

Possibility of chemistry

# Denka

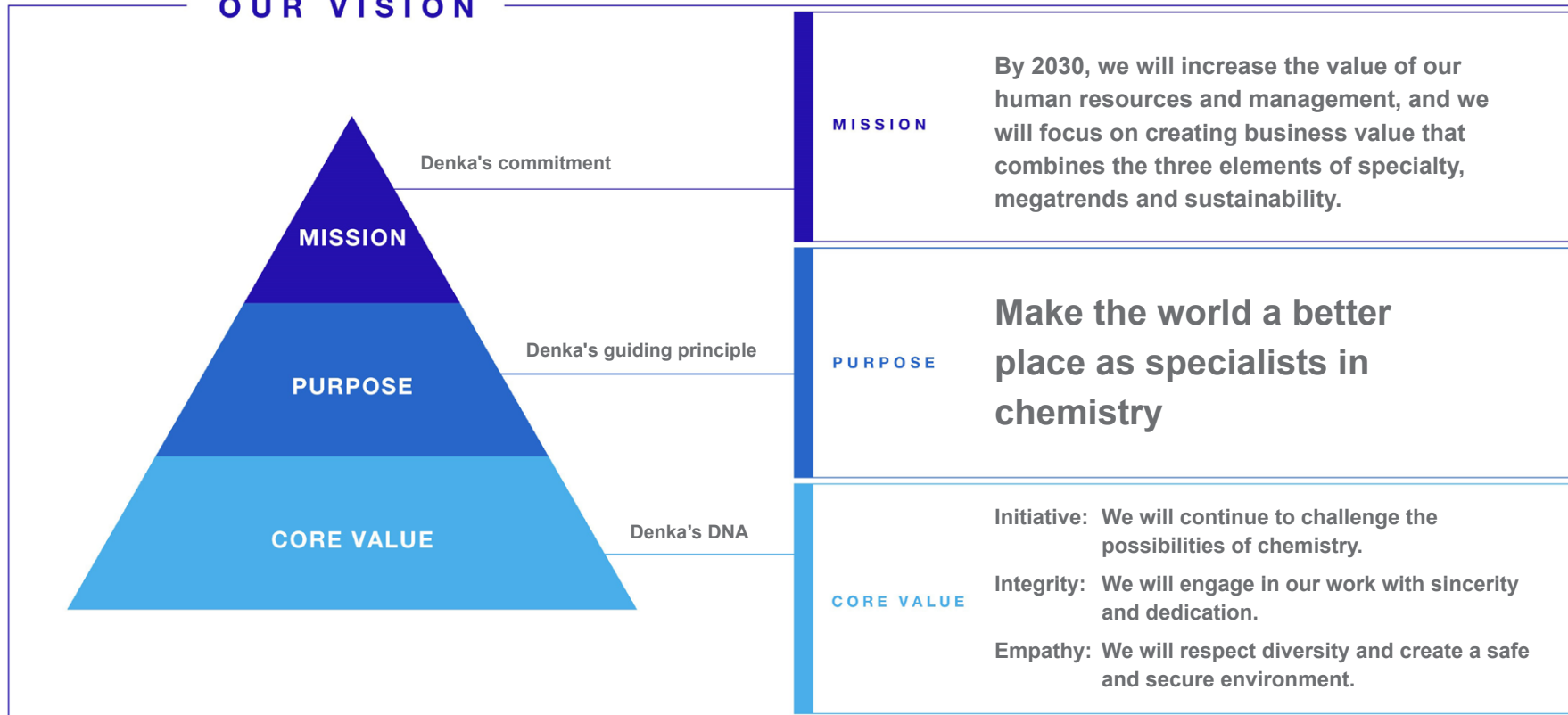
Denka Report 2024

Integrated Report

Possibility of chemistry

Denka

## OUR VISION



## MATERIALITY

▶P15-16

We clarified important management issues for fulfilling our social responsibilities in the "envisioned world" and "megatrends," and reviewed Important Management Issues (Materiality) in order to link them to individual goals for our business activities.

## Denka Group Important Management Issues (Materiality)

Responsibility and contribution to a sustainable society (5 items)

Strengthening our business foundation (9 items)

## Management Plan "Mission 2030"

▶P23-32

Three  
Growth  
Strategies



Three-star  
businesses





## Message from the President

# Aiming to Make the World a Better Place as Specialists in Chemistry, Guided by the Core Values of “Initiative”, “Integrity”, and “Empathy”

### Returning to Core Values and Renewing Awareness of Safety and Trust

First, I would like to report on the fatal accident that occurred at our Omi Plant in fiscal 2023, and the inappropriate conduct in relation to UL certification at both our company and affiliated companies, as well as our subsequent responses.

Regarding the pipe burst accident at the chloroprene monomer production facility at the Omi Plant last year, we are working on the measures [▶ P51](#) based on the final report of the accident investigative committee and I, as president, will take a proactive role in addressing safety issues moving forward. For Denka today, I believe the most important thing is to protect the physical and mental safety of each other, including our partner companies, as colleagues working together in the same workplace. To foster this awareness, it is essential to think, understand, and act from the perspective of others, and I believe that empathy is the most important quality to achieve this. Denka has three core values, one of which is “Empathy”. We are returning to this core value as we work to create a safe workplace where colleagues protect each other’s mental and physical well-being. While establishing a safe production system in terms of hardware, such as machinery and equipment, we will also enhance our sense of “Empathy”, ensuring safety through both approaches.

Also, regarding the inappropriate UL certification practices conducted by our company and our affiliated company, Toyo Styrene, we will thoroughly implement measures to prevent recurrence based on the external investigation committee’s report. At the same time, we will also re-engage with our core value of “Integrity”. “Integrity” begins with keeping promises, and in business, it means strictly adhering to agreements with customers. However, I believe that failing to uphold that standard is at the core of this incident. The investigation report pointed out that a skewed power balance and an overly rigid hierarchy were barriers to communication and highlighted the need to transform the corporate culture into one where voices can be raised and voices are valued. In order to demonstrate “Integrity”, which is part of Denka’s DNA, we will foster relationships that cultivate empathy, enabling individuals to put themselves in the shoes of others—whether between superiors and subordinates, or among different organizations. Additionally, one point that we are taking as a lesson from this issue is



## Message from the President

the weakness in our group governance. Going forward, we will focus on strengthening governance and promoting the importance of quality. We will also continue to engage in dialogue with employees on the front lines.

Looking back on these two incidents, we are working to build a more robust human resource framework within the company while communicating the importance and necessity of returning to the core values of “Empathy” and “Integrity” in daily work to all employees. As president, when visiting factories, branches, and overseas subsidiaries, I always directly convey two key points. The first point is regarding safety. No matter how outstanding the performance or product, it must not come at the cost of a precious life. The second point is regarding quality. I emphasize that continuing inherited practices without thorough verification is unacceptable, and I expect managers on the front lines to take responsibility for ensuring this verification is carried out. I also believe that this will serve as an opportunity for employees to deepen their understanding of how the core values are directly connected to their work and serve as daily guiding principles for their actions.

## Viewing the Current Crisis as a Turning Point for FY2024

First, let me talk about the current economic environment and the state of our company's business situation. In FY2023, the classification of COVID-19 in Japan was downgraded to Category 5, leading to a gradual recovery in the economy, with improvements in consumer spending and capital investment. However, on the global stage, the economy remains in a highly uncertain state due to ongoing challenges, including unresolved issues like the Israel-Palestine conflict, the prolonged Russia-Ukraine conflict, weak consumer spending and exports in China, high inflation and tightening monetary policies in the U.S. and Europe, along with frequent natural disasters driven by global climate change.

Amid such economic conditions, FY2023, which marked the beginning of Denka's new management plan, “Mission 2030,” turned out to be an extremely challenging year. There are three main factors behind the downturn in performance, which can be described as a crisis. The first factor is the decline in revenue from the Electronics & Innovative Products Division, which had been driving our operating results, due to the global drop in demand for semiconductors. However, the semiconductor market is expected to recover in the second half of FY2024, and we anticipate an improvement in the profitability of this division. The second factor is the decline in demand for chloroprene rubber, coupled with increased repair and labor costs at Denka Performance Elastomer LLC, U.S. In Japan, the facility shutdowns at the Omi Plant caused by the accident and the Noto Peninsula earthquake have also negatively impacted our financial performance.

The third factor is the increase in fixed costs. Compared to FY2021, when we recorded our highest profits, increase in labor and repair costs, as well as upfront investments, have resulted in an approximately 15 billion yen increase in costs. To overcome this situation, we have launched the “Best Practice Project” (described later).

## Strengthening the Foundation for a Return to Growth and Higher Medium and Long-Term Corporate Value

### ●Building the Foundation for a Return to the Growth

To overcome the extremely severe situation we are currently facing, Denka will implement the following measures in FY2024. By pushing forward with these measures, we will return to the growth trajectory envisioned in our management plan “Mission 2030” and establish a foundation that will enable us to once again aim for record profits in FY2025.

#### [Portfolio Transformation for Business Value Creation]

In our management plan “Mission 2030”, we have set the mission of focusing on business value creation that incorporates the three elements of Specialty, Megatrends, and Sustainability while enhancing both human resources and management value by 2030, within the framework of our growth strategy. One essential initiative for achieving this goal is the transformation of our business portfolio. We classify businesses that incorporate the three elements of Specialty, Megatrends, and Sustainability as “Three-Star Businesses.” Our plan is to selectively focus on our existing businesses, aiming to turn all of them into “Three-Star Businesses” by 2030. We plan to decide on a course of action by FY2024 for businesses that are rated as One-Star and are currently unprofitable. Out of these businesses, six of them are scheduled to implement final measures within a set timeframe. (The two businesses, “Toyokalon business” and “Y film and Caralyan business” have been announced.) Among them, the highest priority will be given to fundamental solutions for the chloroprene rubber business, with a decision made by the end of FY2024. In addition to these six businesses, we will also optimize the sales and production systems for styrene resin products in line with the restructuring of the petrochemical business, aiming to quickly enhance our competitiveness in the market.

#### [Selection and Refinement of Investment Plans]

In May 2024, we announced a revision of our investment plans. Since the profits for FY2023 did not reach the levels targeted in the management plan “Mission 2030”, we revised the eight-year investment cash flow plan from the initial 570 billion yen to 470 billion yen. By clarifying the prioritization of investment projects, further refining our investment plans, and revising schedules for non-urgent projects, we aim to control cash outflow for investments and achieve a reduction of 100 billion yen.

Meanwhile, we will proceed with important investments in areas crucial for Denka's growth—namely, our focus sectors of “ICT & Energy”, “Healthcare”, and “Sustainable Living”—as planned, ensuring that our business development effectively captures expanding market opportunities. For example, in the “ICT & Energy” sector, products that utilize Denka's proprietary technology, capable of handling the high frequency and heat are demanded by the market driven by the spread of 5G, 6G, and generative AI, and some of the products are already being well-received and evaluated by users. As a result, we plan to release the low-dielectric organic insulating material SNECTON in the second half of FY2024, the highly heat-resistant temporary bonding material TBM during FY2024, and the liquid crystal polymer film LCP during FY2025. We aim to firmly capture the expanding market and grow these into new pillars of our business.

## Message from the President

### [Best Practice Project: Tackling Cost Reduction and Operational Efficiency with a New Approach]

One of the reasons for the worsening balance sheet in FY2023 is that the assumptions made when formulating the management plan changed, and despite an increase in fixed costs due to actively promoted strategic investments, including increased depreciation and labor costs, we were unable to achieve a corresponding increase in sales volume to offset the rise in fixed costs. To address this, we launched the Best Practice Project in FY2024, focusing on cost reductions through a different approach than before. We are aiming to achieve company-wide results of 1 billion yen in FY2024, 5 billion yen annually in FY2025, and over 10 billion yen in FY2026. The key difference from previous cost-reduction efforts is that we are now leveraging the insights of external consultants to approach cost reduction through the introduction of cost benchmarks and best practices. By utilizing external expertise, we aim to clearly identify cost-related issues within the company and address them through the most optimal methods, focusing on targeted solutions. We have also paid close attention to developing structures and systems to ensure that the Best Practice Project stands out as a proactive and forward-looking initiative, distinct from the routine cost-cutting measures that manufacturers commonly carry out. To advance the Project, we established a dedicated organization called the Best Practice Promoting Department, with myself as the leader. Each initiative has an executive in charge as its leader, ensuring accountability, and we are actively creating opportunities for dialogue between management and employees to drive the project forward. Additionally, a portion of the cost reduction results will be returned to employees as incentives. The Best Practice Project not only aims for numerical results, but also intends to foster employee growth by learning best practices, which contributes to increased engagement. All employees, across various departments, are encouraged to rethink their work methods and align themselves with our core values, taking a leading role in driving transformative change.

### [Proactive Shareholder Returns]

For shareholder returns, we remain confident in the recovery of our results starting from FY2025 and will continue to provide stable dividends. There is no change in our policy to aim for a total shareholder return ratio of 50% level over eight years, as outlined in our management plan “Mission 2030”. Based on this, considering future cash flows and other factors, we will implement proactive shareholder returns, aiming to maintain or increase dividends.

### ●Aiming for Medium- to Long-Term Growth in Corporate Value

Denka is committed to enhancing corporate value over the medium to long term by promoting three key growth strategies—“Business Value Creation”, “Human Resources Value Creation”, and “Management Value Creation”—as part of the management plan “Mission 2030”, while continuing to embody our core value of “initiative”.

### [Environmental Initiatives in Business Value Creation]

Denka recognizes that the pursuit of sustainability in its business operations is essential for continued growth and has positioned it as one of the pillars of “Business Value Creation” in its management plan “Mission 2030”. We will not ease up on the investments necessary to achieve business sustainability.

The chemical recycling plant for polystyrene, which began operations at our Chiba plant in March 2024, marks a critical first step in achieving one of the KPIs outlined in our management plan “Mission 2030”—the establishment of a consortium for social implementation of chemical recycling. This facility is part of a circular economy by collecting used polystyrene products, such as scraps generated from the plants of our business partners, and food trays, chemically breaking them down, and recycling them into raw materials for plastic products. More than 60% of polystyrene is used in food packaging, but conventional recycling methods face many restrictions in reusing it for food-contact purposes due to concerns about quality and safety. Polystyrene chemical recycling is the solution to overcoming these restrictions. Looking ahead, we aim to establish a stable resource recovery system by collaborating not only with local governments but also with our business partners and industry peers, working toward the social implementation of this process. We hope that through the recycling of waste plastics, we can build a decarbonized, recycling oriented society and contribute to the reduction of greenhouse gases, and we hope to meet society’s expectations with this effort.

To achieve carbon neutrality, we are developing a technology called “Methane-to -Acetylene”, which will significantly reduce CO<sub>2</sub> emissions. For Denka to reduce CO<sub>2</sub> emissions, it is crucial to cut emissions during the production process of acetylene, which is a raw material for chloroprene and acetylene black. By replacing the conventional method using carbide with a process that produces acetylene by ionizing methane, we aim to significantly reduce CO<sub>2</sub> emissions. We are moving forward with plans to introduce demonstration facilities at the Omuta Plant and will consider actual implementation.

One product contributing to carbon neutrality is the concrete admixture “LEAF®”, which absorbs CO<sub>2</sub>. It is estimated that during the hardening process, this product can absorb and store approximately half the LEAF’s weight in CO<sub>2</sub>, which helps offset the CO<sub>2</sub> emissions from the manufacturing process, and also has an effect of increasing the strength of the concrete.

Denka has established a Sustainability Committee to ensure the effective management of ESG (Environmental, Social, and Governance) practices. The non-financial KPI targets set in the management plan “Mission 2030” are reflected in the goals of both individual employees and every department. The Sustainability Committee receives reports on the progress of non-financial goals from each business division, reviews the associated ESG risks and business opportunities, and reports this information to the Board of Directors. Through this framework, we strive to provide value to society and our stakeholders while ensuring the sustainability of our business.

## Message from the President

### [Human Resources Value Creation]

Denka aims to be a company where each employee feels a sense of personal growth. This means the company should not only be a place to earn a living but also provide employees with a sense of hope and purpose as they engage in their daily work and grow. Since the beginning of 2024, I've hosted lunch meetings with employees at our head office, during which I have spoken with over 200 staff members. Through these interactions, I've come to a renewed understanding of how important it is for each individual to have a platform to express their own opinions. I believe that revitalizing internal communication, which was significantly hindered during the COVID-19 pandemic, is of utmost importance. Currently, we have adopted a framework called the "Company-Wide Reform Campaign", which provides a platform for all employees, regardless of position, to submit proposals. For ideas that can be acted upon immediately, we have also established a system that allows for swift implementation. In addition, I also plan to create opportunities for dialogue between myself, as president, and the employees on the front lines, and we are conducting town hall meetings that allow sufficient time for meaningful conversations. Through these initiatives, we aim to foster a corporate culture where employees feel free to express their opinions, and we want to create a company environment where employees feel that their voices are



Lunch Meeting

being heard by the top management and where their contributions are driving meaningful change within the company. In June 2024, we welcomed Rumiko Nakata, who has extensive experience in the field of human resource management, as an outside director. Since FY2022, She has supported Denka as an advisor, providing external perspectives on human resources. Moving forward, she will contribute to one of our key growth strategies, "Human Resources Value Creation", by strategically driving investment in human resources and systematic reforms.



Denka Innovation Day

### [Management Value Creation]

To further advance ESG management, Denka has identified Management Value Creation as one of its growth strategies and is working to strengthen its management foundation. One of these efforts is process reform. In addition to transforming our business models and organizational structure, we are working to improve productivity and enhance our competitiveness, with digital transformation (DX) being the driving force behind these efforts. To drive DX, we need talented people who not only have the skills to utilize digital technologies and data but also possess the mindset to embrace change without fear. So we

will hire experienced professionals with these digital skills and mindset, and at the same time we have launched a program to develop our existing employees. Our goal is to train and place a Digital Pilot (DP) in each department. DPs will help employees tackle the challenges they face by acting as a bridge to help find solutions. By positioning DPs at the forefront of the workplace, DPs will drive the initiative, enabling the organization to implement DX with contributions from all employees. Furthermore, digital talent is also a key focus within our growth strategy of "Human Resources Value Creation". By offering incentives to employees who become DPs and their respective organizations, we aim to boost motivation within the company and foster a culture that is more receptive to change.

## Making Denka an Even Better Company by Surviving the Harsh Winter with Core Values

Denka is currently facing a very challenging situation, but I was deeply inspired by the words of Jack Ma, the founder of Alibaba, who said, "Every great company is born in winter". This past year has been the most challenging year for Denka in its 109-year history, for me personally as someone who has worked here for many years, and for many of my colleagues—it truly felt like a "winter year". However, I have come to recognize once again that the strength exhibited in overcoming such crises is what makes a company stronger, and we will take this difficult situation as an opportunity to move forward. I am confident that there is a future for Denka beyond this winter that we will reach together.

At Denka, I believe that by having each executive and employee face challenges with the shared language of our core values—"Initiative", "Integrity", and "Empathy"—we can overcome this harsh winter. I have always worked with the desire to leave something valuable for the next generation and to pass on a better Denka. It is precisely because of this harsh winter that the challenges we face have become clear, and by overcoming them with the strength of our core values, we will fulfill our mission to make the world a better place as specialists in chemistry. This is our promise to our stakeholders. We sincerely ask for your continued support of the Denka Group.





## Omi Plant Pipe Burst Accident

Refer to [▶P51](#) for details.

Our deepest thoughts and prayers are with the worker from our partner company who lost their life in the accident that occurred at Denka's Omi Plant on June 14, 2023, and with the worker's bereaved family during this harrowing time. We also express our heartfelt sympathies to the workers who were injured. We deeply apologize to our many business partners and stakeholders, including local residents, for the inconvenience and worry this incident has caused.

### Initiatives for Achieving Zero Serious Accidents

Following the accident, we established an Accident Investigative Committee consisting of invited external experts and specialists to look into the cause more exhaustively and formulate measures to prevent recurrence of the accident. The Committee proposed five measures to strengthen safety management in the company as a whole so that we do not cause any serious accidents. Based on this proposal, we will enhance the organization and system of safety management company wide, and we will advance measures in line with the proposal to implement our mission as a chemical manufacturer to safely handle chemical substances and provide stable supply.

#### 1. Qualitative Improvement of Risk Assessment

In addition to establishing hazard evaluation methods for substances for which sufficient hazard information is not available, such as substances that adhere to pipes (scale), we effectively used the general inspections and various types of information about the hazards of existing substances to advance evaluations and measures that are free of any oversights.

#### 2. Construction Work Safety Management

For construction work, we introduced a mechanism to share hazard information with partner company employees to enhance the safety management system.

#### 3. Safety and Security Education

We enriched the process safety and chemical substance education for training safety and security staff.

#### 4. Safety Audit of Partner Companies and Denka

We have established an audit system to ensure that our partner companies and our company thoroughly implement the measures to prevent recurrence of the accident.

#### 5. Establishment of a "Safety Day"

We have designated June 14 as "Safety Day" to avoid even one recurrence of a serious accident of this nature, and to stop the memory of the accident from fading away. At the first Safety Day event this year, the entirety of Denka Group vowed to make efforts to prevent serious accidents.



The Accident Investigative Committee's probe into the causes of the accident



Streaming the "Safety Day" event to the group

## Improprieties Related to Third-Party Certification of Resin Products

Refer to [▶P53](#) for details.

Denka Company Limited has identified improprieties related to certain resin products manufactured and sold by Denka and an equity-method affiliate. Denka made a public announcement on May 29, 2023 and has decided to establish an external investigation Committee consisting of outside experts who have no conflict of interest.

We received an investigation report (\*) from the same Committee on December 11 of the same year. The report included a thorough investigation of the inappropriate actions, a probe into the causes, and suggestions of measures to prevent recurrence. We published the report together with the recurrence prevention and other measures we had formulated ourselves.

In the investigation report, the Committee pointed out organizational issues such as an insufficient system for securing psychological safety regarding statements about inappropriate matters. We sincerely adopted the comments in the investigation report. We must permeate, throughout the entire group, the management posture of making compliance the highest priority, and we will do everything in our power to advance drastic measures.

\* Announcement Concerning the Report of an External Investigation Committee Regarding Improprieties Related to Third-Party Certification of Resin Products of Denka and Toyo Styrene, an Equity-Method Affiliate

[https://www.denka.co.jp/storage/news/pdf/1185/20231211\\_denka\\_report\\_measures.pdf](https://www.denka.co.jp/storage/news/pdf/1185/20231211_denka_report_measures.pdf)

### Handling Required for Inappropriate Matters and Recurrence Prevention Measures

In the case of the inappropriate third-party authentication standards, Denka and the equity-method affiliate conducted a roller investigation. A multi-faceted and comprehensive questionnaire, the effectiveness of which is ensured by the adoption of leniency and other tactics, was conducted by the External Investigation Committee. Based on the facts grasped via these approaches, we performed factor analysis of the motives, opportunities, and justifications at the site level and factor analysis of the organizational issues. In addition, jointly with the External Investigation Committee, while eliciting opinions from each company site, we extracted observations from the investigation results, deduced the causes, and extracted the issues. We classified the issues extracted from the formulation of recurrence prevention measures into four categories. We formulated measures focused on recurrence prevention for each of the respective issues and are currently starting with specific measures.

#### The four issues we extracted

Management  
approach

Quality  
function  
enhancement

Quality  
foundation  
enhancement

Human resources  
strategies and  
education

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## Editorial Policy

The Denka Report 2024 aims to communicate to stakeholders, including shareholders and investors, about what we have been doing to create new value over the medium to long term from the viewpoint of addressing environmental, social, and governance (ESG) issues. We also have a sustainability website to ensure that relevant information is disclosed in a comprehensive and timely manner.

## Coverage

This report covers FY2023 (April 1, 2023, through March 31, 2024) in principle, but also includes additional information on some initiatives undertaken subsequent to the FY2023 year-end. The report also presents data on performance indicators (numerical) from the past several fiscal years. Date of publication: September 30, 2024

## Scope

In general, this report covers topics related to the Denka Group's business sites within the scope of consolidation. However, some articles are based on data gleaned outside the scope of consolidation. These articles individually specify the organizations subject to reporting.

## Guidelines

- The 2021 GRI Standards of the Global Reporting Initiative (GRI)
- The 2018 Environmental Reporting Guidelines of Japan's Ministry of the Environment
- The 2021 International Integrated Framework of the International Integrated Reporting Council (IIRC)

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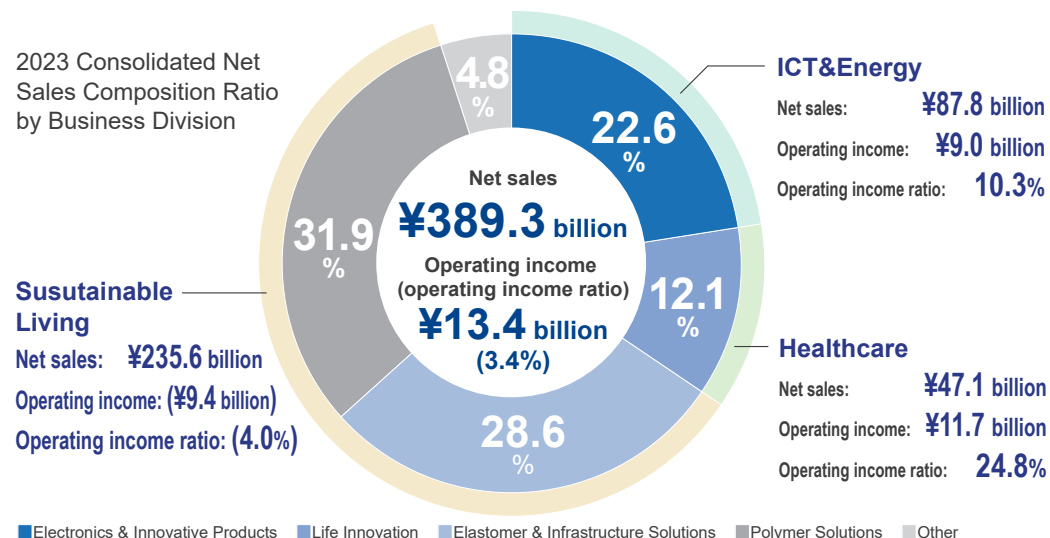
## Overview of the Denka Report



# At a Glance

The Denka Report 2024 describes in detail the initiatives for achieving the goals of the “Mission 2030” management plan and the specific measures to establish a base for targeting maximum profits again in 2025.

## Denka Group Businesses and 2023 Results



## Point

While maintaining a policy of positive shareholder return, we will return to a path of growth in business results through careful selection of strategic investment, a shift in our business portfolio, and driving forward the Best Practice Project.

### Review of the Investment Plans



Careful Selection of Investments  
Aiming to reduce investment cash flow by 100 billion yen over eight years

### Business Portfolio Shift



Highest priority items:  
fundamental measures for the chloroprene rubber business

### Best Practice Project



Cost cuts  
Work efficiency increase of at least ¥10 billion per year in FY2026  
The progress of each and every employee

### Positive Shareholder Return Policy



Total return ratio of 50% (cumulative 8-year management plan)  
Aiming to maintain or increase dividends per share, taking into account future cash flows, etc.

## Denka Group in Figures



Founded  
**109**  
years ago



Hydroelectric power plants  
**17** locations **140,290** kW

\* As of August 2024, including Denka's ownership of output from hydroelectric power plants owned by a joint venture



Number of consolidated employees  
**6,514**

\* As of the end of March 2024



Overseas net sales ratio  
**43.2%**

\* FY2023



Manufacturing bases  
**13** in Japan + **9** overseas

\* As of April 1, 2024

# Denka's Trajectory

## Contributing to Social Development

Since our founding in 1915, Denka has been wrestling with the issue of how much of the value required by society can be created through chemistry. Here, we will introduce the history of Denka's corporate value creation and change in our portfolio over six eras.



### Social changes

Instability in global affairs

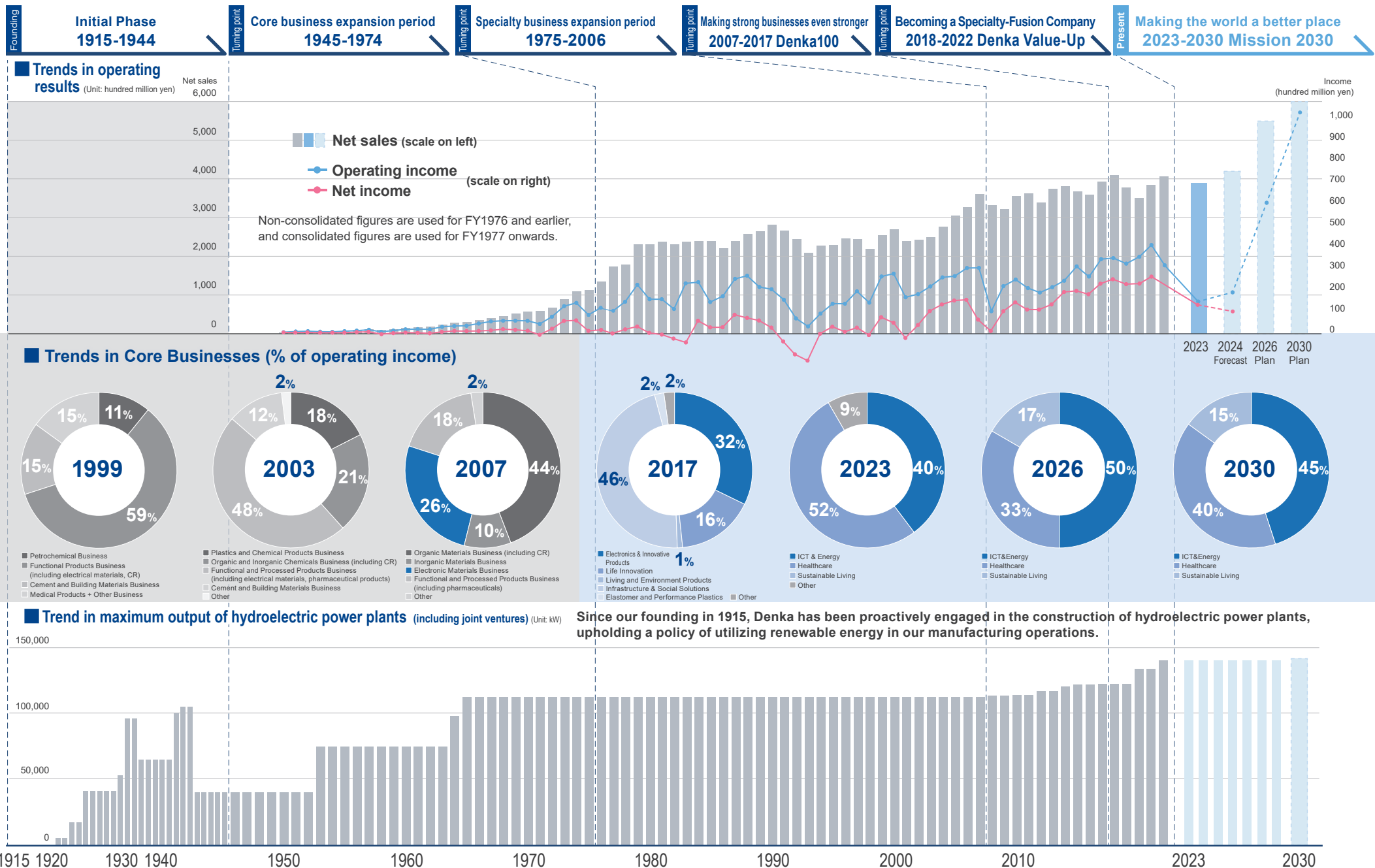
Period of rapid economic growth

Acceleration of globalization and IT

Toward the VUCA era

- -1918 World War I
- 1929- The Great Depression
- 1939- World War II
- 1955 Japan starts construction on national expressways (Chuo Expressway, Tohoku Expressway, etc.)
- 1964 The Tokaido Shinkansen line starts operation
- 1971 The Nixon shock
- 1973 The First Oil Crisis
- 1979 The Second Oil Crisis
- 1990 The Cold War ends, spread of the Internet
- 1991 The Japanese asset price bubble bursts
- 1993 The EU is formed
- 2008 Subprime Mortgage Crisis
- 2011 Great East Japan Earthquake
- 2015 Adoption of SDGs and the Paris Agreement
- 2019 Start of the COVID-19 pandemic
- 2022 Russian invasion of Ukraine
- November 2022 Global population exceeds 8 billion
- February 2023 Great Turkey-Syria Earthquake
- May 2023 G7 Hiroshima Summit
- May 2023 COVID-19 reclassified as Class 5 infectious disease
- January 2024 Noto Earthquake
- May 2024 Historically weak yen





\* Since 1933, the output from Kurobegawa Electric Power Company's power plants has been calculated in line with the ratio of Denka's equity (50%) in the joint venture.  
In 2022, the power generation capacity totaled 140,000 kW due to the start of operations of the Kurobegawa Electric Power Company's New Himekawa No. 6 Power Plant.

## Our Value Creation Process

In response to the world we envision for the future, we will make use of six types of business capital nurtured across 109 years of history, creating business value and striving to realize a sustainable society.

### INPUT (Six types of business capital)



#### Human Capital

▶P61

International and diverse human resources

- Number of employees (consolidated) 6,514 (as of March 31, 2024)
- FY2023 ratio of female managers 4.8%
- FY2023 ratio of non-Japanese employees 15.6%



#### Intellectual Capital

▶P33

Core technologies that captured megatrends

- Research sites 1 in Japan + 3 overseas
- FY2023 number of research staff 864



#### Natural Capital

▶P55

Efficient use of resources

- FY2023 renewable energy ratio 41%
  - Hydroelectric power plants 17 locations
- Note: includes co-owned plants



#### Manufacturing Capital

A production system that supports global competitiveness

- Manufacturing sites 13 in Japan + 9 overseas
- FY2023 investment in equipment ¥43.7 billion



#### Social Capital

▶82

Our partnerships with stakeholders



#### Financial Capital

▶P29

The financial base and investment for value creation

- Consolidated total assets ¥616.244 billion
- Net DE ratio 0.45 times

### PURPOSE

Make the world a better place as specialists in chemistry.

## BUSINESS MODEL

### Management Plan “Mission 2030”

▶P23-32



#### Business Value Creation



#### Human Resources Value Creation

#### Management Value Creation

#### Materiality

▶P15-16

Responsibility for and Contributing to a Sustainable Society

Strengthening our business foundation

## OUTPUT

New Business  
Development

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Electronics &  
Innovative Products

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## Life Innovation

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Elastomer &  
Infrastructure Solutions

▶ P47-48

## Polymer Solutions

▶ P49-50

## OUTCOME

Increased Sustainability  
and Corporate Value

Operating income (FY2030)

**¥100 billion or more** (15% or more operating income ratio)

ROE (FY2030)

**15% or more**

ROIC (FY2030)

**10% or more**

Make **100%** of businesses  
“three-star business” that incorporate  
the three elements of specialty,  
megatrends, and sustainability

Eight-year investment cash flow total

**¥470 billion**

R&amp;D spending (including ¥50 billion for basic research)

**¥180 billion**Contributing to a  
sustainable society

## ICT&amp;Energy



- Ensure universal access to affordable, reliable, and modern energy services (7.1)
- Substantially increase the share of renewable energy in the global energy mix (7.2)
- Double the global rate of improvement in energy efficiency (7.3)

## Healthcare



- End epidemics of infectious and communicable diseases (3.3)
- Reduce premature mortality from non-communicable diseases (3.4)
- Achieve universal health coverage (3.8)

Sustainable  
Living

- Ensure access for all to adequate, safe, and affordable housing and basic services (11.1)
- Provide access to safe, affordable, accessible, and sustainable transport systems for all (11.2) Enhance inclusive and sustainable urbanization and capacity for participatory, integrated, and sustainable human settlement planning and management (11.3)
- Reduce the adverse environmental impact of cities by paying special attention to air quality and municipal and other waste management (11.6)

**SUSTAINABLE  
DEVELOPMENT GOALS**

## Denka Group Core Competencies

Denka Group aims to achieve “making the world a better place as specialists in chemistry” by utilizing to the maximum its technological capabilities and its originality that captured the megatrends, which have been nurtured throughout the 109 years of its history.

### 1 Core Technologies and Market Share

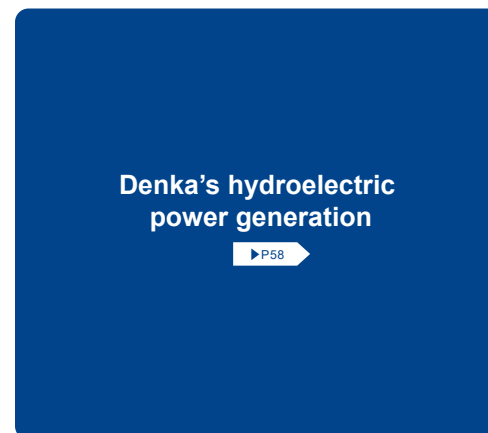


### Initiatives to increase our competitive advantage

To respond promptly to market changes and diversifying needs, we reorganized the research and new business development systems throughout the company in April 2022, and newly established the “New Business Development Division”. We are aiming to enhance new business creation by setting up an organization under this division that consistently conducts the series of processes from business concepts to concept verification, incubation, and commercialization, as well as setting up the Denka Innovation Center mainly in charge of basic research, and by clarifying responsibilities.

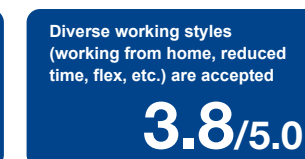
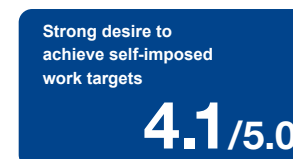
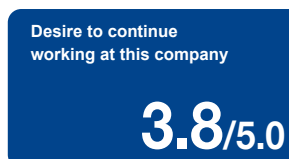


### 2 Sustainable competitiveness

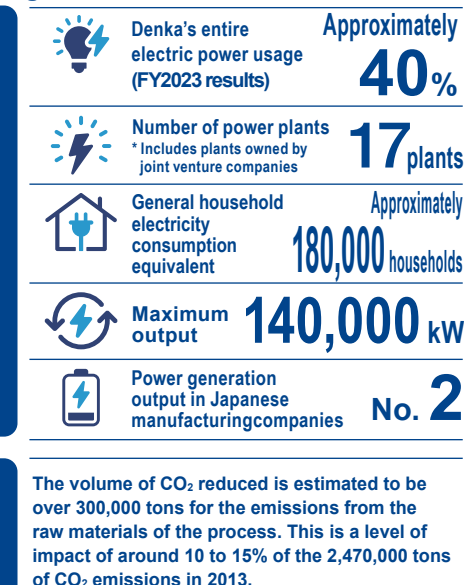


### 3 Employee engagement

We regularly conduct an employee awareness survey at Denka. The FY2023 survey showed high employee engagement, with all fields exceeding the standard score (3.0). In the future, we will measure the effect of various measures via this survey and also discover newer issues, and we will make use of these in in-house measures.

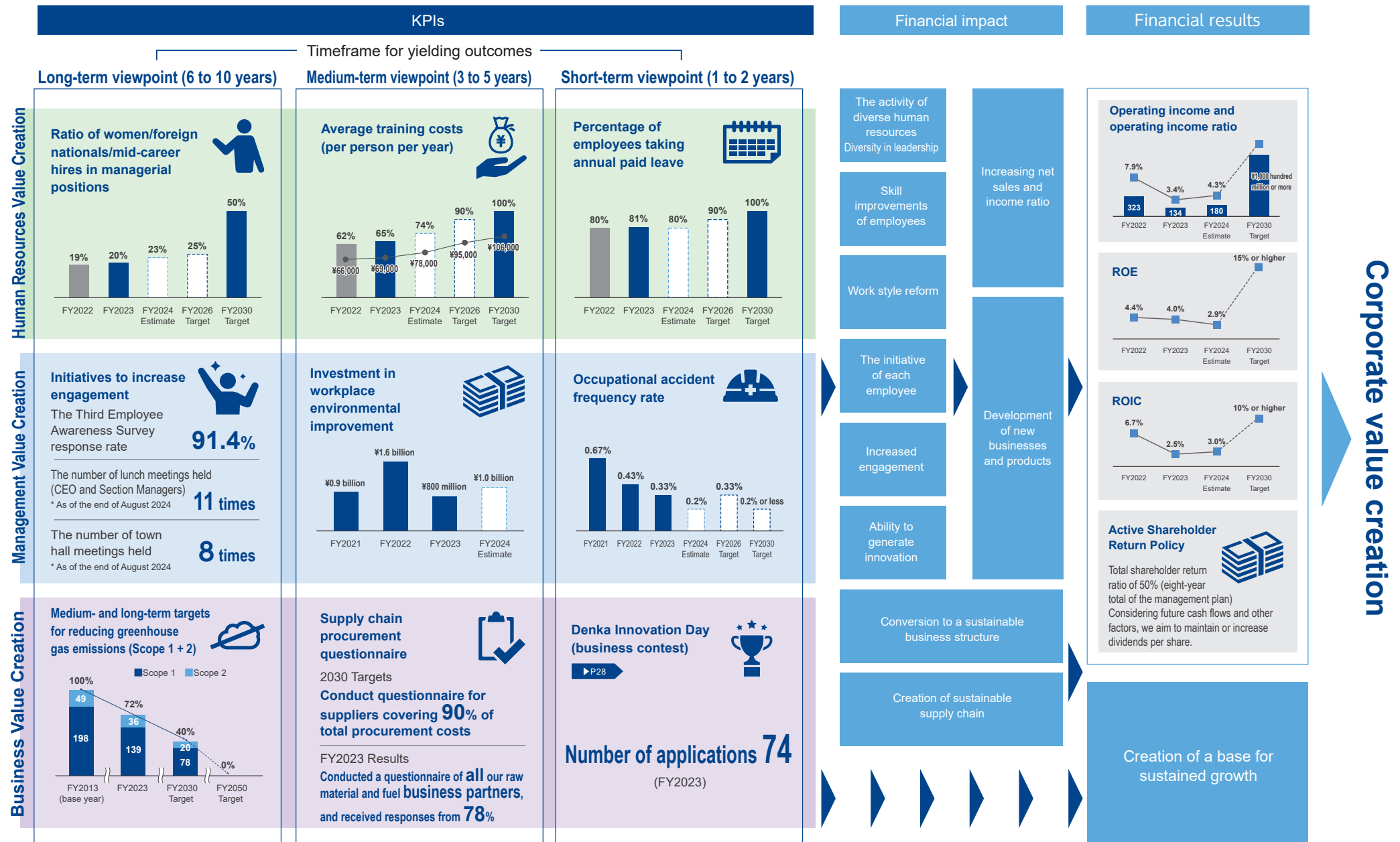


### Denka's hydroelectric power generation in numbers



## Corporate Value Creation Initiative (connection between non-financial indicators and financial results)

The following diagram indicates key performance indicators (KPIs) based on the timeframe of the financial results.





