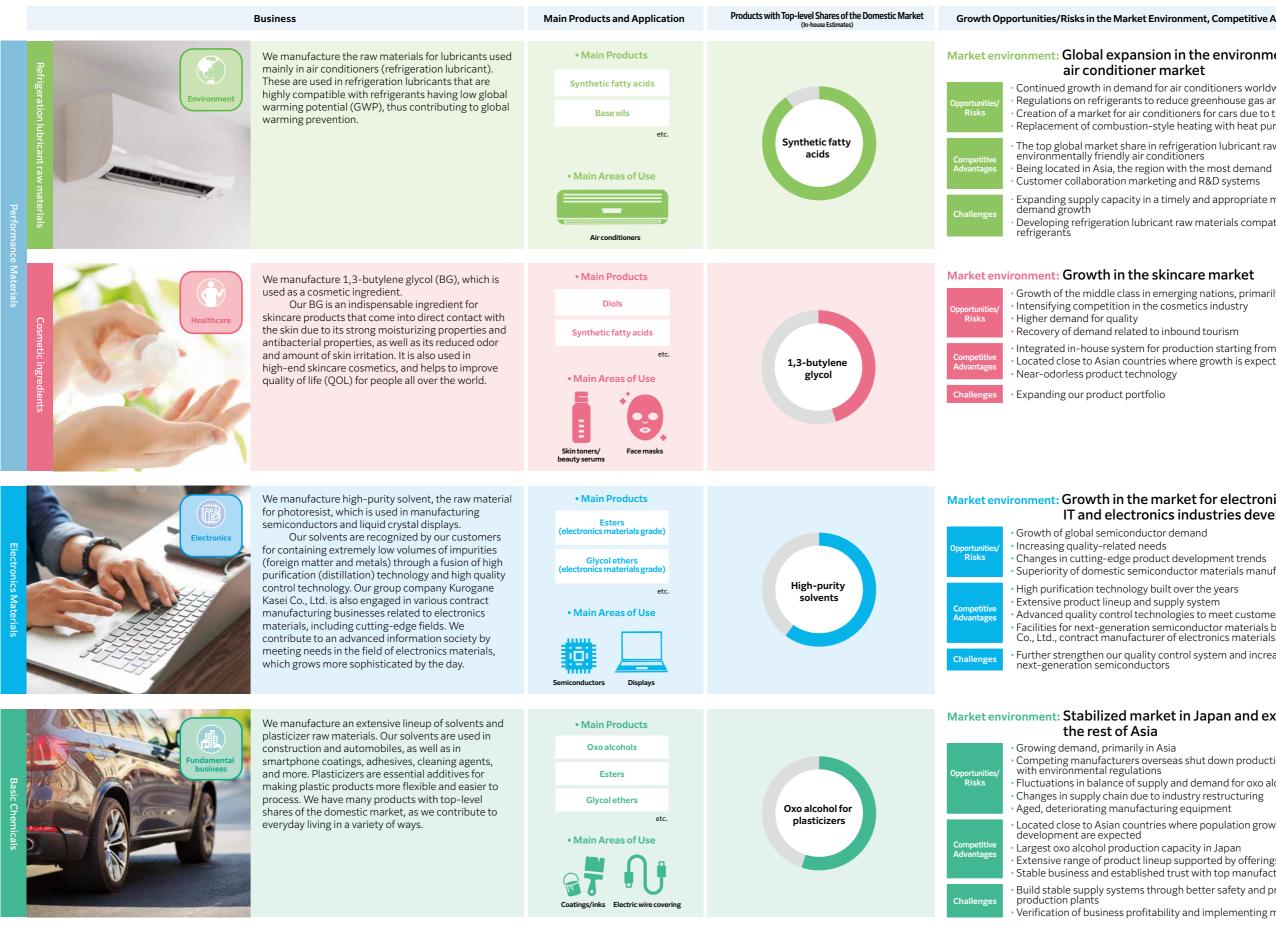
# We harness outstanding manufacturing facilities and unique technologies to create niche materials that support a wide range of industries.





Then and Now

# **Business**



#### Growth Opportunities/Risks in the Market Environment, Competitive Advantages and Challenges

# Market environment: Global expansion in the environmentally friendly air conditioner market

Continued growth in demand for air conditioners worldwide

- Regulations on refrigerants to reduce greenhouse gas and protect the ozone layer Creation of a market for air conditioners for cars due to the spread of EVs Replacement of combustion-style heating with heat pump-style heating
- The top global market share in refrigeration lubricant raw materials for environmentally friendly air conditioners
- Customer collaboration marketing and R&D systems
- Expanding supply capacity in a timely and appropriate manner according to demand growth
- Developing refrigeration lubricant raw materials compatible with next-generation refrigerants

- Growth of the middle class in emerging nations, primarily in Asia Intensifying competition in the cosmetics industry
- Integrated in-house system for production starting from raw materials Located close to Asian countries where growth is expected

# Market environment: Growth in the market for electronics materials as the IT and electronics industries develop

- Changes in cutting-edge product development trends
- Superiority of domestic semiconductor materials manufacturers
- Advanced quality control technologies to meet customers' needs
- Facilities for next-generation semiconductor materials belonging to Kurogane Kasei Co., Ltd., contract manufacturer of electronics materials
- Further strengthen our quality control system and increase supply capacity for next-generation semiconductors

# Market environment: Stabilized market in Japan and expanding market in

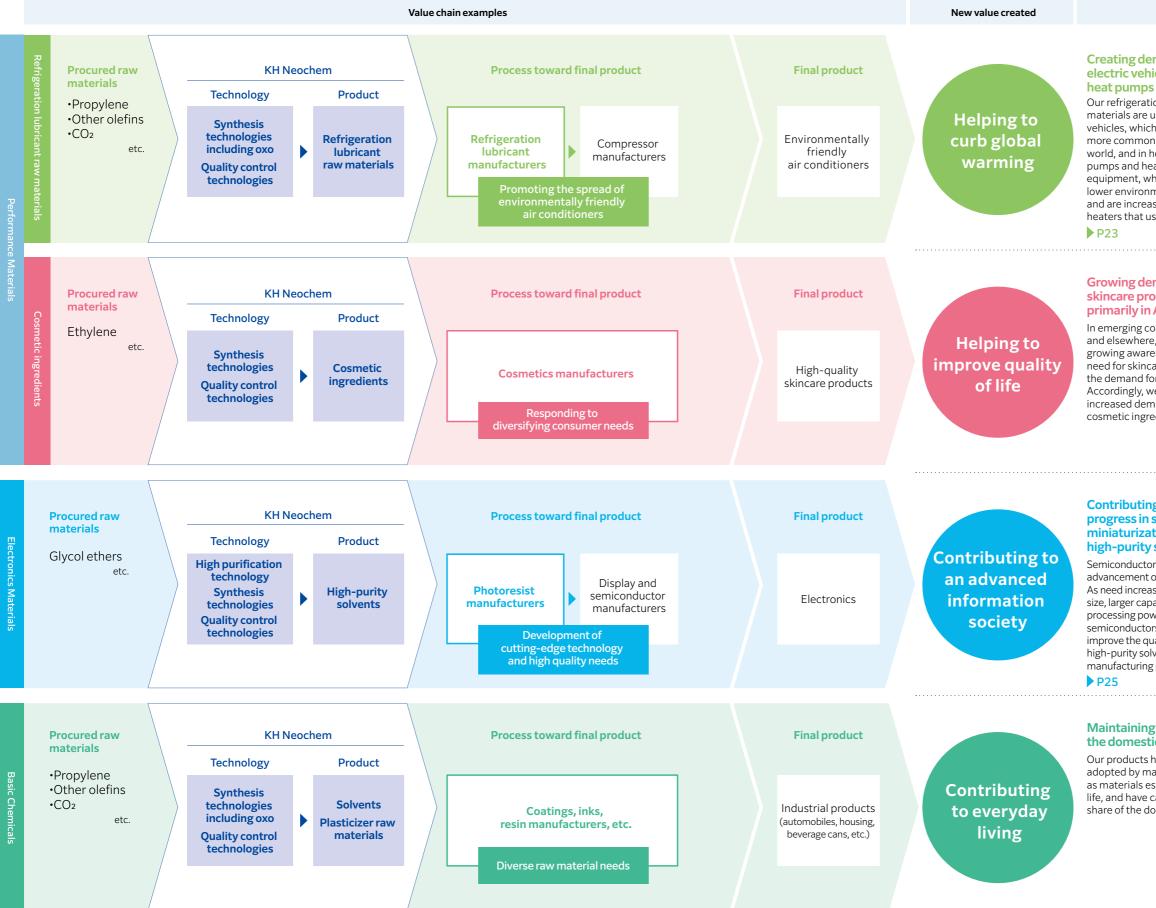
- Competing manufacturers overseas shut down production when unable to comply
- Fluctuations in balance of supply and demand for oxo alcohol in Asia
- Located close to Asian countries where population growth and infrastructure
- Extensive range of product lineup supported by offerings of derivatives
- Stable business and established trust with top manufacturers in each market
- Build stable supply systems through better safety and preventative maintenance at production plants
- Verification of business profitability and implementing measures

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# **Business**



#### **Business topics**

# **Creating demand for** electric vehicles and

Our refrigeration lubricant raw materials are used in electric vehicles, which are becoming more common around the world, and in hot water heat pumps and heating equipment, which have a lower environmental impact and are increasingly replacing heaters that use fossil fuels.



## **Growing demand for** skincare products, primarily in Asia

In emerging countries in Asia and elsewhere, there is growing awareness of and need for skincare, expanding the demand for cosmetics. Accordingly, we expect increased demand for our cosmetic ingredients.



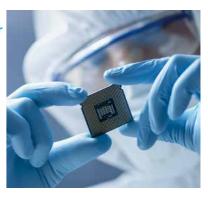
## **Contributing to further** progress in semiconductor miniaturization with high-purity solvents

Semiconductors support the advancement of generative AI. As need increases for smaller size, larger capacity and higher processing power

semiconductors, we continue to improve the quality of the high-purity solvents used in the manufacturing process.

# Maintaining top share of the domestic market

Our products have been adopted by many customers as materials essential for daily life, and have captured the top share of the domestic market.





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# KH Neochem refrigeration lubricant raw materials

# Contributing to global expansion of the air conditioner market and global warming prevention

KH Neochem is a top global supplier of refrigeration lubricant raw materials. Through these products, we aim to help protect the ozone layer and curb global warming while achieving further business growth.

# Refrigeration lubricants, special lubricants used in air conditioner outdoor units

Air conditioners cool rooms by taking in indoor air and moving the heat outside. During this process, the refrigerant that carries the heat is compressed by the compressor inside the outdoor unit. Refrigeration lubricant is essential for keeping the compressor running efficiently and smoothly over the long term.

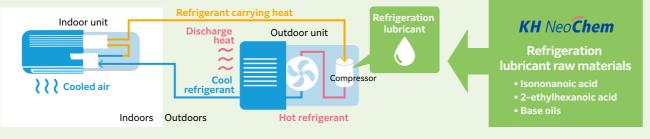
These refrigeration lubricants require inherent lubrication capabilities as well as additional properties. • Lubricity: Ability to maintain appropriate viscosity and reduce friction and lubricity for smooth compressor operation Durability: Capability to ensure a certain level of functionality

over long-term air conditioner use • Electrical insulation: Electricity resistance to prevent short

circuits in the electrical components inside the air conditioner • Compatibility: Easily dissolves with the refrigerant

Refrigeration lubricants require especially high performance compared to other lubricants, and KH Neochem manufactures the raw materials that are key to ensuring their performance.

### Air conditioner mechanism (for cooling operation)

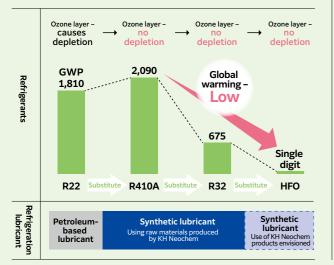


KH Neochem refrigeration lubricant raw materials compatible with environmentally friendly refrigerants

So how do KH Neochem refrigeration lubricant raw materials help protect the ozone layer and curb global warming?

This ties into environmental regulations on

### **Combined refrigerants and refrigeration lubricants**



refrigerants. The Montreal Protocol of 1989 stipulated regulatory measures working toward the phased reduction and eventual elimination of R22 and other ozone depleting refrigerants, and a shift to non-ozone depleting alternative fluorocarbons such as R410A. As the transition progressed, it increased demand for refrigeration lubricants compatible with these fluorocarbons, and KH Neochem's products were adopted as raw materials for their production.

The Kigali Amendment (2019) to the Montreal Protocol further stipulated a phased reduction of these alternatives, refrigerants with high global warming potential (GWP). This drove a continued shift to refrigerants with an even lower GWP, such as R32, and these also use our products. Following this history, we have expanded our business in response to societal demands to protect the ozone layer and curb global warming.

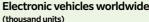
Our refrigeration lubricant raw materials are also expected to be used in next-generation refrigerants such as HFO (hydrofluoroolefin), which are expected to see widespread adoption in the future.

Demand for air conditioners in emerging nations, and expanded demand for electric vehicles and heat pump-style water and room heaters

Demand for home air conditioners is expected to expand in emerging nations such as India and in the southeast Asian region. Recent years have also seen the use cases for air conditioners and their mechanisms expand in line with the global movement away from fossil fuels. Typical examples of this include electric vehicles (EVs), heat pump-style water and room heaters.

Gasoline-powered vehicles are designed to use air conditioning for cooling and exhaust heat from the engine for heating. However, electric vehicles cannot use

#### Global air conditioner market (million units)







Source: Company Estimate

nates based on IARN and Inte Energy Agency (IEA) (The Future of Cooling), etc Excl. car air conditioners

Global greenhouse gas emissions are approximately 57 billion tons CO2 equivalent. Of this, 1 billion tons is considered to be due to HFC (hydrofluorocarbon), an alternative refrigerant used in air conditioners and other devices.

Under the Montreal Protocol, advanced nations were required to eliminate controlled CFCs by 2020, while emerging nations are required to eliminate them by 2030. Then, the Kigali Amendment stipulated a phased reduction schedule for alternative fluorocarbons as well. Japan and other developed countries are now required to gradually reduce emissions by 85% CO<sub>2</sub> equivalent over standard values between 2019 and 2036. Emerging nations are required to reduce emissions by 80% by 2045. As a result, this regulation is expected to further raise demand for air conditioners that use low GWP refrigerants, such as R32.

A study by the International Energy Agency (IEA) estimates that the number of air conditioners owned worldwide in 2050 will be three times that of 2018,

exhaust heat, so they require a new system similar to a home air conditioners that can both cool and heat.

Furthermore, with growing environmental awareness of the need to reduce greenhouse gas emissions, heat pump-style water and room heaters are gaining attention around the world. These will require a system similar to home use air conditioners rather than combustion, so refrigeration lubricants will be needed. Along with these trends, we believe that demand for our refrigeration lubricant raw materials will continue to expand in the future.



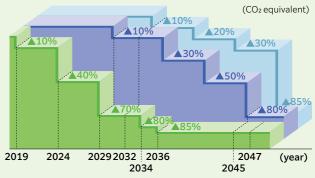


Heat pump-style water and room heaters



## Contributing to a sustainable future for the earth through refrigeration lubricant raw materials supply

- so if this trend continues, GHG emissions will increase significantly.
- KH Neochem will promote the spread of low GWP refrigerants by supplying refrigeration lubricant raw materials, thereby helping to protect the global environment both now and in the future.
- Kigali amendment HFC phase-down schedule Developed Countries = First group of emerging nations Second group of emerging nations



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# **KH Neochem Electronic Materials**

# Essential to the semiconductor manufacturing process

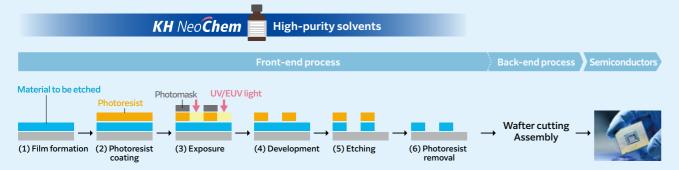
Photoresists and other advanced materials are used in the front-end manufacturing processes of semiconductor manufacturing. KH Neochem manufactures high-purity solvents, which are an essential raw materials for the production of these advanced materials. We harness our technology and know-how to eliminate impurities to a maximum order of one part per trillion, ensuring quality solvents.

# KH Neochem high-purity solvents, a raw material for photoresists, etc.

The many front-end processes for semiconductor manufacturing include applying a photoresist (photosensitive resin) to a substrate to form fine circuits through light exposure.

We manufacture a variety of high-purity solvents used as raw materials for the photoresists used in this process, playing an important role in the ever-evolving semiconductor industry.

# Our connection to the semiconductor manufacturing process



# KH Neochem quality control technologies supporting nanotechnology

KH Neochem high-purity solvents are characterized by their extremely high quality. The circuit width of a semiconductor is so extremely fine that it is measured in nanometers\*, so the solvents used to manufacture them must be a high enough purity that they are free of even the most trace amount of dust or metal to avoid defects.

We endeavor to keep impurity within one part per trillion. To put this in perspective, this means that if we filled the Tokyo Dome (a 55,000-person capacity arena) with water, total impurities would measure about the size of a one-yen coin (20 mm). (Company Estimate)

Our products combine the ideal resin solubility and extremely high purity to ensure effective functionality of photoresists at this invisible nano-level.

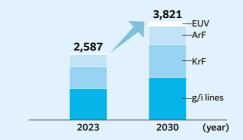
As demand for cutting-edge semiconductors expands along with the evolution of information technology, the need for even better, purer solvents is expected to grow.

\* 1 nanometer = 1 billionth of a meter





## The global photoresist market (thousands of gallons)



Source: 2023 Semiconductor Materials Market Current Status and Future Outlook (Fuji Keizai) \* The values are forecasts.

# Turning response to customer needs into shape



**Rvo Takebe** Technology Development Center

We harness our sophisticated synthesis, purification and quality control technologies and know-how to play a vital role as a manufacturer of high-purity solvents for the semiconductor and display fields. Our clean room, installed in 2022 and of the same grade as those of semiconductor manufacturers, serves as a place of technical exchange with our customers. We utilize this room to reduce and stabilize variation in quality throughout the supply chain, from synthesis and purification to logistics.



Kurogane Kasei Co., Ltd.

There is a constant demand for new, innovative materials with unique features in the semiconductor industry. To meet these needs, we listen to customer feedback and refine our synthesis technologies to make us capable of manufacturing raw materials for cutting-edge semiconductor. Furthermore, to handle contract manufacturing, we steadily invest in facility expansion to enable both small-lot and mass production scale of a certain scale. We will work to continue to give shape to response to the world's most cutting-edge needs while prioritizing high quality and reliability.

# Solutions beyond the semiconductor field

# Alicyclic compounds: Propelling an autonomous driving society through the power of chemistry

In the mobility field, demand for high-performance sensing cameras is expected to increase in connection to the development of advanced driver assistance systems (ADAS) and autonomous driving technology. The plastic lenses used in these cameras require performance such as heat and light resistance, so the



End uses of alicyclic compounds: Optical materials such as car camera lenses, smartphone camera lenses, and goggles for virtual reality (VR). augmented reality (AR), and mixed reality (MR)

We make capital investments and conduct R&D to meet customer need.



Quality control facility in Yokkaichi, Mie Photo: Ena Mitsui (Kawasumi • Kobayashi Kenji Photograph Office)



Kurogane Kasei Co., Ltd.'s advanced technology in monomer and polymer contract manufacturing is needed for semiconductor processing materials

alicyclic compounds developed by KH Neochem are gaining attention as a way to achieve this. These compounds (diol, monool) are synthesized using KH Neochem's core oxo technology.

They can be used as raw materials for polyesters, polycarbonates, epoxies, polyurethanes, urethane acrylates, (meth)acrylates and other products, and resins synthesized from them have better heat resistance (glass transition temperature) than resins from other alicyclic compounds currently on the market. It is even possible to impart properties derived from the alicyclic structure to the resins—properties such as low water absorption, water vapor barrier, oxygen barrier, low dielectric constant and low dielectric tangent—so we can expect these properties to be applied to the resins used in the mobility and electronics fields as required.

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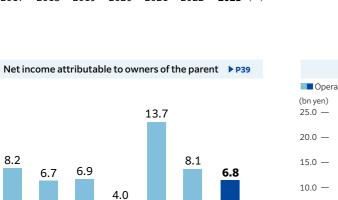
Then and Now

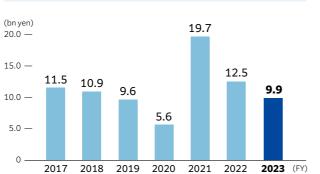
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# **Financial Highlights (Consolidated)**

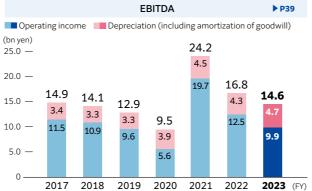


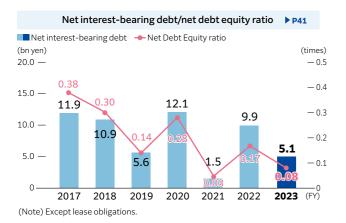




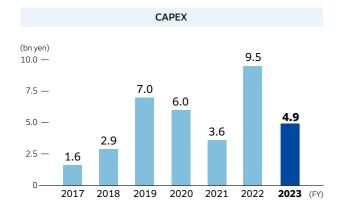
Operating income

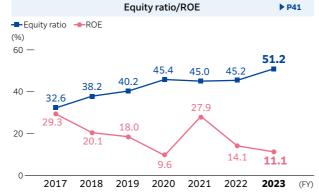
▶ P39

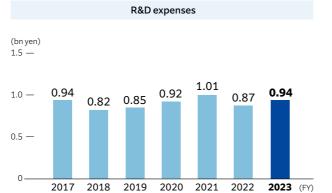




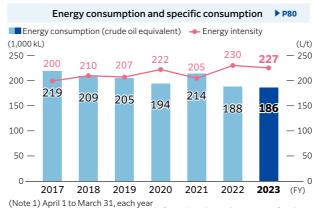
2017 2018 2019 2020 2021 2022 **2023** (FY)



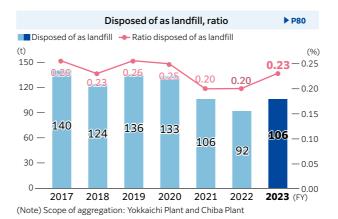




# Non-Financial Highlights (Non-Consolidated)



(Note 1) April 1 to March 31, each year (Note 2) Due to a change in the method of rounding decimals starting in fiscal year 2021, there are slight differences from the figures shown in the previous report.



Number of employees and ratio of female employees > P60 Male Female - Ratio of female employees (persons) (%) 800 -- 15.0 673 659 660 649 659 611 600 600 -14.0 400 -- 13.0 200 -12.0  $\approx$ 82 88 90 78 85 73 74 - 0.0 2017 2018 2019 2020 2021 2022 **2023** (FY)

(Note) Full-time workers, contract employees and seconded staff (all figures as of December 31)

	Gender wage gap	▶ P60			
FY	2022 2023				
F1	2022	2025			
All workers	83.4%	85.6%			
Full-time workers	81.6%	83.2%			
Part-time or fixed-term workers	67.6%	83.8%			

(Note) Ratio of female wages to male wages

(bn yen)

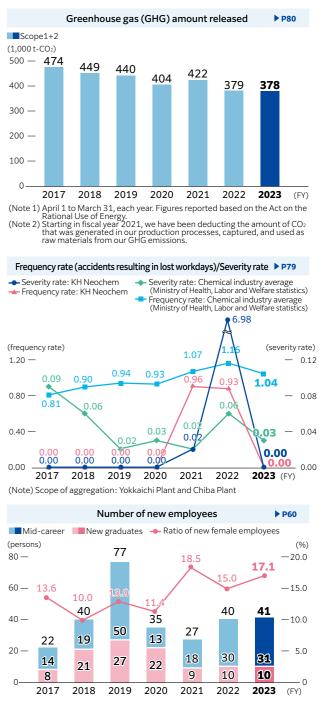
15.0 —

12.0 —

9.0 —

6.0 -

3.0 -



(Note) Only workers who have signed a labor contract with no fixed term

Years of service and gender differences								►	P60
									(year)
	FY	2017	2018	2019	2020	2021	2022	2023	2024
years of service	male	16.5	16.0	14.6	13.5	13.7	14.0	14.2	14.1
" service	female	16.9	16.3	14.3	14.3	15.0	15.3	15.1	15.4
(f	fference emale – male)	0.4	0.3	-0.3	0.8	1.3	1.3	0.9	1.3

(Note 1) "Number of years difference" is the difference in the number of years of service calculated as "female - male." (Note 2) Full-time workers only. All figures as of April 1, each year Then and Now

Sustainable Value Creation

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Data

Section

# **Sustainable Value Creation**

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# Message from the CEO

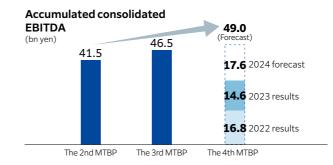
In line with our corporate policy of realizing a brighter tomorrow for society through the power of chemistry, we will contribute towards solving social issues through our business and sustainably enhance our corporate value.

Michio Takahashi KH Neochem Co., Ltd. Representative Director, President & CEO

In order to realize the ambition we set forth in VISION 2030, we are steadily strengthening our earning power while addressing the challenges we face.

