# **UBE** Corporation





### Our Philosophical Framework

Pursue technology and embrace innovation to create value for the future and contribute to social progress Corporate

### "Coexistence and Mutual Prosperity" "From Finite Mining to Infinite Industry"

Founding

LIRE

.ong-Terr

Princip

UBE

Vision for 2030

Leveraging the manufacturing technologies the UBE Group has cultivated throughout its long history, create the value required by society, in the safe and environmentally friendly manner demanded by society, and deliver that value to the people. And by Purpose doing so, help to solve global environmental issues, which have become a common issue for all humankind, and contribute to people's lives and health, and an enriched future society.

1. Ethics Be highly ethical, comply with laws and regulations, and respect social norms 2. Safety and Security Work to conserve the global environment and practice safe, secure manufacturing

3. Quality Deliver quality that earns the trust of customers and society

4. People Respect individuality and diversity, and build healthy and comfortable workplaces

### A Corporate Group Centered on Specialty Chemicals that Contributes to the Global Environment, Human Health, and an Enriched Future Society

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### To Our Stakeholders

# **Expanding Specialty Businesses while Accelerating** Structural Reforms at Basic Businesses, Including **Overseas Sites, and Continuing to Progress** Steadily toward Our Vision for 2030

### **Overview of Fiscal 2023**

# **Boosted Earnings on Robust Specialty Business** Performance that Offset **Basic Business Struggles**

**Operating Climate and Performance Highlights** While raw materials and fuel price surges subsided during the fiscal year under review, automotive production did not recover to initially expected levels. Demand for semiconductors and electronic components adjusted in the second half of the fiscal year. An economic slowdown in China particularly affected results. Fiscal 2023 was generally adverse for the chemicals industry, especially for companies offering commodity products.

Operating profit did not recover as sharply as we initially hoped. This was because a stagnant Chinese economy and other factors affected such basic businesses as caprolactam, a raw material for nylon, and nylon polymers. Even in such a situation, we shifted our focus to specialty businesses and boosted earnings almost 40% from a year earlier. This was on the strength of robust sales of separation membranes and after-sales services for machinery. Another contributor was higher royalty income from pharmaceuticals.

Ordinary profit rose significantly on better earnings in equity-method affiliates in cement-related businesses, as planned, with profit attributable to owners of parent exceeding the initial projection. We accordingly raised our year-end dividend by ¥5 more than we originally intended.

> Masato Izumihara President and Representative Director CFO

Progress with Medium-Term Management Plan: UBE Vision 2030 Transformation -1st Stage

# Expand Specialty **Businesses while Reducing** Impact of Basic Businesses on Operations

### Steadily Secure Earnings and Align with Original Medium-Term Management Plan

A significant market downturn affecting the basic businesses prevented us from reaching our goals under our current medium-term management plan. That said, the specialty businesses secured stable profits overall, notwithstanding some variations by product. This outcome confirmed the soundness of our strategy of expanding specialty businesses and lowering the impact of basic businesses on our overall operations through structural reforms. We are investing extensively in expanding specialty businesses. One key challenge will be how swiftly we can overhaul basic businesses in view of poor prospects for structural improvements in the commodity chemicals market.

In Japan, we are progressing as planned with structural reforms in our basic businesses. These efforts include lowering caprolactam production in fiscal 2024 and preparing to halt ammonia production by 2030. Still, we have to revise our initial scenario for the basic business overseas, which was to maintain that business to support specialty business growth.

In fiscal 2024, the final year of our current medium-term management plan, we anticipate recoveries to an extent in the automobile, semiconductor, and electronics markets. We look to generate secure earnings by stabilizing operations, controlling a surge in fixed costs, and aligning ourselves as much as possible with the goals of the original plan.

### **Completing Medium-Term Management Plan** Measures to Improve Price-to-Book Ratio

Our price-to-book ratio (P/B ratio\*) remains stubbornly below 1x. To improve this unacceptable situation, we must increase our return on equity (ROE), the numerator of that ratio, and lower the cost of

shareholders' equity in the market (Cost of shareholders' equity - Expected growth rate), which is the denominator. By focusing on growth in ROE, we will invest extensively in specialty businesses to steadily enhance earnings.

We can cut the market cost of shareholders' equity by reducing the beta value, a risk indicator in the capital asset pricing model. We assume that the equity market has set a high beta value for our stock in view of significant earnings volatility in our basic businesses and has discounted our growth potential. On top of that, the market considers high greenhouse gas (GHG) emissions risky. We believe that we can lower the market cost of equity by demonstrating our ability to generate stable earnings through specialty businesses, which are less prone to economic fluctuations, and by steadily reducing GHG emissions through structural reforms of basic businesses.

One strategy under our current medium-term management plan is to increase ROE by expanding specialty businesses, reduce earnings volatility by structurally reforming basic businesses, and adapt to a carbon-neutral economy. In other words, steadily implementing our plan and producing favorable outcomes should improve our P/B ratio. \* P/B ratio = ROE x P/E ratio = ROE x 1 / (Equity cost - Expected growth rate)

### Corporate Philosophy Guiding Specialty **Business Growth and Efforts to Tackle** Environmental Issues

Our founding principles of Coexistence and Mutual Prosperity and From Finite Mining to Infinite Industry

······ ····· UBE Group's business model Contribution to **Growth in Specialty Global Environment** Digital Chemicals Policy for Achieving Transformation Create added value Carbon Neutrality by 2050 Improve productivity based on strengths and efficiency through the use of • FY2030 GHG emission reduction target (compared to FY2013): 50% reduction digital technology Low energy burden and data • FY2030 target percentage of consolilated net sales comprising environ-mentally friendly products and technologies: **60% or more**  Create new value Resistant to swings in market conditions **\$....** Highly profitable \$..... Environment Social: Enhancing human capital, diversity, equity, and inclusion Business foundation Governance: Effective group governance

Sustainable society



together with the corporate philosophy, purpose, and management principles guide our routine operations. It is in line with that philosophical framework that we formulated our Vision for 2030 statement of. "A corporate group centered on specialty chemicals that contributes to the global environment, human health, and an enriched future society." To achieve that vision, we developed a growth strategy that combines expanding specialty businesses with tackling environmental issues and pursuing carbon neutrality. This shows our philosophical framework that starts from our founding principles links to our vision. Coexistence and Mutual Prosperity reflects a commitment to coexisting with all stakeholders. From Finite Mining to Infinite Industry represents our goal of delivering sustainable growth by transforming our business structure to reduce our reliance on fossil resources. These principles continue to guide us forward.

### Specialty Business Growth Strategy and **Profitability Improvements**

# Investing Intensively in Specialty Businesses to **Drive Growth**

### **Expanding Specialty Businesses**

In the polyimide business, production facilities for raw material biphenyl tetracarboxylic dianhydride (BPDA) and polyimide film should be up and running by the end of fiscal 2024. We will tap this greater production capacity to expand our polyimide business.

We decided to significantly bring forward plans to lift separation membrane production in response to robust demand for biomethane production. Demand for our energy-efficient, high-performance, and durable separation membranes has grown

considerably in line with surging biogas use in Europe and the United States because of heightened environmental awarenesses. We must advance plans to further boost production during fiscal 2024.

We also decided to step up ceramics production ahead of schedule in line with steady demand growth, particularly for power semiconductor substrates and bearing balls for electric vehicles (xEVs).

We will similarly raise separator production in response to consistent demand growth for xEVs and energy storage systems and other applications.

### **Deciding to Invest in C1 Chemicals Production** in North America

A particularly key move for expanding our specialty businesses globally was a decision to build a dimethyl carbonate (DMC) and ethyl methyl carbonate (EMC) plant in North America. We will spend approximately US\$500 million, in what will be our biggest-ever investment, to erect a facility in Louisiana whose annual production capacities would be 100,000 metric tonnes for DMC and 40,000 metric tonnes for EMC.

DMC and EMC are raw materials for electrolytes. which are essential for lithium-ion batteries (LiBs) in electric and other vehicles. The only other suppliers of these materials are Chinese. The United States has to import all of the DMC and EMC it needs to cater to projected demand growth for xEVs. Manufacturing DMC-the starting material-there should boost American economic security and meet strong customer demand to be part of the local supply chain.

DMC and EMC are also raw materials for such high-performance coatings as polycarbonate diol (PCD) and polyurethane dispersion (PUD). As the world's top manufacturer of PCD, we aim to position our U.S. plant as a hub for expanding our specialty businesses worldwide. We will invest in PCD and other facilities as soon as DMC production gets on track.

### **Expanding Businesses through Acquisitions**

API Corporation, which we acquired in 2022 and plan to absorb by merger in December 2024, is a key vehicle for expanding our contract development and manufacturing organization business.

As a growth measure, we are exploring the possibility of acquisitions. Historically, business units interacting closely with customers and the market have spearheaded our acquisition efforts, primarily to secure opportunities to grow existing businesses. We recently initiated a new approach, wherein

specialist sections of corporate divisions lead acquisition efforts in areas that are slightly distant from current operations but can leverage our technology platform to offer new opportunities to progress. We aim to achieve significant results with these corporate acquisitions.

# **Restructuring Basic Businesses Clarifying Optimal Scenario** for Halting Ammonia Production

### Looking to Bring forward Business Restructuring and Specialty Business Expansion at Overseas Sites

While planning to halt ammonia production in Japan by 2030 as scheduled, we may bring this time-line forward in view of Japan's emissions trading system (GX-ETS) and the introduction of levies. We are working to optimize our schedule.

We will also restructure overseas units. We will particularly review the caprolactam and nylon polymer production structure at our Thailand unit that is vulnerable to Chinese market trends, to reduce the negative impact on its business. We have strengthened such specialty businesses as PCD and composites there, and look to accelerate our shift to specialty businesses at that unit.

### Vision for 2030-Transformation

Transform its business structure through aggressive investment in specialty chemicals to achieve both GHG emission reductions and business growth.

In Spain, we will focus on carbon-neutral

caprolactam production to differentiate ourselves

in Europe, where environmental regulations are

toward Carbon Neutrality

and Catering to Demands

International Community

Combining Structural Reforms with Steady

Individual Efforts to Become Carbon Neutral

UBE is striving to become carbon neutral by 2050.

We aim to halve GHG emissions from fiscal 2013

levels by fiscal 2030, with environmentally friendly

products and technologies accounting for more

than 60% of consolidated net sales by that year.

initiative (SBTi) and ISCC PLUS certification and

participating in the GX League. It is important to

note, however, that certifications are not our goal.

We consider it important to cater to the demands

of customers and the international community by

aligning our environmental initiatives with external

objective standards. Also, we are working on a

Key efforts include securing Science Based Targets

Addressing Environmental Issues

Steadily Progressing

of Customers and the

becoming more stringent.





brand strategy for environmentally friendly products and deploying a system to calculate GHG emissions data by product. We are certain that we will reach our fiscal 2030 goals by restructuring, including by halting ammonia production in Japan.

### **Biodiversity Initiatives**

We believe that contributing to nature conservation and restoration through our nature positive commitment is vital to tackling environmental issues. After the release of the Taskforce on Nature-related Financial Disclosures (TNFD) framework in September 2023, we conveyed our basic nature positive stance on our website. We plan to clarify specific disclosures and key performance indicators (KPIs) based on that framework in and beyond our next medium-term management plan.

# Initiatives to Enhance Human Capital Fostering an Innovative Corporate Culture with DE&I

### Measuring Outcomes from Human Capital Investments

We must create innovative work environments and foster a diverse corporate culture to grow as a specialty chemicals company. Diversity, equity, and inclusion (DE&I) are essential for this goal. We have set numerical targets for the ratios of female employees, career hires, and non-Japanese hires, and are striving to reach them.

While DE&I should ultimately contribute to earnings and enhance corporate value, it is challenging to set KPIs that demonstrate cause and effect. We need to determine if improvements stem from investments in human capital. We thus aim to benchmark labor productivity improvements and the impact of our human capital investments.



### Prioritizing Safety for All Employees, Not Just Those in Manufacturing

As a manufacturer, our fundamental premise for enhancing human capital and productivity is that safety is our top priority. This commitment extends beyond the manufacturing floor. We emphasize the daily safety and health of all employees, including those in back-office and sales units, ensuring they are happy when clocking in and going home. While we have prevented serious occupational accidents, we realize that there is always room for improvement and will keep making steady efforts in this respect.

### **Specialty Business Growth and Process** Digitization

# Deploying Digital Transformation in New Initiatives

### **Using Generative AI**

UBE is extensively working on digital transformation (DX) under its current medium-term management plan. We formulated a total of 10 DX themes, including manufacturing, sales and marketing, R&D, human resources, and supply chain management to promote DX. Executive officers are appointed to each theme, thus, we are working as the Companywide business reform and value creation promotion activities. We rolled out our enterprise resource planning (ERP) system ahead of schedule to establish a foundation for such digitization and enable employees to focus on core operations that offer higher added value. We plan to invest approximately ¥22 billion including ERP by 2030, which should generate return on investment of roughly ¥30 billion annually.

DX must progress to create new value in a range of business domains. We have therefore started using generative AI at manufacturing sites. By integrating AI into on-site operations, equipment management, and safety activities that we have traditionally based on procedure manuals and the accumulated experience of individuals, we aim to address risks that people might overlook. We will incorporate AI in a range of areas after formulating Companywide rules for its use.

# **Corporate Governance** Ensuring a Solid Lineup of Outside Directors

### Ensuring Transparent Succession Planning

Our Board of Directors is highly effective and engages in lively deliberations. We maintain a wellbalanced lineup of outside directors in terms of

### The UBE Group's Business

skills, numbers, and gender diversity. They offer candid views and help enhance our corporate value. Succession planning for top management and other executives is one of the most important agenda items in Board meetings. We have rank-specific succession plans covering from general managers, executives and to the CEO. Since taking office, I have presented my thoughts on succession plans in annual Nominating Committee meetings, receiving feedback from directors, and making plans. We ensure succession planning transparency through discussions in that body.

# Machinery and Cement-Related Businesses Fostering Independent and Agile Management and **Ensuring Suitable Group** Governance

UBE fosters independent and agile management at the wholly owned UBE Machinery Corporation, Ltd. and equity-method affiliate Mitsubishi UBE Cement Corporation. As the holding company, we established robust Group governance systems for both businesses by dispatching directors to each of them and forming Holdings Meeting responsible for governance, which receives regular reports.

### Machinery Business: Receiving Order for Ultra-Large Die-Casting Machine for Giga Casting

The key focus of our machinery business is its ultralarge die-casting machine for giga casting. Overseas automakers have led the way in using large die-casting machines to reduce weight, lower part numbers, and streamline xEV production. Japanese counterparts are now also considering introducing these machines, and we have already received an order. Large die-casting machines have always been a strength for UBE Machinery. With a handful of manufacturers able to handle ultra-large machines for giga casting, we have high hopes for this machine to become a standout offering.

### **Cement-Related Business: Anticipating Growth**

Mitsubishi UBE Cement achieved a significant recovery in fiscal 2023. Key drivers were a correction in cement sales prices, robust overseas operations, and a production system review that we undertook in fiscal 2022. While domestic cement demand continues to dwindle and the business environment remains challenging, Mitsubishi UBE Cement looks to grow by reaping the rewards of

integration across its supply chain and expanding its overseas operations.

Carbon neutrality remains a prime challenge for Mitsubishi UBE Cement. That company seeks to lower its CO<sub>2</sub> emissions by 40% from fiscal 2013 levels by fiscal 2030 while developing a low-carbon cement, transitioning to alternative energy sources, and harnessing carbon dioxide storage and utilization technologies. As a 50% shareholder, we have committed to fulfilling our responsibility to ensure that this business addresses environmental issues.

As a leader in Japan's cement industry, we intend to strengthen that affiliate's independent management and build a structure that enables it to stand on its own.

# Message to Stakeholders Launching Our Next Medium-Term Management Plan from a Position of Strength

Fiscal 2024 is the crucial final year of our current medium-term management plan and the formulation of the successor initiative. Unfortunately, the Chinese economy recovery and automobile production have not reached the levels we anticipated when drafting our current plan. Despite a challenging business environment, we look to embark on the next plan after delivering results that are as close as possible to our final-year targets, with the highest possible earnings outcome.

Under the next medium-term management plan, we want to ensure that growth investments we made under the current initiative yield results. While the overall thrust of structural reforms by fiscal 2030 will remain unchanged, we will adjust implementation approaches and schedules in keeping with the business climate. Our current plan targets a dividend on equity (DOE) of 2.5% or more and a consolidated total return ratio of 30% or higher. We will explore raising these indicators under our next plan.

I look forward to your ongoing support and encouragement in fiscal 2024 and beyond.

July 2024

M. Iqumih

Masato Izumihara President and Representative Director CEO



The UBE Group is building on its long history and diverse businesses to help create a sustainable world by drawing on technologies that it developed with customers to innovate

	Major applications				
9	<ul> <li>Chip-on-film (COF) for large liquid crystal displays</li> <li>Flexible OLED substrates</li> </ul>				
	Refining biofuels (biomethane)				
<b>Y</b> \\					
	Bearings and heat-dissipating substrates for xEVs				
Darators	Lithium-ion battery (LiB) separators for xEVs				
	Automotive components				
PCD, PUD	<ul> <li>LiB electrolyte</li> <li>Synthetic leather and water-based paints</li> </ul>				
	Food packaging films				
	Nylon fibers for apparel and fertilizer				
caprolactam	Chemical raw materials				
	Automotive tires				
	<ul> <li>Automotive component molding</li> </ul>				
	Transportation systems, mills and bridges				
chines	Steel products				
ЛO)	<ul> <li>Drug discovery research</li> <li>Manufacture of active ingredients and intermediates and process development</li> </ul>				
eration)	In-house power generation and sale of surplus power				

### A History of Constant Reinvention

The UBE Group has overcome numerous challenges by continuing to reinvent itself. It will keep delivering sustainable growth by turning environmental changes into new business expansion opportunities.

