



KH Neochem Report 2021

Creating a Sustainable Future

KH Neochem Integrated Report

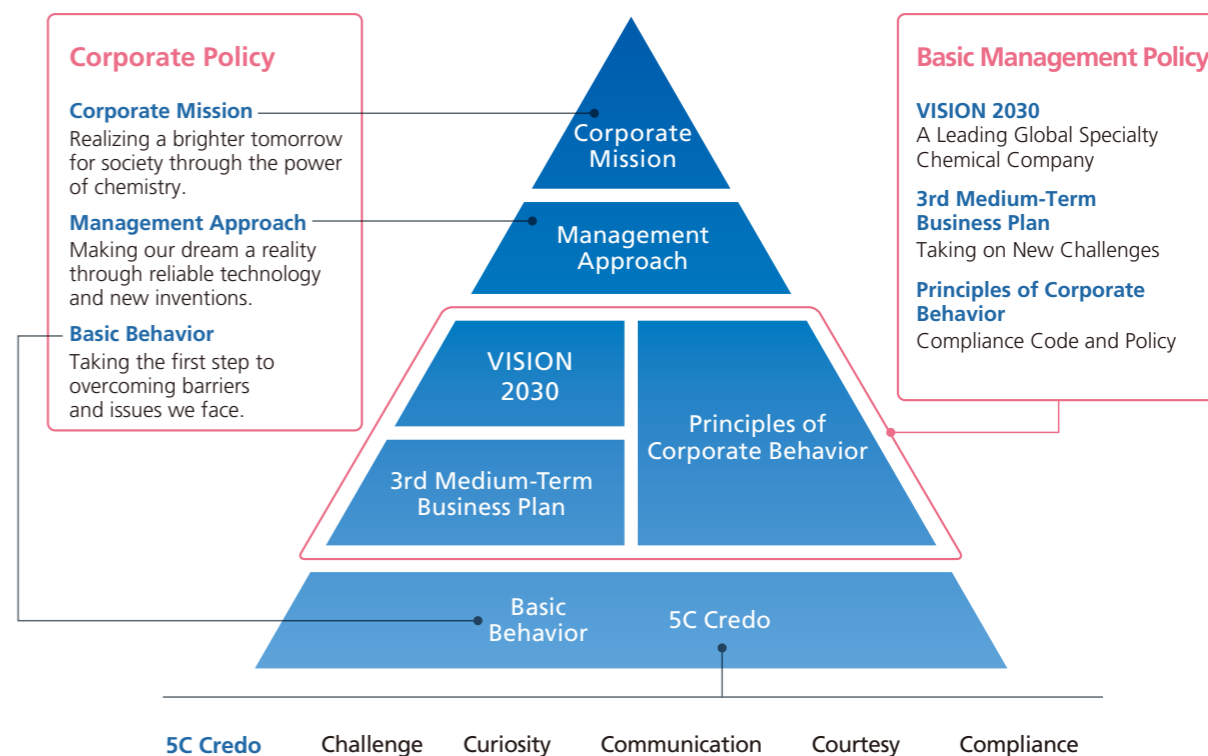




Corporate Mission

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

Our Basic Principles



INDEX

02	KH Neochem at a Glance	26	R&D and Business Creation	46	Responsible Care
04	KH Neochem Strengths	29	Production Technology	53	Social Contribution Activities
06	KH Neochem's Value Creation Story	30	Human Resources and Corporate Culture	54	Community-based Measures Taken at Plants
08	VISION 2030	34	Special Feature: Roundtable Discussion on Progress in Corporate Governance	56	Dialog with Shareholders and Investors
09	Message from the President and CEO	37	Sustainable Management	57	Management's Discussion and Analysis
14	Financial and Capital Strategy	38	Corporate Governance	59	Consolidated Financial Statements
16	Financial and Non-Financial Highlights	44	Members of the Board	63	Corporate Overview
18	Business Strategy				

Editorial Policy

In this report, by demonstrating our medium- to long-term value, vision, strengths and drivers, and the foundation of our value creation, we aim to engage in dialogue with our stakeholders to further advance our value creation activities.

We referred to the Ministry of Economy, Trade and Industry's Guidance for Value Co-creation in preparing this document.

Scope of Report

Reporting period:

January 1, to December 31, 2020*

*However, environmental report data and other statutory information is for the period from April 1, 2020 to March 31, 2021. Some portions of the report also include activities for 2021.

Organization covered:

KH Neochem Co., Ltd. (nonconsolidated) (Some portions also include consolidated information.)

Date of publication: July 2021

Note on Forecasts

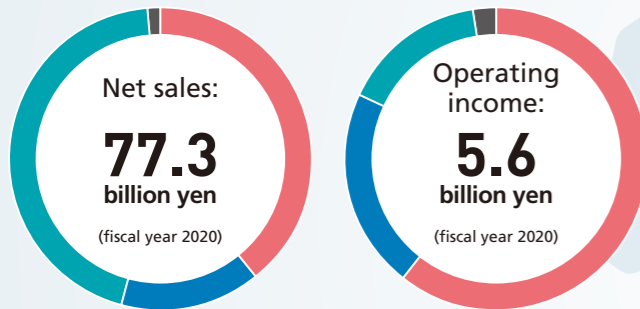
Among the information contained in this report, information aside from historical facts includes forecasts that are based on certain assumptions and rely on judgments made by KH Neochem's management using the information available at that time.

For this reason, actual business results may differ, depending on various factors.

KH Neochem at a Glance



Business lines



■ Performance Materials ■ Electronic Materials ■ Basic chemicals ■ Others

Market capitalization: 95.8 billion yen
(as of June 30, 2021)

Number of employees: 829
(as of December 31, 2020)

External assessments



**2021 CONSTITUENT MSCI JAPAN
EMPOWERING WOMEN INDEX (WIN)**

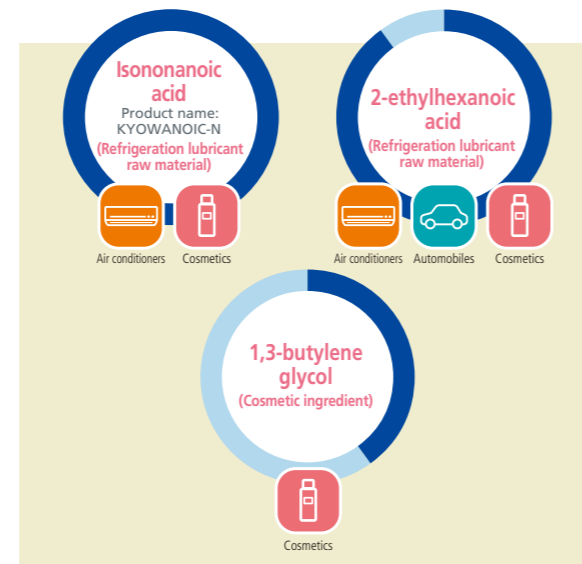
*The inclusion of KH Neochem Co., Ltd. in any MSCI index, and the use of MSCI logos, trademarks, service marks or index names herein, do not constitute a sponsorship, endorsement or promotion of KH Neochem Co., Ltd. by MSCI or any of its affiliates. The MSCI indexes are the exclusive property of MSCI. MSCI and the MSCI index names and logos are trademarks or service marks of MSCI or its affiliates.

Note: Figures for business performance and number of employees are presented on a consolidated basis.

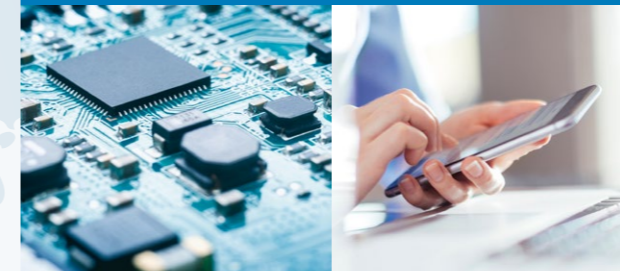
Performance Materials



Our performance materials have unique structures and properties. We are helping to preserve the global environment through performance materials used as raw materials for lubricants that are highly compatible with refrigerants having low global warming potential (GWP). The raw materials used in our cosmetics and household detergents also have a strong reputation.



Electronic Materials



Manufacturing processes for semiconductors and LCDs require extremely high-purity solvents. Our solvents have significantly low levels of impurities (dust and metal fragments), achieved through a combination of our high-level purification technologies (distillation) and excellent quality management, and so meet the ever-evolving needs of the electronic materials market.



Basic Chemicals



We have put together an extensive product lineup of basic chemicals. Solvents are used in construction and automobiles, as well as in smartphone coatings, adhesives, and cleaning agents. Plasticizer raw materials are essential for the production of plastic products. We have captured a leading share in domestic markets for many of our products.



Expansion of our businesses

Began basic chemicals

Our startup businesses provide products for fields close to our daily lives, such as houses, automobiles, and food packaging.

Began performance materials

Entering the market for high value-added products that are more friendly to people and the environment. Providing products used for environmentally friendly air conditioners and cosmetics.

Began electronic materials

Developing the products that meet the demands of the advanced electronics industry, such as high-purity solvents with extremely low impurities.

Aiming to create new businesses

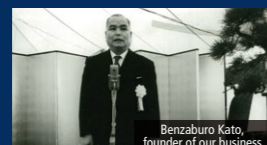
We intend to create innovation from non-conventional perspectives by working on collaborative technical innovation with external partners using cross-industry exchanges, business matching, and other approaches.

History of KH Neochem

1948

Began as Japan's first mass-producer of acetone and butyl alcohol by fermentation

Provided new value by looking beyond the times



1961

Converted to petrochemical manufacturing methods

Transformed the Company to meet the changing times



1988

Established a two-plant system: the Yokkaichi and Chiba Plants

Expanded our product lineup, creating a system that can cope with diverse needs



2008

Extended accident-free record: the Yokkaichi Plant

Our proud safety and stability record: accident free for 23.95 million man-hours*



*Total working hours without lost workdays and accidents

2011—2012

Became independent and changed name to KH Neochem

Became independent from Kyowa Hakko Kirin Group (at that time), marking the start of KH Neochem



2016

Listed on the First Section of the Tokyo Stock Exchange

Took new steps forward as a listed company



2018

Announced VISION 2030

The vision of KH Neochem for continuing to create new value and striving for sustainable growth



KH Neochem Strengths

KH Neochem has been building up unique strengths since being founded in 1948. We intend to provide greater value by maximizing and further refining these strengths.

1 Rich and Unique Technologies

Also known as hydroformylation, our core technology, oxo synthesis, is a process where carbon monoxide and hydrogen react with raw materials, such as olefins, to synthesize aldehydes. This extremely rare technology uses carbon dioxide (CO₂) as a raw material to produce carbon monoxide and hydrogen. KH Neochem has two types of oxo technologies: high pressure and low pressure. By making the best use of their respective features, we manufacture a wide range of products based on our operations and equipment management technologies cultivated over our long history. Recently, we have been working to further improve productivity in manufacturing plants by introducing advanced control systems that use AI technology (see page 29).

Our technologies—aside from obtaining highly pure target compounds from a mixture—are also used to produce products under strict quality control that have a consistent quality with extremely low impurities. These technologies are highly valued by customers in Japan and overseas.

By combining these unique technologies, we are helping to provide many of the specialty chemicals that are essential for people's lives.



3 World's Leading Manufacturing Plants

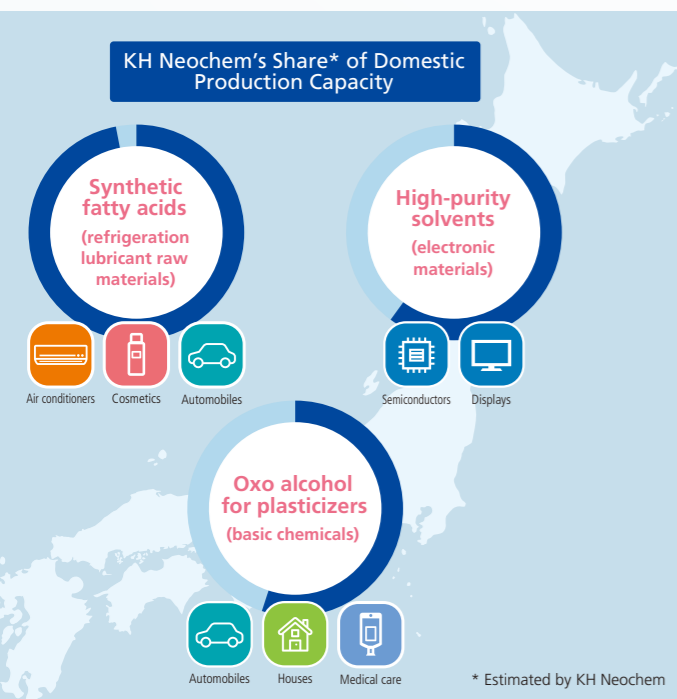
KH Neochem has plants in Yokkaichi City, Mie Prefecture and in Ichihara City, Chiba Prefecture. The Yokkaichi Plant has two sections for oxo-related products with a production scale and product lineup at a high level domestically. Our Chiba Plant has a high-pressure oxo reaction process capable of supplying specialty alcohols and synthetic fatty acids, such as isononyl alcohol, isodecyl alcohol, and isononanoic acid. In VISION 2030, we have plans for large-scale investments in production facilities, with the aim of further increasing our production capacity and improving productivity.



The Yokkaichi Plant (top) and Chiba Plant (bottom)

2 Major Products with Large Market Shares

KH Neochem has many major products with leading shares. For example, our synthetic fatty acids are the raw material for lubricating oil (refrigerating lubricants) used in environmentally friendly air conditioners that help protect the ozone layer and prevent global warming. This underscores our strong international presence. Further, our high-purity solvents, used in manufacturing semiconductors and displays, are highly evaluated for their quality due to extremely low levels of impurities (contamination and metal content). Oxo alcohol, produced with oxo technologies, is a raw material used in the substance (plasticizer) that is added to soften polyvinyl chloride. This raw material is used in products that support our lives, such as in electric cables, wallpaper, flooring, and medical transfusion bags, and is another example of a product with a leading share.



4 A Wide-ranging Customer Network

KH Neochem provides products to customers in a wide range of manufacturing industries, including manufacturers of refrigerating lubricants, cosmetics, photoresists, paints, and ink. Moreover, many of our main clients are leading companies with a strong presence in their respective industries; we have created new value together with them based on solid, long-standing relationships of trust. Going forward, we will continue to strengthen the network and relationship of trust with our customers. By quickly and meticulously understanding their needs and demands, we will work to further grow sales, while developing new products and businesses.



KH Neochem's Value Creation Story

Through the power of chemistry, KH Neochem has contributed to resolving social issues by providing products that are beneficial both for the environment and people's lives.

Going forward, we aspire to continue contributing to a sustainable society by providing value through our business to achieve an environmentally conscious world and a richer life for people based on the foundations of safety, security, and trust.

We will promote sustainable management by continuing to work openly on the seven promises (see page 37) that we have made to our stakeholders in order to achieve sustainable growth together with society.

KH Neochem Strengths

▶ p. 04

Rich and Unique Technologies

Major Products with Large Market Shares

World's Leading Manufacturing Plants

A Wide-ranging Customer Network

INPUT

Financial Capital

Financial structure and profitability to enable agile investments
(Equity ratio 45% / ROE 10%)

Human Capital

Diverse skills and values
(829 employees (consolidated))

Natural Capital

Use of CO₂ as a raw material
Use of biomaterials

*The above are actual figures for fiscal year 2020

Expected Changes in Society and the Environment

Worsening climate change

Increasing interest in improving QoL*

Progress of an advanced information society

Increasing corporate responsibility for sustainability

*quality of life

Management Approach

Making our dream a reality through reliable technology and new inventions

Developing unique new products and technologies

Contributing to resolving social and environmental issues with our unique products

Technology and Information

▶ p. 26+

Human resources

▶ p. 30+

Rapidly expanding supply capacity in line with growth in global demand

Performing safe and stable operations
Strengthening relationships of trust with clients

Proposing new value through partnerships

Basic Behavior

Taking the first step to overcoming barriers and issues we face

Corporate Mission

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



OUTPUT / OUTCOME

An environmentally conscious world

Sustainable Management

A richer life for people

Business that contributes to an environmentally conscious world and a richer life for people

Domain	Environment	Healthcare	Electronics	Fundamental business
Creating value	Contributing to global warming prevention	Contributing to improved QoL	Contributing to an advanced information society	Contributing to everyday living
Current, main product lines	Refrigeration lubricant raw materials, etc.	Cosmetic ingredients, etc.	Electronic materials	Basic chemicals

Continual creation of new businesses

Safe, secure, and trustworthy

Seven promises to promote sustainable management

▶ p. 37

Our Ambitions

▶ p. 08

VISION 2030

A Leading Global Specialty Chemical Company

*The Sustainable Development Goals (SDGs) are a collection of 17 global goals and 169 targets. The SDGs were published in September 2015 by the United Nations General Assembly and are intended to be achieved by the year 2030.

VISION 2030

The vision of KH Neochem for continuing to create new value and striving for sustainable growth. We aim to achieve sustainable growth and increase corporate value by making strategic investments to meet the demands of society.

Our Ambitions

A Leading Global Specialty Chemical Company

- Providing specialty chemicals that contribute to the reduction of global warming and a better quality of life
- Expansion of products with the largest global share and new businesses in three strategic domains
- Top-class profitability in the chemical industry

Financial Targets*

Net sales	Operating income	ROE	Equity ratio
180.0bnJPY	Over 25.0bnJPY	Over 12%	50%
Corporate growth at 5% annually on average	Expansion of profits at 7% annually on average	Maintaining high capital efficiency	Construction of a financial structure that is immune to the external environment

(Consolidated basis)

高橋理夫

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

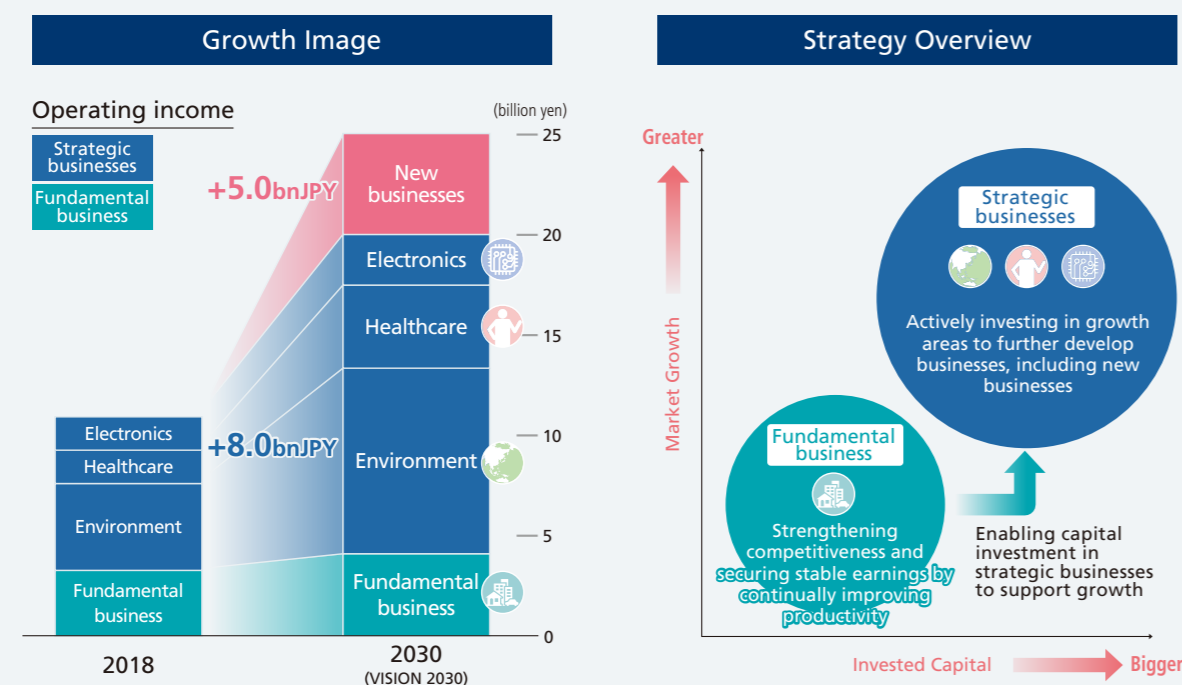
Helping to resolve environmental and social issues through our business activities, and growing sustainably together with society

Fiscal year 2020 performance assessment and fiscal year 2021 market environment

In fiscal year 2020, the spread of COVID-19 had a significant impact on the global economy. At KH Neochem, we took countermeasures, such as cost reductions through zero-based budgeting, but with demand at home and overseas dropping sharply, it was a very tough year, all in all.

However, demand for basic chemical products recovered moderately from the third quarter, mainly for the automotive industry. Looking at performance materials, with higher air conditioner sales a recovery in demand for raw materials for refrigeration lubricants became clear from the fourth quarter. Cosmetic ingredients continued to face challenges throughout the year due in large part to the near-zero demand from overseas tourists. The business environment for electronic materials, on the other hand, remained favorable throughout the year as remote working spread and the transition to 5G move ahead.

In fiscal year 2021, the business environment has been improving rapidly, especially since the supply-demand balance remained tight for many chemical products due to the recovery of the global economy, particularly in the United States and China. So, we revised our earnings forecast upward in May. We are expecting record-high performance throughout the year.



Progress on focused initiatives in our Third Medium-Term Business Plan



Power generation equipment at the Chiba Plant

In our three-year Third Medium-Term Business Plan that began in fiscal year 2019, we committed to taking on new challenges with a view to achieving our goals under VISION 2030. These challenges have inspired the initiatives that contribute to our medium- to long-term growth. In fiscal year 2020, the second year of the plan, the effects of COVID-19, as described earlier, had a severe impact on earnings. On the other hand, I believe that we made steady progress on the major initiatives set out in the Medium-Term Business Plan.

Construction was completed as planned in the first quarter of 2020 for a new production line for refrigeration lubricant raw materials at the Yokkaichi Plant, our largest capital investment project under the Third Medium-Term Business Plan. We are now ready to respond to medium- to long-term market growth following the anticipated recovery in demand, and we expect to significantly contribute to protecting the ozone layer and to helping reduce global warming through our refrigeration lubricant raw materials, which are well-suited to environmentally friendly air conditioners. Regarding electronic materials, a new facility for materials for next-generation semiconductors started operations in the fourth quarter of 2020 at Kurogane Kasei, a Group company. As a result, we believe that we have been able to prepare equipment that can handle the cutting-edge fields of the semiconductor and display market as the advanced information society progresses.

In the area of research and development, we are putting open innovation initiatives into full swing. Our KH Neochem innovation hub established in 2019, KH i-Lab, started personnel exchanges with other industries in 2020, and in April 2021, open labs were launched as places for joint research with venture companies and universities.

For production technology, we have been working on introducing an advanced process control system that uses AI technology to improve productivity and energy savings in plant equipment. In 2020, we steadily increased the introduction of this system, as we will continue to do in 2021 and beyond. In addition, in March 2021, we started operating inhouse power generation equipment that reduces CO₂ emissions by about 15% at our Chiba Plant. At our Yokkaichi Plant, we began constructing a quality control building equipped with the highest-standard clean room, aiming for completion in March 2022, with a view to further developments in the field of electronic materials. In this way, we are steadily implementing our plan's major initiatives.

Fiscal 2021 is the final year of the Third Medium-Term Business Plan, and we are currently working on formulating our Fourth Medium-Term Business Plan. The period from fiscal 2022 on is the time for an important second step toward realizing VISION 2030. Now, we are considering the next medium-term business plan through discussions with project teams, mainly the next-generation staff who will lead us to our future.



Recognizing the future issues and direction of each business for growth

For refrigeration lubricant materials, efforts are being made to reduce chlorofluorocarbon (CFC) substitutes through an international treaty. For example, developed nations are required to make an 85% reduction in CO₂ equivalent values by 2036. The US did not initially ratify the treaty, but with the new Democratic administration, a federal law was enacted that stipulated an 85% reduction in CFC substitutes over the next 15 years. With this goal, the US began drafting new regulations. In China, the revised national standards that came into effect in July 2020 have tightened regulations on air conditioners that are not energy efficient. Given this global trend, we predict that the shift to more environmentally friendly air conditioners will accelerate. Since our refrigeration lubricant raw materials are perfect for environmentally friendly air conditioners, I believe that we can expect significant growth. We are a top manufacturer of refrigeration lubricant raw materials. To avoid significant impact to our competitive advantage, we will continue to assess demand trends and invest at the appropriate time, in this way achieving steady growth.

In electronic materials, we are finding many opportunities for the development of an advanced information society. For example, in high-purity solvents, quality control with extremely fine precision is required, and we are also introducing equipment and brushing up on the technology to meet this requirement. As the hurdles for refinement increase year by year, we will continue to make timely necessary investments to meet the needs of our customers. As mentioned, at Group company Kurogane Kasei, materials equipment for next-generation semiconductors that can handle cutting-edge fields was completed in fall 2020. We will make the most of this equipment to build a new business.

Basic chemicals are our fundamental business; we focus on a lineup of products that use oxo technology, our core technology. Many of our products in this business enjoy a high market share, and with them we will continue to respond firmly to the needs of society.