## Important Management Issues (Materialities)

In formulating our Management Plan “Mission 2030,” the Denka Group analyzed and evaluated sustainability issues over the medium-to-long term leading up to 2030, and reviewed materiality. In “Three Growth Strategies,” Denka has defined the basic policy with important management issues (materiality) related to sustainability, and promoted various initiatives.

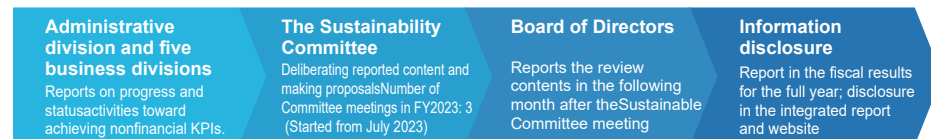
### 1 Sustainability Promotion Framework

Based on Management Plan “Mission 2030” started from 2023, Denka established the Sustainability Committee (with President as the chairperson) to promote sustainability (mid-/long-term sustainability) initiatives, and discuss and propose activities. As an organization within the Executive Division, the Sustainability Committee receives reports from relevant departments on a regular basis regarding activities related to sustainability in Management Plan “Mission 2030”, progress of non-financial targets and KPI, responses to risks and profit opportunities. The Committee, then, reviews the reports and makes appropriate recommendations, and reports to the results to the Board of Directors, and the stakeholders to communicate the progress of the management plan.

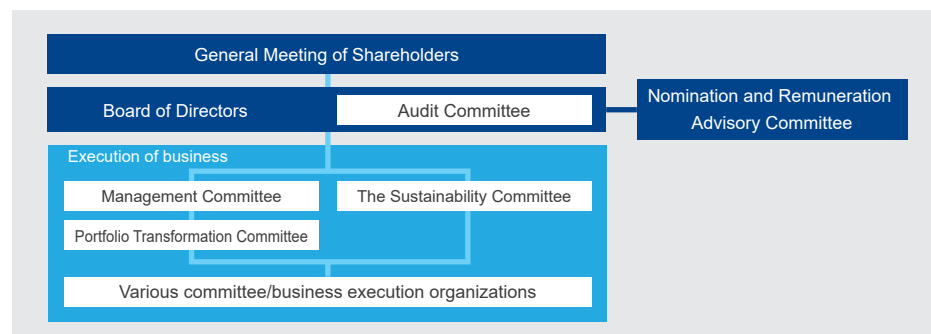
#### The Sustainability Committee Members

[Chairperson]	[Vice chairperson]	[Members]	[Observers]	[Secretariat]
President	Corporate Planning Dept. senior officer	HQ Management D ivision senior officer	Directors	Corporate Planning Dept.

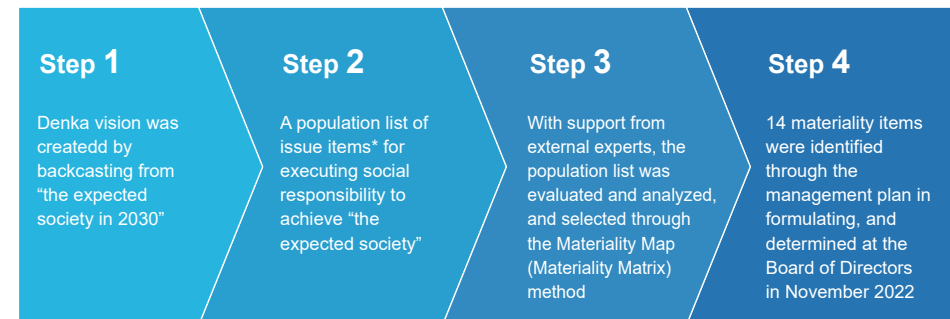
#### Deliberation process



#### Sustainability management promotion structure

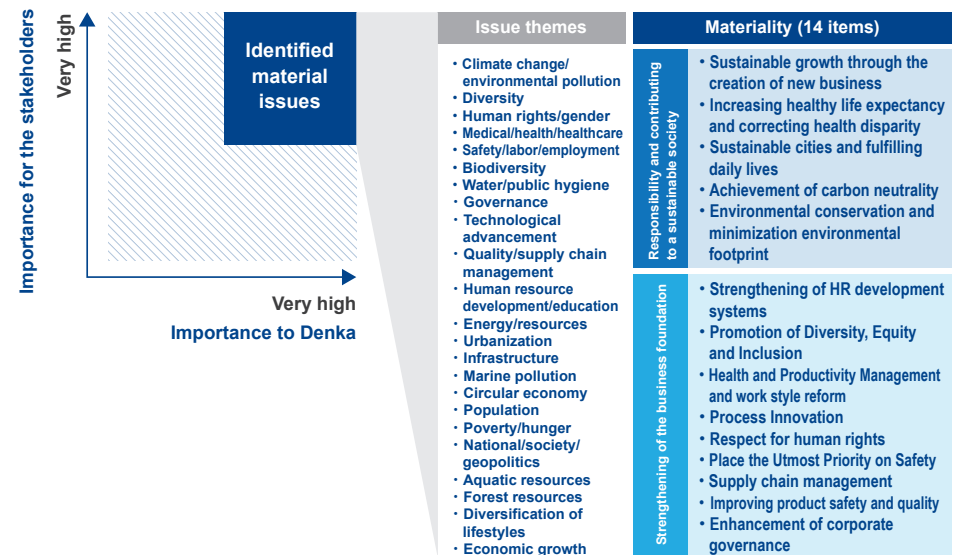


### 2 Materiality Review Process



\* Population of social issues: Survey items of ESG assessment organizations such as the World Economic Forum (WEF) Global Risk Report (2022 edition), Sustainable Development Goals (SDGs), the SASB Standard, and the CDP were analyzed and classified into 23 categories/333 items

#### Denka Group Materiality Analysis Map



### 3 Materiality (Important Management Issues)

We have classified materiality issues into two categories, “responsibility and contributing to a sustainable society”, in which we contribute to society through our business activities, and “strengthening our business foundation”, which is a requirement for corporate survival and sustainable growth. Responsibility and contribution to a sustainable society (5 items) consists of items that the Denka Group should address in order to resolve social issues through its business operations, such as global warming countermeasures, healthcare, and sustainable cities and lifestyles. Strengthening our business foundation (9 items) is based on the Denka Group ESG Basic Policy, and issues related to human resources, a source of sustainable growth, and initiatives to fulfill social responsibilities through supply chain interaction.

#### The Denka Group ESG Basic Policy and direction of materiality and issue resolution

The Denka Group ESG Basic Policy		Materiality (14 items)	Issue resolution for each Materiality
<b>E</b> Promote climate change countermeasures <b>E</b> Reduce environmental impact and preserve/protect biodiversity <b>E/S</b> Sustainable economic growth and solving social issues <b>S</b> Respect for human rights <b>S/G</b> Promote diversity and inclusion, nurture human resource development, and reform working styles	<b>S</b> Develop inclusive workplace environments with the utmost priority on safety <b>S</b> Participate in, contribute to, and build trust toward creating better local communities <b>S</b> Build relationships of trust with customers <b>G</b> Fair corporate activities <b>G</b> Information disclosure and constructive dialogue with stakeholders <b>G</b> Risk management <b>G</b> Protect and manage our tangible and intangible assets <b>G</b> Ensure the role of top management and the implementation of this policy	<b>Responsibility and contributing to a sustainable society (5 items)</b> <ul style="list-style-type: none"> <li>• Sustainable growth through the creation of new business</li> <li>• Increasing healthy life expectancy and correcting health disparity</li> <li>• Sustainable cities and fulfilling daily lives</li> <li>• Achievement of carbon neutrality</li> <li>• Environmental conservation and minimization of environmental footprint</li> </ul>	Creating new businesses by enhancing our core technologies, strong product development and open innovation
			Accelerating decarbonization and achieving carbon neutrality, mitigating the intensification of natural disasters caused by climate change, preventing the spread of emerging and re-emerging infectious diseases, and improving QOL
			Address waste problems, conservation and restoring natural capital (biodiversity, etc.)
			Nurturing future management personnel, building a company-wide education system and fostering a culture of self-learning
			Fostering a workplace environment, framework, and culture in which people with diverse ideas can thrive
<b>S</b> Develop inclusive workplace environments with the utmost priority on safety <b>S</b> Participate in, contribute to, and build trust toward creating better local communities <b>S</b> Build relationships of trust with customers <b>G</b> Fair corporate activities <b>G</b> Information disclosure and constructive dialogue with stakeholders <b>G</b> Risk management <b>G</b> Protect and manage our tangible and intangible assets <b>G</b> Ensure the role of top management and the implementation of this policy	<b>Strengthening our business foundation (9 items)</b> <ul style="list-style-type: none"> <li>• Strengthening of HR development systems</li> <li>• Promotion of Diversity, Equity &amp; Inclusion</li> <li>• Health and Productivity Management and work style reform</li> <li>• Process reforms</li> <li>• Respect for human rights</li> <li>• Place the Utmost Priority on Safety</li> <li>• Supply chain management</li> <li>• Improving product safety and quality</li> <li>• Enhancement of corporate governance</li> </ul>	<b>Strengthening our business foundation (9 items)</b> <ul style="list-style-type: none"> <li>• Strengthening of HR development systems</li> <li>• Promotion of Diversity, Equity &amp; Inclusion</li> <li>• Health and Productivity Management and work style reform</li> <li>• Process reforms</li> <li>• Respect for human rights</li> <li>• Place the Utmost Priority on Safety</li> <li>• Supply chain management</li> <li>• Improving product safety and quality</li> <li>• Enhancement of corporate governance</li> </ul>	Promote institutional reforms to create workplaces that will make people want to come back tomorrow
			Transforming business models and organizations, improving productivity, and developing in-house digital talent
			Absolute respect for human rights based on the UN Guiding Principles on Business and Human Rights and the UN Global Compact
			Creating absolute safety, establishing rules and a safe work environment
			Working with business partners to increase sustainable value in the supply chain
			Provision of trustworthy products and services
			Ensuring transparency and fairness based on high ethical standards and building an advanced and effective corporate governance system

### 4 Incorporation of Sustainability Issue into Management

Materiality is an essential element to address the risks and opportunities connected to issues of sustainability in our management base from a medium- to long-term perspective and aiming to realize our vision. It should form the cornerstone of our business activities.

Under our new management plan, “Mission 2030,” the entire Denka Group will work to resolve global issues, such as climate change and contribute to the realization of a sustainable society by establishing management strategies that are linked to materiality.

For Business Value Creation, with the Denka Group's policies, “Achievement of carbon neutrality by 2050,” “Sustainable cities and fulfilling daily lives,” and “Environmental conservation and minimization environmental footprint,” we will proceed various initiatives, such as portfolio reform including establishment of low-carbon acetylene chain to reduce CO<sub>2</sub> and other greenhouse gases, expansion of renewable energy, development of products that contribute to achievement of SDGs, and promotion of a circular economy for styrene-based packaging materials to achieve a circular society.




For Human Resources Value Creation, we pursue a company where each employee can experience self-achievement and growth. With the policies, “Strengthening of HR development systems,” “Promotion of Diversity, Equity & Inclusion,” and “Health and Productivity Management and work style reform,” we will also develop future management team members, establish a company-wide education system, creation of self-learning culture, establish a system and foster a culture where people with diverse ideas can succeed, and promote a systematic reform to create a working environment where everyone wants to come every day.

For Management Value Creation, we set process reforms, respect for human rights, utmost priority on safety, supply chain management, product safety, and advanced corporate governance as the basic policies to enhance the management foundation, a prerequisite of our business continuity, from an ESG management perspective.

### 5 Future Materiality Reviews

In response to changes in sustainability issues, social needs, and stakeholder expectations, we will review materiality issues and non-financial indicators (KPI) as appropriate to reflect our business activities and their mutual impact on the economy, environment, and society in our management approach.

#### Management Plan “Mission 2030”

Management Plan “Mission 2030”		Materiality
<b>Business Value Creation</b> 	<b>Three-star businesses 100%</b>	Sustainable growth through the creation of new business
	<b>Pursuing Sustainability</b>	Increasing healthy life expectancy and correcting health disparity Sustainable cities and fulfilling daily lives Achievement of carbon neutrality Environmental conservation and minimization of environmental footprint
<b>Human Resources Value Creation</b> 		Strengthening of HR development systems Promotion of diversity, equity & inclusion Health and Productivity Management and work style reform
<b>Management Value Creation</b> 		Process reforms Respect for human rights Place the Utmost Priority on Safety Supply chain management Improving product safety and quality Enhancement of corporate governance

# Talk with the President



## Atsushi Yoshida

Equity Research Department, Senior Analyst  
Mizuho Securities Co., Ltd.

[Facilitator] Takahiro Okabe, Sinc Inc.

**In this year's Denka Report "Talk with the President", we welcomed Mr. Atsushi Yoshida, a top analyst at Mizuho Securities. He has long been engaged in the chemical sector, and observed management at a number of chemical manufacturers.. We had Mr. Yoshida talk with President Imai about changes in Denka's management, current challenges, and expectations for the future from a analyst's perspective.**

## Toshio Imai

Denka Company Limited  
Representative Director, President

### Atsushi Yoshida Career Summary

Senior Analyst, Equity Research, Mizuho Securities Co., Ltd.  
1988 Joined Wako Securities Co., Ltd.  
1996 Wako Economic Research Institute  
2000 Corporate Research Dept. at Shinko Securities, Co., Ltd.; (after the merger) Equity Research Dept. at Mizuho Securities Co., Ltd.  
Engaged in research in the chemical sector until today

## 1. Revising the initial year in "Mission 2030"

**Okabe:** Denka started its 8-year Management Plan "Mission 2030", in fiscal 2023. President Imai, could you please explain how you evaluate this initial year?

**Imai:** 2023 was a year that shook the foundations of management as a company manufacturing chemical products, due to the occurrence of a fatal accident as well as improprieties regarding quality. With these two incidents, I thought that we should get back to our core values: integrity, empathy, and challenge.

The heart of the first core value, "integrity", is to keep promises. It was unveiled that Denka and Toyo Styrene, an equity-method affiliate, was engaged in an activity that led loss of trust in product standards. This incident made us reaffirm the importance of keeping promises with our customers, in other words, integrity. The second core value is empathy. We failed to keep safety of the employees from our partner company in the fatal accident at Omi Plant. It is most important that the people who work at the same workplace ensure each other's safety, and feel "empathy" to one another. And finally, "initiative". We translated the word "chousen (challenge)" to Initiative. It means we take the initiative to do what needs to be done. To hold responsibility and sincerely facing safety and quality, is to keep on taking "initiative" while prioritizing "integrity" and "empathy".

2023 turned out to be a year of reexamining our core value through these two incidents.

**Yoshida:** Fatal accidents and improprieties regarding quality give significant impact to the business continuity of a company, and are impermissible. Regaining trust is really difficult. I would really like to ask you to enforce risk management and safety. However, perfection is non-existent in a human's activity. What matters is the continuous effort to reduce risks as low as zero, and how you recover from the aftermath of an incident.

**Imai:** For the quality problem, more than 200 issues were extracted through an internal survey after the introduction of a leniency system, a system to reduce and exempt self-reported violations. Our workplaces should allow anyone at any job position have a voice to point out violations, and "hazardous actions. I think the employees' mind state and psychological safety are important to achieve this,, and we are implementing various measures for this.

**Yoshida:** It is indeed very important to improve internal communication and build a working environment where people can say what is wrong is wrong.



## Talk with the President

### 2. Trend in the chemical industry and expectation to Denka

**Okabe:** 2023 was a tough year for Denka. But it was also a year with a difficult business environment for the entire chemical industry, including decline of the petrochemical demand and more restrictive environmental regulations. Mr. Yoshida, you have long observed the chemical sector. What is your impression about the industry in the recent years?

**Yoshida:** It is said that, while reorganization of the primary industry in Japan has progressed in, say, the glass, pulp and paper, and iron and steel, reorganization in the chemical industry has not advanced much. I think, however, the management teams in the chemical industry have very good insights in trend of the times. I feel confidence on them that they are showing their reasons of existence while responding to the trend of the times.

It is often said that the chemical industry is adaptable. The target markets range from electronics, automobile, life science, and so on, and each company can leverage its characteristics in its respective market. A company will grow unless management makes a mistake in deciding what to concentrate or which direction to take. It is true that declined profitability in the petrochemical industry has led to reorganization in the chemical industry and portfolio transformations, but it is just in the last few years. I believe the chemical industry will stay in a stable condition.

**Imai:** I perceived the “Three-star businesses” consisting of the three elements – “Specialty”, “Megatrends”, and “Sustainability” – as Denka’s “work we do better than anyone else”, and am concentrating our management resources to it. As a part of this initiative to substantiate our business portfolio shift, we decided to withdraw from the cement business in October 2022. In this year, we transferred three companies in the dissolved acetylene area to Koatsu Gas Kogyo Co., Ltd., from the top leader’s viewpoint. We now are proceeding some specific investigations at the Portfolio Transformation Committee, for example, and I expect more results this year.

As you pointed out, Mr. Yoshida, our petrochemical business is in a tough situation due to the recent decline in demands for petrochemical products in the domestic and overseas markets. The Polymer Solutions division, which supported Denka’s management prior to the COVID-19 pandemic, is experiencing a drop in profitability. While we see reorganization of the petrochemical complex in Chiba Prefecture and Shell’s withdrawal from the petrochemical business in Singapore, we will examine our business direction while leveraging Denka’s strength and characteristics.

**Yoshida:** Denka has grown through mutual complementarity between businesses in its diversification of management. However, two out of four segments are currently losing money, and Denka is in one of the most difficult financial conditions in its long history.

While the withdrawal from the cement business was announced in October 2022, I had thought it would have taken longer time to decide due to issues in handling by-products. Denka has the ability to resolve such a difficult issue, and the stock market is expecting a lot from President Imai’s decision-making capability.

**Imai:** Regarding the by-product handling in the cement business, Taiheiyo Cement Corporation, to which the business was transferred, took care of it.

As the issue was clear in the top leader’s viewpoint, I did not have difficulty in making a decision about this business.

What’s difficult in this kind of decision-making is that the withdrawal from a non-profitable businesses and transition of managing resources to new business have to be done simultaneously. New businesses may experience slow growth, and simple withdrawal from the existing non-profitable business would gradually make the situation worse. Because of this, our management Plan “Mission 2030” explicitly states that we will concentrate our management resources into three focus areas: ICT & Energy, Healthcare, and Sustainable Living.

### 3. Concentration of management resources to growing products

**Imai:** I would like to talk about some new products I have good expectations for growth in the future.

Especially in the focus area of “ICT & Energy”, we have a number of new products, as a result of our strategic investment since the days of previous management plan “Denka Value-Up”.

The first one is, the organic insulation material “SNECTON” (LDM: Low Dielectric Macromonomer). It is used for things such as substrates for high-speed communication and various intercalation materials. It



## Talk with the President

is a big hit product once in a long time that we expect annual sales of 20 billion yen by 2030. While it is a product from the Electronics and Innovative Products, it is based on polymer solution technologies. This resin was created through coordination polymerization of styrene and ethylene that hardly undergo polymerization, and proves to be a good achievement enabled by Denka's wide portfolio. We also focus on the LCP film (crystalline polymer film) for commercial release. This is also a product utilizing Denka's resin film formation technologies. We expect growth in the flexible circuit board for high-speed communication. TBM is a highly heat-resistant temporary bonding material that can withstand 300°C, capable of high-temperature processing in the manufacturing processes of power semiconductors and the next generation semiconductor packages.

On the other hand, we are proceeding aggressive equipment enhancement in prospective existing businesses. Silicon nitride, a product that we have long had, is expanding its demand for xEV motor bearings. This is a material that offers high reliability for substrates and bearings because of its high mechanical and electric characteristics, thus doubling the production capacity. We expanded our manufacturing capacity of spherical alumina by five times in comparison with fiscal 2018 by building a new plant in Singapore to meet its growing demand for on-board chargers for xEVs and PHEVs. We also doubled the manufacturing capacity of heat dissipation sheets to satisfy its demand for 5G and xEV applications, by concentrating the production capacity to Shibukawa. Our production capacity of Acetylene Black will be enhanced by annually 11,000 tons once a joint venture in Thailand is established. It would help us meet growing demands for high-voltage transmission lines for automotive LiB and offshore power generation.



Denka SCGC Advanced Materials Co., Ltd

In the focus area of Healthcare, we doubled our influenza vaccine production capacity, and expect it contribute to profitability this year. Expansion of POCT (Antigen Diagnostic Test Kits) kit production facilities will complete in March 2025, resulting in 2.5 times of production capacity.

The expansions start contributing to our performance from 2024 and for new products, they will start contributing from 2025 or 2026. We are struggling from semiconductor related products, chloroprene rubber, and petrochemical products, resulting in a triple demand decline. But there is now a sign for recovery in the semiconductor field. We would like you to expect our growth as this business will definitely be back on track for growth after the 2nd half of this fiscal year.

**Yoshida:** Indeed, you have a lot of cards in your hand. Many investors and analysts are often not sure what Japanese chemical companies are engaged in because they have diverse businesses. I recall that ex-President Mr. Seiki Kawabata (President from 2006 to 2011) always referred to his company as “my company” My Home.

He often said, “My company is a society-friendly company,” while referring Denka's joint function improvers agent with macromolecular sodium hyaluronate as a “product friendly to senior citizens” and a concrete structure repair system as a “building-friendly technology”. I thought he accurately represented Denka's business models that meet the demands at the time. I think the keywords representing today's social needs are: Generative AI, Environment and Mobility, and Healthcare. Denka's current three focus areas – “ICT & Energy”, “Healthcare”, and “Sustainable Living” - match these social needs. As President Imai explained, I have high expectancies in Denka's growth investments in “ICT & Energy”. While Sustainable Living has a rather humble impression, I have a positive and steady growing image of it in measures against food problems and natural disasters, as well as effective use and recycling of limited resources. Meanwhile, “Healthcare” is a difficult area to forecast. I understand that there are high demands in infectious disease, in vitro diagnostic agents, and cancer treatment drugs, but I have difficulty in getting a clear picture of Denka's technological characteristics, growth potential in the market, and ability to meet the social needs. I would like you to give us detailed explanation about this area. I see “Healthcare” is the key for Denka's mid-/long-term growth, and it can change the idea in the market about Denka's business strategies.

**Imai:** I will explain about our growth investment in “Healthcare” in detail. Let me start with the expected product development. First is our joint research project for replicon (next generation mRNA) vaccines for seasonal influenza. The second is intelliplex, a simultaneous multi-item diagnosis technology, now reaching its highlight. We expect that this technology contributes to significantly shortened diagnostic time for septicemia pathogen and drug resistance. I really want this product to succeed. DELYTACT®, an agent for malignant brain tumor for which we did not have effective therapeutic approach, is the second oncolytic virus product in the developed countries, and the first in Japan. Although this is a high-hurdled theme, I would like to see an early goal.

You just told us about “a society-friendly company”, and we have technologies in Sustainable Living that are capable of social contribution in terms of environment. We have established a consortium for carbonated admixture LEAF®, a key material for carbon negative concrete, utilizing the Green Innovation Fund Project<sup>1</sup>. FASTRONG, another special cement additive for concrete, is used for Hume pipes and U-tubes, and has excellent environmental characteristics in terms of decarbonization and shorter production process.

## Talk with the President

In addition, a polystyrene chemical recycle plant started its operation in March 2024. We now have a chain of monomer, polystyrene, BOPS (biaxial stretching), food container formation connected to materials made of collected used food containers and packages (post-consumer materials). This is a very meaningful project to form a circular styrene chain out of a single plant, which we are working for social implementation in a collaboration with Ichihara City, Chiba Prefecture. By tackling this project as an entire society, we can generate merits and profit with all the participants. It is undoubtedly an "initiative".



Chemical Recycling Plant

**Yoshida:** Polystyrene chemical recycling is ideal as it does not consume petroleum resources. Companies have technologies, but the issue is how to collect the post-consumer materials. There is a limit for what a single company can do for this matter. And cost effectiveness is another question. It requires support from the national government to involve local governments and communities to generate a social trend.

**Imai:** And what I expect most in Sustainable Living is the methane-to-acetylene technology. It is a low carbon acetylene production technology. Approximately 400,000 tons of CO<sub>2</sub> is emitted annually from the current carbide manufacturing process. This is a new technology to resolve this issue, by generating acetylene from ionizing methane. What is excellent about this technology is that the portion is 1:4 for hydrogen and generated acetylene. Instead of burning hydrogen in a gas turbine, we can find a highly value-added application to increase the effectiveness of this production method. We can produce green chloroprene in a way that significantly reduces CO<sub>2</sub> emission. We will examine this technology in a pilot plant built at Omuta Plant.

## 4. Review of the investment plans

**Okabe:** In the announcement of financial statements in May 2024, Denka announced a reduction of 100 billion yen in investment cash flow for eight years. How do you evaluate this decision, Mr. Yoshida?

**Yoshida:** I take it very positively. I kind of thought that 360 billion yen for strategic investments and 180 billion yen for R&D for eight years were a bit too high. I think this correction, as well as the idea of curation of investment projects and review of the investment timing show integrity with the management plan. I would like to keep my eyes on the new production site for SNECTON and Acetylene Black in Thailand, and introduction of the "methane-to-acetylene" technology to Omuta Plant and roll out to Omi Plant.



## 5. Best Practice Project

**Okabe:** You explained Denka will curate and continue growth investments to the areas where growth is expected.

Can you tell us about the Best Practice Project you are currently engaged in to get back to the track of growth illustrated by the management Plan "Mission 2030"?

**Imai:** Manufacturing companies like us always think about potential cost reduction. It is not easy to achieve significant reduction unless new thoughts and mindsets are introduced. In this project, we are incorporating insights from third parties and benchmarks to learn best practices. It does not have to be special, but we would like to acquire intellect to perform common practices in a common way.



## Talk with the President

Comparing 2023 to 2021, when we achieved the our top profit, the fixed cost rose by 15 billion yen. We would not be able to get back to the growth path without a determined mindset for cost reduction. We plan to achieve cost reduction of 1 billion yen this year, 5 billion yen next year, then 10 billion yen in the following year. 10% of the achievement from this project will be returned to the employees. Without achieving this target, we will not be able to achieve the management Plan “Mission 2030 targets. I will be spearhead this initiative, and encourage each employee to acquire best practices to polish up the practices. As specialists at a manufacturing company, we keep our bars high for the future growth.

## 6. Stock price

**Yoshida:** I think 10% return from the Best Practice Project cost reduction achievement to the employees is a key to emphasize the mutual success. I really want to see more than 10 billion yen cost reduction effect. While I highly evaluate this initiative at Denka, the current valuation (evaluation) in the stock market (as of June 2024) shows about 0.6 in PBR. As the average in the past five years is about 1, it is at a low level in a long-term view.

As my personal impression, I think it is because the growth areas in the Electronics and Innovative Products and Life Innovation failed to achieve expected results, in addition to the decline in profitability in the Elastomer & Infrastructure Solutions and Polymer Solutions divisions. Additionally, the market is



concerned about the impact from the temporal recording of expenses associated with the fundamental measures for the chloroprene rubber business. However, Denka, with these impacts in mind, announced an anticipated dividend of 100 yen per share in 2024, taking improved cash flow after 2025 into consideration. As the stock market feels negative about potential risks for reduction in dividend, I think the market took this announcement positively.

**Imai:** In our management plan “Mission 2030”, we will maintain the total shareholder return ratio at 50%. The ratio in the last fiscal year was 72%, and 96% this fiscal year, that are well above 50%. The announcement of preserving 100 yen dividends show our confidence to getting back to the track of growth after the upcoming fiscal year.

**Yoshida:** I take the total shareholder return ratio at 50% positively. On the other hand, it can be seen as a stock buyback with a purpose as an announcement effect, or progressive dividend to determine the lower limit of the dividends, if the current stock price is judged to be relatively low. If there is no risk for reduction in dividend, the current dividend yield is relatively high at 4.7%. The upcoming reorganization can trigger an increase in the stock price.

**Imai:** At this point, we prioritize dividends, and we are not thinking about a stock buyback with reduced dividends.

I think we have more options in the upcoming fiscal years once we have solid clues for resolution of various issues and regain profitability

## 7. Human Capital

**Okabe:** I have a question for you, Mr. Yoshida. As an analyst, where do you focus on when you evaluate human capital management?

**Yoshida:** While it is difficult to reflect to the stock price, I think the happiness of employees is essential for a company to grow. A company with low employee satisfaction would not grow. That is why I expect Denka to take actions in “Human Resources Value Creation”, and would like it to be led to corporate value creation and sustainable growth. While there are various elements of the human capital, such as enhancement of human resource development and promotion of diversity, equity and inclusion (DE&I), it is difficult for the external parties to see what results can be achieved by doing what. I would like the company to have an employee-first mindset, and then examine the relationship between each initiative and employee satisfaction improvement.

**Imai:** I want to make Denka a company where the employees can feel their growth by working at Denka. Also, I want to establish a company where each employee feel they are treated right and valued by the company. The company has empathy for the employees and the employees have empathy for the company - I think such a company is expected in terms of compliance and safety.

## Talk with the President

Then, what can we do to build such a company. First, we need to foster a self-learning culture. For this purpose, we are proceeding with a KPI to double the training cost per employee in FY2030 in comparison with FY2021. And we set up Career Planning Committee so that the company can think of each employee's future career. At this point, the Committee primarily consists of senior officers. Managing directors and managers should join the Committee to develop future management personnel and succession plans.

For DE&I, we set up a KPI to hire female workers, those with foreign nationalities, and experienced workers, and additionally, we welcome Rumiko Nakata-san, a human resource strategy expert, as an outside director in this June to drive this initiative. Nakata-san will take a role of chairperson at the Nomination and Remuneration Advisory Committee.

When I think over the past, I'm afraid we did not have enough dialogs between the management and the employees. We started Townhall Meetings, where President and employees communicate this year. We previously had plant tours on a regular basis, but it was our first attempt to have meetings targeting the headquarters and all sites. We should refrain a one-sided dialogues, and focus on bi-directional communication. With our core values (Integrity, Empathy, and Challenge) as the axis, we talk about safety, quality, and cost reduction, and so on.

## 8. Conclusion

**Okabe:** Can you please tell us about what you expect from the Denka Group in a transitional phase?

**Yoshida:** My primary message for Denka employees is: Do not fear "change".

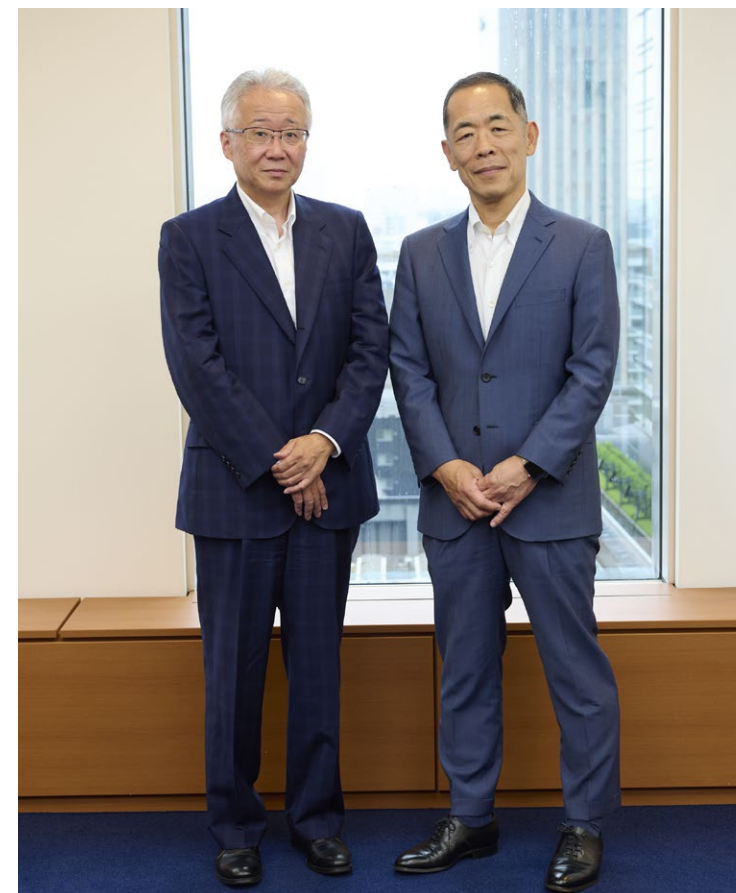
Denka has grown through some business portfolio transformation according to the changes in time. I would like Denka to make the most of this critical phase and revitalize itself as a specialty chemical company.

My definition of a specialty chemical is a company with high profitability and a company that can achieve profit growth in a stable manner. To meet this definition, the company must align its non-profitable businesses with the management structure at some extent. And what is important is growing businesses. The growth in the current Electronics and Innovative Products and Life Innovation divisions is not enough yet. I would like the company to use enough resources to achieve high growth. I do not want a company to strive for scale. Previously, some chemical manufacturer companies had a principle of sales for the sales' sake. Such companies do not exist any longer, and the market does not evaluate it either. When proceeding portfolio transformation and the top leader's mindset, the company can constantly achieve 10% of an operating income ratio and 10% of ROE, while the scale of the company may get smaller. A specialty chemical company focuses on the absolute profit and income ratio. I would like Denka to aim to be the best at what we do.

This transformation requires physical strength and patience. I would like President Imai to take care of his health and spearhead this transformation with confidence.

**Imai:** Thank you for your clear and solid message. To make the world a better place as specialists, we will not pursue for scale, but focus on the "Three-star businesses" in which we can do work we do better than anyone else.

Thank you very much for your time today.



Date: June 21, 2024, Location: Denka Company Limited Head Office

## Management Plan “Mission 2030”

“Mission 2030” is our new management plan that aims to help us achieve Denka’s vision by 2030. With Business Value Creation, Human Resources Value Creation, and Management Value Creation as the three growth strategies, we set targets and KPIs based on the important management issues (materiality) ▶P15-16 and are working to improve the corporation's value. In Business Value Creation, we aim to turn all Denka businesses to “Three-star businesses” equipped with Specialty, Megatrends, and Sustainability.

### MISSION

**By 2030, we will increase the value of our human resources and management, and we will focus on creating business value that combines the three elements of specialty, megatrends, and sustainability.**

### FY2023 initiatives

In FY2023, the first fiscal year of Management Plan “Mission 2030”, we were not successful to achieve sales increase to reasonably balance the cost for the strategic investment and other expenses planned in the previous “Denka Value-Up” management plan, due to various factors such as the decline in demand for chloroprene rubber, in addition to changes in the economic environment, including the prolonged decline in demand for semiconductors, slow-down in China's economic growth, and global inflation. Despite of some extraordinary income from sales of cross-shareholdings, we are facing unsatisfactory results, partially because of the aftermath of 2024 Noto Earthquake and impairment loss from abortion of norovirus vaccine development.

After FY2024, new production equipment to which we made forward looking investments will be in operation, and there is no change in our strategy to drive three growth strategies. By proceeding with three initiatives (portfolio transformation, review of the investment plans, and the Best Practice Project) to get back to the growth path based on the management plan targets, we will get the profit level back to the growth path in FY2025.