### 1897 — Reinvention Begins under the Founding Principles of "Coexistence and Mutual Prosperity" and "From Finite Mining to Infinite Industry"

### **UBE's Establishment**

Creation of Okinovama Coal Mine and Business Development UBE started out with the establishment of the Okinovama Coal Mine as a silent partnership that local investors set up to develop coal fields in Ube, Yamaguchi Prefecture. Knowing that the coal resources were finite, machinery and cement

![](_page_5_Picture_6.jpeg)

1910

Okinoyama

Coal Mine

businesses were inaugurated with a view to generating infinite value. In the 1930s, it initiated its chemicals business, which succeeded in the synthesis of ammonia, the raw material for ammonium sulfate (fertilizer).

### 1942 — Contributes to Postwar Reconstruction and Modernization by Merging into Ube Industries, Ltd.

- 1897 Okinoyama Coal Mine established Coal mining
- 1914 Ube Shinkawa Iron Works established Manufacturing coal mining equipment 1942 Merge
- 1923 Ube Cement Production, Ltd., established ---
- Cement production

1933 Ube Nitrogen Industry, Ltd., established Manufacturing ammonium sulfate (fertilizer)

### Formed through the Amalgamation of Four Companies

Establishment of Ube Industries, Ltd. During the war, the Company experienced strict restrictions on the use of coal, hampering production. The four companies shown on the left amalgamated to form Ube Industries, Ltd., to ensure their collective survival in response to the government demanding a corporate restructuring as a requisite for using coal.

![](_page_5_Picture_16.jpeg)

1960 Crude oil gasification plant

### **Postwar Reconstruction**

Striving to Increase Coal and Ammonium Sulfate Production Air raids during World War II destroyed many production facilities. The Company did its utmost amid postwar chaos to revive its operations and help rebuild the economy by meeting energy demand and addressing food shortages.

Ube City burned to the ground during the war

![](_page_5_Picture_20.jpeg)

The Ube Method, a Pioneering Approach to Tackling Pollution Ube City suffered from fly ash pollution from burning coal. In 1951, the council brought together industry, government, academia, and other private-sector stakeholders to tackle the issue, culminating in the Ube Method, UBE took a leading role in the business community by installing equipment to collect fly ash.

![](_page_5_Picture_22.jpeg)

1953 Heavy fly ash pollution in industrial area of Libe

### 1960 — An Energy Revolution — Shift from Coal to Oil Presents Business **Expansion Opportunities**

### **Closed Coal Mines and Entered the Petrochemicals Business**

Converting Ammonia Gas Sources to Oil With the competitiveness of coal declining amid an energy revolution, UBE shifted from coal to oil as an ammonia gas feedstock and closed the coal mines that had supported it since its establishment. This turning point for a company that had leveraged coal for its growth marked a bold entry into the petrochemicals business to further develop its operations.

	1946–1949 Irre	egular settlement			
	Irregular sett	tlement			
1942	Switch to new yen 1950 Irr	egular settlement	1960	1970	
Non-c	onsolidated settlement (Six-	month settlement)			

# 1970 — Overcoming Oil Crises and Laying the Foundations for Its Specialty Chemicals Capabilities

### Leading Industry in Resuming Coal Usage

Returning to Coal as an Ammonia Gas Feedstock UBE overcame rocketing petroleum product prices after oil crises by taking the lead in industrial circles to resume the use of coal by returning to coal as an ammonia gas feedstock (see note). The Company became the first in the world to gasify coal for ammonia production on a large scale.

Note: From 1996, UBE took the process further by switching to petroleum coke, an end product from petroleum refining.

![](_page_5_Picture_32.jpeg)

### **Diversifying the Chemicals Business**

Expanding the Specialty Chemicals Business UBE stepped up research and development in high-value-added fields as recessions stretched out following the oil crises. The Company commercialized many of its current specialty chemicals businesses from the 1980s. These included polyimide, separation membranes, silicon nitride, dimethyl carbonate (DMC) and other C1 chemicals, separators, and pharmaceuticals.

1993 DMC plant begins operatio

# 1995 — Steadily Restructuring Finances and Overhauling **Operations to Stabilize the Revenue Base**

### Financial Restructuring

Stabilizing the Financial Base Heavy interest-bearing debt created an unprecedented crisis for UBE during the recession after the bubble economy burst. The Company pushed ahead with reforms, focusing resources on core businesses, rationalizing or withdrawing from unprofitable fields, and selling cross-shareholdings. This endeavor built a stable financial base that endures to this day.

### 2022 — Renaming as UBE Corporation **Opens New Growth Chapter for the UBE Group**

1990

### Becoming a Corporate Group Centering on Specialty Chemicals

Spinning off Cement-Related Business and Renaming Parent UBE Corporation In 2022, we integrated our core cement-related business with the counterpart at Mitsubishi Materials Corporation. We accordingly renamed ourselves UBE Corporation, becoming a corporate group focusing on the chemicals business

Ceaselessly Growing and Pursuing Structural Reforms Major changes in the business climate include the rise of emerging economies and the drive toward decarbonization. It was in response to such conditions that we reduced domestic production of caprolactam, a key chemicals business (May 2024), and we aim to halt ammonia production by 2030. At the same time, new needs have expanded in such areas as electric vehicles (xEVs) and renewable energy. We will deliver sustainable growth by expanding specialty businesses globally, including by establishing a new DMC plant in the United States

2000

UBE	Corporation	

1980

Consolidated settlement

![](_page_5_Picture_49.jpeg)

![](_page_5_Picture_50.jpeg)

1984 Coal gasification plant firing ceremony

Net Sales (Millions of yen) 700.000

600,000

500,000

400 000

Examples of specialty chemicals

200,000

300.000

100.000

2010

2020

### **Consolidated Financial and Non-Financial Highlights**

### **Financial Highlights**

![](_page_6_Figure_3.jpeg)

Net Sales

Net sales were down 5.4% from a year earlier. This reflected the impact on the Polymers & Chemicals segment of sluggish economic conditions in China and slow sales of nylon polymers, caprolactam, and other offerings. These factors offset gains from acquiring pharmaceuticals contract manufacturing company API Corporation in December 2022.

![](_page_6_Figure_5.jpeg)

Operating profit increased 38.5%. This was due largely to robust sales of separation membranes in the Specialty Products segment, after-sales service contributions in the Machinery segment, and higher royalty income in the pharmaceuticals business. The return on sales (ROS) rose 1.5 percentage points, to 4.8%.

![](_page_6_Figure_7.jpeg)

Net income per share was ¥298.59, from a net loss per share of ¥72.54 a year earlier. This stemmed from the operating profit turnaround and a rise in equity in earnings of affiliates following price adjustments at Mitsubishi UBE Cement Corporation.

![](_page_6_Figure_9.jpeg)

Return on equity (ROE) was 7.5%, compared with negative 1.9% a year earlier. Return on assets (ROA) was 5.1%, against negative 0.7% in the preceding term.

![](_page_6_Figure_11.jpeg)

Shareholders' equity rose 13.0%, and the shareholders' equity ratio increased 2.4 percentage points, to 51.8%.

![](_page_6_Figure_13.jpeg)

Interest-bearing debt dropped 2.2%, primarily because a significantly higher operating cash flow reduced debt. The debt/equity ratio remained robust, at 0.52 times.

\*1 ROA = (Operating profit + Interest and dividend income + Share of profit of entities accounted for using equity method) / Average total assets \*2 Shareholders' equity = Net assets - Share subscription rights - Non-controlling interests

![](_page_6_Figure_16.jpeg)

GHG emissions decreased 8% from a year earlier and

26% from fiscal 2013. \* Note: FY2023 GHG emissions have been revised as a result of the

third-party verification in October 2024.

![](_page_6_Figure_20.jpeg)

![](_page_6_Figure_21.jpeg)

The number of directors was unchanged, at 10. Outside directors again accounted for half of the Board of Directors, and included a female director.

![](_page_6_Figure_23.jpeg)

In recent years, the number of patents and new patent registrations declined owing to the transfer of patent rights due to the reorganization of chemicals businesses and the progress of inventorying patents held. In fiscal 2023, however, the numbers were at the same level due to steady patent registration procedures. Patents related to the specialty businesses accounted for 63% of the number held in fiscal 2023.

\*3 Figures exclude those for the cement-related business transferred to Mitsubishi UBE Cement. \*4 Number of patents held by UBE Corporation and some of its Group companies \*5 On a consolidated basis in Japan

Debt/Equity

Sales of environmentally friendly products and technologies were down 2.9%, although they constituted 47% of net sales, up 1.0 percentage point.

R&D expenses were maintained at a certain level.

Providing greater opportunities for women is a key diversity, equity, and inclusion priority. Women held 4.6% of management positions in the fiscal year under review, up 0.5 percentage point.

### Key Risks and Opportunities / Materiality

### **Risk Management Policy and System**

UBE suitably manages Group risks and stipulates risk management rules based on the Basic Policy for Establishing Internal Control established by the Board of Directors. In this way, risk management is implemented for all Group companies.

The President of UBE appoints a director or executive officer to serve as Chief Risk Officer (CRO). The CRO is responsible for promoting the implementation of risk management tasks for the UBE Group. The Risk Management Department provides administrative and other support for the CRO, as the secretariat for risk management.

The Risk Management Department maintains a risk management system to register and centrally oversee risks. We identify pertinent risks for each division and business unit, classifying them as major, medium, and minor in line with their risk impacts. We define major risks as having financial impacts of at least ¥1 billion.

Serious (major) risks that impact the entire Group are reported to the Risk Management Committee for discussion. They are then submitted to the Strategic Management Meeting (Sustainability Committee), where the members discuss approaches and effective measures based on the risk recognition. The details of these discussions are regularly reported to the Board of Directors, which monitors the risk management.

Individual officers are appointed to manage a particular serious (major) risk. Under this system, each officer evaluates the risk concerned along with the effectiveness of relevant risk management measures from a Groupwide perspective. The officer then provides guidance and instruction to relevant departments for risk management measure implementation in the following fiscal year.

![](_page_7_Figure_8.jpeg)

Information

security

https://www.ube.com/ube/en/sustainability/

Category		Risk Overview Examples	Countermeasures	Opportunities	
Growth	<ul> <li>Variable factors         <ul> <li>Init sales declines from being unable to match customer demand on time or prices falling amid intensified competition</li> <li>Supply increases attributable to competitors expanding production or sudden changes in key raw materials prices that could narrow product and raw materials price spreads</li> </ul> </li> </ul>		<ul> <li>Accelerate specialty business growth by pursuing customer satisfaction and concentrating investment of management resources including M&amp;As</li> <li>Promptly reflect raw materials price hikes in product pricing to ensure proper price spreads</li> <li>Reduce plant costs and downsize or withdraw from unprofitable businesses</li> </ul>	<ul> <li>Accelerate transformation into a specialty chemicals company by satisfying customers</li> <li>Expand existing markets and create new ones by matching increasingly</li> </ul>	
	R&D	<ul> <li>R&amp;D themes do not proceed as planned, significantly delaying new product development and leading to a cessation in development</li> <li>Approvals for new drugs in the pharmaceuticals business are postponed or revoked</li> <li>Concentrate operating resources based on business portfolio, swiftly materializing R&amp;D results and endeavoring to enhance development precision</li> <li>Build technological superiority and shorten lead times by utilizing open innovation and DX</li> </ul>		<ul> <li>sophisticated and diverse customer needs</li> <li>Expand and create markets in which the UBE Group can draw on its strengths</li> <li>Expand markets globally</li> <li>Enhance competitiveness by deploying a suitable intellectual property strategy</li> </ul>	
	Intellectual property	<ul> <li>Important technologies or know-how leaked to external parties, intellectual property rights are violated</li> <li>Intellectual property disputes arise with other companies and decisions go against the UBE Group</li> </ul>	<ul> <li>Protect intellectual property by obtaining and managing intellectual property rights and by properly managing information such as technical expertise</li> <li>Respect the intellectual property rights of third parties and obtain patent clearances</li> </ul>	-	
Environment	Environmental issues	<ul> <li>Because GHG emissions are high, lifting carbon taxes, tightening regulations, and other moves would significantly increase costs</li> <li>Delays in addressing circular economy, nature positive, and other new environmental challenges could cause a downturn in product sales</li> <li>If the Company is deemed a laggard in addressing environmental issues, sales could languish, adversely affecting corporate value</li> </ul>	<ul> <li>Determine addressing global environmental issues as management priorities, focusing on reducing GHG emissions while developing and popularizing products and technologies that help lower environmental impact and foster a carbon-neutral economy</li> <li>Announce policy for achieving carbon neutrality by 2050 and establish Medium-Term Targets to reach those objectives by fiscal 2030</li> <li>Undertake R&amp;D that contributes to a circular economy</li> <li>Disclose information based on TCFD recommendations</li> </ul>	<ul> <li>Expand markets for products and services that help resolve climate change and other environmental issues</li> <li>Drive carbon dioxide utilization, recycling, and other technological advances in R&amp;D that seek to resolve environmental issues</li> </ul>	
Society	Human capital and human rights	<ul> <li>It becomes hard to attract highly specialized, experienced, and expert individuals</li> <li>Vital people leave the Company</li> <li>Failing to adequately address international human rights requirements could undermine corporate value</li> </ul>	<ul> <li>Pursue diversity, equity, and inclusion (DE&amp;I) to create positive workplaces that empower women, tap the expertise of senior workers, and employ people with disabilities</li> <li>Improve wages and other terms, offer flexible work arrangements, and shorten working hours</li> <li>Formulate the UBE Group Human Rights Guidelines and engage in human rights due diligence</li> <li>Educate all Group directors and employees on human rights</li> </ul>	<ul> <li>Improve management by deploying advanced DE&amp;I practices</li> <li>Foster innovation by securing highly specialized, diverse individuals</li> <li>Enhance labor productivity by improving work environments and personnel systems</li> </ul>	
	Supply chain	<ul> <li>Changing socioeconomic conditions, natural disasters, and other factors could drive raw materials prices higher and disrupt supply chains</li> <li>Driver shortages, tighter overtime regulations, and rising fuel costs could lead to higher logistics expenses or disruptions</li> </ul>	<ul> <li>Mitigate UBE's earnings impacts through appropriate negotiation that complies with the Subcontract Act and other relevant legislation</li> <li>Diversify suppliers of raw materials and fuels and production sites and maintain suitable inventory levels</li> <li>Identify more affordable alternatives that could replace existing raw materials</li> <li>Expand modal shifts, secure multiple transportation means, and streamline transportation to alleviate logistics company workloads</li> </ul>	<ul> <li>Stabilize operations and improve profitability by properly managing the supply chain</li> </ul>	
	Quality	<ul> <li>Quality issues create significant damages compensation and other costs and erode public trust, causing business activities to decline</li> </ul>	<ul> <li>Improve quality management</li> <li>Implement extensive measures to ensure that previous inappropriate quality inspection practices are not forgotten and never recur</li> <li>Maintain facilities, install suitable measuring equipment, create work manuals, and educate employees</li> <li>Take out product liability insurance</li> </ul>		
Governance	Laws and regulations	<ul> <li>Revisions to laws and regulations in various countries and regions could result in costs to upgrade or modify manufacturing facilities and improve working conditions</li> <li>Violations of laws and regulations could result in significant</li> </ul>	<ul> <li>Appoint a compliance officer and set up the Compliance Committee</li> <li>Establish a direct reporting hotline for directors and employees</li> <li>List key domestic and international regulations and share regulatory updates with the relevant departments</li> <li>Identify and address regulatory risks through the risk management system</li> </ul>	<ul> <li>Earn stakeholder trust through proper governance</li> </ul>	

- fines, restricting business activities and undermining public trust • Provide e-learning and training for all Group directors and employees • A system shutdown from a cyberattack or other unforeseen Establish the Information Security Committee, formulate related regulations, implement measures to detect
- event or critical information leaks, destruction, or other damage and prevent unauthorized intrusions, formulate IT business continuity plans, and educate all Group causing production to halt, leading to massive compensation directors and employees about security claims and loss of credibility • Establish the Computer Security Incident Response Team to minimize damage from security incidents

Please see pages 30-33 of the 118th Securities Report for information regarding other risks and details (in Japanese only). https://www.ube.com/ube/ir/ir\_library/financial\_results/

Materiality	The UBE Group's Measures	Key KPIs	Related Pages	SDGs Items to Which We Contribute
Growth in specialty chemicals	We aim to build an organization that can grow steadily and become more profitable in any economic climate. We will get there by increasing the ratio of specialty businesses* in our overall business. Specialty businesses encompass many operations that generate minimal GHG emissions. We look to lower emissions rates by lifting the contributions to sales of such businesses. We are emphasizing R&D activities and intellectual property strategies to build a competitive edge in the specialty business. * Polyimide, separation membranes, ceramics, semiconductor gases, separators, composites, C1 chemicals, high-performance coatings, pharmaceuticals, phenolic resin	FY2024 (Note) Operating profit: ¥40.0 billion (Of which, specialty businesses: ¥24.0 billion) Ordinary profit: ¥47.0 billion (Including ¥8.0 billion* in equity in earnings of Mitsubishi UBE Cement Group) * Tentative values assumed before launching group ROS: 8% ROE: 8% Note: Original medium-term management plan Please see pages 18 and 19 for fiscal 2024 forecasts. FY2030 ROS: 10% or higher	Key specialty business growth strategies <i>Pages 24–33</i> R&D and intellectual property <i>Pages 40–41, 42–43</i>	3 COOD MEAN AW WILL SENC AWAY 10 NOT THE NEW OF NOT
Addressing global environmental issues	<ul> <li>We have formulated the following three categories for ongoing environmental action.</li> <li>(1) Addressing climate change (carbon neutrality)</li> <li>(2) Contributing to a circular society (circular economy)</li> <li>(3) Contributing to nature conservation and restoration (nature positive)</li> <li>We are particularly stepping up efforts to achieve carbon neutrality by cutting GHG emissions across our value chain. In addition, we will help resolve environmental issues by providing products, technologies, and services that materialize a circular economy and are nature positive and by engaging and collaborating with stakeholders.</li> </ul>	FY2030 GHG emissions reduction: 50% reduction compared to FY2013 Percentage of consolidated net sales comprising environmentally friendly products and technologies: 60% or higher	Disclosure based on TCFD recommendations <i>Pages</i> 50–51 Tackling environmental issues <i>Pages</i> 52–57	6 ALLA MATTA CONSISTENTIAL 12 INSTRUCTER CONSISTENTIAL 13 ALTAR 13 ALTAR CONSISTENTIAL 14 INTERNITER CONSISTENTIAL 15 UKLAS
Hiring and development of human resources	People will be the engine of the UBE Group's growth over the medium and long terms. We will hire more women and non-Japanese nationals while educating employees to cultivate people with diverse values and perspectives, thereby enabling us to respond swiftly to changes in the business climate and pursue sustainable growth.	FY2024         (Consolidated basis in Japan)         Percentage of women in the workforce:         18% <sup>(Note)</sup> Percentage of women in management         positions: 6%         Percentage of mid-career recruitment         in the workforce (career-track employees):         50% or more         Number of non-Japanese recruits         (career-track employees):         Several people         Note: Revised from 15% target set when formulating the medium-term management plan         FY2030         (Consolidated basis in Japan)         Percentage of women in the workforce:         30%         Percentage of women in management         positions: 10%	Conversation about human capital strategy Pages 60–63 Human capital initiatives Pages 64–69	S CENT VOIC AU EXPLICIT EXPLIC EXPLIC EXPLICIT EXPLICIT EXPLICIT EXPL
Strengthening the management platform (corporate governance and digital transformation)	We will reinforce the Group's new structure under UBE Vision 2030 Transformation – 1st Stage, our medium-term management plan. UBE itself will accelerate specialization as a chemical company and properly govern a machinery subsidiary and a cement-related affiliate as a shareholder. UBE is endeavoring to ensure Board of Directors' diversity and delegate authority to executives. It is creating a framework to deepen discussions about materiality. UBE will implement a DX strategy encompassing all employees and business areas to accelerate efforts to drive growth in specialty chemicals and address environmental issues.		Digital transformation strategy <i>Pages</i> 44–47 Corporate governance <i>Pages</i> 73–83	12 ESSONALE produktion Jer Production

### etermining Materiality

e comprehensively take into account environmenissues and other Group risks (Please see pages 2-13 for details), mega trends, the global consenus on sustainable social development, and the roup's technological capabilities for helping lower vironmental impact in identifying and focusing materiality impacts that affect our sustainable owth.