To achieve the goals set out in VISION 2030, I believe it is important to focus on creating new businesses in addition to seeking organic growth from existing businesses. We will not try to do everything on our own; we will use open innovation through collaborations with venture companies and research institutes, and we will keep an eye out for M&A opportunities. Making full use of these and other methods, we will work to create new businesses and expand existing businesses in our three strategic fields: the environment, healthcare, and electronics.

Initiatives in fiscal 2021 under the Third Medium-Term Business Plan

Strategy I	Strategy II	Strategy III
Profit Increase by New Facilities	Active Investment for the Future Expansion of Performance Chemical Business*2	Improvement of business framework
Strategies of 3rd Mid-term Plan	Strategies of 3rd Mid-term Plan	Strategies of 3rd Mid-term Plan
<ul style="list-style-type: none">Start up of new facilities for refrigeration lubricant raw materials and marketing of new productsOperate new facilities for next generation semiconductor materials	<ul style="list-style-type: none">Further increase in production capacity for performance chemicalsCreation of new business through the new research hub	<ul style="list-style-type: none">Further introduction of facility control system with latest technologies (AI and IoT)Improvement of work environment and encouragement of diverse work styles
Initiatives	Initiatives	Initiatives
<ul style="list-style-type: none">Meet increasing demand, supported by a new plant for refrigeration lubricant raw materialsPut into operation facilities for next-generation semiconductor materialsConstruction of new quality control building with the highest level clean roomImplementing debottlenecking*1 for cosmetic ingredientsIncreasing capacity utilization, particularly for basic chemicals, and capturing strong demand	<ul style="list-style-type: none">Continue the feasibility study for investment in Performance MaterialsPropose new business plans from a new research hub (KH i-Lab)	<ul style="list-style-type: none">Continue to expand the advanced plant control systemContinue to reform personnel systemInitiatives to improve the workplace environment at our plantsIntroduce a new ERP system

*1 Debottlenecking is identifying specific areas that prevent efficiency improvement in existing manufacturing processes, then making improvements to strengthen production efficiency.
*2 Performance materials and electronic materials

Our ambitions and added value under VISION 2030

The concept of VISION 2030 is for us to become a leading global specialty chemical company. To create the value needed to achieve this goal, we will promote sustainable management.

We believe it is important to address sustainability from two angles. The first is to contribute to the realization of a sustainable society by providing solutions through our business for global environmental and social issues, such as those outlined in the UN's SDGs. The second is to sustainably improve our corporate value by providing value to society and our stakeholders. Our refrigeration lubricant raw materials help to protect the ozone layer and reduce global warming. Our basic chemicals, cosmetic ingredients, and electronic materials help to improve the quality of life (QoL) and contribute to progress for the advanced information society. While growing these businesses further and creating new businesses, we will provide value that helps to produce an environmentally conscious world and a richer life for people. In this way, we will achieve sustainable growth together with society. On the other hand, for us to be sustainable, it is essential that stakeholders recognize us as a safe, secure, and trustworthy company. We will work hard on corporate governance, including compliance and risk management, and aim to be a highly transparent company.

We have been working on CSR since our listing. In recent years we have added the perspective of sustainability and are further deepening our efforts. Since 2019, we have invited Kunio Ito, Professor Emeritus at Hitotsubashi University and Hidemitsu Sasaya, Professor at Chiba University of Commerce to discuss their fields of expertise, ESG and the SDGs, with our officers. Since last year, key officers gathered many times to discuss our value creation story and material issues, and we established the Seven Promises to promote sustainable management (see page 37). Going forward, we will further enhance our efforts under the Fourth Medium-Term Business Plan and actively disclose information.



Specific initiatives to promote sustainable management



Environment

While increasing our ability to supply refrigeration lubricant raw materials used in environmentally friendly air conditioners, we have continued to practice Responsible Care and take energy-saving initiatives to reduce the environmental impact of our business activities. As mentioned above, we are pursuing energy savings by upgrading to energy-efficient in-house power generation and introducing an advanced process control system. As the momentum for carbon neutrality continues to grow, we will formulate a strategy in the Fourth Medium-Term Business Plan specifying how we can do our part to further reduce emissions while promoting collaboration with other companies, such as through industry associations and with other companies with petrochemical refineries.

Further, we believe it is important to pursue the understanding of stakeholders by disclosing how we are working to contribute to the environment through our business. For example, oxo reactions, one of our core technologies, uses CO₂ as a raw material. In addition to procuring CO₂ externally, we are also working to capture and consume the CO₂ emitted during production inside our own plants. Also, by supplying refrigeration lubricant raw materials to meet the growing demand for environmentally friendly air conditioners, we are significantly contributing to the protection of the ozone layer and helping to reduce global warming, as we consider society as a whole. In this way, we will do our best to show as clearly as possible that our technologies and products contribute to protecting the environment throughout the supply chain.



Society

As mentioned, it is important to improve the value we deliver through business via solutions for environmental and social issues throughout the supply chain. For that reason, human resources and corporate culture are important driving forces. Looking in particular at human resources, we have been working on organizing our training programs as well as introducing a job-based personnel system built on clearly defined performance objectives for managers and a revised evaluation system. Also, as a result of continually recruiting new graduates and through mid-career recruitment, the number of employees who joined the company since we became independent in 2011 has already reached about half of our total employees, improving the diversity of our workforce. Going forward, we will do more to improve employee engagement so that we create a corporate culture where diverse employees can reach their full potential and achieve maximum results.

Governance

We are continuing to strengthen our governance system in order to practice transparent management with high ethical standards. In fiscal year 2020, while we increased the number of independent outside directors and female members of the board, all members of the Board of Directors discussed how to increase the Board's effectiveness, based on the improvements that were made. In addition, as a basic management policy, we worked on establishing the Compliance Code, which is the Group's principle of conduct, and the formulation and penetration of policies that classify and embody this into each item.

Also, in April 2021, we reviewed our management structure to further clarify the separation of management from business execution in order to strengthen governance and speed up decision-making. Today, directors focus on their supervisory function and their role in clarifying the medium- to long-term strategy. At the same time, they delegated more responsibility and gave more authority than before for the execution of daily business to executive officers and the heads of operating departments. I believe this has put in place a system for efficient and prompt decision-making related to business operations.

As a chemical manufacturer rooted in the local community, we will continue to focus on safe and stable operations to gain the trust of our stakeholders.

Message to stakeholders

It is still uncertain when COVID-19 will come to an end. Nevertheless, we will flexibly respond to rapid changes in the external environment and overcome challenges one by one, as we recognize that continuing to maximize periodic profit in this way is an important role for our management team.

On the other hand, to further improve our corporate value, it is necessary to develop a growth strategy, such as expanding production for our core products based on a medium- to long-term strategy. Along with this, there may be cases where expenses take priority, such as a temporary increase in amortization expenses, but we believe that this is necessary for the Company to achieve sustainable growth.

To our valued investors and other stakeholders, thank you very much for your continued support as we pursue sustainable growth.

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

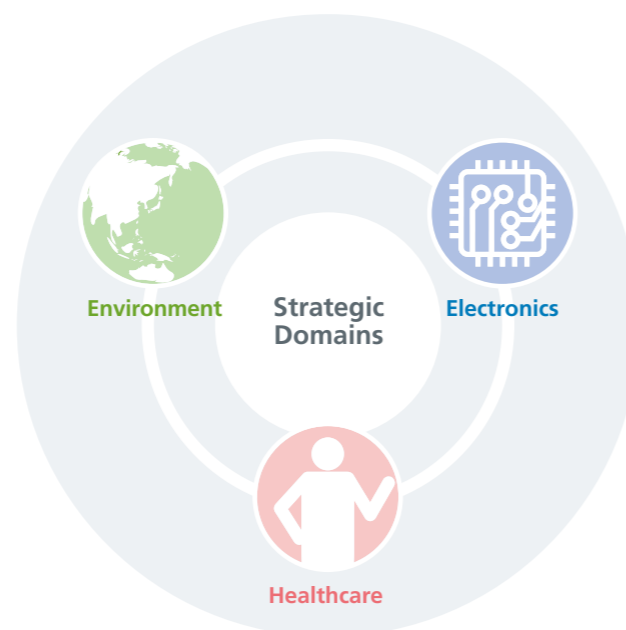


Aiming to increase corporate value over the medium- to long-term by improving capital efficiency through appropriate allocation of management capital

In order to realize our VISION 2030, we aim to build a well-balanced financial structure that is less susceptible to changes in the external environment while maintaining a high level of capital efficiency. To that end, we will implement measures based on our three-year Medium-Term Business Plan.

Balancing improving capital efficiency and strengthening our financial base

ROE is one of the important numerical targets in our 3rd Medium-term Business Plan (2019 - 2021), and we have set a target for ROE of 18% for 2021. In addition, by setting the equity ratio management standard of 40 to 50%, we are striving to balance capital efficiency and financial soundness. By achieving this balance we will further allocate resources to our strategic domains—the environment, healthcare, and electronics—which are expected to maintain market growth in the future, aiming for sustainable growth while continuing to improve profitability.



Basic investment policy and strategy

During the first two years of the 3rd Medium-term Business Plan, especially in 2020, we faced with a difficult environment with sluggish demand due to the spread of COVID-19. Even under such circumstances, we have steadily implemented not only strategic investments but also investments to reinforce and rationalize our business base. These will contribute to medium- to long-term growth.

In 2020, we completed a new plant for refrigeration lubricant raw materials at our Yokkaichi Plant. This product is



Building for quality control in Yokkaichi Plant, completion image

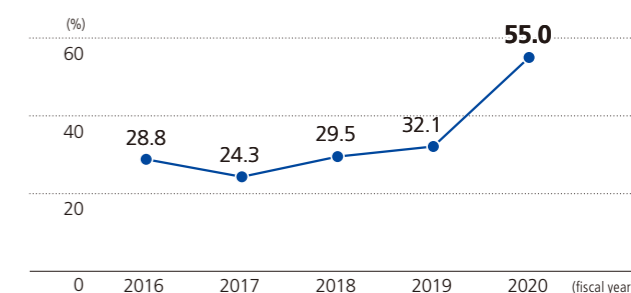
essential for air conditioners that contribute to the reduction of global warming, and we expect further demand growth in the future as efforts to reduce CO₂ emissions are accelerating around the world. In the Electronics domain, we are making forward-looking investments, such as starting operation of new equipment for materials for next-generation semiconductors at our Group company and deciding to construct a quality control building with the highest-level clean room at the Yokkaichi Plant. In 2021, we are making investments with a view to 2030, such as the establishment of an open lab at KH i-Lab, our open innovation hub, and the startup of inhouse power generation facilities that reduce CO₂ emissions through conversion to energy with lower environmental impact. On top of this, we are continuing to focus on investments in more advanced plant control systems and to improve the workplace environment at our plants.

On the other hand, we thoroughly reviewed the necessity, timing, and content of each investment project. As a result, capital expenditures over these three years will be approx. 20% more efficient than originally planned.

Shareholder returns

We set shareholder returns as one of our most important management issues. Under the 3rd Medium-term Business Plan, our basic policy is to provide stable shareholder returns in proportion to corporate growth, aiming for a dividend payout ratio of 30%. In 2020, both domestic and overseas demand decreased due to the spread of COVID-19, causing a slump in our business performance. Nevertheless, we paid an annual dividend of 60 yen per share as originally planned, taking into consideration our shareholder return policy and financial situation.

Dividend payout ratio



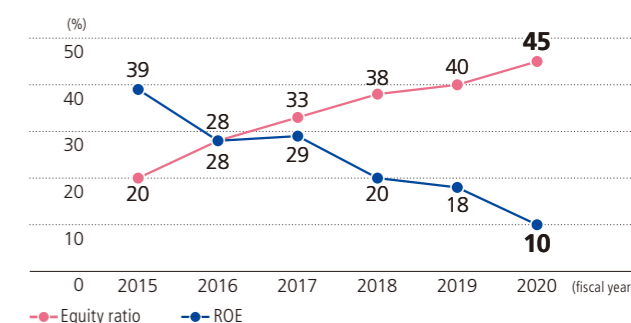
VISION 2030 progress and future initiatives

Under VISION 2030, we are aiming to build a financial base that is immune to the external environment while maintaining high capital efficiency, with net sales of 180 billion yen and operating income over 25 billion yen. Our financial targets for 2030 are an ROE of over 12% and an equity ratio of 50%. In 2020, our business performance temporarily declined due to the spread of COVID-19, but our medium- to long-term growth strategy remained unchanged, and we steadily recovered business performance by capitalizing on improvements in the external environment.

However, the business environment is changing rapidly and having a greater impact than anticipated. To achieve

sustainable corporate value, we will optimize our product portfolio and bolster our financial base.

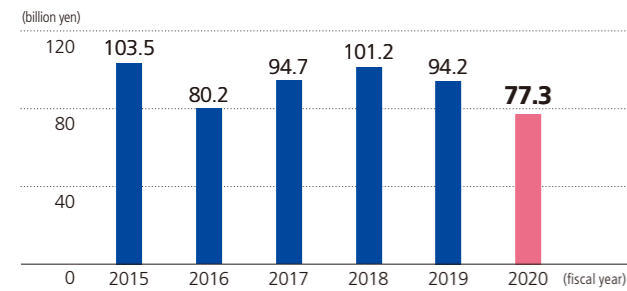
Equity ratio/ROE



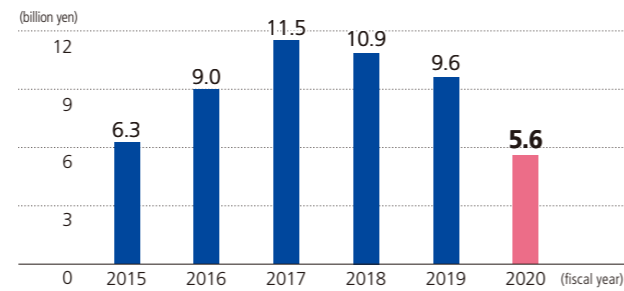
Financial and Non-Financial Highlights

The figures on page 16 are consolidated and those on page 17 are non-consolidated.
Data with no explanatory notes indicate the period from January 1 to December 31, each year.

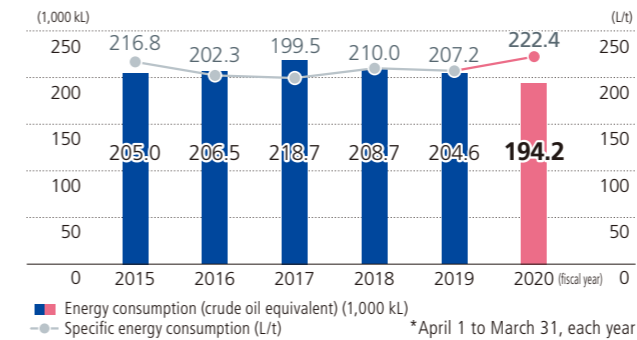
Net sales



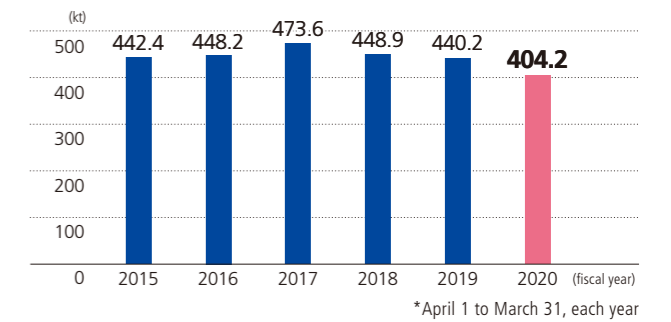
Operating income



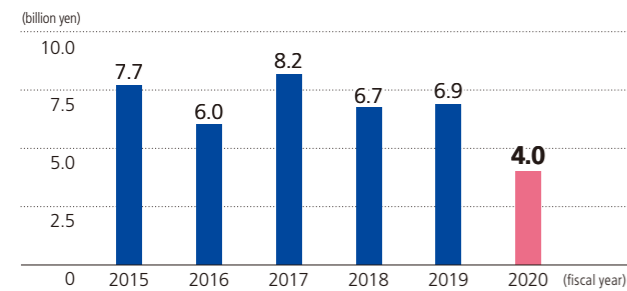
Energy consumption and specific consumption



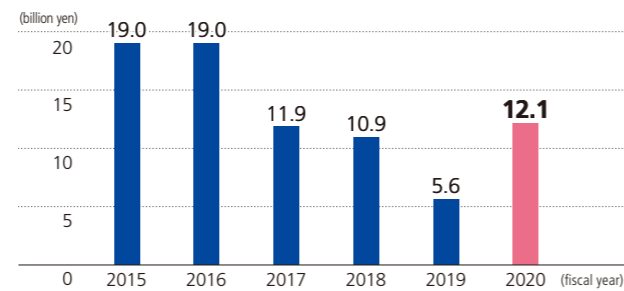
CO2 emissions volume



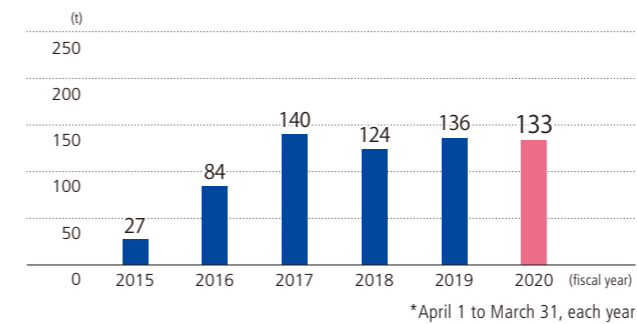
Profit attributable to owners of parent



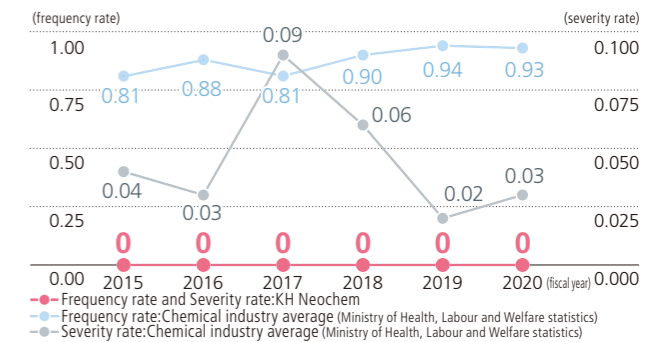
Net interest-bearing debt (except lease obligations)



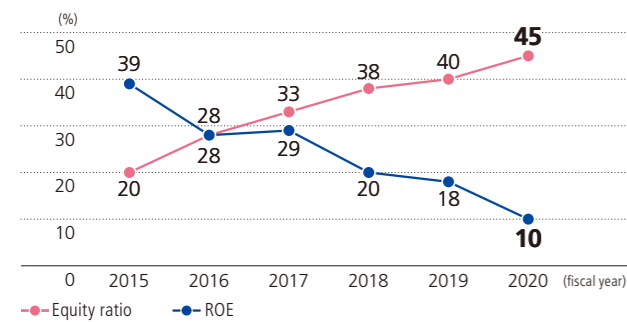
Disposed of as landfill



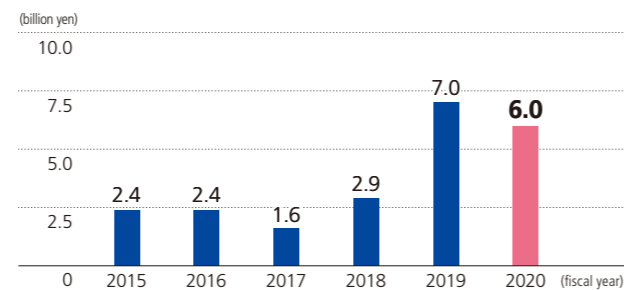
Frequency rate (accidents resulting in lost workdays)/Severity rate



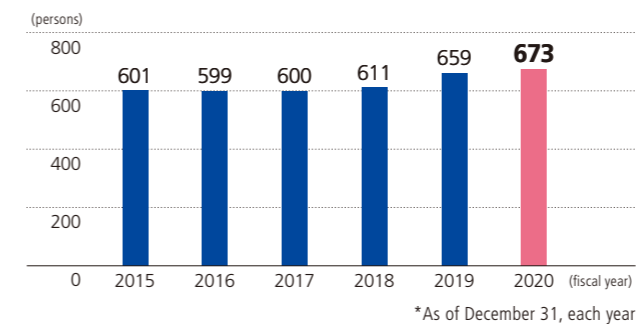
Equity ratio/ROE



CAPEX



Number of employees

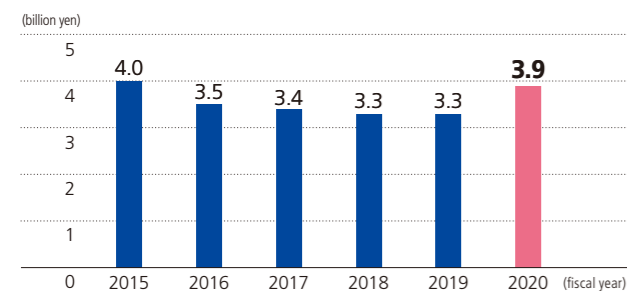


Number of new employees

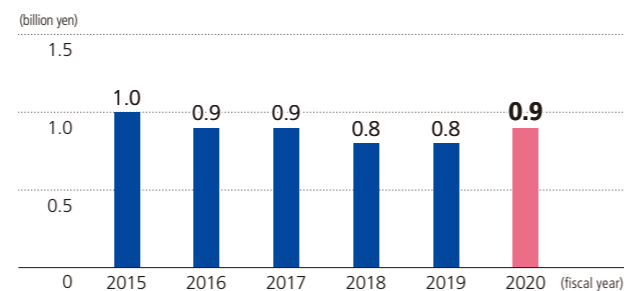
	2015	2016	2017	2018	2019	2020
New graduates	14	18	8	21	27	22
Mid-career	8	5	14	19	50	13
Total	22	23	22	40	77	35

*Only workers who have signed a labor contract with no fixed term

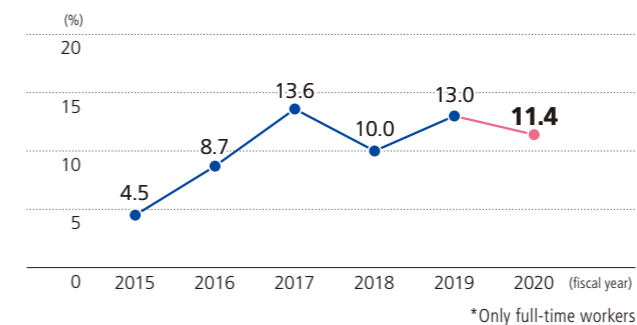
Depreciation



R&D expenses



New female employees



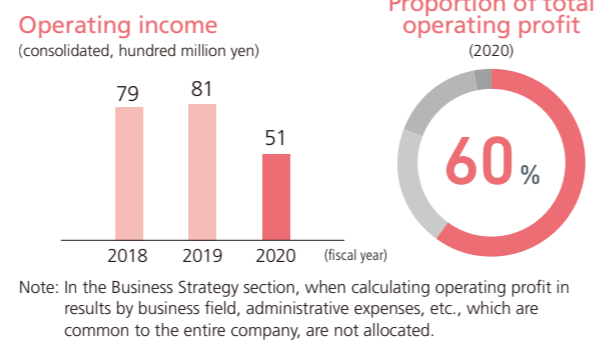
Years of service and gender differences

	2016	2017	2018	2019	2020	2021
Years of service (male)	17.1	16.5	16.0	14.6	13.5	13.7
Years of service (female)	16.9	16.9	16.3	14.3	14.3	15.0
Difference (female - male)	-0.2	0.4	0.3	-0.3	0.8	1.3

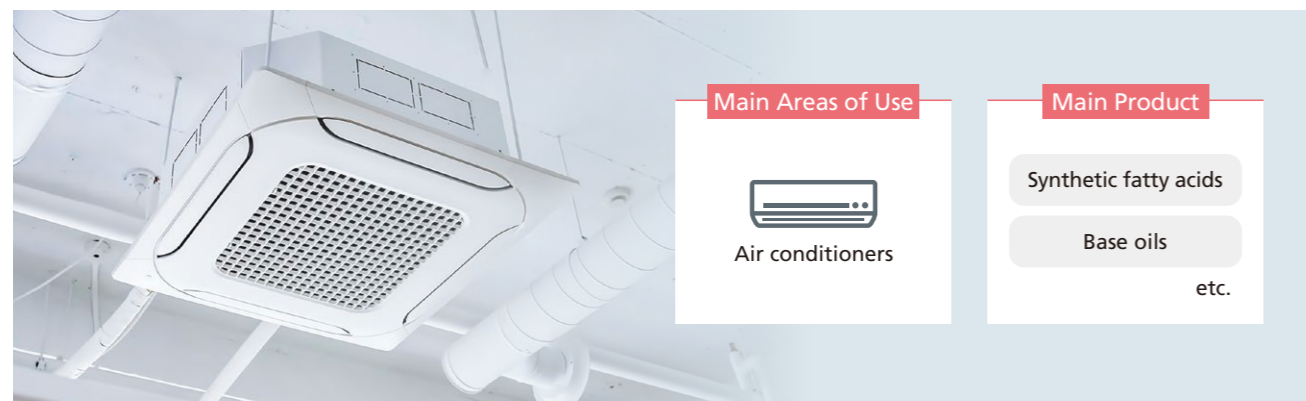
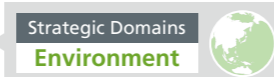
*Only full-time workers *As of April 1, each year

In the three strategic domains that we have established, Performance Materials supports two of them: the environment and healthcare.