01

Business portfolio shift

▶P28

02

Review of the Investment Plans

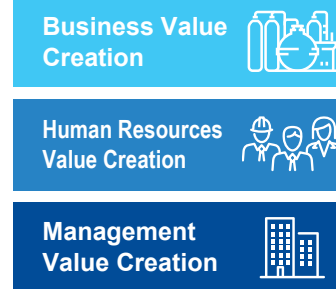
▶P28

03

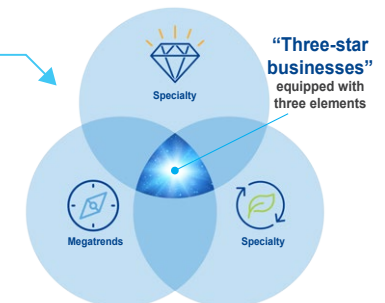
Best Practices Project

▶P28

### <Three growth strategies>

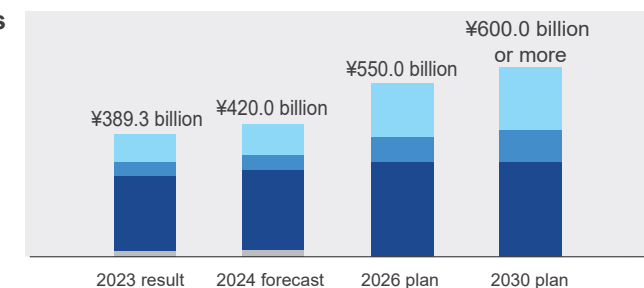


### <Three Elements of Business Value Creation>



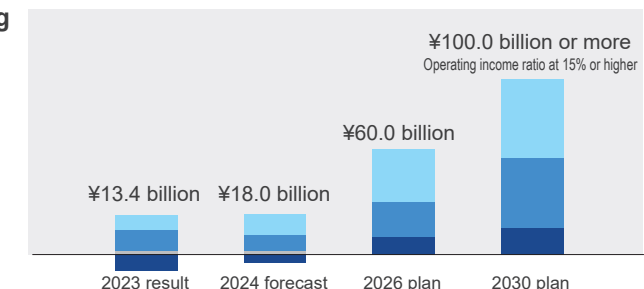
### Net sales

ICT & Energy  
Healthcare  
Sustainable Living  
Other



### Operating income

ICT & Energy  
Healthcare  
Sustainable Living  
Other



### Financial index

	FY2023 Results	FY2024 forecast	FY2030 KPI
Operating income ratio	3.4%	4.3%	15% or higher
ROE	4.0%	2.9%	15% or higher
ROIC	2.5%	3.0%	10% or higher
Investment settlement amount	¥116.7 billion	¥42.0 billion	8 years from FY2023 to FY2030: ¥540 billion

## Key Financial and Non-Financial Data (2030 Targets and FY2023 Results)

2030 Financial Targets	Operating income	<b>¥100 billion</b> or more (FY2023: ¥13.4 billion)	Operating income ratio	<b>15% or higher</b> (FY2023: 3.4%)
	ROE	<b>15% or higher</b> (FY2023: 4.0%)	ROIC	<b>10% or higher</b> (FY2023: 2.5%)
	Approved investment amount	8 years from FY2023 to FY2030: <b>¥540 billion</b> (FY2023: ¥116.7 billion)	Total shareholder return ratio	<b>50% level</b> (FY2023: 72%)
2030 Non-financial Targets	Achievement of carbon neutrality			
	CO <sub>2</sub> emission	<b>60% reduction compared to FY2013 (1 million tons)</b> (FY2023, 28% reduction compared to FY2013 [1.78 million tons- CO <sub>2</sub> ])	Maximizing renewable energy generation	<b>150MW</b> (FY2023: 146MW)
			Renewable energy + Electricity mix with non-fossil fuel certificates	<b>76%</b> (FY2023: 40%)
			Promotion of energy conservation	<b>Continue 1% reduction from previous year</b> (FY2023: 102% year on year)
	Strengthening HR development systems			
	Average training costs (per person)	<b>Double amount compared to FY2021</b> (FY2023: ¥69 thousand/person/year)	Ratio of female/foreign/experienced hires in management positions	<b>50%</b> (FY2023: 20%)
			Percentage of males taking parental leave	<b>85%</b> (FY2023: 53%)
			Percentage of mid-career hires*	<b>50%</b> (FY2023: 47%) * Percentage of FY2023 hires
	Health and Productivity Management and work style reform			
	Overtime hours	<b>30 hours/person/year</b> (FY2023: 147 hours/person/year)	Taking annual paid leave	<b>100%</b> (FY2023: 81%)
			Employees within appropriate weight limits	<b>80%</b> (FY2023: 65%)
	Employees with high stress levels	<b>10% or less</b> (FY2023: 15%)	Employees with good exercise habits	<b>40%</b> (FY2023: 34%)
			Smokers	<b>12% or less</b> (FY2023: 25%)
	Place the Utmost Priority on Safety			
	Occupational accident frequency rate (Number of casualties / Total working hours x 1 million)	<b>The Company and affiliates 0.2 or less</b> (FY2023: 0.4)	Training for occupational safety and security	<b>All group employees</b> (FY2023: 82%)
	Improvement of product safety and quality			
	Integration of quality control systems, raising of control standards	<b>Number of significant compliance violations: 0</b> (FY2023: 1)	Introduction of compliance training	<b>All group employees</b> (FY2023: 90%)
	Enhancement of corporate governance			
			Group-wide establishment of internal control framework	<b>Establish internal control framework for all Group companies</b> (FY2023: 11 companies completed, 3 companies in process)
	Supply chain management			
	Procurement questionnaire implementation rate	<b>Conduct questionnaire for suppliers covering 90% of total procurement cost</b> (FY2023: Questionnaire all suppliers of raw fuel and of these 78% responded)		

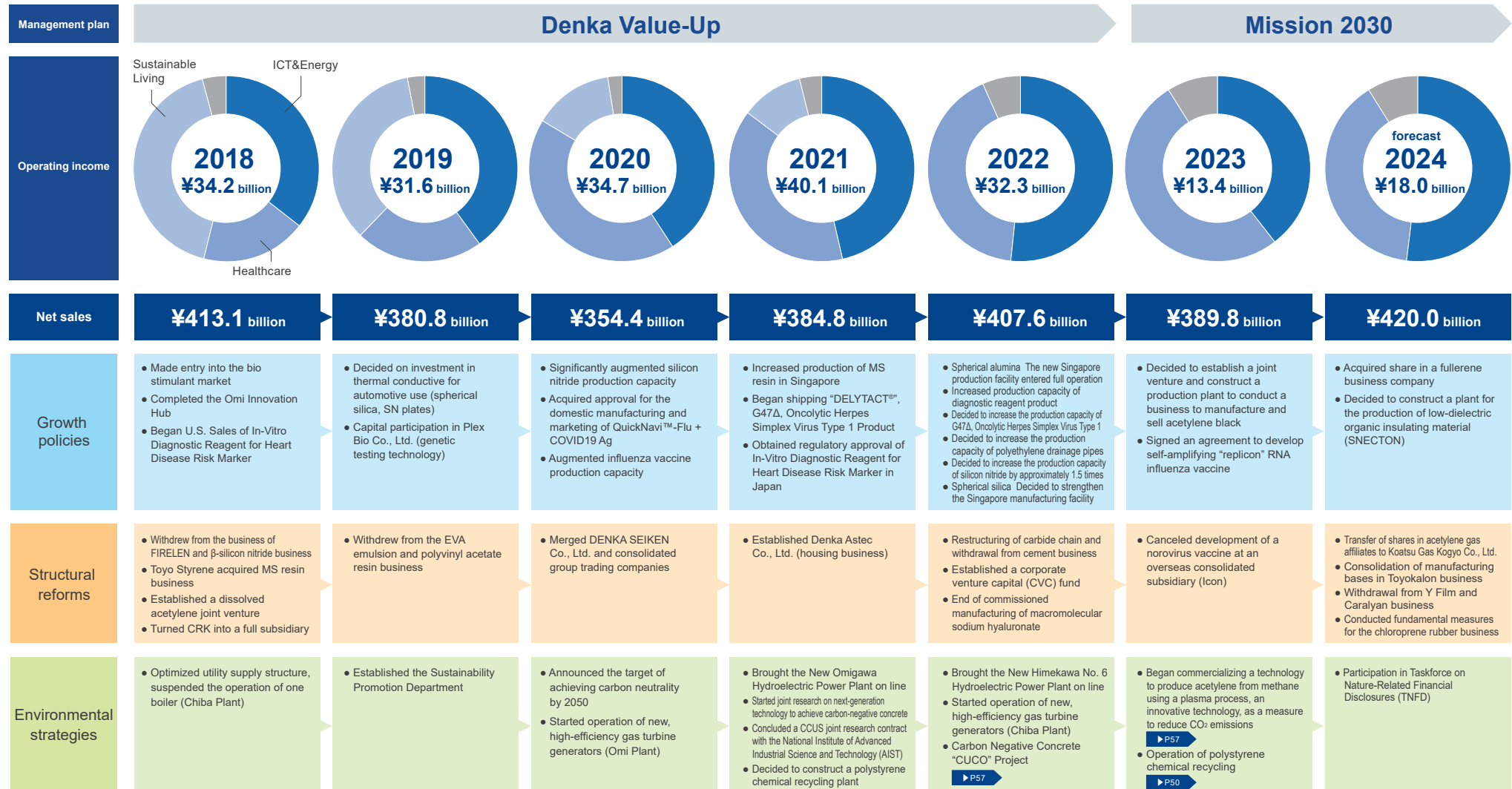
# Business Value Creation Trajectory of Our Business Portfolio Shift

Denka Group started the management plan “Denka Value-Up” in FY2018. In this management plan, we drove forward our two growth strategies of “business portfolio shift” and the “introduction of innovative processes”. As a result, we decided to withdraw from the cement business in FY2022. However, there are businesses that still depend largely on the external environment, and therefore, we must further propel our portfolio shift.

In the management plan “Mission 2030” from 2023, we are implementing more proactive measures toward the 2030 target of “100 percentage of three-star business”.

Carefully selected strategic investments ▶P31

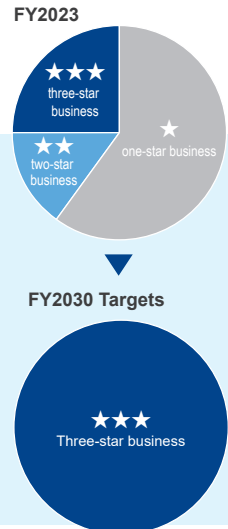
Capital investment trends by four business divisions ▶P42





## Portfolio Transformation Committee

The Portfolio Transformation Committee, chaired by the President, was launched in FY2023 in order to increase the number of three-star business to 100%. We are reviewing and confirming the policies of our one and two-star business. After deliberation, we plan to decide on a course of action by FY2024 for businesses that are rated as 1-Star and are currently unprofitable, including the chloroprene rubber business, and six of them are scheduled to implement final measures within a set time frame. Among them, the highest priority will be given to fundamental measures for the chloroprene rubber business. In addition to these six businesses, we will also capture the trends in future demand and optimize the sales and production systems for styrene resin products in line with the restructuring of the petrochemical business in the chemical industry as a whole.

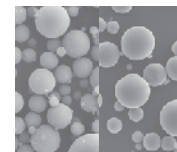


### What is a three-star business

Businesses incorporating the three elements of specialty, megatrends, and sustainability. A star is given when each criterion is met.



#### Representative three-star ★★★ products



Spherical silica/  
spherical alumina



QuickNavi™-Flu +  
COVID19 Ag

#### The consideration process of the Portfolio Transformation Committee



### Status of the initiative to achieve 100% three-star business

**Decided the deadline in six businesses (total operating profit/loss of ¥15 billion)**  
**Implemented the final measures**

- (1) Consolidation of manufacturing bases in Toyokalon business
- (2) Withdrawal from Y Film and Caralyan business
- (3) Decision on the fundamental measures for the chloroprene rubber business

Scrutinize optimal chloroprene rubber production capacity at Omi Plant and DPE in the U.S. from various perspectives, including demand trends, exchange rate trends, raw material market conditions, and BCP measures.

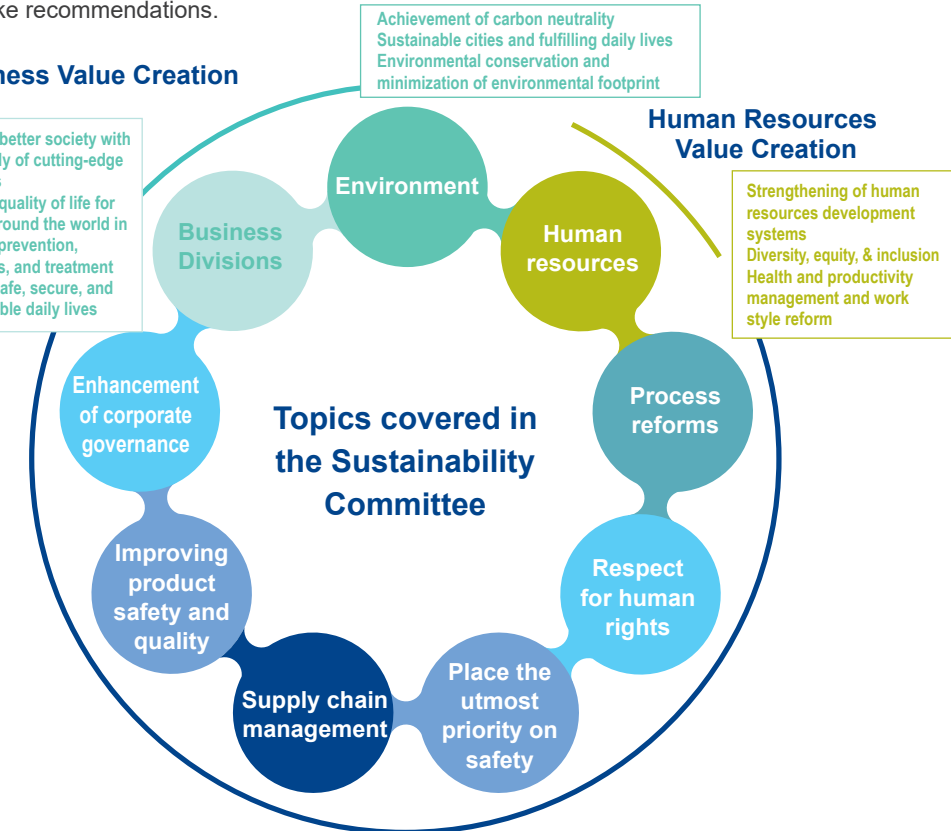
## Sustainability Committee

▶P15 Sustainability promotion framework

The Sustainability Committee was established to manage the progress of the non-financial targets set forth in the management plan "Mission 2030". The committee was established as an organization within the Executive Division. It is chaired by the President, and the committee members are made up of the officers in charge of each management division. The Chairman, full-time audit committee members, and outside directors participate as observers. The committee meets five times per year to deliberate about the initiatives of executive divisions that are in line with the themes below and report the results to the Board of Directors and make recommendations.

### Business Value Creation

Create a better society with the supply of cutting-edge materials  
Improve quality of life for people around the world in areas of prevention, diagnosis, and treatment  
Realize safe, secure, and comfortable daily lives



### Management Value Creation

**Management divisions:** Report on the status of activities and progress of non-financial KPIs  
**Business divisions:** Report on responses to risks and opportunities related to sustainability issues

## Human Resources Value Creation [▶ Social \(human resource initiatives\)](#) [▶ P61-64](#)

We will implement human resources investments and undertake system reforms with the aim of being a company that allows each employee to be aware of their own growth.

Policy	Strategy	FY2023 main initiatives
Strengthening of human resources development systems	Cultivation of future executive manager candidates, building of company-wide, integrated education framework, and fostering of a self-directed learning culture	<ul style="list-style-type: none"> <li>• Launched strategic personnel changes</li> <li>• Reviewed human resource development programs</li> <li>• Established Career Planning Committee</li> </ul>
Promotion of diversity, equity & inclusion	Fostering of workplace environments, systems, and culture that empowers individuals with diverse ways of thinking to demonstrate their capabilities	<ul style="list-style-type: none"> <li>• Expanded recruitment portfolio</li> <li>• Held seminars to provide support for balancing work and childcare commitments</li> </ul>
Health and productivity management and work style reform	Promotion of system reforms to create workplaces where employees will “want to come to work again tomorrow”	<ul style="list-style-type: none"> <li>• Expanded shift breakers</li> <li>• Establishment of an Internal Recruitment System</li> <li>• Conducted third Employee Awareness Survey</li> <li>• Recognized as a Certified Health &amp; Productivity Management Organization 2023 and part of the White 500</li> </ul>

## Management Value Creation [▶ Governance](#) [▶ P65-81](#)

From the perspective of sustainability management, we will work to strengthen the management foundations that are imperative for Denka's corporate survival.

Policy	Strategy	Previous main initiatives
Process reforms	Transformation of business model and organization, productivity improvements, and development of in-house digital workforce	<ul style="list-style-type: none"> <li>• Process reform initiatives <a href="#">▶ P39</a></li> </ul>
Respect for human rights	Establishment of human rights policy and thorough respect for human rights based on the United Nations Guiding Principles on Business and Human Rights and the Global Compact	<ul style="list-style-type: none"> <li>• Our view on human rights <a href="#">▶ P74</a></li> </ul>
Place the utmost priority on safety	Group-wide efforts toward essential safety, establishment of rules, and promotion of safe workplace environments	<ul style="list-style-type: none"> <li>• Pipe burst accident at Omi Plant <a href="#">▶ P6, 51</a></li> <li>• Place the utmost priority on safety <a href="#">▶ P52</a></li> </ul>
Supply chain management	Sustained improvement of added value across entire supply chain	<ul style="list-style-type: none"> <li>• Dialogue with stakeholders <a href="#">▶ P82-84</a></li> </ul>
Improving product safety and quality	Contribution to sustained growth of society and the environment through the provision of trusted products and services	<ul style="list-style-type: none"> <li>• Preventing recurrence of quality irregularation <a href="#">▶ P7, 53</a></li> <li>• Quality Assurance Management <a href="#">▶ P54</a></li> </ul>
Enhancement of corporate governance	Building of highly sophisticated and effective corporate governance structure that ensures transparency and fairness based on high ethical standards	<ul style="list-style-type: none"> <li>• Governance <a href="#">▶ P68-73</a></li> <li>• Risk management <a href="#">▶ P76-78</a></li> <li>• Internal control <a href="#">▶ P79</a></li> <li>• Denka Group's Compliance <a href="#">▶ P80-81</a></li> </ul>

# Special feature: Three “Company-Wide Reform Campaigns”

## Business idea contest: Denka Innovation Day

Denka held “Denka Innovation Day”, a new business idea contest for our employees, with the goal of creating new businesses aligned with the themes of “Specialty”, “Mega Trend”, and “Sustainability” as listed in our management plan “Mission 2030”.

The first iteration received 74 entries, and on February 15th, 2024, the six projects that advanced to the final screening presented their ideas. Approximately 500 people, including online viewers, watched the final screening presentations. Prizes were awarded to the top three presenters, and the winning idea will be considered for commercialization.

### Overview of the 1st “Denka Innovation Day” screening process

**First screening (74 entries):**  
Document screening

**Second screening (20 candidates):**  
Online presentation

**Final screening (6 candidates):**  
Face-to-face presentation

**First-prize winner**  
(One winner)  
Prize: One million yen,  
and a screening opportunity  
for commercialization

Denka Innovation Day was started not only to foster the creation of new businesses but to also internally spread one of the core values, “initiatives”, and to cultivate a corporate culture where employees can feel excited about the future.

The entries were evaluated from multiple perspectives, including whether they were meaningful for Denka, their feasibility, and applicants' intentions for commercialization.

For this contest, experts were invited and provided follow-ups to the participants' ideas, and as a result, participants gained insights into the necessary processes and perspectives for commercialization.

We plan to make improvements for the next contest, from the insights gained from the first event



## Townhall Meetings and Lunch Meetings

To promote “Human Resources Value Creation”, one of three growth strategy in our management plan “Mission 2030”, Denka must become a company that enables each employee to achieve their own growth with Denka's core values: “Initiative”, “Integrity”, and “Empathy”. As a part of this approach, we hold Townhall Meetings and Lunch Meetings, where both executive managers and employees can communicate with each other. By shortening the psychological distance between the executive managers and employees and providing opportunities for them to have direct communication, we aim to foster a corporate culture that allows all Denka members at any position to express their opinions.

### Q&A Session Excerpt

**Q. What does Denka aim for in “Specialty” in Mission 2030?**

**A. We aim for growth. To do so, new development is essential. Also, while toxic working environments are unacceptable, we do think animal-spirit-like challenging mindsets are needed.**

**Q. We don't have enough time for sales operations due to the excess creation of documents. What are your thoughts as an executive?**

**A. We are addressing this issue through initiatives such as reducing the number of meetings. We plan to facilitate our business processes through promoting delegation of authorities.**

### VOICE from a participant

In the Townhall Meeting I attended, President (Imai-san) gave us detailed briefings about Denka's management policy and specific initiatives. In my second year at Denka, I had concerns about my job while doing day-to-day tasks. My concerns were cleared by getting advice from Imai-san and Ishida-san, and they helped me tackle my tasks with confidence. We also could listen to the opinions and challenges from members at other departments who we rarely have the chance to communicate with. It was a very meaningful opportunity for me.



**Tatsuya Hoshino**  
Isesaki Plant Manufacturing  
Department  
Cover Tape Section

## Establishment of the Improvement Committee and introduction of an improvement measure proposal system

### 1. The Improvement Committee

The Improvement Committee (I.C.) is a part of Denka's company-wide reform campaign. The I.C. is an organization to identify issues on the production floors, discuss measures for each issue, and take actions to enable timely response and resolution of issues in the divisions in charge of business practices. We introduced an improvement measure proposal system to directly collect opinions from a wide variety of employees, including about inefficiency and insufficiency on the production floors and about organizational issues and problems. Aiming at timely and speedy responses, we verify and classify the applications at the management level, prioritize the issues to resolve, and allocate executing personnel for resolution.

### 2. Specific initiatives and progress

The I.C. has received proposals from the entire company as of July 2024. The Committee examines each proposal and provides the results to the corresponding applicants. Examples include those for which we can achieve immediate improvement, such as curation of in-house meeting members and time savings for in-house processes, as well as initiatives to contribute to operation efficiency across the organization by establishing a company-wide e-mail guideline to limit unnecessary CCs and replies. We expect a total saving of 3,200 hours in a year from the initiatives in place so far. To promote the proposal system usage, we introduce the I.C. initiatives at each site and communicate the achievements on the in-house portal site on a regular basis.



**Rimiru Hayashida**

Managing Executive Officer  
Chief Financial Officer

### Message from the CFO

Our PBR (price book-value rate) was 0.66 at the end of FY2023, and I take the fact that our PBR was below 1, very seriously. I recognize that the biggest cause is our ROE (return on equity) being as low as 4%. We used to have an ROE of over 8%. While our decline from over 8%, which we were previously capable of maintaining, was partially due to deteriorated capital efficiency caused by increased capital, the main and root cause was the significant drop of our business profitability. I acknowledge that our first step to improving this situation is to recover our profitability in our core businesses as soon as possible.

Our current initiatives to tackle are: (1) promotion of portfolio

transformation, (2) curation of investments, and (3) the “Best Practice Project”, a company-wide cost reduction project. The main goals of these initiatives are for the improvement of Denka Group’s profitability, but they also lead for the pursuit of a robust constitution of the company. These three initiatives are therefore designed to improve our capital efficiency at the same time. I firmly believe that they will help us improve our ROE, in terms of both profitability and efficiency. None of these initiatives are easy to implement and involve various challenges and difficulties. However, I acknowledge that we are currently at a difficult stage, which is inevitable for the Group’s future growth, and we will continue to work to deal with this situation.

## 1. Status of the initial year of management plan “Mission 2030”

In FY2023, the initial year of our management plan “Mission 2030”, the net sales were 389.3 billion yen (-18.3 billion yen year on year) and the operating income was 13.4 billion yen (-18.9 billion yen year on year), resulting in decreases in income and profit year on year.

In addition to changes in the economic environment, including the prolongation of the decline in demand for semiconductors, downturn of China’s economic growth, and global inflation, various factors such as the decline in demand for chloroprene rubber, we were not successful to achieve an increase in sales to balance the cost for the forward-looking investments and other expenses planned in the previous management plan “Denka Value-Up”. Despite some extraordinary income from the sale of strategic shareholdings, we are facing unsatisfactory results, with the overlapping of the aftermath of the Noto Earthquake and impairment loss due to the termination of norovirus vaccine development. While our operating income, ROE, ROIC (return on invested capital) significantly declined in FY2023 along with the downturn, the facilities we had invested up front for will start operations in the upcoming fiscal years. While capturing these potential demands, we will have no change in our long-term strategy of driving our growth strategy stated in our management plan “Mission 2030”.

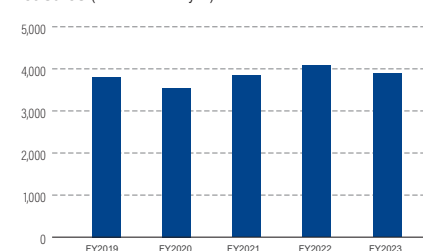
Our management plan “Mission 2030” sets ROE and ROIC as the primary KPIs to promote management with the capital cost in mind and enhance corporate value.

We aim to increase our ROE to over 15%, and ROIC to over 10% by the year 2030. By applying ROIC to the business assessment, we will advance our portfolio transformation, as well as enhancing our profitability and capital efficiency.

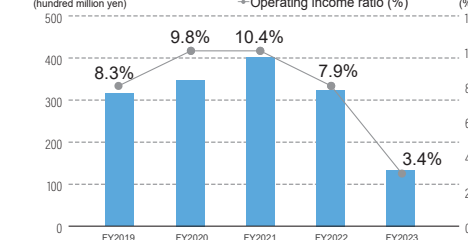
Also, under the financial disciplines with ratings in mind, we will pursue the optimal capital structure using financial leverages for improving ROE. While our ROE and ROIC in FY2023 experienced significant declines as stated above, we will implement initiatives to improve them in terms of both profitability and capital efficiency.

	FY2023	FY2030 KPI
Operating income	¥13.4 billion	100 billion yen or more
ROE	4%	15% or higher
ROIC	2.5%	10% or higher

Net sales (hundred million yen)



Operating income/ratio  
(hundred million yen)    Operating income (hundred million yen)  
+ Operating income ratio (%)





## 2. Three Measures for the Recurrence to Growth Track

1



### Business portfolio shift

Top priority: Fundamental measures for the chloroprene rubber business

Fundamental measures for nonprofitable businesses take the top priority. It is important to turn nonprofitable businesses into highly profitable businesses, and we are discussing this matter with the Portfolio Transformation Committee. [▶P25](#) This is not a mere measure for improving profits but an issue of optimal allocation of assets and capital. Denka has many assets accumulated in its long history, and we strive for regenerative reformation by reallocating capital from the businesses

with low profitability to the growing businesses. We sold our strategic shareholdings, primarily aimed at enhanced governance, many of which were assets for older businesses or common assets that do not directly lead business profitability. By converting them into money, which will be allocated for investment capital in the growing fields, we will achieve our portfolio reformation.

2



### Revision of investment plans

Curation of investment projects: Aiming at 100 billion yen reduction in the investment cash flow in eight years

We aim to deduct approximately 100 billion yen of investment expense from the initial plan in management plan “Mission 2030”. The aim is to maintain our financial principles in a situation where the current performance is significantly lower than the initial plan, but it is not a simple suppression of investment. By reviewing the megatrend demands through examination, we will not hesitate to make investments required for our business growth. In addition to investments for growth based on the increase of demand in the future, a large amount of investment

expenses is inevitable to maintain and update the current facilities as well as for safety and quality. We have made quantitative judgment on investments for growth in terms of investment efficiency (profitability). For investment for maintenance and update, we will introduce ROIC (return on invested capital) as a quantitative criterion from the last fiscal year to make stricter judgment on investments. For investment for growth, needless to say, we should make more accurate evaluations of their underlying demand forecasts.

3



### Best Practice Project

Cost deduction: More than ¥10 billion/year in FY2026    Operational efficiency: Growth of each employee

Besides the eternal factor of declined demand for electronic materials and decreases in other demand, our low profitability in the core businesses is largely due to the increased fixed costs. We believe that we will regain demand for semiconductors and other electronic materials for smartphones, PC, and xEV, and we are in process of establishing our production systems. We also think that, on the other hand, the current fixed costs will prevent us from achieving the level of our

highest profit in the past, even if we regain the net sales. Cost reduction is an inevitable initiative for us to get back on track with our business growth. We have made efforts to reduce costs as a part of daily operations. Unlike the conventional initiatives, however, this project is our first attempt to analyze the cost with external experts and to incorporate best practices.

### 3. Cash Allocation

#### • Optimal capital structure

We will finance businesses by examining the optimal capital structure in terms of capital efficiency and financial health and by leveraging interest-bearing liabilities while controlling it with a D/E ratio of 0.6 - 0.8.

#### • Proactive shareholder returns

With anticipation of the improvement effects from the fundamental measures for the chloroprene rubber business and marketing cash flow improvement from FY2025, we will make proactive shareholder returns with the same or increased dividends with a return ratio around 50% over eight years total in the management plan “Mission 2030”.

#### • Curated strategic investments

Trends in capital investments by four business divisions

►P42

We will ensure to continue to invest in important projects for our growth strategy. For strategic investments, we will clarify the priorities of investment projects, further curation of investment plans, and reviewing schedules for less urgent projects to control investment cash out, deducting 100 billion yen from 570 billion yen of investment cash flow in eight years planned in Mission 2030 management plan, resulting in 470 billion yen. Even after this reduction, the annual average investment will still exceed 1.5 times the amount invested during the five years stated in the previous management plan “Denka Value-Up”.

		FY2024	FY2025	FY2026 and later
Curated investment projects	ICT&Energy	Enhancement in spherical silica business (In action in the 1st half)	Enhancement in silicon nitride business (In action in the 1st half)	Acetylene black New manufacturing site in Thailand (in operation in the 2nd half of 2026) Investment value: 4 hundred million dollars
		Heat dissipation sheet site relocation/ new plants (In action in the 1st half) Investment value: ¥1.7 billion	LCP film equipment in operation	Methane to Acetylene Introduction to Omuta Plant (in action in the 2026 1st half) Investment value: ¥6.7 billion yen
		SNECTON manufacturing/ marketing (Starts in the 2nd half)	TBM equipment in operation	Scheduled investment for SNECTON
		Enhancement in emitter business (In action in the 2nd half) Investment value: ¥1 billion		
	Healthcare	Enhancement in clinical reagent/ diagnosis kit business (In action in the 2nd half) Investment value: ¥11 billion	Enhancement in G47Δ production Investment value: ¥12 billion	
	Sustainable Living		Polyethylene drainpipe Toyo Drain site relocation/new plants (In operation in the 1st half) Investment value: ¥2.3 billion	Methane to Acetylene Roll out to Omi Plant  Carbonated admixtures/ concretes LEAF Scheduled for investment

#### [Denka's mindset for capital investment]

Prioritizing and curating investment projects are important for a company to grow. To clearly understand the capital cost when making decisions for equipment investments, we make decisions with the weighted average cost of capital (WACC) in mind. We also adopt the internal rate of return (IRR) as an investment criterion for our strategic and growth investment to curate the investment projects.

#### ► Strategic investment

Investments that contribute to the growth in the core areas, investments that lead to process transformation (production, research, and operation), and investments targeting energy saving and carbon neutrality, etc.

#### ► Growth investment

Investments to increase profit, excluding strategic investments

IRR15%≧

Strategic investment	Growth investment
Investable	Investable
Determined strategically	In principle, difficult to invest
In principle, not feasible to invest	

### 4. Raising funds through sustainable finance

Denka is also looking to raise funds through ESG and SDGs initiatives. In the last three years (FY2021 to FY2023), approximately 50% of our long-term funds were procured through sustainable finance, which we will continue to actively utilize in the future.

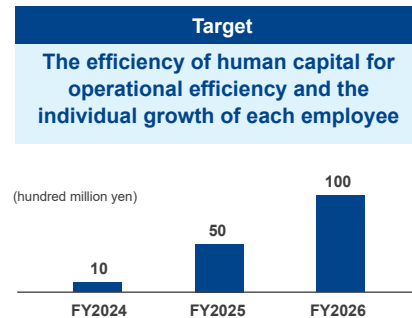
## Best Practices Project

Best Practices Project is a project launched in 2024.

While we have tried to reduce costs based on the knowledge within the company, this project will help us tackle thorough reduction of costs by utilizing external knowledge, including the cost benchmark and optimal cost reduction technique, in the system directly managed by President. In addition, the Best Practice Committee, a dedicated team, was established to promote the project at the company.

Through promotion of this project, we aim to achieve company-wide results of 1 billion yen in FY2024, 5 billion yen in FY2025, and 10 billion yen in FY2026.

In addition to this, we will also facilitate human capital for operational efficiency and the growth of each employee.



To Date

Cost reductions based on in-house knowledge

Make full use of external benchmarking and best practice in the system directly managed by the President



### Zero-based review

- Conduct thorough review of needs, cost justifications



### Global optimization

- Engage in consistent cross-departmental coordination and pursue overall optimization



### Scientific approach

- Engage in rational cost management based on facts and data



### System

- President personally committed as overall leader
- Establish the Best Practice Promoting Department to act as a dedicated organization
- Appoint an owner with numerical accountability for each team



### Governance

- Conduct rigorous progress management and timely visualization of results
- Use monthly policy-making meetings to receive top approvals for goals and measures



### Engagement

- Involve all employees in detailed management-employee dialogues
- Share a portion of successful results with employees

Best Practices  
Project

### Promotion system of the Best Practices Project



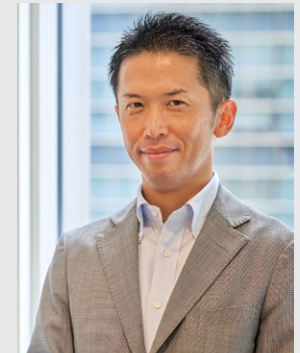
In the Best Practice Project promotion system, initiatives are categorized into some groups, and an owner, leader, and members are assigned to each group. The meeting bodies consist of the policy-making meeting and initiative-based meeting. The management team, including the President, attends the policy-making meeting, which is held monthly and functions as a decision-making body. The initiative-based meeting is formed by the applicable initiative team, and initiative owners who are senior executive level are responsible for execution and achievement of objectives. Under the instruction of the owner, the initiative leaders are responsible for executing initiatives, rollout to the entire company, and achieving effects.

## Message

The Best Practice Project is our initiative to optimize the cost and operation. It is an initiative featuring, for example, identification of potential opportunities for cost reduction based on comprehensive data analysis, new techniques such as benchmarking of advanced cases related to streamlining, and establishment of promotion organizations and management systems, advancing our previous cost reduction techniques.

We have an aggressive goal to improve profitability to 10 billion yen in FY2026 in this project, but at the same time, I think our ultimate goal is to achieve a corporate culture to pursue best practices. To achieve this, it is necessary for all employees to share clear targets, enhance the awareness of the cost, and keep trying. Our team would like to keep striving to contribute to the success of this project through communication and addressing issues.

The role of this project is quite crucial as a part of our foundation enhancement plan to keep our sustainable growth. Our team is very motivated to participate in such an important initiative and will concentrate all of our efforts together.



**Heisuke Sakamoto**

Managing Director,  
Best Practice Promoting Dept.



## Hideki Toya

Managing Executive Officer,  
Chief Scientific Officer (CSO)

### Message from the Chief Scientific Officer (CSO)

With the heritage of our DNA of taking on challenges, one of our core values, the research division focuses on new business creation, new product development, and expansion of the existing products in the fields of “ICT & Energy”, “Healthcare”, and “Sustainable Living”. To achieve the Mission 2030 targets, we are in charge of development of appropriate research themes based on the customer needs in the megatrend, accelerating research activities by using DX, and promotion of open innovation in collaboration between industry, academics, and government. The New Business Creation Department and the Denka Innovation Center in the New Business Development Division actively promote collaborations with startup companies through the corporate venture

capital established last year, and we have some potential investment projects. The R&D Management Department, with corporate functionality, as well as the Intellectual Property Department and Analysis Technology Research Department are engaged in achieving internal and external synergy for growth of business units and IPL\* initiatives for business promotion. To achieve innovations that create new social values, we need to respect diversity and our differences. We would like to merge technologies, experiences, knowledge, and ideas from different people to develop as many products as possible to contribute to the society.

\* intellectual property landscape

### Research & development policy

The Denka Group is accelerating the creation of attractive new businesses and products that create new value by expanding our range of the “technologies that we do best” and promoting the development of products unique to Denka that can contribute to a sustainable society. To this end, we will promote research and development that leverages the Group’s collective strengths to integrate multiple disparate technologies and generate synergies across the entire Denka Group that transcend organizational boundaries and domains.

### Roadmap

#### [FY2023 Results]

- Enhancement and promotion of R&D according to the megatrend
- Establishment of an R&D portal to share effective technological information across the company
- Introduction and development of new processes to reduce CO<sub>2</sub> emissions and to achieve a recycling-oriented society

#### [FY2024 Plan]

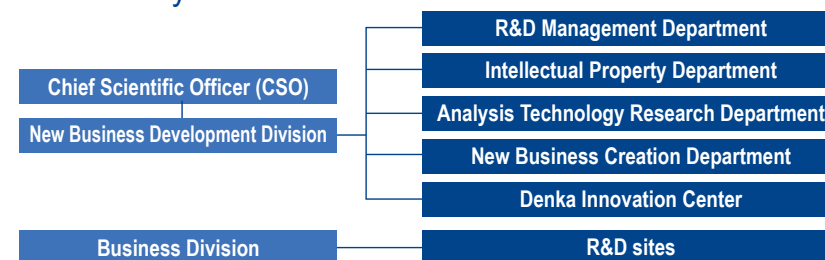
- Capture the future customer needs, develop research themes, and create new business at speed
- Optimize research resources and promote R&D through in-house synergy effects
- Promote MI\* and IPL landscape usage initiative and establish an R&D platform

\* Materials informatics

#### [FY2030 Target (ideal form)]

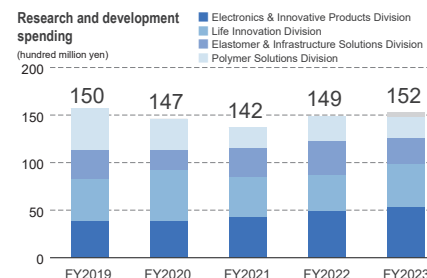
- Create new businesses by making the most of the research assets and contribute to society with new values
- Deepen seeds-needs matching and provide products and service offerings that suit the needs of society and markets
- Make the most of the R&D platform to promote efficient product development and technology development
- Provide opportunities for capable research human resources with insights and due diligence to build business models

### Promotion system



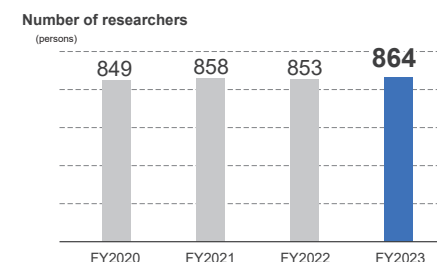
### R&D spending (consolidated)

The annual average of the five-year R&D budget between FY2019 and FY2023 was 14.8 billion yen, and the budget in FY2023 was 15.2 billion yen.



### Number of researchers (consolidated)

The number of researchers in FY2023 was 864, which increased by approx. 20 in 4 years.





# Intellectual Property Initiatives

## 1 Intellectual Property Vision

### MISSION

Provide high-value-added intangible assets to directly and indirectly increase the corporate value.

### PURPOSE

To serve as a compass to guide to business value creation through merging IP and our specialties.

### CORE VALUE

Specialty: Each employee is a human resource with unique values.

Diversity: Acknowledge and empathize with different backgrounds and viewpoints to grow together.

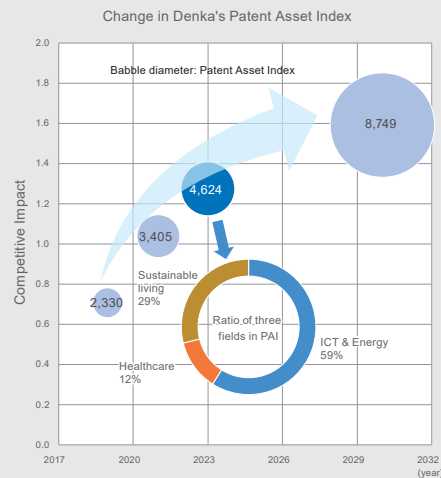
Co-creation: Respect each other and tackle work with integrity.

## 2 Toward achievement of the “Mission 2030” management plan targets

To achieve 100 billion yen of operating profit in FY2030 as listed as the “Mission 2030” management plan target, we verified the correlation of the R&D expenses and operating profit with the Patent Asset Index (PAI value)<sup>\*1</sup> and Competitive Impact (CI value)<sup>\*2</sup>. Based on that result, we set the PAI value and CI value for the achievement of “Mission 2030” operating profit to 8,749 and 1.6, respectively, against the current PAI value (4,624) and CI value (1.3). (Figure 1)

We will proceed with the following three initiatives to achieve these targets:

Figure 1. Patient Asset Index and “Mission 2030” target



1. Promote the business portfolio transformation, and provide appropriate patent information through IPL activities
2. Coordinate inside and outside the company to utilize open innovations to obtain high-value patent assets
3. Effectively utilize intangible assets to differentiate ourselves from other companies

\*1. Patent Asset Index (PAI value) refers to a metric that represents competitive advantage and total value of the patent portfolio calculated using LexisNexis' PatentSight®

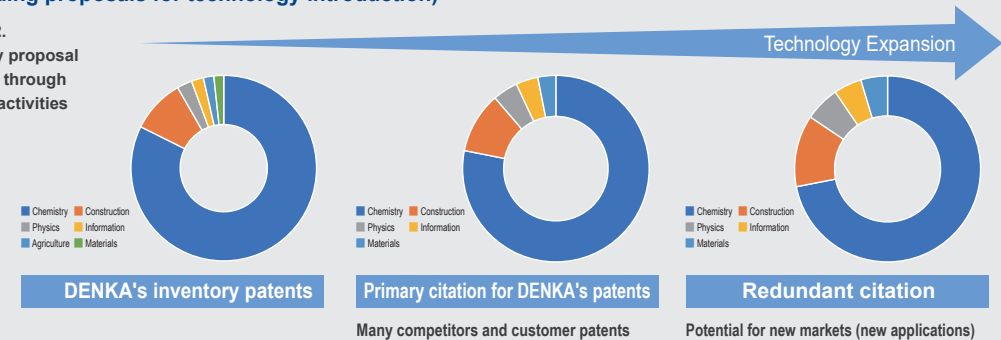
\*2. Competitive Impact (CI value) refers to a metric that represents the competitive strength and quality of the patent family, calculated from the number of the references to the patent family and the size of the global market where the patent family members exist.

## 3 Contribution to Business through the IPL Activities

We have actively promoted our IPL activities since 2021 to achieve “Mission 2030” targets. In 2023, 16 IPL activities were reported. Through the IPL activities, Denka ascertains the current market value, seeks business areas with potential future market value, and proposes strategies featuring Denka's strengths. In addition, Denka pursues business value creation through provision of information valuable for new business creation and open & close strategy development, etc. Denka also creates an IP version of product portfolio management for existing businesses, organizing its patents and developing new markets (new applications). (Figure 2)

### Business analysis and strategy proposals utilizing patent information (including proposals for technology introduction)

Figure 2. Strategy proposal scheme through the IPL activities



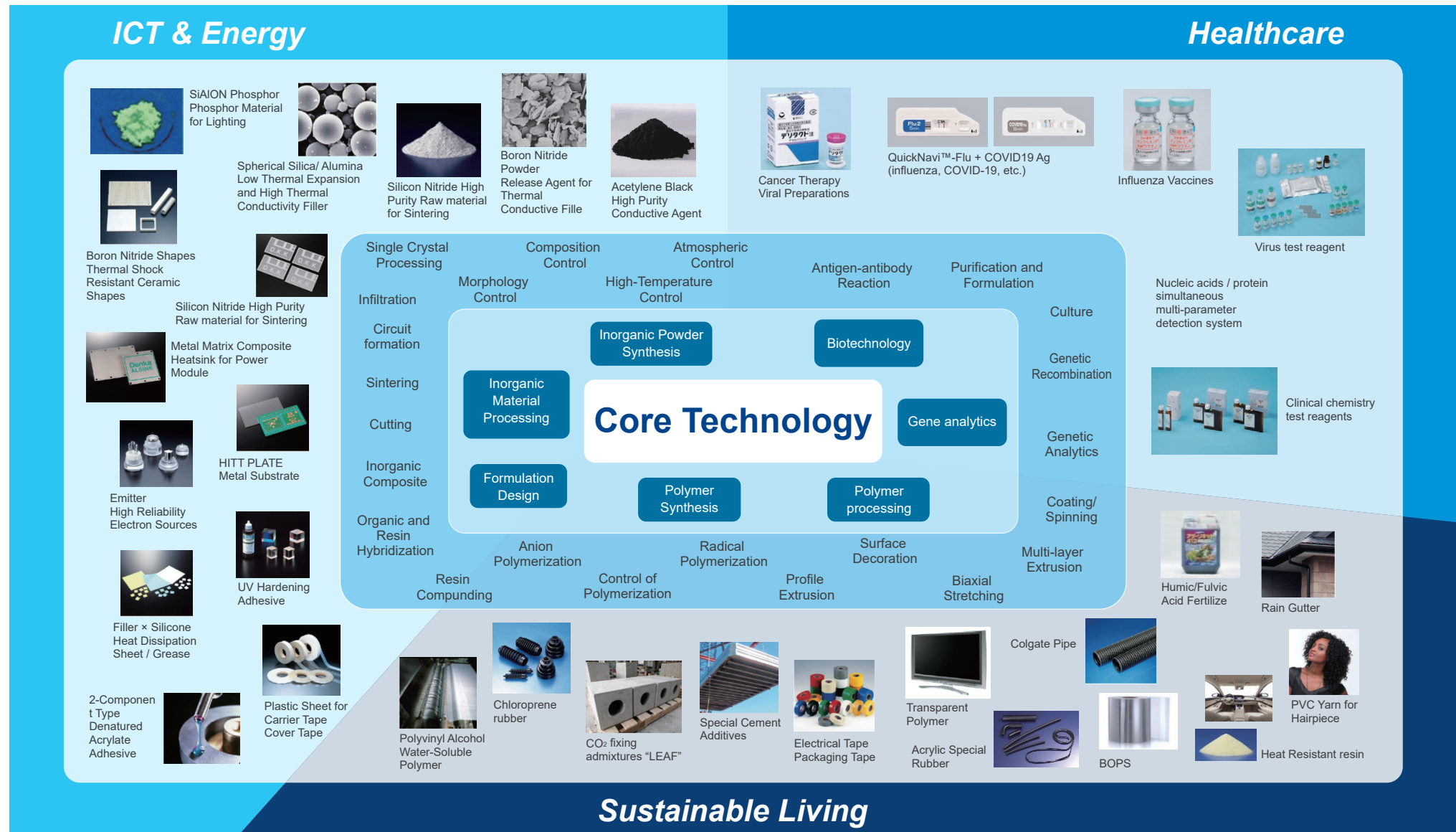
### TOPIC | Kids' Innovation Workshop

To foster the next generation of innovators, we held a Kids' Innovation Workshop in August 2023. Elementary school children of Denka employees participated in this workshop and had a valuable experience that will help them foster their creative capabilities. Denka's patent attorney, who has the experience of taking part in a Kids' Innovation Workshop, took the role of the instructor and taught children about what they can do to bring their own ideas to life. Denka aims to contribute to finding and fostering future innovators by continuously holding Kids' Innovation Workshops to create a sustainable future.