We consider the environment our greatest risk in ew of our high GHG emissions. We seek to reduce ese risks and turn them into opportunities not only endeavoring to slash emissions but by building r portfolio of environmentally friendly products d technologies.

### Identify issues

**tep 1** Identify issues based on such international guidelines as the SDGs and the UN Global Compact, social issues, and market trends

![](_page_8_Figure_15.jpeg)

Rank importance **Exep 2** Rank materiality based on risks and opportunities for the UBE Group, factoring in two-axis (innovation and industrial development, and contributions to resolve environmental issues) and future financial impacts

ntributions to resolve ironmental issues Creating a better society Innovation and industrial development

### Identify materiality

**Exep 3** Identifying from the most important issues and reviewing as needed

### nsensuses to which we have referred

Sustainable Development Goals

- ASB Standards, IFRS Foundation
- Iniversal Declaration of Human Rights
- Guiding Principles on Business and Human Rights
- SO 26000, a global standard for social responsibility
- Blobal Reporting Initiative standards

### Value Creation Process

The UBE Group evaluates the risks and opportunities of changes in the business climate to identify materiality. We then plan and implement management strategies and deliver products and solutions, thereby delivering real value to society while appropriately addressing various risks and helping to realize social sustainability in our drive to generate sustainable growth.

![](_page_9_Figure_3.jpeg)

Capital reinjections into new value creation

pital components	<ul> <li>Value provided to society</li> </ul>
profit ¥22.5 billion butable to parent ¥29.0 billion	Contribution to global environment <ul> <li>Shifting to xEVs and improving fuel efficiency through light- weighting for automobiles</li> <li>Using more renewable energy sources</li> <li>Reducing hazardous</li> </ul>
flow ¥19.6 billion	substances
4.8% 7.5% 5.1% 4.7%	7       III INTERNITY         IVENUE       IVENUE         IVENUE       IVENUE         Contributions to health and food safety         • Reducing food loss
f newly patents 178	<ul> <li>Stabilizing food supplies</li> <li>Addressing labor shortages</li> <li>Improving medical care</li> </ul>
e of consolidated net prising environmentally oducts and ies 47%	2 More Starting Start
sions 3,500 kt-CO2e/y charges 385 million m <sup>3</sup> om resource reuse y conservation ¥3.0 billion see the 2024 Integrated Report any Information (Environment and ty/Quality Assurance) for details.	the digitalization of society • ICT equipment advances (notably in terms of displays and semiconductors)

# Progress under UBE Vision 2030 Transformation – 1st Stage, Our Medium-Term Management Plan

This initiative guides our drive to materialize our Vision for 2030. We have positioned three years through fiscal 2024 as a period for reinforcing our earnings base and investing in growth while pressing forward with ongoing business structure reforms to focus on specialty chemicals and address environmental issues.

Although our fiscal 2023 results fell short of medium-term management plan targets, owing largely to a basic business performance deterioration, earnings levels remained stable in specialty businesses.

We will continue to expand our specialty businesses and restructure basic businesses

to deliver sustainable growth worldwide.

Basic Policy and Priority Measures and Related pages Pursuing global profit growth driven by specialty

chemicals Pages 24-33
Structural changes in response to global environmental issues Pages 34–35, 50–57
Enhancing human capital for sustainable growth Pages 60–63, 64–69
Enhancing corporate value and creating customer value by promoting DX Pages 44-47
Further improving governance Pages 73–83

Progress of Numerical Targets		2022		2023		2024 (FY)	
		Original targets	Results	Original targets	Results	Original targets	Forecasts
Key Figures	Net sales	¥510.0	¥494.7	¥520.0	¥468.2	¥520.0	¥510.0
(Billions of yen)	Operating profit	34.5	16.2	41.0	22.5	40.0	27.0
	Ordinary profit (loss)	31.0	(8.7)	45.0	36.3	47.0	37.0
	Profit (loss) attributable to owners of parent	21.0	(7.0)	32.0	29.0	33.0	29.5
Key Indicators	Return on sales (ROS)	6.8%	3.3 %	7.9%	4.8%	8%	5.3%
	Return on equity (ROE)	5.6%	(1.9)%	8.2%	7.5%	8%	7.1%
	Return on invested capital (ROIC)	_	(2.0)%	_	4.7%	6%*	4.8%
							* Reference
Progress by Portfolio Segmentation		2022		2023		2024 (FY)	
		Original		Original		Original	_

	Business portfolio	targets	Results	targets	Results	targets	Forecasts
Net sales	Specialty business	¥143.5	¥138.2	¥149.0	¥152.9	¥162.0	¥172.5
(Billions of yen)	Basic business	238.5	236.9	252.0	201.0	240.0	217.5
	Machinery business	106.0	96.9	98.0	96.9	100.0	104.0
	Other businesses (incl. adjustment*)	22.0	22.8	21.0	17.4	18.0	16.0
	Total	¥510.0	¥494.7	¥520.0	¥468.2	¥520.0	¥510.0
Operating profit (loss) (Billions of yen)	Specialty business	¥ 23.5	¥ 18.3	¥ 24.5	¥ 18.6	¥ 24.0	¥ 24.0
	Basic business	11.0	(3.4)	16.5	0.1	15.5	1.0
	Machinery business	5.0	5.2	5.5	7.2	6.0	7.0
	Other businesses (incl. adjustment*)	(5.0)	(4.0)	(5.5)	(3.4)	(5.5)	(5.0)
	Total	¥ 34.5	¥ 16.2	¥ 41.0	22.5	¥ 40.0	¥ 27.0

\* Adjustment includes elimination of inter-portfolio transactions.

Overall performance will fall short of the final year target of the medium-term management plan due to the deterioration of basic businesses. However, specialty businesses are expected to achieve the targets.

Basic businesses	-Heavily impacted by factors such as the stagnation in China's economy, achieving the
	original medium-term management target is difficult. The performance of caprolactam and
	nylon polymers has fallen significantly below expectations due to sluggish sales volumes and
	declining sales prices. Industrial chemicals are also affected by the slow demand for ammo-
	nia in industrial applications in Japan and the falling international ammonia market prices.

- Specialty businesses Although some products were affected by inventory adjustments, the steady growth of separation membranes, ceramics, and high-performance coatings has supported the overall business, and it is expected to catch up with the original target in the final year.
- Machinery businesses-Both machinery products and after-sales services have been relatively strong, and the business is expected to exceed the original target.

### **Business Portfolio**

	Business Portfolio Segmentation	Businesses		
Specialty business	Aim for further growth and expansion in business that can create added value and achieve high profitability based on the Group's core technologies and strengths in the value chain	<ul> <li>Polyimide Separation membranes Ceramics</li> <li>Semiconductor gases Separators Composites</li> <li>C1 chemicals High-performance coatings</li> <li>Pharmaceuticals Phenolic resin</li> </ul>		
Basic business	Aim to steadily improve and add to profits	<ul> <li>Nylon polymers</li> <li>Caprolactam, ammonium sulfate</li> <li>Industrial chemicals</li> <li>Elastomers</li> <li>Polyethylene films</li> <li>Processed resin products</li> </ul>		

Others: Sales companies outside Japan, logistics services, real estate business, machinery, etc. Note: Please see pages 24-33 for details on the growth strategies of businesses in blue text.

### Measures for Growth

In the current medium-term management plan, many growth investments have been decided and implemented in specialty businesses. This will lead to profit growth during the next medium-term management plan and beyond.

Polyimide	<ul> <li>New facilities for films and BPDA anticipated to go into operation in the second half of FY2024</li> <li>Meeting increasing demand associated with the growth and sophistication of digital devices</li> </ul>	Separators	<ul> <li>Capacity expansion decided, with operation anticipated in FY2026</li> <li>Meeting increasing demand associated with the electrification of automobiles</li> </ul>
Separation membranes	<ul> <li>Capacity expansion decided ahead of schedule, with operation anticipated in the first half of FY2025</li> <li>Additional expansion under consideration in response to strong demand</li> <li>Pioneering the next-generation environmental and</li> </ul>		<ul> <li>Establishment of a new DMC and EMC facility in the United States decided, with operation anticipated in November 2026</li> <li>In Thailand, expansion of PCD completed in FY2023</li> </ul>
Ceramics	<ul> <li>energy markets</li> <li>Capacity expansion decided ahead of schedule, with operation anticipated in the second half of FY2025</li> <li>Meeting rapidly growing demand associated with the electrification of automobiles</li> </ul>	Pharmaceuticals	<ul> <li>API Corporation acquired in 2022, and its absorption scheduled for December 2024</li> <li>Aiming to enhance presence and further development in the CDMO industry</li> </ul>

### Capital Allocation

	Billions of yen				
3-year cumulative cash-in	Original targets	Forecasts over three years			
Operating cash flow*1	¥182.0	¥144.0			
Sale of assets, etc.	15.0	15.0			
Debt financing	0.0	62.0			
Cash on March 31 2022					

Cash on March 31, 2022

¥ 35.0\*2 ¥ 35.0 Cash \*1 Operating cash flow before R&D investment

\*2 Excludes the cash and deposits transferred to Mitsubishi UBE Cement Corporation as of April 1, 2022

### Business Resources Allocation Plan by Portfolio Segmentation and Progress

Growth investments in specialty businesses, such as accelerated investments in separation membranes and ceramics, and the expansion of C1 chemicals in North America, have increased compared to the current medium-term management plan.

Total available for distribution ¥256.0 billio Original target ¥232.0 billion

![](_page_10_Figure_27.jpeg)

### Allocate cash generated to growth investments, R&D, and shareholder returns

		Billions of yen				
	3-year cumulative cash-out	Original targets	Forecasts over three years			
	Investments	¥130.0	¥160.0			
	R&D	32.0	31.0			
n	Debt repayment	12.0	0.0			
	Shareholder returns	29.0	30.0			
	Cash on March 31, 2025					

¥ 29.0 ¥ 35.0 Cash Reference: Consolidated balance sheets at end of March 2025

Total assets: ¥850 billion Interest-bearing debt: ¥269 billion Shareholders' equity: ¥424 billion

Shareholders' equity ratio: 49.9% Debt/equity ratio: 0.63 times

### Message from the CFO

We aim to bolster corporate value by cultivating specialty chemicals and engaging in sustainability management while maintaining a sound financial position Hirotaka Ishikawa

to deliver sustainable growth.

Director, Executive Officer CFO

![](_page_11_Picture_5.jpeg)

### **Basic Financial Policies**

Under our current medium-term management plan, we prioritize investing to grow specialty businesses, and are bringing investments forward as needed. We look to increase and stabilize our cash flow and enhance corporate value by expanding specialty businesses, where we have a solid competitive edge. At the same time, we will constrain interest-bearing debt to match our cash generation capabilities and shareholders' equity. Given that our financial load could rise temporarily because of time lags between making and recovering investments, we will endeavor to mitigate risks by forecasting financial indicator trends over the medium to long terms to balance growth investments and our financial soundness.

We will carefully explain measures and progress toward our Vision for 2030 to stakeholders and fulfill our responsibility for deepening understanding of our growth potential.

### **Overview of Operating and Financial** Performances in Fiscal 2023

In fiscal 2023, net sales decreased 5.4%, to ¥468.2 billion, and operating profit jumped 38.5%, to ¥22.5 billion. We posted an ordinary profit of ¥36.3 billion, from an ordinary loss of ¥8.7 billion

a year earlier. Profit attributable to owners of parent was ¥29.0 billion, compared with a loss of ¥7.0 billion a year earlier. The operating profit gain stemmed from steady sales of separation membranes, robust after-sales service contributions in the Machinery segment, and higher royalty income from the pharmaceuticals business. Turnarounds in ordinary profit and profit attributable to owners of parent benefited from greater equity method gains from improved earnings in the cement-related business (an equity-method affiliate), as well as from an increase in operating profit.

ROS was up 1.5 percentage point, to 4.8%. ROE was 7.5%, from a negative 1.9% a year earlier. The debt/equity ratio was 0.52 times, from 0.60 times in fiscal 2022, while the shareholders' equity ratio was 51.8, up from 49.4%.

### Fiscal 2024 Forecasts

For fiscal 2024, the final year of our current medium-term management plan, we project net sales of ¥510 billion and an operating profit of ¥27 billion. The earnings improvement would come mainly from demand recoveries in the Polymers & Chemicals segment. It will remain challenging, however, to reach plan targets of ¥520 billion in net sales and ¥40 billion in operating profit.

Medium-Term Management Plan: Numerical Targets by Portfolio Segmentation and Progress Business portfolio		2022		2023				2024	(FY)	
		Original targets	Results	Difference	Original targets Results Difference			Original targets	Forecast	Difference
Net sales	Specialty business	¥143.5	¥138.2	¥ (5.4)	¥149.0	¥152.9	¥ 3.9	¥162.0	¥172.5	¥ 10.5
(Billions of yen)	Basic business	238.5	236.9	(1.6)	252.0	201.0	(51.0)	240.0	217.5	(22.5)
	Machinery business	106.0	96.9	(9.1)	98.0	96.9	(1.1)	100.0	104.0	4.0
	Other businesses (incl. adjustment*)	22.0	22.8	0.8	21.0	17.4	(3.6)	18.0	16.0	(2.0)
	Total	¥510.0	¥494.7	¥(15.3)	¥520.0	¥468.2	¥(51.8)	¥520.0	¥510.0	¥(10.0)
Operating	Specialty business	¥ 23.5	¥ 18.3	¥ (5.2)	¥ 24.5	¥ 18.6	¥ (5.9)	¥ 24.0	¥ 24.0	¥ —
(Billions of yen)	Basic business	11.0	(3.4)	(14.4)	16.5	0.1	(16.4)	15.5	1.0	(14.5)
	Machinery business	5.0	5.2	0.2	5.5	7.2	1.7	6.0	7.0	1.0
	Other businesses (incl. adjustment*)	(5.0)	(4.0)	1.0	(5.5)	(3.4)	2.2	(5.5)	(5.0)	0.5
	Total	¥ 34.5	¥ 16.2	¥(18.3)	¥ 41.0	¥ 22.5	¥(18.5)	¥ 40.0	¥ 27.0	¥(13.0)

\* Adjustment includes elimination of inter-portfolio transactions

	Dillori	o or you
3-year cumulative cash-in	Original targets	Forecasts over three years
Operating cash flow*1	¥182.0	¥144.0
Sale of assets, etc.	15.0	15.0
Debt financing	0.0	62.0
Cash on March 31, 2022		
Cash	¥ 35.0	¥ 35.0*2

\*1 Operating cash flow before R&D investment \*2 Excludes the cash and deposits transferred to Mitsubishi UBE

Cement Corporation as of April 1, 2022

Throughout the current plan, the Specialty Products and other specialty businesses have generally performed on track. At the same time, earnings levels of basic businesses have been lower than we anticipated when formulating that initiative. This has been because of deteriorating operating climates for caprolactam, nylon polymer, and ammonia. We will have to swiftly and decisively expand specialty businesses and restructure basic businesses to attain our Vision 2030 goals.

### Cash Allocations

When we formulated this plan, we projected a cumulative operating cash flow (before R&D investment) of ¥182 billion over three years. We have lowered that forecast to ¥144 billion. That said, we are stepping up forward spending to cater to buoyant demand for separation membranes and ceramics. We are expanding C1 chemical operations in North America, with growth investments rising more than we envisaged under the plan. Also, we expect R&D investment and shareholder returns to be basically as we intended. So, while interest-bearing debt should

![](_page_11_Figure_24.jpeg)

![](_page_11_Figure_25.jpeg)

<sup>(</sup>implemented in fiscal 2021).