Refrigeration lubricant raw materials used in environmentally friendly air conditioners have contributed to global warming prevention. Cosmetic ingredients, used in high-end skincare cosmetics such as skin toner, have helped improve the quality of life (QoL) of people all over the world.

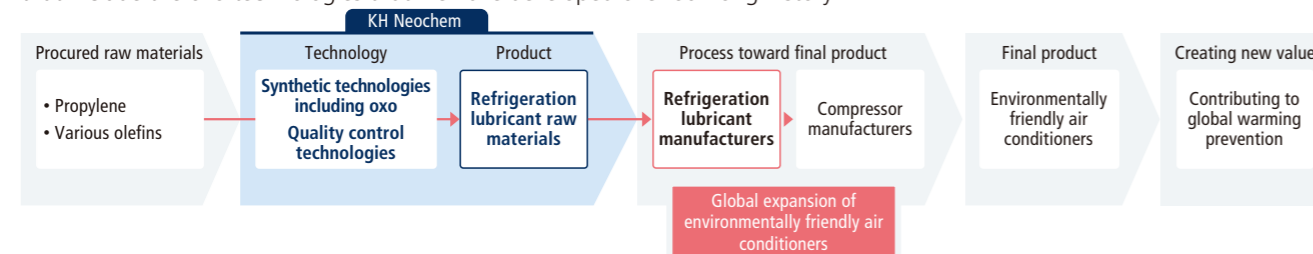


01 Refrigeration Lubricant Raw Materials



Value chain example

We manufacture and market refrigeration lubricant raw materials for use in air conditioners, employing synthesis technologies that include the oxo technologies that we have developed over our long history.



External Environment

Global expansion in the environmentally friendly air conditioner market

Population expansion in emerging nations

Worldwide increase in the size of middle-income groups

Tightening international environmental regulations for refrigerants

Strength

Large share of global market

Located in Asia, the region with the world's highest demand

R&D system in cooperation with customers

Key Points in the Third Medium-Term Business Plan

- 1 Start up of new facilities for refrigeration lubricant raw materials and marketing of new products
- 2 Further increase in production capacity for performance chemicals (refrigeration lubricant raw materials, etc.)

Progress in the Medium-Term Business Plan and Outlook for the Future

Regarding ①, we began operating the new refrigeration lubricant raw materials production line at the Yokkaichi Plant in Q1 2020. The COVID-19 pandemic and other factors depressed demand in 2020, but accelerating moves around the world to curb global warming have led to increased demand for more environmentally friendly air conditioners that use low GWP refrigerants. We therefore expect this new manufacturing plants to allow us to further contribute to this market.

Regarding ②, we are still conducting a feasibility study on improvements at the Chiba Plant. We will make an appropriate investment decision to meet strict economic constraints in light of major changes in the business environment, such as the rising cost of plant construction.

Over the medium to long term, we forecast growth in demand for more environmentally friendly air conditioners

and consequently for our refrigeration lubricant raw materials. We will make every effort to implement our growth strategy, taking the best course of action for immediate management issues and prioritizing the medium- and long-term perspectives.



TOPICS

New facility for refrigeration lubricant raw materials at the Yokkaichi Plant

As discussed above with respect to ①, we installed a new production line for refrigeration lubricant raw materials at our Yokkaichi Plant.

Construction was completed in Q1 2020 and the new line provide a 50% increase in production capacity for each product.

Creating value that helps to resolve social issues

▶ Refrigeration lubricant raw materials that help curb global warming

Markets for air conditioners are growing as developing nations make more economic progress. Most of the air conditioners in developing nations use old technologies that contribute to the destruction of the ozone layer and lead to global warming. However, in recent years, China and many other countries have started to use more environmentally friendly air conditioners. We manufacture refrigeration lubricant raw materials that are compatible with more environmentally friendly air conditioners. As part of our initiative to help curb global warming, we are working to ensure stable supplies in response to growing demand.

(See pages 20 and 21 for more details.)



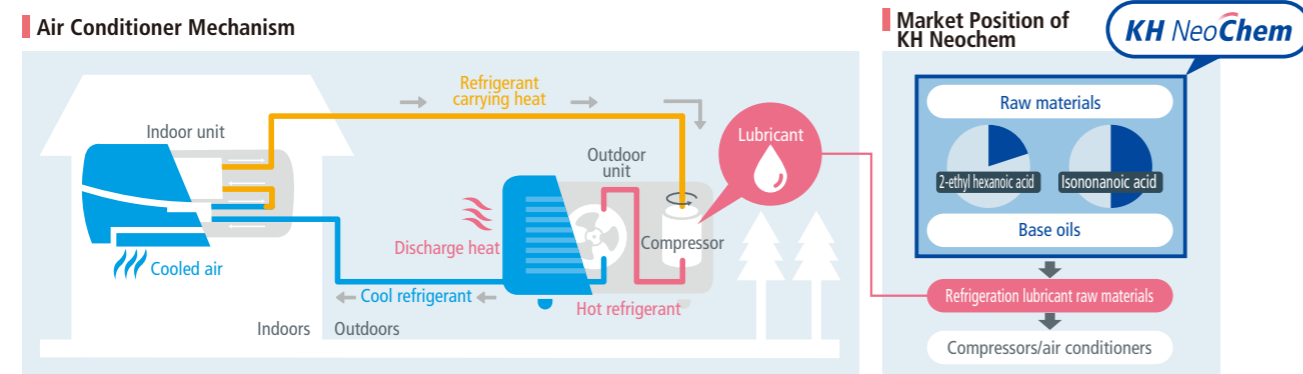
COLUMN Market Prospects for Refrigeration Lubricant Raw Materials

One of KH Neochem's main products is refrigeration lubricant raw materials. In this special feature, we look at the prospects for these ingredients, while reflecting on the global trend for increasing concern for the environment.

What are refrigeration lubricant raw materials?

Air conditioners make rooms cool by taking in hot indoor air and moving just the heat to the outside. Moving the heat to the outside is performed by a refrigerant, which functions by being compressed in a compressor inside an air conditioner's outdoor unit. The compressor needs a lubricant, specifically refrigeration lubricant raw materials to operate efficiently and smoothly, without breaking down over a long working life.

Currently, the shift toward environmentally friendly air conditioners is accelerating, and demand for refrigeration lubricant raw materials that are compatible with the refrigerants used in these air conditioners is also growing. KH Neochem holds an extremely high share globally for the raw materials used in refrigeration lubricant raw materials.



Transition to Refrigerants and Refrigeration Lubricants Raw Materials with Low Environmental Impact

From Controlled CFCs to CFC Substitutes

In 1987 the Montreal Protocol was adopted, establishing the regulatory measures for CFCs, including the gradual reduction and ultimate elimination of controlled CFCs, which cause ozone layer depletion. As a result of this Protocol being enacted, a global shift to CFC substitutes that do not harm the ozone layer has developed rapidly since around 2000.

Shift to Low GWP*1 Refrigerants

Since its adoption, the Montreal Protocol has undergone several revisions, as they are required. In the 2016 Kigali Amendment,*2 it was agreed to gradually reduce refrigerants with high GWP to suppress global warming. This is accelerating the shift to new refrigerants such as R32, a CFC substitute with low GWP.

Transition in Refrigerant and the Raw Materials for Refrigeration Lubricant

International agreement on global environmental regulations	1987 Montreal Protocol		1997 Kyoto Protocol	2016 Kigali Amendment
Global trends	Requirement to reduce and eliminate controlled CFCs		Greenhouse gas emission regulations	Requirement to reduce CFC substitutes
Transition in refrigerants*3	<div>From around 2000</div> <div><div>Old refrigerants: R22 (controlled CFCs)</div><div>Substitute</div><div>Current refrigerant: R410A (CFC substitute)</div><div>Substitute</div><div>New refrigerant: R32 (CFC substitute)</div><div>Substitute</div><div>From 20XX</div><div>Next-generation refrigerant (currently under development)</div></div>			
	<div>Ozone layer –causes depletion</div> <div>Ozone layer –no depletion</div> <div>Ozone layer –no depletion</div> <div>Global warming impact –large (GWP–1,810)</div> <div>Global warming impact –large (GWP–2,090)</div> <div>Global warming impact –low (GWP–675)</div>			
Transition in refrigeration lubricant raw materials	Petroleum-based	Synthetic Using raw materials produced by KH Neochem		Under development

*1 GWP (global warming potential): the greenhouse effect of a refrigerant, expressed as a value with carbon dioxide standardized at 1.

*2 Kigali Amendment: A new international agreement reached at the 28th Montreal Protocol Conference (MOP28) held in Kigali, Rwanda on October 15, 2016.

*3 In the case of household air conditioners

International Regulations on Refrigerants Concerning Climate Change (Kigali Amendment) and the Future of Refrigeration Lubricant Raw Materials

Advanced Nations

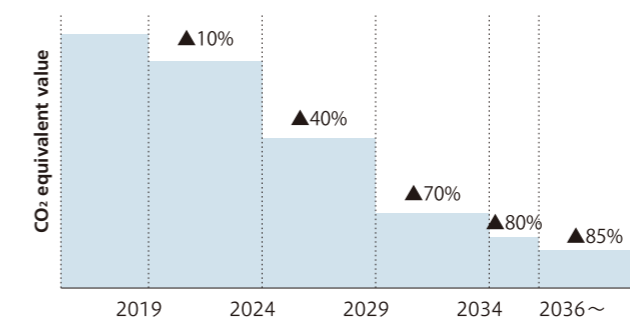
Obliged to Reduce the CO₂ Equivalent Value, based on the Kigali Amendment and Growing Demand for Synthetic Refrigeration Lubricant Raw Materials

Although CFC substitutes do not harm the ozone layer, 18 types of CFC substitutes with high GWP were added as regulated substances in the Kigali Amendment, with a view toward preventing global warming.

The gradual reduction of CFC substitutes outlined in the Kigali Amendment uses CO₂ equivalent values obtained by multiplying the quantities of CFC substitutes by GWP as an index. Average values for the production and consumption of CFC substitutes from 2011 to 2013, among other data were used as standard values.*4 For advanced nations, including Japan,*5 a gradual reduction in CO₂ emissions from the standard values is required from 2019 to 2036, with the ultimate target of an 85% reduction by 2036.

As a result, this regulation is expected to further raise demand for air conditioners that use low GWP refrigerants, such as R32.

Advanced Nations and Refrigerant GWP Reduction Schedule*4



*4 For more details, please refer to the Montreal Protocol on Substances that Deplete the Ozone Layer on the website of the Ministry of Economy, Trade and Industry. (Japanese documents only)

https://www.meti.go.jp/policy/chemical_management/ozonelaw/ozonelaws.html

*5 Regulatory measures differ in some advanced nations, such as Belarus and Russia.

Emerging Nations

Different Reduction Schedules for Advanced and Emerging Nations

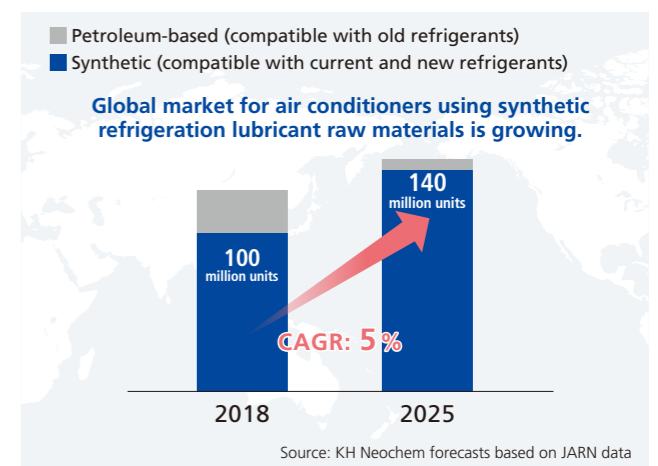
Under the Montreal Protocol, advanced nations are required to eliminate ozone layer-depleting controlled CFCs by 2020, while emerging nations are required to eliminate it by 2030.

In the measures against global warming laid out in the Kigali Amendment, emerging nations*6 are obliged to reduce the CO₂ equivalent value by 10% of the standard value by 2029. The regulations become stricter in steps, ultimately reaching the requirement for an 80% reduction by 2045.

In addition to the above, we expect further growth in demand for more environmentally friendly air conditioners as the economies of developing nations strengthen and regulations against air conditioners with low energy efficiency come into effect in China (see figure below).

*6 The standard value is calculated based on the average values for production and consumption of CFC substitutes from 2020 to 2022, among other data. The schedule is more gradual in India, Pakistan, Iran, Iraq, and the Gulf States. For more detail, please see the graph below.

Global Air Conditioner Sales Forecasts



KH Neochem's Strategy

Due to the Kigali Amendment and the growing economic strength of emerging nations, we foresee an increase in demand for air conditioners using low GWP refrigerants, such as R32. We will further strengthen our capacity to supply refrigeration lubricant raw materials used in these air conditioners. With an eye on the future, we will also conduct research and development into refrigeration lubricant raw materials that will be compatible with next-generation refrigerants for extremely low GWP.

02

Cosmetic Ingredients

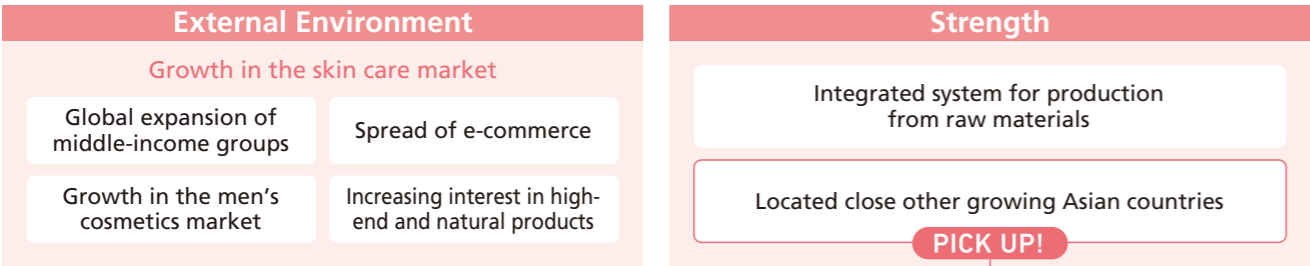
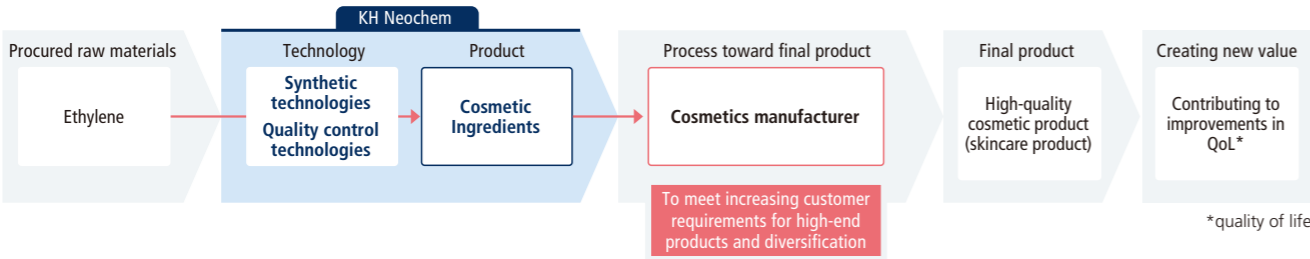
Strategic Domains

Healthcare



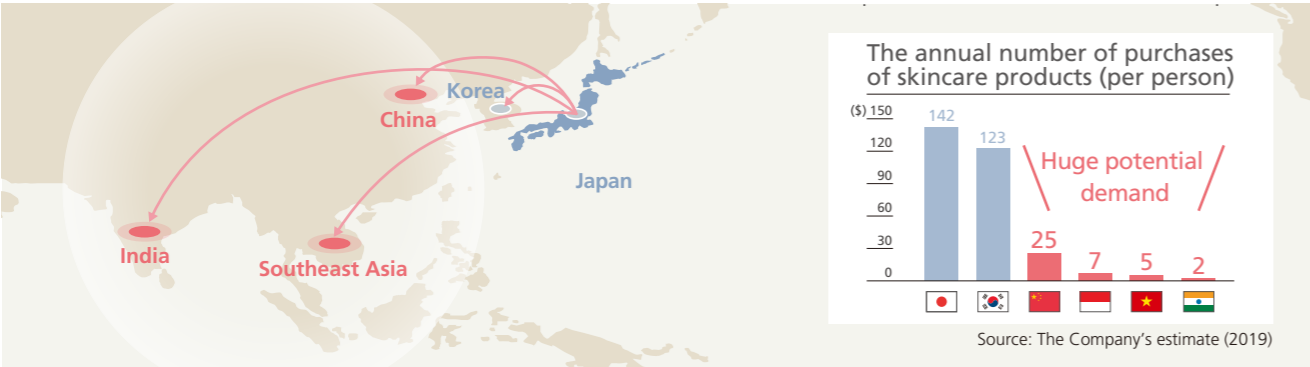
Value chain example

We manufacture and sell cosmetic ingredients mainly for skincare products and have received a strong reputation for product quality.



Increasing global sales channels focused on Asian markets

We are selling our cosmetic ingredients in Japan and Korea, where people have high awareness of beauty and skincare, as well as to China, Southeast Asia, and India, markets with rapidly increasing demand.



Key Points in the Third Medium-Term Business Plan

- 1 Production capacity growth for skincare products (1,3-butylene glycol) in response to expanding markets for skincare products in Asia
- 2 Quality improvement by creating near-odorless products, etc.

Progress in the Medium-Term Business Plan and Outlook for the Future

Regarding 1, we began production debottlenecking* with a minor investment in 2019. In 2021, we carried out further debottlenecking, increasing supply capacity by approximately 10% compared with before.

Regarding 2, we are studying ways to reduce odors and expand our product lineup in collaboration with research institutes.

The difficult business environment continues due to the drop in demand from tourism into Japan and a fall in cosmetics sales caused by fewer people leaving their homes due to the COVID-19 pandemic. However, we expect an increase in demand for skincare products, mainly in Asia, over the medium to long term. For cosmetic ingredients, we intend to steadily implement growth strategies from a medium- to long-term perspective.

* Debottlenecking is identifying specific areas that prevent efficiency improvement in existing manufacturing processes, then making improvements to strengthen production efficiency.



TOPICS What is 1,3-butylene glycol?

1,3-butylene glycol (1,3-BG) is a cosmetic ingredient that produces a moist texture when using skin toners, face masks, or beauty serums, etc. It is an indispensable ingredient for skincare products that come into direct contact with the skin due to its strong moisturizing properties and antibacterial properties, as well as its reduced odor and amount of skin irritation.

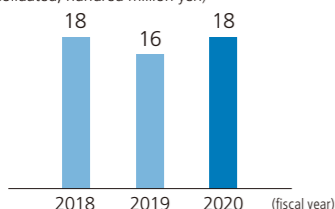
Creating value that helps to resolve social issues

Supporting the healthy lives and beauty of people around the world

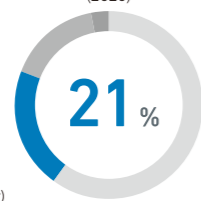
We are one of a handful of companies worldwide that are capable of manufacturing cosmetic grade 1,3-BG.

Every cosmetic has an ingredients label. If it says BG or 1,3-butylene glycol, there is a good chance our materials have been used. Our high-quality 1,3-BG, often used in high-end skincare cosmetics and sunscreens, is supporting the healthy lives and beauty of people around the world.

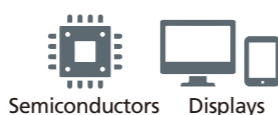


Operating income
(consolidated, hundred million yen)

Note: In the Business Strategy section, when calculating operating profit in results by business field, administrative expenses, etc., which are common to the entire company, are not allocated.

Proportion of total
operating profit
(2020)

Main Areas of Use



Main Product

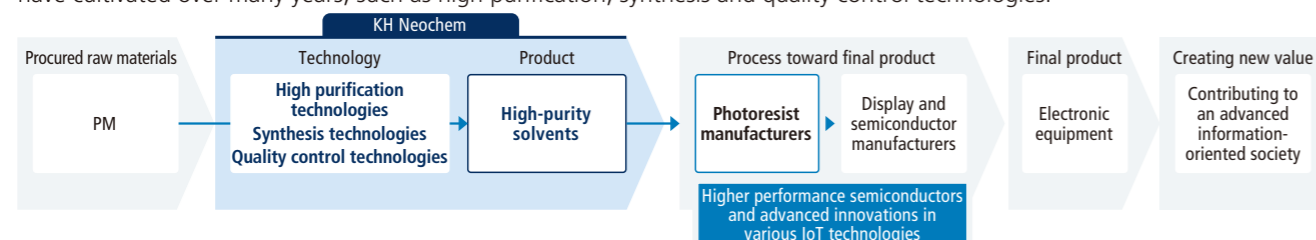
Esters
(electronic materials grade)

Glycol ethers
(electronic materials grade)

etc.

Value chain example

We sell products such as high-purity solvents with an extremely low impurities (foreign substances and metal content) used for the manufacturing process of displays and semiconductors. These solvents are manufactured by utilizing the technologies that we have cultivated over many years, such as high purification, synthesis and quality control technologies.



External Environment

Growing electronic materials market associated with development of IT and electronics industries

Spread and development of AI & IoT

Improvements in the speed and functionality of electronic equipment

Increased demand for cutting-edge semiconductors due to the spread of 5G technologies

Strength

Technological expertise in high purification technologies accumulated over many years

Varied product lineups and supply system

Advanced quality control systems that accommodate customer requirements

Key Points in the Third Medium-Term Business Plan

- 1 Operate new facilities for the next generation semiconductor materials
- 2 Further improvement in the quality of high-purity solvents in response to greater miniaturization of semiconductors

Progress in the Medium-Term Business Plan and Outlook for the Future

Regarding ①, in our Group company Kurogane Kasei Co., Ltd. a contract manufacturer of electronic material products, we built a new facility for the next-generation semiconductor materials in the last year. This plant can also be used for the current generation of semiconductor materials and will allow us to optimize our manufacturing and marketing strategy in line with market trends, responding to continued growth in existing markets and with a view to market growth in cutting-edge fields.

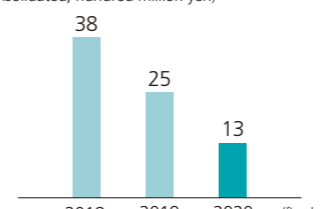
Regarding ②, with the ever-increasing miniaturization of semiconductors, there is more demand for improvements in product quality. We are steadily strengthening our systems for quality assurance and supply chain systems to ensure even higher levels of quality in our high-purity solvents.

Creating value that helps to resolve social issues

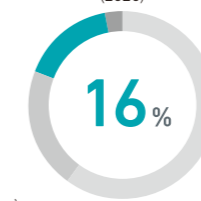


▶ Responding to semiconductor miniaturization needs to contribute to an advanced information-oriented society

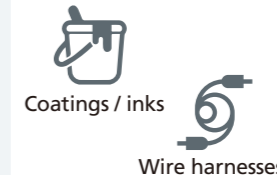
The development of 5G, AI, and IoT applications and progress in digital transformation (DX) are driving increased demand for higher performance semiconductors with microcircuitry. Semiconductors also help to improve the energy efficiency of electronic equipment. We are further improving our technological strengths to respond to the need for more semiconductor miniaturization and to support an advanced information-oriented society.

Operating income
(consolidated, hundred million yen)

Note: In the Business Strategy section, when calculating operating profit in results by business field, administrative expenses, etc., which are common to the entire company, are not allocated.

Proportion of total
operating profit
(2020)

Main Areas of Use



Main Product

Oxo alcohols

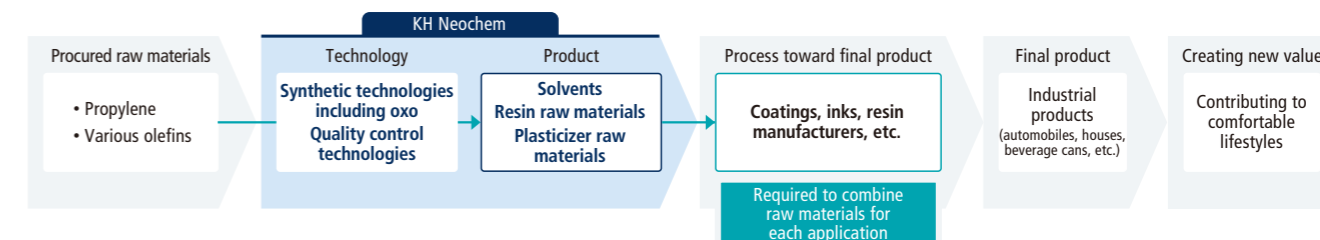
Esters

Glycol ethers

etc.