## Technology platform diagram

Denka is focusing R&D resources on three focus areas that capture megatrends. Here are some of the technologies we are currently developing.



## Denka Technologies - Contributing to a Sustainable Society

Denka is vigorously pursuing various initiatives that contribute to sustainability in order to become a company with a superior competitive edge that is consistent with ESG initiatives.

### Denka technology supporting renewable energy

Technologies that support the development of renewable energy include acetylene black, used as a raw material for ultra-high voltage cables that efficiently transport electricity generated by clean offshore wind power to various locations, and silicon nitride, which is used in bearing balls for wind power generation.

Silicon nitride assists in the transmission of **clean wind power**

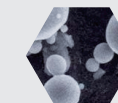


Acetylene black efficiently carries **clean energy**

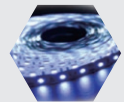
### Denka technology supporting 5G

There are many technologies that support high-speed data communications required in an advanced information society, such as technology to protect semiconductors from heat, technology to reduce energy loss, and technologies to prevent static electricity and contamination of semiconductors by foreign matter during transport to ensure absolute quality.

Spherical silica reduces **energy loss**



Carrier tape sheets and top cover tapes protect against **static electricity and foreign matter contamination**



Spherical alumina protects against **heat**

### Denka technology supporting carbon neutrality

In addition to promoting energy conservation and expanding renewable energy sources, namely hydroelectric power generation, we are also studying the introduction of innovative technologies such as CCUS, which separates, recovers, utilizes, and stores CO<sub>2</sub> from plants at the source, as well as the use of hydrogen. Moreover, we will push ahead with efforts to reduce the environmental burden attributable to our entire value chain by expanding the scope of our initiatives to address issues associated with the total life cycles of our products.



LEAF

PS chemical recycling



Hydroelectric power plants

\* Photo courtesy of Agilyx

### Denka technology improving QOL

There are many technologies that support the three areas of prevention, diagnosis, and treatment, including the development of manufacturing technology for G47Δ oncolytic virus, a new treatment to combat cancer; influenza vaccine production and stable supply to meet society's needs for immunization; and QuickNavi™-Flu + COVID19 Ag that enable rapid response to pandemics.

G47Δ oncolytic virus is meeting **unmet medical needs**



Influenza vaccines protect **your health** and wellbeing

QuickNavi™-Flu + COVID19 Ag help protect **society**

\* Unmet medical needs refer to medical needs for which there is no effective treatment available

### Denka technology supporting next generation xEVs

There are many technologies that support the electrification of automobiles, including the circuit boards for CPUs that control the power of xEVs that run on motors, heat resistance modifiers that make automotive components lighter and paint-free, and high-purity special carbon black used in lithium-ion batteries.

Heat resistance modifiers enhance heat resistance

Aluminum nitride and silicon nitride substrate **conduct heat to enhance vehicle safety**



Acetylene black increases the storage capacity of **lithium-ion batteries**



# Innovation

New business roadmap

## Developing new business based on customer needs to achieve early commercialization

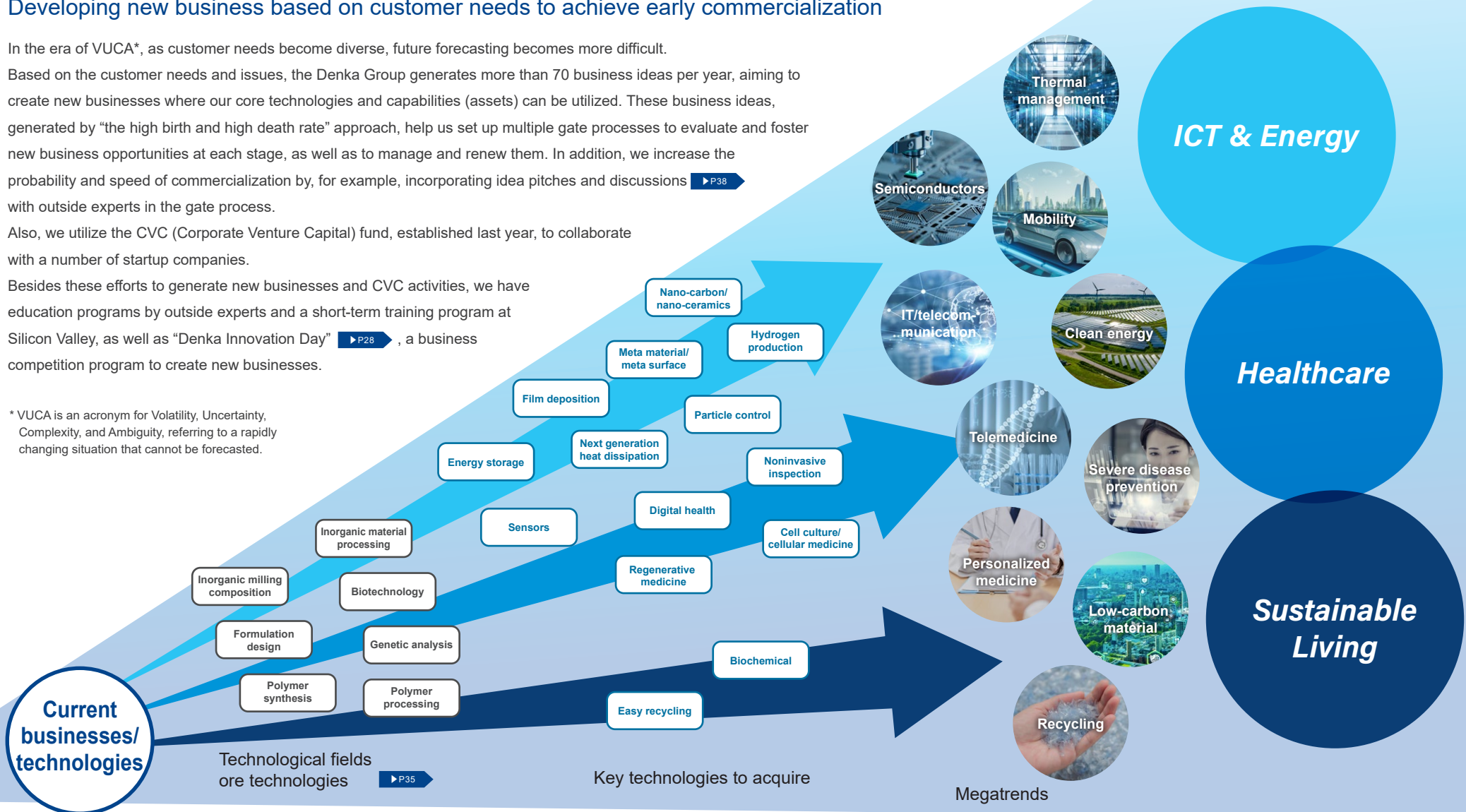
In the era of VUCA\*, as customer needs become diverse, future forecasting becomes more difficult.

Based on the customer needs and issues, the Denka Group generates more than 70 business ideas per year, aiming to create new businesses where our core technologies and capabilities (assets) can be utilized. These business ideas, generated by “the high birth and high death rate” approach, help us set up multiple gate processes to evaluate and foster new business opportunities at each stage, as well as to manage and renew them. In addition, we increase the probability and speed of commercialization by, for example, incorporating idea pitches and discussions [▶ P38](#) with outside experts in the gate process.

Also, we utilize the CVC (Corporate Venture Capital) fund, established last year, to collaborate with a number of startup companies.

Besides these efforts to generate new businesses and CVC activities, we have education programs by outside experts and a short-term training program at Silicon Valley, as well as “Denka Innovation Day” [▶ P28](#), a business competition program to create new businesses.

\* VUCA is an acronym for Volatility, Uncertainty, Complexity, and Ambiguity, referring to a rapidly changing situation that cannot be forecasted.







## Initiatives for New Business Creation

### MESSAGE

**Ken Watanabe**

Executive Officer  
New Business Creation Dept. Officer

### Advancement of organizations and systems for new business development

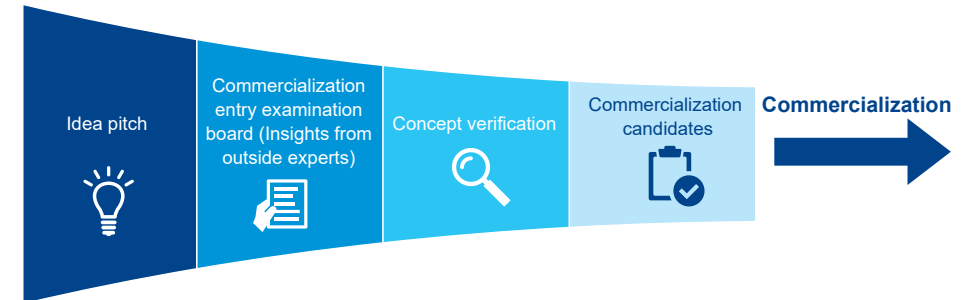
Denka has conceptualized and validated multiple commercialization themes to create new values with business structure conversion in mind. For early achievement of our management plan, Mission 2030, we are working to advance our organization and structure for new business development.

The purpose of new business development is: Create new growth drivers to achieve enhanced business performance that exceeds the market growth, while refining the new business focus areas and growth scenarios based on the judgment criteria for the market size, growth potential, social issue resolution, etc., and supporting shrinking exiting businesses. To achieve this goal, we should have our future vision based on the given social issues and develop our strategies with a back-casting approach. To refine the most difficult question "what to focus and concentrate on," we must thoroughly focus on marketing. In a rapidly changing world market, Denka communicates with customers directly, listens to the market from the early stage of conceptualization for commercialization, and foresee the potential social change and future needs. Then, we thoroughly enhance our hypothesis verification cycle based on marketing, as well as refine our systems to utilize our management resources in an effective manner by, for example, early pull out projects with low growth potentials. As a part of our commercialization strategy, we would not limit our activities in product development and startup investment, but also promote business commercialization through a new business model creation that utilizes all available means, including alliance with business partners.

The key for successful new business development is the presence of global management human resources with robust and resilient leadership that can organize and lead teams across countries and entities. Denka will help enthusiastic personnel have a variety of experiences, fostering them to be management resources with leadership and international senses.

Tsuneichi Fujiyama, the founder of Denka, was a man of action equipped with unique ideas. He launched a whale-catching electric spear business soon after graduating from the Department of Electrical Engineering at the University of Tokyo in 1898. While failing in his first business, Fujiyama came to know lime carbide manufacturing method - the cutting-edge technology at the time - through a German magazine in 1902. He handmade transformers and electric furnaces, and overcame a series of failures. He continued his challenges, even after he lost in a fire the roof of a warehouse at a hydraulic power plant as substitute for laboratory where he worked for his invention. He became the first engineer to manufacture carbide in Japan, and his technology served as the foundation for Denka's fertile business to contribute to resolve a social issue at the time, what was the need to increase food production in Japan due to rapid population growth. Denka will go back to the founder's venture spirit, and challenge creation of new value, beyond product development to provide solutions to realize our customers' highly added values, including social issue resolution and production improvement, in the growth area where the Denka Group can utilize its strength, regardless of the presence of synergy effects.

## 1 Commercialization candidate selection process



## 2 Idea pitch

As the initial gate process to examine business ideas, we have an idea pitch event every month. The idea pitch event is designed to examine the audience's empathy and acknowledgment, with a discussion time between the presenter and the audience on the challenges seen in the presented ideas and solution ideas. Its primary purpose is to communicate ideas at an early stage. Through such discussions, the participants can grasp the target customers and obtain new ideas for solutions.



## 3 Commercialization entry examination board (Insights from outside experts)

Commercialization ideas screened at the idea pitch undergo hypothesis verification from both perspectives of potential clients and technology. Candidates verified as FACT<sup>\*1</sup> move to the next gate process, "Commercialization entry examination board." At the commercialization entry examination board, not only the in-house experts but outside experts also have thorough discussions at the early phase on the verification results, marketability, feasibility of the commercialization candidate from a wider viewpoint, and examine them if they are eligible to move to the next stage: Concept verification<sup>\*2</sup>.



<sup>\*1</sup> Verification that customer needs exist, and that the idea is feasible with Denka's core technologies and capability.

<sup>\*2</sup> A prototype is built to verify if the idea/concept in question is feasible.



# Technology -Process Reforms-

## Process Reforms Initiatives

The Denka Group is trying to transform its business models and organizational structure and is committed to the improvement of labor productivity by making the best use of digital and robotic technologies and by significantly reforming existing processes. In particular, these include optimizing operating conditions by analyzing accumulated process data, early anomaly detection with proactive management of equipment, development and implementation of optimized production plans through supply chain collaboration, automating inspection equipment using AI technology, and automating material handling\* operations (robotization). We will further evolve these initiatives and commit to activities following our management plan "Mission 2030".

\* A collective term of equipment used to facilitate and automate logistics operations.

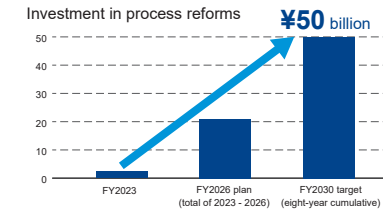
### MESSAGE

#### Progress of process reforms (achievements and challenges)

To continue our production activities in an aging society with a declining birthrate and working age population, there is a need to improve our labor productivity by process reforms (transforming the existing processes by making the best use of digital and robotic technologies).

As a non-financial KPI in our "Mission2030" management plan, we aim at promoting labor saving with a 50-billion-yen investment to process reforms(eight years), organizing labor-saving targets and plans at domestic plants every fiscal year, and selected priority products and plants to implement process innovation. In addition, we established a system for early performance of process reforms and cultivation of new business themes.

To promote our process reforms, it is necessary to understand the current situation, freed from fixed ideas, and to keep changing as the time changes. We would like all stakeholders to share common recognition without fearing changes to pursue our goal.

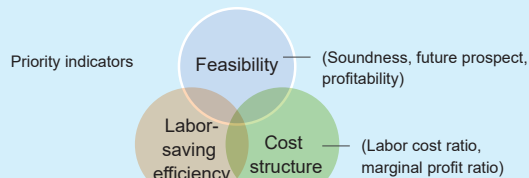


**Kazuyuki Yubune**  
General Manager of the Production & Process Technology Department

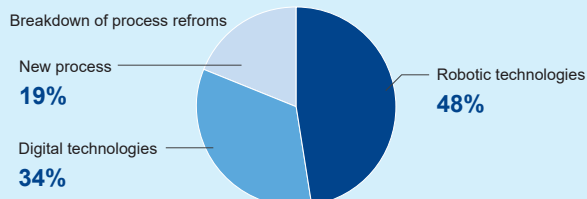
## Roadmap

### [FY2023 Results]

- Development of labor-saving targets and plans up to 2030 through process reforms. 187 process reform themes to be implemented during the target period are selected, and prioritized for implementation plans of each fiscal year.



- 14 priority products were selected based on the priority product indicator to implement process reforms. A system is established, including resource concentration, for early performance of the study themes and accelerated new theme development.



### Examples of initiatives



#### • Big data analysis for stable operations:

Operating parameters required for stable operation are extracted through analysis of big data collected from fusion furnaces and decomposition furnaces. Based on this result, new management criteria were set, leading to quality stabilization and operation rate improvement (increased number of days of continuous operation).



#### • Quality control enhancement and labor saving initiatives in data management:

Using static analysis software that enables data visualization and easy static analysis, manual recording of inspection data and data import to Excel were automated. Data variation and tendency management was visualized, leading to further labor saving.



#### • Building the original production management system:

A system was built to allow real-time sharing of inventory and shipment information of tape products with sales divisions, aiming at facilitating production plans.

### [FY2026 Plan]

- In a three-year period until 2026, approximately 100 process reform investments will be made to achieve labor savings of 475 manpower.
- With approximately 100 process reform investments, the concept of selection and concentration is incorporated, and will enhance process innovations in Electronics & Innovative Products and Life Innovation division. In particular, these include automating inspection equipment, robotization of material handling, and promoting DX at each production site to achieve process innovation.

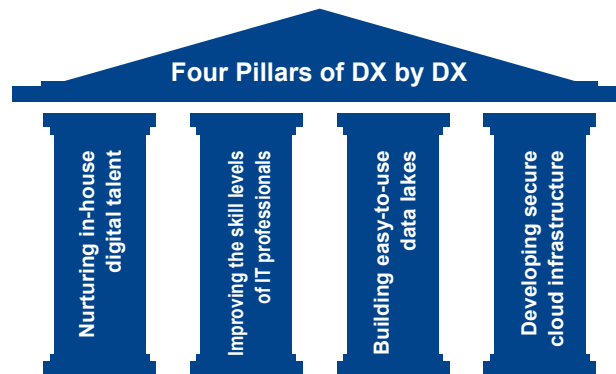
### [FY2030 Target (ideal form)]

- In the aging society with a declining birthrate and working population, we will achieve continuous production activities with limited human resources.
- We will promote smart factory initiatives by adapting IoT, big data analysis, AI, and robotics, aiming at factories equipped with innovative technologies, evolving according to the changes in time.
- We will enhance cross-sectional collaboration between divisions by promoting DX, and ensure our competitive advantage through transformation of organizations and business models.

## Digital Strategy for Our Management Plan “Mission 2030”

### Basic Approach (policy)

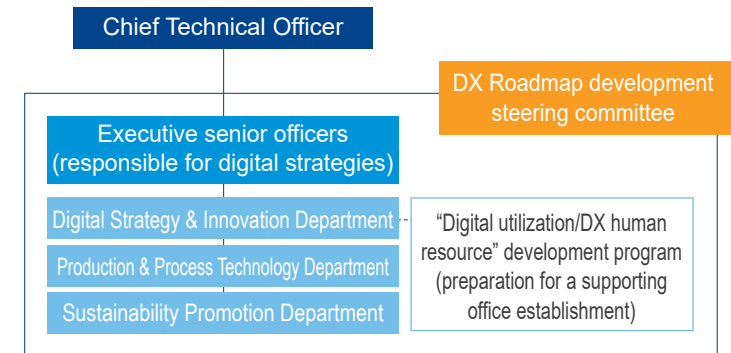
Our management plan, “Mission 2030” sets forth a variety of measures aimed at enhancing corporate value through three mission-based growth strategies. The Digital Strategy Department will work to clarify what systems can be used for each of these measures, and formulate concrete measures to achieve them. As one measure that has already been implemented, we are providing a product-specific ROIC calculation system that contributes to data-driven management. Further, we will restructure core systems that we plan to update in the near future, taking into account the level of contribution that can be made to each measure. Under the theme of “DX by DX” (Denka Transformation by Digital Transformation), the Digital Strategy & Innovation Department aims to make a concrete contribution to the financial targets set out in “Mission 2030” by 2030 by achieving the “Four Pillars” (see right).



### Promotion system

With the supervision of the Chief Technical Officer, executive senior officers responsible for digital strategies are appointed. A new structure consisting of Digital Strategy & Innovation Department, Production Technology Department, and Sustainability Promotion Department will serve as a DX Roadmap development steering committee to develop an DX Roadmap with aggregated feedback from various departments.

When developing the DX Roadmap, we will ensure that it corresponds to our three policies (“business value creation”, “human resources value creation”, and “management value creation”) to clarify its link to the management plan “Mission 2030”, as well as we will clarify what to innovate (products and service offerings, business models, business process, organization, process, corporate culture/climate) while aligning with DX defined by the Ministry of Economy, Trade and Industry.



## Roadmap

### [FY2023 Results]

- “Digital utilization/DX human resource” development program was established, and an assessment was conducted.
- Product-specific ROIC calculation system that contributes to data-driven management
- Generative AI, Copilot, was deployed
- Enhanced security measures (EDR upgrade, Dark Web monitoring)

### [FY2026 Plan]

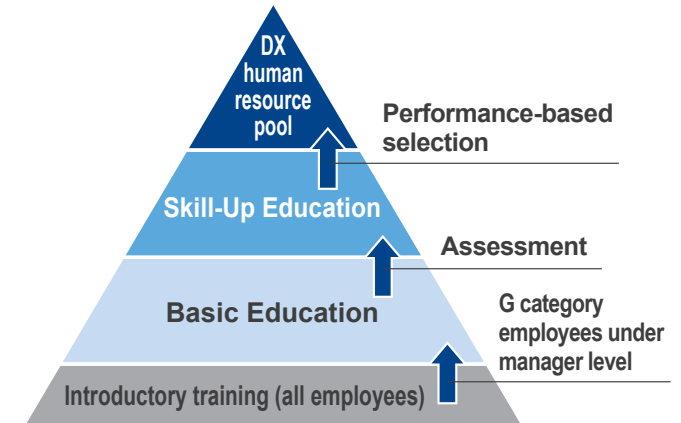
- Foster 150 Digital Pilots (DP)
- Implement a data utilization platform (data lakes)
- Deploy and implement 200 accounts for generative AI, Copilot for MS 365
- Quantitative comprehension and visualization of ICT assets
- Acquisition of DX Certification

### [FY2030 Target (ideal form)]

- We will make the most of data and digital technologies to create new services and businesses, and reduce “impossibility, waste, and variation” in all business processes.
- We will standardize and automate business processes.
- While managing and operating our ICT assets, we will utilize them to implement our digital strategies to establish a system for continuous growth.

## Digital Pilot Development

In order to carry out measures to achieve our Mission 2030 targets, we believe it is essential for all employees to acquire digital literacy and to utilize the available digital technology in their respective workplaces. Each department requires “DX human resources” with the knowledge and skills to actively promote DX. However, rather than recruiting these from within our current resource pool, we launched a pyramidal “DX human resources” development and education program in FY2023 to raise the level of digital literacy among all employees. Through this educational program, the participants can feel their growth with improved works and quality, while their motivations will increase through incentives enabled by the corresponding human resource evaluation systems. For managers of these participants, the work processes in their workplace will improve, leading to an organizational and self evaluation. This program is a source of performance improvement and competitive force, while it leads to development of outstanding human resources, that are the company's treasures. We believe that providing excellent products and services through our DX achievement will lead to resolution of social issues.



### VOICE

#### As a representative of 450 participants in the “Basic Education program”

I felt I needed an ability, in addition to my chemical expertise, to accelerate my development work using information science, so I took this education program. It was a great opportunity to learn various digital tools and marketing skills, and I think that results in better work efficiency and approach improvement.

**Hiroki Banno** Electronic Materials Research Department, Shibukawa Plant

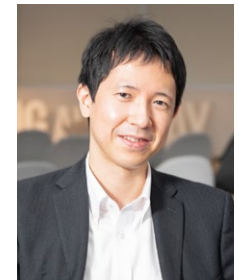


### VOICE

#### As a representative of 85 participants in the “Skill-Up Education program”

It was a valuable opportunity to widen my field of view, as well as to acquire skills needed in the digital age. The e-Learning program allowed us to learn at our own pace, and I've been engaged with it to improve my skills. I would like to continue my effort to contribute to the DX promotion in our company.

**Taiyo Yamaura** R&D Management Department, New Business Development



## Development of data lakes and infrastructure

Digital Strategy & Innovation Department aims at building a data environment and infrastructure that serves as an essential foundation to promote DX. Denka has a long history, which means it has massive data accumulated through years, or, in other words, a great collection of treasures. However, as Denka operates diverse businesses, its databases are not functioning as they should be. To overcome this silo problem of databases, we are building a system capable of cross-database searches. It will help us reduce the great amount of time spent looking for information and facilitate business processes, as well as create new values. For example, we will be able to develop new applications and new businesses by combining material information and sales information to match potential needs and available seeds. In the age when data utilization creates new values, Denka recognizes that building data lakes is an important environmental improvement that enables all DX.

### MESSAGE

#### Progress of digital strategy initiatives (achievements and challenges)

In November 2023, a strong message from President, Initiatives for human resource development to utilize digital technologies and promote DX, ensured the serious attitudes among the management team. In addition to that, it was a great achievement that Digital Utilization and DX Human Resource Development Program was launched in April 2024. As many DX human resources are fostered in the near future, we cannot wait to establish a supporting environment to help them use their skills without any limit. On the other hand, the retention cost of ICT assets is increasing year by year. I think we have challenges to visualize our ICT assets, enhance its management and operations to enable new strategies, enhance security against potential cyber attacks, and evaluate the result of operational improvement enabled by digital technologies through corresponding initiatives.

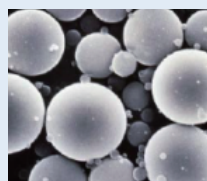


**Minoru Morioka**  
General Manager of the  
Digital Strategy & Innovation  
Department

## 4 Business Divisions Trends in Capital Investment and R&D Expenses

### Electronics & Innovative Products

The Division strives to build a prosperous society through innovative materials that are essential for 5G communications, xEV and renewable energy, including conductive additives for lithium-ion batteries, heat-dissipating materials and substrates, and functional ceramics, films and tapes.



Functional ceramics  
(Spherical Alumina)

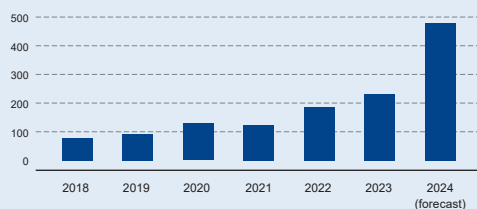


Conductive agents for lithium-ion  
batteries (Acetylene black)

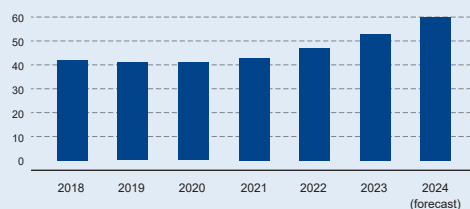


Sheets and tapes for transporting  
semiconductors and electronic components  
(sheets for carrier tape, cover tape)

Trends in Capital investment (hundred million yen)



Trends in R&D expenses (hundred million yen)



### Life Innovation

The Division works to improve people's quality of life throughout the world in the fields of prevention, diagnosis and treatment, including influenza vaccines and test reagents such as QuickNavi™-Flu + COVID19 Ag.



Vaccines

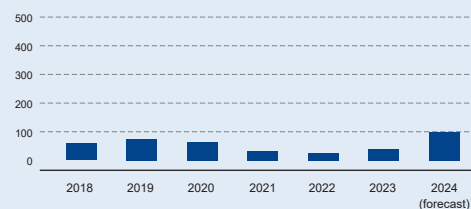


G47Δ oncolytic virus for  
treating cancer treatment

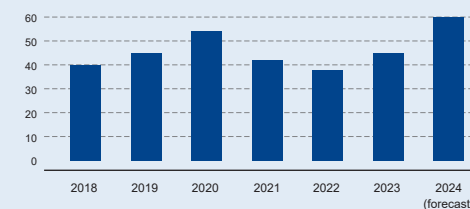


POCT diagnostic reagents

Trends in Capital investment (hundred million yen)



Trends in R&D expenses (hundred million yen)



### Elastomers & Infrastructure Solutions

Utilizing the carbide chain that has been in place since our founding, the Division has been supporting safe and secure lives with a wide range of organic and inorganic technologies, including functional elastomers, special admixtures needed for infrastructure toughening, and corrugated pipes and fertilizers for agriculture.

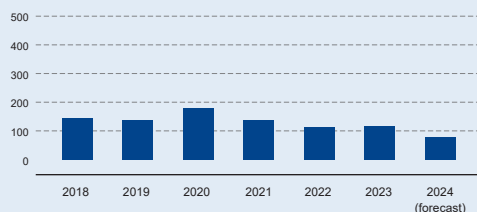


Shotcrete Accelerator (Denka NATOMIC)

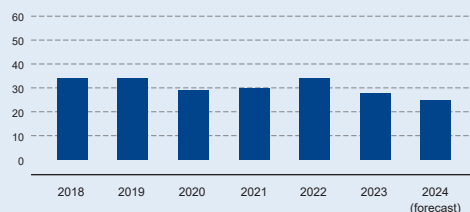


Underground Drainpipes (Corrugate)

Trends in Capital investment (hundred million yen)

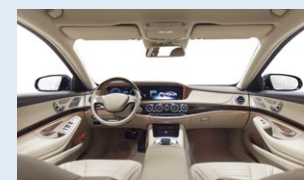


Trends in R&D expenses (hundred million yen)



### Polymer Solutions

With an extensive product range from styrene monomer to styrene-based performance plastics, chemicals such as POVAI, food packaging sheets, and synthetic fibers for wigs and hair pieces, the Polymer Solutions Division supports people's lives, and strives to create a sustainable society across a wide variety of applications in the automotive, electrical, electronic, and food packaging container industries.

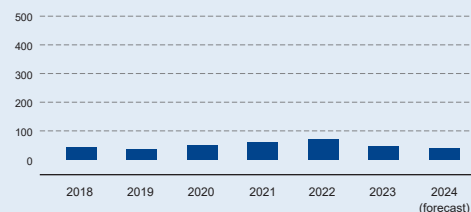


Example of Heat-resisting additive usage  
(DENKA IP)

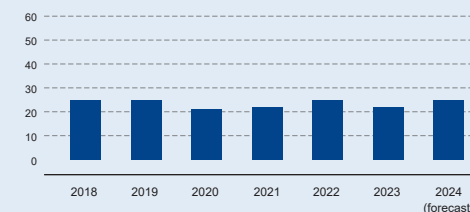


Example of Food packaging material usage  
(Thermosheet BOPS)

Trends in Capital investment (hundred million yen)



Trends in R&D expenses (hundred million yen)





## Electronics & Innovative Products



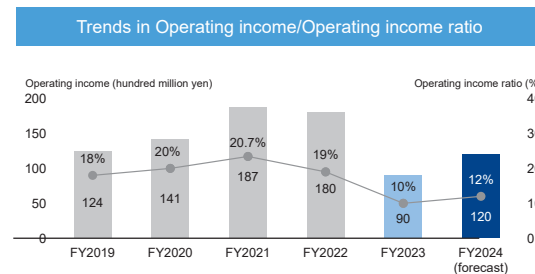
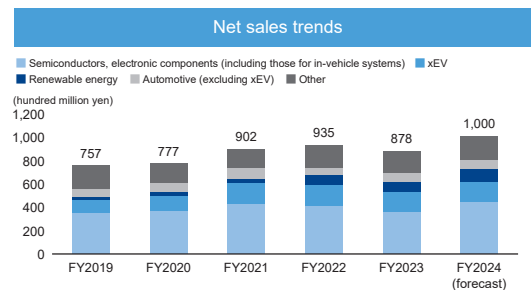
### Message from the Division Head

Our department's growth strategy is to deepen our understanding of customer needs, and to continue providing optimal materials to the market on time by using non-organic/organic composite technologies, thermal countermeasure technologies, and high-frequency response technologies that we expertise. When we face suppression of environmental impact as a pressing issue, we will contribute to achieving better society by providing high performance materials that help digital and other technologies evolve.

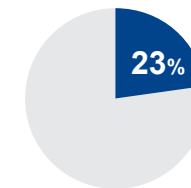
### Hiroto Horiuchi

Executive Officer  
Head of Electronics & Innovative Products

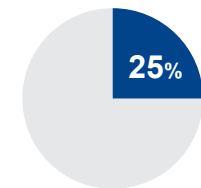
In FY2023, we accelerated investment to achieve “Mission 2030” management plan goals, including an establishment of a joint venture in Thailand where we manufacture Acetylene Black, performance enhancement in various high functional ceramic powders. We will release new products equipped with three elements – “Specialty”, “Mega Trend”, and “Sustainability” - and foster them to be core business to support Denka business.



Percentage in overall net sales (FY2023)



Percentage of employees to overall net sales (FY2023)



## To achieve the management plan “Mission 2030” targets

### Areas of focus and markets

Next-generation  
high-speed  
communication

xEVs and renewable  
energy

### [Key products]

- Spherical silica/spherical alumina
- Low dielectric silica
- Low dielectric organic insulating resin (SNECTON)
- LCP film

- Acetylene black
- Spherical alumina
- Silicon nitride
- Silicon nitride substrates

### [2023 results]

- Decided to increase the production capacity of spherical silica at Denka Advantech Pte. Ltd. by 30%
- Decided to establish joint venture in Thailand and build an Acetylene Black production facility with a 11,000-ton production capacity per year
- Decided to increase silicon nitride production capacity by 50% at Omuta Plant
- Established a formulation as a part of preparation for a release of the heat-resistant temporary bonding material (TBM) for power conductor production processes in FY2024
- Started trial marketing of SNECTON, as a part of preparation for its FY2024 release

### [2026 plan]

- Expanded sales of Acetylene Black for growing markets of LiB and cable applications
- Retained and enhanced the top world share of silicon nitride for xEV motor bearing ceramic ball application
- Achievement of HITPLATE high thermal conductor for the general industry (over 20W)
- Achievement of new emitter types for semiconductor production and inspection equipment
- Established a market de facto standard of LCP film and SNECTON for expected production release of next-generation high speed communication

### [Divisional vision (ideal form in 2030)]

- Establish overwhelming presence and de facto standards as specialty products
- “On-time development and delivery of optimum materials” targeting the field of mega trends
- Achieve a sustainable society via our ESG/SDGs management



## SWOT analysis

- A diverse product lineup capable of meeting a broad range of customer needs
- Intelligence capabilities stemming from strong market share commanded by our products
- A broad range of essential technologies, including high-temperature control, nitriding, spherical shaping, and calcining technologies

Strengths

S

- Growing importance of communication and the progress of high-speed communication due to the spread of IoT and autonomous driving systems
- Trend for decarbonized society, including xEV and renewable energy

Opportunities

O

- Growing financial burden attributable to capital expenditure due to rapid market expansion

Weaknesses

W

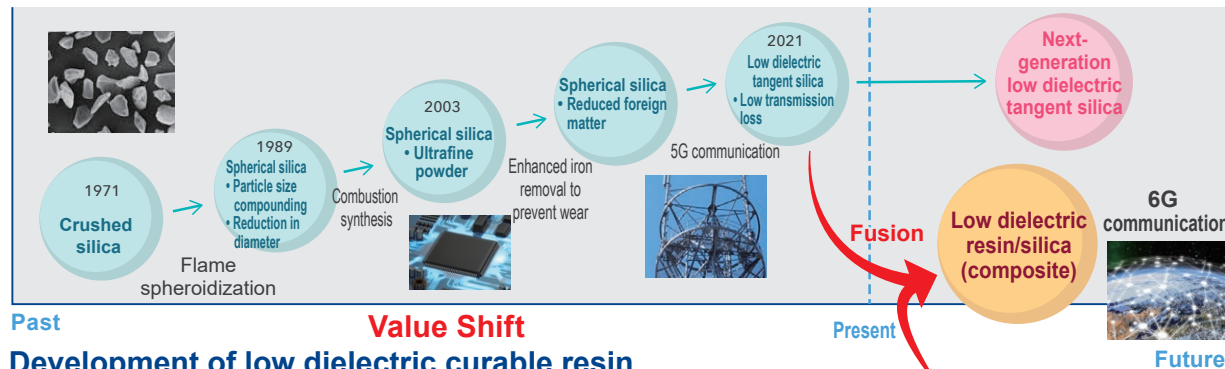
Threats

T

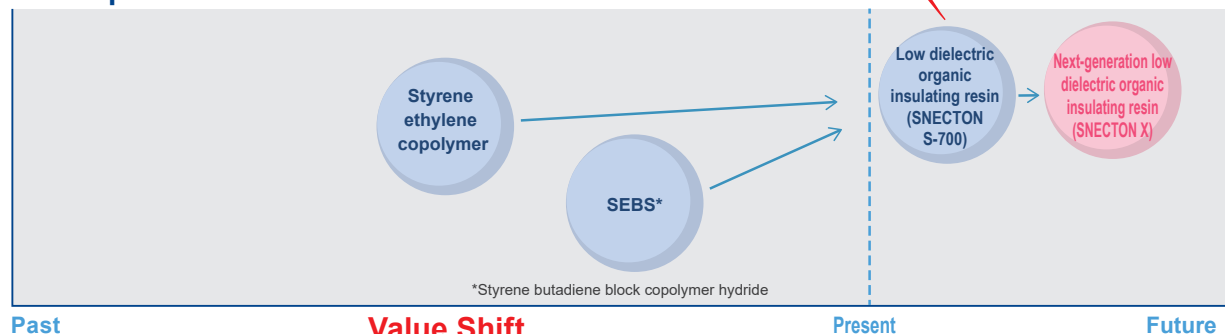
- Possible emergence of novel material serving as a game changer
- A major shift in technological development trends due to factors such as the growing need for environmental solutions
- An increase in the number of competitors due to the entry of newcomers from emerging nations

## Development of spherical silica

Material/Process Innovation



## Development of low dielectric curable resin

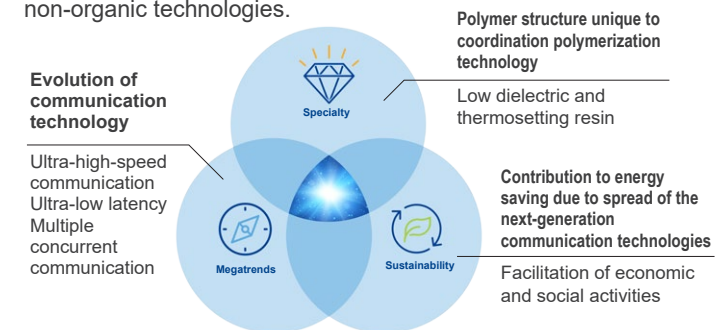


## Contributing to society through business

### Low-dielectric organic insulating material “SNECTON” + low dielectric tangent/low transmission loss silica filler

The next-generation mobile communication is expected to bring a big innovation to our society. The challenge for its spread is insufficient performance of the electric devices and terminals to receive the radio wave. SNECTON, a low-dielectric organic insulating material developed by utilizing Denka's coordination polymerization technology calls attention as a material that can overcome this challenge.

Initially a thermoplastic resin that gets softened when heated, its design was modified to a thermosetting resin to accommodate its applications. In addition, its low dielectric characteristic was enhanced. It is a soft resin that not only has both top-level low dielectric characteristic and excellent heat resistance but also high affinity with other low dielectric materials, allowing easy compounding and forming. Its expected applications include insulating materials in the next-generation high frequency high speed communication substrate and packages, as well as antenna materials. With a combination with our silica filler that already has a large market share, Denka can deliver with an optimal compounding to customers because we have both organic and non-organic technologies.



SNECTON  
(Low Dielectric Macromonomer: LDM)

## Life Innovation



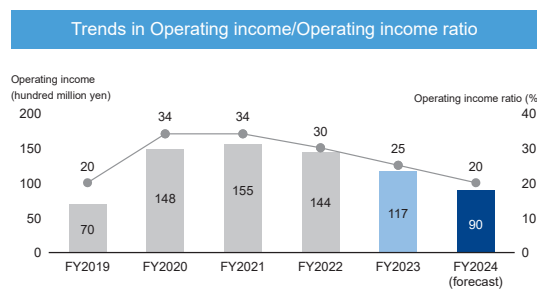
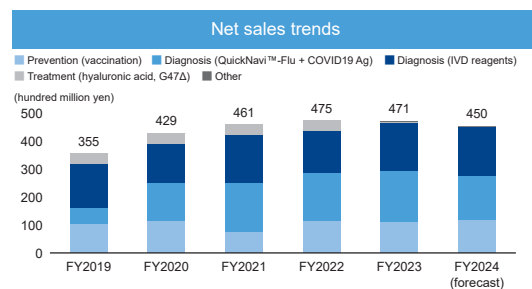
### Message from the Division Head

After COVID-19 was classified as the Category V infectious disease, the same as the seasonal influenzas, we are regaining our normal lives. The lesson we learned in the last few years is that humanity is always at risk of infectious diseases, and that we need to be prepared to cope with these infectious diseases. As a leading company in the field of infectious disease antigen

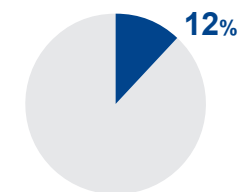
### Taro Inada

Executive Officer  
Head of Life Innovation

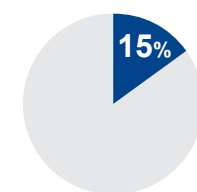
diagnostic kits, we will promote innovations, and continue to contribute to people's improved quality of life (QOL) through a series of Life Innovation Business, including various clinical reagents, vaccines, and commissioned development/manufacturing of the pharmaceuticals.