We established VISION 2030 in 2018 and are enhancing our corporate value by way of a series of three-year medium-term business plans (MTBP). We announced our ambition of becoming a leading global specialty chemical company, and stated our three policies of (1) Provide specialty chemicals that contribute to the reduction of global warming and a better quality of life, (2) Expand the lineup of products with top global share and new businesses in the strategic domains (▶P34), and (3) Achieve top-class profitability in the chemical industry.

We have faced a number of changes in the external environment since the formulation of VISION 2030, including a downturn in the global economy due to the COVID-19 pandemic, sluggish growth in the air conditioner market due to the real estate recession in China and the





United States, and a significant increase in energy costs due to the worsening situation in Russia and Ukraine. Even under these circumstances, however, we have taken steps to appropriately reflect increased costs and product value in sales prices while maintaining our position as the world's top supplier of refrigeration lubricant raw materials. Thanks to such steps, although we are not in line with our targets in the 4th MTBP, I believe that we are steadily strengthening our earning power: a record high three-year accumulated consolidated EBITDA of around 49 billion yen is within sight and our ROE is expected to be at least in double digits, ranging between 11 and 15%.

However, issues still remain with regard to ensuring safe and stable operations. We have multiple products with a large share of the global market that can only be manufactured by us. We recognize that improving supply stability is an extremely important management issue if we are to properly fulfill our social responsibility and are currently taking various steps aimed at further enhancing our manufacturing infrastructure.

Manufacturing infrastructure reliability is a requisite for companies that have products with a large share of the global market. We will continue to strengthen initiatives aimed at safe and stable operations.

Many petrochemical plants in Japan were constructed in the 1960s and are aging.

For this reason, the maintenance and management

Then and Now

# Message from the CEO

of equipment needs to constantly evolve, and this is particularly vital for companies like us which have multiple products with a high share of the global market. We are currently moving forward actively with initiatives to strengthen safe and stable operations.

We are constantly developing the Comprehensive Safety Check Initiative (▶P47), which comprehensively checks the risks of all work at the plants and takes the necessary measures against them. Rather than simply following precedents, we employ thorough countermeasures in response to these risks, including for tasks that have not had major problems in the past. I also consider it essential to go beyond tangible measures and also further cultivate a culture of safety. To this end, we are improving safety skills and awareness via the introduction of practical training equipment to practice for hazardous work and training that utilizes VR (virtual reality). These training programs were launched in response to suggestions made spontaneously by employees, something that truly underlined to me how the company has been transformed.

We are also strengthening maintenance strategies. Instead of repairing equipment after it fails, we are systematically implementing preventive maintenance, which involves reorganizing ledgers for all facilities and machinery, and prioritizing inspections and repairs of high-priority facilities and equipment. The launch of predictive diagnostic systems which use big data from plant operation information and AI technology to detect signs of equipment trouble in advance is scheduled for this year. In addition, we are also moving forward with the digitization and visualization of daily plant inspections and operations management data, and having a timely grasp of what is happening, and where, is strengthening our system for safe and stable operations. I believe this will make it easier to pass the operating technologies and know-how we have accumulated on to future generations. Furthermore, several times in recent years we have had trouble procuring CO<sub>2</sub>, the raw material used in oxo reactions, due to equipment problems at our suppliers. As a countermeasure, we are currently constructing equipment at the Chiba Plant that captures CO<sub>2</sub> emitted from the manufacturing process and recycles it as a raw material. It is scheduled for completion in January of next year, and I believe that this initiative so typical of our company will not only contribute to the stable operation of the plant, but also contribute to the reduction of CO<sub>2</sub> emissions.

All executives and employees will strive to ensure safe and stable operations, while maintaining a broad perspective and sense of mission that we manufacture products that are needed by society and play a part in important supply chains around the world.

### Main strategies for sustainable growth

Category	2019	2020	2021	2022	2023	2024	2025	2026	2027
		The 3rd	МТВР		The 4t	h MTBP		The 5th M	ТВР
Refrigeration lubricant raw materials		• Yokk	aichi Plant: E	xpansion of fa	cilities		• Chiba Plant Expansion o		
Electronics Materials			• Constructior next-genera	n of new facilit	aichi Plant: Co ies for ductor materi	<ul> <li>Strengt supply</li> </ul>	thening of hig infrastructure Expansio next-gen	h-purity solve e n of facilities f	or
Open innovation strategy		• Establish	nment of an op		n hub (KH i-La vestment in tw	•	mpanies		
	Introduc	ction and exp	ansion of adva	anced plant co	ontrol systems				
Improvement of production framework				iba Plant: Rei neration equi	••••• newal of in-ho pment	ntroduction o	of predictive c Chib equi	a Plant: Const pment to capt k Initiative 20.	ruction of ure CO <sub>2</sub>
Strengthening of governance, and human resource development		• Intro			• Intro	duction of job managerial p • Sh Su	o-based perso osition emplo ift to a compa pervisory Cor	ny with an Au	dit and

# Market growth potential and our strengths remain unchanged. We are moving forward steadily with measures aimed at future growth.

Our manufacturing approach of developing products that society needs and then evolving them into product ranges with even higher added value has been our DNA ever since our founding. By utilizing our synthesis technologies centered around oxo synthesis, our core technology, we have created value by confronting market issues head-on rather than simply pursuing scale. There are multiple companies that possess oxo technology, but we have established a unique position by investing not only in large-scale products such as higher alcohols, but also in products that may not be large in scale but are demanded by the market and have a high potential for growth. We have developed such strengths during the course of our history as the manufacturing plants, production engineering, networks with business partners, and products with a high market share that we have accumulated over the years.

A prime example of that is the refrigeration lubricant raw materials that currently drive our growth. Ever since the Montreal Protocol came into effect in 1989 with the aim of protecting the ozone layer, there has been an ongoing shift in the refrigerants used in products such as air conditioners from CFCs (chlorofluorocarbons) to non-ozone-depleting CFC substitutes. A special lubricant called refrigeration lubricant that is compatible with CFC substitutes is indispensable in order to use them in air conditioners, and we have contributed to the switch to CFCs by supplying the raw materials for this refrigeration lubricant. We have established a world-leading position in this field by expanding our production technology for refrigeration lubricant raw materials and the range of our product development via the utilization of not only oxo technology but also synthesis technology and other technologies we have cultivated so far, and by responding to market needs. The Kigali Amendment to the Montreal Protocol came into effect in 2019, further strengthening environmental regulations. This has resulted in the ongoing gradual shift to refrigerants with a low global warming potential, which is also making our products indispensable. In an era where aspects such as environmental regulations are dramatically changing, we will continue to provide support in terms of materials for solutions to social issues.

Currently around 140 million air conditioners are sold worldwide but, due to factors such as expanding demand in emerging countries, it is thought that more than 200 million will be sold in 2030, and more than 400 million in 2050. In order to steadily capture the resulting growing demand for refrigeration lubricant raw materials, following on from the expansion project at our Yokkaichi Plant, completed in 2020, we also completed the expansion of facilities at our Chiba Plant in July 2024. The said expansion



at our Chiba Plant was our largest-scale investment so far, and was a huge project that took more than two and a half years, from the investment decision at the end of 2021 to its final completion. With this investment, we have expanded production capacity for our core products by about 1.5 times and, going forward, we are aiming to utilize those facilities to further grow our refrigeration lubricant raw material business.

With regard to electronics materials, in order to respond to the increasing need for high product quality in the semiconductor field, we also built a quality control building with a world-class clean room at the Yokkaichi Plant in 2022 and are engaged in strengthening our high-purity solvent quality control system. Furthermore, the expansion project for the next-generation semiconductor materials facilities built in 2020 is scheduled for completion in 2024. We have actively adopted open innovation strategies aimed at creating new businesses, and invested in two startup companies in 2022. We are accelerating initiatives such as joint research with those companies utilizing KH i-Lab, the open innovation hub we built in 2019.

We are also focusing on improving our business framework. In March of this year, we made the shift to a company with an Audit and Supervisory Committee in order to enhance our governance and pursue sustainable growth and increased corporate value. The majority of the directors are Independent Outside Directors, strengthening the supervisory function of the Board of Directors. We have appointed CxO members (chief officers) to properly manage each area and clarified their responsibilities, and also changed the system to enable business matters to be executed promptly and appropriately. Introduction

Then and Now

# **VISION 2030**

# Message from the CEO

Becoming a company where each employee thinks things through, becomes more autonomous, and improves our corporate value.

The air conditioner and semiconductor markets are growth markets that are expected to continue to grow. We have been investing in expanding our facilities and strengthening our infrastructure in order to achieve further expansion in such growth markets. However, VISION 2030, which was formulated in 2018, is now nearing the halfway point and, going forward, the results of the investments we have made must become even more manifest.

It is people who will do that. We have multiple products with a large share of the global market that can only be manufactured by us, so it is essential to develop professional human resources with a high level of expertise and a strong sense of responsibility. We want to cultivate as many human resources as possible who have a wide-ranging perspective and a sense of mission, who can think things through thoroughly and take action. We want those human resources to have a positive ripple effect on those around them, creating a virtuous cycle that revitalizes the entire company. To that end, we have proactively implemented initiatives such as external training and inter-industry exchanges, expanded the job-based personnel system introduced for managers to general employees, and enhanced career development programs that encourage employees to autonomously pursue professional growth. We intend to make the sustainable enhancement of our corporate value even more certain by proactively supporting the growth of professional human resources.

# Scrupulously getting results from our investments so far, and pursuing enhanced corporate value. We will embody our vision of realizing a brighter tomorrow for society through the power of chemistry.

KH Neochem products are supplied to a truly wide range of industries, take on various shapes and are used in various aspects of our daily lives. We firmly believe that our products contribute to an environmentally friendly society, and richer lives for people, and that belief is part of our corporate policy of realizing a brighter tomorrow for society through the power of chemistry.

In order to realize that policy, I believe the main role and responsibility of the management team is to maximize the effects of the investments we have made so far and enhance our corporate value. During our time under the umbrella of the investment fund, we implemented management with a thorough awareness of capital efficiency, and that awareness is still engraved in our minds. We will continue to achieve sustainable growth while maintaining a good balance between short-term and mid-to-long-term perspectives and, of course, enhancing shareholder returns. Our management team intends to demonstrate leadership in order to further meet the expectations of our shareholders and all other stakeholders, and we thank you for your continued support.

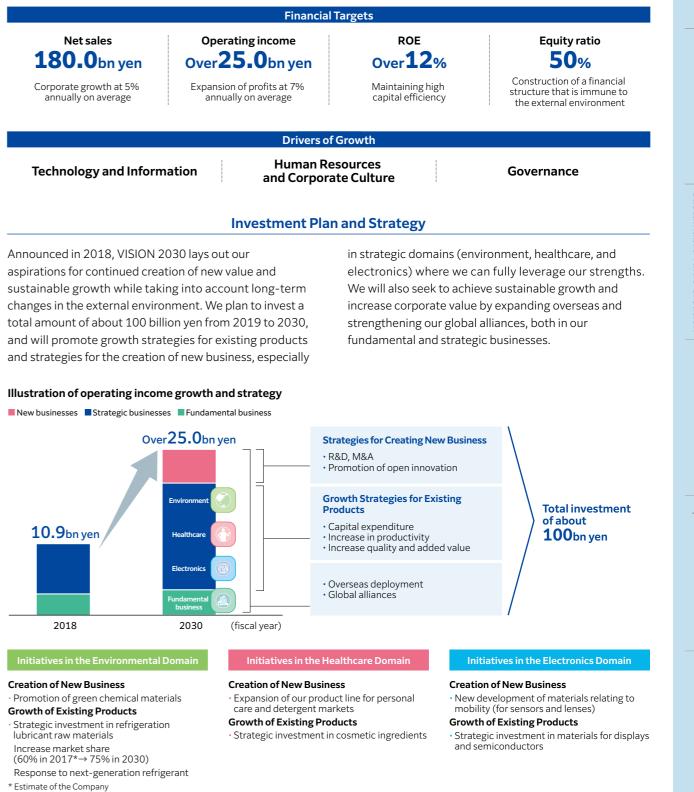


# **Our Ambitions**

# A Leading Global Specialty Chemical Company

 Provide specialty chemicals that contribute to the reduction of global warming and a better quality of life Expand the lineup of products with the largest global share and new businesses in three strategic domains Achieve top-class profitability in the chemical industry

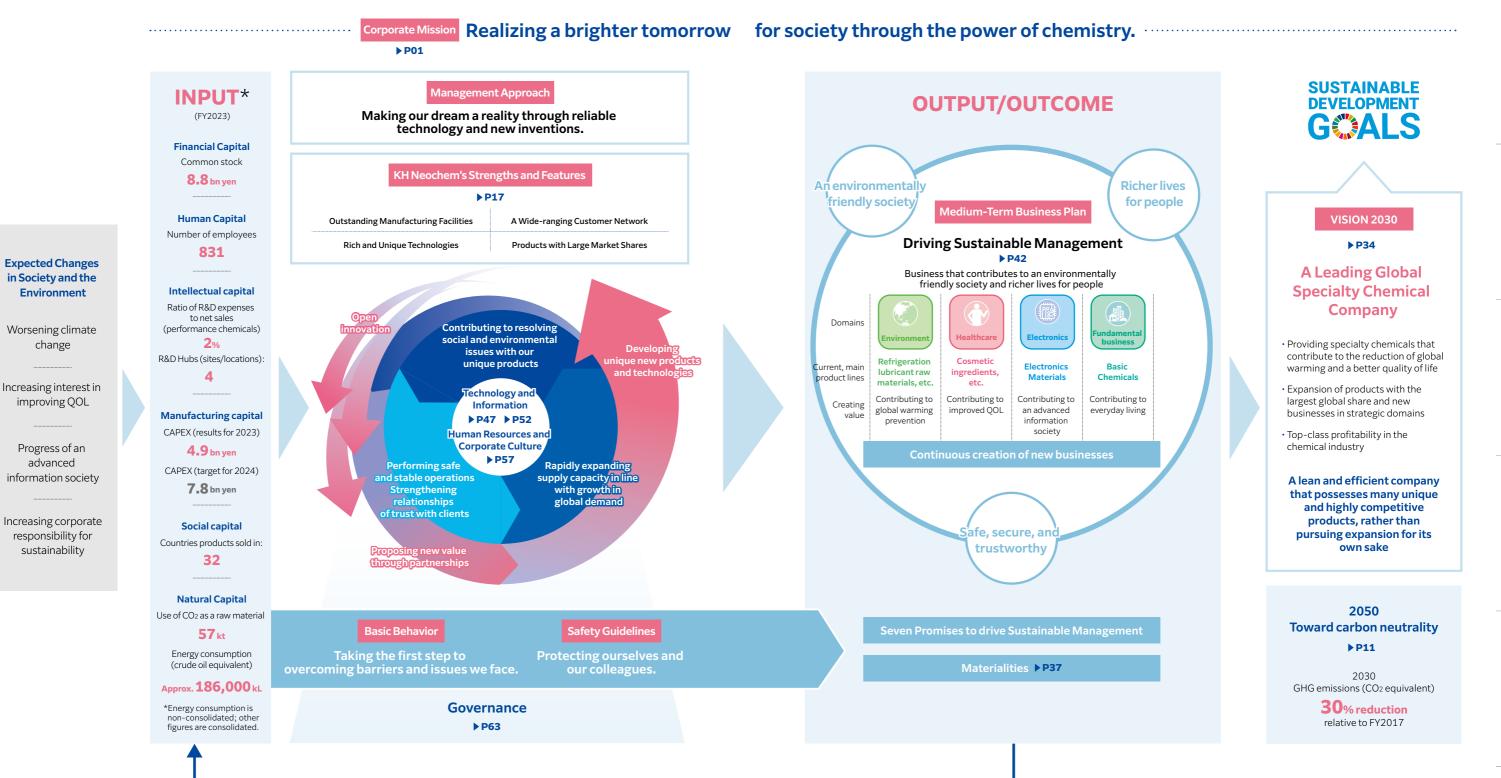
	Financial
Net sales <b>180.0</b> bn yen	Operating income Over <b>25.0</b> bn yen
Corporate growth at 5% annually on average	Expansion of profits at 7% annually on average
	Drivers of
Fechnology and Informa	ation Human Re and Corpora



# **Value Creation Story**

# We will drive Sustainable Management and realize a brighter tomorrow for society through the power of chemistry.

Through our business, we will contribute to a sustainable world by providing value, on the basis of "safe, secure, and trustworthy," for realizing an environmentally friendly society and richer lives for people, while also ensuring ongoing growth in our own corporate value.



Sustainable Value Creation

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Section

# **Materiality Identification Process and Progress Report**

From 2020, discussions were held among the relevant executives, including full-time directors, to develop our value creation story, and this was approved by the Board of Directors in 2021, together with our materialities and KPIs during the period of the 4th Medium-Term Business Plan. We will use these materialities and KPIs as a platform for enhancing constructive dialogue with our stakeholders.

# **The Identification Process**

Developing our Value Creation Story and Seven Promises	step           Selection of Materiality Candidates	2 Identifying Our Materiality and Developing Corresponding KPIs
About 10 discussions were held among the relevant executives, including all full-time directors, to develop our value creation story. Looking ahead to VISION 2030 and beyond, we visualized our strengths, business model, and the value we provide. Next, we defined Sustainable Management and the Seven Promises. These were brought together as our value creation story, and approved by the Board of Directors.	During the discussions leading up to the development of our value creation story, we identified discrepancies with the goals set out in VISION 2030 in terms of putting our Seven Promises for driving Sustainable Management into practice. In addition, we conducted an analysis of materiality candidates, including SDGs, international norms, evaluations by ESG assessment organizations, feedback from stakeholders, and issues identified by division heads from the perspective of the value chain.	All full-time directors and relevant officers assessed impacts on stakeholders and the Company from a long-term perspective, then identified our materiality— that is, key issues that have a particularly severe impact on both stakeholders and the Company— in light of the Seven Promises. Furthermore, from a medium-term perspective, specific milestones during the period of the 4th Medium-Term Business Plan were designated as KPIs.

# **Seven Promises and Materialities**

Seven Promises	Materialities		
We will develop businesses that help resolve social issues.	<ol> <li>Expansion of social problem solving businesses centered on strategic domains</li> <li>Promotion of innovation</li> <li>Strengthening of intellectual property strategies to strengthen the foundation for growth</li> </ol>		
2 We will conduct business conscious of reducing our impact on the environment.	<ul> <li>Improvement of energy efficiency and reduction and management of CO<sub>2</sub> and other emissions</li> <li>Proper management of chemical substances</li> </ul>		
3 We will strive to secure trust through safe and stable operations.	<ul> <li>6 Safety and disaster prevention at plants with consideration of the local region</li> <li>7 Responsible and stable supply to customers</li> </ul>		
We will practice management transparency with high ethical standards.	<ul> <li>B Strengthening of corporate governance and risk management</li> <li>Compliance</li> <li>Transparent and responsible communication with stakeholders</li> </ul>		
5 We will provide a lively work environment that motivates and rewards diverse human resources.	<ol> <li>Health and safety of employees</li> <li>Human resource development and recruitment to support Sustainable Management</li> <li>Improvement of employee engagement and creation of comfortable workplaces to improve productivity</li> </ol>		
6 We will promote responsible supply chain management.	Promotion of Corporate Social Responsibility (CSR) procurement		
7 We will strengthen our earning power.	<ul> <li>Optimization of business portfolio for stable profit generation</li> <li>Pursuit of higher productivity and efficiency at plants</li> </ul>		

List of KPIs KPIs for each materiality Rate of increase in sales volume of refrigeration lubricants raw materials (compared to 2021) 1 Over 17 Number of collaborations with external organizations in research and development 23 Over 10 30% redi (Target f 4 Greenhouse Gas (GHG) emissions (CO<sub>2</sub> equivalent) 4 Energy intensity 1% or mo 6 Volume of final landfill disposal of industrial waste 1% or le 6 Impleme Systematic introduction of Smart Industrial Safety 7 Production plan achievement status Impleme Identification of important risks by using risk maps and implementation of countermeasures 8 Implem Number of compliance education and training sessions at 9 Over 5 ti all sites 10 Number of dialogues with investors Over 22 1 Number of employee accidents resulting in lost workdays 0 Ratio of female employees in managerial career track 12 Over 159 positions 12 Rate of recruited personnel leaving work (in less than 3 years) Less than B Engagement survey score Over 3.4 13 Rate of taking of annual paid leave Over 80 Coverage ratio of Corporate Social Responsibility (CSR) questionnaire survey of main raw materials (based on purchase amount value) 14 Over 70 Operating income of core products (performance materials + electronics materials) 15 Over 14. 15 ROE Over 15 Improvement of productivity through introduction of advanced control systems Introduo 16 product 16 Status of progress in DX related installations Impleme

(Note 1) Materiality No. (1) is consolidated, while No. (1) - (2) and (3) are not consolidated. Operating profits in results by business field and administrative expenses common to the Group are not allocated upon calculation.
 (Note 2) Period covered: January 1, 2023 to December 31, 2023. For items marked solely with an asterisk (\*), period covered: April 1, 2023 to March 31, 2024





step3Approval by the Board of Directors

Materialities and the KPIs in the 4th Medium-Term Business Plan aimed at realizing VISION 2030 were approved by the Board of Directors after discussions by the Management Committee.

Targets for 2024	Progress in 2023	Main relevant pages
7% increase	7% decrease	P23-24
) per year	6	P52-56
duction relative to FY2017 for 2030)	20% decrease*	P11,28,80
nore improvement per year	1.6% improvement*	P28,80
ess of waste generated	0.23%*	P28,80
entation as planned	Digitization of operations management	P47-50
entation as planned	Not achieved due to a significant decrease in production	P47-51
entation as planned	Implementation of countermeasures for important risks	P73
times per year	7 times	P76
20 times per year	186 times	P81
	0	P78-79
5%	13.3%	P28,60-61
an 10%	9.3%	P60-61
44	3.14	P60
)%	91.9%	P61
)%	89.0%*	P83
l.1 bn yen	10.3 bn yen	P18,40
5%	11%	P27,42
ced as planned and tivity increased	85% instead of the 80% introduction target for 2024	P50
entation as planned	Introduction of a predictive diagnostic system decided	P49-51

# **Message from the CFO**

We will enhance and integrate capital in areas such as manufacturing, human resources and finance, and improve ROE.

# Masaya Hamamoto

Board Director, Senior Corporate Officer and Chief Financial Officer (CFO)

# Review of 2023

# We recognize the need to improve the accuracy of demand forecasts.

Our consolidated operating income for 2023, the second year of the 4th Medium-Term Business Plan (4th MTBP), was 9.9 billion yen. We take it very seriously that the results were contrary to the expectations of our shareholders and investors, as it decreased for the second consecutive year following on from 2022 and was significantly lower than the 15 billion yen forecast announced at the beginning of the fiscal year. The main factor behind the sharp decrease was that the business environment for our core businesses was harsher than was assumed at the start of the fiscal year, due to factors such as the stagnation of the Chinese economy and the continued sluggishness of the U.S. housing market. In addition, productivity declined significantly in the second half of the fiscal year because we had to suspend operations at the Yokkaichi Plant for nearly two months due to equipment trouble at a raw material supplier. However, our products are characterized by a high share of global niche markets, and we believe it is necessary to assess demand forecasts more strictly and precisely since we are aiming to become a leading global specialty chemical company. We also recognize the need for greater resilience in the face of raw material procurement problems.

### Outlook for 2024

# We must achieve the operating income target set at the start of the fiscal year. We are making this the year when we regain the market's trust.

We are firmly determined to achieve our forecast consolidated operating profit of 11.8 billion yen and make 2024 the year in which we regain the market's trust. With regard to our core business of refrigeration lubricant raw materials, global air conditioner sales remained flat year on year in 2022 and increased by 1% in 2023, posting almost no growth over the previous two years, but we expect to return to a 3% growth trajectory this year. Over the past two years, we have continued to actively invest in performance materials and electronics materials, which are expected to grow over the medium to long term. I would like to make 2024 a transformational year when we restore the trend of business growth.

Results forecast for 2024 (bn yen)					
	2023 results	2024 forecasts	YOY Amount %		
Net Sales	115.2	121.1	+5.9	+5%	
Operating Income	9.9	11.8	+1.9	+19%	
Operating Income Ratio	8.6%	9.7%	-	-	
Ordinary Income	9.7	11.9	+2.2	+22%	
Net Income Attributable to Owners of the Parent	6.8	8.4	+1.6	+23%	
EBITDA	14.6	17.6	+3.0	+21%	
ROE	11%	13%	-	-	
Foreign Currency (JPY/USD)	141	140	-1	-1%	
Domestic naphtha (JPY/KL)	67,600	72,500	+4,900	+7%	

#### **Capital allocation review**

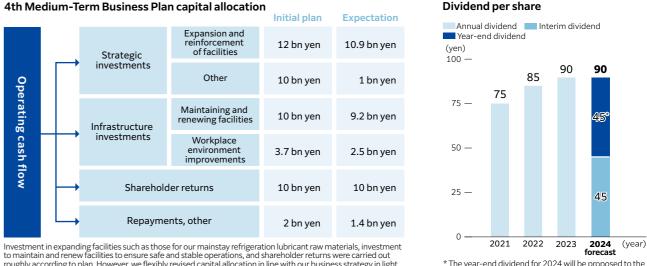
In light of changes in the business environment, we will concentrate our investments in business fields where the market is expected to expand.