Value chain example

These products are manufactured using our core technologies, and are sold for many uses, including coatings, inks, and electric cables in industrial fields such as automobiles, houses, and electrical machinery.



External Environment

Stabilized market in Japan and expanding market in the rest of Asia

Stable domestic market

Population growth in emerging nations

Economic growth centered in Asia

Strength

The largest production capacity for oxo alcohol in Japan

Extensive range of products supported by an expanded lineup of derivatives

Trusting relationship and stable trade with top manufacturers in each market

Located close other growing Asian countries

Key Points in the Third Medium-Term Business Plan

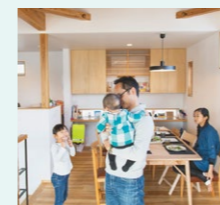
- 1 Operating an effective pricing policy and higher sales figures
- 2 Further introduction of facility control system with latest technologies (AI and IoT)

Progress in the Medium-Term Business Plan and Outlook for the Future

Regarding ①, although demand has gradually recovered since Q3 2020, particularly in our automotive-related operations, business conditions are still difficult as the recovery has not been strong enough to completely offset the negative impact of the pandemic. In the future, we will accurately capture the steady demand and connect this demand to sales.

Regarding ②, we have been introducing the system mainly into plants for Basic Chemicals. This system had been introduced into around 40% of our plants in 2020 and around 50% of plants as of 2021, contributing to productivity improvements and reduced workloads. We are trying to introduce this system into most of our plants by 2023.

Creating value that helps to resolve social issues



▶ Extensive product lineup contributing to a better quality of life

We have an extensive lineup of basic chemical products that are used in coatings, inks, and pharmaceuticals, as well as electric cables, wallpapers, floorings, plastic food wraps, and medical transfusion bags, all of which contribute to a better quality of life in a wide range of settings.



R&D and Business Creation

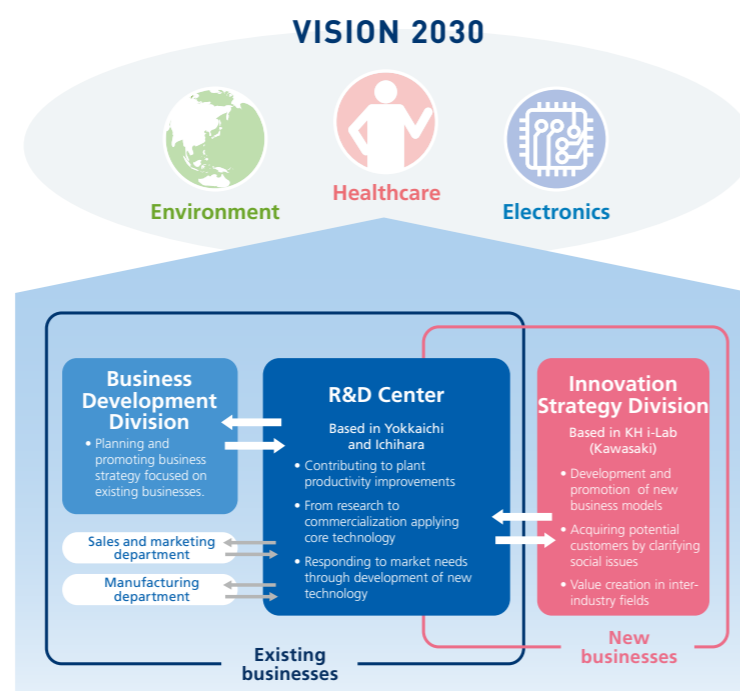


Organization

KH NeoChem

Strengthening strategic functions through organizational integration

To achieve VISION 2030, we established the Business Development Division in April 2021 and integrated the functions to involve in business strategy formulation. We can accelerate the promotion of commercialization by planning a business strategy that reflects management policies and by making efficient and quick decisions. The R&D Center, overall in charge of the research and development strategy, is intended to provide technological solutions as well as ongoing development of the core technologies that support our business operations. The Innovation Strategy Office, which was established to create new businesses, renamed the Innovation Strategy Division and has now been expanded organizationally. Through these organizational changes, we are working to create new businesses in addition to strengthening and growing existing businesses.



Drivers for value creation

The R&D Center and the Innovation Strategy Division are working to create new value for KH Neochem's technologies. The R&D Center is improving core technologies—to put KH Neochem in an even stronger position—and supporting competitive strategies for existing businesses, while also creating technologies for developing new businesses for the future. We are also managing the intellectual property strategy

for KH Neochem as a whole to build an optimal intellectual property portfolio. The Innovation Strategy Division is using the KH i-Lab as a collaborative technology hub for open innovation with outside organizations, while working to speedily acquire new technologies and create new businesses.



Technology

R&D that utilizes our strengths

To adapt to changes in the social environment, including policy changes by governments to address global environmental issues and growth in the scale of electronics markets, we are exploring new markets where we can roll out our unique technologies and products. We are collecting information and researching trends through joint research with universities, as well as through introduction of our development products at exhibitions and participation in international conferences. To respond the new trends obtained from these initiatives, we are working to maintain and strengthen the competitive advantage of our products. Furthermore, we will do by developing new materials that utilize our core technologies and by creating new value by acquiring technologies that improve quality.



Human resources



Diversification of values and expansion of development potential through human resource exchanges



Personnel exchanges with NGK SPARK PLUG CO., LTD. (a plant tour at our Chiba Plant)

Personnel exchanges with external organizations, which started in 2020, have fostered our development capabilities that incorporate new perspectives. One example: With NGK SPARK PLUG CO., LTD., we exchanged one employee from each company. This experience is prompting us to reflect different industry perspectives in our development programs. We are working together for proof of concept on themes where we both have strengths, such as chemical plant equipment inspections using sensing technologies. We can expand the approach for our new development through activities such as collaborative brainstorming sessions involving both companies to address social issues on a global scale. Looking ahead, we intend to grow our development potential further through collaborative innovation with other organizations.

Further advances beyond the existing technology

We aim to grow our market share in existing fields and develop business in different fields by increasing our product and technology expertise. We are working to promote even closer coordination among the staff in our plants and to improve further understanding of our existing technologies. This leads to foster the development of human resources which can increase productivity and product quality through technology improvements. In addition, we are building fundamental technologies by creating platforms in new fields to propose innovative ideas and open up new markets for our products. We are also working to improve our technological strengths through more joint research with universities, allowing us to develop new products and

acquire new technologies that utilize our existing technologies and equipment.



Developing new technologies to respond to diversifying market needs

The world is becoming more complex and diverse, making it increasingly difficult to accurately respond to customer needs. Given this situation, we are working to develop technologies that contribute to common global-scale targets, such as the Sustainable Development Goals (SDGs), in order to respond to market needs over the long term. By utilizing our core technologies in oxo reaction and purification technologies built up over our long history and our manufacturing expertise in quality control, we aim to acquire new technologies that will allow us to work with a wide range of materials, such as natural raw materials that have been rapidly increasing in use over the past few years. Through these initiatives, we aim to move into high-value-added businesses and expand the scope of our business through collaborations with other companies.



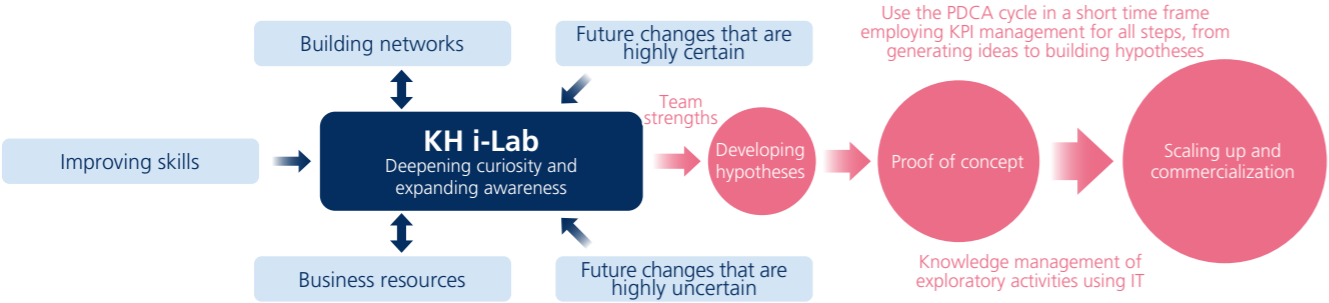
Collaborative innovation

Developing new approaches to social issues at KH i-Lab

KH i-Lab aims to innovate based on the three strategic domains set out in VISION 2030: the environment, healthcare and electronics. We categorize and target social issues that could arise in the future, from global-scale issues (megatrends) to niche issues that customers have. In addition, we advocate exploratory activities that emphasize the characteristics of each member, such as their own interests and specialties. We call this strategy *Wide Range*

Operation with Curiosity or WROC. Among the issues targeted, some have already occurred; some can be discovered by exploration; and some can be uncovered by investigating deeply into phenomena, then repeatedly proposing and testing temporary hypotheses. Through our research activities, we are working to uncover a wide range of social issues and to create forms of business that help to resolve them.

■ WROC strategy: research activities that are sparked from individual curiosity



Role of the open lab and our future plan



The KH i-Lab started operating an open lab in April 2021. This open lab can be used for experiments, for example in biotechnology, that previously would have been difficult to do with our existing labs. A number of themes are currently at the hypothesis testing stage in joint R&D with venture companies and universities, and we will then use the open lab to look into commercialization. In the future, we will make greater use of the open lab for collaborative innovation with outside parties with the goal of translating these activities into new business developments.

Using intellectual property to strategically increase corporate value: technology platforms

We are working to develop and use intellectual property using our technology platforms. We aim to maintain and evolve the competitive strengths of existing businesses and create entirely new businesses. The technology platform is the core of our intellectual property so that we can visualize our technology and extract and systematize of competitive points. As well as the role technology platforms play in visualizing a technology and supporting technology transfer, they also help to increase corporate value from several perspectives including through the discovery of new inventions and the creation of new technology fields.



Production Technology

Evolution of production technology

Introduction of an advanced process control system for plants

A chemical plant is a maze of pipework, and safe plant operations are ensured through continual, precise adjustments in the flow rates of raw materials and products. It takes a lot of experience and advanced expertise to master plant operations, and the problem with adjusting the manual flow rate is losses.

To minimize these manufacturing losses, an advanced process control system, or a state-of-the-art system that employs technologies such as AI, controls the plant by automatically estimating the appropriate settings, based on temperature, pressure, and other conditions. The introduction of this system, which automatically adjusts settings to the right values, has allowed us to minimize manufacturing losses. Reducing the operator workload also makes it possible to further improve operational efficiency. As of 2021, we have completed the introduction of this system in around 50% of our plants.

By introducing this advanced process control system across the whole company, KH Neochem intends to dramatically improve production efficiency as well as tackle several manufacturing issues, such as quality stabilization.



Restructuring business processes related to equipment management



As a petrochemical manufacturer, maintaining safe and stable production is one of our biggest targets. Effectively repairing and upgrading our plants and equipment that deteriorate over time is a vital role of our equipment management department. For this reason, we are restructuring our business processes for equipment management to prevent potential drops in the quality of equipment management work, such as a generational change of employees due to the retirement of veteran staff. First, we are focused on evaluating ways to enable more stable production based on risk assessments, regularly obtaining estimates of the frequency rate and the impact of breakdowns in advance as well as performing preventive maintenance. We are also working on standardizing operations and redoing the equipment ledger, so that younger employees can do the same work as more experienced employees. After completing regular maintenance in 2022, we will be implementing redesigned operational processes. These processes will include developing maintenance and testing plans, making repairs and updates, and evaluating maintenance results. Through these activities, we aim to effectively direct our limited management resources (human resources and financial resources), helping to reduce missed manufacturing opportunities as much as possible.

Human Resources and Corporate Culture

Message from the corporate officer in charge of human resources

Fostering a corporate culture that has diverse human resources and that maximizes results

Yukihiro Isogai Director & Corporate Officer
KH Neochem Co., Ltd.,

Human resources strategy needed to achieve VISION 2030

To achieve VISION 2030’s challenging goals, in the future we must dramatically improve productivity, and the foundation for doing that is our human resources. At KH Neochem, as we set “ideal type of person” (shown on the right), we believe that it is necessary to foster a corporate culture that has diverse people and that maximizes results. Based on this idea, we have selected themes to strengthen every part of human resources, and we are working on a variety of HR initiatives and corporate culture reforms.

Ideal type of person for 2030

- “Speed” in outperforming competitors
- “Innovations” responding to changes in the environment
- “Professionalism” to gain competitive advantages
- “Networking” to further develop strengths

Human resources (HR) strategy

Securing diverse human resources and promoting employees’ full participation

Considering that the full participation of employees with diverse values is essential for the sustainable growth of companies, we have been hiring mid-career recruits over the past few years. To secure unique added value and achieve significant growth in a tough environment, it is necessary to have a continuous stream of innovation in every area. With the participation and collaboration of many employees with multifaceted backgrounds, experience, and skills, I feel that a wide range of ideas and options have been generated recently within the company, and initiatives are being

developed to accelerate growth. We are not only securing diverse human resources; To enable everyone to reach their full potential and contribute to our business operations, we have also developed several initiatives: an HR placement and personnel evaluation system that puts the right people in the right places based on merit (as opposed to seniority); systems for flexible working styles; and support for career development by expanding our education and training (see Education System on page 31, next page).

Reforming corporate culture and improving employee engagement

These initiatives have outwardly made our lineup of human resources more diverse. On the other hand, to translate participation by diverse human resources into value creation and to establish a competitive advantage, I feel that we must foster an organizational culture that sees differences as strengths and makes the most of them, and we need to improve employee engagement. Looking at these themes,

we implemented the One Word Makes a Difference campaign to encourage company-wide communication, as a first step, with a view to creating workplaces where people can work with respect for one another. We have also been holding annual discussions to improve team engagement at every workplace. Little by little, changes are taking place in our departments.

Education System

Position	Position-specific education			Specialized skills training	On-the-job training and career development	Language training
	Management skills	Human skills	Solution skills			
Managers	Executive candidate fostering Management skills training New managers’ training					
Leaders		Worker-manager fostering training			Human development meeting Skills development meeting	
Mid-level employees	Required training Advanced Required training Fundamental	Leadership Mentoring	Presentations (advanced) Problem-solving knowledge Logical thinking Presentations (basic)	R&D Production technologies, engineering Sales Planning and management	Workshop for new employees’ trainers Self-development support system	
Young employees	Required training Basic		Logical writing Objective thinking New employee training		New employees’ trainer system	Language training and learning support for instructor dispatch

Bolstering managers’ management skills

To forge ahead with reforming the corporate culture and improve employee engagement, it is necessary to have company-wide themes to work on. More important, however, is how managers take on day-to-day workplace management. People’s values and attitude to work have diversified. So, compared with the conventional Japanese-style management of a uniform group where people anticipate and react to others’ unspoken wishes, more advanced workplace management skills are needed to lead human resources with varied lifestyles and to maximize organizational results toward business goals. Moreover, while managers are required to wear many hats, if we look

at reality, they are managing under the constant pressure of having to deliver at a high level for both short-term results—such as the steady execution of plans and achieving performance goals—and medium-term results, such as training of subordinates and promoting reforms. To address these issues, we have been training to reinforce management skills (management basics and understanding roles) for managers from 2018. In this way, we provide learning opportunities so that our managers can learn and apply the basic cycle of training subordinates according to the situation and achieving results through their personal growth, which is the essence of management.

Future challenges and initiatives

As I mentioned earlier, we have introduced a range of HR systems and initiatives to “foster a corporate culture that has diverse people and that maximizes results.” To realize VISION 2030, I believe it is important to go beyond superficial diversity and create human resource and management systems that enable people to truly demonstrate their diverse capabilities. For this reason, we must thoroughly promote workstyle reform, revise the personnel evaluation system, and reform managers’ awareness. These are all important topics, and none can be achieved overnight. I think it is therefore essential for executives to deepen employees’ understanding by clearly

explaining, in a way that makes it easy to imagine, why something is necessary and what kind of world can be opened up by doing something.

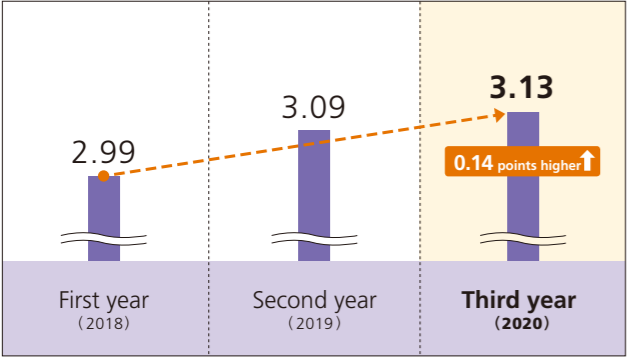


Initiatives to improve engagement



Engagement training (conducted in 2019)

Engagement survey results



We have been conducting engagement surveys for all employees since 2018.

The third engagement survey, conducted in fiscal 2020, confirmed a 0.14-point increase over two years.

To improve employee engagement, we interviewed people in departments with high levels of engagement about initiatives that have led to increased engagement, and then rolled these out internally as best practices. We also trained managers to bolster their management skills and implemented the One Word Makes a Difference campaign that all officers and employees can practice immediately, as a first step toward encouraging communication and creating workplaces where people can work with respect for each other.

The One Word Makes a Difference campaign was something new for us. We hope that it will lead to more engagement by encouraging people to actively convey gratitude every day and to offer praise for good behavior, by adding a word of appreciation in email exchanges, for example.

We will continue to roll out measures so that each employee will gain a solid sense of the effect of initiatives such as this, resulting in an improved engagement score for the Company.

Creating workplaces where it is easy to work

We are also working on developing an environment that is easy to work in and respects the work-life balance of each individual.

In addition to days of no overtime, a flextime system and a paid leave system that allows half-days, we have put together systems that allow flexible workstyles according to employees' life stage. For example, the system of shorter work hours for employees rearing children had previously been limited to 48 months, but we abolished that limit, now allowing more employees take advantage of the system. We also introduced remote working for employees rearing children or caring for family members, creating an environment that allows employees with limited time to work due to parenting or caregiving responsibilities to balance their life with their work.

Also, to build even better labor-management relations, we regularly hold meetings of the Joint Management Council that includes executives and worker representatives to discuss workplace issues, such as business conditions and company policies.

For the physical infrastructure, we have improved the working environment by relocating our head office.

In addition, we are improving health and safety with employee participation, such as holding health and athletics events, conducting stress checks and interviews with industrial physicians for promoting mental health, and we are enforcing the practice of "pointing out and calling out" at the plants as well as predicting risk, as safety initiatives.



Promoting diversity

We foster a corporate culture in which employees recognize each other's diverse values and everyone is able to play an active role and fulfill his or her potential. As part of those efforts, we are eagerly rolling out measures to promote active participation by women.

We have set two goals in our general business action plan related to promoting the participation of women:

- (1) Raise the percentage of female managers to at least 7%
- (2) Establish a system for both men and women that allows them to continue working while raising children or taking care of family members

(Planning period: from May 2019 to March 2022)

To achieve these goals, we are introducing skill development meetings and establishing a system to support flexible workstyles according to a woman's stage in life. Flexible workstyles are designed to select candidates for management positions at an early stage, to make them aware of their expected role, and to systematically train them. We will foster a climate of providing support for even more participation by female employees, while raising awareness of effective evaluation and flexible workstyles, not only for female employees. We will enable every employee to realize his or her full potential according to their skills, capabilities, and experience, and to play an active role in a range of ways.

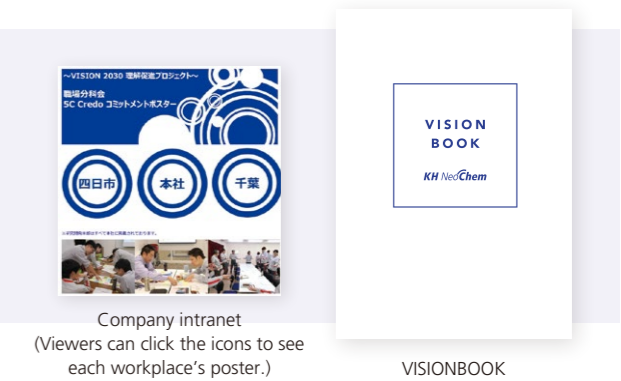
Promoting understanding of VISION 2030

If we are to achieve VISION 2030, each individual employee must deeply understand his or her own role, and everyone must get on the same page as we take up the challenge.

So far, we have held workplace briefings conducted by top management, distributed to all employees the booklet *Vision Book*, which clearly explains VISION 2030, and formed workplace groups centered on managers and workplace leaders.

In addition, while discussing different opinions, every workplace has put together a declaration that includes workplace ideals, the 5C Credo,* and actions to be taken. Digital posters were made for each department and are available on the Company's intranet. The posters were updated in February 2021.

*See Our Basic Principles on page 01.



Initiatives to prevent the spread of COVID-19

- With a view to preventing the spread of COVID-19, we have implemented the following measures for ensuring the safety of local communities, business partners, and our employees and their families, and to maintain business continuity.
- 1. Work system
 - ① Head Office and Osaka Branch Office
 - Making maximum use of remote working
 - For employees that need to come to the office, we recommend off-peak commuting by using a flextime system (no core time) to avoid congestion on public transportation.
 - ② Other sites
 - A work system is specified at each site, bearing in mind the local circumstances.
 - 2. Business trips
 - In principle, overseas business trips are prohibited.
 - In principle, employees should refrain from going on business trips in Japan and instead use video conferencing, Web conferencing, conference calls, etc.
 - 3. Meetings, seminars, etc.
 - In principle, employees should avoid face-to-face conversations as much as possible and make the most of Web conferencing, conference calls, etc.
 - 4. Implementation of measures to prevent the spread of disease
 - We strive to systematically implement countermeasures to prevent infection and the spread of infection.

Going forward, we will respond flexibly according to the situation, such as whether or not a state of emergency has been declared and the situation of infections in the region.

The Basic Policies for Novel Coronavirus Disease Control issued by the Government of Japan have positioned KH Neochem, a company in the petrochemical business, as a business operator that is required to continue business operations during a state of emergency. We are proud to manufacture and sell products that are essential to the lives of people in and outside of Japan. To fulfill this mission, we will take effective measures to prevent the spread of infection, and continue our business activities to ensure a stable supply of products.



Evolution of Corporate Governance

Under VISION 2030, we have been working to further strengthen our corporate governance. This time, we have asked our independent outside directors to have a frank discussion about the status of operations and any issues in the Board of Directors, which is the key to corporate governance.

Profiles



Independent Outside Director
Sayoko Miyairi

Appointed in March 2019. Based on her work experience at a consulting firm and her extensive experience and insight as a university professor, she provides opinions and recommendations, especially for human resource development and ways to improve employee engagement.



Independent Outside Director
Jun Tsuchiya

Appointed in March 2020. He has management know-how cultivated at global companies and advanced technical knowledge in the chemical industry, and he provides opinions and recommendations for our entire business.



Independent Outside Director
Yuji Kikuchi

Appointed in March 2020. Attorney. He has experience working for the Securities and Exchange Surveillance Commission and expertise in corporate law and corporate governance. He gives opinions and recommendations to management that help to strengthen governance in particular.

Q What is your impression of the Company's Board of Directors?

Miyairi I feel that the Board of Directors has established a place for constructive discussions. A big part of that is because careful explanations are provided in advance. Formerly, there were times when questions had to be confirmed on the day of a Board meeting, but now that happens less often.

Kikuchi I feel the same way. After all, for the Board of Directors to function, preparation by the proposers and the secretariat is of the highest importance. Since that is thoroughly taken care of, the Board of Directors is able to focus on discussions.

Tsuchiya The groundwork certainly makes it easy to have discussions. This is probably because the secretariat's preparations, centered on the concept of corporate governance, are reflected in the Board's operations. Also, I think that the reorganization in April 2021 has been successful. To build an efficient and rapid decision-making framework, we abolished the divisional structure to create a flatter organization. By making it clear that full-time directors

are supposed to supervise management, all Board members now have a strong awareness of overall optimization.

Miyairi I also think that the reorganization has made it possible for full-time directors and outside directors to have more equal discussions. Before now, there may have been an atmosphere that kept full-time directors from treading on each other's domains, but I think that has also gone.

Tsuchiya I think that full-time directors tend to view things along the same lines as how business has been done in the past, but the strength of outside directors is that they can take an objective view of any business model. In general, there are many cases where outside directors are asked to approve an agenda for which there is a certain level of consensus, but I think it is a good idea to also have opportunities to seek the opinions of outside directors before proposals are set. The question is whether we can have discussions that allow us to make use of our specialized knowledge and have it well-received; that would be a good way to use outside directors.

Kikuchi My impression is that it is easy to exchange opinions in the current Board of Directors. To make Board discussions more productive, it is very important to share diverse

opinions. Sometimes we have to voice critical opinions, but I think that is our role as outside directors.

Q What do you think of the evaluation of Board of Director's effectiveness in fiscal 2020?