Percentage in overall net sales (FY2023)



Percentage of employees to overall net sales (FY2023)



## To achieve the “Mission 2030” management plan targets

Areas of focus and markets	[Key products]	[2023 results]	[2026 plan]	[Divisional vision (ideal form in 2030)]
Prevention	<ul style="list-style-type: none"> <li>Influenza vaccines</li> </ul>	<ul style="list-style-type: none"> <li>Began operation of new facility for the manufacturing of undiluted influenza vaccines to enable early and stable supply of influenza vaccines in 2022</li> <li>With an anticipation that the number of the vaccines would regain as that of an average year in 2023, we manufactured 10 million vaccines, exceeding the number in the previous year, but the vaccination rate did not exceed that of the average year</li> <li>Soaring prices of raw material for influenza vaccines</li> </ul>	<ul style="list-style-type: none"> <li>Promote initiatives to increase profitability by enhancing stable production and early shipment, while aiming at expanding share and increased shipment of existing vaccines as one of our core businesses through early shipment and enhanced logistics strategies</li> <li>Enhance the fundamental technologies of vaccine production and promote new vaccine development</li> </ul>	<ul style="list-style-type: none"> <li>Advance the development of safer and more effective vaccines in addition to early stable supply of existing vaccines</li> </ul>
Diagnosis	<ul style="list-style-type: none"> <li>QuickNavi™-Flu + COVID19 Ag</li> <li>Diagnostic reagents</li> </ul>	<ul style="list-style-type: none"> <li>Increase in income and profit compared to 2022</li> <li>Increased sales of the simultaneous tests kits (combo kits) for COVID-19 and influenza due to the influenza outbreak</li> <li>Expanding Gosen site reagent production capacity to address increased demand of the antigen QuickNavi™-Flu + COVID19 Ag and diagnostic reagents (Scheduled for completion in second half of 2024)</li> </ul>	<ul style="list-style-type: none"> <li>Advance stable supply and maximize production of high quality product through the expanding production capacity</li> <li>Promote income increase by enhancing domestic and overseas marketing, establishing new sales channels, and expanding our product portfolio</li> </ul>	<ul style="list-style-type: none"> <li>Provide a variety of diagnostic agents and systems that are quick, simple, inexpensive, high quality, and multi-diagnostic</li> </ul>
Treatment	<ul style="list-style-type: none"> <li>G47Δ oncolytic herpes simplex virus type 1 product</li> </ul>	<ul style="list-style-type: none"> <li>Redeveloping the invest plan in production capacity reinforcement of G47Δ, oncolytic herpes simplex virus type 1 product</li> </ul>	<ul style="list-style-type: none"> <li>Establish a system for stable production, supply, and expanded production of G47Δ, oncolytic herpes simplex virus type 1 product</li> <li>Promote initiatives to address overseas expansion and expansion of domestic applications</li> </ul>	<ul style="list-style-type: none"> <li>Aim for CMOs and CDMOs based on oncolytic herpes simplex virus type 1</li> </ul>

## SWOT analysis

- A lineup of various diagnostic reagents developed in-house employing Denka's proprietary technologies
- Superior technological capabilities and robust production capacities backed by cutting-edge vaccine manufacturing facilities
- A robust network of industry-academia-government collaboration with a diverse range of partners to enhance Denka's own R&D capabilities
- Innovation arising from the integration of know-how in the fields of chemistry and healthcare, two very different fields, and marketing capabilities derived from a combination of customer bases in both fields

Strengths **S**

- Growing need for solutions supporting the prevention and early diagnosis of disease in countries around the globe
- Growing demand for rapid diagnostic testing kits in the face of the COVID-19 pandemic
- Growing demand for medical services tailored to the needs of individual patients
- Widespread use of IoT and AI
- Possible emergence of novel types of business supported by government-led growth strategies (legal revisions and regulatory relaxation)

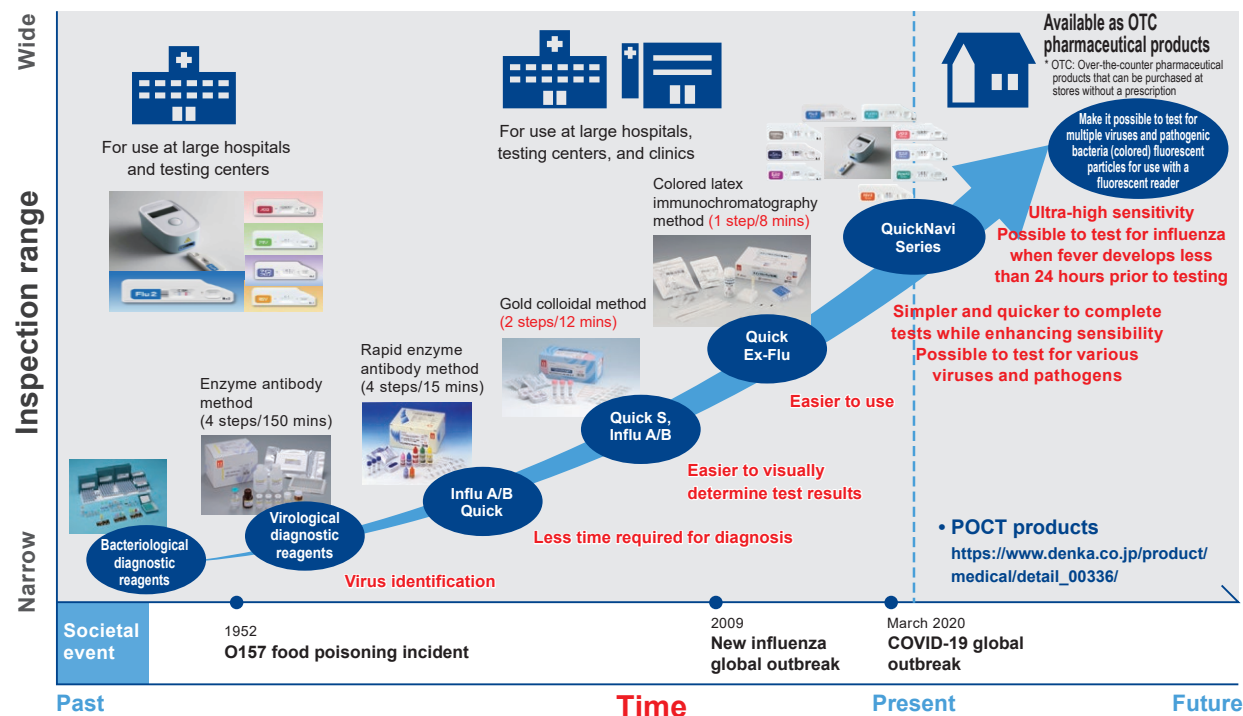
**O** OpportunitiesWeaknesses **W**

- Susceptibility of infectious disease-related products to demand fluctuations attributable to changes in the magnitude of epidemics and types of disease

**T** Threats

- Acceleration of competitor technologies for vaccine and diagnostic reagents on the back of global efforts to counter the COVID-19 pandemic

## Development of POCT Products



## Contributing to society through business

### • Influenza vaccines

We will contribute to maintaining health of people and the entire society as well as improved well-being level and production capacity by preventing seasonal influenza that infects many people every year.



### • QuickNavi™-Flu + COVID19 Ag

(Influenza, novel coronavirus, hemolytic streptococcus, norovirus, RS virus, etc.) By diagnosing infectious disease infection, including influenza and novel coronavirus, we will enable early and appropriate treatment to shorten recovery time and prevent outbreak. We will contribute to burden reduction of patients and medical staff, continuous economic activities, and public hygiene (we offer combo kits capable of simultaneous diagnosis for influenza and novel coronavirus).



### • Test reagents

(Immune serum test reagents, clinical chemistry test reagents, bacteria/virus test reagents, etc.)

We provide various test reagents to the domestic and overseas markets, enabling early diagnosis of myocardial infarction and rheumatism, diagnosis of lifestyle related diseases such as arteriosclerosis and diabetes, and diagnosis of various infectious diseases. By enabling quick and accurate diagnosis, we play an essential role in selecting appropriate treatment methods and disease management. We contribute to improvement of public hygiene, early diagnosis and prevention of diseases, reduction of medical cost, as well as to maintaining healthy society.

## Elastomer & Infrastructure Solutions



### Message from the Division Head

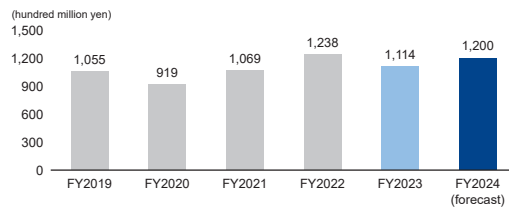
We provide a wide range of materials that are essential for building the foundation of social infrastructure, such as chloroprene rubber, of which we have the world's top share, special cement additives that make concrete highly functional, and corrugated pipes for underdrainage for agriculture and civil engineering. We are also proceeding with the full-scale development of biostimulants to contribute to solving global food problems, and conducting research and development of carbon-negative

### Masahiro Omata

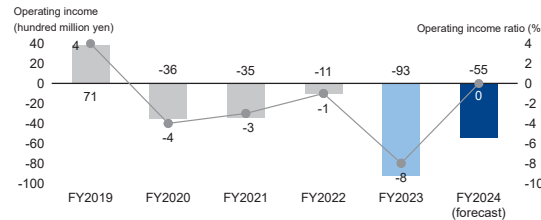
Executive Officer  
Head of Elastomer & Infrastructure Solutions

concrete that aims to reduce the burden on the environment. We position this fiscal year as the year to establish a foundation for “portfolio transformation,” to turn businesses, including chloroprene rubber business, to “three-star businesses,” striving for significant results in the next fiscal year. As said above, we aim to realize safe, secure, and comfortable daily life as the core division of “Sustainable Living”, a focus area of the management plan “Mission 2030”.

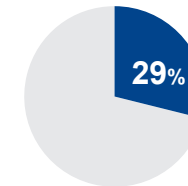
Net sales trends



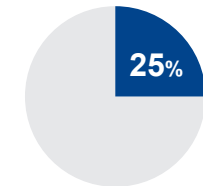
Trends in Operating income/Operating income ratio



Percentage in overall net sales (FY2023)



Percentage of employees to overall net sales (FY2023)



## To achieve the “Mission 2030” management plan targets

Areas of focus and markets	[Key products]	[2023 results]	[2026 plan]	[Divisional vision (ideal form in 2030)]
Food	<ul style="list-style-type: none"> <li>Biostimulants*: PRULA, RECOLTE, and AZUMIN</li> <li>* An agricultural material to keep plants healthy and contribute to the reduction of chemically synthetic agrochemicals</li> <li>Environmental conservation type agrochemicals: calcium cyanamide, YORIN (Fused Magnesium Phosphate), TORE-TARO (Fused Silicate Phosphate)</li> </ul>	<ul style="list-style-type: none"> <li>With global attention to our biostimulants business due to climate change and abnormal weather, we are establishing sales channels in various countries.</li> <li>Digital marketing utilization               <ol style="list-style-type: none"> <li>(1) Distribution of online content</li> <li>(2) Direct promotion to farmers via YouTube <a href="#">Denka Channel</a></li> </ol> </li> </ul>	<ul style="list-style-type: none"> <li>Global sales expansion through “communicating the effect and mechanism of our biostimulant products” and “promotion of inexpensive application methods”</li> </ul>	<ul style="list-style-type: none"> <li>We will select what businesses can and can't be executed well using the keywords “specialty”, “megatrends”, and “sustainability”, and proceed with a shift in our business portfolio</li> <li>Aiming to realize a carbon-neutral society by 2050, we are looking to expand our product lineup, including the carbon cement additive “LEAF®”</li> </ul>
Infrastructure	<ul style="list-style-type: none"> <li>Special cement additives</li> <li>Toyo Drain</li> <li>“LEAF®,” carbon cement additive for carbon negative concrete</li> </ul>	<ul style="list-style-type: none"> <li>On-site application of carbon negative concrete</li> </ul>	<ul style="list-style-type: none"> <li>Achievement of new carbon cement additives (Social implementation of results of the Green Innovation Fund Project)</li> </ul>	



## SWOT analysis

- Technology for absorbing and immobilizing CO<sub>2</sub> in concrete
- Chloroprene business with the world's largest production capacity
- A robust carbide chain created via use of the limestone from nearby limestone mines and powered by Denka's own hydroelectric power plant network

Strengths **S**

- Growing demand associated with enhancing the resilience of buildings and civil infrastructure to mitigate natural disaster damage
- Growing demand associated with the maintenance and renewal of domestic infrastructure constructed mainly during the period of high economic growth in Japan that is currently deteriorating
- Growth in the biostimulant market due to growing food demand in step with the growing global population

Opportunities **O**

Weaknesses **W**

- Difficulty in securing robust brand recognition in markets overseas (special cement additive business)

Threats **T**

- Expansion in the scope of various environment-related regulations influenced by a growing trend toward carbon neutrality
- Shrinking in the construction and agricultural markets due to a decline in the domestic population
- Soaring global raw material and fuel prices

## Special cement additive business

Material/Process Innovation

Responding to the diverse needs of society, such as low-carbon concrete structures, labor-saving construction, enhanced functionality, and ultra-long life, we will contribute to the enhancement of social infrastructure both in Japan and overseas with reliable technologies and a wide range of products.

Highly functional materials

Construction methods/systems

Survey and diagnostic technology

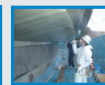
**Social infrastructure (concrete)**  
Low-carbon  
Labor-saving  
High functionality  
Longer life



Grout material



Quick hardening material



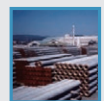
Repair material



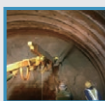
Electrochemical repair method



Expansion material



High-strength material



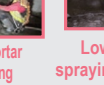
Fast-binding material



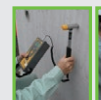
Ultra-high strength fiber reinforced concrete



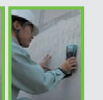
Sprayed mortar labor-saving construction system



Low dust spraying system



Non-destructive testing technology



Drone surveys



Carbonated admixtures/concretes



3D printing



Quick hardening material for low environmental load type concrete



Condensation accelerator for improving concrete construction productivity



3D digital measurement

Past

Technology history

Present

Future

## Contributing to society through business

### • Development of innovative carbon negative concrete technology

As a managing underwriter of CUCO, a consortium selected for the Green Innovation Fund Project, Project for Development of Concrete and Other Manufacturing Technologies Using CO<sub>2</sub> at NEDO (New Energy and Industrial Technology Development Organization), we are developing innovating carbon negative concrete technologies based on our carbon cement additive, LEAF, technology. The R&D theme we are engaged in has two research items: Development of CO<sub>2</sub> fixing admixture using unused calcium source (wastes, etc.) and Establishment of quantifying technique of CO<sub>2</sub> fixation amount.

In March 2024, we won two awards: the Ichimura Prize in Science against Global Warming by Ichimura Foundation for New Technology awarded for LEAF as a CO<sub>2</sub> fixing admixture with improved durability contributing to decarbonized concrete, and the 32th Grand Prize for the Global Environment Award by Fujisankei Communications Group awarded for our contribution to reduction in CO<sub>2</sub> through expanded adoption of CO<sub>2</sub>-SUICOM, a carbon negative concrete containing LEAF.

As an example of specific efforts for social implementation, our technology will be adopted to some pavilions and facilities in EXPO 2025 Osaka, Kansai, Japan.

We will advance our efforts in this business, and contribute to society through reduction of CO<sub>2</sub> emission social issue as well as strive to achieve a carbon neutral society by 2050.





## Polymer Solutions



### Message from the Division Head

Japan's petrochemistry industry is facing a major transition period that occurs once in 30 years for the transformation to a sustainable and growing industry, while facing the increased production of ethylene in China and carbon neutral investments demands. Companies are striving to achieve high added-values, and momentum for collaboration and restructuring is accelerating. Under the industrial "crustal change," The Polymer Solutions Division will undertake sweeping structural reform to achieve a sustainable business. Denka's unique feature is that we operate the entire styrene chain, from the raw material styrene monomers to the downstream food packaging.

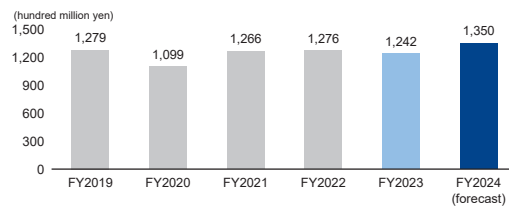
### Kei Hara

Executive Officer  
Head of Polymer Solutions

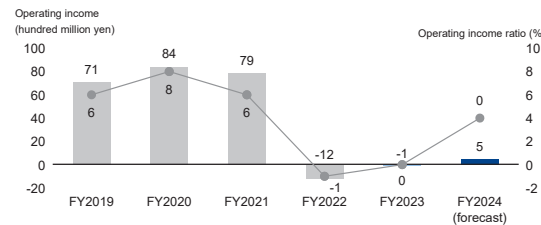
In addition, a polystyrene chemical recycle plant started operation from March 2024, which made us a leading company to promote circular economy in Japan. We are thinking of a reformation design to utilize the advantage to have most of our production sites in metropolitan Chiba area, the biggest area of domestic demand.

Adding to it, our top priorities in 2024 includes: price correction, cost reduction, maximized sales (sales target portfolio revision, new customer development, and sweeping structural reform.)

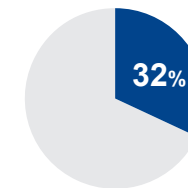
Net sales trends



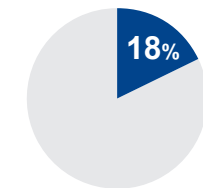
Trends in Operating income/operating income ratio



Percentage in overall net sales (FY2023)



Percentage of employees to overall net sales (FY2023)



## To achieve the "Mission 2030" management plan targets

### Areas of focus and markets

Automotive Energy industry Housing and home appliances
Food packaging materials Cosmetics and hair products

### [Key products]

- High performance styrene based resins (MS, IP, ABS)
- Special additives for oil and gas field drilling, building materials, etc. (Poval)
- Construction materials, flexible air conditioning materials  
Gutters, aluminum ducts (Denka Astec)
- High performance styrene based resins (Clear Alene, MS, AS)
- Oil-resistant, heat-resistant, high-strength thin sheets (BOPS)
- Functional barrier sheets
- Raw yarn for wigs and hairpieces (Toyokalon)

### [2023 results]

- The chemical recycle plant started operation in March 2024. (Toyo Styrene Co., Ltd., Denka)
- Acquire International Sustainable Carbon Certification "ISCC PLUS Certification"
- Start marketing Dual Light, heat-resistant and oil-proof BOPS with high microwave resistant characteristics
- Release of high volume and good-in-touch raw yarn, suitable for the mainstream items (three-strand braid style)

### [2026 plan]

- Forecast the trend in the petrochemistry industry, aiming at optimization of management structure with alliances in the relevant businesses in mind
  - (1) Structural reform in the styrene chain business
  - (2) ROIC improvement
  - (3) Response to geopolitical risks
  - (4) DX promotion
  - (5) New business creation
  - (6) Promotion of a circular economy

### [Divisional vision (ideal form in 2030)]

- Portfolio transformation:  
Improving corporate value through portfolio transformation, increasing added value, new business creation, and alliance building
- Sustainable&Disruptive Innovation:  
Create new three-star businesses through:  
Innovation utilizing the styrene chain and Denka's elemental technologies and Innovation through M&A and the utilization of external resources
- Ahead to green:
  - Styrene chemical recycling
  - Promotion of environmental products
  - Establish circular economy models from upstream to downstream through collaboration with local communities

## SWOT analysis

- An integrated manufacturing and marketing system that encompasses a range of styrene-based operations from the production of raw materials to the manufacture of processed products
- Development of plastic resins and processed products in a way that accommodates growing needs for eco-friendly solutions
- Global business capabilities backed by a two-location production system comprising of bases in Japan and Singapore
- A diverse range of resin processing technologies, including those associated with polymer structure design and control and the production of sheets, films, and synthetic fiber
- Synergies arising from the combination of materials and processed products as well as solution proposal and development capabilities supported by such synergies

### Strengths

S

### Opportunities

O

### Weaknesses

W

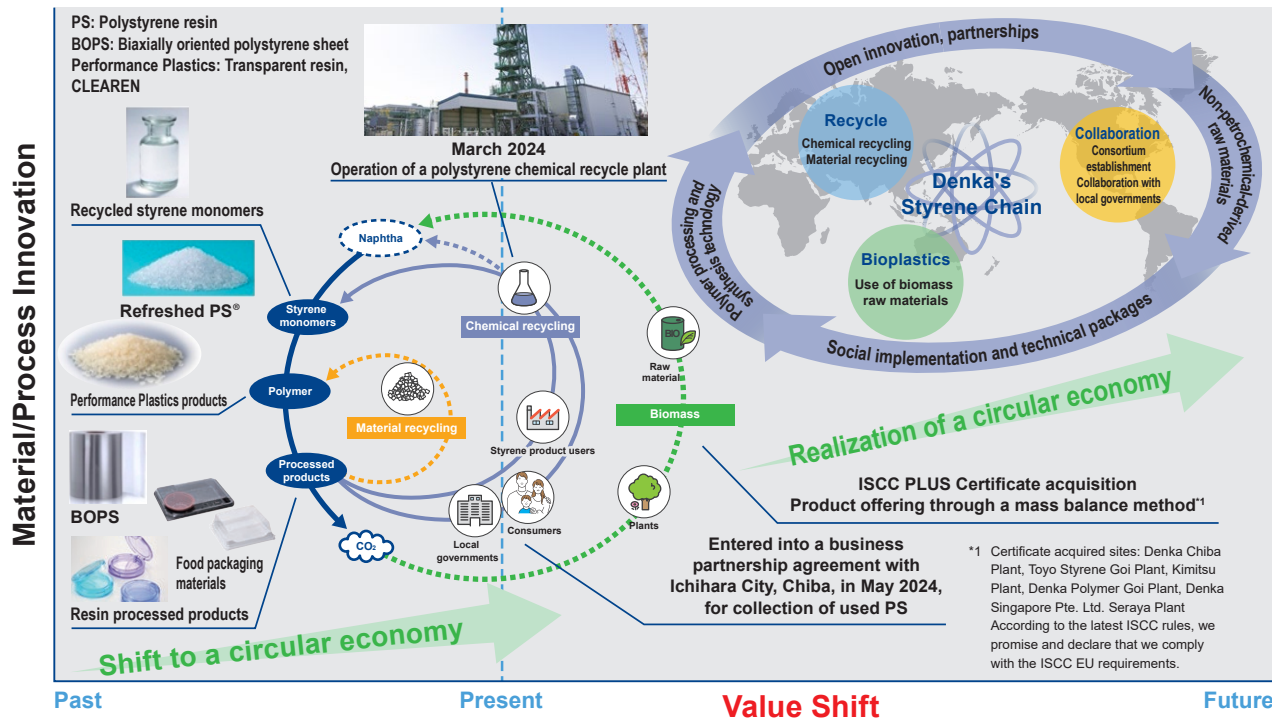
### Threats

T

- Change in the global supply-demand balances
- Time lag between fluctuations in the prices of raw materials (e.g. naphtha and benzene) and product price revisions reflecting these external conditions

- Development of plastic resins and processed products in a way that accommodates growing needs for eco-friendly solutions
- Establishment of a comprehensive recycling system that takes full advantage of the strengths afforded by our integrated production system, extending from raw materials to processed products, and thereby meeting demand arising from the growing trend towards resource recycling
- Versatile expansion stemming from our diverse product lineup
- Operation of a polystyrene chemical recycle demonstration plant for social implementation
- A decline in the need for plastic due to environmental problems induced by waste plastics (especially single-packaging containers)
- Intensification of price competition in step with the improvement in the quality of products manufactured by overseas competitors
- Unstable procurement of various raw materials (due to rises in costs, the abolishment of certain materials, etc.)
- Restructuring of the petrochemistry industry at a global scale

## Value shift across polymer solutions



## Contributing to society through business

### The Denka Group provide new values by leveraging the characteristics of the styrene chain and achieving a circular economy.

As an essential material for rich social lives, our styrene resins including polystyrene are used for various applications, such as food packaging materials, transparent resin products for cosmetics containers, and LCD TV. However, requirements for polystyrene are getting stricter as the environmental issues calls people's attention, such as issues of plastics in the oceans and demand for a carbon neutral society. To address this, Denka and Toyo Styrene, an affiliate accounted for under the equity method decided to collaborate to operate a chemical recycle plant based on the common idea that establishing a new recycle system to recycle resources is necessary. In March 2024, a polystyrene chemical recycle plant started its operation.

It is a new initiative to collect used containers including food packaging materials (post-consumer materials) and remnant materials (post-industrial materials) generated from sheet and container production plants (processes), decompose chemically, recycle as raw materials for plastic products. It is positioned as the first step towards a circular economy.

As a part of this initiative, we entered a business partnership agreement with Ichihara City Chiba Prefecture, to contribute to achievement of a circular economy and development of local communities.

In addition, Denka, Toyo Styrene, and Denka Polymer acquired ISCC PLUS Certificates for their styrene chain, enhancing the effectiveness of our initiatives.

### [Future movement]

We have focused on development and marketing of styrene resin products, utilizing Denka's material characteristics at the maximum extent. While utilizing the fundamental technologies we have developed so far, we will strive to achieve a circular economy and move forward to the future with all stakeholders, by promoting development of environmentally friendly products and social implementation of recycling technologies.

## Place the Utmost Priority on Safety

### Omi Plant Pipe Burst Accident

Our deepest thoughts and prayers are with the worker from our partner company who lost their life in the accident that occurred at Denka's Omi Plant on June 14, 2023, and with the worker's bereaved family during this harrowing time. We also express our heartfelt sympathies to the workers who were injured.

Please the following URL to view the final report (Japanese): [https://www.denka.co.jp/storage/news/pdf/1193/20240111\\_denka\\_omi\\_finalreport.pdf](https://www.denka.co.jp/storage/news/pdf/1193/20240111_denka_omi_finalreport.pdf)

#### 1 Overview of the accident

The accident occurred during pipe replacing work in the chloroprene monomer production facility of the Omi Plant. In order to remove the pipe for transferring synthesized chloroprene monomer to the storage facilities, the pipe was being cut with an (electric) saw saber. As it was being cut, the pipe burst approximately 3 meters from the cutting point. Out of the three workers from our partner company, the worker (A) who was supporting the pipe with his hand near the bursting point died, and the worker (B) and supervisor (C) who were performing the cutting work were injured.



A plan to renew the pipes to make it easier to clean deposits (scale) inside the pipe was planned

(An increase in deposition of scale after periodic repair work in October 2022 was confirmed)

About 10:00 of the day before  
Partially shut down manufacturing equipment and discharged liquid in pipe

About 15:00 Started flushing with water inside the pipe

About 4:00 of the day of the accident

Stopped flushing with water

To prevent issues such as chemical burns due to dripping, dry nitrogen was influxed  
**The scales were dried**

About 6:30 Stopped influx of nitrogen

About 9:00 Began pipe removal work  
Cut using saw saber

9:05 **Accident occurred**

#### 2 Improving absolute safety

After the accident, we established an Accident Investigation Committee consisting of external experts and specialists, and looked into the cause exhaustively and formulated measures to prevent any recurrence. The investigation determined that factors behind the accident included: poor understanding of the danger of the scales stuck in the pipe, inadequate investigation of the cause of small changes in the operating state of the plant, and inadequate collaboration between the staff involved in the work. As a measure to prevent recurrence, we will ensure that the pipes are always kept in a moist condition. We are also examining and implementing operating conditions to suppress the generation of scale. Furthermore, we are working to strengthen safety management company-wide, as well as at partner companies.

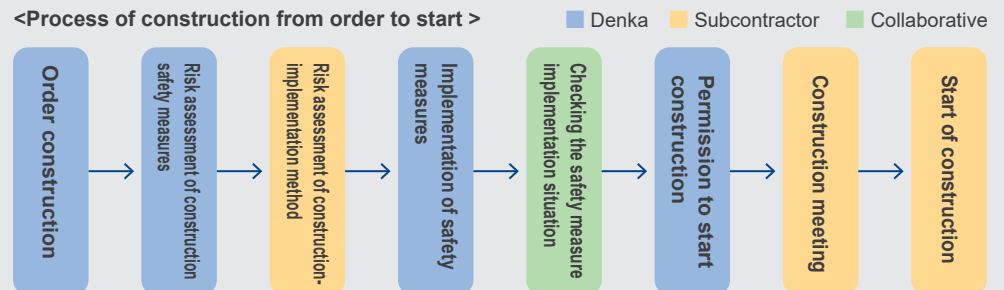
#### 3 Fostering a safety culture centered around environment & safety division

- (1) Since the start of this fiscal year, we have been strengthening the environment & safety division at our Head Office and other business sites, and making efforts towards safety auditing of the handling of chemical substances and partner companies.
- (2) We are improving safety issues by developing a safety patrol system at each business site, and having full-time staff conduct patrols where they go to the actual location and observe the situation firsthand.
- (3) We have declared the day the accident occurred as "Safety Day," and we are working hard to ensure that the memory of the accident does not fade away.

#### 4 Stronger risk assessment of chemical substances and work safety management

- (1) We are reassessing the risk of chemical substances, with a focus on by-products such as scale, and taking countermeasures.
- (2) We are doing risk assessments of work safety measures and work implementation methods, and sharing information on residual risks with partner companies.

<Process of construction from order to start >





# Place the Utmost Priority on Safety

## 1 | Fiscal 2024 Activities

### Companywide Targets

**We put the utmost priority on worksite safety and health, facility security and disaster prevention in all aspects of our business activities**

- 1 Promotion of initiatives to achieve an occupational accident frequency rate of 0.2 or less**
- 2 Achievement of zero serious accidents**

### Priority Initiatives

- 1 Initiatives to achieve an occupational accident frequency rate of 0.2 or less**
  - Safety measures for inexperienced workers, elderly workers, and employees of partner companies
  - Establishment of a business site patrol system, and continuous improvement based on auditing by the Head Office
  - Review of education and training system focusing on non-technical skills and improvement of psychological safety
- 2 Initiatives to achieve zero serious accidents**
  - Risk assessment with emphasis on high-energy hazards (e.g., explosive materials, heavy objects, high locations)
  - Promotion of safety measures proposed by the Accident Investigation Committee
- 3 Initiatives to establish and realize Denka's vision**
  - Resolute implementation focused on activities necessary for legal, safety, and other reasons, and activities with high effectiveness

## 2 | Strategies to Achieve Objectives of Management Plan “Mission 2030”

In order to achieve an occupational accident frequency rate of 0.2 or less and 0 serious accidents by 2030, we are systematically working on the following strategies.

### (1) Reorganization to strengthen safety management

We are bolstering our system by establishing divisions specializing in safety management at our Head Office and business sites.



### (2) Initiatives to achieve an occupational accident frequency rate of 0.2 or less

About 3/4ths of all accidents that have occurred in recent years have involved people in one of the following categories: inexperienced workers, elderly workers, or partner company employees. Therefore, we are focusing on safety measures for these types of workers.



### (3) Initiatives to achieve zero serious accidents

Based on risk assessment results for high-energy hazards, we will take provisional and permanent measures.

#### Flowchart for clarifying dangers of chemical substances



## 3 | TOPICS

### 1. Initiatives to achieve an occupational accident frequency rate of 0.2 or less

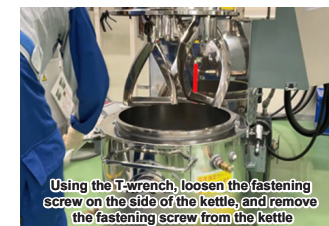
- We are working toward company-wide deployment of video procedures that even inexperienced workers and foreign workers can understand.
- By carrying out thorough risk assessment before each type of work, we will reliably communicate residual risk to everyone at partner companies. At the same time, we will further improve communication, and work as a team to prevent accidents.

### 2. Initiatives to achieve zero serious accidents

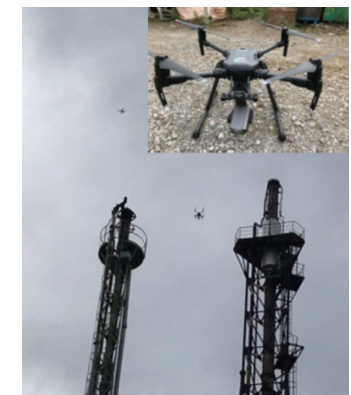
- Through the use of monitoring cameras, management and workers can check videos together, for things like whether workers are carrying out work according to procedures, or whether they are engaged in unsafe work practices. When there is a problem, everyone comes together to consider improvements, and procedures are revised. In this way, we are working to improve the workplace environment so everyone can work safely and securely.
- To check early for problems with safety equipment and devices, we use drones for inspection and monitoring of high locations.

### 3. Initiatives to establish and realize Denka's vision

- By putting in place an auditing system, we are working hard to ensure compliance, including at group companies. The mother plant at Denka is continually working as a team to support safety activities at affiliated companies.
- For education, we have adopted new instructional materials, and we are working hard to improve safety knowledge and understanding of the law throughout the group.



Example of a video procedure



Example of using a drone for equipment inspection

# Recurrence Prevention of Inappropriate Quality Conduct

We have formulated and are conducting specific measures based on the investigation report by the external investigation committee, disclosed on December 11, 2023. The latest progress is reported on Denka's website.

URL for our website: [https://www.denka.co.jp/progress\\_of\\_group\\_measure\\_to\\_prevent\\_recurrence/general\\_information/](https://www.denka.co.jp/progress_of_group_measure_to_prevent_recurrence/general_information/)

## 1. Actions to address issues identified in four areas

### Approach from the management standpoint

Issue	Countermeasure
(1) Strengthening governance	<ul style="list-style-type: none"> <li>◎ Develop a supervisory system by the Board of Directors</li> <li>◎ Strengthen internal control of group companies</li> <li>◎ Continually issue messages and provide communication by management</li> </ul>
(2) Improvement based on management strategy	<ul style="list-style-type: none"> <li>◎ Promote activities to create leeway and lower stress on the front lines</li> <li>○ Adopt psychological safety and non-technical skill education</li> </ul>
(3) Enhancement of company-wide systems	<ul style="list-style-type: none"> <li>◎ Clearly indicate quality compliance in internal rules</li> <li>◎ Adopt 360-degree evaluation in the personnel system</li> <li>○ Reflect in personnel evaluation system</li> <li>◎ Promote use of whistle-blowing system</li> </ul>

### Strengthening quality assurance functions

Issue	Countermeasure
(1) Review of quality system	<ul style="list-style-type: none"> <li>◎ Review and strengthen quality assurance functions</li> <li>○ Rebuild organization to ensure independence of plant quality assurance</li> <li>◎ Review and establish policy, internal rules, and guidelines</li> </ul>
(2) Review of quality assurance system	<ul style="list-style-type: none"> <li>◎ Strengthen function and role of quality assurance department</li> <li>○ Strengthen management of quality-related documents</li> <li>○ Improve and ensure commitment to design review and change management regulations</li> </ul>
(3) Stricter management of certification standards	<ul style="list-style-type: none"> <li>◎ Take corrective action toward normalization</li> <li>○ Address results of questionnaire surveys</li> <li>○ Incorporate certification standard registration into ISO 9001</li> <li>○ Create database and centralize management</li> <li>○ Review second comprehensive investigation</li> <li>○ Comprehensive inspection of specifications</li> </ul>
(4) Strengthening of auditing and supervision	<ul style="list-style-type: none"> <li>○ Consider development of new escalation process</li> <li>○ Establish quality risk secretariat</li> <li>○ Formulate plan for periodic questionnaire surveys</li> </ul>

### Strengthening quality foundations

Issue	Countermeasure
(1) Transmitting skills and reducing person dependency	<ul style="list-style-type: none"> <li>○ Establish procedures and records</li> <li>○ Ensure data integrity (review inspection data management methods)</li> </ul>
(2) Strengthening front lines	<ul style="list-style-type: none"> <li>◎ Establish a deliberative body covering all aspects of quality assurance</li> <li>○ Improve process capability index and strengthen production management</li> <li>○ Optimize personnel on front lines</li> <li>○ Address imbalances between specs and process capabilities</li> </ul>

### Human resources strategy and development

Issue	Countermeasure
(1) Human resources strategy	<ul style="list-style-type: none"> <li>◎ Develop human resources for quality assurance and centralize management</li> <li>○ Formulate human resources rotation standards</li> </ul>
(2) Human resources development	<ul style="list-style-type: none"> <li>◎ Strengthen quality compliance education</li> <li>○ Establish quality education program</li> </ul>

Actions labeled with ◎ and ○ are planned for implementation. ◎ : Implementation starting from FY2024, ○ : Implementation starting from the end of FY2024

## 2. Status of specific initiatives

### Approach from the management standpoint — Strengthening governance

Continually issue messages and provide communication by management

Due to quality irregularities and the fatal accident in the previous fiscal year, we are holding discussion meetings on safety and quality management whenever the President visits business sites. The objective is to raise the safety and quality awareness of each employee at each business site through direct dialogue with the responsible people on the front lines, and to foster a company culture with high psychological safety by sharing the issues confronting the front lines with top management and strengthening communication between levels.



Discussion meeting at the Omi Plant. Diverse opinions were exchanged on topics such as investments in DX

### Human resources strategy and development — Human resources development

Strengthen quality compliance education

In order to strengthen quality compliance through education, we have distributed quality compliance education videos to employees. Going forward, we will review content, distribution methods, and quality education programs to ensure we reach employees at all levels within the group.

**Bad News First(BNF)の心構え**

**Good Newsは聞く方は耳に心地よく、言う方は言いがたがる。反対に、Bad Newsは聞きたくない、言いたくない。これが重大問題を隠してしまう。Bad Newsこそ、いち早く伝えるべきである。**

**< 報告を受ける立場のみなさまに贈る BNF定着のためのポイント >**

- 1.報告に感謝する**  
言いたくないことを言った報告者はびくびくしている。勇気をもって報告してくれたその行動に対して、「先ず感謝」しましょう。
- 2.怒ってはダメ**  
「なぜそんなことになるんだ、バカ野郎！」などと怒ってしまうと、勇気を出して話した報告者は二度とBad Newsを言わなくなる。
- 3.質問は歓迎**  
一番欲しいのは早さ。「Bad」な現象を認識したときに詳細まではわからないケースが多い。いきなり「あれはどうなんだ？これはどうなんだ？なぜそうなった？」と矢張り早に質問してしまうと、次からは想定質問内容を事前に調べてからの初報となり、一番大事な早さが損なわれる。
- 4.その後の指示はOK**  
初報を受けて、「ここにも伝えよ。ここも調べよ。」などの以降の指示はOK。初報は既読確認がものをいう。加えて報告者にとっても道標となる。
- 5.後の改善 - ...「第二報が入ったから知らせて」**  
この言葉で報告者は、もう少し詳しい情報を第二報として報告し、さらに詳しくは第三報で、となる。「全部わかったら知らせて」といってしまうと、いつ報告が来るかわからない。

Example of instructional materials



## Quality Assurance Management

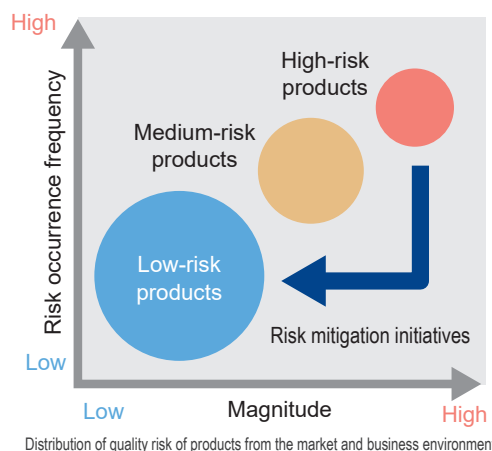
The Denka Group have established a quality policy that aligns with our management plan “Mission 2030,” and we are conducting quality assurance activities for our broad range of products. These products cover everything from organic chemistry, such as synthetic resin manufacturing and resin processing, to inorganic chemistry using methods such as highly functional powder control technology, and bio-related fields such as bacteria/virus incubation and antibody/antigen production technology.

### Quality Policy (Fiscal 2024)

Drawing lessons from quality irregularities, the Denka Group will take measures to prevent recurrence while addressing the situation with seriousness and the “integrity” that is one of our three core values. At the same time, we will ensure consistent quality compliance, continue product safety and quality improvement activities, earn the satisfaction and trust of all stakeholders, including Denka Group customers and the society at large, and thereby achieve the goals of Mission 2030.

### Quality Risk Assessment/Risk Reduction

The risk arising from each product is changing by social needs, such as the growing public call for businesses to contribute to the SDGs even as they strive to meet customer requirements for even higher product quality. With this in mind, we annually review results of the quality risk assessments for all products from the perspective of both the market environment and business environment. We also perform systematic initiatives to mitigate various quality risks based on assessments of their characteristics and magnitude.