We constructed a three-year capital allocation plan in the 4th MTBP but at the end of the second year, unfortunately, there is a definite downturn in operating cash flow as compared to the plan. We are striving to maintain capital allocation in line with our business strategies while flexibly making adjustments.

To be more specific, we are proceeding as planned with investments in business fields where the market is expected to expand over the medium to long term, such as refrigeration lubricant raw materials and electronics materials. However, we are reviewing the priority of individual investment projects in response to changes in the environment and suspending investments in projects with relatively low investment profitability. On the other hand, we are steadily allocating capital to "robust plants" and the "human resources" who embody them. We are also systematically moving forward with the investments necessary for safe and stable operations and workplace environment improvements, which have been major issues for our company in recent years.

Within the strategic investment framework, we are moving forward steadily with DX-related investment as well as investments in new business and product development. Unfortunately, there are no specific projects in the investment framework for M&A at this time, and cash outs are expected to be in or after the period of the next

#### 4th Medium-Term Business Plan capital allocation



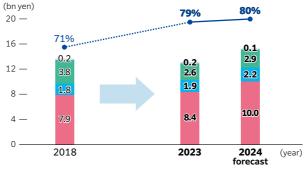
ughly according to plan. However, we flexibly revised capital allocation in line with our business strategy in light of changes in the environment.

medium-term business plan. With regard to shareholder returns, as a result of achieving a dividend level in line with the initial plan, the dividend payout ratio is expected to be around 43% on average over the three-year period, exceeding the 30% assumed in the MTBP.

I am sometimes asked questions about business portfolio transformation in relation to capital allocation. I reply that our investment in expanding capacity is focused on strategic domains and other investments are limited to maintenance and renewal, and that, as a result, we are steadily placing more weight on performance materials and electronics materials. If you look at the diagram showing transitions in operating income by business field, you will see that the ratio of operating income accounted for by performance materials + electronics materials has risen from 71% in 2018 to 79% in 2023. I think you can see from this that we steadily revise our business portfolio in line with changes in industrial structure. However, I feel that it is necessary to move even further with this, and we are currently holding discussions. This is because the cost of maintenance and renewal investment is expected to continue to soar for the foreseeable future due to rising material and personnel costs. For example, unlike so-called commodity chemicals, even in the harsh environment

#### Operating income by business field

Performance materials Electronics materials Basic chemicals Other Ratio of performance materials + electronics materials



\* In operating income by business field, administrative expenses. etc. mon to the entire company, are not allocated

\* The year-end dividend for 2024 will be proposed to the eneral meeting of shareholders in March 2025

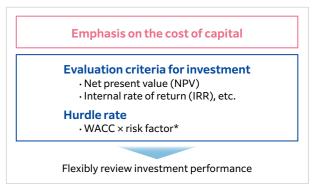
caused by the COVID-19 pandemic in 2020 our basic chemicals are contributing to operating income without falling into the red. However, we are working to identify whether there are any businesses that we need to scale down or withdraw from in view of future cost increases, even though individual products may be in the black. We will ask businesses to make efforts to keep manufacturing costs down, and to pass on to the selling prices any increased costs that cannot be covered. We will have no choice but to scale down or withdraw any products where that is not accepted. This approach is common to all products, but we will start with discussions focusing on the field of basic chemicals, which have a relatively high degree of versatility.

# **Financial strategy**

We are promoting investment to strengthen our earning power using our improved financial foundation.

Our most important numerical management target is ROE. We previously spent six years under the umbrella of an investment fund and the "management that is thoroughly aware of capital efficiency" which we learned during that time has taken root as our basic stance. Our basic policy is to

# Investment decisions and verification



\* A factor based on investment projects such as equipment renewal, boosting production, and new products and businesses

# Message from the CFO

## Improving our financial position to implement further growth strategies



\* Except lease obligations

allocate high returns from our globally competitive product ranges to our next growth investment and aim for an even higher ROE. However, when it comes to strategy, there are sometimes situations where it is necessary to make a decision to invest at a time when cash is scarce. That is why we have consciously moved forward strengthening our financial foundation. We have increased our equity ratio from 28% in 2016, when we became a listed company, to 51% in 2023. Net interest-bearing debt decreased from 19 billion yen in 2016 to 1.5 billion yen in 2021, after which there was a temporary increase due to large-scale capital expenditure on our refrigeration lubricant raw materials, but it had decreased to around 5 billion yen by the end of 2023. Our long-term credit rating (R&I) improved to A- in 2022. I believe that our financial soundness has steadily improved.

However, although we are currently maintaining an ROE of 10% or more, I believe that we should once again make a steady effort to improve our capital efficiency and achieve the financial target of "over 12%" set in VISION 2030. At the crux of this has to be strengthening our earning power, in other words, improving our performance. We will utilize our steadily improved financial foundation to not only invest in increasing capacity in existing business fields in which we have a competitive advantage, but also promote capital allocation to strategic investment so that we can seize all business opportunities that present themselves, such as new business and new product development, and M&As.

#### **Communication with stakeholders**

# We are also increasing opportunities for communication, aware of the need for sustainable value creation.

We have a high ratio of overseas shareholders, approximately 40%. We hold about 200 meetings a year, not only for domestic investors but also for overseas investors in Europe, the United States, Hong Kong and Singapore. In recent years, we have been increasing opportunities for dialogue that consciously deals with sustainable value creation from a longer-term perspective, moving away from short-term business results to focus on non-financial capital such as manufacturing capital and human capital. We are also striving to strengthen ESG-related disclosure and are gradually starting to get

results, including being selected as a constituent of the FTSE Blossom Japan Index for the first time. We have also resumed dialogue with individual investors via exhibitions, which had been suspended due to the COVID-19 pandemic.

I think that in many cases, many people whose attention was drawn to the company from the perspective of equity investment have high expectations for the company's medium- to long-term growth. While firmly achieving our current short-term performance targets, we will take every opportunity to cultivate investors who have a deeper understanding of our strategic initiatives aimed at medium- to long-term growth.

I also recognize that it is an important mission of the CFO to leverage the opinions of shareholders, investors, and analysts in management. I gain a great many insights from your comments. They are reported and discussed quarterly at the Board of Directors and the Executive Management Committee, and we are implementing initiatives to leverage them in management. They are not only discussed by management; we provide opportunities for division heads to engage employees in dialogue about business results and issues in an easy-to-understand manner and in their own words, during which they promote activities to appropriately convey market opinions and expectations. In addition to the CTO who oversees the production divisions, I and the other CxO members visit production sites and engage in direct dialogue with employees from our respective positions.

### My commitment as CFO

I will insist on results to increase our corporate value and will fulfill my responsibilities as CFO.

Our market capitalization at the end of 2021, before the start of the 4th MTBP, was about 118 billion yen, but at the end of July 2024 it was about 83.6 billion yen, a decrease of nearly 30% over the previous two and a half years. I believe we must face this fact head-on and take all possible measures to recover as guickly as possible. I will insist on results so that we can increase our corporate value and expect further growth. We appreciate your continued understanding and support for our Group.

# **Progress under the 4th Medium-Term Business Plan**

To realize VISION 2030, the KH Neochem Group designated "Driving Sustainable Management" as the basic policy of its 4th Medium-Term Business Plan. We have set the following three basic strategies with the aim of further increasing our corporate value, and are implementing various measures.

# **Basic Policy**

# **Driving Sustainable Management**

Strategy I Further Growth in the Strategic Domains

In the strategic domains of Environment, Healthcare, and Electronics, we aim to both increase profits and contribute to solving social issues by expanding our facilities and shifting to high-growth, high-earning products to meet growing global demand.

#### Strategy II Medium-and Long-Term Initiatives to Resolve Social Issues

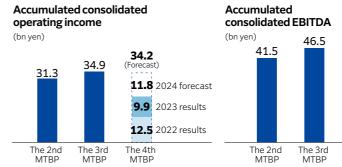
We will implement medium-and long-term initiatives aimed at achieving carbon neutrality by 2050, and at creating new businesses that will contribute to solving social issues.

#### Strategy III Improvement of Business Framework

We will further consolidate the foundations of our business by steadily implementing various measures regarding the topics of "Technology and Information," "Human Resources and Corporate Culture," and "Governance," which we have identified as the drivers for realizing VISION 2030.

### Numerical management targets

We have set accumulated consolidated operating income of 48.6 billion yen, accumulated consolidated EBITDA of 63.5 billion yen, and ROE of 15% or more over a three-year period as our numerical management targets.



# Overview of 2023

The business environment has changed significantly since the medium-term business plan was formulated, through rising prices, heightened geopolitical risk, and delayed recovery in demand. In this environment, we have worked to improve profits by optimizing production efficiency and reducing costs in order to recover short-term performance, while also appropriately passing on increases in costs such as for raw materials, fuel prices and fixed manufacturing costs to product prices. We also proactively promoted efforts to build and strengthen a stable

# **ROE** during period

<b>49.0</b> (Forecast)	Plan	Forecast
<b>17.6</b> 2024 forecast	15% or more	11-15%
<b>16.8</b> 2022 results		
The 4th MTBP		

production system, including preparations to introduce a predictive diagnostic system able to prevent production issues by detecting equipment issues at early stages.

Furthermore, in order to balance expanding medium- to long-term profits with solving social issues, we have taken measures such as expanding production facilities for refrigeration lubricant raw materials and electronic materials, which are included in our strategic domains, and decided to install a CO<sub>2</sub>-capture system at our Chiba Plant.

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# Progress under the 4th Medium-Term Business Plan



# Progress under the 4th Medium-Term Business Plan and Our Path to Further Growth Going Forward

# Development of our refrigeration lubricant raw materials business

Niiya We have continued to expand refrigeration lubricant raw materials facilities in line with the growth of the air conditioner market and changes in refrigerants. We completed the expansion project at the Chiba Plant under the 4th Medium-Term Business Plan (4th MTBP) in July, but demand has become lower than we anticipated when we first decided on this investment. An underlying reason for this is the sluggishness of the housing markets in China and the U.S., however the number of air conditioners sold worldwide was around 140 million units in 2023, and we expect that to expand over the medium to long term, and to be approximately 200 million units around 2030. Accordingly, we have not changed our view that we can expect growth in our refrigeration lubricant raw materials.

**Tsuchiya** In any investment, decisions are made after considering multiple scenarios for the future, but ultimately it is important to be able to execute them properly after the decision is made. At the Board of Directors meetings, we monitor and discuss the subsequent status of important investments. With regard to the current situation, I and other outside directors have instigated discussions about whether the forecast for the plan was lax, haven't we?

**Niiya** Yes, and we take your point. We are trying to grasp how society is changing so that we can analyze the gap between the current situation and our initial investment plan, and make specific revisions to our trajectory.

Tsuchiya Life would be so easy if investments went according to plan. The important thing is to respond swiftly when things do not go the way you think they will. You fall behind the curve when you panic. That makes it hard for the person in charge of the business to say they want to think about the next investment, and business opportunities end up being missed. It's important to have a contingency plan ready so that you can respond swiftly. In that regard, I think that, while it is a struggle, KH Neochem is revising its trajectory. It's essential that you now get onto a growth trajectory. What is your sales strategy going forward? Niiya Well, China and the U.S. are big markets for air conditioners. In China, we are connected with customers via networks we have built up over many years, and we are also in an advantageous position geographically. The United States is also about to change to refrigerants below GWP 700 in accordance with environmental regulations, but our products will still be used. We will capture demand by utilizing the sales network of our local subsidiary. In India, a growing market, the air conditioner market is expected to continue to grow at double-digit rates. The key point here is to assess how the production of air conditioners and compressors for India will develop, and to make our presence felt in the supply chain.

**Tsuchiya** Business in China, be it in raw materials or something else, often uses quantity to compete on price. KH Neochem is currently in a good position, so it's important to leverage relationships of trust with clients and do reliable business to earn points by batting with a focus on your

batting average. Electronics materials, on the other hand, are a field with many players and is a business where you need a product that will provide a clean hit and stand out from the crowd.

# Initiatives in the electronics materials business

Niiya Our core products are high-purity solvents, the raw materials for photoresists, which are used in the semiconductor manufacturing process. Since extremely high purity is required, under the 4th MTBP we have built a quality control building with a clean room that meets the industry's highest standards and strengthened our quality control functions, as well as strengthening our supply infrastructure to ensure a stable supply. Kurogane Kasei, which mainly engages in contract manufacturing, invested in the enhancement of its facilities for next-generation semiconductor materials. The semiconductor field is also expected to grow significantly in the future, and we intend to supply key materials and grow along with our customers. Tsuchiya The lineup of high-purity solvents has been expanded to meet the quality requirements of customers. From the customer's point of view, the company's track record may inspire trust, but there is no room for complacency. Kurogane Kasei does also have potential, but it still lacks the strength to do battle in the first team. In the realm of semiconductors, for example, when customer needs increased, parts and materials manufacturers in Japan, South Korea and Taiwan made capital investments of the appropriate quality and scale in accordance with those needs. In Europe and the U.S., there is a tendency to focus on price increases without capital investment, while in China, there is a tendency to compete in terms of volume via overinvestment. I consider the investment style of Japan, South Korea and Taiwan to be correct. However, I think that Kurogane Kasei should invest more capital and become strong enough to join the first team by tackling many projects.

**Niiya** Contract manufacturing businesses like Kurogane Kasei sometimes do not receive work unless they prepare

# Steadily capture demand in growth areas, strengthen earning power, and get returns on investment



# Crucially, build the strength to carry out the plan without becoming complacent about customer trust and past achievements



facilities to meet the diverse needs of customers. It can be difficult to assess capital expenditure, but we'd like to tackle even more projects.

**Tsuchiya** It's necessary to invest in human resources as well as facilities. Human resources who understand technologies and possess industry networks are particularly essential. Given that, it might be a good idea to bring in people from outside the company.

Niiya Going forward, I believe that we need to consider partnerships with external capital such as alliances and M&As in order to grow our electronics materials business. Tsuchiya From an M&A perspective, deals in the field of electronics materials could involve large amounts of money and be comparatively expensive, and they might not be very effective. What we should be aiming for is something that's the piece that will complete the overall picture. Even if it's a small piece, if nurtured carefully over the long term it will be ready to step up to the plate one day. Oh, and one more thing. It would be good to have another raw material that will become essential in the semiconductor manufacturing process, in addition to the raw material for photoresist. I'm talking about going for a clean hit.

# Formulating the 5th Medium-Term Business Plan

**Niiya** Under the 4th MTBP, we made strategic investments in areas such as facilities expansion, R&D, and human resources, and also steadily made investments in safe and stable operations. The foundation for our further growth is in place. We will make building on that to strengthen our earning power the theme of the 5th MTBP.

Tsuchiya Yes, the most important thing now will be not further capital expenditure but sound operations that will produce solid results. Getting a solid return on investments made in the 4th MTBP. And what you need for that is.... strength training. Introduction

Then and Now

# Main 2023 Initiatives

# **1** Completion of construction to increase production capacity for refrigeration lubricant raw materials

Global environmental regulations on refrigerants have accelerated the shift to environmentally friendly air conditioners that employ refrigerants that lessen impact on global warming. Additionally, the demand for refrigeration lubricant raw materials is increasing due to widespread use of air conditioners, mainly in emerging nations.

We have been carrying out a project to expand production capacity to ensure we can meet this expanding demand. The expansion project at the Chiba Plant was completed as scheduled in July 2024, increasing capacity for production of refrigeration lubricant raw materials (isononanoic acid) to 1.5 times the previous level.

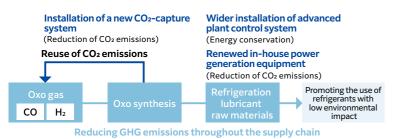


Completed isononanoic acid production facility at the Chiba Plant

# **2** Reducing GHG emissions throughout the supply chain for refrigeration lubricant raw materials

We use our core technology, oxo synthesis, to manufacture refrigeration lubricant raw materials. Because this synthesis uses CO<sub>2</sub> as a raw material, refrigeration lubricant raw materials help reduce GHG emissions not only from the product itself, but also in the production process.

In December 2023, we decided to install a new CO<sub>2</sub>-capture system at the Chiba Plant in order to reuse CO<sub>2</sub> generated during the production process as a raw material. This investment will enable the recovery of up to 50% of the CO<sub>2</sub> used at



the Chiba Plant, increasing the stability of raw material procurement and helping to achieve carbon neutrality. The facility is expected to be completed in January 2025. In addition, we also plan to implement energy conservation measures in our production processes and update our in-house power generation equipment to further reduce GHG throughout the supply chain and enhance our social value.

# **3** Promoting digital transformation to ensure stable plant operations

Among measures to make us more competitive, one that we are particularly focused on is stable plant operation. For example, by introducing a predictive diagnostic system that takes advantage of DX, a plant's operating data history is converted into big data and utilized to enable AI to automatically detect small issues in the plant that humans might overlook, making it more possible to prevent sudden issues before they occur. We are steadily moving forward with preparations for full-scale implementation, and believe this initiative will also be an effective mechanism for passing on technology and skills.

# Additional Measures (2022–2024)

 $\label{eq:measures} Measures \ implemented \ from \ short \ to \ long-term \ perspectives$ 

# Growth investments in strategic domains

 Infrastructure investment for high-purity solvents, investment to expand production facilities for materials for next-generation semiconductors

Investment in ventures related to biotechnology, drug discovery, joint research and marketing
 Full-scale marketing of marine biodegradable resin

#### **Improvement of Business Framework**

• The Comprehensive Safety Check Initiative, fostering and establishing a culture of safety, promotion of smart industrial safety

· Wider installation of advanced plant control system

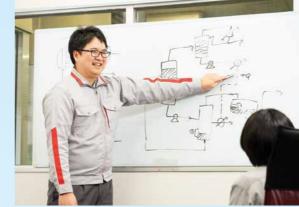
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• Wider introduction of job-based personnel systems, establishing education and training systems • Investment to improve the working environment



Cultivation of polyhydroxybutyrate (PHB), a marine biodegradable resin





# **Drivers of Value Creation**

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# **Further Improving Our Safety and Operations Integrity**

Manufacturing capital is the source of value, leading to safe and stable operations and robust plants that mobilize our technical capabilities

# **Toshihiro Matsuoka**

Executive Corporate Officer and Chief Technical Officer (CTO)

## Thoroughly implement a policy of safety first via the Comprehensive Safety Check Initiative 2022

In April 2022, an employee fatality occurred, due to falling from a height at the Yokkaichi Plant. We firmly vowed to prevent any recurrence of such incidents and are pushing forward with Comprehensive Safety Check Initiative 2022 based on our "Protecting ourselves and our colleagues" Safety Guidelines. All employees and executives are committed to the following three points: to recognize and reaffirm that it is the fundamentals for all employees to put safety first, to thoroughly implement measures to prevent the recurrence of falling incidents, and to perform safety checks of all the work. The introduction of safety-related education and training, which began at the suggestion of employees, and initiatives such as safety-themed discussions at workplace meetings, have greatly increased opportunities for employees to voluntarily confront the issue of safety. My own dialogues with employees at the Yokkaichi and Chiba plants have made it very clear to me how the awareness of safety is spreading. Comprehensive Safety Check Initiative 2022 will always have 2022 in its name. It was decided to continue this initiative under that name, regardless of whether it was in 2030 or 2050, out of our desire that the incident would not be forgotten.

# **Comprehensive Safety Check Initiative 2022**

- 1 Establishment of Safety Guidelines, and revision of the Principles of Corporate Behavior, and their implementation
- **2** Understanding fall risk and executing measures 3 Comprehensive work safety check (identifying and executing
- measures for other high risks)

# Mobilizing our technical capabilities and strengthening our earning power

In addition to safety, we value stable operations. We are a chemical manufacturer that provides distinctive materials that are essential for products such as environmentally friendly air conditioners, cutting-edge semiconductors, and high-end cosmetics. Our company supports a wide range of industries as a raw material supplier, and as such we consider the stable supply of products to be an extremely important management

issue. Meanwhile, a lot of our equipment has been in operation since we converted to petrochemical manufacturing methods in the 1960s, and we need to take comprehensive measures to improve reliability against the risk of process unit trouble due to aging equipment. Accordingly, we will not only enhance the equipment maintenance strategy as an extension of what we have done thus far, but will also introduce a predictive diagnosis system, accelerate DX such as the promotion of safe and efficient smart industrial safety, and deploy proactive equipment maintenance.

As a manufacturer, our plants are the source of our value. We will aim to create robust plants where all divisions join forces to find technical solutions to any difficult challenges that confront them, and overcome each obstacle one by one.

### **Outside Director's Perspective**

### I will strictly monitor and supervise from the investors' perspective whether both safety and profits are being pursued.

Comprehensive Safety Check Initiative 2022 has only just begun but it is an important and never-ending commitment. However, on its own it is not enough. One might ask which is more important, safety or profits, but they are not things that can be traded off against one another. As professionals with their own role to play, plant executives and employees are expected to carry out efficient, safe and stable operations via their pursuit of safety and profits, and they must be capable of doing that. I believe that the role and main duty of an outside director is to strictly monitor and supervise from the investors' perspective whether effective preventive and predictive maintenance is being carried out to avert equipment trouble, whether the necessary human resources are being properly deployed, and whether the plants which are the source of value for a manufacturer are in fact generating value.

Yuji Kikuchi Independent Outside Director



# Thoroughly Ensuring Safety: Comprehensive Safety Check Initiative 2022

Reflecting on the serious incident in 2022, the entire company is engaged in Comprehensive Safety Check Initiative 2022 to thoroughly ensure safety. Going forward, in addition to continuing to execute thorough

# 1. Establishment of Safety Guidelines, and revision of the Principles of **Corporate Behavior, and their implementation**

In October 2022, we added "Protecting ourselves and our colleagues" to our Corporate Policy. We also established Action Goals and Compliance Items to ensure that Safety Guidelines are put into practice, and distributed a Safety Guidelines Card detailing them to all employees and executives. In addition to continuing to encourage open dialogue with plant superiors about safety in 2023, we are working to ensure the spread and establishment of safety awareness.

## A proactive organizational culture leads to a safe and robust plant

We launched a project to reform our organizational culture in 2023 with the aim of creating an atmosphere of a shared vision and values for a plant, on the basis of which everyone works proactively. It has made a start by implementing activities based on dialogue at the general manager, section manager, and general employee levels. We are aiming to change an atmosphere that has become somewhat passive and create one where people tackle everything proactively. That is another important reason to ensure psychological safety, and we focused on building relationships where people can share their thoughts openly and cooperate with one another. The mood of the participants is changing, and they are engaging in positive discussions about various issues, including safety from a plant-wide perspective, and not limiting themselves to issues from their own workplace.

# 2. Understanding the risk of falling and executing measures

As recurrence prevention measures directly related to the said incident, we have implemented both tangible measures, such as considering alternative methods for working at height, the wearing of equipment such as full harnesses for crash control, and the installation of fall prevention equipment, and intangible measures, such as employee education and training, as well as the review and maintenance of rules and procedures. We are particularly focusing on education and training, and introduced VR equipment that simulates a fall incident

# 3. Comprehensive work safety check identifying and executing measures for other high risks

In addition to measures to prevent falls, we identify work-related risks that might lead to a serious incident, and implement comprehensive work safety checks to prioritize measures. In 2023, we moved forward with improvements in high-priority areas in need of tangible measures from amongst those we had identified as areas with a risk of falls, and also worked to identify areas with risks other than falls. In 2024, we aim to complete tangible measures in the remaining areas with a risk of falls, and to finish identifying all areas with risks other than falls.

measures against high risks, we will proceed with safety education to foster a culture of safety and ensure the spread and establishment of safety awareness.





Nobuko Kinoshita Yokkaichi Plant

and training about the correct use of fall protection equipment at the Yokkaichi Plant. The same training equipment was introduced at the Chiba Plant in 2024.







Training facilities for the use of fall arrest equipment



Warnings related to fall risk are posted throughout the plant

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# **Stable Operations**

Our distinctive products are produced by chemical reactions under high temperature and pressure conditions. As a company that manufactures such products, we operate a variety of facilities able to withstand such operating environments both day and night. Once every two years, however, we carry out large-scale periodic maintenance (turnaround) for the necessary inspections and maintenance. As domestic petrochemical plant complexes get older, there is increasing risk of sudden equipment issues, and we too take measures accordingly. In addition to reconstructing our equipment maintenance strategy to achieve more effective and efficient maintenance, we are promoting a variety of initiatives, such as utilizing DX to further improve manufacturing processes and promoting smart industrial safety.

# Eliminating serious process unit trouble via preventive and predictive maintenance

The largest obstacle to stable operations is unplanned shut down or slow down loss due to sudden and serious process unit trouble. To prevent such trouble, up until now we have conducted time-based preventative maintenance based on past experience to determine the maintenance timing. In order to achieve more effective and efficient maintenance, instead of time-based maintenance, we now conduct risk-based maintenance, where risk is analyzed based on the probability of failure for each component of equipment, and the impact of the process unit trouble should a component fail.

We have also decided to introduce condition-based predictive maintenance, where we detect signs of failure by using big data to monitor equipment condition, then plan and execute appropriate maintenance. Through such initiatives, we will work to eliminate sudden and serious process unit trouble.