Miyairi I know that the effectiveness of the Board of Directors was evaluated positively and that the Board's effectiveness was confirmed based on a questionnaire given to directors and Audit & Supervisory Board members. However, we needed to focus more on discussing significant issues, and we also discussed the necessary changes to further improve the Board's effectiveness. Not long ago, we, the outside directors, held an informal meeting online among ourselves, and we found that we had a shared understanding that there needs to be more discussions on medium- to long-term strategies. In addition, the subsequent development of important matters decided by the Board of Directors, such as investment projects, should be effectively monitored. Also, since the risks that were assumed at the time of approval could change over time, we must also look at how to deal with these risks, if adjustments are needed. I think it is essential to continually strengthen monitoring to improve our ability to supervise.

Kikuchi Discussions of medium- to long-term strategies are important, but that is very difficult. If we suddenly go into the whole picture, the discussion will lack focus. It might be better to discuss things broken down a bit. So, for example, what should we do about the HR strategy or the financial strategy? How about the sales strategy? We could reexamine ordinary operations from the perspective of strategy and try to put the current strategy and associated problems into writing. From there, we could discuss company-wide strategy and then go back to the HR strategy and reconsider it in terms of the overall management strategy. I think that it is very important to go back and forth several times in this way. Also, looking at continually strengthening our monitoring, it is important to create an organization that effectively sends information up to the Board of Directors as a basic precondition. When people create materials for the Board of Directors, they end up trying to summarize things nicely. But that can mean issues and risks are not seen in perspective. So, I think it is also important for materials to frankly list the issues, the concerns, and the problems.

Miyairi Medium- to long-term strategies are monitored annually in reference to the VISION 2030, set out in 2018. However, the environment has changed rapidly, such as

Key Agenda Items at Board Meetings in Fiscal Year 2020

Resolutions

- Issues related to establishing fundamental management policies (compliance code, information security policy, procurement policy, personal information protection policy, etc.)
- Review of executive compensation
- Large-scale capital investment projects (construction of a new quality control building, etc.)

Items reported

- Responses to COVID-19
- Monitoring of the Third Medium-Term Business Plan
- Periodic compliance reporting
- Status of risk management operations
- Nomination and Compensation Committee activities
- Issues related to improving the effectiveness of the Board of Directors
- Engagement survey results
- Progress in constructing new facilities by Group companies

with the worldwide spread of COVID-19, so it is necessary to have the courage to be unafraid of making revisions or corrections in some cases, such as if we are approaching the indicators set in VISION 2030 or if we see another path as we go ahead. I think it is important to discuss not only numerical goals, but also strategic goals for our ambitions, as well as their direction and the sense of speed.

Tsuchiya For evaluating the effectiveness of the Board of Directors, in some cases, the impact of analyses and evaluations might not be felt over the short term. In that sense, we are still a developing company. After all, it often takes five or 10 years before some things become visible. Since it is not easy to draw conclusions, I think we should continue to evaluate effectiveness while improving the method for doing this.

Q How do you see your role as an outside director and what challenges would you like to address in the future?

Tsuchiya Having been involved in the chemical industry for a long time and having experience in European and US companies, I try to make comments with awareness of overseas perspectives in addition to my outside perspective. For example, the Corporate Governance Code is fairly conscious of the cost of capital, but while US companies have been aware of this for 20 years or so, Japanese

companies are still lagging behind. And European companies have made progress with mechanisms to reflect the intentions of their headquarters in group companies, but I feel that Japanese companies tend not to place as much weight on this. I believe that proposals based on overseas perspectives are useful. An especially important issue is to create an environment that allows effective risk-taking. In Japan, if people take on challenges that entail some risk, there are still many cases where they are told to take responsibility if they fail, so no one is willing take on risks under these conditions. I think it is important to create a system that supports effective risk-taking by identifying the scope of responsibility and incentives in advance.

Kikuchi I want to help foster a corporate culture that values the law and ethics. I feel that this is my main mission. The topic of risk just came up, and I believe it is my responsibility, from a legal perspective, to support the creation of an environment where risks can be taken boldly, and I hope to improve the prospects for management. Also, it is very important to ensure full compliance, and this is greatly influenced by the attitude of top management. In that regard, we have established a compliance code, and I believe President Takahashi is demonstrating strong leadership.

Tsuchiya Corporate governance is a key part of corporate management because if compliance problems occur, the brand image immediately falls to zero. There is legal compliance, of course, but there are also many social norms that, while not legally binding, should be observed. On the other hand, free and bold ideas are needed to create innovation. Hard law, soft law—obviously we must observe all of these. However, I think it is important to make good use of the law as a solid basis for allowing the generation of these free ideas.

In addition, there are two things I think are important for improving the effectiveness of governance. One is to use *hypothetical thinking*. It is effective to make a hypothesis, verify it, and then extend it. Imagine, for example, that we incorporate hypothetical thinking into the review of our business portfolio and verify it based on multiple scenarios. If the hypothesis is wrong, I think we should be flexible enough to modify and reverify it. The other thing is that I would like to stimulate what I call ITS: *ideas, telling, and*



speaking. Among these, I think that *speaking* is the most difficult. Speaking has the power to persuade people and make them want to try something, depending on the speaker's manner of breathing, level of commitment, and authority. I would like to jump start discussions on this through trial and error.

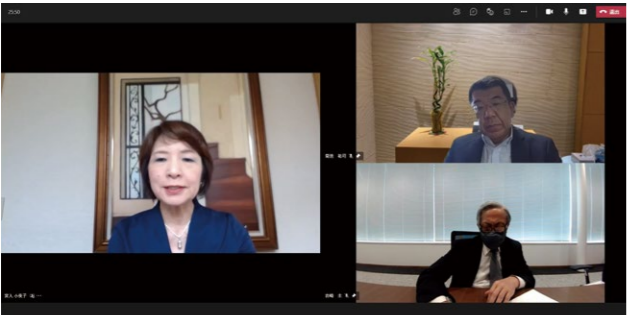
Kikuchi Good point. Today, as a result of Japanese companies adopting various factors for governance, such as the Corporate Governance Code and compliance, it is clear that their goals are becoming increasingly vague. It's the same with ESG, but the most important thing is how to increase corporate value and earn money. I want to evolve so that I don't forget that perspective.

Miyairi The Corporate Governance Code is a guiding principle, and I believe that in order to make governance effective, the Board of Directors must make judgements based on thorough discussions. Mr. Tsuchiya said that hypothetical thinking is important, and in addition to that, I think we should also make use of *goal thinking*. A hypothesis-based methodology will produce a number of options, but it is difficult to determine which ones are best and to prioritize them without solid thinking about the end goal.

Tsuchiya As an organization, the level of acceptance for how to handle diverse perspectives is important as a barometer of corporate culture. I think that's possible for us.

Miyairi I specialize in creating corporate and organizational cultures, so I would like to be helpful on that front. It is important for a company's senior management to be monolithic (have a single purpose), but rather than monolithic in the sense of sharing the same view, it is crucial to head toward the same big goal and to create relationships that make it possible to have constructive discussions based on relationships of trust. In the future, even if done remotely, I think we need to directly reflect voices from the frontlines together with the general feeling of the group. I want to make the Board of Directors a body where we can all have detailed discussions from a management perspective while venturing into each other's domains in a healthy way.

*This roundtable discussion was held online in May 2021 with the view of preventing the spread of COVID-19.

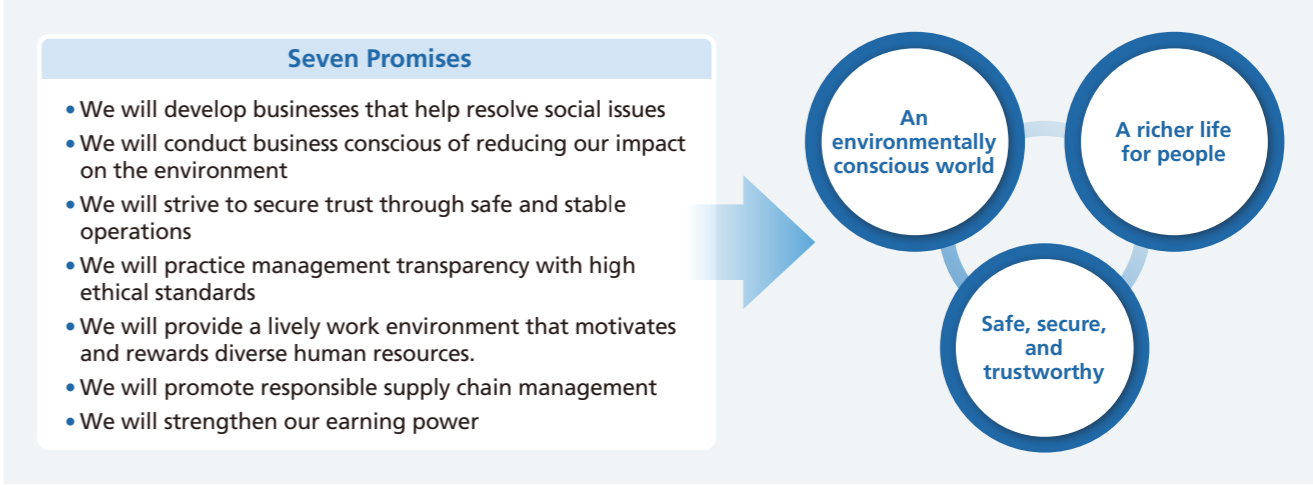


Sustainable Management

KH Neochem's Corporate Mission is "Realizing a brighter tomorrow for society through the power of chemistry." With our business activities, we focus on initiatives that contribute to the environment and society, responsible care, and corporate governance. We will continue to develop our value creation story (see page 06), systematizing our initiatives to promote sustainable management.

Seven promises to promote sustainable management

Through our business operations, KH Neochem creates value for society that supports the development of an environmentally conscious world and a richer life for people based on the foundations of safety, security, and trust. We have made seven promises to our stakeholders that contribute to sustainable societies and continued growth for our Company. By honoring these seven promises, we intend to promote sustainable management.



Practicing sustainable management

To date, we have held CSR Promotion Meetings twice a year—attended by full-time officers and managers of related divisions—to discuss our approach toward CSR across the entire Company. We also invited experts in ESG and the SDGs to give us their frank and honest opinions.

Since 2019, we have increased discussions among officers on establishing our value creation story. In addition, for formulating the Fourth Medium-Term Business Plan (FY2022–2024), we established a working group on ESG and the SDGs, employee engagement, and DX to accelerate discussions, with an eye to practicing sustainable management.

In the future, we will set out materiality (key issues) in line with our seven promises, incorporating materiality into

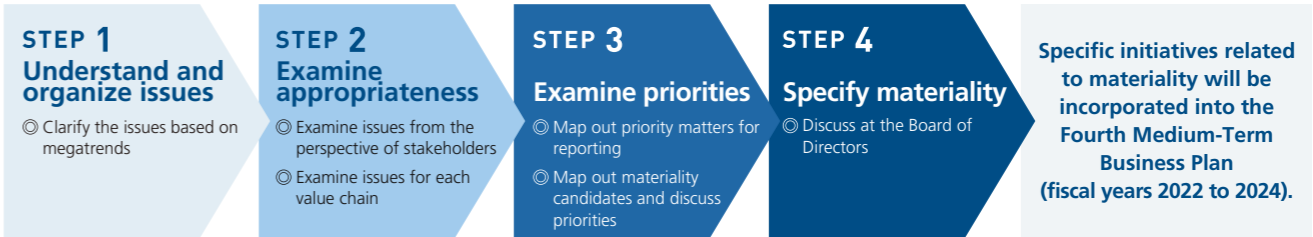
the Fourth Medium-Term Business Plan to steadily tackle all of the issues. We will also consider a system for promoting sustainable management.



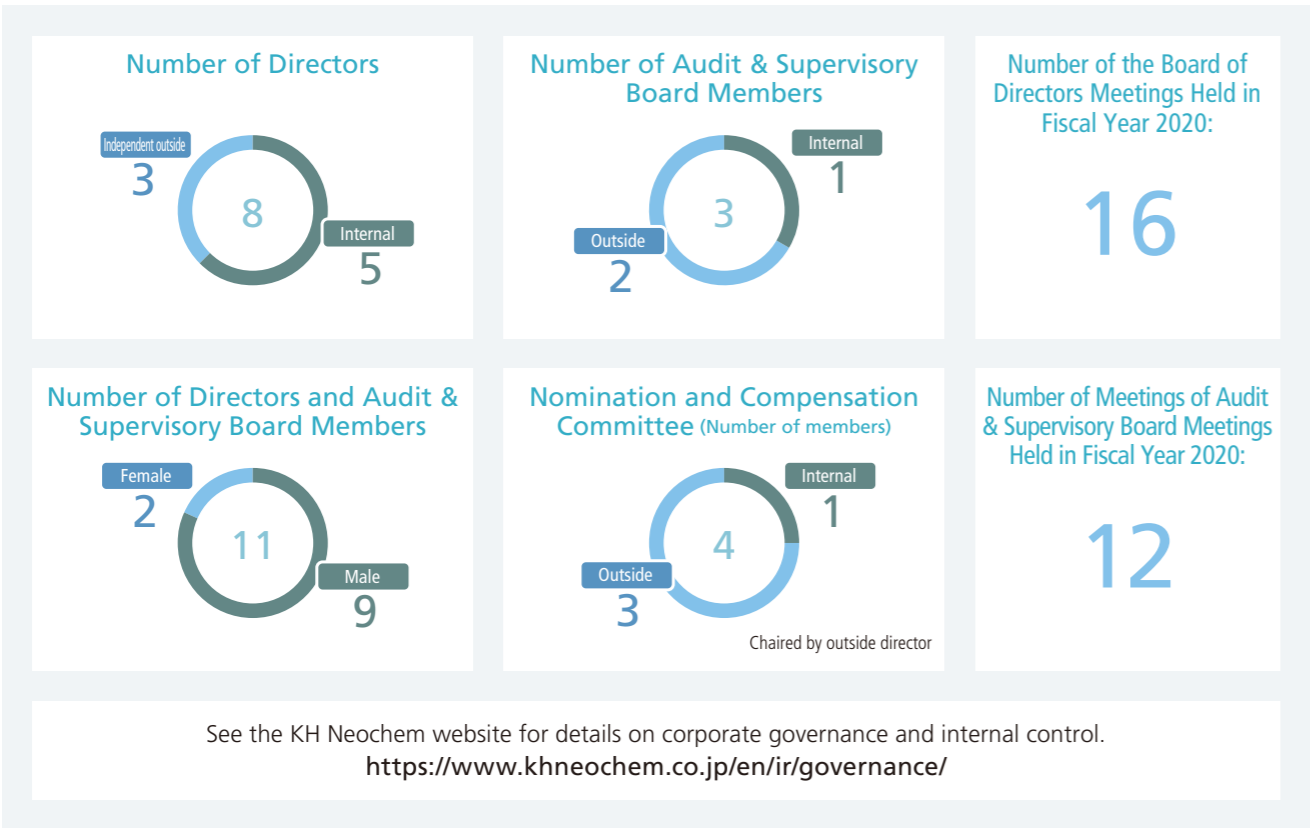
A meeting with Professor Hidemitsu Sasaya of Chiba University of Commerce

Officers discussing our value creation story

Specific roadmap on materiality (key issues) for formulating the Fourth Medium-Term Business Plan

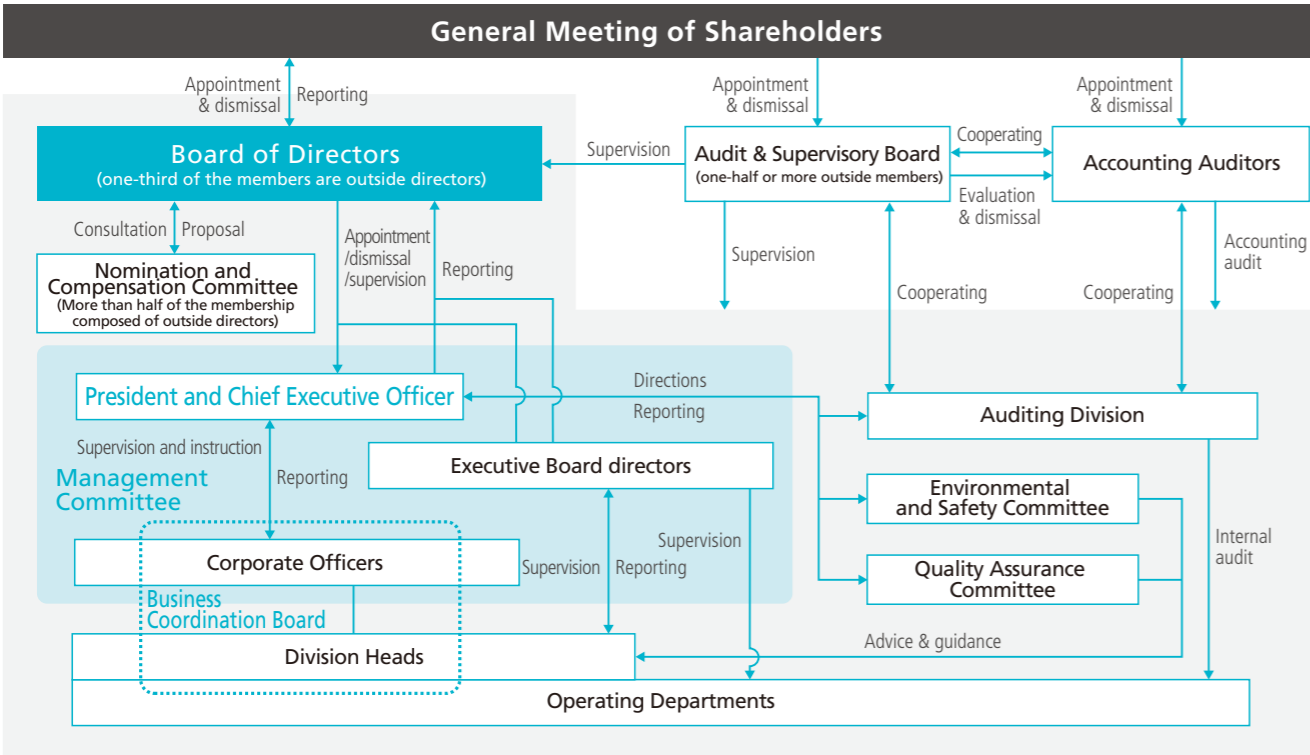


Corporate Governance



*Note: The numbers for the Board of Directors, Audit & Supervisory Board, and Nomination and Compensation Committee are as of June 30, 2021.

Overview of Corporate Governance Structure



Basic conceptual approach

Guided by the Corporate Mission “Realizing a brighter tomorrow for society through the power of chemistry,” the KH Neochem Group is committed to realizing sustained growth; medium- to long-term increases in corporate value; and sound management that assures transparency and fairness. To achieve these goals, we are building and improving a corporate governance structure that reflects the points outlined below.

- To strive for substantive assurance of the rights and equality of our shareholders and engage in constructive dialogue with them.
- To disclose accurate financial information and non-financial information that is useful in constructive dialogues with our shareholders and other similar purposes, with appropriate timing and in a readily understandable format.
- To strive toward appropriate cooperation with stakeholders other than our shareholders.
- For corporate executives and the Board of Directors to provide leadership for building a corporate culture of respect for the rights and perspectives of our various stakeholders and for ethics in business activities.
- For the Board of Directors to its responsibility to exercise effective supervision from an independent perspective over the execution of duties by corporate executives, to make every effort to develop an environment that supports corporate management risk-taking, and so on.

Board of Directors

The Board of Directors of KH Neochem promotes sustainable growth and improvement of medium- to long-term corporate value and works to build and operate an appropriate corporate governance structure while functioning as an operational decision-making body on items in laws, regulations, and the Articles of Incorporation, as well as important management matters. It also functions as a supervisory body over the execution of duties by the executive directors. As a rule, the Board of Directors meets regularly (once a month). Extraordinary meetings of the Board of Directors can be convened as necessary to deal with urgent management issues.

Composition of the Board of Directors

The Board of Directors at KH Neochem comprises eight executive directors, including three outside directors (one is female) who are independent officers. We believe this is an appropriate size for promoting diversity, including gender issues, and for swift decision-making. We have developed a skills matrix to ensure that all of the capabilities that contribute to the management of our business are provided by Board members, including company management; knowledge of our industry; manufacturing, R&D, and innovation; finance and accounting; sales and marketing; governance, compliance, and risk management; and HR development and diversity. We are also monitoring the composition of the Board as a whole so that there is a well-balanced and diverse representation of experience and expertise.

Audit & Supervisory Board and Audit & Supervisory Board Members

Audit & Supervisory Board members meet with the Board of Directors, Management Committee, and other important committees, where they audit the execution of duties by executive directors with the performance, including, but not limited to, stating their views as required, examining important documents under consideration for approval. They also take steps for mutual coordination with the Auditing Department (see page 38) and accounting auditors by regularly exchanging views and information, holding discussions with them, and so on.

The KH Neochem Audit & Supervisory Board has three members, including two outside members. As a rule, the Audit & Supervisory Board holds regular meetings once a month and also holds extraordinary meetings as necessary. They take steps for mutual information sharing with Audit & Supervisory Board members, formulating auditing plans, examining audit implementation status and audit results, and engaging in related activities.

Nomination and Compensation Committee

KH Neochem has established a discretionary Nomination and Compensation Committee with an outside director as the chair and more than half of the members are outside directors. This committee acts as an advisory body to the Board of Directors to reinforce the independence, objectivity, and transparency of directors’ actions and deliberations on the nomination and compensation of executive directors and executive officers.

Discussions in 2020 focused on the following three points: (1) Policy on decision-making for compensation, etc., for individual Board members and changes to the compensation plan with more weight on performance-linked share-based compensation for Board directors (excluding outside directors). (2) Changes to contract formats for corporate officers (from employment contracts to service agreements). (3) Introduction of a new performance-linked share-based compensation plan for corporate officers. (Reports on all of these points are tabled at Board of Directors meetings for decision-making.)

Outside Directors and Outside Audit & Supervisory Board members

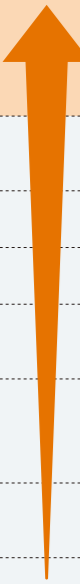
All outside directors and outside Audit & Supervisory Board members satisfy the requirements for independence set out by the Tokyo Stock Exchange. The outside directors make use of their abundant work experience and high level of professionalism to express their views actively and directly from an objective and broad standpoint to ensure that management judgments are not biased by internal points of view. They also offer constructive advice and oversight. Outside Audit & Supervisory Board members have rich experience, broad insight, and considerable expertise, and they conduct audits fairly and objectively.



Board of Directors and Audit & Supervisory Board Members

Initiatives to Increase the Effectiveness of the Board of Directors

Strengthening the Governance Structure

Measures		Objectives
	2021 <ul style="list-style-type: none">Transfer operational execution authority and changes to contracts for corporate officersEnlarge applicable areas in performance-linked stock compensation system and introduce this for corporate officers	Accelerate decision-making in business execution Reviews in directors' remuneration
	2020 <ul style="list-style-type: none">Added one independent outside directorAppointed a female Audit & Supervisory Board member	Strengthened the supervisory functions of the Board of Directors Enhancing diversity within the Board of Directors
	2019 <ul style="list-style-type: none">Appointed a female Board director	Enhancing diversity within the Board of Directors
	2018 <ul style="list-style-type: none">Introduction of performance-linked stock compensation system	Directors' remuneration review
	2017 <ul style="list-style-type: none">Starting evaluations of effectiveness of the Board of DirectorsAdded one independent outside director	Continually improved the effectiveness of the Board of Directors Strengthened the supervisory functions of the Board of Directors
	2016 <ul style="list-style-type: none">Issued corporate governance reportAppointed one independent outside directorEstablishment of Nomination and Compensation Committee	Improved transparency Strengthening the supervisory function of the Board of Directors
	2014 <ul style="list-style-type: none">Voluntarily setting up a Compensation Committee	Strengthening the supervisory function of the board of directors and improving transparency
	2013 <ul style="list-style-type: none">Introduction of executive officer system	Separation of management and business execution

Evaluation of Effectiveness of the Board of Directors

The effectiveness of the Board of Directors is evaluated once a year with advice from an external agency. The members of the Board of Directors consider specific improvements based on the results, and ongoing efforts are made to improve the functioning of the Board by implementing those measures.