### Chemical Substance Management/Product Safety

We routinely collect and monitor information on the revision of domestic and international laws concerning chemical substances. We strive to respond promptly and appropriately when changes are required in the chemical composition of products or chemicals used in production processes to ensure compliance with legal amendments and further safety.

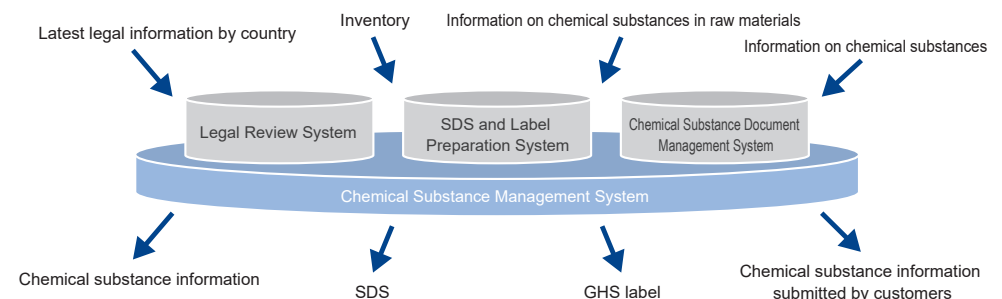
### Improvement of Quality Management System and Management Level

We are promoting the development of quality management systems to provide trustworthy products and services. We are working to further improve the quality of our products and ensure product safety by improving the level of management through our Customer Complaint Management System, which integrates and manages customer complaint information and leads to continuous quality improvement, and our Chemical Substance Management System, which coordinates information on chemical substances with product safety.

#### Customer Complaint Management System



#### Chemical Substance Management System





**Masanobu  
Kosaka**

Executive Officer  
Officer in Charge of Sustainability  
Promotion Department

## Message

### Contributing to Climate Change and Global Environmental Conservation

At Denka, sustainability is at the core of our management, and from the perspective of environmental, social, and governance (ESG), we see our mission as helping to conserve the global environment and achieve sustainable development of society. More specifically, we aim to achieve carbon neutrality by fiscal 2050, conserve the environment, and promote cyclic use of resources, and efforts to achieve these goals are clearly set out in our management plan, “Mission 2030.”

We announced our policy of achieving carbon neutrality by fiscal 2050 in fiscal 2020, and also set a new interim reduction target of a 60% (from emission levels in FY2013) by fiscal 2030 in fiscal 2023. To reach these goals, we will strongly promote measures such as the development and adoption of technology in processes that directly relate to emissions, promotion of energy conservation, and broader use of renewable energy. As one such initiative, we have begun considering adoption of new technology for producing acetylene in order to reduce non-energy derived CO<sub>2</sub> emissions. Denka has also adopted the goals of reducing waste, conserving natural resources, and contributing to a circular economy. To reduce waste, we are working to optimize manufacturing processes, recycle materials, and design products for longer service life. In the area of

natural resource conservation, we have begun to conduct surveys for biodiversity in accordance with the Taskforce on Nature-related Financial Disclosures (TNFD), which has announced new guidelines. As a contribution to the circular economy, we are working to chemically recycle polystyrene. This recycling technique involves chemically breaking down used polystyrene, returning it to the raw material state, and then polymerizing again. This allows us to produce recycled products with quality and properties on a par with new products. The demonstration equipment was completed in March 2024. This will allow us to participate in a platform bringing together citizens, corporations, and government, and we have started building a system for recovering used polystyrene. In addition to these activities, we are actively participating in international frameworks, such as the signatory to the United Nations Global Compact, announcing our support of the Task Force on Climate-Related Financial Disclosure (TCFD), and participating in the GX League. Thus, we are bolstering our efforts to achieve sustainability from a global perspective. Through a diverse range of initiatives, Denka will show its corporate stance aimed at the realization of a sustainable society, and paving a path towards the future with our stakeholders.

## FY2024 Environmental Policy

### Basic Policy

**We will pursue sustainability, contribute to global environment conservation, and improve corporate value.**

- 1** With the aim of creating the sustainable business value described in “Mission 2030,” we will work to realize carbon neutrality by 2050, promote recycling of resources, and conserve the environment while minimizing environmental impact.
- 2** We will strive to provide products and technologies that help reduce environmental impact from the perspective of LCA.

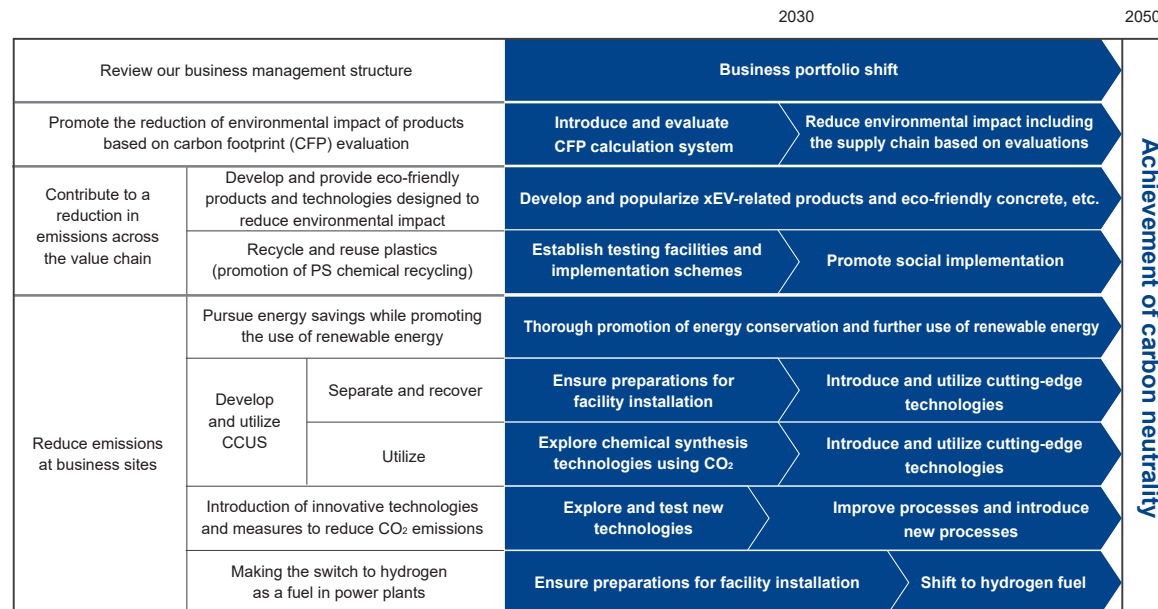
### Targets

- 1** Reduced emissions of CO<sub>2</sub>
- 2** Reduction of wastes
- 3** Conservation of natural resources
- 4** Contribution to a circular economy

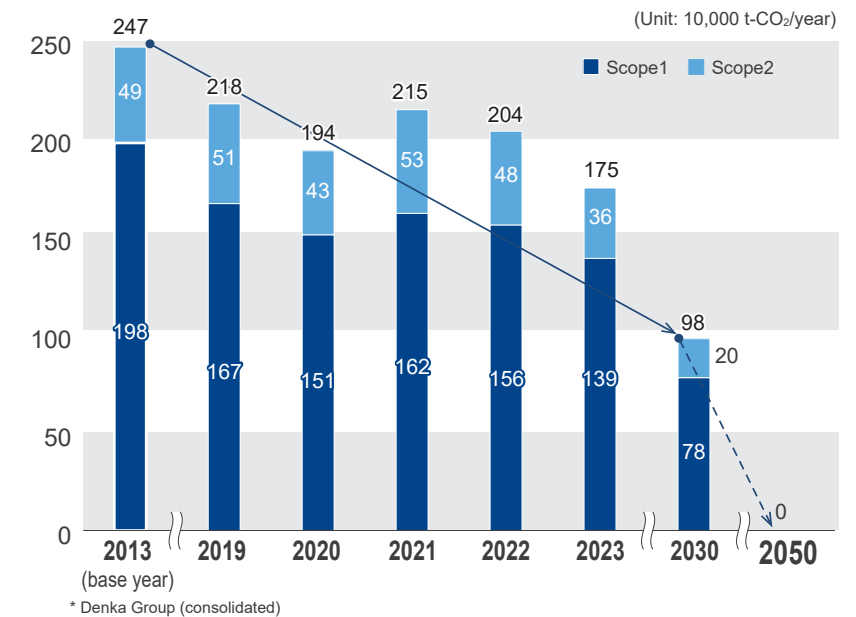
## Carbon Neutrality

For CO<sub>2</sub> emissions attributable to our company (Scope 1 and 2), we are aiming for a 60% reduction from FY2013 levels by 2030 and for carbon neutrality by 2050, so we will strive to convert raw materials, fuel, and processes, and to expand our energy conservation and use of renewable energy. We will also actively collaborate with business partners and local governments to reduce CO<sub>2</sub> emissions in the supply chain (Scope 3).

### Roadmap toward carbon neutrality



### Medium- and long-term targets for reducing greenhouse gas emissions (Scope 1 + 2)



## Regarding Scope 3 emissions

Scope 3 emissions in FY2023 were about 44% of total emissions (Scope 1+2+3). To actively promote increasing carbon neutrality of the entire supply chain, we will examine reduction of Scope 3 emissions from this fiscal year forward.

## Adoption of internal carbon pricing (internal carbon taxes)

At Denka, we have adopted an internal carbon pricing system for capital investment to further carbon neutrality. For our most recent investments, the price is set to ¥10,000/t-CO<sub>2</sub>, and this is used as a standard for determining profit and other figures. Going forward, we will investigate trends by governments and other countries, and review this pricing as appropriate.

## Participation in GX League

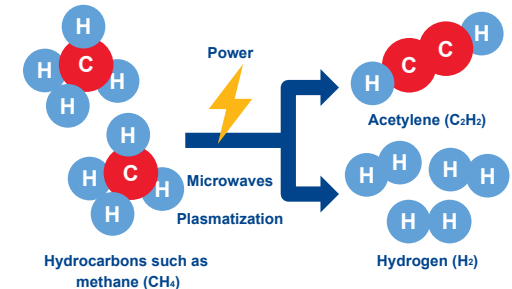
The GX League aims to promote discussion and practical action for the creation of new markets, through industry-government-academia collaboration, by a group of companies that will lead the transformation of the entire economic and social system. We are participating in the GX League as a company which has made a carbon neutral declaration, and we will work to achieve carbon neutrality through activities such as voluntary emissions trading.



## Introduction of innovative technologies and measures to reduce CO<sub>2</sub> emissions

With a target of net zero CO<sub>2</sub> emissions in 2050, we are jointly commercializing an innovative technology to produce acetylene from methane using a plasma process. This is being done together with Transform Materials, a US venture company. This technology does more than just reduce CO<sub>2</sub> derived from limestone. By effectively utilizing the hydrogen produced as a by-product we can make a major contribution to Denka's carbon neutrality (contribution to CO<sub>2</sub> reduction: approximately 300,000 tons/year). We are aiming for early implementation and realization through joint research with Transform Materials.

Conceptual diagram of acetylene production technology from methane



## Initiatives for Environmentally Conscious Products and Technologies

### Carbon Negative Concrete “CUCO” Project

CUCO is a consortium of 55 companies led by Denka, Kajima Corporation, and Takenaka Corporation implementing the “Green Innovation Fund Project/Project for Development of Concrete and Other Manufacturing Technologies Using CO<sub>2</sub>,” adopted by the New Energy and Industrial Technology Development Organization (NEDO). Through this project, we aim to realize highly versatile carbon negative concrete, develop construction technologies, establish quality assessment technologies, and promote the use of these technologies around the world. Also, through active CO<sub>2</sub> fixation in concrete—a goal we are pursuing through development of this technology—we will promote the transition from decarbonization to “active carbon” to play our role in the reduction of greenhouse gases.



CUCO website  
<https://www.cuco-2030.jp/>

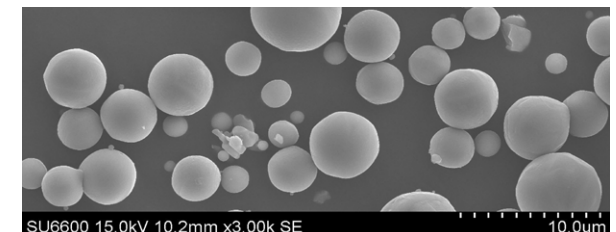
### Silicon Nitride Powder

Molded items using silicon nitride powder are lightweight, with outstanding high-temperature strength and fracture toughness. They are garnering attention for their excellent characteristics such as resistance to abrasion, corrosion, and heat shock. Heat dissipation technology is essential for xEVs and electric rail, where numerous heats generating electronic components are packed together. Silicon nitride is also used in bearing balls for wind power generation. Ceramic bearings have a high heat-resistant temperature, the ability to withstand high loads and high rotation speeds, and no rusting like steel bearings, and thus are contributing to the dissemination of offshore wind power.



### Denka Spherical Alumina

Spherical alumina (heat-radiating filler), developed by leveraging Denka's unique “spheroidization” technology based on high-temperature melting, enables superior filling in various resins and rubbers. This is effective for dissipating heat produced from sources like automotive lithium ion batteries, and reducing energy losses due to electrical resistance. An extensive lineup of products with different particle sizes enables closely-packed filling, so excellent heat dissipation characteristics are obtained, and the technology contributes to reduction of environmental impacts.





# Expansion of Renewable Energy Sources and Introduction of Power Generation Technologies with Low Environmental Impact

In the 109 years since our founding, Denka has cultivated technology for creating renewable energy—primarily hydroelectric power generation—and technology for fully exploiting that energy in chemical manufacturing. Going forward, we will continue to focus on initiatives toward further decarbonization for realizing carbon neutrality.

## 1 Future Outlook for Our Renewable Energy Generation Capacity

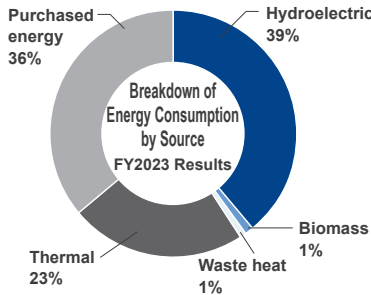
In order to achieve carbon neutrality by 2050, we are promoting efforts toward early attainment and going beyond our goal of “maximum renewable energy generation output: 150 MW” indicated in the non-financial KPIs of “Mission 2030.” At present, we are considering introduction of new solar power generation facilities at business sites, renewal of existing hydroelectric power plants (improvement of power generation efficiency), and, over the medium- to long-term, the possibility of introducing new power sources, such as development of hydroelectric power plants. We will accelerate these efforts going forward.

### Future Outlook for Our Renewable Energy Generation Capacity

	FY2005	FY2023	FY2030
Hydroelectric	111	140	141
Solar, etc.	3	6	13
Total	114	146	154

\* The above figures include 50% of the power output from power plants run by Kurobegawa Electric Power Company (a joint venture co-owned by Denka and Hokuriku Electric Power Company).

(Power generation capacity MW)



## 2 Denka Hydroelectric Power

The Omi Plant is geographically situated amid a web of 17 hydroelectric power plants, including power plants co-owned together with Kurobegawa Electric Power Company, which boast a total maximum output of approximately 140,000 kW, making this one of the largest private-owned power generation networks of its kind in Japan. Hydroelectric power plants generate virtually no greenhouse gases while serving as a renewable energy source with superior energy efficiency. Thus, these power plants are capable of harmoniously coexisting with the natural environment while generating electricity in a sustainable manner. About 1/3rd of our power demand is met with hydroelectric power, and by effectively using this resource, we will contribute to the realization of a sustainable society.

Hydroelectric power plants  
Japan

17 plants \* Includes co-owned plants  
Power generation capacity  
140,290 kW

\* As of August 2023, including Denka's ownership of output from power plants owned by a joint venture



New Omi-gawa Hydroelectric Power Plant (started operation in 2021)



New Himekawa No.6 Hydroelectric Power Plant (started operation in 2022)

## 3 Energy Conservation Initiatives

In terms of thermal power plants, we have introduced high-efficiency gas turbine power generation facilities at the Omi Plant (FY2020) and the Chiba Plant (FY2022), and these will contribute to energy conservation and reduction of CO<sub>2</sub> emissions. Looking towards the future, we are also investigating and considering power generation facilities using hydrogen gas single-fuel or mixed-fuel burning technology.



Gas turbine power generation facilities at the Omi Plant, which began operation in 2020



Gas turbine power generation facilities at the Chiba Plant, which began operation in 2022

## 4 Solar Power Generation Initiatives

Solar power generation facilities are currently operating at the Shibukawa and Isesaki Plants in Gunma Prefecture, and aside from these we are introducing facilities using PPA\* at our Chiba Plant and our plant in Vietnam. To increase renewable energy generation capacity, which is tied to the non-financial KPIs in our management plan “Mission 2030,” we are examining the potential for adoption throughout the Group, both inside and outside Japan.

\* Power Purchase Agreement (PPA): A system under which a power producer installs and operates a solar power generation facility on our company's site, and supplies the generated power to our company.



DENKA Solar Power Shibukawa

## Information Disclosure Based on the Recommendations of the Task Force on Climate-Related Financial Disclosure (TCFD)

Denka Group announced its support for TCFD in September 2020. Going forward, we will carry out ongoing assessments focused on risk and opportunities arising from climate change and other relevant factors, including changes in government policies, regulations and market conditions as well as technological breakthroughs in the course of across-the-board initiatives aimed at realizing the low-carbon society and decarbonized economy envisioned by the Paris Agreement.



### Governance

Denka's response to the problem of climate change over the medium- to long-term is overseen by the Officer in Charge of Sustainability Promotion, under the supervision of the Board of Directors. Non-finance matters deemed particularly important—including the formulation of targets and basic policies, priority measures, and the determination and evaluation of management indicators—are discussed by the Sustainability Committee (convened five times a year), with the Board of Directors making final decisions.

A working group has also been established for comprehensive management and implementation of environmental policy. At monthly meetings, the officer in charge serves as leader. Discussion includes practical issues, and responses to those issues are promoted. Important matters are reported to the Board of Directors.

### Risk management

Risks related to climate change is managed as a priority risk in Denka's risk management system. [▶ P77](#)

### Metrics and Targets

In our management plan "Mission 2030," we have set non-financial KPIs for achieving carbon neutrality, and are managing our progress.

**Reduction rate of CO<sub>2</sub> emissions (Scope 1+2)... 2030: 60% (of FY2013 levels), 2050: 100%**

**Maximum renewable power generation output... 2030: 150 MW (133 MW in FY2021)**

### Strategy

We are analyzing scenarios regarding the risks and opportunities of climate change, and we will continue verifying anticipated effects and countermeasures over the medium- to long-term. Through analysis, we will quantitatively ascertain business risks and opportunities for the Denka Group, and will incorporate these into our management plan and business strategies.

## Climate Change-related Risks and Opportunities Based on Scenario Analysis

■ Risks ■ Opportunities

Scenario	TCFD classification	Risk/opportunity event	Approach to calculating impact		Impact		Applicable Division	Main related business sites	Countermeasures
					Medium term (2030)	Long term (2050)			
1.5°C	Laws/regulations	Increased costs due to rising carbon taxes	Calculation of amount of carbon tax based on the carbon price projections of the IEA's WEO, taking GHG emissions in FY2022 as a reference point	Calculation of the cost share if decarbonization measures are not taken Calculation of the cost share if decarbonization measures are taken (reduction of CO <sub>2</sub> emissions (Scope 1, 2) by 60% by 2030, and 100% by 2050, from FY2013 levels)	¥43 billion ¥21 billion	¥77 billion ¥0	All divisions	Omi Plant	• Expansion of clean energy, support for energy conservation, and introduction of new technology
	Technology	Increased costs due to carbon reduction in manufacturing processes	Setting the environmental investment up to 2030 in the management plan "Mission 2030"		¥85 billion	—	All divisions	Omi Plant, Omuta Plant	• Reduction of CO <sub>2</sub> by more than 300,000 tons per year by switching manufacturing process to a "low-carbon acetylene chain" (methane to acetylene) • Pursuit of further profit through steps such as R&D to utilize by-product hydrogen
	Products/services	Growth in demand for products that contribute to decarbonization (silicon nitride, acetylene black, spherical alumina)	Calculation of increase in sales due to market growth rate, using sales results from FY2022 as a reference point		¥19 billion	—	Electronics & Innovative Products	Omuta Plant	• Augmentation of production facilities in line with increased demand
		Growth in demand for products that contribute to solving the food crisis (biostimulant market)	Calculation of increase in sales based on market growth rate, using sales results from FY2022 as a reference point		¥0.1 to 1 billion	—	Elastomer & Infrastructure Solutions Division	Denka Azumin Co., Ltd.	• Introduction of new products and expansion of sales • R&D on products with even higher functionality
3-4°C	Markets	Growth in demand for products which make effective use of CO <sub>2</sub> (LEAF concrete for CO <sub>2</sub> capture and fixation)	Calculation of increase in sales based on sales plan		¥0.1 to 2 billion	—	Elastomer & Infrastructure Solutions Division	Omi Plant	• Introduction of new products and expansion of sales • R&D on products with even higher functionality
		Increased raw material and fuel costs due to rising naphtha prices	Calculation of cost increase due to price inflation rate, taking the fuel purchase amount for FY2022 as a reference point (IEA WEO)		¥-4 to 6 billion	¥-5 to 12 billion	Polymer Solutions Division	Chiba Plant	• Promotion of recycling resources through chemical recycling of used polystyrene, and development/sale of biomass-derived raw material products incorporating things such as resins containing eggshell
	Physical risks	Increased raw material and fuel costs due to rising natural gas prices	Calculation of cost increase due to price inflation rate, taking the fuel purchase amount for FY2022 as a reference point (IEA WEO)		¥-6 to 1 billion	¥-8 to 1 billion	All divisions	Omi Plant, Chiba Plant	• Reduction in usage through process electrification • Energy conservation through optimization of production flow
		Increased damage to production facilities and suspension of production activities due to intensification of natural disasters	Calculation based on increase in annual rainfall and risk of flood damage at business sites near oceans and rivers		¥1 billion or less	¥1 billion or less	All divisions	Omuta Plant	• Review and strengthening of facility maintenance measures
	Products/services	Growth in demand for products (test reagents) that contribute to prevention and diagnosis of infectious diseases	Calculation based on market growth rate, using sales results from FY2022 as a reference point		¥17 billion	—	Life Innovation Division	Gosen Site	• Strengthening R&D and introducing new technology • Augmentation of production facilities in line with increased demand

## Initiatives for Biodiversity and the Taskforce on Nature-Related Financial Disclosures (TNFD)



The Denka Group has set forth “Reduction of environmental burden and the preservation/protection of biodiversity” in our ESG Basic Policy, and are working hard to understand the environmental impact of our business activities, and to avoid, mitigate, and compensate for risks, while promoting activities cognizant of preserving and improving biodiversity in the areas near our business sites.

As part of these efforts, we began assembling information in accordance with the disclosure framework of the Taskforce on Nature-Related Financial Disclosures (TNFD), an international initiative for nature-related information disclosure, and carrying out survey activities, analysis, and evaluation necessary for disclosure in September 2022.

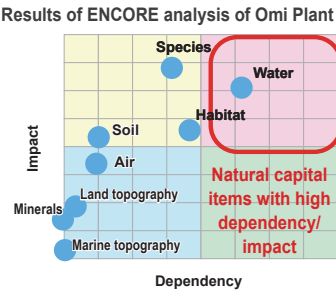
Based on the understanding, gleaned through preliminary surveys, that the characteristics of natural capital vary by region, we are conducting surveys and analysis via the “LEAP approach”<sup>\*</sup> recommended by TNFD for nine production and research sites in Japan. By FY2024, we will evaluate all nine sites, and use this to drive concrete actions for addressing issues relating to biodiversity.

<sup>\*</sup> LEAP approach: An integrated approach for scientifically evaluating contact points and dependency relationships between business activities and nature, as well as impacts, risks, opportunities, and other nature-related issues

### Latent dependencies and impacts on natural capital

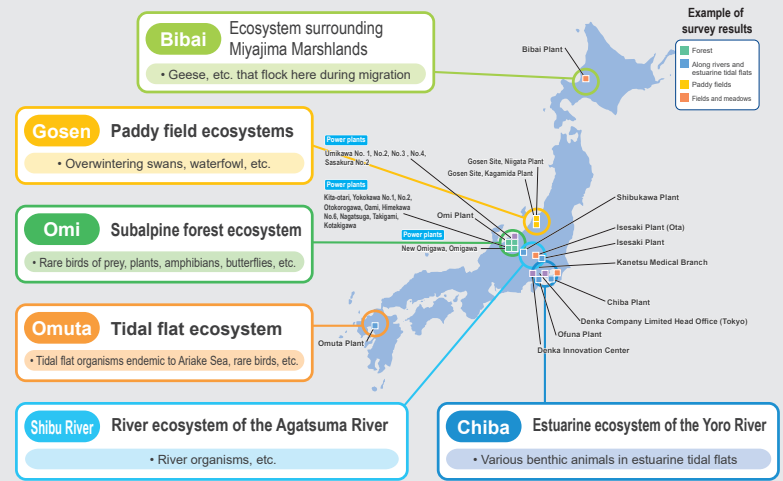
By using the nature-related risk analysis tool “ENCORE”<sup>\*</sup> recommended by TNFD, we have analyzed latent dependencies and impacts on natural capital for five domestic business sites where we carried out surveys from September 2022 to March 2024. At the Omi Plant, we identified potential risks in the nature category for species, water, and habitats.

<sup>\*</sup> ENCORE (<https://encorenature.org/en>): A tool for focusing in by sector or sub-industry, and checking dependencies and impacts on nature for each production process



### Our domestic plants and the surrounding natural environment (ecosystems)

Our business sites are scattered across Japan, and the surrounding natural environment varies. We are conducting surveys on the points of contact with the natural environment at each business site and evaluations for biodiversity.



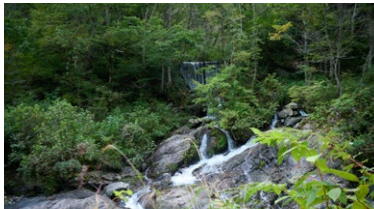
## Relationship between Domestic Business Sites (Plants) and Natural Capital, Priority Regions, etc.

We assembled environment data and evaluated site environments for five domestic business sites. The results are set out in the table at right. For the five sites, we identified ecosystem integrity relating to natural capital for which our business activities have high impact and dependency, and priority regions and key conservation targets in line with their materiality. To examine the potential for sustainable use of hydroelectric power, we carried out a survey for the Omi Plant to check the situation of the forest distributed in the catchment area. We also conducted a survey of the natural environment of the Tomi Plant green space. We have checked for the presence of the important plant species *Calanthe puberula*, the important bird species *Certhia familiaris*, and other species which contribute to biodiversity. Going forward, we will expand our surveys and evaluations based on the LEAP approach to other business sites, and identify priorities to be addressed.

Site subject to evaluation in FY2023	Natural capital with high impact/dependency	Priority region and main conservation target (target with issues relating to the natural environment, where the site has assets or activities)
Omi Plant	Water	Catchment area of intake weir for hydroelectric power generation (water conservation forest)
	Species	Interval with intake weir for hydroelectric power generation from Hime River estuary (fish)
	Habitat	Tomi Plant green space
Bibai Plant	Species	Miyajima Marshlands and surrounding agricultural land (greater white-fronted geese visit during migration)
Gosen Office	Species	Agricultural land near plant (overwintering swans)
Shibukawa Plant	Water	Intake of plant water (Tone River)
	Species	Various organisms constituting the river ecosystem of the Tone River
Omuta Plant	Habitat	Coastal area of Ariake Sea, including plant and related facilities



Survey to check siting environment



Catchment area



Calanthe puberula (orchid family)





## Ikuo Ishida

Managing Executive Officer  
Chief Human Resource Officer

### Message from CHRO

One year has passed since the start of our management plan “Mission 2030”. We are making steady progress on the various KPIs we have set. To continue this progress and achieve the targets of the management plan “Mission 2030”, we recognize the importance of accelerating transformation of our business portfolio by integrating our management and human resources strategies, and boldly investing in and reallocating human capital. We will also strive to create an environment where diverse human resources mutually respect each other, sharpen each other’s skills, and bring out the potential of each individual to the fullest. In this way, we will produce a consistent stream of human resources capable

of contributing to the creation of business value in a sustainable fashion. We want to focus on creating a corporate culture where each employee considers career building and their life story, and energetically tackles challenges in every area. To make the management plan “Mission 2030” more well-grounded, we will create more opportunities to visit each site of the Denka Group and engage in dialogue directly with employees. We will deploy additional necessary measures while seeing first-hand the situation on the front lines. I believe my mission is to create a favorable environment where each employee can sense their own growth, and the company can grow together through those measures.



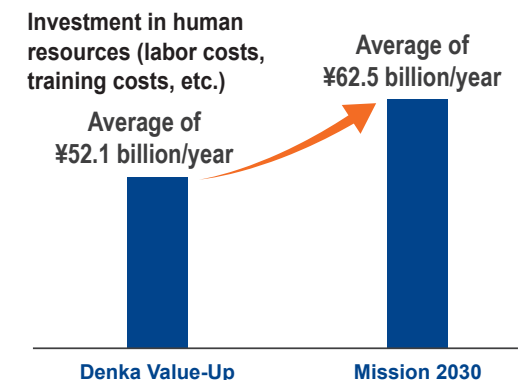
### Human resources value creation

## Denka’s core values of “initiative”, “integrity”, and “empathy” make it a company where each individual can realize personal growth

In our management plan “Mission 2030”, we established three policies—strengthening our human resources development system, promotion of diversity, equity and inclusion, and health and productivity management and work style reform—and set strategies and 2030 targets based on those policies. For investment in human resources, we plan to invest 500 billion yen over eight years, with the objective of being a company where each person can feel a

sense of their own growth through Denka’s core values of “initiative,” “integrity,” and “empathy.” In addition to our active efforts to effect system reform, we periodically conduct employee awareness surveys and identify issues. Then we formulate and implement improvement measures.

Policy	Strategy	KPIs (2030 target)
Strengthening of human resources development system	Cultivation of future executive manager candidates, building of company-wide, integrated education framework, and fostering of a selfdirected learning culture	<b>Average training costs 2 times that of FY2021</b>
Promotion of diversity, equity & inclusion	Fostering of workplace environments, systems, and culture that empowers individuals with diverse ways of thinking to demonstrate their capabilities	<b>Ratio of women, foreign nationals, and mid-career hires in managerial positions 50%</b>
Health and productivity management and work style reform	Promotion of system reforms to create workplaces that employees will “want to come to work again tomorrow”	<b>Visualization and ongoing improvement of engagement</b>





## Previous Human Resources Initiatives and KPIs

In the creation of human resources value under the “Mission 2030” management plan, we set medium- to long-term KPIs linked to our policies of strengthening of human resources development system, promotion of diversity, equity and inclusion, and health and productivity management and work style reform.

Policy	Measures	2020	2021	2022	2023	2024
Strengthening of human resources development system	Improve personnel systems and evaluations	<ul style="list-style-type: none"> <li>Abolished qualification levels</li> <li>Integrated into job levels</li> <li>Established new job allowance</li> </ul>			<ul style="list-style-type: none"> <li>Launched strategic personnel changes</li> <li>Reviewed human resource development programs</li> </ul>	<ul style="list-style-type: none"> <li>Introduced system to support self-improvement</li> </ul>
	Improve employee treatment	<ul style="list-style-type: none"> <li>Revised wages for M-category employees</li> <li>Established conversion system from S-category to M-category employees</li> </ul>				
	Improve management	<ul style="list-style-type: none"> <li>Launched succession plan</li> <li>Established Career Planning Committee</li> </ul>				
Promotion of diversity, equity & inclusion (DE&I)	Active employment and promotion of female managers	<ul style="list-style-type: none"> <li>Started providing support to balance work and nursing care commitments, developed seminars and video viewing programs</li> </ul>		<ul style="list-style-type: none"> <li>Launched project to facilitate the hiring and promotion of females for managerial positions</li> <li>Established new investment limits to improve the workplace environment</li> <li>Acquired Kurumin certification</li> </ul>	<ul style="list-style-type: none"> <li>Expanded recruitment portfolio</li> <li>Held seminars to provide support for balancing work and childcare commitments</li> </ul>	<ul style="list-style-type: none"> <li>Established company-wide policy for promoting DE&amp;I</li> <li>Acquired Kurumin certification (2nd time)</li> </ul>
	Support for balancing work and childcare commitments					
Work style reform	System	<ul style="list-style-type: none"> <li>Introduced telework system</li> <li>Introduced staggered working hours system (revised)</li> </ul>	<ul style="list-style-type: none"> <li>Establishment investment limits to improving the workplace environment</li> </ul>	<ul style="list-style-type: none"> <li>Relaxed requirements for employees to take childcare and nursing care leave</li> <li>Introduced Shinkansen commuter passes</li> <li>Hourly paid leave trials began at all production sites</li> </ul>	<ul style="list-style-type: none"> <li>Systemized innovative working styles (telework, etc.)</li> <li>Expanded shift breakers</li> <li>Started in-house recruiting system</li> </ul>	<ul style="list-style-type: none"> <li>Initiated wellness leave (leave for menstruation, infertility treatments, and donor activities)</li> <li>Established system for hourly paid leave</li> </ul>
	Employee engagement	<ul style="list-style-type: none"> <li>Conducted 2nd Employee Awareness Survey</li> <li>Conducted 3rd Employee Awareness Survey</li> </ul>				
Promotion of health and productivity management	Systems and initiatives	<ul style="list-style-type: none"> <li>Established Health Promoting Section</li> <li>Announced Declaration of Health and Productivity Management</li> <li>Introduced Health Support App (&amp;well)               <ul style="list-style-type: none"> <li>Recognized as a Certified Health &amp; Productivity Management Organization 2022</li> <li>The 1st labor and management jointly sponsored walking contest</li> </ul> </li> <li>Recognized as a Certified Health &amp; Productivity Management Organization 2023 and part of the White 500</li> <li>Held Denka's Health Week (seminars)</li> <li>Held gait measurement sessions to prevent falls (all production sites)</li> <li>Decided on future policies aimed at a workplace free of passive smoking</li> <li>Began offering support to quit smoking</li> <li>The 2nd labor and management jointly sponsored walking contest</li> </ul>				

Policy	KPI	FY2022 results	FY2023 results	2030 KPI progress and target
Strengthening of human resources development system	Average training costs (per person) *Head Office	¥66,000	¥69,000	Average training costs 2 times that of FY2021 ¥53,000
Promotion of diversity, equity & inclusion	Ratio of female/foreign/experienced hires in management positions	19%	20%	50%
	Percentage of male employees to take childcare leave	44%	53%	85%
	Percentage of mid-career hires	47%	47%	50%
Promotion of work style reform and health and productivity management	Improve employee engagement	Created action plan for issues identified based on results of analyzing 3rd Employee Awareness Survey		
	Overtime hours (person/year)	157 hours	147 hours	30 hours or less
	Rate of taking annual paid leave	80%	81%	100%



## Strengthening of Human Resources Development System

### Strategy

#### Cultivation of future executive manager candidates, building of company-wide, integrated education framework, and fostering of a selfdirected learning culture

##### • Cultivation of future executive manager candidates

As part of promoting our succession plan for strategically cultivating future executive managers, we have been operating a "Career Planning Committee" (CPC) chaired by the CHRO since FY2023. The CPC provides opportunities for development by giving "tough assignments" to human resources at or above the manager level who have been selected based on recommendations by executive officers.

##### • Building of company-wide, integrated education framework, and fostering of a selfdirected learning culture

To realize "human resources value creation", we will develop a consistent company-wide education system that enables people to "be the best they can be" — as stated by our human resources development policy — and we will strive for all employees to be "specialists." We have also put in place a self-improvement support system to provide support for each employee as they realize the career they aspire to, and tackle the challenges of building their own life.

### FY2023 initiatives

#### • Cultivation of future executive manager candidates

At the FY2023 CPC, a reassignment plan dated April 1, 2024 was decided for a total of 16 of the selected department and section managers.

While periodically reviewing the selected staff, we will strive to expand and improve our human capital through continuing efforts every year.

#### • Building of company-wide, integrated education framework, and fostering of a selfdirected learning culture

While building our development system, we have made efforts focusing on three priority measures: (1) Establishing new megatrend education, (2) Strengthening and expanding level-based education, and (3) Expanding and improving measures to support independent career building.

## Promotion of diversity, equity & inclusion

### Strategy

#### Fostering of workplace environments, systems, and culture that empowers individuals with diverse ways of thinking to demonstrate their capabilities

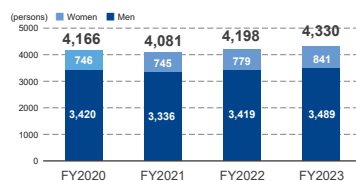
At Denka, our slogan for promoting diversity, equity, and inclusion is "a company where everyone can aim to be the best they can be." We will create business value that makes the world a better place, and become a company that is continually chosen by society.

### FY2023 initiatives

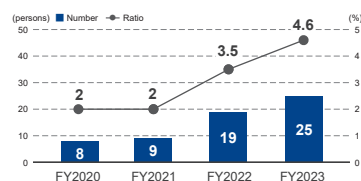
As efforts toward equity promotion in FY2023, we continued measures to support balancing work with nursing care or childcare commitments, and in January 2024, we acquired Kurumin certification (for the second consecutive time) from the Ministry of Health, Labour and Welfare as a company supporting childcare.

To rise to a new stage of diversity, equity, and inclusion promotion, we will incorporate outside viewpoints, sort out issues, and formulate and steadily deploy company-wide policies and measures for the future.

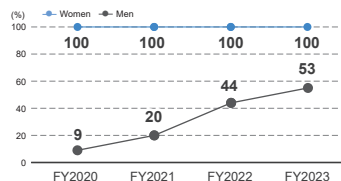
Number of men and women employed (main offices)



Current ratio and number of women in managerial positions (main offices)



Percentage of employees taking childcare leave (main offices)



## Health and productivity management and workstyle reform

### Strategy

#### Promotion of system reforms to create workplaces that employees will "want to come to work again tomorrow"

To create workplace environments where employees can work actively and in good physical and mental health, and be a company where employees realize their own growth and want to come to work again tomorrow, we have established the improvement targets of "reduction of employees with high stress levels" on the psychological side, and "increased number of employees within appropriate weight limits" on the physical side. In particular, will deploy measures with a focus on exercise habits and smoking as priority issues.

In light of the results of our health issues analysis, we have added worsening lifestyle disease risks and aging employees as priority issues. We have adopted the goals of "enhancing approaches for Prediabetes" and "reducing fall accidents", and we have also strengthened related measures.

### FY2023 initiatives

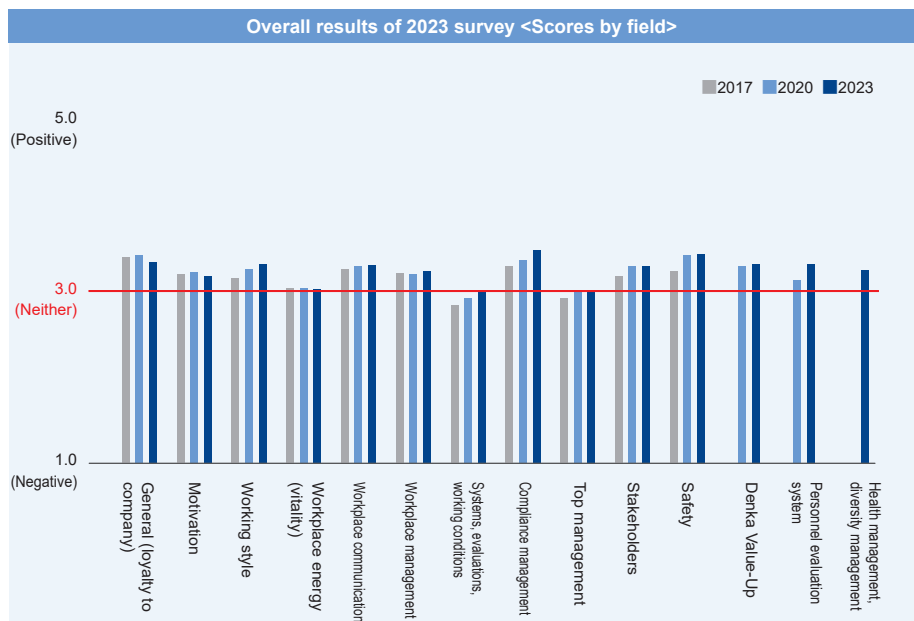
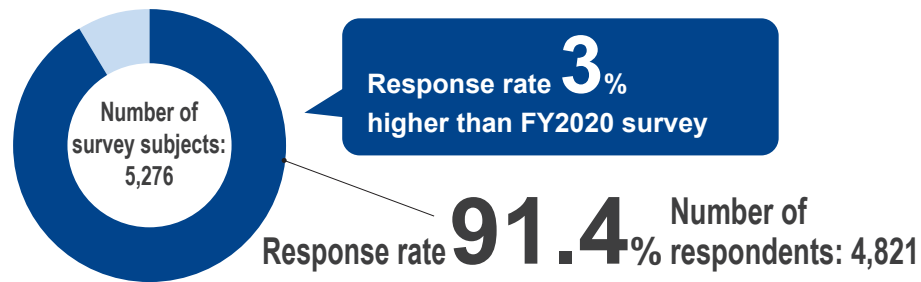
To further advance employee understanding of health management, we have designated the final week of May each year as "Denka's Health Week," and by holding daily health seminars during this period as well as labor and management jointly sponsored walking contests, we have worked to not only establish good exercise habits, but also to promote in-house communication.