Total available for distribution ¥256.0 billion

Original target ¥232.0 billion

	Billions of yen				
3-year cumulative cash-out	Original targets	Forecasts over three years			
Investments	¥130.0	¥160.0			
R&D	32.0	31.0			
Debt repayment	12.0	0.0			
Shareholder returns	29.0	30.0			
Cash on March 31, 2025					
Cash	¥ 29.0	¥ 35.0			

Reference: Consolidated balance sheets at end of March 2025

Shareholders' equity ratio: 49.9% Debt/equity ratio: 0.63 times

Total assets: ¥850 billion Interest-bearing debt: ¥269 billion

stay sufficiently financially stable, projecting a debt/equity ratio of 0.63 times and a shareholders' equity ratio of 49.9% at the end of fiscal 2024.

### Shareholder Returns Policy

Shareholders' equity: ¥424 billion

Our basic policy on shareholder returns is to maintain stable dividends. We have set targets of a dividend on equity (DOE) ratio of 2.5% or above and a consolidated total return ratio (average for the three years of our current plan) of 30% or higher. It was in keeping with that policy that we set the cash dividend for fiscal 2023 at ¥105 per share. Down the track, we look to further increase shareholder returns by investing heavily in growth and reaping rewards from it.

> UBE's basic policy is to continue to pay consistent dividends.

UBE strives to further enhance shareholder returns, while growing profits and shareholders' equity through aggressive capital investment.

Dividend on equity 2.5% or above

Consolidated total return ratio 30%

Note: Total return ratio was calculated to reflect the effects of the stock purchases of ¥10 billion in fiscal 2018, and ¥10 billion in fiscal 2020

### Initiatives to Bolster Enterprise Value

We are endeavoring to improve the price-to-book (P/B) ratio to enhance enterprise value. I will explain our improvement efforts in terms of ROE and our price-to-earnings (P/E) ratio, both being components of the P/B ratio.

We aim to improve our ROE (ROIC) by expanding specialty businesses and restructuring basic businesses. To expand specialty businesses, we will grow in areas where we have competitive edges. Examples include polyimide, separation membranes, ceramics, separators, composites, C1 chemicals, high-performance coatings, and pharmaceuticals.

Under the current medium-term management plan, we have decided to invest in growth, such as by boosting production capacity for separation membranes from the first half of fiscal 2025, lifting capacity for ceramics from the second half of fiscal 2025, raising capacity for separators from fiscal 2026, and building a DMC and EMC plant in the United States that would be operational from November 2026. We will keep lifting capacity at the right time to capture market growth.

On top of that, we are exploring acquisitions that would deliver inorganic growth, an example to date being our purchase of API Corporation in December 2022, which we plan to absorb in December 2024.

In restructuring basic businesses, we will overhaul our ammonia and caprolactam operations. We completed domestic caprolactam production cutbacks in May 2024. We look to bring forward moves to halt domestic ammonia production from 2030, which was the target when we formulated the current medium-term management plan.

In terms of our P/E ratio, we will lower equity costs by transforming our business portfolio to make it less vulnerable to market fluctuations, notably by expanding specialty businesses and restructuring basic businesses. Also, by practicing sustainability management we will reinforce our foundations for growth by systematically developing talent to drive growth in specialty businesses, fostering an innovative culture by providing greater opportunities for women and hiring more specialists while utilizing digital transformation (DX) to improve and streamline operations.

We recognize that GHG emissions add to the risk premium (business continuity risk) in the cost of equity. We accordingly plan to halve those emissions from fiscal 2013 levels by fiscal 2030. We expect to deliver those reductions by production reduction of domestic caprolactam and future suspension of domestic ammonia production. We will further lower emissions by conserving energy and improving processes, optimally harnessing renewable energy, and innovating technologies. Such measures should shrink our risk premium.

Current Medium-Term Next Medium-Term lanagement Plan Management Plan Specialty Business Expansion Measures (FY) 2022 2025 2028 Polyimide Raw material BPDA facilities (Japan) Capacity up 60% Film facilities (Japan) Capacity up 20% 🖝 Separation membranes Separation membrane facilities (Japan) Capacity up 80% -Ceramics Silicon nitride facilities (Japan) Capacity up 50% -Separator facilities (Japan) Separators Capacity up 30% New facility: DMC 100,000 tonnes, EMC 40,000 tonnes C1 chemicals and DMC and EMC plant (U.S.) high-performance Capacity up PCD manufacturing facilities (Thailand) coatings 4 000 tor Absorption Pharmaceuticals API Corporation Acauisition ( Current Medium-Term Next Medium-Term Management Plan Management Plan **Restructuring of Basic Businesses** (FY) 2022 2025 2028 Production outback (Japan) Production reduction Conrolantom

Caprolactam	Production cutback (Japan)	by 40% (May 202	4)		~
Nylon polymers	Transfer of high-value-added Signades from Japan to Thailand	tart of production (Thailand)			
Ammonia	Production cessation (under consid	deration)	Production cessati (under consideration	on on)	~~~>

Japan: We withdrew from the downstream ammonia products business including oxalic acid 1.6-HDL and sodium nitrate in fiscal 2023. Thailand: We will review our production system for caprolactam and nylon polymers. We will examine details in fiscal 2024 in preparing our next medium-term management plan.

Spain: We will pursue carbon neutrality for caprolactam production and differentiate ourselves competitively through environmental measures.

![](_page_12_Figure_15.jpeg)

![](_page_12_Figure_20.jpeg)

2030

2030

**Growth Strategies of Specialty Chemicals** 

![](_page_13_Picture_2.jpeg)

# Polyimide, **Separation Membranes and Ceramics**

Fiscal 2024 is the final year of our medium-term management plan. During the first half of that initiative, our polyimide business drove growth, particularly in display and other electronic components. In fiscal 2023, however, demand was sluggish owing to factors such as lower smartphone sales. On the upside, demand surged in our core mobility market for silicon nitride powder, a heat-resistant material used in electrified vehicles. In the environmental energy field, demand jumped for separation membranes for biomethane, an alternative to fossil fuel. We were thus able to perform largely as planned. With these three core businesses,

we will execute demand-led capital investment plans and concentrate on developing applications for these markets while pursuing sustainable business expansion.

Keiichi Nagata Senior Managing Executive Officer General Manager, Specialty Products Div.

# Polyimide

![](_page_13_Picture_8.jpeg)

### **Product Characteristics**

Polyimide is a super engineering plastic with outstanding strength and heat resistance. Its applications span from televisions, smartphones, and automobiles to aerospace.

UBE is the only manufacturer in the world to have integrated production from biphenyl tetracarboxylic dianhydride (BPDA), a raw material, to varnish, film, and powder. Our raw materials and proprietary molding and processing techniques enable us to create products with features that competitively differentiate us. Our polyimide has a high market share in chip-on-film (COF) applications for large displays and also has a high market share in varnish for flexible organic light-emitting diode substrates.

We also manufacture gas separation membranes incorporating polyimide hollow fibers (please see

pages 26-27 for details) and develop new products. Our polyimide chain will contribute to a growth in specialty chemicals.

### Social and Market Analysis

Although sluggish demand for such end products as smartphones and televisions hampered our polyimide business during the second half of fiscal 2023, we look for demand to expand over the medium through long terms. Notwithstanding a slow recovery in demand for COF films, we maintained a high market share. We anticipate a turnaround again, albeit slowly, once demand recovers. Our varnishes for flexible organic light-emitting diode substrates remain the standard for high-end equipment despite moves to manufacture these materials in China. Materials requirements in developing next-generation displays are diversifying as display technologies evolve. Demand should expand for low-dielectric polyimide films for 5G communications. We also anticipate new applications for electrified vehicles (xEVs). The need for new materials to support lithium-ion batteries (LiBs)

![](_page_13_Picture_16.jpeg)

![](_page_13_Picture_17.jpeg)

![](_page_13_Picture_18.jpeg)

**New Value Creation** 

### Opportunities and risks

Opportunities

Further display evolutions

New applications for 5G uptakes for smartph

 New demand created for BPDA-based polyir high heat resistance

### UBE's strengths

- Integrated production of films, varnishes, and in-house raw materials
- Unique molding and processing technologies BPDA-based products
- UBE's brand and intellectual property in BPDA-based polyimide

in these vehicles should also grow. Polyimide

![](_page_13_Figure_30.jpeg)

Source: UBE estimates based on a range of data \*1 Organic light-emitting diode

0 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030

\*2 Liquid crystal display

### Growth Strategies

UBE is building on its strengths in display applications, its strongest polyimide application. We are increasing production capacity of COF films in response to the growing number of COFs needed due to the trend toward large high-definition displays. For small and medium-sized displays for mobile devices, we are developing thin, easy-to-handle films that enhance customer processes, contributing to thinner displays and better designs. In varnishes for flexible organic light-emitting diodes, while maintaining our materials as the standard for high-end equipment, we aim to set a new industry standard for advanced display materials by creating innovative varnishes that address diversifying customer needs.

In addition to display applications, we plan to expand our business by developing new products and entering new markets. One focus is low-dielectric polyimide film for flexible printed circuit (FPC)

### Strategies for Value Creation

UBE's polyimides support advances in displays by leveraging their properties and in serving in COFs for large liquid crystal displays and flexible organic light-emitting diode substrates for smartphones.

nones and xEVs mide requiring		<ul><li>Risks</li><li>Changes in prescribed properties and replacements with other technologies</li><li>Policy on producing raw materials within China</li></ul>
		New value creation
d powders with		• We will continue to supply differentiated and unique products and contribute to electronics
s and unmatched	4	technology advances.

boards, where we expect demand to grow with the spread of 5G. We are also focusing on polyimide powder for molded parts used in semiconductor manufacturing and inspection equipment, a rapidly growing sector, as well as polyimide binders for silicon negative electrodes in high-capacity LiBs.

We are developing environmentally friendly water-based polyimide varnishes that are free of organic solvents and are exploring their applications. We contribute to sustainable economic progress by manufacturing and selling polyimide.

![](_page_13_Figure_48.jpeg)

### Capital Expenditures and New Business Areas

(Production capacity increase rate)

BPDA	Operations in second half of fiscal 2024	+60%
Films	Pilot operations to start in January 2025	+20%

### **R&D** and Intellectual Property

UBE will develop advanced products in response to social needs. Examples include the rising sophistication of electronics and growing environmental awarenesses. The Company will further reinforce its brand position and competitiveness by leveraging its development and intellectual property strengths in BPDA-based polyimide.

# **Separation Membranes**

![](_page_14_Picture_2.jpeg)

### **Product Characteristics**

Membranes that could separate gas and vapor mixtures were commercialized in the 1980s. UBE drew on its proprietary polyimide technology to launch membranes offering excellent heat and chemical resistance, mechanical strength, and high gas and vapor permeability and separation properties.

Our gas separation membranes comprise fine. straw-shaped hollow polyimide fibers. They harness the difference in permeability of polyimide layers on the outer surfaces of the membranes to separate gas and vapor mixtures. We fill containers with hundreds of thousands of polyimide hollow fiber membranes and supply them to customers as separation membrane modules. Our separation membrane modules are highly durable, long-lasting offerings with numerous applications. They include carbon dioxide separation, nitrogen enrichment (air separation), dehumidification, hydrogen separation, and organic vapor dehydration (alcohol dehydration).

![](_page_14_Figure_6.jpeg)

### Social and Market Analysis

Governments and businesses around the world are ramping up efforts to secure and diversify energy, resources, and chemicals to reduce GHG emissions and achieve carbon neutrality. As a result, initiatives to produce biomethane by extracting carbon dioxide from biogas derived from livestock manure and waste are gaining traction, particularly in Europe and the United States. We anticipate strong growth in this sector.

![](_page_14_Figure_9.jpeg)

We also foresee increasing demand for organic vapor dehydration membranes used in alcohol refining and hydrogen separation membranes for hydrocarbon production.

### **Growth Strategies**

The deployment of renewable energy is accelerating amid carbon-neutral policies and rising energy prices. Technologies and solutions proposed for economies adopting green and hydrogen energy resources include biomethane, bioalcohol, sustainable aviation fuel, and the effective use of carbon dioxide. Distillation, absorption, and adsorption techniques separate and concentrate gases and vapors in these manufacturing processes. The use of the more energy-efficient membrane separation began in the 1980s. Its reliability and reputation have grown significantly over the years.

UBE's separation membranes should contribute much as environmentally friendly products and technologies in specialty chemicals, playing a vital role in the Group's sustainability management. By 2030, we will increase the sales ratio of environmentally friendly products in our separation membrane products line to 70% and establish a business model that enables sustainable growth.

![](_page_14_Figure_14.jpeg)

New Value Creation Opportunities and risks Opportunities America and Asia UBE's strengths · Growing awareness of its energy-saving, maintenance-free membrane separation method • UBE separation membranes employing in-house raw materials **Capital Expenditures and New Business Areas** 

Demand is surging for carbon dioxide separation membranes for biomethane production. Management decided to expand the production facilities of polyimide hollow fiber for gas separation membranes at the Ube Chemical Factory and the separation membrane module production facility at the Sakai Factory, which will go online in the first half of fiscal 2025. These moves will lift production capacity around 80% from the current level

### Application Examples

Environment and Safety

![](_page_14_Picture_20.jpeg)

compressed air to obtain nitrogen Dehumidification Obtaining dry air by

Environment and Energy

![](_page_14_Picture_23.jpeg)

Organic solvent dehydration Removing water from alcohol and other organic solvents

compressed air

Hydrogen separation

Obtaining hydrogen and other useful gases from mixed gases

Carbon dioxide separation

Removing carbon dioxide from carbon dioxide and methane mix to obtain pure methane

### • Strategies for Value Creation

*Dur carbon dioxide separation membrane modules separate and remove* carbon dioxide from biogas generated from livestock manure and other sources and concentrate it as biomethane.

That biomethane serves as a renewable energy source.

• Deploying environmental contribution businesses in which Europe and North America have led the way into South

### Risks

- Changed or revised national policies in response to regime changes or international conflicts
- Foreign exchange fluctuations

to deliver high gas permeability, separability, and durability

### New value creation

- Contributing to surging production of biomethane and other renewable energy sources
- Contribute to a better environment and cut GHG emissions

(Production capacity increase rate)

### +80%

UBE will consider additional investments after assessing demand trends for carbon dioxide separation membranes and other environmentally friendly products as separation membranes.

### **R&D** and Intellectual Property

Polyimide hollow fiber membrane R&D began in the 1970s, leading to the commercialization of hydrogen separation membranes in 1986. Since then, big data accumulated through quality control and other operations has underpinned improvement activities. In R&D relating to manufacturing and applying hollow fiber membranes, containers, and separation membrane modules, repeated molecular, materials, strength, and process design and verifications has bolstered our technological position. We will keep pursuing R&D to enhance our products and resolve environmental problems around the world.

![](_page_14_Picture_52.jpeg)

removing water vapor from

![](_page_14_Picture_54.jpeg)

Including protection from explosions of oil, gas, coal, chemicals, or other materials, the On-Board Inert Gas Generation System for aircraft, analytical gases, and laser cutter gases

Including railroad and machine tools and other pneumatic equipment, medical devices, and analytical equipment

![](_page_14_Picture_59.jpeg)

Refining bioethanol, industrial and pharmaceutical ethanol, isopropanol, ketones, and other substances

Hydrogen recovery for oil refineries, methanol, ammonia and renewable energy production, and adjusting concentration of syngas

Biogas, landfill gas, natural gas, and other methane enrichment

# Ceramics

![](_page_15_Picture_2.jpeg)

### **Product Characteristics**

Silicon nitride is a fine ceramic material with excellent strength, fracture toughness, wear resistance, and thermal shock resistance. UBE's silicon nitride is a high-grade powder made with a unique imide-decomposition process. It features a uniform grain size and low impurity levels. The precise controllability of this structure results in superior sintering. These advantages have this product in high regard as the global standard for silicon nitride raw materials. Since its launch in 1986, its applications have ranged from automotive, aerospace, and electronics to machine tools. In recent years, demand for the Company's high-quality silicon nitride, with its proven track record, has surged in such high-end areas as motor bearings for xEVs and heat-dissipating circuit boards for inverters, underscoring its reputation as a top manufacturer in the high end of the silicon nitride market.

### Examples of applications for ceramics in xEVs

Power sem

modules

Semiconductor

sealing materia

Adhes

### Social and Market Analysis

Silicon nitride supports a wide range of applications, including bearings, substrates, cutting tools, glow plugs, phosphors, and components for semiconductor manufacturing equipment. While these applications continue to grow robustly, the rising adoption of xEVs has significantly increased demand, particularly for bearing and substrate uses.

For bearing applications, silicon nitride balls excel in high-speed bearings for machine tools due to their lighter weight and superior wear resistance compared to steel balls. In xEVs, especially in Europe where driving distances are long, the demand for durable and reliable silicon nitride balls is surging, particularly in luxury cars.

In substrate applications, the excellent insulation and heat dissipation of silicon nitride have driven its adoption in power semiconductor substrates for xEVs. Looking ahead, as power semiconductors are likely to operate at higher temperatures, the advantages of silicon nitride substrates will become even more prominent due to their strength as well as their ability to withstand high thermal stress and enable thinner designs.

It is also worth noting that the production of battery electric and plug-in hybrid electric vehi-

![](_page_15_Picture_11.jpeg)

High-purity ceramics (silicon nitride) made with UBE's proprietary process are used in the motor bearings and the inverter heat-dissipating circuit boards of xEVs, underpinning uptakes of these automobiles.

### **New Value Creation**

### **Opportunities and risks**

### Opportunities

- xEV expansion in automotive market
- Rising use of silicon nitride bearings because of the trends toward high voltages and high power outputs
- Increasing demand for heat-dissipating substrates owing to the higher drive temperatures of power semiconductors

### UBE's strengths

- High-performance powder made with UBE's proprietary imidedecomposition process
- High reputation and track record for excellent strength, purity, and durability

Global demand for silicon nitride powder

For bearing and substrate applications

For conventional applications

2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 (CY) Source: UBE estimates based on a range of data

### **Growth Strategies**

For bearing applications, demand for xEVs is surging, in addition to the solid demand for machine tools and other conventional uses. Also, the adoption of ceramic bearings is increasing not only for use in luxury cars but also popular cars. UBE will continue to supply as much silicon nitride powder as possible for this application to maintain its No. 1 market share.