#### Terminology of breakdown, preventative and predictive maintenance

Terminology	Explanation		
Breakdown maintenance	Reactive maintenance conducted after equipment functionally fails		
Preventive maintenance (time-based)	Proactive maintenance conducted after a certain number of years, based on equipment life and empirical guidelines		
Preventive maintenance (risk-based)	Proactive maintenance conducted based on risk when equipment fails		
Predictive maintenance (condition-based)	Minimizing impact on production by detecting signs of process unit trouble through sensors and predictive diagnostic systems to conduct systematic maintenance		

# Promoting RAISE (ReliAbility Improvement by Smart Engineering) activities to optimize maintenance plans and ensuring high-level operation

To ensure high-level operation and reliability at an appropriate cost, we determine the ideal state of operation management and facility management and maintenance to establish and operate new work processes. We call such processes RAISE. In order to comprehensively manage equipment reliability, we document equipment maintenance strategy to analyze failure risks for individual components based on thousands of items of equipment data. We then plan maintenance work based on the analyzed risk, and improve reliability by conducting inspections, repairs and replacement at appropriate timing. Through repetition of the PDCA cycle, with major turnaround every two years as a single cycle, we improve maintenance effectivity.

# Clarified equipment maintenance focus and improved equipment maintenance strategy

We started our RAISE activities by reviewing equipment maintenance strategies from scratch, for example by reinspecting data from a birds-eye view and formulating measures according to failure patterns. The RAISE results, which began with the major turnaround in 2022 based on the new maintenance strategies, are being verified against the 2024 major turnaround, and we are discussing the next step of improvements. There are very many points which require attention in equipment maintenance, but I keenly feel that there are many things we have noticed anew, and that the clarified focus is making maintenance work more accurate.



# Ensuring management execution based on turnaround planning and execution guidelines

In order to maintain plants with safe and stable operations, turnaround is an extremely important opportunity to check, inspect, repair, replace, modify equipment, or install new facilities. Highly skilled project management, detailed planning and certain execution are all key to successfully completing turnaround. That is why we established turnaround planning and execution guidelines, and both the Yokkaichi and Chiba plants formulate and implement basic turnaround plans that stipulate basic policy, planning and execution organization, workflow and milestones for the activities required, from turnaround planning to execution and plant startup. Moreover, a turnaround manager is assigned for each turnaround. The turnaround manager

# Optimizing manufacturing processes and improving equipment maintenance by promoting DX

In order to produce a wide variety of chemical products, our plant is configured from multiple units where complex operating conditions such as temperature, pressure and flow rate must be constantly adjusted. These adjustments require a wealth of experience and a high level of expertise, and even external factors such as weather changes must be taken into account. Therefore, we have introduced advanced plant control systems to systematize and reproduce the skills of skilled operators by harnessing Al and other cutting-edge technologies. Doing so has made it possible to operate under optimal conditions, enabling us to maximize profit while also reducing CO<sub>2</sub> through efficient energy utilization. At the

# Promoting Smart Industrial Safety utilizing advanced technology to manage operations and equipment

To ensure stable operations into the future, we must implement safety activities while addressing issues such as shortages of human resources and the handing down of skills from one generation to another and continue to carry out stable and efficient operations. In order to do so, we promote Smart Industrial Safety, where we utilize advanced technology to manage operations and equipment.

As one measure to pass down skills to the next generation and improve efficiency, we promote tablet usage in order to digitize daily checks and operation management. We are going to expand the use of tablets to all manufacturing sections during the 4th maintains a constant grasp of plan progress, and implements measures to prevent schedule delays and lead overall action. He/She also shares information with the Turnaround Steering Committee, which is chaired by the plant manager, and discusses measures to deal with any issues.



A Turnaround Steering Committee meeting

end of 2023, more than 80% of plant control systems were equipped with these systems, as per plan. Going forward, we will repeatedly verify the outcome of their introduction and aim to maximize results.

We will also proceed with the introduction of a predictive diagnosis system to detect plant trouble in advance. We completed construction of an environment that accumulates and utilizes all kinds of information related to the operating condition of equipment in 2023, and plan to launch the operation of a predictive diagnosis system utilizing big data in 2024. We will then go on to expand the use of equipment sensors to promote further predictive maintenance.

Medium-Term Business Plan. We are also considering alternative inspection methods, such as using drones for high places.



Daily checks using tablets



Concept image of drone inspection

Then and Now

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# Further Improving Our Safety and Operations Integrity

# Strengthening competitiveness through the evolution of our production engineering capabilities

Our materialities, listed on ▶P37, include "Improvement of energy efficiency and reduction and management of CO<sub>2</sub> and other emissions" and "Pursuit of higher productivity and efficiency at plants." If we are to resolve those material issues, we need to continue to develop our production engineering capabilities and take on the challenge of initiatives that are totally new to us. We are strengthening our competitiveness via steps such as making stable operations even more reliable on the basis of production engineering capabilities nurtured in plant divisions and the Technology Development Center, and moving forward with deliberations on the introduction of new technologies aimed at achieving carbon neutrality.

repeated laboratory scale verifications based on the

results we had obtained, and then carry out further

simulations based on the results of those experiments.

This evaluation technology does not only enable us to

an early stage, and to swiftly evaluate and select raw

materials and catalysts. We also enhance operational

each process. Such evaluation technology is also

explore the introduction of new technologies, and

thereby boost our competitiveness.

stability by using it to optimize operating conditions for

harnessed to improve productivity and efficiency, and to

prevent manufacturing site problems or resolve them at

# Achieving stable operation and greater competitiveness by fusing technologies for computation and experimentation

Our company has a number of products that are manufactured by only a few companies across the world. In order to offer a stable supply of such products, we not only have to resolve or prevent any manufacturing site problems, but must also evaluate whether or not a large number of raw materials and catalysts have been used in accordance with material procurement strategies based on global circumstances.

We are therefore establishing an evaluation technology that fuses computation and experimentation. For example, we utilize digital technologies and carry out simulations of manufacturing processes, then carry out

## Analyzing big data to further enhance stable operation and quality

We are engaged in further enhancing stable operation and quality by moving forward with statistical analysis and machine learning based on the data we have accumulated, which we then apply to identify the main causes of malfunctions and use in predictive diagnosis. In the case of products for electronics materials that require low metal content, for example, we stabilize quality by identifying the optimal operating conditions via the statistical analysis of operation records and process analysis data, and strengthening controls.



Technology Development Center

# Evolving production engineering capabilities and creating new value by responding closely to the needs of our customers and society

We are one of the very few manufacturers who possess large-scale oxo technologies and Wacker oxidation technologies. Utilizing these technologies, we have not only developed the capability to create targeted derivatives from the unique intermediates obtained, but also possess precision separation technologies (distillation, extraction) and advanced low-metal management techniques. We also possess the know-how to swiftly carry out relatively large scale-ups and modifications while ensuring that safety and quality are maintained. We have developed and provided a wide variety of products by making maximum use of our technologies and know-how to respond agilely to the various sophisticated needs of our customers.

We will continue to explore the use of green raw materials, consider CO<sub>2</sub> reduction technologies, and engage in initiatives such as the recycling of thermal energy and new energy-saving technologies to replace distillation, all aimed at achieving carbon neutrality by 2050. By doing this, we will further evolve our production engineering capabilities and create new value for society.

#### Working to establish and introduce new manufacturing methods that make new products a reality

We are working on the environmental domain-related themes set forth in VISION 2030. We are studying mass production processes for new products utilizing our production engineering. We have reviewed each process from reaction to refining, and have found new manufacturing methods that significantly improve productivity by repeating hypotheses and verifications, and have been highly praised by our business partners. In order to provide even greater value, we have also taken on the challenge of improving our technology for the crystallization process, which is currently difficult to control.



Technology Development Center

# **Evolving and Expanding Our Value Creation**

Evolving and exploring market-oriented knowledge, aiming for sustainable value creation

## Yukihiro Isogai

Senior Corporate Officer and Chief Marketing Officer (CMO)

# Tackling market-oriented product development for new business creation

We have engaged in product-oriented product development that fully leveraged the strengths of industrial complexes based on petrochemistry. We are growing our current core products by keeping up with contemporary trends of the times, forming a strong network with the market, and evolving our technologies. However, in order to realize VISION 2030, we need to further evolve our existing business and create new business. In addition to product-oriented product development, we also need to respond to market and social needs, in other words we also need market-oriented product development.

# Aiming for collaboration between divisions responsible for the evolution and exploration of knowledge

We are working to ensure the creation of value by constantly improving our core businesses (evolving knowledge), experimenting and taking action aimed at new business (exploring knowledge), and fusing the intangible assets we acquire thereby. We are also consciously taking measures to secure human resources who will play a vital role in value creation and to boost individual enthusiasm.

To that end, we aim for organizational design that displays an awareness of diversity and inclusion (D&I). As part of this, Innovation Strategy, which is responsible for exploring knowledge, brings together employees with diverse backgrounds, including mid-career hires, and carries out exploration activities based on the curiosity of individual members. This is known as the WROC\* strategy. Sales & Marketing is a mixed team of employees involved in sales and development, and is responsible for evolving knowledge while conducting sales activities. It engages in the integrated management of business and R&D strategies based on the needs acquired via our strong network with existing customers, and is working to evolve existing businesses.

Going forward, we must be strongly aware of boosting the superiority and market appeal of our company by evolving and exploring knowledge, in other words via collaboration between Sales & Marketing and Innovation Strategy. In addition, Intellectual Property is



creating a platform for the information that it provides about other companies' intellectual capital and our internal intellectual capital, and is creating a system that can be used for value creation.

# As CMO, I emphasize the development of human resources who will play a key role in developing materials

In addition to organizational design that displays an awareness of diversity and inclusion (D&I), I recognize that the human resources who work within that organization are an important force in driving it forward. I will focus on fostering an organizational culture that brings out the full potential of each individual and developing human resources who will play a key role in developing future materials. Regardless of their age, gender or job title, they will enhance their skills through a variety of experiences, and we will increase the accuracy of our value creation.

\* Wide Range Operation with Curiosity

### **Outside Director's Perspective**

### How to start creating value

Interest is growing in value, such as corporate value and value creation. Value is determined by other people. You create value by imagining what other people deem to be value. So what should you do to create value? There are plenty of handbooks and other information but you can't feel confident. Why not? Could it be because you have neglected to think for yourself? So what should you do? It all boils down to developing a habit of thinking for yourself and thinking with colleagues when it comes to value creation. That is what is expected of our company. You will be motivated when you think for yourself. When you think together, your horizons will broaden and ideas will come more quickly. Start by thinking for yourself and then fine tune your ideas with feedback from those around you. Repeat this process over and again. Diversity will emerge naturally when there are more individuals in the company who think for themselves, and there will be more possibilities for new value to be created as well. Start with that first step. Then create great value through the actions of the sales

and marketing, R&D, and

intellectual property trinity.

Jun Tsuchiya Independent Outside Director

# **Evolving and Expanding Our Value Creation**

Our innovation is embodied by our management stance, "Making our dream a reality through reliable technology and new inventions." We will continue to focus on environmentally conscious methods, creating products and businesses with value that contribute to the enrichment of people's lives through our further pursuit of technologies where we excel and acquiring new technologies generated through internal and external partnerships.

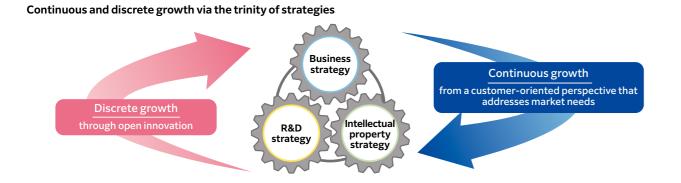
# Creating value through continuous and discrete growth

In order to achieve our corporate mission of realizing a brighter tomorrow for society through the power of chemistry, we are working to improve the competitive advantage of our existing businesses and create new products and businesses that solve social issues by making maximum use of various manufacturing technologies, including our core oxo reaction technology, as well as refining and quality control technologies. To do this, we are utilizing our accumulated intangible assets (networks, technologies, know-how, etc.) to achieve continuous growth from a customer-oriented perspective that addresses market needs, and acquiring new intangible assets from outside the company through open innovation activities to create businesses that solve new social issues by integrating those new intangible assets with our core technologies to achieve discrete growth. We are working to create value through both continuous and discrete growth. Sales & Marketing is mainly in charge of continuous growth, while discrete growth is mainly the province of Innovation Strategy. In addition, the Technology Development Center, which aims to further enhance our production engineering capabilities, is collaborating with Intellectual Property, which is responsible for strengthening our intellectual capital, including new business. Business, R&D, and intellectual property strategies are acting as a trinity.

KH Neochem Group R&D is carried out at four locations in Japan (Yokkaichi City in Mie Prefecture,

Ichihara City in Chiba Prefecture, Kawasaki City in Kanagawa Prefecture, and Chiryu City in Aichi Prefecture). In particular, KH i-Lab, which was established as an open innovation hub in Shin-Kawasaki in 2019, is equipped with open laboratories where joint experiments can be carried out with universities and startup companies, and the feasibility of new ideas and concepts, and the results obtained from them, can be verified.

When it comes to value creation, human capital is just as important as intellectual capital. We believe it is particularly vital to improve our ability to assess value creation themes. By this we mean the ability to gain insight into the true nature of information and the fundamental principles of phenomena from amongst the various information scattered amidst social conditions, accompanying megatrends, and individual customer needs, and to make very accurate choices to create value for our company. This ability cannot be acquired from seminars, lectures or handbooks. It is honed through discussions with a diversity of people inside and outside the company, and through experience gleaned from repeatedly selecting, verifying and generating themes. Our open innovation activities provide an environment where many such experiences are available, and we are endeavoring to nurture value creation skills by using KH i-Lab as a place where employees can hone that ability.



# The integration of newly acquired biotechnology and chemical processes

We are currently aiming to commercialize a marine biodegradable resin using microbial fermentation technology. In order to meet the diverse needs of our customers, we are supplementing our resources in collaborations with external institutions rather than sticking rigidly to our own approach, and are pursuing quality improvements and mass production. We are working hard to make a product that can be used for a wider range of applications. We would now like to speed things up further as we head towards commercialization.



Important themes in strategic domains

As we work to realize VISION 2030, we have identified the strategic domains of environment, healthcare and electronics, and aim to create new businesses from a medium- to long-term perspective. We must leverage our strengths to provide highly unique and competitive products that contribute to solving social issues and lead to sustainable growth for the company.

# **1. Environmental Domain**

Our strategy for this domain is to further expand the refrigeration lubricant raw materials business that is our core business, and to create new businesses to follow it. Under global refrigerant regulations, environmentally friendly air conditioners that use low GWP refrigerants with less environmental impact are becoming increasingly popular. We are working to improve our production engineering so that we can maintain and expand our presence in this growing market. With marine biodegradable resins using renewable green chemical raw materials as their theme, the new businesses will

# 2. Healthcare domain

Our cosmetic ingredient is used in a wide range of applications, mainly in high-end skincare products, due to its strong moisturizing properties and antibacterial properties. Its characteristic reduced odor and skin irritation are due to the fact that there are fewer impurities in the product. This is a market and product where we leverage our refining and quality control technologies.

Our strategy for the healthcare domain is to expand our business by providing further added value in the cosmetic ingredients field and developing other applications, and to create new businesses in other fields. In other fields, we are focusing on biopharmaceuticals, and have invested in GlyTech, Inc., a company which

# 3. Electronics domain

We manufacture high-purity solvent, the raw material for products such as photoresist, which is used in manufacturing semiconductors and liquid crystal displays, and our group company Kurogane Kasei Co., Ltd. manufactures next-generation semiconductor materials. In order to meet the growing market demand for ultra-high purity and ultra-low metallization quality for both product groups, our strategy in this domain is to develop high purification, quality control, and synthesis technologies. As a strategic investment, we built a new quality control building with a clean room that meets the

# Important themes in strategic domains



fuse the chemical technology that is our forte with biotechnology such as genetic engineering and fermentation, and we are conducting joint research with universities and various companies. We also set our sights on agriculture as a new field of activity for our technologies, and invested in Ac-Planta, Inc. in 2022. That company has strengths in biostimulants, which are expected to improve food productivity by encouraging plants to be resilient to climate change associated with global warming. It is developing new businesses by such means as joint research.

supports drug discovery using glycans, rare in vivo components that are difficult to synthesize artificially. It is one of the few companies in the world that possesses technology to manufacture glycans, and we are aiming to establish commercial-level manufacturing technology by coupling GlyTech's manufacturing technology with the chemical technology that is our forte. By moving forward with support for drug discovery using glycans and the establishment of manufacturing technology, we are endeavoring to facilitate their practical use in biopharmaceuticals such as antibody drugs to enable the provision to society of various benefits and results.

industry's highest standards at the Yokkaichi Plant in 2022. Kurogane Kasei is moving forward with the expansion of its next-generation semiconductor materials facilities, which are scheduled for completion in the final quarter of 2024. In another new business, based on our oxo reaction technology we are developing materials for the plastic lenses of high-performance sensing cameras. Demand for these materials is increasing with in-vehicle cameras becoming mandatory and with the development of advanced driver assistance systems (ADAS) and autonomous driving technologies.

# Introduction

# Aiming to achieve solid results in value creation themes

The 4th Medium-Term Business Plan lists the number of collaborations with external organizations as a materiality KPI. (The target is at least 10 collaborations per year.) Our aim is to create new businesses in an environment that encourages creative collaboration where we do not stick rigidly to our own approach. We believe that the number of collaborations is one of the indicators to measure the status of open innovation and market-oriented activities.

Up until now, Sales & Marketing and Innovation Strategy have focused on verifying the feasibility of specific ideas, new products, and business concepts aimed at value creation. From now on, they will also focus on things such as closing the distance between us and our customers (markets), substantiation and verification, and

considering mass production. They will also work even more closely with Intellectual Property and the Technology Development Center in areas such as the acquisition of intellectual property rights and the establishment of manufacturing processes from the perspective of competitive advantages.

The sustainable management we promote aims to contribute towards solving social issues and sustainably enhancing our corporate value. In order to achieve that, we need to synchronize sustainability for society and sustainability for our company. Going forward, we will continue our unstinting daily efforts to create innovation, firmly believing that maintaining our enthusiasm is the first step toward increasing our corporate value.

# Development cases that demonstrate our basic behavior of "Taking the first step"

We are harnessing the petrochemical manufacturing technology we have cultivated so far to create new derivatives with high added value from raw petrochemical materials, and are also working on green chemicals from raw bio materials. We are working to manufacture bio products that solve social issues such as marine pollution from a global scale while also improving corporate value. There are many fields where we can employ our petrochemical manufacturing technology and apply it to our bio-based manufacturing technology, and we are focusing on creating businesses that leverage this strength.



### Development personnel working to create value and achieve VISION 2030

### (New derivatives) Development of new highly functional raw resin materials for in-vehicle/smartphone cameras

We utilize our strength in oxo reactions and hydrogenation reactions to develop raw materials for high-performance resins.

Because alicyclic monomers can be given characteristics such as high heat resistance, low dielectric properties and low water absorption, they are expected to be used in such areas of the electronics materials field as in-vehicle/smartphone cameras and 5G/6G communications. The electronics materials field requires high quality raw materials, so we are developing high-quality and efficient manufacturing processes.

#### (Green chemicals) Contributing to the creation of a carbon-neutral society via the development of natural higher alcohols

We harness our high-pressure oxo technology to develop higher alcohols from naturally derived raw materials.

The higher alcohol currently under development has a high degree of biomass, and possesses functional characteristics such as being a liquid at room temperature and being easier to handle than solid existing natural products. Sample work has been started on the assumption that it will be useful in applications such as raw resin materials, inks/coating agents and lubricants. Via our unique materials, we will contribute to realizing a carbon-neutral society.

### (Bio products) Aiming to solve food security issues such as climate change and the increasing demand for food

We are working to create new businesses to address climate change issues such as global warming.

Via initiatives such as investment in agri/bio venture companies and joint research, we are working on solutions to food security issues such as reducing the impact of climate change on food production and ways to address rapid increases in the demand for food. We are aiming to create new businesses in the agricultural field by strengthening cooperation with external organizations and making approaches in the interdisciplinary field of agriculture and chemicals.



Sales & Marketing



Yuichiro Naka Sales & Marketing



Aina Nakamichi Innovation Strategy

# Intangible assets that support value creation

It is vital to enhance and utilize intangible assets in order to revitalize innovation. Intellectual Property manages intellectual property from a company-wide perspective,

# Strengthening our competitiveness via intangible assets and DX, and contributing to solutions to social issues through sustainable value creation

Our value creation is made viable by various intangible assets. These include technologies, know-how, employee skills, and intellectual property. We aim to create new value by enhancing, accumulating and making maximum use of intangible assets.

Our technical knowledge and know-how, as well as the expertise and skills of our employees, help to drive forward the creation of new products and businesses through basic technologies such as our oxo reaction, refining, and quality control technologies. We nurture diverse skills in our employees via education, and gain external insights via open innovation.

Intellectual property and digital transformation (DX) are also essential elements in our use of intangible assets.

# **IP** governance system

The Company has established an Intellectual Property Policy and operates the Intellectual Property Strategy Meeting to promote enhanced utilization of intellectual capital. The relevant departments discuss intellectual property policy and strategy at meetings held almost every month. The IP activities and other content discussed at the meeting are reported regularly to the

# Enhancing IP

Cooperation between divisions directly tied to our business is vital to revitalizing business via the utilization of intellectual property. With Intellectual Property playing a central role, we are strengthening active collaboration among related divisions and promoting proactive IP activities. For example, Sales & Marketing and Intellectual Property collaborate to discuss and promote the acquisition of intellectual property rights for important products, based on our business policy and changes in the external environment. With regard to strengthening intellectual property related to value creation, we are aiming to

### Enhancing IP throughout the KH Neochem Group

As the person in charge of IP, I aim to boost my knowledge and share issues via regular study groups and exchanges of information with Intellectual Property at KH Neochem. These shared activities have made me keenly aware that we are aligned as a group, and that the speed at which we deliberate issues has accelerated dramatically. Going forward, we will use this relationship to encourage employee inventions at Kurogane Kasei and aim to properly manage and utilize technology.



and aims to further enhance and utilize this capital to revitalize our business over the medium- to long-term.

Intellectual Property actively acquires and protects intellectual property rights for important products and technologies to increase our competitiveness. At the same time, it aims for the effective sharing and utilization of information via its construction of a platform that integrates information such as internal technologies, know-how, and equipment design data. This facilitates the sharing and use of data with researchers and partners, leading to the generation of new knowledge and ideas. We are also promoting data-driven R&D by utilizing materials informatics and AI.

By making strategic use of these intangible assets and promoting value creation, we will continue to contribute to sustainable growth and solutions to social issues.

Board of Directors by the CTO. and the Board of Directors is responsible for supervision of company-wide IP enhancement activities. This system enhances the effectiveness of our intellectual property strategy.



strengthen intellectual property that is directly linked to our business by not only considering policies for enhancing IP to boost the competitiveness of our business model in cooperation with relevant departments, but also deploying marketing personnel within Intellectual Property and strengthening activities to gather external information and submit proposals in cooperation with relevant departments.

Intellectual Property is also strengthening collaboration with staff in charge of IP at Kurogane Kasei with the aim of boosting the level of IP capabilities throughout the KH Neochem Group.



Chiaki Teshiba Kurogane Kasei Co., Ltd

# **Human Resource Strategies to Increase Corporate Value**

As a company that provides world-class products, we aim to develop human resources who possess a high level of expertise and professional pride.

# **Tatsuro Niiya** Board Director, Senior Corporate Officer and Chief Strategic Officer (CSO)

# **Developing professional human resources** with a high level of expertise is essential

We provide society with world-class products such as refrigeration lubricant raw materials and electronics materials. Many human resources are involved in the process stretching from R&D to the manufacture of those products and their delivery to the customer, and that process requires a high level of expertise. Furthermore, a sense of pride and responsibility as professionals in charge of globally important supply chains is essential in the performance of our duties. For this reason, I believe that, when we promote our human resource strategy, it is necessary for each employee to be aware of the value that we provide to society, and understand the role expected of them in this, so that they feel the desire to make the company better through their own growth.

# In order to provide distinctive products and continue to shine as a leading global company

As we work to achieve VISION 2030, our long-term vision, we are aiming to develop human resources with the following qualities: a greater sense of urgency to outstrip other companies, the ability to change in response to changes in the environment, expertise that generates competitiveness, and networking capabilities that will make us even stronger. For example, we transformed a change such as the Montreal Protocol's regulation of CFCs into an opportunity to protect the global environment and expand our business. In the semiconductor field, we have contributed to the advanced information society by responding to our customers' need for increased quality. However, today more and more demands are being placed on companies by society and the market, and the content of their demands is becoming more sophisticated. We need to enhance our human resource development still further in order to respond to those demands, and we as individuals must continue to change and not let ourselves be bound by what used to be common practice.

Since we are a manufacturing industry, we need to strengthen our manufacturing capital from all angles, including equipment, technology, and intellectual property, but it is particularly vital to do so from the

human resource angle. With Human Resources playing a central role, all divisions are planning and implementing human resource measures in order to combine manufacturing capital and human capital and create synergies. The company actively supports the autonomous growth of employees through such measures as a job-based personnel system and a system where employees can choose their own training path. Furthermore, we intend to continuously produce professional human resources with a high level of expertise by systematically training and deploying successors, creating a route to sustainable value creation.