To shift toward workplaces free of passive smoking, we have mandated no smoking during some working hours, and introduced purchasing assistance for remote smoking cessation guidance, smoking cessation clinics, and smoking cessation aids (patches, gum), so smokers can choose an approach that suits their circumstances.

In addition, to reduce falling accidents, we have held gait measurement sessions at each work site and provided practical exercise guidance based on measurement results, thereby helping participants to take responsibility for themselves, and raising their awareness of activities they should practice.

## Conducted Employee Awareness Survey

At Denka, we introduced an Employee Awareness Survey in 2017 with the objective of understanding how employees think about the company and their jobs, and their awareness of problems, and creating workplace environments with greater job satisfaction. We conducted this survey for the third time in the spring of 2023. This time, we measured the effectiveness of measures taken based on the results of the previous two times. We are considering steps to address new issues, and moving to implementation.



As a result of the three employee awareness surveys conducted, points improved in multiple fields. Of note, "Safety" scored relatively high in the Company, where we place the utmost priority on safety. This shows that the thorough safety education and guidance system has succeeded in increasing awareness regarding employee safety even higher. Furthermore, we believe that the opportunities for learning improved in "Compliance Management" and the promotion of acquiring leaves, dissemination of hybrid work, and other initiatives related to work style reform in "Work style" have led to the improved evaluation. In "Systems, evaluations, and treatment," we believe that our efforts to build a workplace environment, revision of various human resources such as the evaluation system, and other initiatives being positively received have led to this result.

### Issues and Measures to be Addressed in the Future

#### Issue (1) Work Style

##### Leveling and streamlining of work

##### Issues

- Work gets concentrated on specific people due to person dependency of work
- Work load varies depending on the time/season, and it is hard to even it out
- Managers do not make time for necessary management work

##### Measures

- Make work visible and streamline work through process reform
- Improve the skill level of all employees by strengthening human resource development

#### Issue (2) Management

##### Review of responsibilities and authority, and realization of communication to improve sense of unity

##### Issues

- Approval process is too long
- Dissemination of information on management decisions to employees
- Communication between top management, middle management, and front line employees

##### Measures

- Promote delegation of authority
- Actively issue messages from top management
- Have the officer in charge explain important management decisions to employees
- Improve understanding and acceptance of decisions

#### Issue (3) Workplace climate and culture

##### Creating a workplace with job satisfaction (satisfaction + ease of work)

##### Issues

- Have habits and constraints due to the past
- Hard to understand the situation and circumstances in other departments
- Pressed by day-to-day work, and do not have the leeway to tackle challenges

##### Measures

- Improve understanding of other departments through rotation between departments and job types
- Find extra time through work reform or outsourcing, and create a workplace where it is easier to tackle challenges

#### Issue (4) Systems

##### Introduction and use of strategic personnel system

##### Issues

- Transfers between departments and job types are rare, and work tends to fall into a repetitive pattern
- It is hard for the younger generation to envision their career
- Desire for introduction of systems (flextime, incentives for younger workers, etc.)

##### Measures

- Introduce more active personnel transfers and in-house recruiting system to support career building
- Actively disseminate information on personnel systems and working condition improvements
- Identify issues and consider improvements through a company-wide reform project

## Message from the Chairman

### Enhancing Corporate Governance for Sustainable Management

In modern society, we are being continually exposed to rapid climate change, drastic geopolitical shifts, and the ever-evolving advancements in AI and other digital technologies. For companies facing these changes, sustainable management is required to enhance corporate value over the long term, which involves responding to global environmental and societal demands while balancing corporate value growth and contributing to the interests of various stakeholders. There is growing support for strengthening the role of the Board of Directors in pursuing ESG management—an essential non-financial objective—and in balancing achievements in medium-term SDGs with financial objectives such as performance and capital efficiency. In response to these trends, our Group has implemented various measures aimed at strengthening corporate governance, with the objective of steadily transitioning from a management board to a monitoring and advisory board.

In addition to enhancing the effectiveness of the Audit Committee system, we have streamlined the Board of Directors, increased the ratio of outside directors, utilized a skills matrix, and clarified accountability through the expansion of performance-linked ratio of the executive compensation system. This year, we have also strengthened diversity by increasing the number of female directors and enhanced supervisory functions by appointing a non-executive chairperson for the Board of Directors.

Currently, our company is implementing the management plan “Mission 2030”, targeting the fiscal year 2030. Under the leadership of the president, employees are working together to simultaneously respond to the deteriorating economic environment surrounding our business and to implement fundamental structural reforms with a long-term perspective. The Board of Directors will use our current measures to support appropriate and swift decision-making for execution aimed at achieving financial goals, while also keeping a close watch on progress towards non-financial objectives and fulfilling its supervisory and advisory roles. Going forward, we will continue to further revitalize the Board of Directors, contributing to the realization of sustainable management that balances the pursuit of non-financial goals aligned with societal demands and the long-term enhancement of corporate value.

### Response to Key Management Priorities

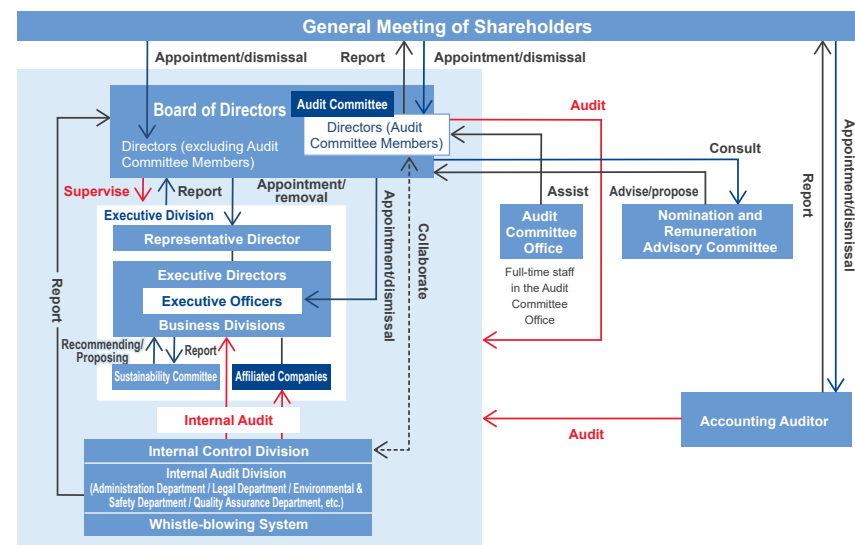
Regarding the major safety accident and quality incidents that occurred last year, we established an external investigation committee and confirmed the progress and results of the investigation. The issues and corrective measures raised by this committee were regarded as top priority management issues by the Board of Directors, and through supervision and advice in detailed discussions, we encouraged secure and timely execution. Furthermore, the Board of Directors will continue to strengthen its oversight to prevent recurrence.

With regard to the business portfolio reform that is central to the management plan, following our withdrawal from the cement business, the Board of Directors is striving to make appropriate and swift decisions through in-depth discussions with the executive team on the large-scale business reorganization that is being planned.



**Manabu Yamamoto** Chairman and Director

### Corporate Governance System





## Message from Outside Directors

### Business Portfolio Reform and the Role of an Outside Director and Audit Committee Member

The environment surrounding our company is far from stable, and we recognize that business reorganization, including a review of our business portfolio, is necessary in our company's management. Under these circumstances, as an Outside Director and Audit Committee Member, as well as a certified public accountant with expertise in financial accounting, I intend to continue cooperating with the executive management team and carrying out the following actions.

#### 1. Review and Support of Management Strategies

I will confirm the effectiveness of the strategies for reviewing the business portfolio and business reorganization formulated by our executive management team, while providing opinions as a financial and accounting expert.

#### 2. Recognizing Risks and Challenges

The review of the business portfolio and business restructuring involves risks and challenges. I will share the executive management team's response measures to these risks and their future business outlook, providing advice as necessary.

#### 3. Commitment to Sustainable Growth

To support the company's sustainable growth, I will assist the executive management team by analyzing financial aspects and management indicators as a certified public accountant.

#### 4. Ensuring the Accuracy of Financial Information and Preventing Fraud and Illegal Actions

The enhancement of our company's internal control organization is essential for ensuring the accuracy and propriety of financial information and preventing fraud and illegal actions. As a certified public accountant, I will evaluate the internal control framework and risk management system.

By taking the above actions, I will continue to work with the executive management team to enhance the corporate value of our company, while improving its reliability and transparency, ensuring that we provide highly reliable information to shareholders and investors.



**Toshio Kinoshita**

Director, Audit Committee Member



**Nakata Rumiko**

Director

### Monitoring for Enhancing Denka's Human Resources and Management Value

My name is Rumiko Nakata, and I assumed office as an outside director on June 20, 2024.

I hope to contribute to increasing Denka's corporate value by leveraging my experience in pharmaceutical and materials manufacturing companies. Last year, Denka developed a new vision as part of the management plan "Mission 2030". It was wonderful that young members were involved in creating their own new vision. The future of Denka will be built by its young members of today. If they take this new vision as their own, using it as a guide for actions and decisions, and create new achievements on the foundation of the traditions and numerous assets that have been built so far, we will create something unbeatable here at Denka.

In today's environment of increasing job mobility, the source of a company's competitiveness lies in its people, corporate culture, and organizational climate, and their importance continues to grow.

As a material manufacturer, Denka must simultaneously pursue both quality and safety, and consequently, Denka tends to adopt a more traditional communication style. However, it is crucial to create a corporate climate where diverse people can freely express their opinions, feel respected, and maximize their potential regardless of age, experience or background, while also making use of the positive aspects of traditional communication.

From the perspectives of human capital and organizational culture, I hope to contribute as an outside director by monitoring to help Denka evolve and enhance its human resources and management value.

Board of Directors



Photo taken on July 8, 2024

Mizuhiro Uchida  
Director  
(Full-time Audit Committee Member)

Miyuki Matoba  
Outside Director  
(Audit Committee Member)

Akio Yamamoto  
Outside Director  
(Audit Committee Member)

Toshio Kinoshita  
Outside Director  
(Audit Committee Member)

Manabu Yamamoto  
Chairman and Director

Toshio Imai  
Representative Director,  
President & Chief Executive Officer

Rumiko Nakata  
Outside Director

Kazuo Takahashi  
Representative Director

Ikuo Ishida  
Director

• See here for Director profiles. <https://denka.disclosure.site/ja/themes/673>

## Our View on the Appointment of Directors

Under the Denka Vision formulated in 2022, to achieve the eight-year management plan “Mission 2030” through fiscal 2030, the Company aims to strengthen the management structure with Directors and Executive Officers, while enriching the governance structure and supervisory function. In electing Directors, internal Directors are chosen from persons who possess a wealth of experience and achievements in various divisions within the Company, while also possessing insights and adequate specialized knowledge as Director, and Outside Directors are chosen from persons who possess the specialization required for continuous growth and improvement in corporate value of the Company and wide insights based on a wealth of business

experience and management experience at other companies. The Company believes that it is important for the Board of Directors as a whole to elect from persons who possess expertise and wide insights based on a wealth of business experience and management experience at other companies required for the improving corporate value, and consist of a good balance of personnel with a variety of knowledge, experience, and abilities, and ensure that the composition of the Board of Directors is diverse in terms of gender, international background, work history, and other factors. Additionally, the Company believes that Independent Outside Directors should comprise at least one-third of Directors. The present ratio is approximately 44%.

### Skills Matrix of the Board of Directors

			Attributes			Skills											
			Independent/Outside	Number of years in office	Gender	Corporate managing/Corporate planning	Human resources value creation	Global business	Financial strategy/Accounting	Legal/Compliance	ESG/Sustainability			Business value creation/Marketing	Research/Intellectual property	Technology/Manufacturing	DX
											E: Environment	S: Social	G: Governance				
Chairman and Director	Manabu Yamamoto			11	M	○	○	○				○	○	○			
Representative Director, President	Toshio Imai	President and Chief Executive Officer		5	M	○	○	○			○		○	○			
Representative Director	Kazuo Takahashi	Senior Managing Executive Officers		3	M	○	○	○		○					○	○	○
Director	Ikuo Ishida	Managing Executive Officer		1	M	○	○	○		○				○			
Director	Rumiko Nakata		○	—	F		○					○					
Director	Mizuhiro Uchida	Full-time Audit Committee Member		1	M				○	○		○	○				○
Director	Toshio Kinoshita	Audit Committee Member	○	9	M			○	○				○				
Director	Akio Yamamoto	Audit Committee Member	○	9	M	○	○	○						○			
Director	Miyuki Matoba	Audit Committee Member	○	3	F					○		○	○		○		

\* The matrix above shows the skills that the Board of Directors expects from them among the knowledge and experience they possess. \* Years of service are shown as of June 20, 2024. \* F: Female, M: Male

#### (Reference: Skill matrix for managing executive officers who do not concurrently serve as directors)

Kazuya Tokumoto	Managing Executive Officer			M	○		○			○	○			○	○	
Rimiru Hayashida	Managing Executive Officer			M	○			○				○				
Yukio Sasagawa	Managing Executive Officer			M						○	○			○	○	○
Hideki Toya	Managing Executive Officer			M						○	○			○		

## Necessary Skills for the Board of Directors and the Reason They Were Selected

The skills considered necessary for the Company's Board of Directors to make important decisions and supervise management under Denka's vision formulated in 2022 to reach the goals of the Company's eight-year management plan through

### Corporate management/Corporate planning

Directors are needed who have extensive management experience and achievements to establish and review management plans aimed at realizing the Denka's Vision and supervise the execution of duties to achieve these plans.

### Human Resources Value Creation

Directors are needed who have extensive knowledge and experience related to human resources value creation in order to realize human resource investment and system reforms, aiming to become a company where each and every employee can gain experience self-realization and personal growth.

### Global business

Directors are needed who have extensive experience in global business to fulfill our Purpose to "making the world a better place as specialists in chemistry" with an awareness of global megatrends.

### Financial strategy/Accounting

Directors are needed who have extensive knowledge and experience in the financial strategy and the accounting field not only to ensure the accurate disclosure of financial information, but also to drive selection and concentration of businesses, pursue optimal capital structure and improve profitability and efficiency.

### Legal/Compliance

Directors are needed who have robust knowledge and experience in the legal and compliance fields to ensure fair and trustworthy corporate activities appropriately responding to increasingly complex legal systems and regulations in Japan and abroad.

### ESG/sustainability/E (Environment)

Directors with extensive knowledge and experience in E (Environment) are needed to fulfill corporate social responsibility working on the precondition for continuation of business, "Achievement of carbon neutrality," "Sustainable cities and fulfilling daily lives," and "Environmental conservation and minimization of environmental footprint."

### ESG/Sustainability/S (Social)

Directors with solid knowledge and experience in S (Society) are needed to fulfill corporate social responsibility through the provision of safe and high-quality products, respect for human rights, and participation in the effort to build a better community.

fiscal 2030, and to promote ESG management through the priority management materiality issues are as follows.

### ESG/Sustainability/G (Governance)

Directors with solid knowledge and experience in G (Governance) are needed to fulfill corporate social responsibility building a more advanced and effective corporate governance system that ensures transparency and fairness based on high ethical standards.

### Business value creation/Marketing

Directors are needed who have market insight based on a broad perspective, as well as extensive business experience to ensure that all the three focus areas, ICT & Energy, Healthcare, and Sustainable Living, will be fully made up of "three-star businesses" that incorporate the three elements of specialty, megatrends, and sustainability, while promoting the transformation of business portfolio, considering also selling or exiting a business that is difficult to convert to a "three-star business."

### R&D/Intellectual property

Directors are needed who have a track record of promotion of innovation, as well as deep knowledge in science and technology and a wealth of experience in proprietary technologies and intellectual property, in order to create business value in the three focus areas of ICT & Energy, Healthcare, and Sustainable Living.

### Technology/Manufacturing

Directors are needed who are deeply familiar with technology, and who have extensive practical experience and robust insight into manufacturing are needed to create management values through process reforms to improve productivity, ensure trustworthiness in manufacturing, and establish a safe work environment.

### DX

Directors are needed with profound knowledge and extensive experience related to digital technologies and data utilization, as well as the ability to understand and analyze the nature of the Group's business and use this insight to transform it are needed to promote the transformation of business model and organization through process reforms.

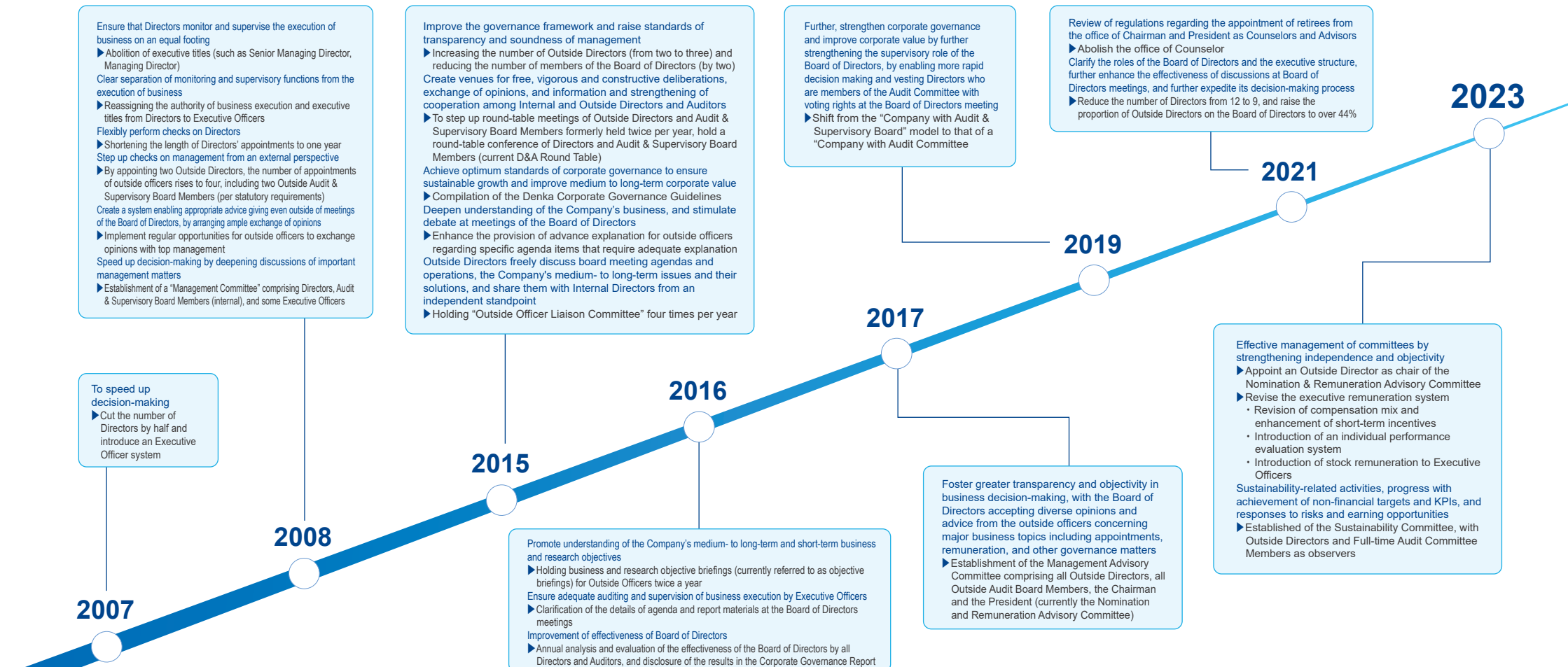


## Basic Approach to Corporate Governance

To fulfill the expectations and trust of its many stakeholders, including shareholders, customers, local society, and employees, based on Denka's Vision (a vision of the future) comprising the Core Value that is the Company's DNA to serve as the foundation to support the tiers above, Purpose that serves as the North Star to guide the Company, and the Mission that the Company aspires to accomplish by 2030, the Company strives to strengthen its business foundation by improving its

earnings power and expanding the scope of operations, while also working to improve corporate value by making every effort to continue being a company that can win the trust and sympathy of society. The Company considers corporate governance as the foundation for the above, and so we have striven to strengthen governance, to fulfill the responsibilities we owe to all our stakeholders and ensure the transparency and soundness of our management.

### Governance chronology Initiatives to Corporate Governance Thus Far



# Director Remuneration

## 1 Policy (Basic Policy)

We have set the remuneration for each Director (excluding Audit Committee Members) based on their roles and responsibilities within the limit of the total amount approved by the General Meeting of Shareholders. To enhance objectivity and transparency, remuneration is determined by the Board of Directors after receiving advice and recommendations from the Nomination and Remuneration Advisory Committee and this process is outlined in our internal regulations. Remuneration for Directors consists of a basic remuneration set at a fixed amount as well as performance-linked remuneration and stock remuneration. The performance-linked remuneration is designed to increase awareness of Directors of their responsibility to work to improve business and individual performance each fiscal year to function as an incentive, while the stock remuneration aims to instill a strong sense of purposefulness toward achieving medium- to long-term growth in corporate performance and corporate value in our Directors. However, Outside Directors and Non-Executive Directors receive only basic remuneration in light of their duties.

## 2 Director Remuneration System and Content

### (1) Diagram of Basic System (Executive Directors)

Performance-linked remuneration (cash, fixed)	Performance-linked compensation (cash, variable)	Stock remuneration
6	3	1

\* The above chart shows the approximate ratio when operating profit is achieved based on the management plan and the evaluation for individual performance-linked remuneration is standard.

### (2) Content of Each Remuneration

#### ① Basic remuneration

A fixed monetary remuneration is paid every month to each director depending on their responsibilities and roles, considering the standard for employee salary.

#### ② Performance-linked compensation

Performance-linked compensation consists of compensation linked to the performance of the entire Company and individual performance. The Chairman and President are only eligible for compensation linked to the performance of the entire Company. However, the Chairman who does not have representative rights (Non-Executive Directors) is not eligible.

The total amount of compensation linked to the performance of the entire Company is determined according to the consolidated operating income, which is a major numerical target in our management plan and is distributed among each director according to their roles and responsibilities immediately

### FY2023 Director Remuneration

Category	Number of persons	Amount of remuneration, etc.	Content					
			Cash remuneration				Stock remuneration	
			Basic remuneration		Performance-linked compensation			
			Number of persons	Total	Number of persons	Total	Number of persons	Total
Director (excluding Audit Committee Members) (Of which Outside Directors)	6 (1)	205 million yen (12)	6 (1)	162 million yen (12)	2 (—)	14 million yen (—)	5 (—)	27 million yen (—)
Director (Audit Committee Members) (Of which Outside Directors)	5 (3)	74 (36)	5 (3)	74 (36)	— (—)	— (—)	— (—)	— (—)
Total (Of which Outside Directors)	11 (4)	279 (48)	11 (4)	237 (48)	2 (—)	14 (—)	5 (—)	27 (—)

\* There are currently nine directors (of which four are outside directors), but remunerations for two directors who retired as of the conclusion of the 164th shareholders' meetings held on June 22, 2023, are included.

after the financial statement is finalized. However, if the consolidated operating income does not reach the designated amount, there is a large amount of extraordinary loss, or a major compliance violation occurs, compensation will not be provided or provided in a reduced amount. Compensation linked to individual performance is determined based on the individual evaluation of each director based on how much they were able to achieve their financial and non-financial targets, and compensation is provided immediately after the financial statement is finalized as outlined in our internal regulations.

#### ③ Stock remuneration

Stock remuneration is a system that uses the trust method to issue treasury stock to directors through the trust after their retirement according to points provided each month according to their position as outlined in our internal regulations. The capital required for issuing treasury stock for directors provided to the trust is set to a maximum of 40 million yen per year.

### 3. Method of determining the content of individual compensation, etc. for directors

Individual compensation for directors is determined by the Board of Directors after receiving advice and recommendations from the Nomination and Remuneration Advisory Committee and this process is outlined in our internal regulations.

Of the director remuneration, compensation linked to individual performance is determined based on the evaluation of each director's performance by the President as outlined in our internal regulations stipulated by the Board of Directors. The Board of Directors stipulates the amount of compensation linked to individual performance before ensuring appropriate execution of the above authority by the President as well as reporting on their content.

# Evaluation of the Effectiveness of the Board of Directors

## 1 Method of Evaluation

Denka analyzes and evaluates the effectiveness of the Board of Directors every year. As we did in the previous fiscal year, Denka analyzed and evaluated the effectiveness of the Board of Directors by having individual Directors complete the "Self Evaluation Questionnaire", such as scale, composition, operation, and 25 other items, and discussed the questionnaire results at Board of Directors meetings.

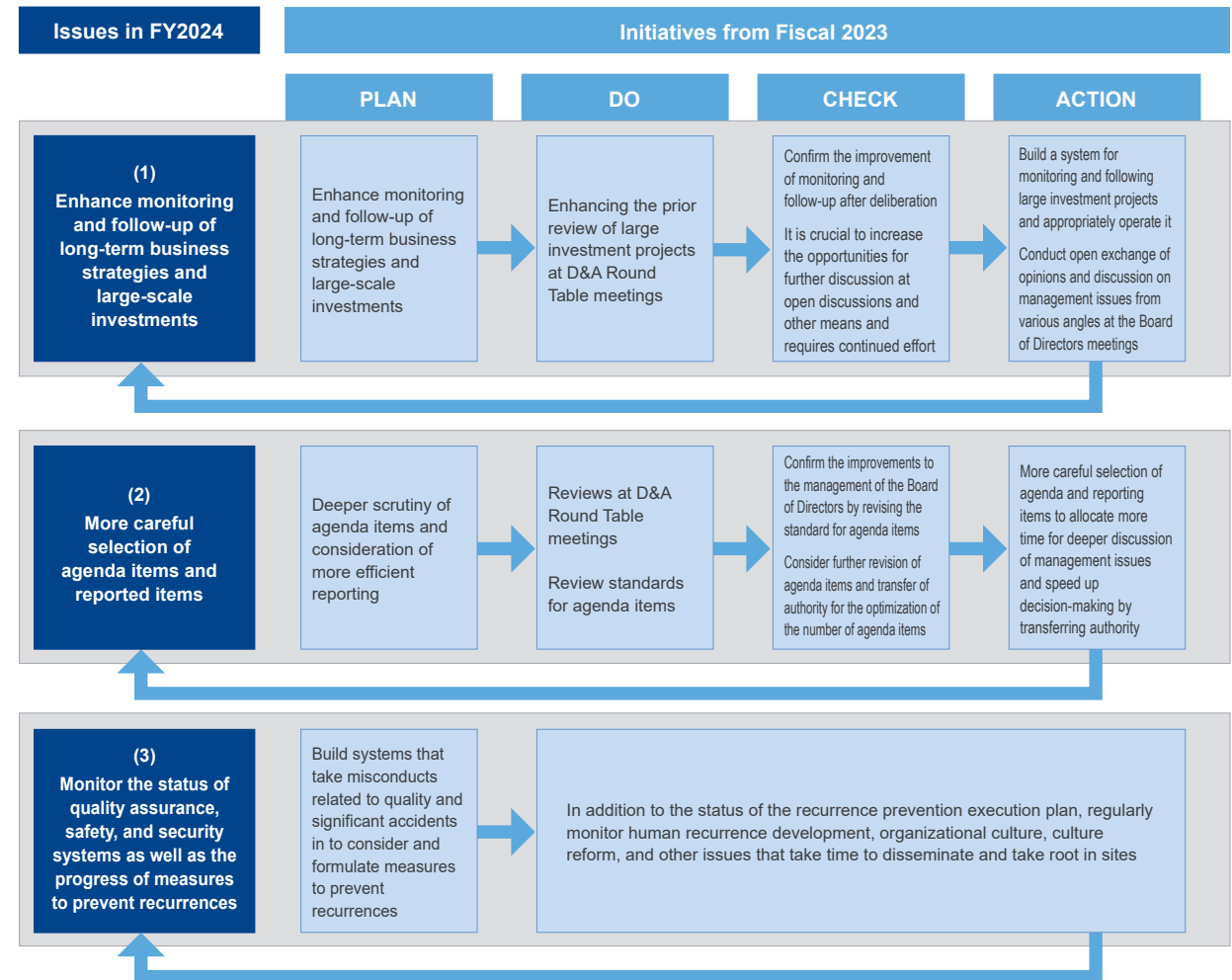
## 2 Summary of Evaluation Results and Future Efforts

The results of fiscal 2023 confirmed that the frequency and time of meetings of the Board of Directors and its composition (balance and diversity of knowledge, experience, and abilities) are appropriate and management oversight and supervision are being properly implemented by the Board of Directors, of which 44% are Independent Outside Directors.

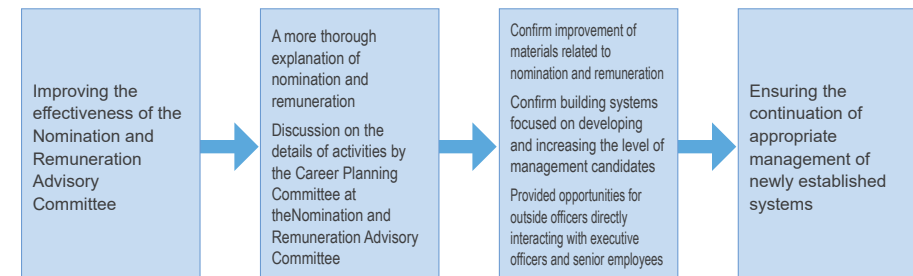
In terms of the previous year's task of further improving the effectiveness of the Nomination and Remuneration Advisory Committee, it was confirmed that explanation about the nomination and remuneration became more thorough have led to active discussions and the establishment of the Career Planning Committee enabled a system that focus on the developing and raising the level of candidates for management.

In addition, for the deepening discussions at the Board of Directors meetings, decision-making process became more deeper by being already thoroughly discussed at the D&A Round Table for large investment projects. Monitoring and follow-ups after deliberation were also improved but it was pointed out that there are issues that need to be continuously improved for these systems. Furthermore, in terms of more careful consideration and improvement of the effectiveness of the reporting of agenda items for the Board of Directors, revision of standards for agenda items showed signs of improvement. However, the need for an even more careful selection of agenda items and important items to report to allocate more time for discussions on long-term business strategies, large investment projects, and other management issues as well as increasing the speed of decision-making was shared among the participants.

In light of these constructive opinions, the Board of Directors will continue its efforts to improve its effectiveness, thereby enhancing corporate value over the medium and long term and meeting the expectations and trust of shareholders and other stakeholders.



### <Reference> Details of issues and activities in FY2023 (excluding above (1) and (2))





## Management Status of Each Committee

### Board of Directors and optional committees, etc.

#### ■ Board of Directors (Met 14 times in fiscal 2023)

To accomplish the Company's Mission in the Vision, the Board of Directors monitors and supervises major operational decision-making and execution of business duties by executive officers, based on strategic and management planning. The Board of Directors as a whole appoints candidates to be Directors in line with the standards for the appointment of both internal and Outside Directors, based on the belief that it is important to appoint a good balance of people with a variety of expertise, experiences, and skills. In addition, in principle, the Company has discontinued the use of executive titles, (such as Senior Managing Director, Managing Director) for Directors, such that all Directors may focus on monitoring and supervising the execution of business duties from an equal standpoint. Also, the Company has set the length of Directors' (excluding Audit Committee Members) terms to one year to facilitate flexible checks on them at the General Meeting of Shareholders.

#### [Key topics in FY2023]

- (1) Build systems that take improprieties regarding quality and serious accidents in to consider and formulate measures to prevent recurrences
- (2) Established a joint venture company for the construction of acetylene black manufacturing plant No.4 in Thailand
- (3) Focusing management resources on other fields at overseas consolidated subsidiaries in response to the termination of Norovirus vaccine development
- (4) Best Practice Project (promotion of cost reductions)  P32
- (5) Sales of strategic shareholdings  P75

#### ■ Sustainability Committee (Met 3 times in FY2023)

 P15

 P26

#### ■ Outside Officer Liaison Committee (Met 4 times in FY2023)

Outside officers frankly discuss the nature of the agenda and operation of the Board of Directors, as well as the Company's medium- to long-term issues and their solutions, from an independent standpoint and share the results of the discussions with internal Directors, to contribute to management.

#### ■ Nomination and Remuneration Advisory Committee (Met 4 times in FY2023)

For major management matters such as nomination, remuneration, and other elements of governance, the Board of Directors has set up the Nomination & Remuneration Advisory Committee, comprising all Outside Directors, the Chairman, and the President, to foster transparency and objectivity in management decision-making, informed by a wide range of opinion and advice from Outside Directors.

In fiscal 2023 this Committee received inquiries from the Board of Directors regarding the executive and governance structure, the formulation of a skills matrix, succession planning, and remuneration for officers, and made recommendations and proposals regarding the results of these inquiries after deliberations at the Committee. The committee is chaired by an Outside Director as of fiscal 2023.

Furthermore, an Outside Director has served as chairperson of the Committee since FY2023 to increase its independence and objectivity and achieve more effective operation. In regard to succession plans, we are strategically developing candidates eligible for future management teams. During the current fiscal year, we plan to hold sessions with outside directors who are members of the Committee as lecturers to offer opportunities to directly engage with said candidates as well as conduct 360° analysis and feedback from their superiors, colleagues, and subordinates for all executive officers.

#### ■ D&A Round Table (Met 12 times in FY2023)

In order to facilitate in-depth discussions regarding management matters that are of particular importance, the D&A Round Table is organized as a forum for free, open-minded, constructive discussions, exchange of opinions and information, and strengthening of cooperation between internal and Outside Directors.

In fiscal 2023, lengthy, active discussions on the core measures for the chloroprene rubber business and the risks, opportunities, and business strategies related to the construction of the acetylene black production facility were conducted.

#### ■ Objective briefings (Met 2 times in FY 2023)

Briefings are held in order to have Outside Directors understand the Company's medium- to long-term and short-term business and research policies.

### Audit Committee (Met 14 times in FY2023)

In accordance with their fiduciary responsibilities to shareholders, Audit Committee Members and the Audit Committee work with the support of the full-time staff of the Audit Committee Office, whose independence from management is ensured, to conduct audits of the legality and validity of execution of Directors' duties by conducting hearings on the state of business duties fulfilled for each department, office, and subsidiaries as well as other investigations in close cooperation with the Internal Control Division. In addition, the Audit Committee forms views on matters related to the selection and remuneration of Directors (excluding Directors who are Audit

Committee Members) and agenda items for the selection, removal, and refusal of reappointment of accounting auditors following the Companies Act.

Furthermore, the Company appoints candidates for Directors who are Audit Committee Members based on its judgment that, for the Audit Committee to fulfill its roles and responsibilities, Audit Committee Members should possess appropriate experience and ability as required for their duties, and that in particular, there should be at least one person with expertise in finance and accounting.



## Our View on the Human Rights

The Denka Group respects international norms related to human rights and strives to act by the Guiding Principles on Business and Human Rights of the United Nations. In addition, we endorse the Ten Principles stipulated by the above initiative as a signatory company of the United Nations Global Compact. We share a common understanding of the importance of human rights throughout our business activities. Based on the Denka Group ESG Basic Policy and the Denka Group Ethics Policy, we work to fulfill our responsibility in respecting human rights. We value diversity in terms of race, religion, gender, age, nationality, and disability, and will increase corporate value by fulfilling our responsibilities.

### Denka Group Human Rights Policy

The Denka Group Human Rights Policy was approved by the Board of Directors and enacted on September 11, 2023.

This human rights policy applies to all Group executives and employees, and its business partners and suppliers are urged to support and respect it.



•The Denka Group Human Rights Policy <https://denka.disclosure.site/ja/themes/727>

### Promotion system

We organize related departments and Human Rights Working Team to coordinate in promoting initiatives on respecting human rights. The progress of initiatives is reported twice a year to the Board of Directors after being discussed by the Sustainability Committee.



### Target and road map of the response process in the Management Plan “Mission 2030”

We are promoting activities to achieve the 2030 target of establishing a process of identifying and responding to human rights risks in the Group’s supply chain in the Management Plan “Mission2030”. We will continue to promote awareness of and disseminate the Denka Group Human Rights Policy to all Group employees and work systematically together with expert third parties on human rights due diligence and redress mechanisms.



### Initiatives in FY2023 and FY2024

#### • Implementation of internal briefings on human rights

We held briefings for all Denka Group employees (on November 30 and December 6, 2023). In these briefings, we explained the Denka Group Human Rights Policy and our future human rights initiatives.

#### • Evaluation of impact on human rights (human rights risk assessment)

Denka Group identified 10 risks that take priority being addressed by conducting hearings (target: business and management divisions of the Head Office and labor union) to identify important human rights risks in the second half of fiscal 2023. We will conduct hearings with a wider scope from fiscal 2024 and beyond to promote preventative and mitigation measures with the aim of establishing a human rights due diligence process.

Category	Risk items
Occupational health and safety	Human rights in work environment (health and safety)
Power Harassment	Risks of Power Harassment occurring among employees
	Risks of Power Harassment on employees of suppliers (including their business partners)
	Risks of Power Harassment on our employees by a customer
Long working hours	Risks of long working hours and overwork
Freedom to relocate residence	Risks of violating freedom of relocating residence by forced transfer of work location or job
Rights of indigenous people and local residents	Risks of negatively impacting the daily lives of local residents due to manufacturing and disposal of products, etc.
Consumer safety and the right to know	Risks of violating the right to know of purchasers and consumers due to misinformation related to products
Occupational health and safety	Human rights risks related to health and safety in supplier's work environment
Forced and child labor	Risks of serious incidents of forced and child labor occurring in the production sites of raw materials, etc., and purchasers (and plants)

## Policy on Strategic Shareholdings

As a general rule, Denka does not hold strategic shareholdings considering the improvement of capital efficiency. However, Denka will hold such shareholdings if it judges that it will contribute to building a stable business relationship and maintaining and strengthening business alliances under its growth strategy, thereby enhancing the Company's corporate value over the medium to long term. In accordance with the above policy, the Board of Directors conducts a comprehensive annual review of such shares from various perspectives, including the financial condition of the issuing company, the volume of transactions with the Company and the economic rationality of such transactions, and a comparison with the Company's cost of capital. As a result of this continuous analysis, the number of issues of strategic shareholdings as of March 31, 2024, decreased by 16 from the end of the previous fiscal year to 54, and the ratio to consolidated net assets decreased by 2.76 percentage points to 7.21% from the end of the previous fiscal year.

### Trends in strategic shareholdings

	FY2019	FY2020	FY2021	FY2022	FY2023
Number of issues	97	93	90	70	54
Amount on balance sheet (Millions of yen)	26,468	33,243	34,034	29,956	22,848
Total net assets (Millions of yen)	254,014	270,036	292,094	300,351	316,915
Percentage of consolidated net assets	10.42%	12.31%	11.65%	9.97%	7.21%

### Number of issues of strategic shareholdings at the end of March 2024 and the amount on the balance sheet

	Number of issues	Amount on balance sheet
Unlisted issues	52 issues	3,460 million yen
Listed issues	2 issues	19,388 million yen

### Issues with declining number of shares held in FY2023

	Number of issues	Total amount of gains related to the decrease in the number of shares
Unlisted issues	6 issues	222 million yen
Listed issues	12 issues	19,740 million yen

## Regarding Litigation Against US Subsidiary

Since 2018, multiple lawsuits (20 cases as of the end of March, 2024) have been brought against Denka's U.S. subsidiary, Denka Performance Elastomer LLC ("DPE"; Denka's stake in DPE is 70%), and DuPont de Nemours, Inc. and its affiliates (collectively "DuPont"), in the 40th Judicial District Court, State of the Louisiana, United States, and are currently pending. The plaintiffs (total sum of plaintiffs is 7,308, as of the end of March, 2024) are alleging in the lawsuits that they are suffering physical, property and psychological damage from chloroprene monomer emitted from the plant located in the State of Louisiana in the US, (DuPont started its operation in 1969 and later DPE acquired the plant in 2015,) where DPE manufactures Neoprene. In the lawsuits, the plaintiffs are seeking damages with an upper limit of 50,000 USD per plaintiff from DPE and DuPont. DPE will continue to closely examine the details of these claims by the plaintiffs and take appropriate response action. In addition, DPE saw a lawsuit filed against it by the United States Department of Justice ("DOJ") on behalf of the U.S. Environmental Protection Agency ("EPA") in the United States District Court Eastern District of Louisiana on February 28, 2023, and the lawsuits currently pending. In the lawsuit, the DOJ is seeking DPE to implement measures to remove hazards arising from emission of chloroprene monomer. This was followed by a motion for a preliminary injunction for the implementation of such measures on the same matter filed on March 20, 2023. DPE will closely examine the details of these claims and take appropriate response action.

For details, please refer to the news releases\* posted on the corporate website of Denka Co., Ltd.



<https://www.denka.co.jp/news/>

\* News releases dated June 19, 2019; February 14, June 8, June 19, August 7, December 17, 2020; March 2, June 22, July 20, 2021; April 28 and June 17, October 28, 2022; January 13, March 6, April 21, 2023; and April 17, July 10, 2024.



**Akinori Adachi**

Executive Officer

### Message from the Executive Officer in charge of the Internal Control Dept., Legal Dept., Administrative Dept., and Secretary Dept.