Simultaneously, for substrate applications, the shift from traditional silicon-insulated gate bipolar transistor modules to silicon carbide modules in power modules, driven by the rising power output of xEVs, is pushing operating temperatures beyond 200°C. Silicon nitride excels under these conditions, making it highly reliable for the demanding specifications of automotive applications. UBE will continue to drive further adoption of its silicon nitride in this field.

• Strategies for Value Creation

### Risks

- Intensifying competition from new entrants
- Fluctuating xEV demand

New value creation

Sales volume

 Contributing to the expansion of environmentally friendly vehicles by tapping the material properties of proprietary manufacturing processes to meet market needs, particularly for xEV components

![](_page_15_Figure_43.jpeg)

**Capital Expenditures and New Business Areas** 

Silicon nitride production facilities Operations in second half of +50% fiscal 2025

(Production capacity increase rate)

To meet rapidly growing demand, UBE decided to expand its silicon nitride production facilities at the Ube Chemical Factory. The new facilities should come online in the second half of fiscal 2025, boosting production capacity around 50% from the current level.

### **R&D** and Intellectual Property

UBE's silicon nitride powder has earned high regard as a high-grade material with few impurities. The Company is leveraging the uniform grain size, low impurity content, and controllable microstructure to develop silicon nitride powder for new applications.

Growth Strategies of Specialty Chemicals

![](_page_16_Picture_2.jpeg)

# **Pharmaceuticals**

In pharmaceuticals, we seek to make life sciences a core Group business by stepping up development in existing drug discovery research, bolstering our contract development and manufacturing organization (CDMO), and entering new life science areas. In line with this effort, we acquired all shares of API Corporation, a CDMO outfit, from the Mitsubishi Chemical Group in 2022. We plan to complete a merger by absorption of this subsidiary on December 1, 2024. This complete integration will streamline operations, enhance our market presence, and expand our CDMO business. It will also enable

CO.H

PhSO<sub>2</sub>H

us to leverage the technological foundations of both our Company and API to explore new life science fields as we progress toward our objectives as a strategic growth business.

Yoichi Funayama Managing Executive Officer General Manager, Pharmaceutical Div.

![](_page_16_Picture_7.jpeg)

### **Business Overview and Features**

The Pharmaceutical Division engages in drug discovery research and CDMO operations. While operating independently of each other, they maintain business models unique to a chemical manufacturer in that we can draw on their dual capabilities to generate synergies as we need.

In drug discovery research, in addition to focusing on conventional small molecule drugs, we are exploring higher value-added drug discovery fields. These include antibody-drug conjugates (ADC) and proteolysis-targeting chimera (PROTAC). We are expanding our business with a view to bringing new drugs to market by licensing out preclinical stage drugs to pharmaceutical manufacturers and conducting joint R&D with them.

In the CDMO business, we maintain stable supplies of high-quality offerings by manufacturing

![](_page_16_Figure_12.jpeg)

active pharmaceutical ingredients (APIs), intermediates, and clinical trial materials for small molecule drugs. We provide development solution services, including to create manufacturing processes and optimize existing ones.

### Social and Market Analysis

Demand for advanced and high-level medical treatment should grow even though the populations of Japan and some other developed countries decline. In developing nations, demand for pharmaceuticals will probably rise as populations soar and economic standards rise.

In technological fields, demand for addressing unmet medical needs is expanding in oncology and other orphan drugs (for rare diseases), compared with conventional lifestyle-related disease areas. Not only responding to these by developing small molecule drugs, while such new modalities as nucleic acid drugs, gene therapy, and cell therapy are emerging.

### **Growth Strategies**

### Drug Discovery Research Business

We will expand drug discovery targets by according top priority to clinical needs. We will do this by promoting open innovation and considering such approaches as in silico\* and AI drug discovery which transform drug design schemes. We will develop such new modalities as ADC and PROTAC and conventional small molecules to bolster our pipeline and swiftly launch products.

\* A drug discovery technique that uses computerized numerical calculations and simulations

![](_page_16_Figure_21.jpeg)

# Opportunities and risks

Opportunities

- Increasing demand for advanced medical care
- Growing need for stable supplies of top-shelf pharmaceuticals in developing countries

### UBE's strengths

- Joint development with pharmaceutical manufacturers and proven record in drug discovery based on organic synthesis technologies cultivated over many years as a chemical manufacturer
- High-quality API manufacturing capabilities based on a variety of facilities, equipment, and advanced guality control systems that match setups in Japan, the United States, and Europe
- Solution services for manufacturing and developing APIs and intermediates, which have earned accumulated results

### CDMO Business

The UBE Group will establish a highly profitable structure through action in several respects. First, we will leverage our production capacity, which is one of the biggest in Japan, to expand contract manufacturing of small molecule drugs. Second, we will maximize earnings from our fifth pharmaceutical plant, which manufactures low-dose, high-potency pharmaceuticals, and do more of our business in such high-value-added fields as nucleic acid drugs.

### New Business Creation

We aim to enter new business areas in life sciences, utilizing cell culture systems using polyimide porous membranes.

![](_page_16_Figure_34.jpeg)

Capital Expenditures and New Business Areas Our fifth pharmaceutical plant, a small-lot, highpotency API production facility completed in fiscal 2021, is performing well and contributing to earnings. In nucleic acid drugs, we are acquiring

![](_page_16_Picture_38.jpeg)

Risks

Ó

- Paucity of target molecules and increasing difficulty of first-in-class\* development in small molecule drug field Countermeasures: Standardize development priorities, deploy open innovation, and streamline drug discovery research by tapping drug discovery ecosystem and AI drug discovery
- \* Novel and highly beneficial breakthrough drugs

### New value creation

 Contributing to health and prosperity everywhere by developing and manufacturing new pharmaceuticals

(Billions of yen) 4.5 3.0

1.5

manufacturing technologies by gradually scaling up facilities from lab-level prototypes and building a pilot plant to manufacture contract bulk pharmaceuticals. The target completion date is March 2025.

In expanding into new business areas, we began selling polyimide porous membrane inserts, which are cell culture kits, in November 2023. We are collecting data for future business development by expanding the use of these kits.

![](_page_16_Picture_55.jpeg)

Polvimide porous membrane inserts

### **R&D** and Intellectual Property

Our CDMO business develops APIs for nucleic acid drugs. We are more efficiently developing and acquiring manufacturing technologies. To that end, we are leveraging an investment in Luxna Biotech Co., Ltd., a venture company developing nucleic acid drugs based on a modified nucleic acid group (XNA) that Osaka University developed. We are also joining RNA-targeted drug discovery technology development carried out by the Japan Agency for Medical Research and Development.

![](_page_17_Picture_1.jpeg)

# **C1 Chemicals** North American Deployment and Global Strategy

**EW ORLEANS** 

The long-planned establishment of a large chemical plant in North America is nearing fruition. UBE has a long track record of developing unique C1 technologies and operations,

and is poised to make another leap forward by expanding its business in North America. The Company will leverage its strengths to meet the local production and consumption demands of the U.S. market. Bold capital

investments, R&D, and the launch of a new company through this major project will also foster emerging talent. UBE aims to cultivate leaders to drive sustainable business growth worldwide.

Yuki Nishida Representative Director Senior Managing Executive Officer Assistant to the President, General Manager of DX Promotion Office, with responsibility for Information Systems Dept. and C1 Chemicals Project

![](_page_17_Picture_8.jpeg)

# **UBE Group Decides to Construct DMC and EMC Facility** in Louisiana as Its First Major U.S. Chemical Site

### **Building North American Plant**

UBE decided to invest approximately US\$500 million to construct a plant for dimethyl carbonate (DMC) and ethyl methyl carbonate (EMC) derived from DMC in Louisiana. The new facility is projected to go online in November 2026.

DMC and EMC are key components of electrolyte solvents for lithium-ion batteries (LiBs). DMC is also a developer solution for semiconductor manufacturing processes. Related capital investments totaling several trillion yen have already been made in

![](_page_17_Figure_13.jpeg)

UBE's DMC business specializes in electrolyte and semiconductor developer solutions offering high added value and growth potential.

![](_page_17_Figure_15.jpeg)

the United States on the strength of a government industrial policy to drive the adoption of xEVs and establish a domestic supply chain. While demand for DMC and EMC is expected to surge after 2025, the United States is completely dependent on imports. The new plant will enable UBE to cater to local demand as the first and only domestic producer of DMC and EMC. It will become more cost competitive by manufacturing carbon monoxide, the prime raw material, from inexpensive natural gas, thus reinforcing its leading position. While policy changes and other factors could slow xEV uptakes, even if the penetration rate of xEVs remains at roughly 20% by 2030, demand should greatly exceed the plant's production capacity. Also, demand should increase for other applications, such as semiconductors and solvents with low environmental impacts (DMC is not subject to volatile organic compound (VOC)\* regulations in the United States).

### Capital investment

DMC Operations in November 2026: Production capacity of 100,000 metric tonnes (of which, 40,000 metric tonnes would be converted to EMC)

### About UBE's C1 Chemical Chain

This chain originated in the 1970s when UBE invented a proprietary nitrite technology (a carbon monoxide coupling reaction using a palladium catalyst) while developing a new process to manufacture oxalic acid. This breakthrough led to such key offerings as DMC, PCD

### Production Capacity of Electrolyte-Grade DMC and EMC

The only suppliers of DMC and EMC other than UBE are Chinese manufacturers. The Company will draw on its edge in terms of location and raw materials and transportation costs to build a robust position as the sole supplier within the United States.

![](_page_17_Figure_23.jpeg)

(Industrial park)

### **Cultivating PCD and PUD Businesses**

In the United States, UBE looks to build a new polycarbonate diol (PCD) facility further downstream as part of its C1 chemical chain development starting with DMC. The Company plans to set up a technical service center as its third PCD site after those in Spain and Thailand. While U.S. PCD demand remains limited, its characteristics are gradually earning recognition, and could ultimately enjoy rapid growth. UBE is pushing forward with its facility plans to solidify its market lead position as the only PCD supplier in the United States by leveraging the cost competitiveness of its integrated DMC through PCD manufacturing and its superior technical services. It is also stepping up marketing to expand into polyurethane dispersion (PUD).

### Toward a Carbon-Neutral Future

UBE has drawn on its technology licensing experience to constantly enhance DMC's productivity, energy efficiency, environmental impact, and manufacturing technology. The U.S. plant will employ advanced processes to minimize its environmental impact. Using natural gas as the prime

![](_page_17_Figure_28.jpeg)

(a high-grade polyurethane raw material made from DMC), and PUD, which is downstream from PCD.

The C1 chemical chain continues to expand as a central element of UBE's specialty chemicals growth strategy, riding a rising wave of clean energy and environmental responsiveness.

Integrated Report 2024

### Unique Aspects of the C1 Chemical Chain

DMC made with the nitrite process is unique because other manufacturing approaches generate by-products. Another advantage is the high quality, making it suitable for LiB electrolytes and semiconductor manufacturing processes.

Chinese competitors DMC 700,000 metric tonnes EMC 500,000 metric tonnes

UBE plant in Europe (in planning) DMC 50,000 metric tonnes

• Chinese joint venture DMC 10,000 metric tonnes I IBE plant in Japan DMC 15,000 metric tonnes

Louisiana offers good access to U.S. will benefit from inexpensive natural gas, services from the industrial park, and riverboat and rail transportation networks.

raw material and utility source will result in CO2 emissions per unit of production being just half those of existing plants in Japan. UBE aims to achieve carbon neutrality by harnessing biogas and new technologies to produce carbon monoxide from carbon dioxide.

### Driving the Group's Global Growth

UBE targets global growth for its C1 chemical chain. There are no DMC or EMC suppliers in Europe, so customers there strongly demand local production. UBE is thus conducting a feasibility study with a view to building new facilities after 2027. Since UBE's Spanish unit already makes PCD, integrating DMC production with new facilities should enhance cost competitiveness. Also, UBE looks to deploy new technologies and procure raw materials that ensure carbon neutrality.

For PCD and PUD for high-performance coatings, UBE will tap its technological platform to develop new products and undertake a growth strategy that includes acquisitions.

By fiscal 2030, UBE looks for the C1 chemical chain overall to generate sales of ¥60 billion to ¥80 billion and an operating margin of 20% to 25%.

> Since the prime raw material is carbon monoxide, production facilities do not rely on naphtha crackers, so plants can be located virtually anywhere. UBE has licensed out its manufacturing technology since 2015.

\* VOCs are subject to regulation because their atmospheric releases can cause pollution and threaten health

• UBE Group Competitors

### **Restructuring Basic Businesses**

The Performance Polymers & Chemicals business aims to balance growth in specialty chemicals with contribution to global environment. We will tackle such challenges as the environment, an evolving mobility market, and progress toward a digital economy by swiftly and effectively expanding and developing our specialty chemicals businesses, which is one of our key strengths. At the same time, we will address issues with unprofitable areas, particularly in our basic businesses, by restructuring, downsizing, or withdrawing as necessary.

In fiscal 2023, we expanded capacity in specialty businesses. These included PCD, composites, and high-purity nitric acid. In fiscal 2024, these efforts should bear fruit, and we will keep investing to reinforce our specialty chemicals position.

During fiscal 2024, we will start fully restructuring basic businesses. We will initially lower the production volume of caprolactam in Japan and optimize nylon polymer manufacturing elsewhere in Asia.

Under our next medium-term management plan, we will keep driving our transformation to reinforce our businesses to help enhance corporate value.

Executive Officer General Manager of Performance Polymers & Chemicals Div.

![](_page_18_Picture_7.jpeg)

### Progress in Lowering Caprolactam Production in Japan and Halting Ammonia Operations

Caprolactam and nylon polymers will most likely experience chronic oversupplies owing to Chinese companies expanding capacity. Even if demand recovers, it will likely be hard to generate consistently stable earnings. We are accordingly accelerating structural reforms.

We reduced caprolactam production in Japan by approximately 40% in May 2024 in line with regular maintenance. Output thus also decreased for ammonium sulfate, a by-product used as fertilizer. That said, by lifting the production ratio for high-value-added large-grain ammonium sulfate, which benefits from domestic demand, we look to offset the impact of the caprolactam production cut and enhance the overall earnings volatility of the basic businesses.

With nylon polymer, for which caprolactam is a raw material, we started optimizing production capacity in fiscal 2023 by shifting copolymer-grade

![](_page_18_Picture_12.jpeg)

A plant complex in Ube, Yamaguchi Prefecture, for caprolactam, ammonia, and other interrelated businesses

manufacturing from Japan to Thailand. This lowered production capacity in Japan from 53,000 metric tonnes to 25,000 metric tonnes. We will improve global profitability by optimizing our lineup.

The ammonia business greatly affects our operations. We are exploring specific steps to halt production by 2030 or possibly before then. In fiscal 2023, we withdrew from such downstream areas as oxalic acid, 1,6-hexanediol (1,6-HDL), and sodium nitrate. We will keep pursuing structural reforms.

### **Restructuring Overseas Sites**

We are also restructuring basic businesses at overseas sites.

In Thailand, we have started reviewing caprolactam and nylon polymer operations. We will strengthen the nylon polymer business by first boosting the production ratio of highly profitable copolymer grades. We will then conduct further reviews for our next medium-term management plan during fiscal 2024.

In Spain, we are developing environmentally friendly products that match needs in Europe, which is advanced in that respect. We are exploring new opportunities for environmentally friendly businesses. For caprolactam, we will strive to make production processes carbon neutral. For nylon polymers, which give us a significant share of the European food packaging market, we are undertaking post-industrial recycling, collecting film scraps to launch a circular economy business. As well as selling recycled resins, we will also use them as composites in automotive and other applications.

![](_page_18_Figure_20.jpeg)

# Applications: Raw material for nylon fibers and

Market trend: UBE's share in Asia has declined significantly since the mid-2010s owing to Chinese companies expanding capacity. These expansions continue, undermining profitability because of market fluctuations stemming from an imbalance in supply and demand.

![](_page_18_Picture_24.jpeg)

UBE CORPORATION EUROPE S.A.U. (Spain)

With Europe further regulating fertilizer usage, are also investing in a pilot plant for coated ar nium sulfate, which is a slow-release fertilizer.

### Stepping Up Restructuring to Stabilize Performance

While further enhancing reviews under our next medium-term management plan, we will push forward with additional restructuring for basic businesses, including overseas. We look to lift the contribution of environmentally friendly businesses to 60% or 70% by 2030. We also aim to generate

			Current Mana	Medium-Te gement Plai	rm Next Me n Manage	edium-Term ement Plan				
Restructuring of Basi	c Businesses	(FY)	2022		2025		2028	2030	)	
Caprolactam	Production cutback (Japan)	Produc by 40	tion re 0% (Ma	duction ay 2024) 🕶				>	•	
Nylon polymers	Transfer of high-value-added grades from Japan to Thailand	Start of produ (Tha	iction iland)					>	•	
Ammonia	Production cessation (under cor	nsideration)			Production (under cons	cessation sideration)		·····>	•	

Japan: We withdrew from the downstream ammonia products business, including oxalic acid. 1.6-HDL, and sodium nitrate, in fiscal 2023. Thailand: We will review our production system for caprolactam and nylon polymers. We will examine details in fiscal 2024 in preparing our next medium-term management plan

Spain: We will pursue carbon neutrality for caprolactam production and differentiate ourselves competitively through environmental measures.

UBE Group (Thailand) complex

, we	
mmo-	

roughly 70% of operating profit from specialty businesses by building a robust operational structure comprising high-value-added product lines. At the same time, we will tackle climate change, such as by lowering GHG emissions and establishing a clean ammonia procurement system that is carbon neutral. We will transition toward environmentally friendly businesses that differ from traditional commodity areas, offering products that contribute to the circular economy and are nature positive.