# **Outside Director's Perspective**

## There is no silver bullet that will increase engagement. Create teams where people can share their psychological satisfaction and sense of achievement in daily matters

Human capital management is declared to be at the heart of sustainable corporate value enhancement, and how to increase engagement has become an issue, particularly at manufacturing sites. Japan's economic growth has been supported by manufacturing and workplace capabilities, however the workforce, and work styles and values, have become more diverse in this turbulent age of VUCA (Volatility, Uncertainty, Complexity and Ambiguity). It is fair to say that there is accordingly no silver bullet that will boost engagement

We are creating an environment in which people can work comfortably in terms of tangible aspects such as systems and measures, but recognizing diversity does not mean that it is acceptable for individuals to lose their sense of interconnection. Creating teams where people can share their psychological satisfaction and daily sense of achievement at having operated together safely in their workplace is the key to solving this challenge. I intend to leverage my experience and expertise to contribute to increasing engagement via such means as my comments at Board of Directors meetings.

Sayoko Miyairi Independent Outside Director



# Driving human capital management via three human resource strategies

VISION 2030 identifies human capital as a driver for growth. We are moving forward with human capital management by implementing various measures centered around three human resource strategies. Employees produce results as professionals by having a deep understanding of their expected roles and taking proactive actions for their own growth. By facilitating this, we aim to achieve sustainable growth for the entire KH Neochem Group.



# Expanding eligibility for the successor training project to strengthen the human resources pipeline to support growth

In order to realize VISION 2030 and achieve sustainable growth even after that, we must develop and recruit human resources with the ability to systematically manage the company from a long-term perspective. Since 2020, we have been holding personnel meetings with the aim of systematically training and deploying successors. These meetings are an initiative that plays a central role in our human resource management, where Human Resources and other divisions proactively consider their own human resource issues and place the right person in the right position based on merit. In the first fiscal year, we started by discussing deployments connected with division heads and other core positions. In order to facilitate the seamless acquisition of successors at all levels in the company, since 2022 we have continued to hold the meetings while expanding eligibility as far as potential next-generation leaders and executive candidates.

These meetings have now been held for a number of years, and as a result of their deliberations, the succession issues of each division have become clear. For high-priority positions in particular, we are steadily implementing initiatives such as the selection of human resources who meet the requirements, the formulation and implementation of training rotation plans, and the recruitment of human resources for them.

Although short-term measures have begun, full-scale discussions are scheduled to start in 2024 on the mid- to long-term development of successors and a



Takatoshi Fuiii Corporate Officer and Head of Human Resources

3 Creating workplaces where it is easy to work

 Promoting improved work-life balance Safe and healthy work initiatives

# Strengthening human resource strategies to increase corporate value

concrete human resource allocation plan. It is necessary to further expand initiatives to enhance future successors.

The early discovery and development of human resources is also essential to secure a pool of successors over the medium to long term. Since 2019, we have been actively conducting selective training such as university MBA programs and courses at GLOBIS Management School for successors who will play a vital role in the next generation of management. Graduates of this training program are flourishing in key positions within our company.

Furthermore, as part of our efforts to establish succession plans for management, outside directors have been interviewing division heads every year since 2021 so that we can select and nurture human resources capable of running operations objectively. In 2023, the theme discussed was thinking about management issues from the perspective of company-wide optimization, and we also expanded eligibility for the interviews to include senior managers, who will be the next generation of division heads.

Going forward, with these initiatives, in addition to fostering a culture that develops successors from the perspective of company-wide optimization, we will encourage a shift in mindset from choosing the most suitable person available at the time to developing the right person, and will promote more capable human resources in line with management strategy.

Data

Section

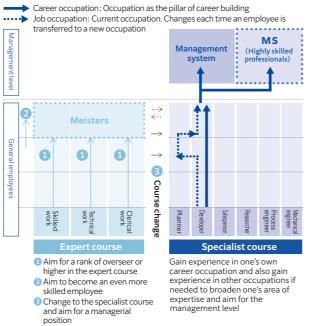
# Encouraging professional growth via the new personnel system

In order to foster professional human resources with a deep understanding of their roles who are committed to producing results, we launched a new personnel system in January 2023 based on the concept of rewarding those who take on challenges and work to achieve them. Under the new system, we have set up two courses for experts and specialists according to work style characteristics, and introduced a job-type personnel system for general employees in the specialist course, following on from that introduced for managerial positions. We are aiming to establish a merit-based system that employees can have confidence in via measures such as determining compensation based on duties and roles, and early selection of young personnel.

In addition, as we strengthen the company-wide system of promptly taking on new challenges with a high level of expertise, we have introduced the Meister<sup>\*1</sup> and MS (Master of Specialist)<sup>\*2</sup> systems in order to further intensify the spotlight on human resources with advanced skills and expertise.

By setting new career goals for human resources with advanced skills and expertise, we will realize the appropriate deployment of highly specialized human resources, boost the motivation of individual employees, and promote professional growth.

# Career overview



\*1 Possesses advanced skills and plays a central role in passing down skills to the next generation.

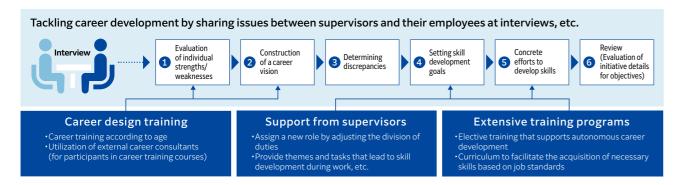
\*2 Provides and implements highly specialized solutions for achieving goals and solving issues that are totally new to us.

## Multi-faceted support for autonomous growth and career development

We are implementing a range of measures targeting general employees in order to instill a sense of personal responsibility for their own career and assist them to take on challenges and grow.

In 2022, we changed the training program from courses based on employment length to a system where employees can choose their own training according to their rank and occupation. In 2023, we expanded the training program according to occupational category and introduced career training according to age in response to the job-based personnel system introduced for general employees. As part of our career training, we are expanding the range of support available, such as by making it possible to consult with external career consultants for those who wish to do so.

Through career development support, employees share with their supervisors what kind of career they want to pursue and which skills and competencies they need to achieve that goal, and take the initiative in developing their own skills through extensive training programs, filling in any gaps in their skills or dealing with any challenges that may exist. This will facilitate the career development of each employee and the development of human resources who will play a central role in the company.



# Cultivating a culture that respects diverse values

# Promoting diversity and inclusion, and cultivating a corporate culture where everyone can flourish

We implement a variety of initiatives that enable diverse human resources to play an active role, regardless of factors such as nationality, age or gender. These initiatives include the development of a work-life balance support system that goes above and beyond legal requirements to support employees who are raising children, and we have expanded our childcare leave system to male employees based on the belief that encouraging men's participation in childcare will lead to greater participation by women throughout society. The ratio of male employees who took leave to raise children

#### Paternity leave ratio

	2022	2023
Leave ratio	90%	105%
Number of employees	19	21

\* Childcare leave includes childcare leave, childcare leave at birth, and paid leave for childcare purposes. The leave ratio exceeds 100% due to employees who had a child at the end of 2022 taking leave at the beginning of 2023.

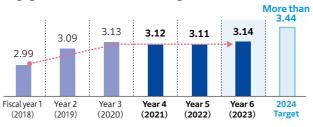
#### The Racti Club, an expanding network for female employees

The Racti Club, whose name comes from the Japanese words for carefree and active, was started as a voluntary activity by employees in order to expand the network of female employees. It provides opportunities for female employees to casually talk about their concerns, such as worries and future career plans, as well as opportunities for dialog with the female executives and managers who are their role models.

# Increasing engagement and promoting productive workplaces where employees work with enthusiasm

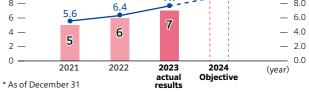
We prioritize increasing engagement in order to promote energetic employees and a productive organization. The company-wide engagement score for 2023 was 3.14, maintaining a steady level since 2020. If we break it down by workplace, headquarters and the R&D divisions are close to reaching the 2024 target, but results are sluggish in the plant divisions. We are promoting various measures for what we have identified as the most important issues. These include assistance in acquiring

#### Engagement score trends and target values



reached 90% in 2022 and exceeded 100% in 2023. Furthermore, we focus on actively training and recruiting women managers and candidates in order to encourage the participation and advancement of female employees, and as of the end of December 2023, 7.7% of managerial positions were filled by women, and this ratio is increasing. Moving forward, we will continue to develop systems that support flexible work styles for different life stages and strive to foster a corporate culture in which each and every employee recognizes each other's diverse values, and where everyone can play an active role.







First meetings: Between June and July. Self-introductions, etc. 21 participants Second meeting: October. Topic: careers. 12 participants

know-how related to motivating and empowering employees to boost engagement in the plant departments, and the holding of rank-based off-site meetings to improve our corporate culture. Via steps such as analyzing the correlation with stress checks and increasing opportunities for direct dialog between management and employees, we will gain a more detailed understanding of specific issues in each division, and plan and implement initiatives to resolve them.

# Engagement score by division

<ul> <li>Headquarters, R&amp;D divisions</li> </ul>		Plant divisions A	- Plant divisions B	
3.30	3.39	3.47	3.43	
3.11	3.05	2.97	2.99	
2.85	2.81	2.85	2.93	
2020	2021	2022	2023	(year)

# Maintenance and improvement of a comfortable workplace environment

# Promoting improved work-life balance via flexible work styles and a high ratio of employees taking annual leave

We introduced measures that demonstrate our respect for the work-life balance of all our employees, ensuring that diverse human resources can work autonomously and produce results. We have introduced systems that enable flexible and balanced work styles, such as the continued operation of flextime and telecommuting systems without core hours, and the establishment of a system at our plants that allows employees to set days where they will not work overtime.

We also regularly notify managers regarding the taking of paid leave and encourage discussion among members to promote systematic acquisition of leave. Thanks to this, the ratio of leave taken continues to exceed our target. In addition, we also provide labor management training for all managers to promote understanding of the system related to work style, and to provide management support. Going forward, we will continue to provide an environment where diverse human resources can demonstrate their talents.

#### Rate of taking of annual paid leave (April 1 to March 31, each fiscal year)



# Aiming to create a safe and secure working environment

First and foremost, we actively work to create a workplace environment where employees can work safely and securely. Based on our safety guideline "Protecting ourselves and our colleagues," we are boosting our employees' safety awareness via steps such as rolling out the company-wide Comprehensive Safety Check Initiative 2022, where individual employees take the initiative in identifying dangerous areas in the workplace, and promoting activities for improvement.

We also focus on mental healthcare and walking rallies in collaboration with industrial physicians and health insurance societies to ensure employees can continue to work in prime physical and mental condition.

In terms of the workplace environment, we relocated our headquarters in 2019, renovated the office of the Yokkaichi Plant's Kasumigaura Plant in 2022, and refurbished Research Building 1 at the Technology Development Center (Yokkaichi) in 2023. The Chiba Plant office is currently being renovated, with the work scheduled for completion at the beginning of 2025.



Enhanced security entry and exit gates



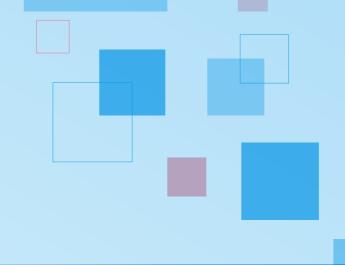
Office space in the renovated research building

# Refurbishing Research Building 1 to strengthen research capabilities and improve the workplace environment

We have installed security gates and refurbished office spaces with the aim of strengthening research capabilities, and improving the workplace environment in terms of controls and safety. We incorporated requests from employees such as to install elevators and expand the insufficient web conference spaces and chat areas, and as a result we have received feedback like "it's safer and easier to move around," and "people are communicating more frequently." I hope it will become a workplace where there are even livelier discussions and people freely exchange advice in interactions that go beyond research themes and transcend teams.



# **Improvement of Business Framework**







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Introduction

# **Corporate Governance**

# **Basic Stance on Corporate Governance**

In line with the KH Neochem's Corporate Mission of "Realizing a brighter tomorrow for society through the power of chemistry," we strive to achieve sustainable growth, improve our corporate value for the mid-to-long term and realize sound management with secured transparency and fairness. As such, we have established a corporate governance system which considers the following points and make ongoing efforts towards its enhancement.

• Endeavor to practically secure the rights and equality of our shareholders and maintain constructive dialogue with our shareholders. • Disclose accurate and straightforward financial and non-financial information beneficial for constructive dialogue with shareholders, etc. in a timely manner.

• Endeavor to appropriately collaborate with stakeholders other than shareholders.

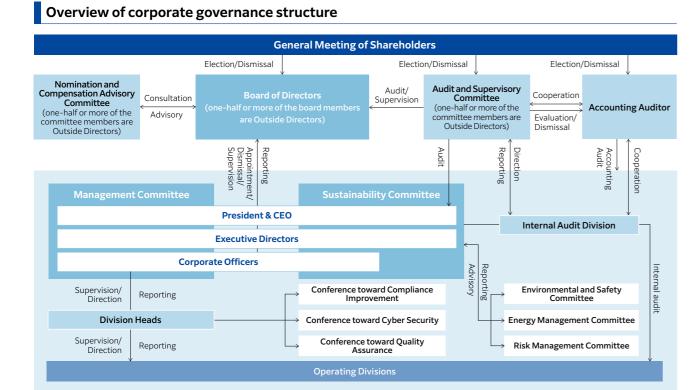
· Have a management team and Board of Directors whom demonstrate leadership which promotes fostering of a corporate culture that respects the rights, positions and business activity ethics of a variety of stakeholders.

• The Board of Directors shall, from an independent position, engage in effective supervision of the management team's execution of its duties and endeavor to create an environment which supports the risks taken by the management team and fulfill all associated responsibilities.



See here to view our Corporate Governance Report.

https://www.khneochem.co.jp/en/sustainability/governance/corporate-governance/



# Organizational Design

KH Neochem has transitioned to a company with an Audit and Supervisory Committee pursuant to a resolution of the 14th Ordinary General Meeting of Shareholders held on March 26, 2024. While the separation of management oversight and execution has been promoted to date, we intend to accelerate management decision-making and further enhance the supervisory function of the Board of Directors by electing to become a company with an Audit and Supervisory Committee, which will enable the delegation of a substantial portion of the Board of Directors' decision-making authority for business execution to the executive directors.

# **Board of Directors**

The Board of Directors exists to promote the sustained growth of the Company and the improvement of its corporate value over the medium and long term, to strive for proper structuring and management of a corporate control system, and to make decisions on matters set out in laws, regulations, and the Company's Articles of Incorporation and other critical management matters as the Company's key executive decision-making body in addition to serving as a supervisory body over the Directors' performance of duties. The Board of Directors, in principle, holds ordinary Board of Directors meetings on a monthly basis in addition to extraordinary Board of Directors meetings as needed, forming the Company's system for swift decision-making in management.

# **Evaluation of Effectiveness of the Board of Directors**

The effectiveness of the Board of Directors is evaluated once a year. The Board of Directors deliberate and consider specific improvements based on the results, and ongoing efforts are made to improve the functioning of the Board by implementing those measures.

# Issues in the 2022 Board of Directors effectiveness evaluation and initiatives in 2023

Issues Ident		
Issue 1	Strengthening monitoring with regard to investment projects above a certain amount	<ul> <li>Established compiled a</li> <li>Reported the</li> </ul>
Issue 2	Fostering deeper discussions of sustainability	Held discus     (Disclosure
Issue 3	Strengthening the supervisory function of the Board of Directors Training and identifying next-generation leaders, identifying talent, raising awareness	<ul> <li>Discussed s</li> <li>Transitioner</li> <li>Conducted heads and r</li> </ul>

## 2023 Board of Directors Effectiveness Evaluation

• Implementation period: December 2023 • Method of evaluation of effectiveness: survey (named/multiple choice/descriptive) • Target: 11 persons total\* (8 directors, 3 Audit & Supervisory Board members) \*At the time the survey was conducted.

The effectiveness of the Board of Directors has been recognized as being secured, as the role, composition, and operation, etc. of the Board of Directors have all received positive evaluations in the 2023 Board of Directors Effectiveness Evaluation. Additionally, the evaluation of each issue was confirmed to have improved significantly through the steady implementation of the 2023 initiatives (see above) to address the issues identified in the 2022 Board of Directors Effectiveness Evaluation.

Issues Ident		
Issue 1	Improve effectiveness of monitoring of critical investment projects, etc.	<ul> <li>Strengthen su investment po risks of high ir</li> </ul>
Issue 2	Set the agenda of the Board of Directors in line with the objectives of the transition to a company with an Audit and Supervisory Committee	<ul> <li>Systematicall sustainability Directors meet</li> </ul>
Issue 3	Review and enhance discussion of the process for formulating the next Medium-Term Business Plan	<ul> <li>Have repeate stages of deve</li> <li>Will share info as appropriat</li> </ul>

# Main agenda items for Board of Directors meetings in 2023

Management strategy	<ul> <li>Establishment of a Medium-Term Business Plan, annual management policy, and budget</li> <li>Critical investment projects and monitoring</li> </ul>
Sustainability	<ul> <li>Report of Sustainability Committee activities and discussion of issues</li> <li>Policy for human capital disclosure</li> </ul>
Corporate Governance and Risk Management	<ul> <li>Board of Directors Effectiveness Evaluation</li> <li>Discussions on strengthening the supervisory function of the Board of Directors and the operational execution system</li> <li>Consideration for achieving cost of capital and stock price conscious management</li> <li>Progress in addressing material risks</li> <li>Report on the status of Group compliance</li> <li>Activity report of the Nomination and Compensation Advisory Committee</li> </ul>

### Results of Efforts in 2023

d a monitoring mechanism by identifying critical investment projects, a list of related documents, and updated the list as appropriate the progress of critical investment projects to the Board of Directors, etc.

ssions based on Sustainability Committee activity report e of carbon-neutral and ESG-related information)

strengthening governance

ed to a company with an Audit and Supervisory Committee

d interviews and held discussions between outside directors and division next-generation leaders

supervision of progress against the plan by utilizing the list of critical projects prepared the previous year. Additionally, discuss issues and importance at Board of Directors meetings, etc.

ally set agendas for key issues (succession planning, y-related issues, business portfolios, etc.) and discuss them at Board of eetings

ed discussions among the Board of Directors members from the early velopment

formation on the process of internal discussions with outside directors ate and incorporate their opinions into the formulation of the plan

# Audit and Supervisory Committee

The Audit and Supervisory Committee consists of three directors that are Audit and Supervisory Committee members (two of whom are Independent Outside Directors; hereinafter collectively referred to as "Audit and Supervisory Committee members"). The Audit and Supervisory Committee, chaired by a full-time Audit and Supervisory Committee member, meets once a month in principle for the purpose of discussing and resolving important audit-related matters, and reports any important matters to the Board of Directors.

In addition to attending Board of Directors meetings and expressing necessary opinions, the Audit and Supervisory Committee, led by a full-time Audit and Supervisory Committee member, attends important meetings such as the Management Committee, regularly exchanges opinions with the representative director, and interviews CxO members, Corporate Officers, and other business executors to audit the status of directors' execution of duties. Furthermore, the Audit and Supervisory Committee strives to collect necessary information and improve the auditing environment through daily and flexible cooperation with the Internal Audit Division, communication with the accounting auditors, as well as by inspecting important documents.

### Key Audit and Supervisory Committee Items for 2024

- Governance and business execution in light of the transition to a company with an Audit and Supervisory Committee and the introduction of a CxO structure
- Effectiveness of internal control systems for risk management, compliance, etc.
- Status of measures for safe and stable operations
- $\bullet$  Process for formulating the 5th Medium-Term Business Plan, etc.

# A Message from Audit and Supervisory Committee Members: Aiming to Further Strengthen Supervisory Functions



**Isao Takahashi** Board Director Audit and Supervisory Committee Member

In March 2024, the Company transitioned to one with an Audit and Supervisory Committee. This is a move toward a monitoring-type governance structure, aimed at further strengthening supervisory functions to enhance corporate value. I am keenly aware of the responsibility placed on Audit and Supervisory Committee members to realize this objective. We will audit and supervise not only the appropriateness and fairness of management's execution of operations, but also whether decisions are being made and implemented in terms of measures and investments that will lead to an increase in corporate value. While systematically collaborating with the Internal Audit division, we hope to contribute to the enhancement of corporate value and sustainable growth through what we can do only as Audit and Supervisory Committee members.



Kazuhiro Kawai Independent Outside Director Audit and Supervisory Committee Member

A division that serves to perform checks is indispensable for the sustainable growth of a company. Unlike conventional auditing duties, the Audit and Supervisory Committee members use the Audit and Supervisory Committee as a base and work more closely than ever before with the Internal Audit Division to conduct systematic audits, and to audit (check) legality and validity. Teamwork is an important keyword in organizational auditing. We will cooperate with the members of the Audit and Supervisory Committee and the Internal Audit Division to conduct efficient and in-depth audits and contribute to the sustainable development of the Company. Accurate information is also essential for effective audits. To this end, we would like to actively exchange ideas with our employees as well.



Keiko Tamura Independent Outside Director Audit and Supervisory Committee Member

We believe that the Company will take on a variety of challenges for further growth and advancement. Even under such circumstances, safe and stable operations and compliance-oriented management in existing businesses are extremely important. I hope to perform my duties as a member of the Audit and Supervisory Committee by utilizing my experience as an attorney and as an outside director of other companies, where I have been involved in important decision-making and response to various situations. I will ensure that the Company is properly managed with an emphasis on safe and stable operations and compliance, which are the foundation of the Company.

# Nomination and Compensation Advisory Committee

With the aim of reinforcing the independence, objectivity and accountability of the Board of Directors functions related to nomination and compensation of Directors and Corporate Officers, the Company has established a voluntary Nomination and Compensation Advisory Committee as an advisory body to the Board of Directors. The Chair of the Committee is an Outside Director, and Outside Directors constitute a majority of the members. The Nomination and Compensation Advisory Committee formulates an annual plan and works on matters consulted by the Board of Directors, and reports to the Board of Directors. The chair of the Nomination and Compensation Advisory Committee is selected by the Nomination and Compensation Advisory Committee from among the outside directors.

#### Main agenda items and activities of the Nomination and Compensation Advisory Committee in 2023

- Interviews with division heads and next-generation leaders for succession and training plans for next-generation management executives, and group opinion exchange meetings
- Discussion and advice relating to executive staffing
- Discussion and advice relating to compensation for executives

# **Management Committee**

The Company has established a Management Committee to decide on important matters pertaining to the execution of duties delegated to the company by the Board of Directors, and to hold meetings at which to hold preliminary deliberations on matters for the Board of Directors to discuss. In principle, the Management Committee meets once a month and is attended by a director who is also a full-time Audit and Supervisory Committee member.

# Sustainability Committee

The Company has established a Sustainability Committee, chaired by the Chief Strategy Officer (CSO) and composed of executive directors and CxO members, as an advisory body to the Board of Directors. The committee discusses, provides advice on, and monitors sustainability-related matters selected at meetings of the Board of Directors or the Management Committee, or decided on by the CEO. The Chair may request an expert committee for reports as necessary.

# Message from the Chair of the Nomination and Compensation Advisory Committee

The first mission of the Nomination and Compensation Advisory Committee is to review the appropriateness of nominations of directors and corporate officers. Since it is difficult for outside directors who do not have daily contact with the executive division to select candidates, the key point is to verify the reasonableness of the executive division's explanations regarding the candidates from an investor's perspective. Since management responsibility is a responsibility for results, it is also an important responsibility to say NO to directors and corporate officers who fail to produce results.

The second is to verify the appropriateness of compensation for directors and corporate officers. It makes no sense to bargain away compensation if that means there is no profitability on the horizon. We are looking to see if this can be an incentive to get good results.

Lastly, we have the succession plan. Although this is a difficult task, we are examining the training system for the next generation of senior management and exchanging opinions with executives in an effort to understand their human resources.

The Nomination and Compensation Advisory Committee wishes to remain a constant "watchful eye" for the executive division.

# Yuji Kikuchi

Independent Outside Director The chair of the Nomination and Compensation Advisory Committee



# **Expert Committees and Conferences**

The Company has established expert committees and conferences as important governance bodies that complement and reinforce Company-wide decision-making. The expert committees, chaired by the CxO, examine and deliberate on specialized matters and provide analysis and reports necessary for decision-making. The conferences deliberate necessary matters to be decided exclusively by division heads and formulate and promote Company-wide measures and conduct awareness-raising and training. The expert committees are the Environmental and Safety Committee, the Energy Management Committee, and the Risk Management Committee. The conferences are the Conference toward Compliance Improvement, the Conference toward Cyber Security, and the Conference toward Quality Assurance.