Process	<ol style="list-style-type: none">Conduct questionnaire survey of all members of Board of Directors and Audit & Supervisory BoardOutside agency collates resultsMembers of the Board of Directors conduct analysis, discussion, and assessmentBrainstorm necessary improvements and implementation of countermeasures
Assessment results and countermeasures for improvements	<p>The roles, composition, and status of operations of the Board of Directors have earned a mostly positive assessment, and we recognize that overall effectiveness has been secured.</p> <p>One of the strengths of our Board of Directors is the diversity of our members, including the gender balance; this allows the Board to have vigorous discussions that draw on each member's wide-ranging skills, extensive experience, and different specialties.</p> <p>However, the officers have discussed countermeasures to address the following three issues from the standpoint of further reinforcing the effectiveness of the Board of Directors:</p> <ul style="list-style-type: none">Agenda setting for discussions on medium- and long-term strategyAgenda setting to improve supervisory functionsLeveraging more strengths of the Board of Directors <p>Based on the identified issues, the officers made the following operational improvements:</p> <ol style="list-style-type: none">Hold planned discussions in Board of Directors' meetings and other forums on key themes related to the constant improvement of corporate value, including basic policies for business management (medium- and long-term business strategies and policies)The Board of Directors regularly reports on the progress of important investment projects until they are completed, confirms the operational status of the internal control system, systematically sets agenda items such as compliance and risk management, and continues implementing and strengthening management monitoringClarify the expected roles of Board members by using a skills matrix, provide on-going executive education that reflects changing social needs, and establish executive training programs, especially for outside directors, that can be implemented even under special circumstances like a pandemic

Officers' Compensation

KH Neochem has established a discretionary Nomination and Compensation Committee. This committee deliberates on the policy and standards of officers' compensation, etc. as well as performance evaluation from the standpoint of ensuring the appropriateness of compensation levels and transparency. It also checks everything up to the calculation of individual compensation for each officer. Compensation for directors (excluding outside directors) includes monetary compensation and performance-linked, share-based compensation, and the basic policy is as follows:

- Provide sufficient incentive to improve medium- to long-term performance and increase corporate value
- Ensure competitiveness to secure diverse and outstanding human resources
- Share interests with shareholders and other stakeholders

Indicator for Performance-linked Compensation

KH Neochem has introduced performance-linked compensation for directors (excluding outside directors), both monetary and share-based, and uses consolidated EBITDA* as the indicator based on the characteristics of our business.

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

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.

Outside directors and Audit & Supervisory Board members receive only monetary compensation (fixed monthly amount) based on their roles and to ensure independence.

Total Amount of Compensation by Officer Classification, Total Amount of Compensation by Category, and Number of Officers Subject to Compensation (2020)

Officer classification	Total amount of compensation (million yen)	Total amount of compensation by category (million yen)			Number of officers subject to compensation
		Monetary compensation		Share-based compensation	
		Fixed	Performance-linked	Performance-linked	
Directors (excluding outside directors)	135	88	37	9	6
Audit & Supervisory Board members (excluding outside members)	19	19	—	—	1
Outside directors	21	21	—	—	4
Outside Audit & Supervisory Board members	13	13	—	—	4

Notes: 1. The amount of directors' compensation was resolved at 200 million yen or less annually (excluding the employee portion of salary for directors who are also employees) at the Extraordinary General Meeting of Shareholders on March 31, 2011.
2. A performance-linked, a "Board Benefit Trust (BBT)" share-based compensation plan was introduced for directors (excluding outside directors) at the 8th Ordinary General Meeting of Shareholders on March 27, 2018. The resolution provides that every three fiscal years, a maximum monetary amount of 110 million yen will be contributed to the trust as funds for acquiring the Company's shares paid to eligible directors. In addition, at the 11th Ordinary General Meeting of Shareholders on March 23, 2021, a resolution was passed to continue the performance-linked share-based compensation plan, including details on the maximum number of shares granted (up to 35,000 shares in a single business year).
3. The amount of annual compensation for Audit & Supervisory Board members was resolved at 50 million yen or less at the Extraordinary General Meeting of Shareholders on March 31, 2011.
4. The amount of share-based compensation is recorded as an expense during the fiscal year.
5. This amount of recorded compensation is rounded down to the nearest million yen.

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 50% 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

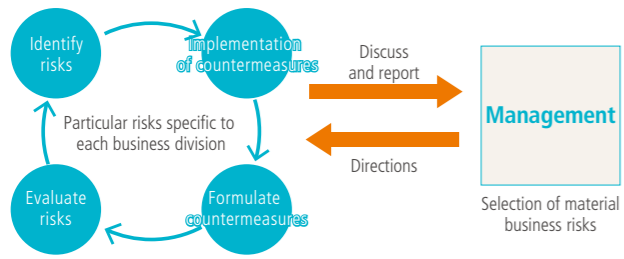
joint industrial complexes. For shares in listed companies, KH Neochem reviews the rationale for each shareholding, including appraisal losses and gains, compliance status, and business dealings with the Company. Decisions are made based on an effective balance between the cost of capital and contributions to KH Neochem earnings, or from comprehensive and medium- or long-term perspectives, including access to market information or R&D initiatives. These decisions are verified by the Board of Directors every year.

Risk Management

Risk Management System

All of our business divisions engage in risk assessment by identifying risks that could affect business activities of the KH Neochem Group as a whole, calculating the risk level based on the impact and probability of occurrence, and conducting an assessment.

Consequently, those business divisions discuss countermeasures to prevent any occurrence and to reduce the impact of risks at the highest level. Meanwhile, management reviews the appropriateness of risk assessments and the countermeasures, and identifies material business risks to discuss and determine what action to take. In these and other ways, we are working to ensure thorough risk management.



Business Continuity Management (BCM)

KH Neochem supplies many customers with products that are essential for production in a wide range of industries and the social lives of citizens.

For that reason, we believe that we have a very important responsibility to maintain and continue our business activities and achieve an early recovery in the event of a large-scale disaster. Each of our workplaces has formulated a business continuity plan (BCP), and we steadily implement advance measures and carry out employee education and training to ensure that these BCPs will function effectively in the event of an emergency. We also inspect and revise the BCPs as part of our business continuity activities.



In the workshop, formulating a BCP (in 2019)

Compliance

Measures for Compliance

Compliance Structure

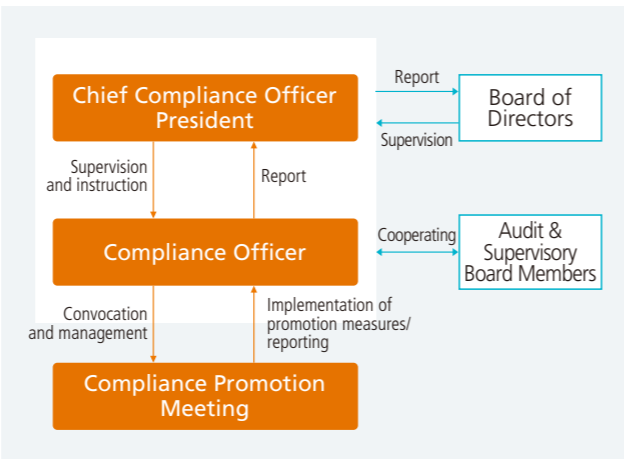
KH Neochem has revised compliance rules and established the compliance structure shown on the right to both strengthen the structure and further increase the effectiveness of the implementation.

The position of compliance officer has been established to assign responsibility for these matters, including swift investigation and preparing appropriate countermeasures. At compliance promotion meetings, compliance officers encourage compliance, carry out educational activities, and conduct training, etc.

Hotlines

KH Neochem has established confidential and anonymous hotlines for executives and employees to be able to discuss and report problems or concerns with compliance.

Specifically, we have set up the Compliance Hotline, the Compliance Officer Hotline, and the Full-time Corporate Auditor Hotline for employees, and have established the Attorney Hotline outside the Company. We have also set up a point of contact on our corporate website that can be used by the general public.



Compliance Structure

Formulation of a Compliance Code

KH Neochem has formulated a Compliance Code that provides shared principles of corporate behavior for the whole Group. The purpose of this code of conduct is to fulfill our corporate policy obligations, achieve management targets, and support sustainable growth.

Through our work to build and improve the systems and organizational structures needed to implement the Compliance Code, we have expanded our systems of governance, taken a highly ethical perspective, and strived to act as a company that meets the needs and expectations of all stakeholders. The goal is to continually improve our corporate value.



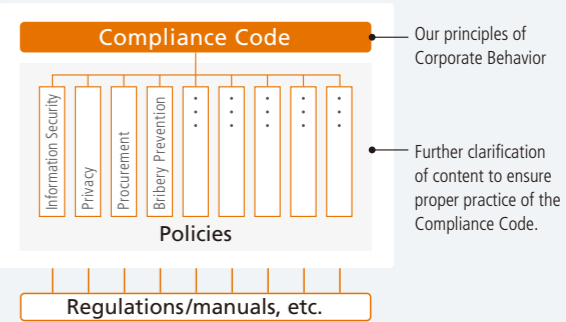
Full version

Compliance Code

As a member of society	Toward our shareholders and investors
<ul style="list-style-type: none">High ethical standardsRespect for human rightsContribute to society and environmental conservation	<ul style="list-style-type: none">Prohibition of insider tradingConstructive dialogue and appropriate information disclosure
Toward our customers	As a member of KH Neochem Group
<ul style="list-style-type: none">High qualityProhibition of bribery	<ul style="list-style-type: none">Suitable management of information assetsMaintenance and improvement of a comfortable workplace environment
<ul style="list-style-type: none">Maintain and improve safe and stable operationContribute to local communityNo relationship with anti-social forces	
<ul style="list-style-type: none">Fair tradeAppropriate management of intellectual property	

Policy Formulation

In order to ensure the implementation of the Compliance Code, we will formulate a policy that clarifies specific actions in each field and the content to be observed, and will comply with the rules based on the policy.



Activities for Dissemination

Internal and External Disclosure

The Compliance Code is available on our corporate website. Internally, the Code has been widely distributed on our intranet and via in-house newsletters, so that the Code content can be accessed at any time.



Compliance Promotion Meeting

Compliance promotion meetings are held to talk over compliance concerns and how to address them, to discuss action plans for the coming year, and to conduct training. In fiscal year 2020, meetings were held to achieve a deeper understanding of the Compliance Code through discussions on how to effectively publicize the Code for implementation in all workplaces.

Compliance Book

To ensure employees have a full understanding, we have produced the Compliance Book with visual images plus specific examples. From July 2021, the Compliance Book will be used for education and discussions across all workplaces to ensure that every employee puts the Code into practice.



Members of the Board (as of June 30, 2021)

Directors



Representative Director President & CEO
Chief Executive Officer
1 Michio Takahashi
Apr. 1987 Joined Kyowa Hakko Kogyo Co., Ltd.
July 2011 President of Basic Chemicals Division of Kyowa Hakko Chemical Co., Ltd. (now the Company)
Mar. 2013 Director and Executive Officer of the Company
Mar. 2016 Managing Director and Executive Officer of the Company
Mar. 2017 Executive Vice President & Executive Officer of the Company
Mar. 2019 Representative Director, President and Executive Officer of the Company
Mar. 2020 Representative Director, President and Chief Executive Officer of the Company (to present)



Board Director
Senior Corporate Officer
4 Masaya Hamamoto
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 Executive Officer of the Company
Mar. 2020 Board Director & Senior Corporate Officer & Chief Financial Officer of the Company (to present)



Board Director
Senior Corporate Officer
2 Toshihiro Matsuoka
Apr. 1987 Joined Kyowa Hakko Kogyo Co., Ltd.
Apr. 2008 General Manager of Production Administration Division of Kyowa Hakko Chemical Co., Ltd. (now the Company)
June 2011 General Manager of Yokkaichi Plant of the Company
Apr. 2013 Executive Officer of the Company
Mar. 2014 Director and Executive Officer of the Company
Mar. 2018 Managing Director and Executive Officer of the Company
Mar. 2020 Board Director & Senior Corporate Officer of the Company (to present)



Board Director
Corporate Officer
5 Yukihiro Isogai
Apr. 1987 Joined Toaboshoku Co., Ltd.
Aug. 2000 Joined YIC Co., Ltd.
Oct. 2001 Joined Kyowa Hakko Kogyo Co., Ltd.
Jan. 2016 General Manager of Yokkaichi Research Laboratories, R&D Office of the Company
Dec. 2017 General Manager of R&D Office and General Manager of Yokkaichi Research Laboratories, R&D Office of the Company
Jan. 2018 Executive Officer of the Company
Mar. 2019 Director & Executive Officer of the Company



Board Director
Senior Corporate Officer
3 Tatsuro Niiya
Apr. 1988 Joined Kyowa Hakko Kogyo Co., Ltd.
July 2013 General Manager of Chemical Sales & Marketing Division, 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)



Independent Outside Director
6 Sayoko Miyairi
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) (to present)
Mar. 2019 Outside Director of the Company (to present)
Aug. 2020 Outside Director of Toyo Engineering Corporation (to present)



Independent Outside Director
7 Jun Tsuchiya
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 (now Mitsubishi Chemical Corporation) as a secondment
Apr. 2001 General Manager of Corporate Planning Office of Mitsubishi Chemical Industries Limited (now Mitsubishi Chemical Corporation) (retired in January 2002)
Feb. 2002 Director of Rohm & Haas Japan K.K. (now Dow Chemical Japan Limited) (retired in December 2006)
Jan. 2007 Representative Director and President of Heraeus K.K. (retired in September 2018)
Oct. 2018 CEO of Tsuchiya International Consulting Corp. (to present)
June 2019 Outside Director of Soken Chemical & Engineering Co., Ltd.
Mar. 2020 Outside Director of the Company (to present)



Independent Outside Director
8 Yuji Kikuchi
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 Bureau)
Mar. 2005 Returned to being a partner at Tokyo Hatchobori Law Office (to present)
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 (to present)
Mar. 2020 Outside Director of the Company (to present)

Audit & Supervisory Board Members

- 9 Tokuo Oodo**
Audit & Supervisory Board Member
- 10 Kazuhiro Kawai**
Audit & Supervisory Board Member (Independent Auditor)
- 11 Keiko Tamura**
Audit & Supervisory Board Member (Independent Auditor)

Corporate Officers

- Seiji Saito**
General Manager, Yokkaichi Plant
- Toshiaki Ogata**
President of Kurogane Kasei Co., Ltd.
- Akio Nakahashi**
General Manager, Chiba Plant
- Yoshiaki Kondo**
Head of Environment, Safety and Quality Assurance
- Hideki Shimizu**
Head of Corporate Planning
- Isao Takahashi**
Head of Corporate Administration, Public Relations, Legal and Compliance
- Akira Kamimura**
Head of Accounting, FP&A, Finance and IR
- Atsushi Tokumitsu**
Head of Procurement
- Katsunori Sato**
Head of Sales & Marketing

Skills matrix:
Specialties and experience provided by the Board directors and Audit & Supervisory Board members

	Name	Company management	Knowledge of industry	Manufacturing R&D Innovation	Finance and accounting	Sales and marketing	Governance Compliance Risk management	HR development Diversity
Directors	1 Michio Takahashi	✓	✓		✓	✓	✓	
	2 Toshihiro Matsuoka	✓	✓	✓				
	3 Tatsuro Niiya	✓	✓			✓		
	4 Masaya Hamamoto	✓			✓		✓	
	5 Yukihiro Isogai	✓	✓	✓				
	6 Sayoko Miyairi	✓						✓
	7 Jun Tsuchiya	✓	✓	✓		✓		
	8 Yuji Kikuchi						✓	
Audit & Supervisory Board Members	9 Tokuo Oodo				✓		✓	
	10 Kazuhiro Kawai	✓			✓		✓	
	11 Keiko Tamura						✓	

Training members of the Board of Directors/Audit & Supervisory Board

We have continually provided training opportunities for Board directors and Audit & Supervisory Board members. In 2020, we invited Professor Emeritus Kunio Ito of Hitotsubashi University and Professor Hidemitsu Sasaya of Chiba University of Commerce, both specialists in ESG and SDGs, to hold a frank discussion. We also arranged for a legal expert to provide executive compliance training and give a more in-depth understanding of compliance risk.



Professor Emeritus Kunio Ito of Hitotsubashi University at the discussion

Basic conceptual approach

Responsible Care (RC) refers to the autonomous management activities that business operators who manufacture or handle chemicals carry out to implement and take steps to improve environmental, safety, and health measures throughout all processes involving chemicals, from development through manufacturing, physical distribution and use, to final consumption and disposal.

KH Neochem has adopted an RC Program Policy and is implementing Responsible Care.



RC Program Policy and System

RC Program Policy

KH Neochem has established the RC Program Policy and pursues business activities with commitment first and foremost to fulfilling responsibility to society as a corporation. We do this in order to continue being a chemical manufacturer that provides distinctive products in a variety of sectors and that supports the global environment, as well as comfortable lives for people around the world. What is required of chemical manufacturers, above all, is to operate their plants safely, and so we have formulated the Fundamental Policy for Safety Management to implement a thoroughgoing response to that requirement, and we are making every effort to assure the security and safety of our operations.

RC program policy

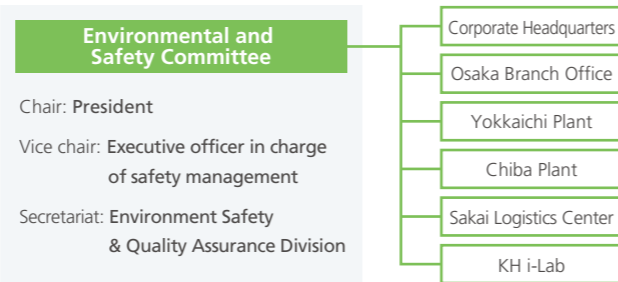
- 1 Compliance**
In addition to international regulations and domestic laws and regulations, we will comply with KH Neochem rules and regulations.
- 2 Environmental conservation**
We will make every effort to reduce the environmental impact of our products at every stage from development to disposal.
- 3 Safety and disaster prevention and occupational safety and health**
We will maintain our record of zero accidents and disasters, making every effort to assure safety, peace of mind, and health for regions and communities, as well as for everybody who works at KH Neochem.
- 4 Physical distribution safety and chemical and product safety**
We will acquire the most up-to-date safety information on the chemical substances and products that we handle, and we will provide the correct information to customers, to the people involved in physical distribution, and to the people who work at KH Neochem.
- 5 Dialogue with society**
We will contribute to regions and communities by engaging in dialogue and communication with them regarding the environment, safety, and health.

Fundamental policy for safety management

- 1** We will unflinchingly comply with all that we have decided based on compliance with all laws and regulations regarding safety.
- 2** We will work to prevent accidents by always looking out for danger.
- 3** We aim to improve our level of safety management through constant improvements to the safety management system.
- 4** We work on training and education to promote the safety activities of our employees and other related personnel.

RC Program System

KH Neochem has established an Environmental and Safety Committee with the president as chair and the executive officer in charge of safety management as vice chair, and the Company is implementing an RC program. Activities are being pursued at every operating facility in accordance with the RC Program Policy and the Fundamental Policy for Safety Management determined by the Environmental and Safety Committee.



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 programs in line with those systems, and both have made the transition to the new ISO 9001 and ISO 14001 standards (2015 versions).

Plant	Certification acquired	Current certification body
Yokkaichi Plant	ISO 9001 January 1999	Japan Chemical Quality Assurance Ltd.
	ISO 14001 July 2000	
Chiba Plant	ISO 9001 December 1998	
	ISO 14001 November 2000	

Action plan for industrial safety and responsible care-related data for our plant are available on our website: <https://www.khneochem.co.jp/en/csr/rc/>

Fiscal Year 2020 RC Program Objectives and Results together with Fiscal Year 2021 Objectives

◎: Achieved ○: Almost achieved △: Unachieved

RC code	Fiscal year 2020			Fiscal year 2021
	Objective	Actual results	Evaluation	Objective
Environmental conservation	● Environmental accidents: 0	● Environmental accidents: 0	◎	● Environmental accidents: 0
Safety and disaster prevention	● Safety-related accidents: 0	● Safety-related accidents: 4	△	● Safety-related accidents: 0
Occupational safety and health	● Work-related accidents: 0	● Employee accidents resulting in lost workdays: 0 ● Employee accidents not resulting in lost workdays: 1 (Yokkaichi Plant) ● Accidents at cooperating companies resulting in lost workdays: 1 (Chiba Plant) ● Accidents at cooperating companies not resulting in lost workdays: 7 (Yokkaichi Plant and Chiba Plant)	△	● Work-related accidents: 0

Inspections and Audits

Environment safety inspections and quality audits

At KH Neochem, periodic environment safety inspections of the Yokkaichi Plant, Chiba Plant, and Sakai Logistics Center are conducted by the Environment Safety & Quality Assurance Division at corporate headquarters under the direction of the executive officer in charge of safety management.

Periodic quality audits are also similarly conducted under the direction of the executive officer in charge of quality assurance. The environment safety inspections and quality audits involve evaluation of RC activities at our operating facilities.

Internal audit of plants

The Yokkaichi Plant and the Chiba Plant conduct internal audits for ISO 9001^{*1} and ISO 14001^{*2} as well as for accreditation as high-pressure gas inspection executors (completion inspection and safety inspection)^{*3} based on safety management systems.

External audits

The Yokkaichi Plant and the Chiba Plant undergo external audits (maintenance audits and renewal audits) based on ISO 9001^{*1} and ISO 14001^{*2} and are maintaining their certifications.

KH Neochem is taking continuing steps to improve RC programs by incorporating the results of these environment safety inspections, quality audits, internal audits of plants, and external audits as feedback.

^{*1} and ^{*2}, See page 46 ^{*3} See page 51

Inspections underway
(Photos show the 2019 inspections. In 2020, inspections were done remotely.)



Environment safety inspection (Yokkaichi Plant)

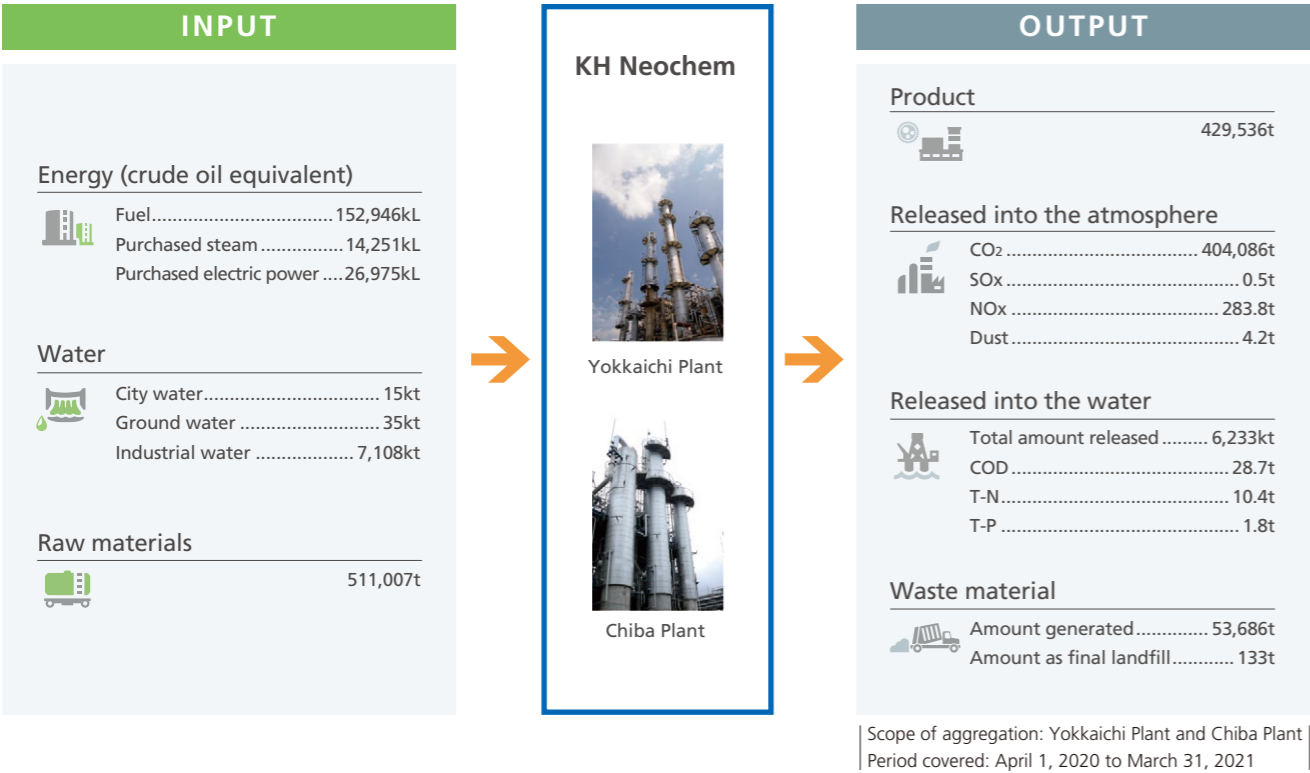


Environment safety inspection (Chiba Plant)

Environmental Conservation

Flow of Environmental Impact Results

This shows an overall image of inputs and outputs that occur when manufacturing our products.



Environmental Accounting

Environmental accounting quantitatively determines and evaluates the amounts of investment and expenses for environmental conservation.