# **Prospects for Growth Strategy Pursuing Specialty Chemicals Growth and Contributing** to the Global Environment

UBE has a growth strategy to drive growth in specialty chemicals and contribute to the global environment in order to achieve its Vision for 2030. President and CEO Masato Izumihara sat down with independent outside directors Takefumi Fukumizu and Tsugio Mitsuoka to discuss UBE's outlook and its challenges as it pushes toward 2030.

### How do you assess UBE's current business model of balancing specialty chemicals growth and contributing to the global environment?

Fukumizu: UBE's vision represents one of the boldest decisions since the Company's founding more than 120 years ago and has earned high regard among stakeholders. Although the business environment remains challenging, UBE's specialty business has performed solidly, and its price-to-book ratio has improved. I have high expectations for the remaining year of the current medium-term management plan.

Mitsuoka: In my view, UBE swiftly and decisively shifted its management policy in response to a sea change in its business climate. Since it has identified the extent to which it is subject to raw materials prices beyond its control, I expect the Company will further accelerate measures to grow its specialty chemicals.

The specialty business has delivered steady growth despite challenging operating conditions. What key factors underpin this strength?

Izumihara: The business climate has changed faster than expected since the start of our current

ARE

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### The C1 chemical expansion in North America represents a new start for the global growth of that business.

![](_page_19_Picture_10.jpeg)

medium-term management plan. We urgently need to expand our specialty business and tackle environmental issues. While many commodity chemicals face challenges, our specialty business is growing steadily. Its strength is driven by UBE's unique technologies, which allow us to create distinctive products. Our specialty business takes priority on providing solutions that truly meet customer needs and thus is shifting to a solutionoriented business style. This focus has fueled our specialty business expansion.

Mitsuoka: UBE's strength lies in its ability to combine unique technologies with people who create value. For example, during a visit to the separation membrane plant, I saw how productivity had massively increased by integrating technologies. This approach highlights UBE's dedication to meeting customer needs as higher level as possible, and I have great hopes for the continued development of its technological and human potential.

So, I expect UBE to deepen its customer ties, anticipate needs, and take various steps in a rapidly changing business environment. Both technology and people are thus vital. Diverse people engaging with customers and society can generate new value. That gives UBE tremendous potential.

Fukumizu: Our specialty business is the No. 1 in the world or the top in niche market, which makes it hard for others to easily imitate. Building one-on-one customer relationships is essential in creating value. If UBE sticks to conventional methods in a rapidly changing environment, it risks falling behind. To succeed, UBE must swiftly improve existing products and develop new ones, by forming partnerships even with competitors and acquiring businesses when necessary. Given its history of overcoming challenges, I believe the Company is strong enough to navigate change.

### UBE is making one of its greatest investments ever to expand its C1 chemicals business in

![](_page_19_Picture_16.jpeg)

### Working out how and when to restructure basic businesses will be a key management decision-making challenge.

Please see page 82 for Mr. Fukumizu's profile.

### North America. What Board of Directors' deliberations arrived at this decision?

Izumihara: This US\$500 million investment is UBE's largest ever. The Board carefully scrutinized it, assessing risks from all angles. After thoroughly understanding the plan, the Board encouraged us to move forward faster than expected.

Dimethyl carbonate (DMC) and ethyl methyl carbonate (EMC), which are essential raw materials for lithium-ion batteries in electrified vehicles, are expected to see rising demand in the United States. The new facility represents a starting point for expanding UBE's C1 chemicals business globally.

UBE was late to deploy its chemicals business in the United States, so setting up a production site with such growth potential is a significant step. Also, I believe that playing a part in the supply chain of the EVs for the United States as a Japanese company contributes much to that nation's economic security.

I thank the Board of Directors for supporting our growth vision and efforts to move forward.

Fukumizu: UBE's commitment to expanding its specialty business is commendable, and presenting this

### I think that UBE's strength is its ability to combine unique technologies and people who create value.

Please see page 82 for Mr. Mitsuoka's profile.

major project to stakeholders is a strong first step. It also gives our employees something to look forward to.

DMC and EMC are not just for electrified vehicle materials but also for environmentally friendly high-performance coatings further downstream. I was extremely supportive of this project, and I believe that further expanding global business is essential for UBE's future. So, I would like management to proceed with the North American business urgently.

Mitsuoka: When I first heard about the North American expansion, I noted thorough plans to swiftly set up a plant and provide products while reviewing ways to address rising costs and other issues. The plan also covered extensive risk management to avoid confusion during on-site construction, such as by using modular construction. These measures convinced me to support the plans.

### The operating climate for basic businesses is deteriorating, including for overseas units. How do you view this situation?

Mitsuoka: Unfortunately, fiscal 2023 results fell short of the initial plan due to Chinese suppliers expanding with a focus more on capturing market share than profitability. UBE must grow its specialty chemicals business to gain greater recognition for the value of the business while accelerating structural reforms to reduce revenue and earnings volatility.

Fukumizu: Caprolactam, for example, faces a price spread issue between the product and raw materials. UBE's growth strategy aims to move away from such businesses, so how and when you do that is a top management issue. Of course, the earlier we address things the better, and we need to tackle a range of them, including customer coordination and personnel issues. Moving forward while keeping tabs on these issues will be a major challenge.

Tsugio Mitsuoka Outside Director

Izumihara: Chinese suppliers have become key market players, and transformed the market structure. We aim to mitigate the impact of basic businesses on our Company while expanding our specialty business to generate overall growth. One challenge will be revitalizing the Ube area's operating sites, as the area is rich in talent and infrastructure. We will clarify an optimal scenario and schedule to steadily increase overall earnings while investing in the specialty business and transitioning personnel and fixed costs from shrinking basic businesses to the specialty business. As part of that approach, we established the Ube Works and the Business Reorganization Department in fiscal 2024. The Ube Works will oversee efforts to integrate Ube area chemical plant operations and headquarters. The department will reallocate personnel to assist with structural reforms.

### What do you think of the efforts and risks involved in halving greenhouse gas emissions from fiscal 2013 levels by 2030?

Fukumizu: UBE scaled back caprolactam manufacturing in Japan in May 2024, and plans to stop producing ammonia, its biggest greenhouse gas emitter, by 2030. So, business structure reforms should enable the Company to reach its targeted 50% reduction in emissions. That said, it faces two risks. The first would be unexpected delays in halting ammonia production. The second could be the full-scale deployment of carbon pricing progressing faster than expected. So, UBE needs to accelerate efforts and unite all employees to achieve its goals.

Mitsuoka: As well as halting ammonia production and lowering caprolactam production in Japan, we are expanding renewable energy use, exploring fuel conversion, and developing systems to monitor environmental impact data. UBE has already taken specific steps. If the Company commits fully to helping to improve the global environment, it can stay ahead of all risks. Continuing with current policies is crucial.

Izumihara: We can reach our goals by reforming our business structure while steadily conserving energy and improving manufacturing processes. At the same time, the full-scale implementation of carbon pricing approaches. We should consider accelerating our ammonia production shutdown in response to changing demand in Japan.

UBE obtained Science Based Targets initiative certification in fiscal 2023. We will keep addressing environmental issues with a strong awareness of global standards while bolstering disclosure by establishing a setup to monitor greenhouse gas emissions by product.

### How is UBE helping as a shareholder to reduce greenhouse gas emissions from cement-related business?

Izumihara: UBE provides governance for its machinery and cement-related businesses as a holding company through its Holdings Meeting. Mitsubishi UBE Cement operates independently, and as a director, I closely monitor its efforts to reduce greenhouse gas emissions and address environmental issues. The company is advancing carbon capture, utilization, and storage measures to meet its targets of a 40% reduction in CO<sub>2</sub> emissions from fiscal 2013 levels by 2030 and carbon neutrality by 2050. We will continue to fulfill our oversight responsibilities as a shareholder.

Mitsuoka: We regularly receive reports in the Board of Directors on progress at Mitsubishi UBE Cement. We expect the company to remain competitive and grow sustainably.

Fukumizu: Cement manufacturing inevitably produces greenhouse gas emissions, so technological advances such as carbon capture, utilization, and storage will be crucial for sustainable progress.

Izumihara: In its manufacturing process, the cement industry uses and recycles municipal, industrial, and disaster waste, which contributes significantly to the circular economy. In addition, the industry supports social infrastructure. Positioning environmental costs and determining who bears them are challenges for society as a whole. In the cement-related business, we aim to balance growth with carbon neutrality.

### How do you position biodiversity and other new environmental challenges within UBE's business model?

Fukumizu: Contributing to the global environment is one of the two pillars of our growth strategy. We must place new environmental challenges at the heart of our management. The chemical industry plays a crucial role by transforming substances. By harnessing our technological prowess and talent, we can make a significant impact on emerging environmental issues across various fields.

Mitsuoka: The chemicals industry must find the best way to connect with the social ecosystem. UBE, with its global reach, must balance macrolevel environmental responses worldwide with micro-level efforts locally. If all employees contribute at both levels, UBE can become even more indispensable to society.

Izumihara: The Taskforce on Nature-related Financial Disclosures published its final recommendations on nature-related issues in 2023. For nature-positive initiatives, we will begin by presenting core concepts to stakeholders, then develop and disclose our efforts using frameworks such as this global initiative.

We already implement various measures that align nature-positive concepts with carbon neutrality and the circular economy. However, our specific actions remain insufficient, and we will continue to explore improvements.

### The ESG debate focuses increasingly on human capital. What challenges does UBE face?

Izumihara: The innovations we need to expand our specialty chemicals business cannot emerge from a monocultural backdrop. So, pursuing diversity, equity, and inclusion is essential. We also need a human resources strategy grounded in career ownership and other new concepts. As UBE's business structure and portfolio evolve, so do our customers, their needs, and their expectations for speed. By adapting to these changes, our corporate culture will naturally evolve and nurture talent. In other words, our business and human resources strategies are inseparable. Cultivating an innovative culture and growing our businesses and people are key management roles.

Fukumizu: Aspects of our long-standing corporate culture may no longer align with today's environment. It is crucial to identify and address those areas. Since people are more important than ever, all executives should make talent strategy their top priority, as if they were heads of human resources.

Mitsuoka: To develop the young employees and experts who will drive specialty chemicals growth,

we must abandon old approaches to human resources. We need to provide opportunities for success and establish systems that clearly recognize achievements. As we transition toward the specialty business, we will experience successes and failures, but offering opportunities and clear evaluations will foster adventurousness. By urgently reforming our corporate culture and workplace environments, we can accelerate growth even more.

### Your target year of 2030 approaches rapidly. What should UBE become beyond 2030?

Izumihara: I have always believed that UBE should continuously deliver value required by society in ways society needs. Beyond 2030, I want UBE to remain socially valuable, upholding its founding principles and corporate philosophy while consistently offering value in a changing world.

Mitsuoka: I hope that all employees, regardless of age, gender, or career history, will continue to dream and tackle many challenges. For the chemicals industry, 2030 and 2040 are just around the corner.

Fukumizu: Beyond structural reforms, I envision having 10 products, each product generating ¥50 billion in sales through acquisitions and new businesses. That's my specific vision for UBE. If young employees seize opportunities to take on new challenges and grow, they will feel even more motivated to work at UBE.

### Finally, what insights or challenges have you recognized through this conversation?"

Fukumizu: UBE undertakes many interesting initiatives. I want society to know more about its activities, and I hope that UBE pursues proactive publicity.

Mitsuoka: This conversation went beyond Board of Directors' deliberations, allowing for deeper engagement. It reinforced my belief that we can have even more active discussions at future Board of Directors' meetings.

> Izumihara: It has reaffirmed to me that outside directors and I are aligned in our goals. I greatly appreciate your continued candid opinions and advice on behalf of our

shareholders and society.

### **R&D** and Intellectual Property

The Research & Development Division's mission is to innovate core technological competencies that will give UBE a competitive edge in coming years.

The division accordingly embraces new technological challenges, drawing on its people's dreams to overcome global competition and change the world for the better, leveraging proprietary technologies their predecessors developed. UBE will tap digital tools to share high-quality

information, including on medium- to long-term needs and insights from academia and start-ups, to drive innovation and create the core competencies of tomorrow.

Yoichi Yoshida Executive Officer, General Manager of Research & Development Div., with responsibility for development section and Intellectual Property Dept.

![](_page_21_Picture_6.jpeg)

# R&D

### **R&D** Policies

The Research & Development Division focuses on sustainability, energy management, and life sciences. It employs backcasting and forecasting to develop new technologies.

Backcasting begins by identifying future social and environmental challenges, predicting shifting market needs, and narrowing down target markets and products. Forecasting draws on information about future market and technology trends from existing products to innovate core technologies and develop new offerings.

By combining backcasting and forecasting, we concentrate on creating new core competencies that drive sustainable growth. To establish technologies that strengthen our competitive edge, we leverage open innovation through participation in national projects, joint research with universities, and collaborations with start-ups to acquire new knowledge, technologies, and expertise.

### Concept for Building a Technology **Development Pipeline**

![](_page_21_Figure_13.jpeg)

### **Research and Development to Create Core** Competencies

### Porous Polyimide Membrane Cell Culture Substrates

The advent of biopharmaceuticals leveraging the protein-producing capabilities of cells, microorganisms, and other lifeforms has driven the development of various drugs that can treat diseases once beyond reach. Still, biopharmaceuticals pose quality control challenges and remain expensive owing to cell metabolism variability in different environments.

UBE's proprietary porous polyimide membrane cell culture substrates tackle these issues by enabling the stable, long-term culture of animal cells. In November 2023, the Company launched prototype cell culture kits for research and showcased them at trade shows to promote their benefits to diverse industry players. We are also collaborating with several partners on joint development projects to unlock the potential of these substrates.

![](_page_21_Picture_18.jpeg)

Porous polvimide membrane cell culture substrates

### CO<sub>2</sub> Electrolvsis

Electrochemically converting CO2 offers a promising path to achieving carbon neutrality by effectively tapping renewable energy.

As part of the Moonshot Research and Development Program of the New Energy and Industrial Technology Development Organization (NEDO),

R&D projects						
	R&D for ex	panding the specialty	y business	New F	&D areas	
Domains	Global warming countermeasures Clean energy	Healthcare Food safety	Prosperous future Digitalization	Carbon circulating society	Advanced medical care Regenerative medicine	
Key applications	<ul> <li>Electric vehicles</li> <li>Fuel cell vehicles</li> <li>Weight-reducing materials</li> <li>Biogas</li> </ul>	<ul> <li>Pharmaceuticals</li> <li>Organic solvent reduction</li> <li>Food packaging</li> </ul>	<ul> <li>Displays, circuit substrates</li> <li>Semiconductors</li> </ul>	<ul> <li>Sustainability Circular economy Carbon neutrality</li> <li>Energy management</li> </ul>	• Life sciences Biopharmaceuticals and regenerative medicine	
Core technologies supporting Organic and inorganic synthesis technology / Functional evaluation technology / Molecular and material design technology						

UBE is collaborating with companies, academic institutions, and government bodies on a project called Innovative Integrated Electrochemical Systems for Scalable CO<sub>2</sub> Conversion to Chemical Feedstocks. The goal is to capture carbon dioxide from the atmosphere, enrich it, and reduce it electrochemically, converting it into ethylene and other valuable chemical feedstock. UBE leverages its expertise from the LiB business and research and development to develop electrode materials that efficiently reduce carbon dioxide. As a result of this project, small-scale technological development has progressed smoothly, meeting milestones in selectivity, current density, and other areas as planned. From fiscal 2024, UBE began scaling up the electrode surface area for pilot demonstration and will continue advancing technology development with an eye on commercialization.

### Conceptual Diagram of Innovative Integrated Electrochemical Systems for Scalable CO<sub>2</sub> Conversion to Chemical Feedstocks

![](_page_21_Figure_26.jpeg)

**R&D** Talent Driving Specialty Business Growth

Developing specialty products requires gathering information about future societal and business environments. Proposing solutions based on this information is crucial for growing the specialty business. In fiscal 2023, we provided basic marketing and Management of Technology training to foster talented R&D experts capable of generating new product ideas and making these proposals. We also facilitated cross-unit meetings among internal technical teams to exchange knowledge and integrate industrial perspectives into ongoing R&D themes. On top of that, we broadened perspectives by assigning employees to universities, academic societies, and venture companies. We will continue cultivating R&D talent that drives specialty business growth through more practical initiatives.

# Intellectual Property

### **Basic Policy and Structure**

### Basic Policy

We will gain a sustainable competitive edge in our specialty chemicals by having our business, R&D, and intellectual property (IP) departments collaborate closely in IP initiatives.

### Structure

For the specialty businesses, we hold IP strategy meetings. There, they discuss IP acquisitions and progress with investments in that area to ensure initiatives are on track.

Regular reports on overall IP activities go to the Strategic Management Meeting and the Board of Directors. They issue instructions on and supervise policies and execution approaches for IP efforts.

![](_page_22_Figure_8.jpeg)

# **IP Strategies and Policies**

### IP Initiatives under the Medium-Term Management Plan

Under our medium-term management plan, our vision is to become a corporate group centered on specialty chemicals that contributes to the global environment, human health, and an enriched future society. We will help achieve our vision by taking several steps in the IP arena. One will be to disseminate useful information and make proposals by tapping patent search tools. Others will be to build a patent portfolio relating to specialty chemicals and environmentally friendly products

and technologies, enhance Group IP governance, and bolster specialist talent.

### 1. Build an IP Portfolio in Existing Businesses

IP is essential to growing our specialty chemicals. To materialize our Vision for 2030 for each of our existing businesses, we will build an IP portfolio that matches the unique features of each business area.

We will draw on IP information through patent maps\*1 and IP landscapes\*2 to identify new issues for resolution, new applications, and prospects for alliances with other companies.

For new inventions, our application review council assesses their essences and patentability and determines the scope of rights in view of the supply chain and future implementation approaches. By deciding appropriately on whether to keep information open or closed, we seek to sufficiently safeguard our technical achievements, establish high barriers to entry through IP, and build a sustainable competitive edge for our businesses.