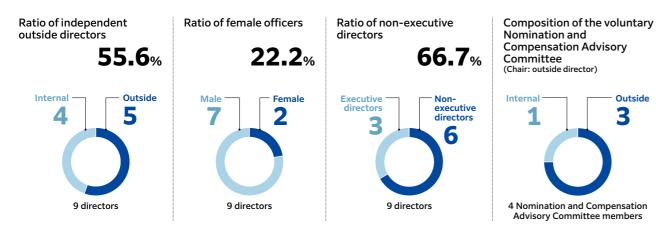
Introduction

# **Corporate Governance**

# Progress in Strengthening Corporate Governance

	2013	2015	2017	2019	2021	2023
Event Organization and Design		Tokyo S	on the First Sectio Stock Exchange any with an Audit & S			to the Tokyo Stock ge Prime Market Company with an Audit and Supervisory Committee
Separation of Execution and Management	2013 • Introduced Cor	porate Officer syst	em		execution autho	rporate Officers from hired to
Structure regarding nomination and compensation	<b>2014</b> • Establi	shed a voluntary C <b>2016</b> • Establi	shed a voluntary N 2018 • Termir	Nomination and Co nated the retiremer	compensation to mpensation Advis	aance-linked share-based o Corporate Officers as well ory Committee ed compensation system
Policy Initiatives to strengthen governance			Board of Direct 2018	ernance Report luation of effective ors lated VISION 2030 <b>2020</b>	Interna ness of the	d the Basic Policy for the Il Control System <b>2023</b> • Established the Sustainability Committee • Made alterations to expert committees and conferences
Board Director			ted one independ director 2017 • Added one inde	outside ependent outside d <b>2019</b>	dependent outsid	Outside Directors • Added two Independent Outside Directors (one of whom is a female)

## 2024 Overview



# Officer Training

Every year, we invite experts, lawyers, and other professionals to provide ongoing training opportunities for management.

We have conducted officer training by Professor Emeritus Kunio Ito of Hitotsubashi University every year since 2019. In 2023, he gave a lecture titled "Transforming KH Neochem" on human capital management, corporate culture reform, capital cost issues, business portfolio management, and other topics, followed by a vigorous exchange of opinions.



Officer training by Professor Emeritus Kunio Ito of Hitotsubashi University

# Support System for Outside Directors

To enable outside directors to exercise appropriate supervision from an independent standpoint, materials are distributed in advance regarding proposals to be put before the Board of Directors, and explanations are provided in advance by the secretariat and the division making the proposal. Additionally, important information related to management is shared via email or other means as appropriate. Furthermore, for newly appointed outside directors, we strive to deepen their understanding of our Group as much as possible by providing them with materials and information and arranging briefing sessions. We also provide regular visits to our plants and subsidiaries as opportunities for interaction and dialogue with employees on the front lines. From 2024, we have also begun to improve the quality of discussions at the Board of Directors meetings, for example, by sharing the internal review process of important matters discussed at the Management Committee and the contents of prior deliberations at the Board of Directors meetings.



Outside directors visit KH i-Lab for a tour and exchange of opinions

# Succession and Development Plans for the Next Generation of Management Executives

As part of our succession and development plan for the next-generation of management executives, we provide opportunities for all division heads to have interviews with outside directors on the Nomination and Compensation Advisory Committee.

In June 2023, division heads were divided into small groups to exchange opinions on Key Issues in Driving Sustainable Management, and in October of the same year, individual interviews were held with division heads to provide opportunities to discuss new measures to enhance corporate value. We actively communicate with outside directors who are members of the Nomination and Compensation Advisory Committee, leading to the development of succession and development plans for the next generation of management executives in the future.

# Efforts to Invigorate Discussions at Board of Directors Meetings and Demonstrate the Skills of Outside Directors

As part of our efforts to stimulate discussion at Board of Directors meetings, we have established informal discussion forums outside of Board of Directors meetings. Specifically, after setting themes based on the state of our governance, we held an off-site meeting that lasted about half a day, during which we engaged in frank and lively discussions on a variety of issues. Additionally, free discussions called "Round-Table Meetings" are held after Board of Directors meetings as necessary to provide an opportunity for free and vigorous discussions on topics related to the Board of Directors' proposals, etc., without being bound to draw conclusions.

Furthermore, to help outside directors demonstrate their skills, the Company holds training sessions in which outside directors serve as instructors. Previously, Director Tsuchiya has made a lecture on "Changes in Our Business Environment and Options and Challenges for the Future (December 2022), Director Miyairi has made a lecture on "Building a Corporate Culture and Safety Culture that Leverages Diversity (April 2023), and Director Kikuchi has made a lecture on "Recent Shareholder Proposals (August 2023). The directors exchanged views with participants after their lectures.



Director Miyairi giving a lecture

# Director Nomination Policy and Required Skills

The Company nominates candidates for Director from the perspective of putting the right person in the right place, and of finding an individual who is competent and can contribute to precise and rapid decision-making based on the skills, etc. required of a Director. After also taking into account diversity issues such as gender, the voluntary Nomination and Compensation Advisory Committee responds to inquiries from the Board of Directors by conducting a comprehensive consideration, and the Board of Directors decides the nomination.

In addition, we have selected seven skills that are expected to contribute to the management of the

## **Reasons for appointment of Outside Directors**

She appropriately fulfills such roles as providing opinions and recommendations on human resource training and Sayoko Miyairi improving employee engagement, particularly from her expert perspective in organization and human resource Outside Director development, in order to ensure that decision making is suitable and appropriate. In addition, as a member of the Nomination and Nomination and Compensation Advisory Committee, she attended all eight of its meetings held during the fiscal year Compensation Advisory under review, supervising the process for the selection of candidates and the determination of remuneration, etc. for Committee Member officers of the Company from an objective and neutral viewpoint. He appropriately fulfills such roles as providing opinions and recommendations concerning the Company's business, Jun Tsuchiya particularly in the areas of management and technology in order to ensure that decision making is suitable and Outside Director appropriate. In addition, as a member of the Nomination and Compensation Advisory Committee, he attended all Nomination and eight of its meetings held during the fiscal year under review, supervising the process for the selection of candidates Compensation Advisory and the determination of remuneration, etc. for officers of the Company from an objective and neutral viewpoint. Committee Membe He appropriately fulfills such roles as providing opinions and recommendations concerning risk management and Yuji Kikuchi strengthening corporate governance, particularly from his professional perspective as an attorney in order to ensure Outside Director that decision making is suitable and appropriate. In addition, as the chairperson of the Nomination and Nomination and Compensation Advisory Committee, he attended all eight of its meetings held during the fiscal year under review, **Compensation Advisory** leading the supervision of the process for the selection of candidates and the determination of remuneration, etc. for Committee Chairpersor officers of the Company from an objective and neutral viewpoint. Kazuhiro Kawai He possesses extensive experience in screening operations and management within financial institutions, along with Outside Director deep knowledge of accounting and internal controls. He has served as an auditor for the Company since March 2020, Audit and Supervisory and his wealth of experience as a business leader is expected to contribute significantly to the organization. Committee Member As a lawyer, she possesses extensive expertise in the fields of finance and corporate legal affairs. While she has not Keiko Tamura been directly involved in the Company's management outside of her role as an outside officer, her experience as an Outside Director auditor for the Company since March 2020, along with her extensive background as a lawyer, is expected to bring Audit and Supervisory valuable insights to the Company. Committee Member

# **Cross Shareholdings**

To improve corporate value, KH Neochem owns shares in companies considered important for maintaining medium- and long-term business connections and synergies that are based on an understanding of the importance of each other's management policies, business lines, and business dealings. Approximately 40% of investment shares on the balance sheet are unlisted shares, of these approximately 90% are shares in affiliated companies acquired through joint investments in key materials manufacturers and in management companies for joint industrial complexes. Thus, these holdings truly are business investments.

Company and created a skills matrix ( P72) to ensure

well-balanced composition that covers each item and

that the Board of Directors as a whole has a

ensures diversity of experience and expertise.

Criteria for Independence of

Independent Outside Directors

In selecting candidates for Independent Outside

the Tokyo Stock Exchange, KH Neochem places

Directors, in addition to the independence standards of

importance on abundant business experience and a high

level of expertise that enables candid and constructive

advice and supervision of the Company's management.

For shares in listed companies, the Board of Directors annually reviews the rationale for each shareholding, including appraisal losses and gains, compliance status, and business dealings with the Company. In 2023, we sold three types of stock, both listed and unlisted.

# Officer Compensation, etc.

# Policy on Determination of Directors' Compensation, etc.

The basic policy regarding the compensation for directors (excluding directors that are Audit and Supervisory Committee members and outside directors) are as follows:

## **Basic Policy on Executive Compensation**

- Director compensation is to serve as sufficient incentive for Directors to improve business performance and increase corporate value over the medium to long term.
- Director compensation is to give rise to competitive strengths that facilitate capacity to gain diverse and outstanding talent.
- Director compensation is to cause Directors to have common interests with shareholders and other stakeholders.

Based on the above basic policy, compensation, etc. consists of monetary compensation comprising fixed compensation and performance-linked compensation, as well as performance-linked share-based compensation involving a trust. Compensation, etc. is to be determined within a compensation range resolved at the General Meeting of Shareholders, and is set at appropriate levels enlisting third-party surveys on compensation of business managers in Japan.

Regarding compensation, etc. for individuals, for monetary compensation, the Board of Directors must seek the advice of the voluntary Nomination and Compensation Advisory Committee and the Representative Director, the President & Chief Executive Officer, and then receive the committee's report and reach a resolution that is the basis for delegating the decision to Representative Director, the President & Chief Executive Officer, who then determines monetary compensation. In pursuit of reasonable levels of compensation and transparency in performance evaluations, the Representative Director, the President & Chief Executive Officer must make decisions in line with the details discussed by the Nomination and Compensation Advisory Committee. Performance-linked share-based compensation is determined based on the "Rules for Delivery of Shares to Officers" set out by the Board of Directors in advance.

# Total amount of compensation by officer classification, total amount of compensation by category, and number of officers subject to compensation (2023)

Officer classification		Total amount of				
	Total amount of compensation	Monetary co	ompensation	Share-based compensation	Number of officers subject to	
	(million yen)	Fixed			compensation	
Directors (excluding outside directors)	194	119	50	24	5	
Audit & Supervisory Board members (excluding outside members)	21	21	-	-	1	
Outside Director	25	25	-	-	3	
Outside Audit & Supervisory Board members	14	14	-	-	2	

Compensation for outside directors and directors serving as Audit and Supervisory Committee members consists solely of fixed monthly monetary compensation.

# **Monetary Compensation**

Around 30% of all monetary compensation is performance linked, and it is calculated using the rate at which planned earnings are achieved and the average achievement rate over the past five years.

# Performance-linked, Share-based Compensation

Performance-linked, share-based compensation is calculated using the rate at which planned earnings are achieved on the condition that consolidated operating income is in the black. While putting more priority on performance, this compensation system clarifies the link with the stock price, providing directors with both benefit from increases in the stock price and the risk of decreases in the stock price with shareholders, thereby increasing awareness of contributing to improvement of medium-to long-term performance and increasing of corporate value.

# Performance-linked Compensation Indicators

The evaluation index used for performance-linked compensation (both monetary compensation and share-based compensation) is consolidated EBITDA,\* taking into account the characteristics of the Company's business and other factors. Because the Company owns a large number of facilities, it considers EBITDA, which includes depreciation and amortization in its calculations, to be a useful indicator.

\*EBITDA is calculated using the following formula: EBITDA = Operating income + depreciation + amortization of goodwill (the amount from the consolidated statement of income is used for operating income, while the amounts from the consolidated statement of cash flows are used for depreciation and amortization and amortization of goodwill).

# Conception of director compensation

Fixed Compensation	Performance-linked Compensation					
<b>60</b> % Monetary Compensation	25% Monetary Compensation 15% Share- based remuneration					
*The above diagram indicates a target for director compensation, which varies						

 In eabove diagram indicates a target for director compensation, which varies with each fiscal year. The proportion of performance-linked compensation increases with executive rank. Note that this excludes directors who are Audit and Supervisory Committee members and outside directors.

Section

Dri

# **Members of the Board**



# Michio Takahashi

dent & Chief Executive Officer Apr. 1987 Joined Kyowa Hakko Kogyo Co., Ltd.

July 2011 General Manager of Basic Chemical, Kyowa Hakko nical Co., Ltd. (now the Company) Mar. 2013 Director & Corporate Officer of the Company

Mar. 2016 Managing Director & Corporate Officer of the Mar. 2017 Executive Vice President & Corporate Officer of

Mar. 2019 Representative Director, President and Corporate Mar. 2020 Representative Director, President and Corpo Mar. 2020 Representative Director, President and Chief Executive Officer of the Company (to present)

# Tatsuro Niiya

Board Director Senior Corporate Officer Apr. 1988 Joined Kyowa Hakko Kogyo Co., Ltd. July 2013 General Manager of Chemical Sales & Marketing, Business Headquarters Office of the Company Jan. 2016 Executive Officer of the Company Mar. 2017 Director & Executive Officer of the Company Mar. 2019 Managing Director & Executive Officer of the Company Mar. 2020 Board Director & Senior Corporate Officer of the

Company (to present

# Masaya Hamamoto

Board Director Senior Corporate Officer Apr. 1985 Joined the Industrial Bank of Japan, Limited (now

Mizuho Bank, Ltd.) Apr. 2011 General Manager of Osaka Corporate Banking Division No. 1 of Mizuho Corporate Bank, Ltd. (now Mizuho Bank, Ltd.) Apr. 2014 Executive Officer and General Manager of Corporate Banking Division No. 5 of Mizuho Bank, Ltd. (retired in March 2015) Apr. 2015 Executive Officer of IBJ Leasing Company, Limited. (now Mizuho Leasing Company, Limited)

June 2015 Director, Executive Officer and General Manager of Corporate Planning Department of IBJ Leasing Company, Limited. Apr. 2016 Managing Director, Managing Executive Officer and General Manager of Corporate Planning Department of IBJ Leasing Company, Limited. (retired in May 2019) June 2019 Joined the company

Sept. 2019 Senior Corporate Officer of the Company Mar. 2020 Board Director & Senior Corporate Officer of the Company (to present)

## Sayoko Miyairi

ndent Outsi Apr. 1979 Joined Hitachi, Ltd. July 1982 Joined Bank of America, N.A., Asia Headquarters

- Mar. 1986 Joined Pasona Inc. and seconded and then transferred to Edu Consult Co., Ltd. (now Scholar Consult Co., Ltd.)
- Apr. 2000 Partner of Scholar Consult Co., ltd. (to present)
- Apr. 2000 Assistant Professor of Nihonbashi Gakkan University (now Kaichi International University)
- Jan. 2005 Director of Scholar Consult Co., ltd.
- Apr. 2008 Professor of Nihonbashi Gakkan University (now Kaichi International University)
- Mar. 2019 Outside Director of the Company (to present)

Aug. 2020 Outside Director of Toyo Engineering Corporation

Apr. 2022 Emerita and Guest Professor of Kaichi International

Jun. 2022 Outside Director of NIHON SEIKAN K.K. (to present)

# Isao Takahashi

Board Director Audit and Supervisory Committee Member

Apr. 1988 Joined Fujisawa Pharmaceutical Co., Ltd. (now llas Pharma Inc.)

Oct. 2012 General Manager of Corporate Planning Department Oct. 2012 General Manager of Operations Department of Astellas Business Service Company Limited Oct. 2014 General Manager of Operations Department of Astellas Business Service Company Limited Oct. 2017 Joined the Company

Oct. 2017 Joined the company Jan. 2019 General Manager of General Affairs Division of the

Jan. 2020 Corporate Officer. Officer in charge of Corporate Functions (HR, Legal, General Affairs, IT, and Compliance) and Head of Corporate Administration, Public Relations, Legal and Compliance of the Company

Apr. 2021 Corporate Officer and Head of Corporate Administration, Public Relations, Legal and Compliance of the Company Apr. 2023 Senior Corporate Officer and Head of Corporate

inistration, Public Relations, Legal and Compliance of the Company Mar. 2024 Board Director and Audit and Supervisory Committee

nher (to present)

Michio Takahashi	President and Chief Executive Officer	CEO
Toshihiro Matsuoka	Executive Corporate Officer	CTO (Chief Technology Officer)
Tatsuro Niiya	Senior Corporate Officer	CSO (Chief Strategy Officer)
Masaya Hamamoto	Senior Corporate Officer	CFO (Chief Financial Officer)
Yukihiro Isogai	Senior Corporate Officer	CMO (Chief Marketing Officer)
Toshiaki Ogata	Corporate Officer	Head of Production Planning and Engineering

	Board of Directors Members							Skill matrix					
	Titles	Number of years in office	Independency	Female	Board of Directors	Number of board meetings attended	Audit and Supervisory Committee	Nomination and Compensation Advisory Committee	Sustainability Committee	Corporate management	Industry insight	Manufacturing R&D Innovation	Finance/Accounting
Michio Takahashi	Representative Director	11			O Chairperson	16 of 16		0	0	•	•		•
Tatsuro Niiya	Board Director	7			0	16 of 16			O Chairperson	•	•		
Masaya Hamamoto	Board Director	4			0	16 of 16			0	•			•
Sayoko Miyairi	Outside Director	5	0	0	0	16 of 16		0		•			
Jun Tsuchiya	Outside Director	4	0		0	16 of 16		0		•	•	•	
Yuji Kikuchi	Outside Director	4	0		0	16 of 16		O Chairperson					
Isao Takahashi	Board Director	New			0	-	O Chairperson						
Kazuhiro Kawai	Outside Director	4*	0		0	16 of 16	0			•			•
Keiko Tamura	Outside Director	4*	0	0	0	16 of 16	0						

\*Includes years of service as a corporate auditor.

Apr. 2001 General Manager of Corporate Planning Office of Mitsubishi Chemical Industries Limited (retired in January 2002)

ical Japan Limited) Jan. 2007 Representative Director and President of Heraeus K.K.

., Ltd. (to present)

Jun Tsuchiya

# Mar. 2020 Outside Director of the Company (to present)

#### Kazuhiro Kawai endent Outside Director

Japan Management Systems, Inc.

Audit and Supervisory Committee Member



Apr. 1981 Joined Argonne National Laboratory, U.S.A. May 1983 Joined Lawrence Berkeley National Laboratory, U.S.A. Feb. 1984 Joined Mitsubishi Chemical Industries Limited (now Mitsubishi Chemical Corporation)

Jan. 1999 Seconded as President to Verbatim Corporation U.S.A. subsidiary of Mitsubishi Chemical Limited

Feb. 2002 Director of Rohm & Haas Japan K.K (now Dow

Oct. 2018 CEO of Tsuchiya International Consulting Corp. (to

June 2019 Outside Director of Soken Chemical & Engineering



Apr. 1983 Joined The Industrial Bank of Japan, Limited. (now

 Apr. 1983 Joined I he Industrial Bank of Japan, Limited. (now Mizuho Bank, Ltd.)
 Apr. 2009 General Manager of Credit Review Division of Mizuho Corporate Bank, Ltd. (now Mizuho Bank, Ltd.)
 Apr. 2012 Executive Officer, General Manager of Corporate Credit Division of Mizuho Corporate Bank, Ltd. (retired in April 2014) May 2014 Managing Executive Officer of Nippon Steel Kowa Real Estate Co., Ltd.

Jun. 2014 Managing Director of Nippon Steel Kowa Real Estate Co., Ltd.

Apr. 2018 Director of Nippon Steel Kowa Real Estate Co., Ltd. May 2018 Outside Corporate Auditor of Kiraboshi Bank, Ltd.

May 2019 Part-time Audit & Supervisory Board Member of

Mar. 2020 Outside Audit & Supervisory Board Member of the

Mar. 2024 Outside Director and Audit and Supervisory tee Member of the Company (to present)

Akio Nakahashi
ʻoshiaki Kondo



Independent Outside Directo

Apr. 1992 Registered as an attorney at law, Entered Sakano, Seo & Hashimoto Law Office (now Tokyo Hatchobori Law Office)

Apr. 2002 Partner of Tokyo Hatchobori Law Office Mar. 2003 Joined the Securities and Exchange Surveillance Commission (Coordination and Inspection Division, Executive

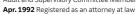
Mar. 2005 Returned to being a partner at Tokyo Hatchobori

June 2010 Outside Audit & Supervisory Board Member of Inui Warehouse Co., Ltd. (now Inui Global Logistics Co., Ltd.) June 2014 Outside Audit & Supervisory Board Member of NEC Networks & System Integration Corporation

Mar. 2020 Outside Director of the Company (to present)



Independent Outside Director Audit and Supervisory Committee Member



Joined Tokyo Yaesu Law Offices (now Asahi Law Offices)

Apr. 1998 Partner of Asahi Law Offices (to present) Jun. 2014 Outside Audit & Supervisory Board Member of The

Norinchukin Trust & Banking Co., Ltd. (to present) Jun. 2016 Outside Director (Audit and Supervisory Committee

Member) of ODELIC CO., LTD. Mar. 2020 Outside Audit & Supervisory Board Member of the

Mar. 2024 Outside Director and Audit and Supervisory Committee member of the Company (to present)

Akio Nakahashi	Corporate Officer	General Manager, Chiba Plant
Yoshiaki Kondo	Corporate Officer	Head of Environment, Safety and Quality Assurance
Hideki Shimizu	Corporate Officer	Head of Procurement
Akira Kamimura	Corporate Officer	Head of Accounting, FP&A, Finance and IR
Atsushi Tokumitsu	Corporate Officer	President of Kurogane Kasei Co., Ltd.
Katsunori Sato	Corporate Officer	Head of Sales & Marketing
Hideo Kurokawa	Corporate Officer	General Manager, Yokkaichi Plant
Takatoshi Fujii	Corporate Officer	Head of Human Resources
Toshiaki Fujima	Corporate Officer	Head of Corporate Planning

## Governance Human Resource Sales Marketing Compliance Risk Manageme Development Diversity • • • • • • • • • • •



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# **Risk Management**

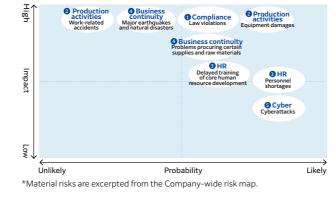
# **Risk Management Activities and System**

KH Neochem defines risk as the uncertainties that affect management and business activities. To achieve sustainable growth, we identify risks to the greatest extent possible, prevent latent risks from materializing, and manage active risks with organizational, strategic, and continuous controls. To promote effective risk management, a Risk Management Committee has been established, chaired by the CFO, who is responsible for overall risk management, with all division heads as members. In principle, this committee meets twice a year and reports its discussions to the Sustainability Committee as well as to the Board of Directors on important matters.

# Risk Evaluation Process and Material Risk Selection

In our risk evaluation process, we identify both internal and external risks in light of social and environmental circumstances, and produce a risk map for the entire company that evaluates their impact and probability of occurrence. Among the identified risks, those with a particularly high impact on our management and business activities, and which require Company-wide measures, are designated as material risks. A risk owner is assigned for each material risk, along with a supervising division and relevant divisions responsible for formulating and implementing countermeasure plans, ensuring proactive efforts to mitigate these risks. Additionally, the Risk Management Committee reviews the assessment of materials risks and reports on the progress of countermeasures, while conducting discussions among its members.

# Positioning of Material Risks on the Risk Map



# Material Risks and their Countermeasures

Category	Examples	Countermeasures
1 Compliance	Law violations, legal restraints	<ul> <li>Establishment of a compliance code &amp; education of all executives and employees</li> <li>Legal compliance status checks and other verifications of relevant regulations</li> </ul>
Production activities	Damage/malfunction of facilities/machinery, work-related accidents	<ul> <li>Development of maintenance plans according to equipment importance</li> <li>Implementation of Comprehensive Safety Check Initiative 2022 (▶P47)</li> </ul>
3 HR	Personnel shortages, delayed training of core human resources	<ul> <li>Reinforcement of hiring activities and systems, holding personnel meetings</li> <li>Formulation of skill enhancement programs and training systems for core human resources</li> </ul>
<sup>4</sup> Business continuity	Major earthquakes and natural disasters Problems procuring certain supplies and raw materials	<ul> <li>Formulation of a business continuity plan (BCP) and conduction of regular exercises</li> <li>Identification of supply risks for critical raw and auxiliary materials, facilities, and supplies; and formulation of risk countermeasures</li> </ul>
S Cyber Security	Cyberattacks	<ul> <li>Strengthen residual risk reduction based on external security assessments</li> <li>Technical and operational measures and updates, and education for all executives and employees</li> </ul>
<b>6</b> Climate change	Abnormal weather, imposition of carbon tax	(See page on the right.)

# **Business Continuity Management (BCM)**

The Company manufactures and supplies essential products for production activities across a wide range of industries and to provide richer lives for people. For that reason, we believe that we have an important responsibility to maintain and continue our business activities and achieve an early recovery in the event of a large-scale disaster. To this end, we have established a business continuity plan (BCP) at our Headquarters and each plant. Additionally, we conduct annual drills to verify the effectiveness of our BCP. In 2023, we conducted our first role-playing drill, simulating a major earthquake directly beneath the Tokyo metropolitan area, affecting both our Headquarters and Chiba Plant simultaneously, and are advancing discussions and countermeasures based on the challenges identified.

Moving forward, we will continue to enhance the effectiveness of our business continuity management (BCM) through BCP training and other initiatives.



Role-playing BCP training

# **Climate-Related Disclosures Based on TCFD Recommendations**

The business environment surrounding KH Neochem is growing increasingly uncertain as cases of heat stroke and natural disasters rise due to climate change, and voices calling for decarbonization and carbon neutrality grow louder and more numerous. In January 2022, we declared our endorsement of the Task Force on Climate-Related Financial Disclosures (TCFD) Recommendations and have disclosed climate-related information ever since.

# **Governance and Risk Management**

We identify material risks according to the risk evaluation process as shown previously. The risks arising from climate change have been identified as material risks to our business due to the significant impact they are expected to have on KH Neochem in the future. In addition, we are taking measures to prevent risks from materializing and reduce their impact by continuously conducting risk assessments based on our risk management system and monitoring them at board meetings when necessary.