Environmental conservation costs

		(million yen)	
Classification		Investment amounts	Expense amounts
Costs within business area		1,092	2,293
Breakdown	Pollution prevention costs	(999)	(930)
	Global environmental conservation costs	(57)	(170)
	Resource recycling costs	(36)	(1,193)
Upstream and downstream costs		0	1
Management program costs		0	25
Research and development costs		0	148
Social program costs		0	0
Environmental remediation costs		0	6
Total		1,092	2,474

* Some totals may not tally due to rounding

Economic impact

		(million yen)
Description		Amount
Profit	Sales of waste material (waste catalyst, scrap, etc.), sales of recovered containers	6

Scope of aggregation: Yokkaichi Plant and Chiba Plant
Period covered: January 1, 2020 to December 31, 2020

Global Warming Prevention

Energy consumption, specific consumption, and CO2 emissions volume

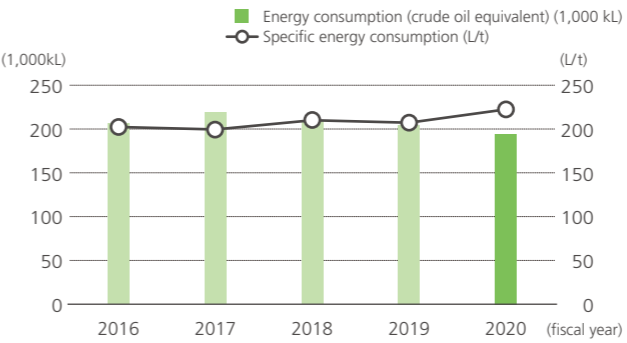
As a designated business operator under the Act on the Rational Use of Energy,^{*1} KH Neochem makes every effort to promote rational uses of energy. As a specified emitter under the Act on Promotion of Global Warming Countermeasures,^{*2} we are also working diligently to reduce CO₂ emissions. Energy consumption and CO₂ emissions volume in fiscal year 2020 fell to 94.9% and 91.8% of the respective levels in fiscal year 2019, but the energy intensity worsened to 107.2% of the fiscal year 2019 amount, due to lower production volumes during the pandemic and other factors. Going forward, the whole company will act together to improve the specific energy consumption and reduce CO₂ emissions.

- *1. Act on the Rational Use of Energy:**

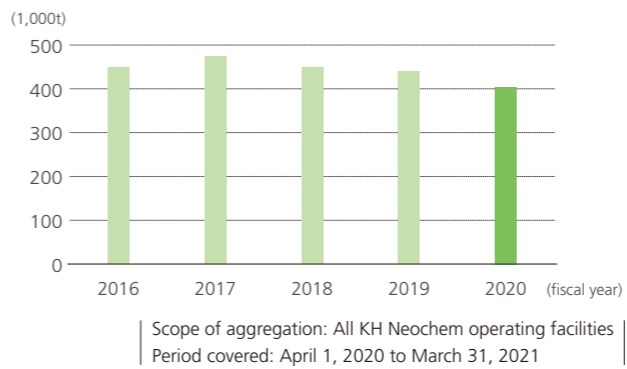
the law covering the rational usage of energy
- *2. Act on Promotion of Global Warming Countermeasures:**

the law covering the promotion of initiatives taken the measure against global warming

Energy consumption and specific consumption



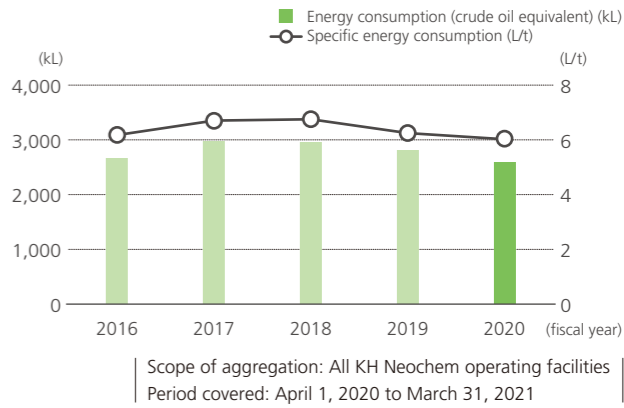
CO2 emissions



Energy consumption and specific consumption in physical distribution

As a designated shipper under the Act on the Rational Use of Energy,^{*1} KH Neochem also promotes the rationalization of energy use during physical distribution. Specific energy consumption for logistics in fiscal year 2020 improved to 96.4% of the prior-year amount due to increased use of trucks and ISO containers for distribution. We will continue to work on reducing our energy consumption in several ways, such as increasing lot sizes and using additives to improve ship fuel.

Energy consumption and specific consumption in physical distribution



CFC Emissions

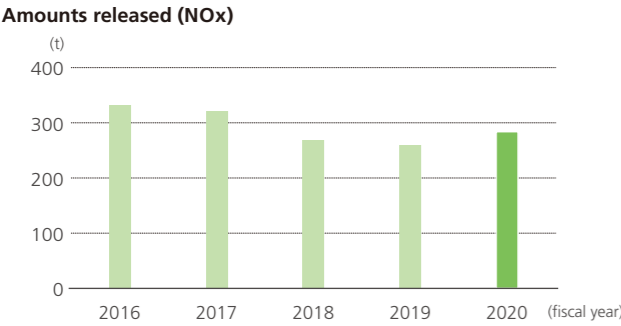
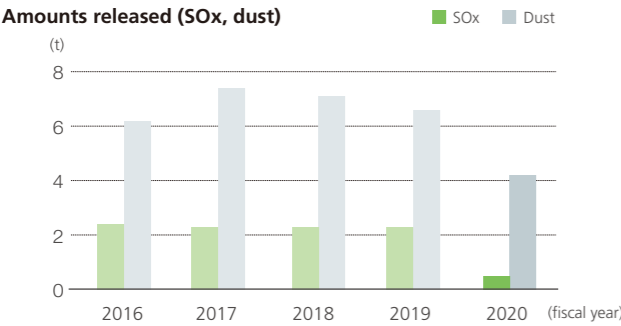
KH Neochem is effectively managing facilities in line with the amended Act on Rational Use and Appropriate Management of Fluorocarbons enacted in April 2015, including simple and regular inspections of Class I specified products and calculating the volume of any leaks. In the future, we will continue to effectively manage Class I specified products and consider changing to low-GWP^{*3} equipment when the plants are renovated.

***3 GWP: Global warming potential**

Reduction of Amount Released into the Environment

Air pollutants

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.



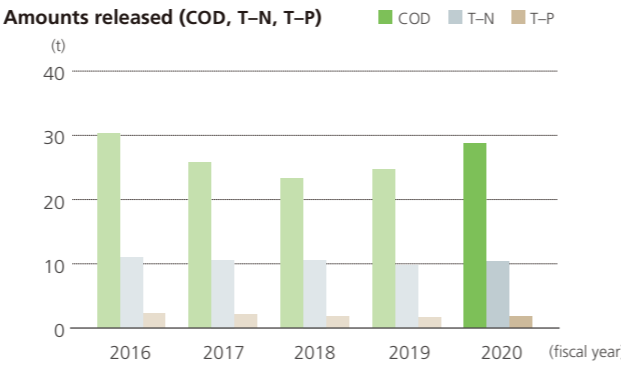
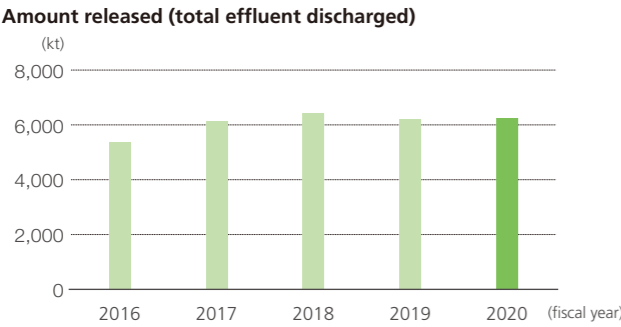
Levels agreed upon with local communities and annual maximum values

	SOx		NOx		Dust ^{*1}	
	Agreement level	Maximum value	Agreement level	Maximum value	Agreement level	Maximum value
Yokkaichi Plant	1.0 Nm³/h	0.0 Nm³/h	53.3 kg/h	45.5 kg/h	0.025 g/Nm³	0.002 g/Nm³
Chiba Plant	9.0 Nm³/h	0.1 Nm³/h	12.0 Nm³/h	2.3 Nm³/h	4.5 kg/h	0.5 kg/h

*1 Dust: At the Yokkaichi Plant, density controls are set per item of equipment. Here, the generator boiler figure is shown as a typical example.

Water pollutants

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.

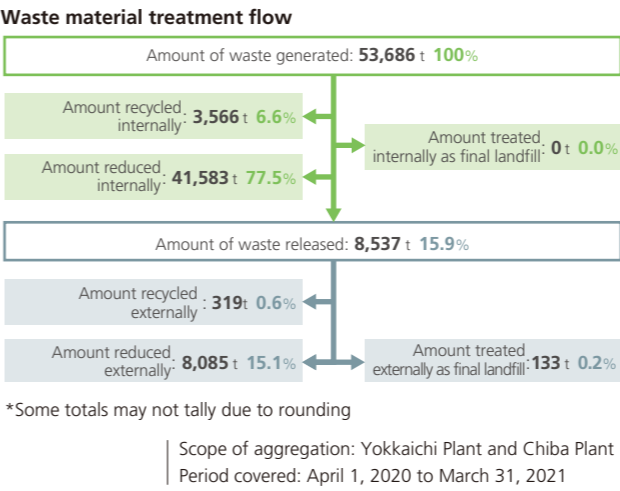
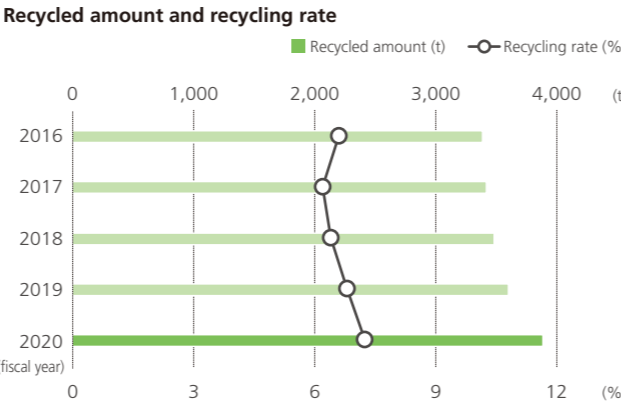
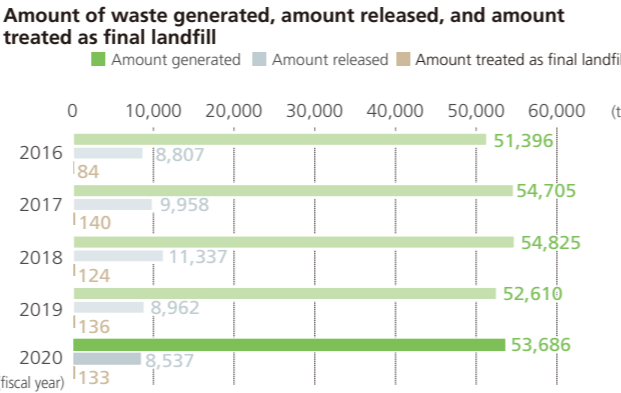


Levels agreed upon with local communities and annual maximum values (kg/day)

	COD		T-N		T-P	
	Agreement level	Maximum value	Agreement level	Maximum value	Agreement level	Maximum value
Yokkaichi Plant	201.2	127.5	46.0	37.0	13.0	9.3
Chiba Plant	124.0	88.4	90.0	72.9	12.5	5.2

Waste material

At KH Neochem we implement thoroughgoing separation of waste materials and engage 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. For waste material that cannot be reused or recycled, we are making every effort to treat it to reduce the volume and to reduce the amount that goes to a landfill.



Safety and Disaster Prevention

Safety and Disaster Prevention Measures

The Yokkaichi Plant and Chiba Plant each define their own Safety Management Policy in accordance with the Fundamental Policy for Safety Management (see p. 46). They carry out a variety of activities to secure the safety of their plants, including safety and environmental assessments, disaster preparedness training, and so on.

Safety and environmental assessment (SEA)

At KH Neochem, we conduct an SEA in advance to assess the environmental, safety, and health impact when introducing new technology, new processes, new facilities, new machinery, and new chemical substances. By using the SEA assessment results for feedback, we make every effort to heighten the safety of processes and equipment.

Emergency training

KH Neochem conducts periodic disaster preparedness training for emergency scenarios, as well as training in initial firefighting response and emergency reporting. We prepare so that we can respond promptly and appropriately, keeping damage to a minimum in the event of an emergency.



Disaster prevention comprehensive drill (Yokkaichi Plant)



Marine disaster prevention drill (Yokkaichi Plant)



Disaster evacuation drill for tsunami (Chiba Plant)

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 plan-do-check-action (PDCA) cycle.

VOICE

Employees speak out

Environment and Safety Section, Chiba Plant
Hideaki Maita

Processes involved in renewing high-pressure gas accreditation

At the Chiba Plant, We have to renew the high-pressure gas accreditation every five years, and this accreditation was due for renewal in fiscal year 2020. As the person responsible for compliance with the High Pressure Gas Safety Act, it was busy and productive for me in fiscal 2020.

We need continual improvements in safety management systems through the participation of every employee if the plant is to maintain or improve on the safety levels required by high-pressure gas inspectors. Our systems need to be approved by the Ministry of Economy, Trade and Industry and the High Pressure Gas Safety Institute of Japan. Accreditation renewal in fiscal 2020 had to be done remotely due to the COVID-19 pandemic, so preparations were difficult, but with the help of departments and sections at our corporate headquarters, I managed to renew the accreditation without any problems. This accreditation renewal process provided me with a good opportunity to review our activities to date and identify current issues.

Measures to ensure security and safety are never-ending, but we aim to be highly focused on our current work to maintain accident- and disaster-free operations.

Occupational Safety and Health

Occupational Safety and Health Measures

KH Neochem conducts risk assessments^{*1} in order to assure the safety of employees and personnel engaged in work at our plants, as well as to take preventive action against disaster. We also conduct case studies on accidents and disasters that have occurred in the past, whether in the Company or elsewhere, and we make every effort to prevent the occurrence of similar accidents or disasters. We also engage in risk prediction activities using *hiyari hatto*, close call recognition, and *kigakari memo*, memos on matters of concern, improvement suggestion programs, and other everyday health and safety activities.

A revision of the Industrial Safety and Health Act has also made it mandatory to conduct risk assessments^{*2} of chemical substances. We began administration of these assessments when the amended law went into effect on June 1, 2016.

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.

***1 Risk assessment:**

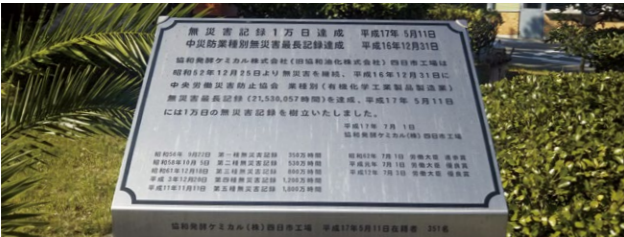
This refers to a series of techniques for identifying the risks and hazards in work, determining the seriousness and likelihood of work-related accidents arising from them, combining that information to estimate the risks, deciding on a priority for countermeasures based on the magnitude of those risks, 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 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

In fiscal 2020, there were zero employee accidents resulting in lost workdays at either the Yokkaichi Plant or the Chiba Plant. However, there was an employee accident resulting in lost workdays at the Chiba Plant on May 12, 2021. We are making every effort to examine the root causes of this accident and to devise countermeasures, including safety education and equipment improvements, to prevent a reoccurrence. At the Yokkaichi Plant, there have been zero employee accidents resulting in lost workdays for around 13 years, since October 11, 2008, and the plant employees are striving to maintain this continuous accident-free work record.

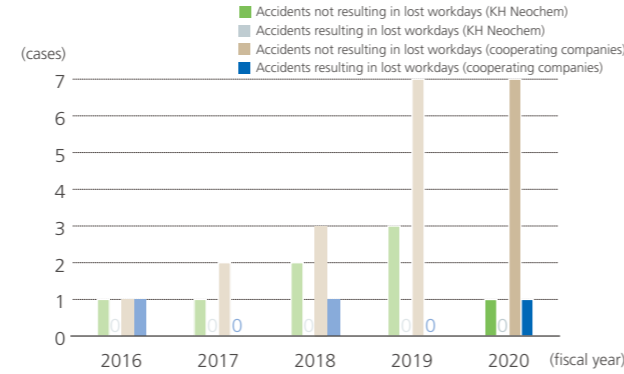


Plaque commemorating continuous accident-free days at Yokkaichi Plant (established in 2005)

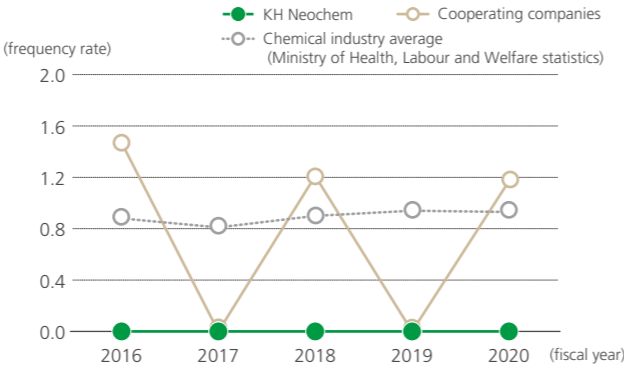
Physical Distribution Safety and Chemical and Product Safety

Data for Physical Distribution Safety and Chemical and Product Safety is available on our website: <https://www.khneochem.co.jp/en/csr/rc/>

Number of work-related accidents

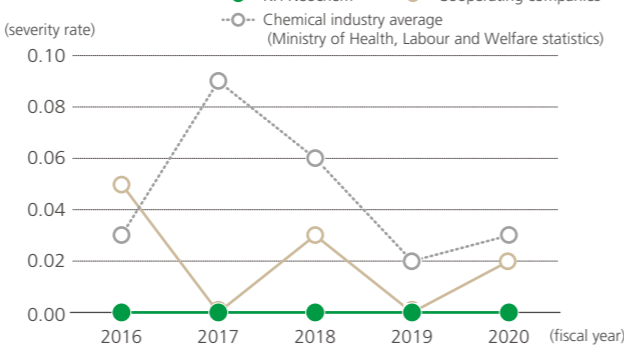


Frequency rate (accidents resulting in lost workdays)



Frequency rate: Indicator of the frequency of accident occurrence
(Number of fatalities and injuries)
÷ (Cumulative number of actual work hours) × 1,000,000

Severity rate



Severity rate: Indicator of the seriousness of an accident
(Cumulative number of lost work days)
÷ (Cumulative number of actual work hours) × 1,000

*Three work-related accidents graphs are based on the scope of aggregation and period covered shown below.

Scope of aggregation: All KH Neochem operating facilities for the number of work-related accidents; Yokkaichi Plant and Chiba Plant for the frequency rate (accidents resulting in lost workdays) and the severity rate.
Period covered: January 1 to December 31, 2020

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.

5 Guidelines for Social Contribution Activities

- Activities that will be welcomed in local communities
- Activities that employees can actively participate in
- Activities that can continue
- Activities that will provide opportunities to learn about KH Neochem
- Activities that relate to our business operations

Strengthening Social Contributions

- Fiscal year 2017**
- Conducted in-house questionnaire for all employees regarding social contribution activities
*573 responded, approximately 90% of employees (non-consolidated)
 - Decided on substance of social activities after reviews and discussions that included management based on the results of the employee survey
 - Touched up paint at a sports field in Yokkaichi City, Mie Prefecture
- Fiscal year 2018**
- Touched up paint at a sports field in Ichihara City, Chiba Prefecture
- Fiscal year 2019**
- Touched up paint at a General Athletic Playground in Yokkaichi City, Mie Prefecture
- Fiscal year 2020**
- Donated and painted benches at a sports field in Ichihara City, Chiba Prefecture
 - Touched up paint on benches at the multipurpose sports fields in Yokkaichi City, Mie Prefecture

PICK UP!

Installed and painted benches at a site near our manufacturing plant (Ichihara City, Chiba Prefecture)

As a chemical material manufacturer that supports manufacturing around the world, we again used paint, which is closely related to our business operations, and painted both existing and newly donated benches in the Ichihara Sports Recreation Park in Ichihara City, Chiba Prefecture, where our Chiba Plant is located.

This time, we installed 24 new wooden benches at the sports fields. Fifty-eight employees and executives from our head offices or the Chiba Plant participated and worked with paints used in our products to paint 108 new or existing benches.

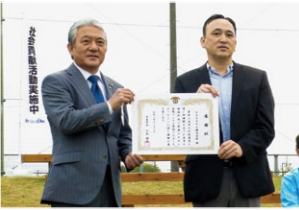
To prevent the spread of COVID-19, only people working at the head office or the Chiba Plant were allowed to participate. This meant that everyone needed to paint two or three benches, prompting initial concerns over whether the work would be finished on time. However, they worked enthusiastically until the paint ran out and managed to finish all the painting on schedule. The Mayor of Ichihara City, Joji Koide, stopped by during the painting to express his gratitude and give the team a letter of appreciation. This social contribution activity—aimed at encouraging the people in Ichihara City to get involved in sports—is extremely meaningful for our Company, and we plan



Painting work



Getting help from Ossa-kun, the Ichihara City mascot



Letter of appreciation from Ichihara City
Left: Mayor Koide, right: President Takahashi

to continue with this type of activity next year and beyond.

Our wish is to continue making contributions to local communities and other stakeholders.

Maintenance work also done at Kasumigaura Ryokuchi multipurpose sports fields (Yokkaichi City, Mie Prefecture)

We painted five wooden benches that we donated in 2020 at Kasumigaura Ryokuchi, where the Mie Tokowaka National



Twenty-two employees and executives participated in the maintenance work



Painting work

Sports Festival will be held in 2021. The painting work was not easy, but the 22 participants from our Yokkaichi Plant worked conscientiously to produce neat and tidy benches, inspired by the idea of providing good places to rest for the athletes coming from all over the country as well as local volunteers.

We aim to continue these activities in the future, with the goal of being seen as a much-loved manufacturing plant by local residents in Yokkaichi City and elsewhere.

Community-based Measures Taken at Plants

In 2020, we thoroughly implemented measures against new coronavirus infections and carried out a range of activities.



Yokkaichi Plant

Location

- Umaokoshi Plant: 2-3 Daikyo-cho, Yokkaichi City, Mie Prefecture
- Kasumigaura Plant: 1-4 Kasumi, Yokkaichi City, Mie Prefecture

Corporate Officer
Plant Manager
Seiji Saito

Topics

2019

- Cleaned safety mirrors at road curves in Kyohoku area
- Participated in a volunteer cleanup of Takamatsu shoreline at Kawagoe-cho
- Participated in a volunteer cleanup and flower bed maintenance on Kyohoku-dori Avenue
- Participated in a volunteer cleanup of Route 23 pedestrian crossings (recognized as an organization that cares for the roads by the Director of the Mie Office of Rivers and National Highways, Chubu Regional Development Bureau, Ministry of Land, Infrastructure, Transport and Tourism)
- Participated in a pro bono event in Yokkaichi City
- Cooperated with a rogaining competition organized by a local NPO

- ★ Held a plant tour for a local educational institution
- Employee received a commendation from the Japan Petrochemical Industry Association
- Employee received a commendation from a director of the Mie Prefecture High Pressure Gas Safety Association

2020

- Held a plant tour for a local educational institution
- ★ Cleaned safety mirrors at road curves in Kyohoku area
- ★ Cooperated with a rogaining competition organized by a local NPO

PICK UP!

[Initiatives at Yokkaichi Plant]



★ Cleaning safety mirrors at road curves

This activity was planned out of a desire for local elementary and junior high school students to be able to commute to school safely and with peace of mind at the start of the new school year. In cooperation with the area's civic center, residents' association, and other groups, we cleaned the safety mirrors at road curves in the area. Employee volunteers cleaned mirrors in 47 locations.



★ Cooperation with local rogaining competition

We cooperated in the management of a mini-rogaining (orienteeering) competition organized by a local NPO commissioned by Yokkaichi City. Rogaining is a sport in which teams compete for the highest score, visiting multiple checkpoints using a map within a time limit. One of the checkpoints was on the plant premises, and we organized some activities, including commemorative photos and yo-yo fishing.



Chiba Plant

Location

11-1 Goi Minami-kaigan, Ichihara City, Chiba Prefecture

Corporate Officer
Plant Manager
Akio Nakahashi

Topics

2019

- Cosponsored Goi Rinkai Festival
- Participated in a volunteer cleanup of Route 16
- Held a plant tour for a local educational institution
- Carried out traffic safety exercise on Route 16
- Chiba Labor Standards Association awarded one person a commendation as an outstanding worker.
- Employee received a commendation from the Chiba Prefecture High Pressure Gas Safety Association.

2020

- ★ Sponsorship of a junior baseball competition: the Ichihara City Friendly Baseball Tournament (KH Neochem Cup)
- ★ Volunteer cleanup of roads around the plant
- Chiba Labor Standards Association awarded one person a commendation as an outstanding worker.
- Manufacturing safety officer received a commendation from the Chiba Prefecture High Pressure Gas Safety Association

PICK UP!

[Chiba Plant Initiatives]



★ Ichihara City Friendly Baseball Tournament sponsorship

KH Neochem sponsored a junior baseball competition, the Ichihara City Friendly Baseball Tournament (KH Neochem Cup). We presented the overall winners with medals as well as sweets as prizes for participation.

We plan to continue supporting programs for local children, who are the future of our region.



★ Cleanup drives

We have continued regular cleanup drives, including on the roads near our plants—even during the pandemic—after taking appropriate measures against infection.

We intend to continue supporting local communities through these cleanup drives.