Please see Growth Strategies of Specialty Chemicals on pages 24 to 33 for progress with current R&D efforts in specialty chemicals.

### 2. Strengthening IP Landscape Efforts in R&D

From exploring R&D activity themes through R&D stages leading to commercialization, we research and analyze IP information and supply insights to the Research & Development Division about technological trends and competitor activities.

By tapping IP information from early R&D stages, we help develop themes, explore new businesses, and create collaborative partnerships.

### 3. Patent Clearance

We endeavor to respect the IP rights of other companies as we do our own. We accordingly do our utmost to conduct patent clearance searches and minimize business risks in existing businesses and at the commercialization stage in R&D.

### Enhancing Corporate Value through Our IP Strategy

Expanding IP Activities in Specialty Businesses In the fiscal year under review, we expanded IP activities beyond traditional focus areas such as polyimides, composites, and high-performance coatings to encompass other specialty businesses. After analyzing internal and competitor patent landscapes, we identified the inventions needed to

maintain and grow existing businesses and accelerated patent filings to strengthen our IP portfolio. By leveraging patented technologies, we tackle customer challenges and contribute to enhancing corporate value. We also conduct thorough patent clearances to properly evaluate third-party patents, taking timely action when necessary. This proactive approach ensures that our customers can use UBE products and services with confidence.

### Patent Inventory Overview

We deployed a patent value assessment tool to reevaluate our portfolio. We are specifically reassessing patents that have minimal impact on our business but attract significant interest from other companies (Group III). We plan to retain these patents alongside those that we and others highly value (Group I) and those crucial for our technological development and business (Group II). This approach enhances the competitiveness of existing businesses while ensuring that we maintain an appropriate patent portfolio for collaborating with other companies.

![](_page_22_Figure_31.jpeg)

### Status of Patents Held

Although the total number of patents held was down from a year earlier owing to an ongoing patent inventory review, we focused on securing patents for inventions related to specialty businesses. The proportion of patents in that business was basically unchanged from a year earlier.

### Comment from General Manager of the Intellectual Property Dept.

Internal and external expectations for IP activities are increasing owing to such factors as publication of the Corporate Governance Code and expansion of the IP landscape. The Intellectual Property Dept. has traditionally provided support behind the scenes, focusing on patent applications and acquiring rights. In coming years, we will be more engaged in business and R&D strategies by continuing to analyze and propose IP insights. We aim to contribute to the UBE Group's growth, with specialty chemicals at its core.

Glossary

![](_page_22_Figure_43.jpeg)

### Number of Registered Patents by Portfolio\* (As of March 31, 2024) Machinery business 73 Domesti Specialty business New busine 1.767 and other 192 Oversea Basic business 95

\* Patents held by UBE and some Group companies

### Initiatives to Attract and Develop IP Experts

We have undertaken a range of IP education initiatives to enhance literacy about that field within the UBE Group and to foster a culture that values and respects IP. In the past year, we have introduced IP e-learning and educated employees about patent valuation techniques. We have also shared IP information and exchanged insights with IP experts among domestic and overseas UBE Group companies.

### Inventor Incentives

In line with employee invention rules, we incentivize inventors upon applying for, registering patents, and commercializing patents. At UBE Group R&D briefings, we honor inventors of patents that have contributed significantly to our business. Such recognition motivates inventors and encourages them to pursue further advances.

In fiscal 2023, we presented awards to inventors for patents in the polyimide, composites, and C1 chemicals areas of our specialty businesses.

### **IP DX Initiatives**

As well as the tools mentioned earlier, we are further visualizing patents, gaining new insights, and streamlining operations by adopting patent analysis software and AI-based patent search tools.

Toshiyuki Fujita General Manager of the Intellectual Property Dept.

<sup>\*1</sup> A patent map is a visual representation from collecting, analyzing, processing, and organizing patent information into charts, graphs, and other visual information. \*2 IP landscape is an analysis of management and business information incorporating IP information in formulating management and business strategies and sharing results (including

overviews of current situations and prospects) with management and business leaders.

### **Digital Transformation Strategy**

# **Business Transformation with Digital** -Transforming Our Business with Digital Technology-

Since launching the DX Promotion Office in April 2022, we have accelerated efforts to transform our business, to drive growth in specialty chemicals, and to contribute to global environment. We advance initiatives across 10 domains, with executives leading operations and managing them from a strategic perspective. Digitizing our business processes should boost annual financial benefits from ¥1.5 billion in fiscal 2024 to ¥8.9 billion in fiscal 2027 and reach

¥30 billion by fiscal 2030.

We have committed to embedding digital processes into our corporate culture, and working on everything needed to realize our vision as a specialty chemicals company.

### Yuki Nishida

Representative Director Senior Managing Executive Officer Assistant to the President, General Manager of DX Promotion Office, with responsibility for Information Systems Dept. and C1 Chemicals Project

![](_page_23_Picture_8.jpeg)

### Driving a Companywide DX

The DX Promotion Office spearheads our DX initiatives. We set it up in April 2022. It has nearly 70 members. These professionals participating concurrently, mostly in their 20s to 40s, bring expertise from the IT Department, business units, plants, research laboratories, and headquarters.

As part of measures to improve effectiveness, UBE appointed executives to oversee each DX domain, directly tying their compensation to the progress of these initiatives.

### **UBE's DX Mission**

UBE views DX as a catalyst for overhauling business processes, approaches, models, and mindsets. It goes beyond simply applying digital tools; it involves every employee and touches all business areas. Digital transformation plays a crucial role in accelerating our specialty chemicals growth and contributing to global environment.

We will boost labor productivity through digitization, leverage accumulated data in more advanced ways, and cultivate digital talent. Simultaneously, we will strengthen customer solutions by harnessing data and digital technologies. Our

![](_page_23_Figure_15.jpeg)

DX themes in 10 domains Smart Factory Digital Marketing Velocity R&D Digital Management Digital SCM • DX Promotion Office Digital ESG ● PMO\*1 Digital Back office Digital HR Branding Data Analytics & Al

Data-driven plant operations using factory information integration systems Creating opportunities for proposing customer value solution by leveraging sales support systems

Advancing materials development with materials informatics and exploring new themes using intellectual property analysis systems

Implementing data-driven management by streamlining budgeting, accounting, and cost calculations Enhancing production and sales planning with optimized supply chain planning systems

Meeting societal demands through comprehensive environmental management and disclosure

Upgrading back-office operations by adopting standardized business processes within a total quality management\*2 framework

Systematically expanding and developing key talent by focusing on knowledge, qualities, and career growth Proactively engaging customers by presenting compelling value creation ideas, rather than waiting for them to come to us

Leveraging data-driven insights to understand current trends, anticipate future developments, and guide decision-making

\* Appointing executives to lead each theme, supported by teams of young employees from IT and business units

\*1 Project Management Office: Driving projects cross-functionally to ensure seamless collaboration across departments

\*2 Total Quality Management: Integrating shared quality management goals into the business strategy to align organizational objectives

### Overview of UBE's DX Activities

We are undertaking integrated DX efforts with a focus on optimizing visions of each domain while ensuring seamless data collaboration among domains to maximize both customer and corporate value.

![](_page_23_Picture_29.jpeg)

goal is to create new value by reforming business processes through co-creation with customers.

When we established the DX Promotion Office in 2022, it focused on four domains. This expanded to eight in 2023 and to 10 in 2024, with each domain gaining depth in focus. Under the current three-year management plan through fiscal 2024, we are investing approximately ¥10 billion in capital expenditures. Cumulative spending should reach around ¥22 billion by fiscal 2030, generating return on investment of ¥30 billion by that year.

### **Collaboration Across 10 DX Domains**

In fiscal 2024, we added Branding and Data Analytics & AI to bring the number of DX domains to 10. We are pursuing a holistic view of the value chain across all DX activities and implement proactive management that maximizes value.

We aim to elevate the UBE brand among stakeholders-society, customers, job seekers, and employees. At the same time, we will

promote proactive management by analyzing data with AI to simulate the impacts of various initiatives on management metrics.

Supporting this approach is our data infrastructure, which we overhauled with the launch of the SAP S/4HANA® Cloud as our enterprise system from April 2024.

### Initiatives to Attract and Develop Digital Talent

We implemented a strategy based on innovator theory to equip all employees with digital proficiency. This approach spreads DX from innovators within the DX Promotion Office to early-adopting evangelists.

We expanded the scope of citizen development\* beyond applications to include the utilization of generative AI and the creation of digital education content. In fiscal 2023, members of the DX Promotion Office began educating the broader workforce-the practitioners-by using e-learning and practical training programs they developed.

To motivate learning, we award digital badges to those who pass final exams.

\* Citizen development: This refers to employees in business units using specialized tools to develop systems without requiring advanced programming knowledge.

### Digital Talent Development (Workforce percentages)

Innovator Theory

Maiority (Embodied)

![](_page_24_Figure_6.jpeg)

specialized and common skills, knowledge, and mindsets for each. Our goal is to foster an environment where employees take ownership of their career paths, while the Company works on building an environment where talent are developed as planned (a talent pipeline). To achieve this, we are enhancing our human resources systems and educational framework. We are implementing a Groupwide talent management structure to efficiently cultivate talent and support career growth.

### Envisaged Talent to Foster Specialization

![](_page_24_Figure_9.jpeg)

Define roles, behaviors, specialized and common skills, knowledge, and mindsets for each talent profile

In the Digital HR domain, we defined 10 specialized

talent profiles and outlined the roles, behaviors,

Cultivating Talent Strategy with DX

Velocity R&D Domain Themes

Accelerating market and product development To accelerate the creation of research and development themes, we developed a technology information search system that visualizes relationships between internal and external authors. This system enables us to quickly identify advanced elemental technologies and expert networks, allowing for swift responses to inquiries, efficient issue resolution, and the

creation of high-quality R&D themes.

We are developing a tool that leverages generative Al to align needs with seeds, for quick creation of market development themes based on business opportunities identified through Sales Force Automation tools that the domain deployed in the digital marketing domain. Additionally, we are advancing the use of materials infomatics\*1 and process informatics\*2 to accelerate product and technology development cycles in R&D.

\*1 Materials informatics (MI) employs statistical analysis and other techniques to explore new materials from vast data volumes. \*2 Process informatics (PI) draws on statistical analysis and other techniques to optimize and improve manufacturing processes.

85.4%

\_

81.5%

**Examples of DX Initiatives** 

![](_page_24_Figure_16.jpeg)

### Smart Factory Domain Theme Example (1)

Eliminating occupational accidents As part of our efforts to prevent occupational accidents, we developed an in-house tool called Anzen Bot-kun, which leverages generative AI to provide tailored support based on specific work conditions and roles, including safety managers, on-site supervisors, and on-site operators.

![](_page_24_Figure_20.jpeg)

### Smart Factory Domain Theme Example (2)

Enhanced productivity for engineers We are developing a system where the latest versions of engineering and equipment-related documents-previously scattered across file servers, archives, individual PCs, and in paper form-are abolished and managed as the sole original copies on our electronic document management system. This ensures that the most up-to-date documents are always accessible. By linking these technical documents with related information, we can guickly reference associated operational trends, equipment management data, and operational control data.

![](_page_24_Figure_23.jpeg)

### **Cybersecurity Initiatives**

Cybersecurity measures are crucial to safely execute our DX initiatives. We are committed to strengthening these measures by leveraging external evaluations that comply with various regulations and guidelines, and by identifying weaknesses relative to industry peers.

In fiscal 2023, we enhanced our human, physical, and technical defenses, resulting in

By integrating AI into field operations, which often depend on the experience and knowledge of veteran workers, we can precisely address risks that we might otherwise overlook, eliminating gaps and oversights. This approach enhances our ability to anticipate hazards and is ultimately aimed at eliminating occupational accidents.

### Adding proprietary data not in ChatGPT, such as the UBE Group's occupational accident records, internal rules, and procedural manuals

This system has dramatically reduced the time engineers spend searching for technical documents and data, which previously consumed about 70% of their workload. By making the latest information readily available, we aim to prevent errors and boost labor productivity.

The time saved through increased productivity will be reallocated to tasks such as predictive maintenance, and process and equipment improvements, thereby enhancing operations. Also, reskilling and skill development based on the specialty-focused talent profiles defined in our Digital HR domain will further contribute to business expansion.

a 6.1-point improvement in our deviation score compared with industry peers.

### Obtaining DX Certification

In June 2024, we became a DX-Certified Operator as defined by the Ministry of Economy, Trade and Industry. We will keep accelerating our DX efforts, tackle business transformation, and strive to constantly create new value.

### Sustainability

**UBE Group Sustainability Concept Chart** 

UBE Corporate Philosophy

UBE

Management

Principles

### **Founding Principles**

"Coexistence and Mutual Prosperity" "From Finite Mining to Infinite Industry"

Purpose

### Vision for 2030

A Corporate Group Centered on Specialty Chemicals that Contributes to the Global Environment, Human Health, and an Enriched Future Society

![](_page_25_Figure_9.jpeg)

4. Strengthening the management platform (corporate governance and digital transformation)

> Digital Transformation

### Approach to Sustainability

The UBE Group has made pursuing sustainability pivotal to corporate management. In order to fulfill its purpose (raison d'être) as a corporate group centered on specialty chemicals, the Group aims to achieve sustainable growth by effectively utilizing its management resources and creating new value for society. The cornerstone of our efforts is a focus on realizing a sustainable world. Toward that end, we work to ensure that all executives and employees of the UBE Group are fully aware of the UBE Group Basic Policies for Sustainability, identifying material issues in the areas of growth, environment, society, and governance, and proactively seeking solutions to these issues.

### **UBE Group Basic Policies for Sustainability** The UBE Group lives up to its founding principles and corporate philosophy by pursuing Group sustainability through its business activities. At the same time, we are focused on strengthening our efforts to address global environmental issues

- 1. We will secure safety and quality in providing products and technologies that contribute to the environment.
- 2. We will practice appropriate information disclosure for all stakeholders and readily communicate with society.
- 3. We will pursue corporate governance that is in keeping with the demands of society and strive to continuously expand revenues and enhance our corporate value.
- 4. In accordance with laws and regulations at home and abroad, and international norms and guidelines that should be observed, and with respect for human rights. we will pursue our corporate activities in a sound and fair manner.
- 5. We will respect the culture and customs of all countries and regions and contribute to the development of local communities.

![](_page_25_Figure_20.jpeg)

### New Sustainability Structure

In April 2024, UBE launched the Sustainability Committee to assess specific sustainability issues and oversee and review the work of subcommittees that formulate countermeasures. The president and CEO chairs this entity, with the executive officer in charge of the Sustainability Department serving as vice chair. The committee fosters initiatives within the Group, and the Board of Directors supervises its efforts.

The committee formulates Group sustainability policies and medium- to long-term and annual plans based on the UBE Group Basic Policies for Sustainability. It also develops response policies that include identifying Companywide issues and materiality. Its subcommittees handle each materiality (key issue). They independently formulate and implement measures to resolve each materiality based on Companywide policies and push forward with their own initiatives.

![](_page_25_Figure_24.jpeg)

![](_page_25_Figure_25.jpeg)

Human rights initiatives

management

### Enhancing Human Capital and Diversity, Equity, and Inclusion

S

### Fiscal 2030 KPIs (Consolidated Basis in Japan) Percentage of female employees: 30% Percentage of women in management positions: 10%

Special Committees (subcommittees)

Group Environment and Safety Committee

Human Resources and Human Rights Committee

Group Health Management Committee

Supply Chain Management Committee

Environmental Issue Committee

Quality Assurance Committee

Risk Management Committee

Crisis Response Committee

Information Security Committee

Security Export Control Committee

Compliance Committee

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![](_page_25_Figure_33.jpeg)

![](_page_25_Figure_34.jpeg)

### **United Nations Global Compact**

In April 2021, we signed the United Nations Global Compact and joined the Global Compact Network Japan. The network's 15 subcommittees (as of June 2024) explore global sustainability trends. Our guarterly cross-departmental meetings share the latest trends from these subcommittees to foster sustainable management.

![](_page_25_Picture_37.jpeg)

### **Disclosure Based on TCFD Recommendations**

We endorse the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). We established a governance structure and are evaluating the risks and opportunities of climate change on our operations. We are reflecting this information in our business strategies and disclosing it externally.

![](_page_26_Picture_3.jpeg)

The UBE Group established the Environmental Issue Committee to identify and act on problems in that regard. The president and CEO chairs the Strategic Management Meeting (Sustainability Committee), which receives deliberation reports from the Environmental Issue Committee, discusses activity plans and key issues, supervises and directs, and constantly monitors countermeasures progress. Reports on important matters regularly go to the Board of Directors, which provides appropriate supervision.

### Environmental Issues Governance Structure

![](_page_26_Figure_6.jpeg)

UBE Group Global Environmental Issue Committee

Informs about environmental issue situation overall and initiatives to reduce environmental impact

Chairperson: General Manager of Sustainability Department

### **Strategies**

In view of efforts to tackle climate change and transition to a low-carbon, decarbonized economy, management assessed a range of scenarios for 2030 and beyond, analyzed risks and opportunities for the UBE Group under each scenario, and formulated the required strategies.

We considered and formulated 2°C and 4°C transition scenarios and a physical scenario. We analyzed the risks and opportunities for the UBE Group under each scenario. For each scenario, we confirmed that while the impacts of risks are unavoidable, we can sustainably enhance corporate value by capitalizing on the opportunities.

We analyzed these scenarios in 2019 and will consider revising them based on the 1.5°C scenario.

CLIMATE-RELATED FINANCIAL

### Steps in Considering Scenario Analyses

- Evaluate each scenario, including operation forecasts for in-house power generation, to assess impacts on each business area
- Analyze the UBE Group's future based on findings from each scenario
- Develop a resilient long-term strategy through 2030, with a focus on 2050
- As a result of these scenario analyses, the following factors should significantly affect us financially in around 2030.