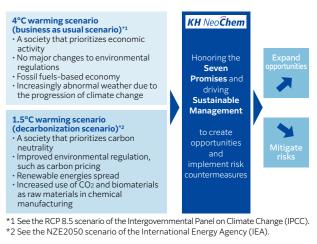
## KH Neochem's climate change-related risks and opportunities

Category		Risks/Opportunities	Key Countermeasures		
Physical risks (4 °C warming scenario)	Impact on operations due to abnormal weather	There is a risk of an increasing impact on operations from increasingly frequent abnormal weather events resulting from climate change, such as high tides, heavy rain, floods, and typhoons.	<ul> <li>Conducting drills to increase understanding and improve effectiveness of BCM/BCPs</li> <li>P73</li> </ul>		
	Introduction of carbon pricing	There is a risk of an increasing financial burden from the introduction of carbon taxes and other carbon pricing. Assuming CO <sub>2</sub> emissions on the same level as 2023 (approx. 378 kt) and a carbon tax of 130 USD/1t-CO <sub>2</sub> in 2030 (1 USD = 140 yen), the financial burden could increase by 6.88 bn yen per year.	<ul> <li>Promoting energy-saving and the introduction of new technologies to achieve carbon neutrality by 2050</li> <li>Achieving the target of reducing greenhouse gas emissions by 30% by 2030 (compared to 2017)</li> <li>P11, 28, and 80</li> <li>Using CO2 as raw material for products</li> <li>P17</li> <li>Introduction of internal carbon pricing (10,000 yen/t-CO2)</li> <li>Introduction of renewable energy electricity</li> <li>P80</li> </ul>		
Transition risks (1.5 °C warming scenario)	Problems procuring certain raw materials	There is a risk to the procurement of raw materials from oil refineries as oil refiners reduce the number of refineries in response to decarbonization trends.	• Promoting purchasing from multiple suppliers		
	Impact of switching to raw materials obtained from biomass	There is a risk of quality problems and increased procurement costs due to switching from oil-based to biomass-based raw materials.	<ul> <li>Maintaining and improving quality assurance</li> <li>P77</li> </ul>		
	Delayed response to ESG investment	There is a risk of divestments and falling share prices due to increasing criticism received for using large quantities of fossil fuels.	<ul> <li>Promoting energy-saving and the introduction of new technologies to achieve carbon neutrality by 2050</li> <li>Achieving the target of reducing greenhouse gas emissions by 30% by 2030 (compared to 2017)</li> </ul>		
Opportunities (4 °C warming scenario)	Increased need for adaptive products	There is a possibility that the increasingly negative effects of climate change will cause rising demand for products that can mitigate those effects (such as heat stroke) and help people adapt to climate change.	<ul> <li>Supplying more refrigeration lubricant raw materials, which are indispensable for heat stroke-preventing air conditioners</li> <li>P23</li> </ul>		
Opportunities (1.5 °C warming scenario)	Increased need for decarbonizing products	As people become increasingly environmentally conscious, there is a possibility of rising demand for products with a smaller carbon footprint.	<ul> <li>As the transition toward environmentally friendly air conditioners accelerates across the world, expanding the provision of refrigeration lubricant raw materials compatible with the refrigerants used in such air conditioners</li> <li>▶P23</li> <li>Using CO<sub>2</sub> as raw material for products</li> </ul>		

\*We have listed items that have a significant risk or opportunity impact on the Company.

# Strategy

We identify risks and opportunities related to climate change and analyzes scenarios based on warming of 4°C and 1.5°C, respectively, to assess the impact of future risks and opportunities heading toward 2030. By engaging in the Seven Promises and driving Sustainable Management, we seek to expand the climate change-related opportunities while mitigating the risks, thereby increasing our corporate value.



Section

# Compliance

# **Compliance** Code

The KH Neochem Group believes that compliance not only involves complying with the law, but also upholding high ethical standards as a member of society, and meeting the demands and expectations of all stakeholders. In order to clarify this stance, we have formulated our Compliance Code, the Principles of Corporate Behavior common across the KH Neochem Group. Each and every member of the Group is expected to faithfully put the Compliance Code into practice by continuously asking themselves, "is my conduct correct?" and "can I speak about this with pride to others?" as they act.

The Compliance Code is available on our website https://www.khneochem.co.jp/en/company/philosophy/ principles/compliance.html

# **Compliance Structure**

The Board of Directors appoints a director responsible for overseeing compliance Senior Compliance Officer, and under the director's supervision, a manager responsible for compliance improvement Compliance Officer is designated. The Compliance Officer convenes the Conference toward Compliance Improvement , where progress and results of initiatives are reviewed, current challenges are discussed, and plans for further initiatives are decided. These efforts are put in a cycle to continuously strengthen our compliance structure. Serious compliance-related issues and the status of activities are reported to the Board of Directors as needed and are also shared with the Audit and Supervisory Committee.

#### **Compliance structure chart**

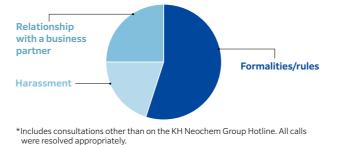


# KH Neochem Group Hotline Internal Whistleblowing / Advice Hotline

We have established the "KH Neochem Group Hotline" as a whistleblowing and consulting channel for people to report corruption, bribery, and other legal violations, improper or illegal conduct, and other breaches or suspected breaches of compliance. We provide the Compliance Hotline, Senior Compliance Officer Hotline, Audit and Supervisory Committee Member Hotline, inside the Company, and the Attorney Hotline outside the Company. All Hotlines provide services appropriately, maintaining strict confidentiality, and preserving the anonymity and privacy of whistleblowers and callers. In 2023, we expanded the scope of users to include not only our Company but also our Group's customers and business partners. The contact details for the hotline are published on the Company's and our Group companies' websites.

In 2023, the KH Neochem Group Hotline received 12 calls, none of which concerned any matter serious enough to require public disclosure.

### Number of Compliance Consultations and Reports (2023)



**Corruption/Bribery Prevention Efforts** 

Our Bribery Prevention Policy mandates adherence to all laws relating to the prevention of corruption, bribery, and so forth. All gifts and hospitality, whether offered or received, are subject to a process that requires prior application and approval by the Compliance Officer. In 2023, there were no actions suspected of being corruption, bribery, etc.

# **Compliance Improvement Activities**

# **Disseminating Compliance Messaging**

All of our officers, including outside directors and corporate officers, send out compliance-related messages to all employees. Each officer conveys the importance of compliance in a clear and easy-to-understand manner using their own words.

# Activities of the Conference toward Compliance Improvement

The Conference toward Compliance Improvement, comprising all division heads and representatives from Group companies, is held twice a year. In 2023, at the suggestion of conference members, discussions focused on diversity, and role-playing exercises were conducted where members identified issues from actual harassment cases and explored solutions. These efforts aim to improve problem-solving capabilities at both the Company-wide and division levels, while practical discussions lead to the development of effective measures.

## **Distribution of the Compliance Book**

We have created and distributed a Compliance Book that clearly explains the Compliance Code to all executives and employees of the Group. This book is designed to ensure that all executives and employees strictly adhere to laws and social norms. It includes explanations of key points of the Compliance Code and interviews with employees responsible for related tasks. The content within the book is regularly reviewed and updated to reflect changes in laws and societal conditions.



#### Main compliance improvement activities

Conference toward Compliance Impro Legal Compliance Week (once a year) Conduct compliance workshops at all Compliance awareness surveys (appro			
Compliance education and training sess • Conduct training on personal informat regulations, harassment, etc. • Other training programs for new emplo			
Posting of information on the KH Neoch			

# **Compliance Awareness Surveys**

To assess the workplace environment and awareness regarding compliance, we conduct an annual survey targeting all executives and employees. Key issues identified through the survey are reported to the Board of Directors and other relevant parties, and countermeasures are implemented by each division.

# **Compliance Leader Activities**

We are selecting compliance leaders in order to increase the number of members who understand compliance better, are capable of resolving compliance issues, have a sense of personal involvement, and nip potential problems in the bud. Approximately every two months, we hold a Compliance Leaders' Meeting, where training is provided to enhance awareness and knowledge. Opportunities are also provided to facilitate discussion among compliance leaders to foster inter-division communication and build bonds that enable reciprocal consultation. The knowledge gained is then translated into concrete initiatives, which are implemented in each workplace. In 2023, workshops themed on respect for human rights (>P83) were conducted in all workplaces, with compliance leaders serving as facilitators, actively promoting compliance within the workplace.



A Compliance Leaders' Meeting in progress

vement (twice a year)

workplaces (approximately once a year) oximately once a year)

ssions at all sites (7 times a year) ation, industrial safety and health, anti-monopoly law, insider trading

ployees, career hires, new managers, etc.

hem Group Hotline on the intranet and posters to ensure awareness

# Security, Safety, and Environmental Conservation Activities

# **Environmental Safety Policy**

KH Neochem believes that the thorough implementation of security, safety, and environmental conservation - in our business activities and based on our Compliance Code - is critical not only for the sustainable improvement of our corporate value but also for us to fulfill our social responsibilities. We have therefore established our Environmental Safety Policy to ensure security, safety, and environmental conservation.

Following the organizational and operational system review as of March 26, 2024, the Board of Directors appointed the Environmental Safety Officer, who holds full responsibility and authority over environmental safety operations. The Environmental Safety Officer has declared their commitment to ensuring compliance with this policy.

# Responsible Care (RC)

We engage in the following responsible care (RC) in good faith to comply with Environmental Security Policy.

## **1**Maintaining and improving a safe workplace

We will endeavor to maintain and improve a safe workplace by ensuring the attainment of behavior goals and compliance matters that we have established in order to put "Safety Guidelines: Protecting ourselves and our colleagues" into practice.

2 Maintaining and improving safe and stable operations We are constantly aware of sources of danger, eliminate any risk, maintain safe and stable operations, as well as striving for further improvement and aiming for no accidents and no incidents, to thereby strive to ensure the safety, comfort and health of the local community and all executives and employees.

Contributing to society and environmental conservation We strive to realize a sustainable society and environment through corporate activities, gather updated safety information regarding the chemical substances and products to be handled, and provide customers, distribution-related parties and all executives and employees with appropriate information, thereby striving to reduce the security, safety and environmental burdens in the entire process from product development through to the disposal thereof.

## **4**Contributing to the local community

Through dialogue and communication activities with the local community regarding security, safety, environmental conservation and health, we cooperate with the local community and thereby contribute to its development.

# **Management System**

The Company designates the Environmental Safety Officer appointed by the Board of Directors, as the highest responsible officer for the execution of environmental safety operations. The Environmental Safety Officer holds full responsibility and authority in this area and oversees the execution of security and environmental management operations across the Company, as well as the inspections conducted by the Headquarters. Furthermore, as the Environmental and Safety Committee and the Incident

Investigation Committee (Headquarters), the officer is responsible for convening and managing these committees.

Among the matters deliberated by the Environmental and Safety Committee, those requiring approval are resolved by the Management Committee or the Board of Directors in accordance with the approval regulations. The fiscal year's priority measures that are approved are communicated to each division, and their progress is regularly monitored through environmental safety inspections conducted by the Environment, Safety and Quality Assurance Division.

# Status of Certification Acquisition

The Yokkaichi Plant and the Chiba Plant have acquired certifications for quality management systems (ISO 9001) and environmental management systems (ISO 14001). These plants are maintaining their certification and promoting RC activities in line with those systems.

Plant	Certificat	tion ac	quired	Current certification body
Yokkaichi Plant Chiba Plant	ISO9001	Jan.	1999	
	ISO14001	Jul.	2000	Japan Chemical Quality
	ISO9001	Dec.	1998	Assurance Ltd.
	ISO14001	Nov.	2000	

\*100% of manufacturing sites have acquired certifications.

# Inspections and Audits

# Environment safety inspections and quality audits

To confirm the progress of the fiscal year's priority measures in RC activities and ensure the proper implementation of safety and environmental management activities, the Head of the Environment, Safety and Quality Assurance, under the instructions of the Environmental Safety Officer, organizes an inspection team to conduct environmental safety inspections at specific business sites.

Similarly, to verify the progress of the fiscal year's priority measures in quality management activities and ensure the proper execution of quality management activities, the Head of the Environment, Safety and Quality Assurance, under the instructions of the Quality Assurance Officer, organizes and audit team to conduct quality audits in the divisions responsible for quality management activities.

# Plant audits

The Yokkaichi Plant and the Chiba Plant conduct internal audits for ISO 9001 and ISO 14001 as well as for accreditation as high-pressure gas inspection executors (completion inspection and safety inspection) based on safety management systems.

In addition, they also undergo external audits based on ISO 9001 and ISO 14001 (maintenance and renewal audits), through which they maintain their certifications.

# 2023 Priority Measures (Numerical Targets) and Results, Together with 2024 Priority Measures (Numerical Targets)

				O: Achieved ×: Unachieved	
RC code			2024		
RC code	Objective	Actual results	Evaluation	Objective	
Environmental Conservation	·Environmental accidents: 0	·Environmental accidents: 0	0	·Environmental accidents: 0	
Safety and Disaster Prevention	·Safety-related accidents: 0	· Safety-related accidents: 11	×	• Major safety-related accidents*1: 0 • Safety-related accidents*2: 6 or fewer	
Occupational	<ul> <li>Accidents resulting in lost workdays: 0</li> </ul>	· Accidents resulting in lost workdays: 0	0	• Major accidents resulting in lost	
Occupational Safety and Health	• Work-related accidents: 9 or fewer	• Work-related accidents: 10 (1 employee accident not resulting in lost workdays, 9 accidents at cooperating companies not resulting in lost workdays)	×	workdays*3: 0 • Work-related accidents: 10 or fewer*2	

Scope of aggregation: Yokkaichi Plant, Chiba Plant \*1 Safety accidents with 9 points or more in the "Intensity Criteria for Abnormal Phenomena (Accidents)" of the Japan Petrochemical Industry Association (JPCA) \*2 At or below the average of the latest five years \*3 Work-related accidents resulting in more than four lost workdays (Note)Action plans related to industrial safety and data related to Responsible Care at our plants can be seen from our website

(https://www.khneochem.co.jp/en/sustainability/envi

# Safety and Disaster Prevention

# **Safety and Disaster Prevention Initiatives**

In accordance with the Environmental Safety Regulations, the Yokkaichi Plant and Chiba Plant have formulated their safety management policies. They are actively engaged in efforts to ensure that all employees are aware of the policies and carrying out safety and prevention activities based on the policies.

# Safety Environmental Assessment (SEA)

At KH Neochem, we conduct a safety environmental assessment (SEA) in advance to assess the impact on security, safety, environmental conservation, and health impact when introducing new technology, new processes, new facilities, new machinery, and new chemical substances, or changing a manufacturing method, etc. By using the SEA results for feedback, we make every effort to heighten the safety of processes and equipment.

# Accreditation as high pressure gas inspection executors (for both completion inspection and safety inspection)

This system, instituted by the High Pressure Gas Safety Act, enables companies that are recognized to have high standards for safety management, operations management, and equipment management, to conduct their own completion inspections and safety inspections in accordance with the High Pressure Gas Safety Act.

The Yokkaichi Plant has acquired this accreditation for six manufacturing facilities and the Chiba Plant has acquired it for one manufacturing facility. Both plants take steps for continuing improvement by implementing the PDCA cycle.

In response to the new certification system under the High Pressure Gas Safety Act that went into effect on December 21, 2023, the Yokkaichi Plant is working to obtain certification as an Accredited Advanced Safety Inspectors in 2024 and the Chiba Plant in 2025.

# **Emergency Training**

KH Neochem conducts periodic comprehensive disaster prevention drill for emergency scenarios, as well as training in initial firefighting response and emergency reporting. We prepare so that we can respond promptly and appropriately in the event of an emergency.



Scene from the comprehensive disaster prevention drill at the Yokkaichi Plant's Kasumigaura Plant



Scene from the same comprehensive disaster prevention drill

# **Occupational Safety and Health**

# Occupational safety and health-related initiatives

KH Neochem conducts education based on the Industrial Safety and Health Act in order to assure the safety of employees and others working at our plants. In addition, we also take preventive actions against disasters, such as risk assessments<sup>\*1</sup>, risk prediction activities using hiyari hatto (close call recognition) and kigakari memo (notes on matters of concern), improvement suggestion programs, and other everyday health and safety activities.

Chemical risk assessments<sup>\*2</sup> are conducted in accordance with the Industrial Safety and Health Act. For projects defined under the regulations as high risk, if any of these assessments reveal a risk, measures to manage the risk are decided through discussions between workers and management at Health and Safety Committee meetings.

Additionally, following revisions to the Industrial Safety and Health Act to establish new chemical substance management based on autonomous control, we are implementing improvements, such as appointing trained chemical substance managers and enhancing risk assessment methods for chemical substances.

- \*1 Risk assessment: This refers to a series of techniques for identifying the risks and hazards in work, determining the seriousness and likelihood of work-related accidents arising from them, combining that information to estimate the risks, deciding on a priority for countermeasures based on the magnitude of those risks, studying measures to eliminate or reduce the risks, and keeping a record of the results.
  \*2 Chemical risk assessment: This refers to the identification of the risks and hazards
- 2 Chemical risk assessment: I his refers to the identification of the risks and hazards of chemical substances and products, estimation of the likelihood of risk to workers or damage to their health, and studying measures to reduce the risks.

## Status of work-related accidents

The Company is engaged in the Comprehensive Safety Check Initiative 2022 to prevent the recurrence of the fall accident that occurred in 2022. Along with direct countermeasures against falls, a comprehensive work safety check is being conducted of all operations that could be implicated in serious work-related accidents and implementing countermeasures. Furthermore, we are conducting safety education and dialogue activities to foster a culture and habit of always prioritizing safety. As a result of these initiatives, in 2023, there were zero accidents resulting in lost workdays among employees and one accidents not resulting in lost workdays. However, since nine accidents not resulting in lost workdays occurred among cooperating companies, we have set the goal of strengthening guidance for cooperating companies as a priority measures for 2024.

# Promoting compliance using legal checklists

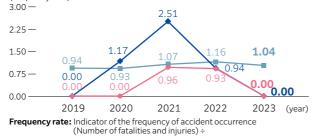
We prepare legal checklists for each relevant law to ensure there are no compliance violations concerning security, safety, and environmental conservation, and each operating facility uses these checklists to perform self-assessments. The results of the self-assessments are used by the Head Office in environment safety inspections to make our legal assessments more comprehensive.

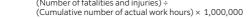
#### Number of work-related accidents

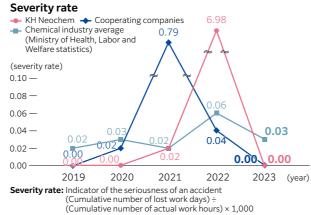


### Frequency rate (accidents resulting in lost workdays)

KH Neochem Cooperating companies
 Chemical industry average (Ministry of Health, Labor and Welfare statistics) (frequency rate)







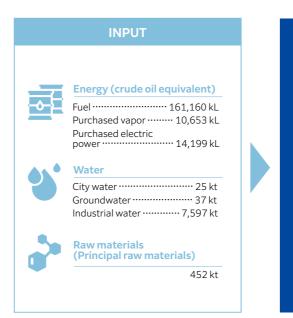
\*1 Scope of aggregation of the graphs of the frequency rate (accidents resulting in lost workdays) and the severity rate: Yokkaichi Plant and Chiba Plant.
\*2 As the employee of a cooperating company involved in an occupational accident in 2021 did not return to work before December 31, 2022, the lost workdays were included in the 2023 data, and the severity data (cooperating company) for 2021 has been updated to reflect this.

# Managing chemicals with safety data sheets

In an effort to ensure that all of our products are used safely, we prepare and update safety data sheets (SDSs) in accordance with JIS standards and relevant law amendments, and provide them to customers. We also prepare, update, and provide SDSs in customers' native languages in line with our business activities in order to accommodate the international GHS guidelines.\* \*GHS stands for the Globally Harmonized System of Classification and Labelling of Chemicals.

# **Environmental Conservation**

# Flow of environmental impact results



Scope of aggregation: Yokkaichi Plant and Chiba Plant Period covered: April 1, 2023, to March 31, 2024

#### **Global warming prevention**

As a designated business operator under the Act on the Rational Use of Energy<sup>\*1</sup>, KH Neochem makes every effort to promote rational uses of energy. As a specified emitter under the Act on Promotion of Global Warming Countermeasures<sup>\*2</sup>, we are also working diligently to reduce greenhouse gas (GHG) emissions. Energy consumption and GHG emissions<sup>\*3\*4</sup> in FY2023 remained almost flat at 99.1% and 99.8%, respectively, from the previous year. The energy intensity improved to 98.4% of the previous year's level.

In addition to adopting renewable energy at KH i-Lab, the Head Office has already effectively switched to 100% renewable energy as of April 2023. In 2023, we have also decided to install a CO<sub>2</sub>-capture system that will capture CO<sub>2</sub> emitted in the manufacturing process at the Chiba Plant and reuse it as a raw material, which is scheduled for completion in January 2025. We will continue further with energy conservation promotion, CAPEX, and considering the introduction of new technologies as we aim to reduce GHG emissions by 30% by 2030 (compared to fiscal 2017 levels) and achieve carbon neutrality by 2050.

\*All environmental performance data can be seen on p.28 and on our website. (https://www.khneochem.co.jp/en/sustainability/environment/data/).

n		OUTPUT
	<u>ة</u> ج	Product
		408 kt
		Released into the atmosphere
		CO2 378,391 t
		SOx 0.5 t
		NOx 279.3 t
		Dust 7.0 t
		Released into the water
<u>í</u>		Total amount released ···· 6,485 kt
		COD 23.2 t
		T-N 10.6 t
		T-P 2.1 t
		Waste material
		Amount discharged ······· 8,613 t
		Amount as final landfill 106 t

# Air pollution prevention

**KH** Neoc

Yokkaid

Chiba

For the sulfur oxides (SOx), nitrogen oxides (NOx), and dust discharged from boilers, liquid waste incinerators, sludge incinerators, and other such equipment, KH Neochem of course complies with emissions standards based on the Air Pollution Control Act, and we additionally comply with levels that have been agreed upon with local communities.

# Water pollution prevention

KH Neochem complies with emissions levels based on the Water Pollution Prevention Act as well as with levels agreed upon with local communities for chemical oxygen demand (COD), total nitrogen (T-N), and total phosphorus (T-P) in wastewater.

# Waste reduction

KH Neochem implements thoroughgoing separation of waste materials and engages in the 3Rs of waste management: reduce, reuse, and recycle. We are moving forward to reuse acid waste and alkaline waste in our plants as well as to reduce their volume, to contract recycling treatment of waste catalysts, and to reuse incinerator waste as aggregate. We are working to reduce the "amount as final landfill" to keep it at 1% or less of the amount of waste generated, as is the target for 2024 in the 4th Medium-Term Business Plan. hen and Now

<sup>\*1</sup> Act on the Rational Use of Energy: the law covering the rational usage of energy \*2 Act on Promotion of Global Warming Countermeasures: the law covering the promotion of initiatives taken the measure against global warming \*3 Figures reported based on the Act on the Rational Use of Energy

<sup>\*4</sup> Starting in FY2021, we have been deducting the amount of CO2 that was generated in our production processes, captured, and used as raw materials from our GHG emissions. We have confirmed this with the government's office for reporting GHG emissions.

# **Stakeholder Relations**

# Major Stakeholder Engagement

KH Neochem has pledged to practice transparent management with a high ethical standard. We strive to communicate with our stakeholders through various opportunities and are committed to embodying their valuable opinions in our corporate activities.



Information on our relationships with our stakeholders is posted on our website.

https://www.khneochem.co.jp/en/sustainability/se/

# Emphasizing Dialogue with Shareholders and Investors and Promoting Initiatives that **Reflect this in Management**

Our top management actively engages in dialogue with shareholders and investors to build and strengthen relationships of trust. During such dialogue, we explain our management policy, priority issues and measures, performance trends, etc., and use the opinions of shareholders and investors obtained through this dialogue for management purposes.

IR Activity	Frequency	Explanation				
Results briefings	4 times	Held quarterly for analysts and institutional investors				
Individual interviews	186 times (220 companies)	Individual interviews and small meetings with analysts and institution investors				
Overseas investors conferences	1 time (10 companies)	Dialogue with foreign institutional investors				
ESG interviews	5 times (5 companies)	Dialogue with ESG analysts and investors				

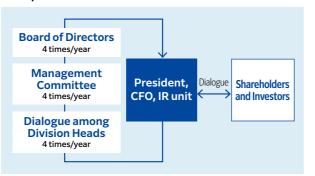
# Creating a Cycle that Utilizes Feedback from the **Capital Markets in Management**

The President, CFO, and IR unit actively engage in dialogues with shareholders, investors, and analysts, not only through quarterly financial results briefings but also by conducting individual meetings. We view the General Meeting of Shareholders as a valuable opportunity for direct communication with shareholders and strive to engage in proactive communication.

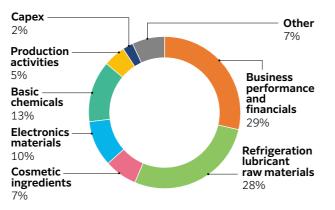
To help individual investors better understand our business, we revamped our corporate website and resumed participation in individual investor fairs to explain our growth potential and uniqueness, fostering deeper understanding.