The Denka Group is strengthening its risk management system to appropriately control risks to minimize capital costs in the face of increasing uncertainty surrounding its business, including rapid changes in the business environment and the full-scale transformation of its business portfolio. Specifically, in order to strengthen our risk management activities in normal times, Denka has renamed the former “Risk Management Committee” to the “Denka Group Risk Management Committee” and launched enterprise risk management (ERM)

activities, a continuous risk management that covers the entire Denka Group, to replace the conventional individual risk management. We strive to conduct strategic risk management that includes identifying risks that affect corporate activities and strengthening response to major risks through this initiative while also thoroughly managing systemic crisis management against natural disasters, terrorism, cyber-attacks, and other major threats to improve corporate value in mid- to long-term for the stakeholders.

### Denka’s approach to sustainability and risk management

Denka’s Board of Directors recognizes that responding to the various social issues related to sustainability is an important management issue that leads to reductions of risks and to profit opportunities. To that end, we formulated the “Denka Group ESG Basic Policy” to put the four areas and ten principles of the United Nations Global Compact into practice and is taking appropriate responses according to the risks, such as strengthening a group-wide compliance system and taking

on the challenge of creating new businesses to solve social issues. Furthermore, the Sustainability Committee chaired by the President also strives to manage the progress of various sustainability initiatives as well as share good practices. Denka strives to improve corporate value in the mid- to long-term through these activities related to sustainability.

### Denka’s risk management structure

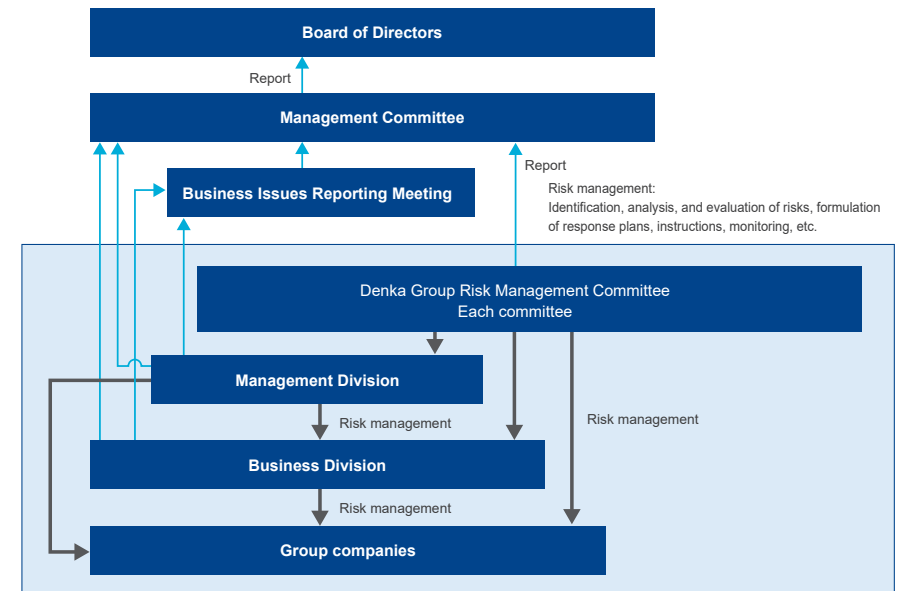
Denka’s Board of Directors recognizes that risks and strategy are inseparable and is working to develop and improve an environment in which each executive officer can take risks, while at the same time developing and improving Denka’s risk management structure for the entire Group.

To achieve these purposes, the Management Committee and the Business Issues Reporting Meeting, both of which are held monthly, discuss the identification and evaluation of each risk that may affect the Group’s management and measures to control risks while considering profitability and other economic values. In addition, each risk in the business divisions, including the status of achievement of the business plan, is continuously tracked.

Each cross-organizational committee conducts specialized risk management depending on the type of risk, such as legal matters, capital investment, the environment, health and safety, quality control, startup investment, and more. Furthermore, Denka’s management divisions are striving to manage the Group’s risks, which they are in charge of based on the Group’s common rules. In addition, while business divisions manage their risks, we dispatch directors to each Group company for them to discuss with our management divisions and manage the business risks of each company.

Denka is working to further strengthen the risk management system of the entire Group based on the concept of Enterprise Risk Management. The Denka Group Risk Management Committee selects and identifies group management-level risks and opportunities as priority risks and evaluates their level of impact, formulates policies, and manages progress to enhance response to such priority risks. We published the Denka Group Management Handbook, a booklet that describes the ideal vision for each operation based on the concept of group internal control policy, to continuously work on strengthening a group-wide internal control system and conducting appropriate operations.

Risk management structure during normal times



## Enterprise Risk Management initiatives

The Denka Group is working to strengthen its cross-organizational enterprise risk management system in the face of increasing uncertainties surrounding its business.

The Denka Group Risk Management Committee chaired by the President identified priority risks by visualizing, analyzing, and evaluating risks that require cross-organizational management based on impact, frequency, and other factors. Management policy is determined based on these priority risks and various year-round monitoring activities, such as implementing measures to enhance the communication network during disasters and conducting real-time disaster response training participated by the management team from the Head Office and senior managers of plants. By increasing the effectiveness of countermeasures through trial and error, Denka will strive to improve corporate value for stakeholders over the medium to long term by reducing impacts of risk exposure on its business performance and minimizing its capital costs.

Denka Group has been continuously improving its enterprise risk management system but is currently working on risks related to safety and quality assurance in response to such issues that occurred in 2023. The Group is engaged in addressing organizational and operational systems, ensuring psychological safety, and reforming the corporate culture with the Environmental & Safety and Quality Assurance departments taking the lead.



### List of priority risks and their risk owners

Major category	Subcategory	Sub-subcategory	Risk ownership
Business risks	Disasters	Earthquake disasters (earthquakes and tsunamis)	Administrative Dept.
Business risks	Accidents/crimes	Major crimes to the Company by third parties (terrorist attacks, arsons, threats, etc. in Japan)	Administrative Dept./Environment and Safety Dept.
Management risks	Business environment (social, economic, political)	Inability to export, operate business, or other actions due to geopolitical risks	Corporate Planning Dept.
Management risks	Business environment (social, economic, political)	Economic crises, economic shifts, and changes in exchange rates	Accounting Department/Finance Dept.
Management risks	Related companies (Group companies, etc.)	Failure of group governance	Internal Control Dept.
Business risks	Disasters	Climate change risks (cold and heat waves, forest thinning, long rains, irregular climates, etc.)	Sustainability Promotion Dept.
Business risks	Accidents/crimes	Operational accidents (fires, explosions, etc. at plants)	Environment and Safety Dept.
Business risks	IT/information management	Overall information system error due to cyber-attacks and unauthorized access	Digital Strategy & Innovation Dept.
Business risks	Products/services	Troubles due to quality issues of products or services (product accidents, drug-induced injuries, large-scale food poisoning, foreign matter contamination, large-scale product recalls, etc.)	Quality Assurance Dept.
Business risks	Violation and non-conformance of laws and regulations	Encapsulation, falsification, and false reporting of information (product counterfeiting, falsification of quality and performance, encapsulation of labor accidents, etc.) Violation of laws and regulations, violation of contracts and internal regulations Global compliance	Legal Department/Internal Control Dept.



## Denka's risk management activities

Denka Group has established the Basic Guidelines for Crisis Management as a basic rule for responding to emergencies in the event that a risk that could have a significant impact on the management of the Denka Group materializes. Based on this guideline, each management department develops appropriate initial response rules, rules for the centralized aggregation of information, and rules for communication with the internal and external stakeholders as well as formulating countermeasures according to crisis scenarios in preparation for such crises. In order to minimize risks that could affect business continuity, such as information leaks caused by cyber-attacks, Denka has established common Group policies such as the Denka Group Information Security Policy, and the Group is implementing initiatives related to information security, including the protection of personal information.

Also, with regard to risks in connection with product quality, which is important for a manufacturer, to minimize risks that may affect business continuity, Denka has established the Denka Group Quality Issue Response Policy and is implementing initiatives across the entire Group. If, in case a crisis does occur, the CEO is to decide whether to establish a crisis task force in accordance with the seriousness of the incident based on the Basic Guidelines for Crisis Management. The relevant departments work closely together and, when necessary, obtain the advice of outside experts to conduct various investigations, analyze causes, and formulate various countermeasures to prevent recurrence. Since fiscal 2023, Denka has been working to strengthen the risk management system of the entire Group based on the concept of Enterprise Risk Management.

## Denka Group Management Handbook

Denka distributes the Denka Group Management Handbook to Group companies in Japan and overseas to strengthen overall risk management and internal control of the Group.



### List of risks and locations of articles describing our response

Category	Summary of major risks	Page number for articles
Business management	Awareness of social and sustainability issues	P2- Message from the President, P17- Talk with the President, P15- Important Management Issues (Materiality)
	Execution of management plans and financial strategies	P23- Management Plan "Mission 2030" P29- Financial strategy
	Corporate governance	P65- Governance [Sustainability Site] "Solid corporate governance/Corporate conduct deserving of stakeholder trust" Improve corporate governance
Risk management & compliance	Risk management	P76- Risk management [Sustainability Site] "Solid corporate governance/Corporate conduct deserving of stakeholder trust" Maintain strict compliance with laws, regulations and corporate ethics, risk management
Environmental management	Climate change, abnormal weather, reduction of environmental impact, and biodiversity	P55- Social
HR strategy	Recruitment, nurturing human resources, health management, diversity, workplace harassment and other human rights issues	P61- Social [Sustainability Site] "Solid corporate governance/Corporate conduct deserving of stakeholder trust" Whistle-blowing system, Denka Group Helpline, response to human rights risks
Quality & product liability	Product safety & quality control, and chemical substance control	P54 Quality assurance management
Accidents & disasters	Safety, health and disaster prevention	P52 Placing the utmost priority on safety
Communication	Responsible dialogue with stakeholders	P82- Dialogue with stakeholders [Sustainability Site] "Products and technologies" Customer satisfaction improvement activities
Information systems & security	System security maintenance and promotion of DX	P78 Denka's risk management activities [Sustainability Site] "Solid corporate governance/Corporate conduct deserving of stakeholder trust" Information asset management
Protection of Intellectual property & privacy information	Protection of intellectual property & privacy information	P34 Activities related to intellectual property Denka website: Privacy policy, [Sustainability Site] "Solid corporate governance/Corporate conduct deserving of stakeholder trust" Initiatives related to protecting intellectual property
Supply chain	BCP, export trade management	P77 Enterprise Risk Management initiatives [Sustainability Site] "Improvement of safety and quality of products" BCP measures based on risk assessments of conflict minerals and raw materials "Solid corporate governance/Corporate conduct deserving of stakeholder trust", export trade management
Individual businesses	Responding to changes in the business environment	P36 Contributing to a sustainable society through technology, P43- Message from division heads, business strategies, SWOT analyses

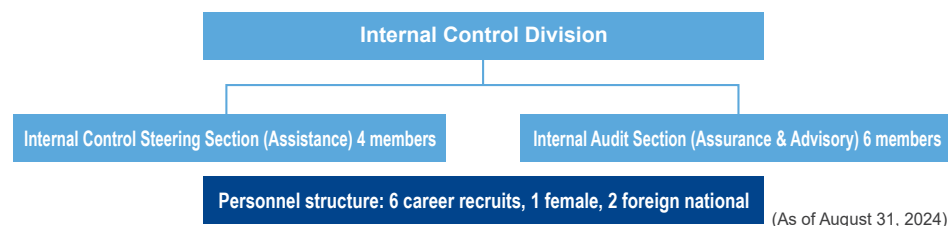
# Denka Group Internal Control

## Basic policy (Mission, Vision, Values)

The Company is committed to improving the non-financial value of the entire group by enhancing internal control, improving business processes, reducing risks, and preventing fraud. The Internal Control Department is organized to lead the force, and we envision becoming a professional team that is trusted by stakeholders inside and outside the company by carrying out three activities:

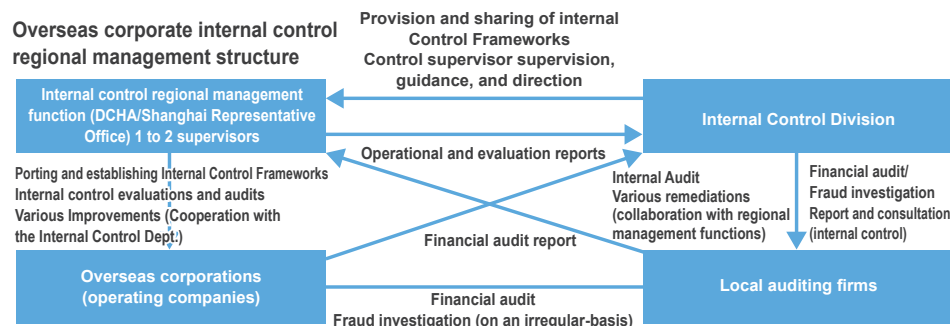
## Promotion system

The Internal Control Department is composed of two organizations: the Internal Audit Office, which is responsible for assurance activities such as control evaluation, auditing, and advice; and the Internal Control Steering Office, which supports and assists the construction of internal controls by the first line. The Internal Control Department is also actively promoting career hiring and transforming into an organization with diverse values that are not bound by gender, age, or nationality.



## Overseas corporate internal control regional management structure

Internal control functions have also been organized within regional headquarters companies in Singapore and China, and are working with the Internal Control Department to strengthen Group's control.



implementing assurance, giving advice, and assisting activities, all on a PDCA basis. As one of the non-financial KPIs in management plan "Mission 2030", we have set a goal of completing the establishment of a structure of internal controls (Internal Control Framework) within the group by 2030, which packages standardized internal control initiatives.

## Overview of internal control

### 1 Implementation of the Three Line Defense

Our company's internal control system is composed of three lines of defense: the first line is the risk owners (sales and manufacturing sites, etc.), the second line is the management department that provides control support and monitoring to the first line, and the third line is the internal audit departments that evaluate and assure the effectiveness of controls.

### 2 The Internal Control Department as the third line

The Internal Control Department as the third line of defense has two independent organizations, the Internal Control Steering Office and the Internal Audit Office. In addition to evaluation and assurance activities such as the Management Assessment and Audit concerning Internal Control Over Financial Reporting (J-SOX) and voluntary audits, the Internal Control Department also supports and assists the establishment of internal control while effectively utilizing the Internal Control Framework, working together closely with risk owners who lack knowledge and know-how.

### 3 Achievements (number of audits and support for internal control development)

In FY2023, we conducted 46 voluntary audits, 10 group companies for Company-level Control (CLC) and 2 group companies for internal control related to Process-level Controls (PLC) under J-SOX. In addition, 4 group companies and 1 site, mainly overseas, have started to establish internal controls using the Internal Control Framework, and the evaluation of 3 companies has been completed.

### 4 Reporting lines

The Internal Control Department reports directly to the president (solid line report) for audit results, etc., but also shares the results with the Audit and Supervisory Committee (dot line report), which is another audit function, to improve the efficiency and comprehensiveness of audits.

### 5 Awareness and dissemination of internal controls

The results of internal control evaluations and audits are also shared with relevant management departments (second line) and major group company executives, and a wide range of items are discussed and reported, such as significant findings, specific actions to be taken, and good examples of control.

# Denka's Group Compliance

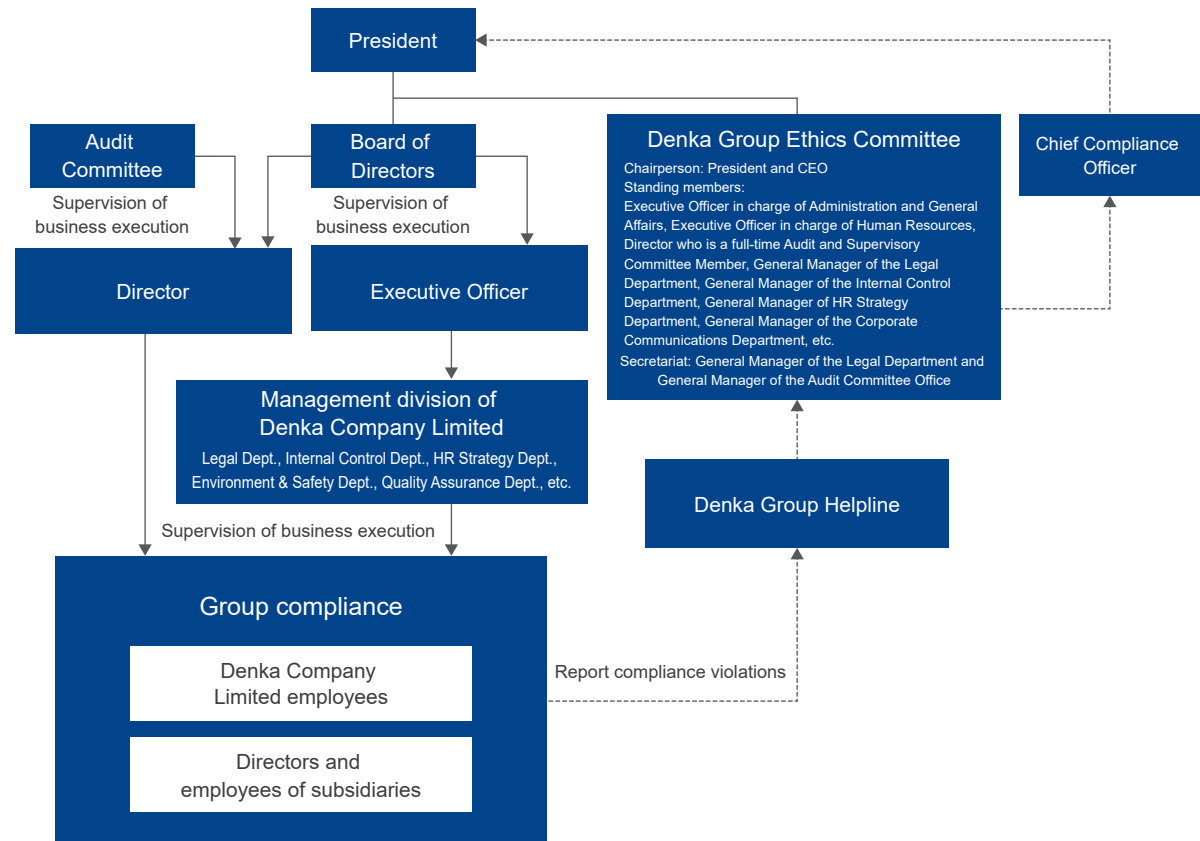
## Basic policy

The Group broadly defines “compliance” as compliance with laws, contracts, internal regulations, and social norms. The Denka Group Ethics Committee, established by the Board of Directors and chaired by the CEO, oversees compliance efforts across the entire Group. In response to each compliance risk, our Management Division in the Head Office devises and implements various preventive measures, gathers information on the latest laws and regulations, legal precedents, and case examples from other companies, establishes and revises various rules, including the Group's common rules and common company-wide rules, and carrying out various compliance training, monitoring, auditing, and more.

In addition to the activities of the Head Office Management Divisions, business divisions, business offices, plants and Group companies strive to reduce compliance risks in each field during normal times, including collaborative activities with outside experts. The Group is enhancing the Group-wide activities of each department of the management divisions. Furthermore, Denka is also working diligently to ensure that all employees throughout the Group comply with laws and regulations as though they were their own responsibilities based on Denka's core values of “initiative”, “empathy”, and “integrity”.

## Denka Group's compliance promotion system

Denka is striving to ensure thorough compliance at the Group level based on the regulation of authorities required for the business execution and common Group rules established by the Board of Directors, such as the “Denka Group Code of Ethics”. The Board of Directors established the Denka Group Ethics Committee, which deliberates on overall compliance including compliance promotion plans, to realize compliance throughout the Denka Group. At the same time, the Board of Directors has appointed an executive officer to oversee compliance as the Chief Compliance Officer (CCO), as well as an executive officer in charge of legal affairs, internal control, general affairs, and secretarial affairs. The CCO oversees Denka Group compliance issues, while the executive officer in charge of legal affairs, internal control, general affairs, and secretarial affairs promotes the strengthening and improvement of the Denka Group compliance system in Japan and overseas through the activities of the Legal Department, Administrative Department, and the Internal Control Department.



## Denka Group Standards of Business Conduct

The Board of Directors established the “Denka Group Code of Ethics” to ensure compliance by officers and employees of Denka Group companies both in Japan and overseas to maintain and ensure the trust of stakeholders and enable sustainable development of the entire Group. Furthermore, we established the “Denka Group Ethics and Legal Compliance Guideline Denka Group Standards of Business Conduct”, which further embodies the content of the “Denka Group Code of Ethics”. These set forth global standards of ethical conduct, as guidelines for ethically and legally appropriate actions, including, which executives and employees of each Denka Group company should follow to realize the Group's vision. In terms of content, we distribute booklets (in Japanese, English, and Chinese languages) as a guide for each employee's daily work. It covers basic rules for appropriate work, environment, safety, fair transactions, export regulations, economic sanctions, insider trading, personal information management, quality compliance, intellectual property rights, corruption prevention, compliance with labor laws, respecting human rights, and other themes.

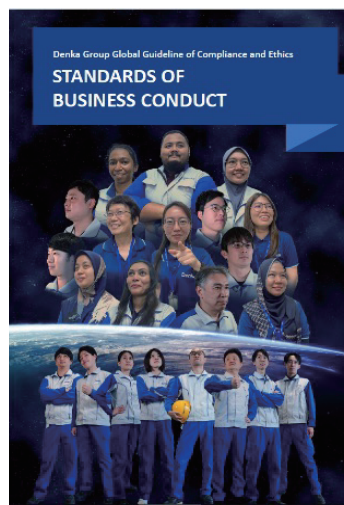
## Whistle-blowing system “Denka Group Helpline”

The Denka Group Ethics Committee operates the Denka Group Helpline, a group whistle-blowing system in compliance with the guidelines of the Consumer Affairs Agency of Japan, to detect and correct compliance issues at the early stages in each Group company. Officers and employees of each Group company, regardless of the contract type, such as temporary employees, etc., their family members within the second degree of kinship living with them, and retirees as stipulated by the Whistleblower Protection Act of Japan, can report compliance issues to the Denka Group Ethics Committee at any time using the Denka Group Helpline. The report can be made either anonymously or with identifying information, whichever whistleblower prefers, in Japanese, English, or Chinese language.

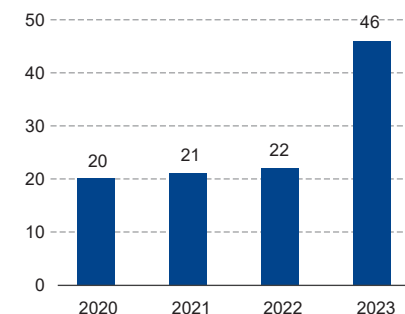
The Denka Group Ethics Committee not only has multiple contact points for receiving reports (internal contact point: the committee secretariat, external contact point: Nishimura & Asahi and specialized businesses serve), but also has stipulated the obligations in the group-wide whistle-blowing regulations for officers and employees to keep the identity of the whistleblower confidential and to prohibit retaliatory actions against whistleblowers, and the strict punishment for violations of these obligations. The Legal Department is also working to maintain trust in and promote the use of the whistle-blowing system by emphasizing this information for officers and employees through various compliance training programs. As a result, the Denka Group Helpline is actively being used, contributing to improving the effectiveness of compliance efforts made by the Denka Group.

## Response to misconduct

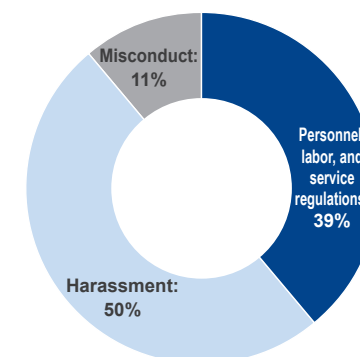
Denka formulated a basic regulation on responding to compliance violation incidents in August 2022 to fairly and appropriately respond to compliance issues reported via internal reporting, office organization, and other routes. This regulation stipulates specifics on internal reporting related to compliance issues, investigation systems, process of proceedings when an issue is recognized, and measures for internal dissemination as corrective and preventative measures. If a compliance issue occurs in the Company, we strive for the early resolution and correction of the issue including implementing necessary disciplinary action by the internal investigation team investigating the issue under the regulation.



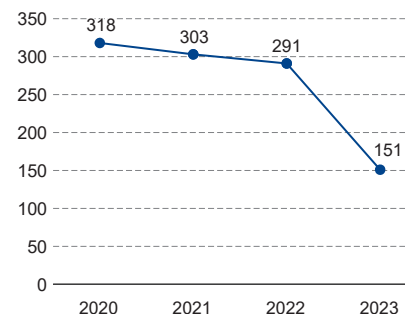
Trend in the number of reports



Breakdown of internal reports  
(cumulative from FY2019–FY2023)



Trend in the number of consolidated employees per report (persons/reports)



\* Classification is based on the content of the report at the time of receipt and does not necessarily reflect the recognized facts.

Breakdown of offices in FY2023 (cases)

	Misconduct	Harassment	Personnel, labor, and service regulations
Head Office	–	11	1
Research facilities and plants	4	6	12
Group companies	–	11	1






## Dialogue with Stakeholders

### 1. Creating value through dialogue with our stakeholders

The Denka Group considers maintaining responsible dialogue with stakeholders and an integral part of the process of assessing our social responsibilities, the degree of our social contributions, and stakeholder expectations about improving our corporate value. It also forms part of the Denka Group ESG Basic Policy, "Information disclosure stakeholder dialogue". The diagram below illustrates the significance of dialogue with our various stakeholders and the value it creates.



## 2. Examples of dialogue with stakeholders

	Objective/Themes	Means
 <b>Customers</b>	<ul style="list-style-type: none"> <li>■ Providing safe, high-quality products that satisfy our customers and appropriate information.</li> <li>■ Forging relationships built on trust through sincere communication with our customers.</li> </ul>	<ul style="list-style-type: none"> <li>■ Face-to-face and online dialogue with customers</li> <li>■ Providing technical services</li> <li>■ Conducting customer satisfaction surveys</li> </ul>
 <b>Business Partners</b>	<ul style="list-style-type: none"> <li>■ Promoting open innovation and building good relationships with our business partners to ensure co-existence and shared prosperity across the entire supply chain.</li> </ul>	<ul style="list-style-type: none"> <li>■ Face-to-face and online meetings with suppliers</li> <li>■ Announcement of our Partnership Building Declaration</li> </ul>
 <b>Local Communities</b>	<ul style="list-style-type: none"> <li>■ Actively participating in the formation of more habitable local communities and contributing to their development as a good corporate citizen.</li> <li>■ Maintaining sound political and administrative relations and fostering a relationship of trust with society.</li> </ul>	<ul style="list-style-type: none"> <li>■ Comprehensive disaster prevention drills</li> <li>■ Facility tours and resident briefings</li> <li>■ Interaction with local residents and dialogue</li> <li>■ Participation in local events</li> <li>■ Educational support</li> <li>■ Social contribution activities</li> </ul>

### Participation in Monozukuri Festa in Ichihara City, Chiba Prefecture

On Saturday, August 3, 2024, Monozukuri Festa which offers elementary students in Ichihara City to experience manufacturing on hand was held at the civic center of Ichihara City. Denka participated in the event this year as part of its social contribution activities and exhibited booths called “Let’s Make My Plastic Bottle!” and an invention class called “Let’s Make A Flying Disc!”.



### Holding “seminar on intellectual property” at Meiji University

We held a seminar on intellectual property at the Meiji University for the students to learn about themes we want for them to know before becoming members of the society, such as the overview of intellectual property, application for patents and designs, service invention, and contracting. We received feedback such as “I had an interest in visualization of intangible assets so I learned a lot from the seminar” and “I want to study how business models, brands, and other values that are not visible are into a common evaluation axis of the society” from the students that participated in the seminar, indicating their high level of interest.



### Denka Group Employees

- Reflecting the opinions of employees to promote the creation of a healthy and comfortable workplace for all members of the Denka Group.

- Visits by and dialogue with the President
- Use of internal portal sites
- Employee awareness surveys

- Labor-management council
- Town Hall Meeting
- Lunch Meeting

### Holding “Bring your kids to work” day at Omi Plant

We held “Bring your kids to work” day at Omi Plant on Friday, August 2, 2024. On the day, 47 family members of the employees participated and experienced experiments using our Poval, exchanged business cards with plant manager and assistant manager, Q&A session, and other programs. We received feedback such as “I want to stay longer”, “I want to also tour inside the plant”, and “I want to know more about Denka” from the participants.



	Objective/Themes	Means
<div> </div> <div> <b>Shareholders and Investors</b> </div>	<ul style="list-style-type: none"> <li>■ Actively, effectively and fairly disclosing financial and non-financial information and ensuring its reliability through constructive dialogue.</li> <li>■ Enhancing our group governance system to enhance the value of the entire company.</li> <li>■ Meetings with institutional investors and securities company analysts (Excluding shareholders' meetings, Financial Results Presentation, and Briefing for Individual Investors)</li> </ul> <div> <p><b>Total: 334 people in Japan and overseas</b></p> <p><b>Japan 199</b></p> <p><b>Overseas 135</b></p> <ul style="list-style-type: none"> <li>■ Individual/small meetings</li> <li>■ Plant tours</li> <li>■ SR meetings</li> <li>■ Top meetings (one-on-one meetings)</li> <li>■ Individual meetings</li> <li>■ Plant tours</li> <li>■ Overseas roadshows</li> </ul> </div> <ul style="list-style-type: none"> <li>■ Main topics of dialogue and matters of interest to shareholders and matters for increased disclosure           <ul style="list-style-type: none"> <li>• Policy and progress of business portfolio shift</li> <li>• Management policy, its content, and cash allocation (shareholder returns, strategic investment, human capital investment, R&amp;D, financial leverage, etc.) that complies with prerequisites that have changed since the formulation of the management plan "Mission 2030"</li> <li>• Prospects for future growth business and investment plan</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>■ Holding of the General Meeting of Shareholders (once per year) Improve the content of convocation notices and other materials for shareholders' meetings to increase the level of disclosure. Adoption of live-streaming for shareholders who are unable to attend the venue on the day, and the exercise of voting rights via the Internet using personal computers, etc.</li> <li>■ Holding of Financial Results Presentation (4 times a year: approx. 80 - 100 people) The President and senior management provide quarterly briefings on financial results and growth strategies to institutional investors and securities company analysts. (Briefings are also held for the media 2 times a year.)</li> <li>■ Holding briefings for individual investors (once per year: 20 people face-to-face and 300 people online) The officer in charge of IR holds briefings for individual investors in a hybrid method to explain management plans and overview of the business.</li> <li>■ Meetings with institutional investors and securities company analysts (334 people)           <ul style="list-style-type: none"> <li>• Individual meetings/small meetings (150 in Japan and 111 overseas) The Corporate Communications Department conducts interactive dialogue with institutional investors and securities company analysts at individual meetings or small meetings to discuss financial results, management plans, and other details.</li> <li>• Plant tours (2 times a year: 1 location in Japan and 1 location overseas) (14 in Japan and 2 overseas) Hold plant tours for institutional investors and analysts from securities companies to explain the characteristics of products and each plant</li> <li>• SR meetings (2 times a year: 28 people in Japan) The General Affairs Department conducts dialogue with major domestic shareholders (institutional investors) to discuss our initiatives centered on governance and countermeasures for misconduct related to quality and significant accidents.</li> <li>• One-to-one top meetings (7 people in Japan) The President discusses changes to our business portfolio, business plans, and other management strategies with domestic institutional investors.</li> <li>• Overseas road shows (2 times a year: 22 people overseas) Our Officer in charge of Investor Relations holds dialogue with overseas institutional investors in the Americas, Europe, and Asia on management plans, business models, R&amp;D, shareholder returns, and ESG initiatives (including one annual conferences per year sponsored by securities companies)</li> </ul> </li> <li>■ Feedback of shareholder opinions and views to management (4 times a year + every time) In addition to providing quarterly feedback on the opinions of shareholders obtained through dialogue with the President and other management and related departments, feedback is also provided whenever there is an event that attracts a large number of shareholders' opinions. This is used as a reference for future disclosure materials and management strategy formulation and promotion measures.</li> </ul>

## Denka's 11-Year Financial Summary

	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
Summary Statement of Income (million yen)											
Net sales	376,809	383,978	369,853	362,647	395,629	413,128	380,803	354,391	384,849	407,559	389,263
Operating income	21,230	24,047	30,634	25,844	33,652	34,228	31,587	34,729	40,123	32,324	13,376
Ordinary profit	20,604	24,287	27,022	23,158	31,499	32,811	30,034	32,143	36,474	28,025	5,474
Profit attributable to owners of parent	13,573	19,021	19,472	18,145	23,035	25,046	22,703	22,785	26,012	12,768	11,947
Equity in earnings (losses) of affiliates	550	950	1,097	568	1,105	1,384	1,170	933	876	2,328	1,731
Financial Position (million yen)											
Current assets	164,747	170,497	161,876	168,902	184,129	190,730	198,452	200,726	218,164	251,793	265,447
Total assets	431,347	445,569	443,864	454,944	473,799	483,827	501,448	526,035	557,646	592,158	616,244
Current liabilities	163,645	160,101	147,537	144,190	158,043	154,047	160,807	155,062	166,679	164,457	171,557
Net assets	189,516	210,798	216,071	227,487	242,780	250,481	254,014	270,036	292,094	300,351	316,915
Interest-bearing debt	120,669	122,536	124,596	113,748	108,269	112,134	134,340	138,191	137,032	169,729	174,368
Cash Flows (million yen)											
Cash flows from operating activities	27,245	35,557	44,014	39,557	48,776	32,660	41,954	40,610	42,630	8,946	36,260
Cash flows from investing activities	(26,693)	(27,449)	(34,979)	(22,258)	(29,298)	(26,176)	(36,303)	(36,976)	(36,839)	(28,268)	(22,572)
Cash flows from financing activities	(3,327)	(7,437)	(7,348)	(19,319)	(15,858)	(8,408)	9,544	(6,706)	(12,341)	18,361	712
Cash and cash equivalents at end of year	8,244	9,157	11,813	10,174	14,101	13,889	29,170	25,909	20,209	20,199	35,386
Per Share Information (yen)											
Dividends per share*	50.0	62.5	65.0	70.0	105.0	120.0	125.0	125.0	145.0	100.0	100.0
Profit per share	145.16	207.40	214.71	205.05	261.80	286.18	262.62	264.24	301.67	148.08	138.61
Net assets per share	2,013.84	2,279.70	2,366.74	2,526.42	2,727.94	2,839.16	2,906.95	3,101.92	3,345.34	3,438.28	3,568.69
Financial Indices											
Operating income ratio (%)	5.6	6.3	8.3	7.1	8.5	8.3	8.3	9.8	10.4	7.9	3.4
Return on equity (ROE) (%)	7.4	9.6	9.3	8.3	10.0	10.3	9.1	8.8	9.4	4.4	4.0
Return on assets (ROA) (%)	4.9	5.5	6.1	5.2	6.8	6.9	6.1	6.3	6.7	4.9	0.9
Shareholders' equity ratio (%)	43.5	46.9	47.7	49.1	50.5	51.0	50.0	50.8	51.7	50.1	49.9
Other											
Capital investment (million yen)	25,735	21,300	21,196	25,731	22,710	32,745	34,205	42,323	35,644	39,369	43,686
Depreciation and amortization (million yen)	22,254	23,032	23,242	24,359	24,599	22,946	22,482	22,911	23,883	26,554	26,516
R&D expenses (million yen)	10,828	11,127	11,787	13,026	13,868	14,562	15,031	14,736	14,231	14,926	15,162
Number of employees at end of year (consolidated)	5,249	5,309	5,788	5,816	5,944	6,133	6,316	6,351	6,358	6,406	6,514
Management Plans											
Resumption of DENKA100 (2013-2017)			Denka Value-Up (2018-2022)						Mission 2030 (2023-2030)		
Denka's main achievements			Completed the Denka Innovation Center main building			Celebrated the centennial of the Company's founding Changed company name Established Denka Performance Elastomer LLC			Merger with DENKA SEIKEN Co., Ltd.		
Environmental developments			Consumption tax hike (to 8%) Signing of the Paris Agreement			Inauguration of the U.S. Trump administration U.S.-China trade tension			Consumption tax hike (to 10%) COVID-19 pandemic Inauguration of the U.S. Biden administration Russian invasion of Ukraine		

Financial information for FY2017 and onwards are modified under the Partial Amendments to Accounting Standard for Tax Effect Accounting (Accounting Standards Board of Japan (ASBJ) Statement No. 28 issued in February 2018).

\* Cash dividends per share ... 1. Denka executed a reverse share split that merged five shares into one share as of October 1, 2017. As we aim to support easy-to-understand comparisons between performance in each fiscal year, the value of dividends per share for the preceding fiscal years has been retrospectively converted to reflect the value of dividends had the reverse share split already been in effect.  
2. Dividends per share for FY2014 comprise (1) full-year dividends per share of ¥52.5 (¥10.5 per share before conversion); and (2) commemorative dividends per share of ¥10.0 (¥2.0 per share before conversion)

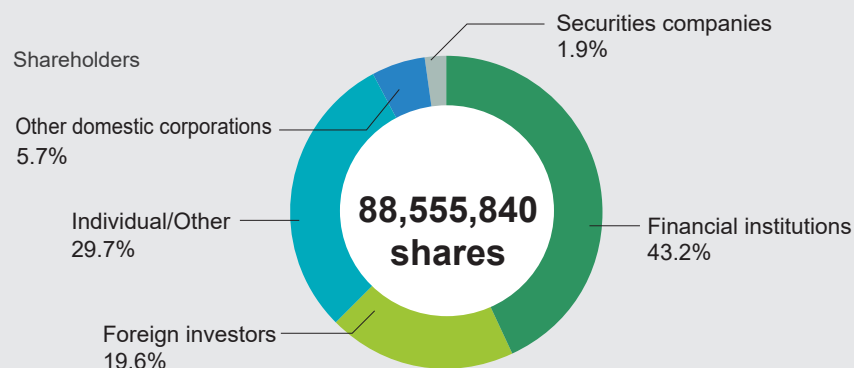
• IR Information <https://www.denka.co.jp/ir/>



## Corporate Profile (as of March 31, 2024)

Name	Denka Company Limited
Established	May 1, 1915
Employees	Non-consolidated: 4,330 Consolidated: 6,514
Paid-in Capital	36,998 million yen
Head Office	1-1, Nihonbashi-Muromachi 2-chome, Chuo-ku, Tokyo 103-8338, Japan (Nihonbashi Mitsui Tower)
	TEL 03-5290-5055 FAX 03-5290-5059

## Share Information (as of March 31, 2024)



### Major Shareholders

Shareholder name	Number of shares held (hundred shares)	Percentage of shares held (%)
The Master Trust Bank of Japan, Ltd. (Trust Account)	151,148	17.52
Custody Bank of Japan, Ltd. (Trust Account)	96,326	11.17
Mizuho Trust & Banking Co., Ltd. Retirement Benefit Trust, Mizuho Bank Account (Account retrusted by Custody Bank of Japan, Ltd.)	32,158	3.73
TAIJU LIFE INSURANCE COMPANY LIMITED	23,816	2.76
SSBTC CLIENT OMNIBUS ACCOUNT	22,305	2.59
National Mutual Insurance Federation of Agricultural Cooperatives	21,507	2.49
Denka Employee Shareholding Association	14,187	1.64
MITSUMI & CO., LTD.	11,066	1.28
Mitsui Sumitomo Insurance Company, Limited	10,874	1.26
Custody Bank of Japan, Ltd. (Trust Account 4)	10,771	1.25

(Notes) 1. 2,280,095 shares of treasury stock have been excluded from the above list of major shareholders.  
2. Treasury stock is excluded from the calculation of the percentage of shares held.

## Major Group Companies (as of March 31, 2024)



### Japan

- Toyo Styrene Co., Ltd.
- Denak Co., Ltd.
- Hinode Kagaku Kogyo Co., Ltd.
- Denka Azumin Co., Ltd.
- Nishi-nihon Koatsu Gas Co., Ltd.
- Denka Renotec Co., Ltd.
- Sanshin Bussan Kabusiki Kaisha
- Denal Silane Co., Ltd.
- Denka Polymer Kabushiki Kaisha
- Denka Astec Co., Ltd.
- Akros Trading Co., Ltd.
- Denka Consultant & Engineering Co., Ltd.
- Kurobegawa Electric Power Company

### Overseas

#### Europe

- Denka Chemicals GmbH
- DENKA SEIKEN UK Limited
- Icon Genetics GmbH

#### North America

- Denka Corporation
- DENKA SEIKEN USA Incorporated
- Denka Performance Elastomer LLC

#### East Asia

- Denka Inorganic Materials (Tianjin) Co., Ltd.
- Denka Electronic Materials Dalian Co., Ltd.
- Denka Chemicals Development Materials (Suzhou) Co., Ltd.
- Denka Advanced Development (Suzhou) Co., Ltd.
- Denka Chemicals Shanghai Co., Ltd.
- Denka Korea Co., Ltd.
- Akros Trading Taiwan Co., Ltd.
- Denka Taiwan Corporation
- Akros Trading China Co., Ltd.

#### Southeast Asia

- Denka Advanced Materials Vietnam Co., Ltd.
- Denka Construction Solutions Malaysia Sdn Bhd.
- PT. ESTOP Indonesia
- Denka Singapore Pte.Ltd.
- Denka Chemicals Holdings Asia Pacific Pte.Ltd.
- Denka infrastructure Malaysia Sdn.Bhd.
- Denka SCGC advanced Materials CO.,LTD.
- Denka Advantech Pte.Ltd.
- Denka Life Innovation Research Pte. Ltd.

# Denka

## ■ Inquiries

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