IR Activities in 2020

No.	1	2	3	4	5	6	7
Month	February	March	May	August	September	October	November
Activities	2019 results briefing	Overseas institutional investors conference	2020 1Q results briefing (conference call)	2020 2Q results briefing (conference call)	Overseas institutional investors conference	North American institutional investors conference	2020 3Q results briefing (conference call)

Communication with Shareholders

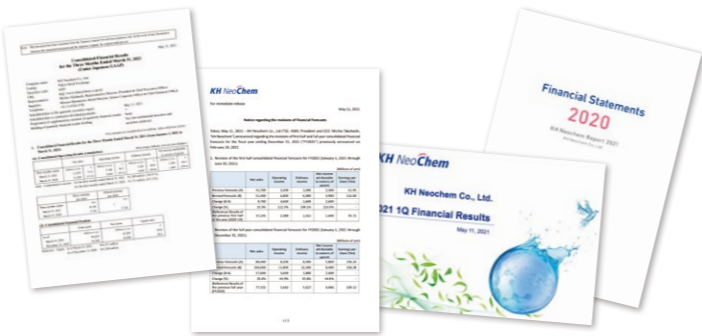


General meeting of shareholders

KH Neochem holds an ordinary general meeting of shareholders in March every year. The general meeting of shareholders is our highest decision-making body. We also consider it a valuable opportunity for us to engage directly in dialogues with our shareholders, and we make every effort to schedule the meeting for a time and place that will make it easy for shareholders to attend. We communicate the details of our business activities and initiatives in an easy-to-understand way by using videos and other methods. Same as in 2019, this year’s meeting was held while taking appropriate measures to prevent the spread of COVID-19.

Communication with Investors

Our corporate executives actively communicate with investors in order to deepen their understanding of our business and performance. We had regular communication with investors even during the pandemic of COVID-19, with web meetings or conference calls. As well as our regular investor relations (IR) activities, we began shareholder relations (SR)* initiatives, engaging in dialogues, mainly on ESG. For individual investors, we are working to make communications on our business and performance easier to understand as well as improving the IR materials published on our corporate website and presentations at general meetings of shareholders. Further, to provide IR information to overseas investors and shareholders timely, we are working to disclose more materials in English.



*SR: Activities intended to foster deeper dialogue with shareholders and to improve relationships of trust

Selected as a Constituent of the JPX-Nikkei Mid and Small Cap Index

KH Neochem was selected as a constituent of the JPX Nikkei Mid and Small Cap Index, effective November 30, 2020. These indices are jointly developed by the Tokyo Stock Exchange, Inc. and Nikkei Inc. In addition, KH Neochem continued as a constituent of the MSCI Japan Empowering Women Index (WIN) and the SOMPO Sustainability Index. We are working to increase corporate value even further in order to respond to the expectations of investors and our shareholders.



*The inclusion of KH Neochem Co., Ltd. in any MSCI index, and the use of MSCI logos, trademarks, service marks or index names herein, do not constitute a sponsorship, endorsement or promotion of KH Neochem Co., Ltd. by MSCI or any of its affiliates. The MSCI indexes are the exclusive property of MSCI. MSCI and the MSCI index names and logos are trademarks or service marks of MSCI or its affiliates.

Operating Results

* The current fiscal year (fiscal year 2020) means the consolidated fiscal year ended December 31, 2020, while the previous fiscal year (fiscal year 2019) means the consolidated fiscal year ended December 31, 2019.

During the fiscal year* under review, the worldwide proliferation of the COVID-19 pandemic caused the state of the Japanese economy to deteriorate as companies postponed capital investment, individuals refrained from consumer activities, and exports and industrial production decreased. Moreover, the Company encountered extremely challenging circumstances amid decreasing production and sales of automobiles, etc., in addition to sharply decreasing crude oil prices due to a breakdown in OPEC Plus talks on the prospect of coordinated output cuts associated largely with concerns of waning demand for petroleum products. Since May, economic activity has resumed in Japan and there has been a rebound in exports to China, industrial production centered on automobiles, and personal spending, which has been boosted in part by government measures such as income support. However, although there have been hopes that the worldwide economy will mount a full-fledged recovery as some nations at year-end began administering vaccines that hold promise of preventing transmission of COVID-19, the spread of infection continued to extend unabated.

Under these circumstances, the Group has managed to sustain its business activities at its plant and other operations without disruption, upon having established a task force at the Company to prevent the spread of COVID-19 while also implementing exhaustive infection control measures that include drawing up behavior guidelines for the Company to protect its employees from infection. The Group has furthermore been taking steps to secure earnings. This has involved ensuring production and appropriate inventory aligned with demand by reinforcing coordination with suppliers regarding raw material procurement, while also placing focus on assessing and analyzing demand outlook amid uncertainty when it comes to market trends. This has also involved implementing policies on pricing appropriately geared to crude oil and naphtha price volatility and the balance of product supply and demand. We have also been

cutting and otherwise curtailing costs by reviewing expenditures using a zero-based budgeting approach carried out from the perspective of achieving cost-effectiveness.

Moreover, through initiatives pursued under the basic strategies of its 3rd Medium-Term Business Plan, the Group has made steady progress in carrying out various measures. This has involved operating new facilities for refrigeration lubricant raw materials and next generation semiconductor materials, continuing efforts to introduce plant control systems utilizing the latest technologies, engaging in activities for creating new businesses enlisting the KH i-lab open innovation hub established in 2019, and clarifying performance accountability at the managerial level as part of the personnel system reform. The Group has also taken steps to strengthen governance by increasing the number of Independent Outside Directors and drawing up a new Compliance Code as principles of corporate behavior for the entire Group.

In the Group’s results for the fiscal year under review, sales volume experienced a large decline compared to the previous fiscal year due decreased demand in Japan and overseas caused by the spread of COVID-19. Sales prices remained weak due to a sharp drop in the price of crude oil and naphtha and weak demand. Sales volume and profit were strong for electronic materials due to strong telework-related demand, but challenging conditions continued due to the large decline in demand for performance materials. The Group also incurred an increase in fixed manufacturing costs, such as repair expenses associated with large-scale periodic maintenance. As a result, both revenue and profits decreased, with the Group having posted net sales of ¥77,332 million (down 17.9% year on year), operating income of ¥5,642 million (down 41.0% year on year), ordinary income of ¥5,627 million (down 43.1% year on year), and net income attributable to owners of the parent of ¥4,046 million (down 41.5% year on year).

Results by Business Field

Performance Materials	Electronic Materials	Basic Chemicals
Demand for refrigeration lubricant raw materials for air conditioners fell sharply in the second quarter due to the spread of COVID-19. It continued to languish until the third quarter partially due to inventory adjustments across supply chains. Meanwhile, demand for cosmetic raw materials remained sluggish amid a downturn in cosmetic sales as a result of people refraining from going out. As a result, sales volume, net sales and profits declined year on year, with net sales totaling ¥30,449 million (down 18.7% year on year) and operating income amounting to ¥5,129 million (down 36.7% year on year).	Sales of high purity solvents were up year on year amid strong demand for semiconductors and displays due to trends such as the expansion of teleworking in Japan and overseas and the shift to 5G. As a result, sales volume, net sales and profits increased year on year, with net sales totaling ¥11,507 million (up 1.8% year on year) and operating income amounting to ¥1,783 million (up 8.3% year on year).	Challenging conditions continued in the second quarter as domestic demand fell in a broad range of fields due to the spread of COVID-19. On the other hand, demand has been mounting a moderate recovery particularly in the automotive-related field since the third quarter. As a result of the overall situation, sales volume, net sales and profits declined year on year, with net sales totaling ¥34,384 million (down 22.7% year on year) and operating income amounting to ¥1,342 million (down 47.0% year on year).

Financial Position

■ Assets

Current assets at the end of the current fiscal year came to ¥43,938 million, decreased ¥11,100 million compared with the end of the previous fiscal year. This was mainly due to decreases of ¥8,801 million in cash and cash equivalents, ¥576 million in receivables-trade notes and accounts, and ¥1,970 million in inventories. Non-current assets came to ¥51,570 million, increased ¥4,347 million compared with the end of the previous fiscal year. This was mainly due to increases of ¥3,562 million in property, plant and equipment and ¥768 million in investment securities. The increase in property, plant and equipment was primarily attributable to new manufacturing facilities for refrigeration lubricant raw materials at our Yokkaichi Plant. As a result, total assets became ¥95,508 million, decreased ¥6,752 million compared with the end of the previous fiscal year.

■ Liabilities

Current liabilities at the end of current fiscal year came to ¥35,206 million, decreased ¥8,213 million compared with the end of the previous fiscal year. This was mainly due to

decreases of ¥3,260 million in payables-trade notes and accounts, ¥2,097 million in accounts payable, ¥1,274 million in income taxes payable, and ¥1,717 million in provision for repairs.

Long-term liabilities came to ¥14,418 million, decreased ¥900 million compared with the end of the previous fiscal year. This reflected increases of ¥652 million in deferred tax liabilities and ¥659 million in provision for repairs, as well as a ¥2,400 million decrease in long-term debt.

As a result, total liabilities became ¥49,624 million, decreased ¥9,114 million compared with the end of the previous fiscal year.

■ Net Assets

Net assets at the end of the current fiscal year came to ¥45,884 million, increased ¥2,361 million compared with the end of the previous fiscal year. This reflected increases of ¥4,046 million in net income attributable to owners of the parent, ¥571 million in unrealized gain on available-for-sale securities, and ¥2,224 million in cash dividend.

Cash Flows

Cash and cash equivalents at the end of the current fiscal year came to ¥9,066 million, decreased ¥8,801 million compared with the end of the previous fiscal year.

The details of cash flows in the current fiscal are as follows:

■ Operating Activities

Net cash provided by operating activities totaled ¥6,931 million (provided ¥10,962 million in the previous fiscal year). This was mainly the result of decreases from ¥1,058 million in provision for repairs, ¥3,197 million in notes and accounts payable, and ¥2,302 million in income taxes-paid, as well as increases from ¥5,627 million in income before income taxes, ¥3,737 million in depreciation and amortization, ¥556 million reduction in notes and accounts receivable, ¥1,931

million reduction in inventories, and ¥1,577 million increase in other current liabilities.

■ Investing Activities

Net cash used in investing activities totaled ¥11,182 million, (used ¥3,512 million in the previous fiscal year). This was mainly due to purchases of property, plant and equipment of ¥10,885 million.

■ Financing Activities

Net cash used in financing activities totaled ¥4,530 million (provided ¥294 million in the previous fiscal year). This was mainly due to repayments of long-term bank loans of ¥2,400 million and dividends paid of ¥2,230 million.

Business Risks

Below is a list of the main risks that the management team recognizes as having the potential to significantly impact our financial position, business result, and cash flows. However, the listed items below notes only some of the main risks of the KH Neochem Group. These do not represent a

comprehensive list of all the risks to the Group and there could be unforeseeable risks besides these.

The listed items below include forward-looking statements, but are based on the information available at the end of the current fiscal year (December 31, 2020).

1 Changes in the economic environment and market circumstances	4 Climate change	8 Infectious diseases	12 Intellectual property
2 Changes in raw material prices	5 Accidents or disasters	9 Overseas businesses	13 Information security
3 Foreign exchange fluctuations	6 Human resources	10 Legal regulations	14 Losses on valuation of securities
	7 Raw materials procurement	11 Product liability	

Please refer to the *Annual Securities Report* for more details (in Japanese only). (<https://www.khneochem.co.jp/ir/securities/>)

Consolidated Financial Statements

Consolidated Balance Sheet

	(Millions of yen)	
	As of December 31, 2019	As of December 31, 2020
Assets		
Current Assets		
Cash and cash equivalents	17,867	9,066
Receivables –trade notes and accounts	22,635	22,058
Merchandise and finished products	10,263	8,278
Work in process	345	309
Raw materials and supplies	2,083	2,133
Other	1,848	2,098
Allowance for doubtful accounts	(5)	(6)
Total current assets	55,038	43,938
Non-current Assets		
Property, plant and equipment		
Buildings and structures	30,697	31,594
Accumulated depreciation	(24,916)	(25,254)
Buildings and structures, net	5,781	6,339
Machinery and equipment	89,579	97,653
Accumulated depreciation	(84,561)	(85,328)
Machinery and equipment, net	5,018	12,324
Land	17,549	17,549
Leased assets	–	221
Accumulated depreciation	–	(6)
Leased assets, net	–	215
Construction in progress	5,935	848
Other	5,765	6,402
Accumulated depreciation	(4,575)	(4,642)
Other, net	1,189	1,760
Net property, plant and equipment	35,474	39,037
Intangible assets		
Goodwill	1,512	1,378
Other	225	535
Total intangible assets	1,737	1,913
Investments and other assets		
Investment securities	7,523	8,292
Assets for retirement benefits	1,562	1,523
Deferred tax assets	100	109
Other	825	696
Allowance for doubtful accounts	(1)	(1)
Total investments and other assets	10,010	10,620
Total non-current assets	47,222	51,570
Total Assets	102,261	95,508

	(Millions of yen)	
	As of December 31, 2019	As of December 31, 2020
Liabilities		
Current Liabilities		
Payables –trade notes and accounts	17,523	14,263
Short-term bank loans	10,440	10,550
Current portion of long-term debt	2,400	2,400
Current portion of long-term lease obligations	–	4
Accounts payable - other	8,313	6,215
Income taxes payable	1,925	650
Provision for repairs	2,245	528
Other	572	594
Total current liabilities	43,419	35,206
Long-term Liabilities		
Corporate bonds	5,000	5,000
Long-term debt	5,650	3,250
Long-term lease obligations	–	259
Deferred tax liabilities	1,769	2,422
Liability for retirement benefits	2,466	2,568
Provision for repairs	–	659
Other	432	258
Total long-term liabilities	15,318	14,418
Total Liabilities	58,738	49,624
Net Assets		
Equity		
Common stock	8,822	8,855
Capital surplus	6,107	6,140
Retained earnings	25,557	27,379
Treasury stock	(36)	(69)
Total equity	40,450	42,305
Accumulated Other Comprehensive Income		
Unrealized gain on available-for-sale securities	590	1,162
Deferred gain on derivatives under hedge accounting	0	0
Foreign currency translation adjustments	113	70
Defined retirement benefit plans	(69)	(158)
Total accumulated other comprehensive income	634	1,074
Non-controlling Interests	2,438	2,504
Total Net Assets	43,522	45,884
Total Liabilities and Net Assets	102,261	95,508

Consolidated Statement of Income

(Millions of yen)		
	Fiscal year ended December 31, 2019	Fiscal year ended December 31, 2020
Net Sales	94,209	77,332
Cost of Sales	73,409	61,187
Gross Profit	20,800	16,144
Selling, General and Administrative Expenses		
Freight	3,827	3,416
Container packaging	1,213	1,095
Salary	1,181	1,241
Other	5,017	4,748
Total selling, general and administrative expenses	11,240	10,501
Operating Income	9,559	5,642
Non-operating Income		
Interest and dividend income	187	168
Equity in earnings of associated company	273	132
Compensation income	–	143
Reversal of provision for environmental measures	–	94
Other	346	257
Total non-operating income	807	795
Non-operating Expenses		
Interest expenses	70	80
Loss on disposal of non-current assets	297	534
Extra retirement payments	–	106
Other	102	90
Total non-operating expenses	471	811
Ordinary Income	9,896	5,627
Income before Income Taxes	9,896	5,627
Income taxes - current	3,143	1,074
Income taxes - deferred	(293)	406
Total income taxes	2,850	1,481
Net Income	7,045	4,145
Net Income Attributable to Non-controlling Interests	127	99
Net Income Attributable to Owners of the Parent	6,917	4,046

Consolidated Statement of Comprehensive Income

(Millions of yen)		
	Fiscal year ended December 31, 2019	Fiscal year ended December 31, 2020
Net Income	7,045	4,145
Other Comprehensive Income		
Unrealized gain on available-for-sale securities	176	571
Deferred gain (loss) on derivatives under hedge accounting	(1)	0
Foreign currency translation adjustments	(4)	(43)
Defined retirement benefit plans	127	(88)
Total other comprehensive income	297	440
Comprehensive Income	7,343	4,586
Comprehensive Income Attributable to		
Owners of parent	7,215	4,487
Non-controlling interests	127	99

Consolidated Statement of Changes in Equity

(Millions of yen)					
	Equity				
	Common stock	Capital surplus	Retained earnings	Treasury stock	Total equity
Balance, Jan. 1, 2019	8,800	6,047	20,746	(26)	35,567
Net change in the year					
Issuance of stock (Exercise of share option)	22	22			44
Cash dividend			(2,107)		(2,107)
Net income attributable to owners of the parent			6,917		6,917
Increase in treasury stock				(15)	(15)
Disposal of treasury stock				5	5
Purchase of shares of consolidated subsidiaries		38			38
Net changes in items other than equity					
Total net change in the year	22	60	4,810	(10)	4,883
Balance, Dec. 31, 2019	8,822	6,107	25,557	(36)	40,450

	Accumulated other comprehensive income					Non-controlling interests	Total net assets
	Unrealized gain on available-for-sale securities	Deferred gains or losses on hedges	Foreign currency translation adjustments	Defined retirement benefit plans	Total accumulated other comprehensive income		
Balance, Jan. 1, 2019	414	1	118	(197)	336	2,401	38,304
Net change in the year							
Issuance of stock (Exercise of share option)							44
Cash dividend							(2,107)
Net income attributable to owners of the parent							6,917
Increase in treasury stock							(15)
Disposal of treasury stock							5
Purchase of shares of consolidated subsidiaries							38
Net changes in items other than equity	176	(1)	(4)	127	297	36	334
Total net change in the year	176	(1)	(4)	127	297	36	5,217
Balance, Dec. 31, 2019	590	0	113	(69)	634	2,438	43,522

(Millions of yen)					
	Equity				
	Common stock	Capital surplus	Retained earnings	Treasury stock	Total equity
Balance, Jan. 1, 2020	8,822	6,107	25,557	(36)	40,450
Net change in the year					
Issuance of stock (Exercise of share option)	33	33			66
Cash dividend			(2,224)		(2,224)
Net income attributable to owners of the parent			4,046		4,046
Increase in treasury stock				(38)	(38)
Disposal of treasury stock				5	5
Net changes in items other than equity					
Total net change in the year	33	33	1,821	(32)	1,855
Balance, Dec. 31, 2020	8,855	6,140	27,379	(69)	42,305

	Accumulated other comprehensive income					Non-controlling interests	Total net assets
	Unrealized gain on available-for-sale securities	Deferred gain (loss) on derivatives under hedge accounting	Foreign currency translation adjustments	Defined retirement benefit plans	Total accumulated other comprehensive income		
Balance, Jan. 1, 2020	590	0	113	(69)	634	2,438	43,522
Net change in the year							
Issuance of stock (Exercise of share option)							66
Cash dividend							(2,224)
Net income attributable to owners of the parent							4,046
Increase in treasury stock							(38)
Disposal of treasury stock							5
Net changes in items other than equity	571	0	(43)	(88)	440	65	506
Total net change in the year	571	0	(43)	(88)	440	65	2,361
Balance, Dec. 31, 2020	1,162	0	70	(158)	1,074	2,504	45,884

Consolidated Statement of Cash Flows

	(Millions of yen)	
	Fiscal year ended December 31, 2019	Fiscal year ended December 31, 2020
Operating Activities		
Income before income taxes	9,896	5,627
Depreciation	3,196	3,737
Amortization of goodwill	134	134
Increase (decrease) in liability for retirement benefits	(48)	128
Decrease (increase) in assets for retirement benefits	(97)	(114)
Increase (decrease) in provision for repairs	1,265	(1,058)
Interest and dividend income	(187)	(168)
Interest expense	70	80
Equity in (earnings) of associated company	(273)	(132)
Decrease (increase) in notes and accounts receivable	4,699	556
Decrease (increase) in inventories	(420)	1,931
Increase (decrease) in notes and accounts payable	(5,893)	(3,197)
Decrease (increase) in other current assets	333	(262)
Increase (decrease) in other current liabilities	1,601	1,577
Other	4	92
Subtotal	14,280	8,933
Interest and dividends received	366	382
Interest paid	(69)	(82)
Subsidies received	6	—
Income taxes paid	(3,620)	(2,302)
Net cash provided by operating activities	10,962	6,931
Investing Activities		
Purchase of property, plant and equipment	(3,322)	(10,885)
Purchase of intangible assets	(71)	(247)
Purchase of investment securities	(10)	(11)
Other	(107)	(38)
Net cash (used in) investing activities	(3,512)	(11,182)
Financing Activities		
Increase (decrease) in short-term bank loans & borrowings-net	(150)	109
Increase (decrease) in commercial paper-net	(0)	—
Increase in long-term bank loans	3,360	—
Repayments of bank loans	(5,760)	(2,400)
Increase in corporate bonds	4,975	—
Proceeds from stock issuance (exercise of share option)	44	66
Purchases of treasury stock	(15)	(38)
Dividends paid	(2,106)	(2,230)
Dividends paid to non-controlling interests	(35)	(33)
Payment from purchase of investment in subsidiaries that do not result in change in scope of consolidation	(17)	—
Other	(0)	(4)
Net cash provided by (used in) financing activities	294	(4,530)
Foreign Currency Translation Adjustments on Cash and Cash Equivalents	(3)	(19)
Net Increase (Decrease) in Cash and Cash Equivalents	7,741	(8,801)
Cash and Cash Equivalents, Beginning of Year	10,126	17,867
Cash and Cash Equivalents, End of Year	17,867	9,066

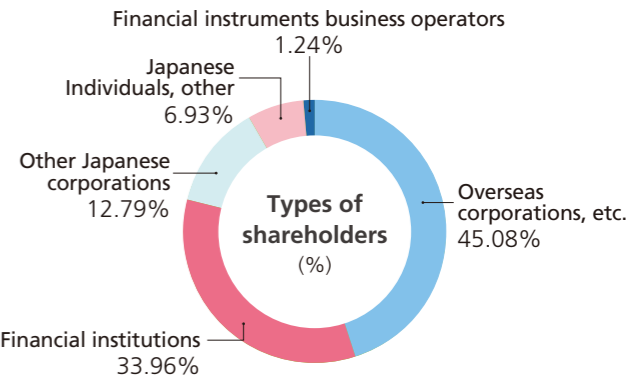
Corporate Overview

Corporate Overview (as of December 31, 2020)

Establishment	December 2010 (Our predecessor Kyowa Yuka, was established in November 1966)
Capital	8.8 bnJPY
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.* <small>*Joint venture with Mitsubishi Chemical Corporation</small>

Stock Overview (as of December 31, 2020)

Total number of shares authorized to be issued	136,200,000
Total number of issued shares	37,149,400
Number of shareholders	4,774



Global Network*

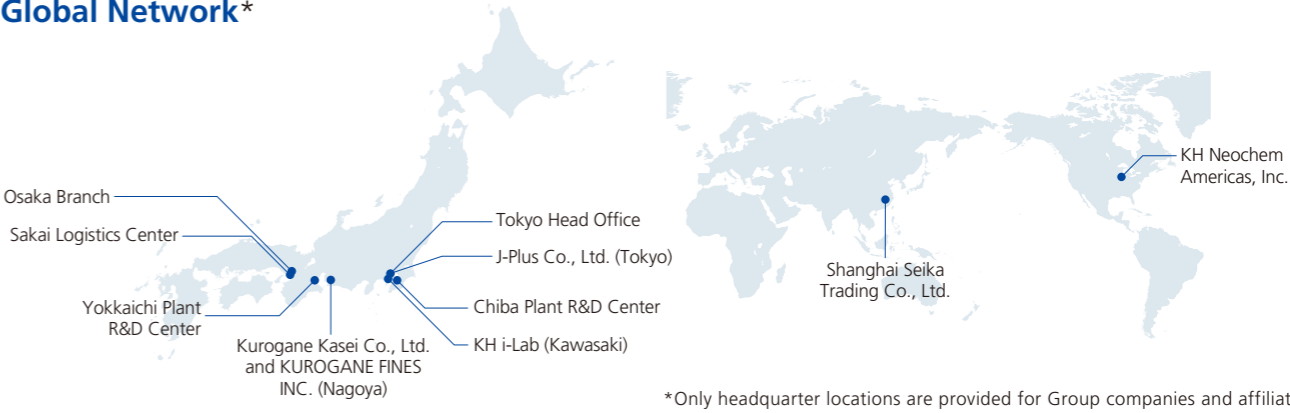


Photo: Aflo Sport

Short track speed skater
Moemi Kikuchi

At the All Japan Short Track Speed Skating Championships in October 2020, Kikuchi came third against a very strong field in the 1500 m race and therefore qualified for the World Cup. Unfortunately, the global spread of COVID-19 led to the World Cup being cancelled.

At the All Japan Championships in January 2021, Kikuchi dominated the Super Finals in both the 500 m and 3000 m races and came second overall.

Qualifying competitions for the Beijing Winter Olympics will start in fall 2021. Our company is united in support of Ms. Kikuchi so that she can maximize her abilities.

KH Neochem has signed a sponsorship agreement with short track speed skating athlete Moemi Kikuchi. The Company is working as one to support Ms. Kikuchi and her goal of medaling at the Beijing Winter Olympics in 2022.