Valuable feedback from these discussions, along with our stock performance trends, is reviewed four times a year by the Board of Directors and the Management Committee, and is incorporated into our management strategy. The IR unit promotes this cycle of activities and applies the insights gained to further enhance our IR efforts.

Initiatives for management and employees to discuss and dialogue about Feedback from the capital markets and stock prices



Details of Dialogue with Shareholders, Investors, and Analysts (2023)



# **Raising Employee Awareness of Management and Business Performance**

To convey feedback from the capital market to our plants, which are key to our manufacturing capital, the management team directly engages with employees, clearly explaining the expectations and concerns of shareholders and investors. After financial results announcements, each division head explains performance, challenges, and countermeasures to their teams in their own words, encouraging employees to reflect on the connection between management, performance, and their specific roles.

# Community-based Social Contribution Activities

KH Neochem is working to contribute to society for the sustainable development of society. We are strengthening our approach to community service by emphasizing activities with deep local roots in Yokkaichi City, Mie Prefecture and Ichihara City, Chiba Prefecture in particular, where our plants are located.

# Installing New Benches and Repairing Paint Work at a Park Near the Plant (Yokkaichi City, Mie Prefecture)

As part of our social contribution activities utilizing paint related to our business, we alternate annually between Yokkaichi City, Mie Prefecture, and Ichihara City, Chiba Prefecture, to donate and paint wooden benches.

In 2023, we donated picnic tables to the Kasumigaura Ryokuchi Park in Yokkaichi City, Mie Prefecture. Additionally, 71 volunteers, including executives and employees and their families, carried out painting and repair work on previously donated benches, as well as cleaning along Route 23. Yokkaichi City Mayor Tomohiro Mori visited on the day and presented us with a letter of appreciation.



Bench painting in progress

# Supporting Children with the Future and **Connecting with the Community**

We are committed to sponsoring sports events for boys and girls so that children, who are the future of the community, can play an active role. We also continue to conduct community cleanup activities, accept local residents and local educational institutions for plant tours, and collaborate with NPOs.



Dialogue between management and employees (management symposium) at a plant

- Main activities
- Yokkaichi City U-10 Soccer Tournament (KH Neochem Cup)
- Ichihara City Friendly Baseball Tournament (KH Neochem Cup)



Yokkaichi City U-10 Soccer Tournamen (KH Neochem Cup)



At Ichihara Spolek Park Ichihara City Friendly Baseball Tournament (KH Neochem Cup)



KH Neochem Report 2024 82

A tour of the Chiba Plant (introducing our chemical fire truck)

# **Discussion and Cooperation with Business Partners**

## **Promoting sustainable procurement**

We are committed to promoting responsible supply chain management as our materiality (key issue), and are committed to sustainable procurement activities. The Sustainable Procurement Guidelines we formulated in March 2023 set forth our basic policy for procurement and summarizes items that we would like to work on together with our business partners.

In 2023, we sent a content confirmation form to our ongoing business partners with the aim of spreading understanding of these guidelines, and were able to obtain submissions from approximately 90% of our business partners. To improve understanding of the guidelines within the Company, we held training sessions for all employees in Procurement in March 2023.

Furthermore, to assess the status of our key business partners' sustainable procurement efforts (specifically raw materials business partners), we conducted a survey based on the CSR Procurement Self-Assessment Questionnaire (Common SAQ) created by Global Compact Network Japan. We received responses from 89% of our business partners (by purchasing amount). Moving forward, we will continue to analyze the survey results and pursue further efforts to mitigate risks and achieve sustainable procurement.



The Sustainable Procurement Guidelines https://www.khneochem.co.jp/en/sustainability/se/pdf/sustainable\_procurement\_guideline\_en.pdf

# **Respect for Human Rights**

We recognize respect for human rights as a social responsibility and have established a Respect for Human Rights Policy, which we have made public both internally and externally. In the policy, we commit to respecting international human rights principles and recognize that addressing the Six Human Rights Priorities the Company prioritizes is crucial to fulfilling our responsibility to respect human rights, and we are actively implementing this. Additionally, we have appointed an executive and established an oversight organization responsible for promoting human rights initiatives across the Company and regularly report the progress of these initiatives to the Board of Directors. Furthermore, by conducting human rights due diligence, identifying and assessing human rights-related risks, and establishing a grievance resolution mechanism for human rights issues, we fulfill our responsibility to respect human rights. We strive to secure the trust of our stakeholders and enhance our corporate value.

\*See our website for more on our Respect for Human Rights Policy. https://www.khneochem.co.jp/en/company/philosophy/ principles/human\_rights\_policy.html



#### KH Neochem's Six Human Rights Priorities

- 1. Prohibition of Discrimination
- 2. Prohibition of Behavior to Undermine Dignity (Harassment)
- 3. Prohibition of Forced Labor and Child Labor
- 4. Respect for Basic Labor Rights
- 5. Respect for Diversity
- 6. Ensuring a Safe and Hygienic Workplace

## Education on Respecting Human Rights

To deepen understanding of our Respect for Human Rights Policy and encourage its practice, we held workshops at all workplaces in 2023. Among the Six Human Rights Priorities the Company prioritizes, discussions were held at all workplaces on the themes of prohibiting actions that damage dignity (harassment) and ensuring workplace safety and hygiene, with approximately 650 participants.

# Identification and Assessment of Human Rights-related Risks

The aforementioned questionnaire to check the status of sustainable procurement includes items to identify human rights-related risks in business operations, including those with business partners. If risks are identified, we proceed to evaluate their impact.

# Human Rights Remediation and Grievance Resolution Mechanisms

The KH Neochem Group Hotline (▶P75) also serves as a contact point for reporting human rights concerns. The hotline is available for Company executives and employees, former executives and employees who retired within the past year, customers, business partners, and others.

# **Consolidated Financial Statements**

# **Consolidated Balance Sheet**

	Fiscal year ended December 31, 2022	Fiscal year ende December 31, 2023
Assets	2022	2023
Current Assets		
Cash and deposits	10,926	9,684
Notes and accounts receivable – trade, and contract assets	37,301	32,699
Merchandise and finished products	17,447	15,966
Work in process	599	590
Raw materials and supplies	3,931	3,532
Other	4,040	3,778
Allowance for doubtful accounts	(7)	(6)
Total current assets	74,239	66,244
Non-current Assets		
Property, plant and equipment		
Buildings and structures	34,244	34,380
Accumulated depreciation and impairment	(26,256)	(26,817)
Buildings and structures, net	7,987	7,562
Machinery, equipment and vehicles	99,740	100,812
Accumulated depreciation and impairment	(89,184)	(91,164)
Machinery, equipment and vehicles, net	10,555	9,648
Land	17,549	17,549
Leased assets	1,689	1,777
Accumulated depreciation	(254)	(435)
Leased assets, net	1,434	1,341
Construction in progress	5,661	8,431
Other	7,275	7,538
Accumulated depreciation and impairment	(4,769)	(5,309)
Other, net	2,506	2,228
Net property, plant and equipment	45,693	46,762
Intangible assets		
Goodwill	1,109	974
Other	533	560
Total intangible assets	1,642	1,535
Investments and other assets		
Investment securities	6,396	6,899
Assets for retirement benefits	2,051	2,486
Deferred tax assets	197	192
Other	1,027	379
Allowance for doubtful accounts	(1)	(1)
Total investments and other assets	9,671	9,955
Total non-current assets	57,007	58,253
Total Assets	131,247	124,498

(Note) Yen amounts are rounded down to millions.

(Millions of yen)					
	Fiscal year ended December 31, 2022	Fiscal year ender December 31, 2023			
Liabilities					
Current Liabilities					
Notes and accounts payable - trade	30,359	25,825			
Short-term bank loans	9,870	9,820			
Commercial paper	5,999	-			
Current portion of corporate bonds	_	5,000			
Current portion of long-term lease obligations	111	118			
Accounts payable - other	7,982	5,536			
Income taxes payable	1,210	1,906			
Provision for repairs	637	2,476			
Other	587	648			
Total current liabilities	56,758	51,332			
Long-term Liabilities					
Corporate bonds	5,000	-			
Long-term lease obligations	1,544	1,447			
Deferred tax liabilities	2,537	2,547			
Liability for retirement benefits	2,388	2,358			
Provision for stock-based remuneration plan for directors (and other officers)	122	164			
Provision for repairs	660	-			
Other	169	153			
Total long-term liabilities	12,422	6,672			
Total Liabilities	69,180	58,004			
Net Assets					
Shareholders' equity					
Common stock	8,855	8,855			
Capital surplus	6,186	6,203			
Retained earnings	43,663	47,239			
Treasury stock	(222)	(267)			
Total shareholders' equity	58,483	62,030			
Accumulated Other Comprehensive Income					
Unrealized gain (loss) on available-for sale securities	570	1,136			
Deferred gains or losses on hedges	(25)	(4)			
Foreign currency translation adjustments	90	107			
Defined retirement benefit plans	229	474			
Total accumulated other comprehensive income	864	1,713			
Noncontrolling Interests	2,718	2,748			
Total Net Assets	62,066	66,493			
Total Liabilities and Net Assets	131,247	124,498			

Then and Now

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# **Consolidated Financial Statements**

# Consolidated Statement of Income

(Millions of yer					
	Fiscal year ended December 31, 2022	Fiscal year ended December 31, 2023			
Net Sales	114,880	115,217			
Cost of Sales	90,434	93,279			
Gross Profit	24,445	21,937			
Selling, General and Administrative Expenses					
Freight	4,294	4,034			
Container packaging	1,071	1,095			
Salary	1,275	1,286			
Other	5,347	5,575			
Total selling, general and administrative expenses	11,989	11,991			
Operating Income	12,456	9,946			
Non-operating Income					
Interest and dividend income	289	175			
Equity in earnings of associated company	450	263			
Surrender value of insurance policies	-	103			
Other	213	190			
Total non-operating income	953	732			
Non-operating Expenses					
Interest expenses	86	81			
Contribution expenses	181	108			
Loss on disposal of non-current assets	386	610			
Settlement payments	-	100			
Other	46	53			
Total non-operating expenses	700	954			
Ordinary Income	12,709	9,725			
Extraordinary income					
Gain on sale of investment securities	237	-			
Gain on liquidation of subsidiaries	95	-			
Total extraordinary income	333	-			
Extraordinary losses					
Loss on valuation of investment securities	992	-			
Accident-related	414	-			
Total extraordinary losses	1,407	-			
Income before Income Taxes	11,634	9,725			
Income taxes - current	2,628	3,139			
Income taxes - deferred	753	(344)			
Total income taxes	3,382	2,795			
Net Income	8,252	6,929			
Net Income Attributable to Noncontrolling Interests	179	103			
Net Income Attributable to Owners of the Parent	8,073	6,826			

(Note) Yen amounts are rounded down to millions.

# Consolidated Statement of

Comprehensive Income	(Millions of		
	Fiscal year ended December 31, 2022	Fiscal year ended December 31, 2023	
Net Income	8,252	6,929	
Other Comprehensive Income			
Unrealized gain (loss) on available-for-sale securities	(451)	565	
Deferred gains or losses on hedges	(24)	21	
Foreign currency translation adjustments	47	17	
Defined retirement benefit plans	127	245	
Total other comprehensive income	(301)	849	
Comprehensive Income	7,950	7,779	
Comprehensive Income Attributable to			
Owners of the parent	7,771	7,675	
Noncontrolling interests	179	103	

# **Consolidated Statement of Changes in Equity**

Fiscal year ended December 31, 2022

			Shareholders' equity		
	Common stock	Capital surplus	Retained earnings	Treasury stock	Total shareholders' equity
Balance, Jan. 1, 2022	8,855	6,186	38,841	(132)	53,751
Changes during period					
Cash dividends of surplus			(3,250)		(3,250)
Net income attributable to owners of the parent			8,073		8,073
Purchase of treasury stock				(89)	(89)
Change in the parent's ownership interest due to transactions with Noncontrolling interests					-
Net changes in items other than shareholders' equity					
Total changes during period	-	-	4,822	(89)	4,732
Balance, Dec. 31, 2022	8,855	6,186	43,663	(222)	58,483

		Accumulated	Other Compreh	ensive Income			
	Unrealized gain (loss) on available-for- sale securities	Deferred gains or losses on hedges	Foreign currency translation adjustments	Defined retirement benefit plans	Total accumulated other comprehensive income	Non- controlling Interests	Total Net Assets
Balance, Jan. 1, 2022	1,022	(0)	42	102	1,166	2,587	57,505
Changes during period							
Cash dividends of surplus							(3,250)
Net income attributable to owners of the parent							8,073
Purchase of treasury stock							(89)
Change in the parent's ownership interest due to transactions with Noncontrolling interests							-
Net changes in items other than shareholders' equity	(451)	(24)	47	127	(301)	130	(171)
Total changes during period	(451)	(24)	47	127	(301)	130	4,561
Balance, Dec. 31, 2022	570	(25)	90	229	864	2,718	62,066

# Fiscal year ended December 31, 2023

			Shareholders' equity		
	Common stock	Capital surplus	Retained earnings	Treasury stock	Total shareholders' equity
Balance, Jan. 1, 2023	8,855	6,186	43,663	(222)	58,483
Changes during period					
Cash dividends of surplus			(3,250)		(3,250)
Net income attributable to owners of the parent			6,826		6,826
Purchase of treasury stock				(49)	(49)
Disposal of treasury stock				4	4
Change in the parent's ownership interest due to transactions with Noncontrolling interests		16			16
Net changes in items other than shareholders' equity					
Total changes during period	-	16	3,575	(45)	3,546
Balance, Dec. 31, 2023	8,855	6,203	47,239	(267)	62,030

		Accumulated	Other Compreh	ensive Income			
	Unrealized gain (loss) on available-for- sale securities	Deferred gains or losses on hedges	Foreign currency translation adjustments	Defined retirement benefit plans	Total accumulated other comprehensive income	Non- controlling Interests	Total Net Assets
Balance, Jan. 1, 2023	570	(25)	90	229	864	2,718	62,066
Changes during period							
Cash dividends of surplus							(3,250)
Net income attributable to owners of the parent							6,826
Purchase of treasury stock							(49)
Disposal of treasury stock							4
Change in the parent's ownership interest due to transactions with Noncontrolling interests							16
Net changes in items other than shareholders' equity	565	21	17	245	849	30	879
Total changes during period	565	21	17	245	849	30	4,426
Balance, Dec. 31, 2023	1,136	(4)	107	474	1,713	2,748	66,493

(Note) Yen amounts are rounded down to millions.

(Millions of yen)

(Millions of yen)

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# **Consolidated Financial Statements**

# **Consolidated Statement of Cash Flows**

	Fiscal year ended December 31, 2022	Fiscal year ended December 31, 2023
Operating Activities		
Income before income taxes	11,634	9,725
Depreciation	4,159	4,517
Amortization of goodwill	134	134
Increase (decrease) in liability for retirement benefits	100	49
Decrease (increase) in assets for retirement benefits	(177)	(163)
Increase (decrease) in provision for repairs	(1,004)	1,178
Interest and dividend income	(289)	(175)
Interest expenses	86	81
Equity in (earnings) of associated company	(450)	(263)
Decrease (increase) in notes and accounts receivable	(4,057)	4,629
Decrease (increase) in inventories	(3,943)	1,976
Increase (decrease) in notes and accounts payable	4,542	(4,628)
Loss (gain) on sale of investment securities	(237)	(19)
Loss (gain) on valuation of investment securities	992	-
Loss (gain) on liquidation of subsidiaries	(95)	-
Decrease (increase) in other current assets	(1,711)	269
Increase (decrease) in other current liabilities	3,291	(2,600)
Other	(909)	368
Subtotal	12,066	15,080
Interest and dividends received	618	681
Interest paid	(85)	(83)
Income taxes paid	(7,467)	(2,477)
Net cash provided by (used in) operating activities	5,131	13,201
Investing Activities		
Purchase of property, plant and equipment	(10,402)	(5,091)
Purchase of intangible assets	(92)	(166)
Purchase of investment securities	(141)	(11)
Proceeds from sale of investment securities	547	99
Other	5	233
Net cash provided by (used in) investing activities	(10,082)	(4,937)
Financing Activities		
Increase (decrease) in short-term bank loans and borrowings-net	(340)	(50)
Increase (decrease) in commercial paper - net	5,999	(6,001)
Repayments of bank loans	(3,250)	-
Purchase of treasury stock	(89)	(49)
Dividends paid	(3,250)	(3,250)
Dividends paid to Noncontrolling interests	(48)	(51)
Payment from purchase of investment in subsidiaries that do not result in change in scope of consolidation	-	(4)
Other	(96)	(94)
Net cash provided by (used in) financing activities	(1,076)	(9,501)
Foreign Currency Translation Adjustments on Cash and Cash Equivalents	18	(3)
Net Increase (Decrease) in Cash and Cash Equivalents	(6,008)	(1,241)
Cash and Cash Equivalents, Beginning of Year	16,934	10,926
Cash and Cash Equivalents, End of Year	10,926	9,684

(Note) Yen amounts are rounded down to millions.

# **Financial and Non-Financial Time Series Data**

# Financial Data (consolidated)

	(Unit)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
Operating Results*								
Net Sales	(Millions of yen)	94,661	101,199	94,209	77,332	117,110	114,880	115,217
Operating Income	(Millions of yen)	11,495	10,858	9,559	5,642	19,685	12,456	9,946
Ordinary Income	(Millions of yen)	11,906	11,197	9,896	5,627	19,809	12,709	9,725
Net income attributable to owners of the parent	(Millions of yen)	8,167	6,737	6,917	4,046	13,691	8,073	6,826
Financial Position*								
Cash and deposits	(Millions of yen)	12,866	10,126	17,867	9,066	16,934	10,926	9,684
Total assets	(Millions of yen)	95,247	94,035	102,261	95,508	122,069	131,247	124,498
Interest-bearing debt	(Millions of yen)	24,730	21,040	23,490	21,200	18,460	20,869	14,820
Equity capital	(Millions of yen)	31,032	35,903	41,084	43,380	54,917	59,348	63,744
Net Assets	(Millions of yen)	34,512	38,304	43,522	45,884	57,505	62,066	66,493
Cash Flows*								
Operating Activities	(Millions of yen)	12,971	7,707	10,962	6,931	17,402	5,131	13,201
Investing Activities	(Millions of yen)	(3,281)	(4,009)	(3,512)	(11,182)	(4,395)	(10,082)	(4,937)
Financing Activities	(Millions of yen)	(9,338)	(6,224)	294	(4,530)	(5,168)	(1,076)	(9,501)
Others*								
CAPEX	(Millions of yen)	1,637	2,943	6,995	6,003	3,639	9,470	4,928
Depreciation (including amortization of goodwill)	(Millions of yen)	3,382	3,254	3,330	3,871	4,504	4,293	4,652
R&D expenses	(Millions of yen)	939	822	847	919	1,005	871	939
Per Share								
Basic net income	(yen)	222.12	182.77	187.09	109.12	368.95	217.73	184.23
Diluted net income	(yen)	220.44	181.62	186.44	109.02	-	-	-
Net Assets	(yen)	842.15	971.92	1,109.88	1,168.62	1,480.27	1,601.26	1,720.81
Cash Dividends	(yen)	54.0	54.0	60.0	60.0	75.0	85.0	90.0
Key Indicators								
EBITDA	(bn yen)	14.9	14.1	12.9	9.5	24.2	16.8	14.6
ROE	(%)	29.3	20.1	18.0	9.6	27.9	14.1	11.1
Equity ratio	(%)	32.6	38.2	40.2	45.4	45.0	45.2	51.2
Net Debt Equity ratio	(times)	0.38	0.30	0.14	0.28	0.03	0.17	0.08
Ratio of operating income to net sales	(%)	12.1	10.7	10.1	7.3	16.8	10.8	8.6
Dividend payout ratio	(%)	24.3	29.5	32.1	55.0	20.3	39.0	48.9

\* Yen amounts are rounded down to millions.

# Non-Financial Data (Non-Consolidated)

	(Unit)	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
Energy consumption	(1,000 kL)	218.8	208.7	204.6	194.2	214.4	187.8	186.1
Energy intensity	(L/t)	199.6	210.0	207.2	222.3	204.9	230.4	226.7
Greenhouse Gas (GHG) emissions (CO2 equivalent, Scope 1+2)	(1,000t -CO <sub>2</sub> )	473.6	448.9	440.2	404.2	422.4	379.1	378.4
Greenhouse Gas (GHG) emissions (CO2 equivalent, Scope 3)	(1,000t -CO <sub>2</sub> )	-	-	-	-	1,332	1,055	1,084
Disposed of as landfill	(t)	140	124	136	133	106	92	106
Number of employees	(persons)	600	611	659	673	649	659	660
Total number of new employees	(persons)	22	40	77	35	27	40	41
Number of new female employees	(persons)	3	4	10	4	5	6	7
Ratio of new female employees	(%)	13.6	10.0	13.0	11.4	18.5	15.0	17.1
Difference in years of service between genders	(year)	0.4	0.3	-0.3	0.8	1.3	1.3	0.9
Number of accidents resulting in lost workdays	(cases)	0	0	0	0	1	1	0
Paternity leave ratio*	(%)	-	-	-	-	-	90	105

\* Results from FY2022 are disclosed based on an amendment to the law.

# Introduction

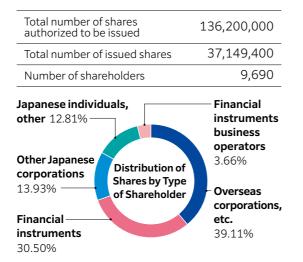
Then and Now

# **Corporate Overview**

# Corporate Overview (as of June 30, 2024)

Establishment	December 2010 (Our predecessor Kyowa Yuka, was established in November 1966)
Capital	8.8 bn JPY
Corporate Headquarters Head Office	2-3-1, Nihonbashi-Muromachi, Chuo-ku, Tokyo 103-0022, Japan
Group companies and affiliated companies	Kurogane Kasei Co., Ltd. Kurogane Fines Inc. KH Neochem Americas, Inc. Shanghai Seika Trading Co., Ltd. J-Plus Co., Ltd.* *Joint venture with Mitsubishi Chemical Corporation

# Stock Overview (as of June 30, 2024)



# **Major Shareholder Information**

Shareholder name	Number of shares held	Ratio of shares held* (%)
The Master Trust Bank of Japan, Ltd. (Trust account)	5,051,800	13.60
Custody Bank of Japan, Ltd. (Trust account)	3,809,900	10.26
Tosoh Corporation	1,852,000	4.99
NORTHERN TRUST CO.(AVFC)RE USL NON-TREATY CLIENTS ACCOUNT	1,163,800	3.13
SSBTC CLIENT OMNIBUS ACCOUNT	999,234	2.69
GOVERNMENT OF NORWAY	888,203	2.39
Mizuho Bank, Ltd.	733,300	1.97
THE NOMURA TRUST AND BANKING CO., LTD. AS THE TRUSTEE OF REPURCHASE AGREEMENT MOTHER FUND	713,700	1.92
JUNIPER	700,000	1.88
STATE STREET LONDON CARE OF STATE STREET BANK AND TRUST, BOSTON SSBTC A/C UK LONDON BRANCH CLIENTS - UNITED KINGDOM	632,500	1.70

\* Calculation based on the total number of issued shares less treasury stock, and rounded to the nearest unit.

# **External Evaluation Index Adopted**



JPX-NIKKEI Mid Small

Sompo Sustainability Index

2024





"FTSE Russell confirms that KH Neochem co., Ltd. has been independently assessed according to the index criteria, and has satisfied the requirements to become a constituent of the FTSE Blossom Japan Index and FTSE Blossom Japan Sector Constituent of the FLSE biossom Japan index and FLSE biossom Japan Sector Relative Index. Created by the global index and data provider FTSE Russell, the FTSE Biossom Japan Index is designed to measure the performance of companies demonstrating strong Environmental, Social and Governance (ESG) practices. The FTSE Biossom Japan Index is used by a wide variety of market participants to create and assess responsible investment funds and other products."

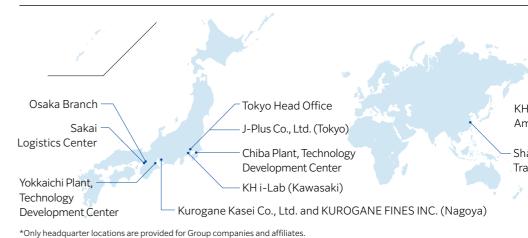


(as of June 30, 2024)

"In 2024, KH Neochem Co., Ltd. received a rating of BBB in the MSCI ESG Ratings assessment."



# **Global Network\***





Yokkaichi Plant

# **Sponsorship of Speed Skaters**

The Company has sponsored short track speed skater Moemi Kikuchi since 2018, and speed skater Rin Kosaka since 2022.

As "a leading global specialty chemical company" that shares the enthusiasm of these athletes to pursue their dreams, we will do our utmost to support both athletes so that they can shine on the world stage.



KH Neochem Americas, Inc.

Shanghai Seika Trading Co., Ltd.



Chiba Plant



nhoto•Aflo Spor



photo:Aflo Sport

# Moemi Kikuchi

Short track speed skater

2021: 500m and 300m SF champion at the All Japan Short Track Speed Skating Championships 2023: Results include placing third in the 1000m at the All Japan Speed Skating Single Distances Championships

**Rin Kosaka** Speed Skater

2021: Beijing Olympics Japan National Team (Mass Start) 2023: Placed second in the Mass Start event



An activity report at the Yokkaichi Plant

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