Analysis Assumptions, Details for Scenarios and Assessment Steps

Detailed information is available in the Support for TCFD Recommendations section of the UBE Group's website: https://www.ube.com/ube/en/sustainability

### Scenario Analysis

### Risk Business risks / Opportunities Financial impacts Period of impact categories Impacts Strategies and responses Risks Short to long terms Rigorously conser Medium to long terms Maximize renewal Greater costs and impacts on product Operations Transition prices from strengthened carbon pricing Medium to long terms • Restructure busine Long term Innovate technolo Adverse situation for coal-fired private Transition Operations ¥30 billion to Medium to long terms • Explore phased co power generation ¥37 billion Requests to expand renewable energy Products Transition Medium to long terms • Produce and procu deployments Short to long terms Rigorously conser Customers requesting disclosure of Transition GHG emissions intensity by product Products Medium to long terms Maximize renewal and lower emissions Medium to long terms • Use non-fossil-bas Product sales falling from shift to xEVs ¥2 billion to Undertake in-hous Transition Products Short to long terms and less coal-fired power production ¥3 billion market needs ¥10 billion to Shutdowns from more frequent and larger Physical Operations Short to long terms Step up infrastruct ¥20 billion climate-related disasters Opportunities Boost sales of environmentally friendly Short to long terms products and technologies that lower Transition Products ceramics, etc. environmental impacts across the supply chain Short to long terms ¥53 billion to ¥69 billion Medium to long terms Products Transition New business growth and creation transmission materials

The GX Emissions Trading System (GX-ETS) will start operating fully in fiscal 2026. A carbon levy will go into force in fiscal 2028. Costs could thus rise around ¥2 billion.

### **Risk Management**

We register and manage climate change responses under our risk management syste which centralizes oversight for such informat and monitors progress with countermeasure classify risks in that system as management, important, moderate, or minor within that sys We discuss management and important risks Strategic Management Meetings and reflect in specific strategies and measures.

The Strategic Management Meeting's Sustainability Committee addresses climate change as a global environmental issue. The Board of Directors regularly receives reports on these discussions and provides oversight. This process helps identify and specify Groupwide climate change risks. The Global Environmental Issue Committee formulates and implements responses and action policies across the organization. The executive officer in charge of the Sustainability Department chairs this body.

Please see Key Risks and Opportunities and Materiality on pages 12 to 15 for more details on the UBE Group's risk management system. Detailed information is available in the Risk Management section of the UBE Group's website: /www.ube.com/ube/en/sustainability

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them

### **Benchmarks and Targets**

We set the following targets for fiscal 2030 relating to efforts to address global environmental issues.

### **GHG** emissions: Reduce by 50% from fiscal 2013 levels

Environmentally friendly products and technologies as a percentage of consolidated net sales: 60% or more

Aggregation scope: Scope 1 and 2 for major business sites of consolidated subsidiaries

Detailed information is available in the Global Environmental Issues section of the UBE Group's website: https://www.ube.com/ube/en/sustainability.

GHG emissions in fiscal 2023 were 3.5 million metric tonnes, down 26% from fiscal 2013. Environmentally friendly products and technologies constituted 47% of net sales in the fiscal year under review.

We expect to achieve our GHG emissions reduction target for 2030 by halting ammonia production in Japan by 2030 and transitioning to a business structure centered on specialty chemicals. This shift should also help minimize financial risk.

ve energy, improve processes and pass prices on
ole energy usage
esses, including by shifting to specialty chemicals
gies
pal-fired private power shutdowns
ure renewable electricity
ve energy and improve processes
ble energy usage
sed fuels (including biomass and from recycled materials)
e and collaborative R&D to create and commercialize offerings that match
tural and other disaster countermeasures

• Offer more environmentally friendly products and technologies, including composites, synthetic rubber, polyimide, battery materials, high-performance coatings, separation membranes, and

• Develop energy management materials

• Develop and commercially deploy carbon-neutral technologies (CO<sub>2</sub> electrolysis and bio-based polymers), xEV and fuel cell vehicle-related materials, and high-speed, high-capacity information

Medium to long terms • Market circular economy technologies (recycle composite resins and bio-resources)

### Tackling Environmental Issues

# Q 13 CLIMATE ACTION

### Basic Guidelines for Addressing Global Environmental Issues

The UBE Group focuses on addressing climate change (carbon neutrality), and on contributing to a circular economy and nature conservation and restoration (nature positive). We are helping resolve environmental issues by steadily implementing strategies and measures. These include reducing GHG emissions across the value chain, providing environmentally friendly products, technologies, and engaging with stakeholders (dialogue and collaboration).

### Purpose

Leveraging the manufacturing technologies the UBE Group has cultivated throughout its long history, create the value required by society, in the safe and environmentally friendly manner demanded by society, and deliver that value to the people.

And by doing so, help to solve global environmental issues, which have become a common issue for all humankind, and contribute to people's lives and health, and an enriched future society

Addressing climate change (carbon neutrality)

2 Contributing to a circular society (circular economy) Including the issue of marine plastic waste

2 Contribute to nature conservation and restoration (nature positive)

Including biodiversity conservation and water resource conservation

Exploring and implementing measures across supply chain in three themes

### **Basic Activities Policy on Environmental Issues**

To realize "Addressing climate change (carbon neutrality)," "Contributing to a circular society (circular economy)," and "Contributing to nature conservation and restoration (nature positive)," we have formulated the following strategies and KPIs and are steadily implementing them.

• Ensuring that the management cycle works properly by analyzing materiality, identifying risks and opportunities, formulating strategies and KPIs, implementing measures, and disclosing information  Minimizing operational impact on the environment • Continuing to engage (dialogue and collaboration)

- Reach out to entire value chain (suppliers, employees, customers, investors, and communities) to resolve issues in everything from product and services purchases to in-house manufacturing and product processing, usage,
- Disclose information appropriately to all stakeholders and encourage collaboration to resolve environmental issues

### 1 Addressing climate change (carbon neutrality)

### Strategy

Reduce internal GHG emissions.

Keep developing and providing environmentally friendly products and technologies that help cut GHG emissions.

### **Targets and Business Plan**

We have formulated a business plan that encompasses overhauling our business structure reforms and deploying measures to conserve energy so we can reach our fiscal 2030 target of halving GHG emissions from fiscal 2013 levels to aim for becoming carbon neutral by 2050.

### Significance

• The increase of GHG emissions into the

atmosphere due to human activities is causing global warming and major changes in the climate.

 This could transform the natural environment and degrade ecosystem services. Rapid climate change could profoundly affect lives and businesses. It is our social responsibility and mission to tackle these changes as swiftly as possible.

### Fiscal 2030 Targets

and disposal

GHG emissions reduction target: 50% reduction compared to FY2013 levels

Target percentage of consolidated net sales comprising environmentally friendly products and technologies: 60% or more

### Initiatives to Reduce GHG Emissions

Progress toward GHG Emissions Reduction Targets\* GHG Emissions

![](_page_27_Figure_34.jpeg)

\* Excluding cement-related business transferred to Mitsubishi UBF Cement Corporation

GHG Emissions in Fiscal 20	23	kt-CO2e/y		
Business sites	Scope 1	Scope 2		
Chemicals business	2,970	350	ć	
Japan	2,290	110	2	
Thailand	400	220		
Spain	280	20		
UBE Machinery Group	160	10		
Total	3,140	370	ć	

Note: Please see pages 6-7 of the 2024 Integrated Report Supplementary Information (Environment and Safety / Quality Assurance) for Scope 3 emissions.

https://www.ube.com/ube/en/assets/images-en/page/ir/ir\_library. integrated\_report/pdf/2024/integrated\_report\_environmental\_ safety da 2.pdf

### Roadmap for carbon neutrality

![](_page_27_Figure_40.jpeg)

\* Under the Energy Conservation Act, Japan deployed the Top Runner Program designating equipment and facilities that deliver outstanding energy efficiency

![](_page_27_Picture_42.jpeg)

![](_page_27_Figure_47.jpeg)

# from fiscal 2013

Total 3,330 2,410 620

300 170

3,500

### **Carbon Neutrality Roadmap**

### **GHG Emissions Reduction Targets**

We will continuously promote energy conservation and improve processes in our production activities, and promote the maximization of the use of renewable energy and the minimization of the use of fossil resources. Furthermore, since innovative technological development is essential to achieve carbon neutrality by 2050, we will work on research and development and practical application of non-fossilization of raw materials and CO2 utilization technologies, including collaboration with other companies, from a medium- to longterm perspective.

### **Environmentally Friendly Products** and Technologies

By promoting the development of environmentally friendly products and technologies and providing them to more customers, we aim to contribute to carbon neutrality for the UBE Group and society as a whole.

Practicing rigorous energy conservation and installing equipment designated by Top Runner Program\* Making process improvements, such as introducing N2O scrubbers

ntroducing and procuring renewable electricity

Reducing GHG emissions by shifting to specialty products

Reduce GHG emissions

by 50% by fiscal 2030

Developing innovative technology

Advancing R&D into and the practical application of non-fossil raw materials and technologies for utilizing CO2 also through collaboration

### Achieve carbon neutrality by 2050

Year

### Tackling Environmental Issues

Sales of Environmentally Friendly Products and Technologies\*

![](_page_28_Figure_3.jpeg)

Estimated Contributions to GHG Emissions Reductions of Environmentally Friendly Products and Technologies Fiscal 2022: Approx. 10,400 kt-CO<sub>2</sub>e/y

Note: Calculations based on the UBE Group's market shares and sales volumes of environmentally friendly products based on CO<sub>2</sub> reductions in usage stages compared with conventional counterparts for end products incorporating UBE Group environmentally friendly products (based on CO<sub>2</sub> reductions for one year of use based on volumes of end products used during fiscal 2022).

We formulated guidelines based on ISO 14001:2015 to define environmentally friendly products and technologies.

### Business Restructuring

Shifting to specialty chemicals should lower GHG emissions by minimizing fossil resource usage and creating a business structure that is significantly less vulnerable to market conditions, including for raw materials and fuels. We aim to establish a business structure that minimally affects the environment, focused on specialty chemicals, from profitability and growth potential perspectives. We will also add value to basic chemicals products and reform our business structure.

While we aim to halt ammonia production in Japan by 2030, whose processes generate high GHG emissions, we are looking into bringing that schedule forward. In May 2024, we scaled back caprolactam production by 40% in Japan in view of high energy consumption in processes and poor prospects for improving profitability in the medium through long terms.

Such business structure reforms should enable us to reach our goal of cutting GHG emissions by 50% by fiscal 2030.

### Fiscal 2023 Initiatives

### Acquiring Science-Based Targets<sup>\*1</sup> Certification

In November 2023, we received certification from the Science Based Targets initiative (SBTi)\*2, an accreditation organization, for complying with its standards and recommendations for 2030 GHG

emissions reduction targets across the entire supply chain. SBTi particularly confirmed that our Scope 1 and 2 GHG emissions reduction targets were in keeping with efforts to limit the global temperature rise to 1.5°C above pre-industrial levels.

### **Overview of Targets**

The SBTi evaluates GHG emissions reduction targets for companies according to its quantitative and qualitative criteria and its target validation protocol. It only certifies targets satisfying all applicable requirements. Below is an overview of our two certified targets.

	Base year	Target year	UBE Group targets	SBTi target thresholds
Scope 1 & 2*3	2021	2030	45%	42%
Scope 3*3	2021	2030	25%	25%

Note: Scope 3 reduction targets cover purchased goods and services, the disposal of sold products, and investments (Scope 1 and 2 GHG emissions from equity-method affiliates based on the shareholding ratios)

- \*1 Science-based targets are GHG emissions reduction goals that companies set in line with Paris Agreement requirements.
- \*2 The Science Based Targets initiative is an international organization that encourages companies to set ambitious emissions reduction targets based on the latest climate science. It looks for them to halve emissions by 2030 and achieve net-zero emissions by 2050.
- \*3 Scope 1: Direct GHG emissions from sources owned or controlled by a company (including fuel combustion and industrial processes
- Scope 2: Indirect GHG emissions from consuming purchased electricity. heat or steam
- Scope 3: All other indirect upstream and downstream emissions in the corporate value chain, excluding those in Scope 1 and Scope 2.

### Participating in GX League and GX Emissions Trading Scheme

We joined the GX League and the GX Emissions Trading Scheme in April 2023. In September of that year, we submitted our GHG emissions reduction targets for 2023 through 2025 and for 2030.

The GX League framework is in line with the Ministry of Economy, Trade and Industry's GX League Basic Concept for promoting a green transformation, or GX\* and driving a transition toward carbon neutrality. This trading scheme within the league will run as a voluntary trading market during its initial phase in 2023 through 2025, with a view to full-scale operations beginning in 2026. We will focus on disclosing information and cutting GHG emissions by participating in this scheme.

\* Green transformation objectives are to minimize the use of fossil fuels and adopt clean energy and undertake activities toward those goals.

### **Deploying System to Calculate Product** GHG Emissions Data

UBE and NTT DATA Japan Corporation jointly created a system to calculate product GHG

emissions. In January 2023, we began providing data from that system to customers. This information makes it easy for customers to assess GHG emissions across their supply and value chains and contribute to efficiently implement measures to reduce these emissions.

We are using this system for products from the Ube Chemical Factory, the Sakai Factory, and the Chiba Factory of UBE Elastomer Co. Ltd.

### Launching U-BE-INFINITY<sup>™</sup>,

**Our Environmentally Friendly Products Brand** We launched this brand in April 2024 to represent particularly outstanding products and technologies offering exceptional environ-

**U-BE-INFINITY** 

mental sustainability contributions among UBE's environmentally friendly products and technologies. We seek to enhance the added value of the products, technologies, and innovations upholding our high environmental standards.

The brand name reflects our aspiration to attain infinite (INFINITY) social development together with stakeholders. The multi-colored logo symbolizes our determination to constantly evolve and never settle for the status quo in addressing global environmental issues.

This brand's offerings contribute to carbon neutrality by lowering GHG emissions, conserving resources by using recycled and biomass materials, and simplifying recycling processes. The brand brought out two newly developed products in its first phase lineup.

We created a special website for this brand. https://www.ube.com/lp/u-be-infinity/en/index.html

### Strategy

We will tap discarded and other resources effectively and recycle them. We will develop and provide circular materials, products, and technologies.

### Targets and Business Plan

Our goal is to increase the sales ratio of environmentally friendly products and technologies, including products that contribute to the realization of a circular economy, to 60% by 2030. In addition, we aim to effectively utilize and reduce waste such as plastics generated by our own operations.

![](_page_28_Picture_51.jpeg)

### Certified newly developed products

Bio-composite	Wood-derived bio-composites offering alternatives to petroleum- based plastics to help reduce CO <sub>2</sub> emissions.
Recycled carbon fiber-reinforced nylon	Nylon composite made using material-recycled carbon fiber as
composites	a raw material.

### Upcoming developments, products, and technologies

Sustainable caprolactam	ISCC PLUS certified caprolactam made from sustainable resources
Bio-based nylon	Nylon made from biomass materials
Mechanically recycled nylon	Recycled nylon made from PCR*1/PIR*2 nylon and filler
Recyclable nylon	Nylon-based compatibilizer master batch for multi-mechanical recycling

\*1 Post-consumer recycling (PCR): Recycling resources from used products in the consumer market

\*2 Post-industrial recycling (PIR): Recycling resources from waste/ remnant materials produced in industrial processes at manufacturing facilities, etc.

### **Engaging with Primary Suppliers**

In May 2023, we took our first step toward engaging with primary suppliers of key raw materials by surveying their efforts to address environmental issues. Their responses revealed these initiatives and identified future challenges. We will keep working with these entities to help resolve environmental issues across the supply chain.

2

### Contributing to a circular society (circular economy)

### Significance

- Population growth and economic development have raised concerns about depleting resources and destabilizing resource supplies. Circulating limited resources will help ensure stability.
- Achieving a circular economy will suppress the deterioration of circulation caused by linear material flows, such as the accumulation of large amounts of plastic waste in the ocean.
- Achieving a circular economy entails transforming linear materials flow into circular ones to establish an economic structure that produces value by reusing waste and used products.

### Tackling Environmental Issues

### Fiscal 2023 Initiatives -

### **Obtaining ISCC PLUS Certification**

ISCC PLUS certification is an international certification that aims to materialize sustainable supply chains. The following Group companies manufacture and sell ISCC PLUS-certified products, using the mass balance approach to allocating biomass and recycled raw materials\*1.

• UBE CORPORATION EUROPE S.A.U.

- UBE Elastomer Co. Ltd. Headquarters and Chiba Factory
- THAI SYNTHETIC RUBBERS COMPANY LIMITED Rayong Factory
- UBE TAIWAN CO., LTD.\*2
- \*1 Mass balancing is a chain of custody option in which certified and noncertified materials are mixed physically, but kept separate on a bookkeeping basis. It allows the attribution of the circular and/or biomass raw material to the final products via verifiable bookkeeping and ensures the full traceability through the entire supply chain. \*2 Obtaining trader certification enables handling of all products recognized by ISCC PLUS

### Contribute to nature conservation and restoration (nature positive)

3

### Strategy

We will identify the impacts and dependencies of our business activities on nature, identify risks and opportunities, and contribute to the conservation and restoration of the natural environment and the sustainable use of ecosystem services. We also provide products, technologies, and services that help realize nature positive.

### **Targets and Business Plan**

• Water sources: We analyze water stress trends based on the water conditions (context) and water supply and demand scenario at each site. At sites where water stress is expected to

rise, we will reduce water withdrawal and improve water recycling rates by formulating water use strategies and monitoring KPIs.

- Environmental impacts of our operations, including from air, water, and soil pollution: We monitor and reduce pollutant emissions to eliminate environmental incidents.
- Engagement: We will work with the supply chain (environmental impact assessment), employees (education), customers (provision of environmentally friendly products and technologies), investors (provision of information and exchange of opinions), and local communities (environmental improvement activities).

We will verify adverse effects (trade-offs) on the natural environment and minimize negative impacts.

### Significance

A lot of the products, services, and energy supporting our lives are the fruits of nature. Protecting the environment, restoring nature, and preserving ecosystem services will help safeguard our living environment and livelihoods. Nature conservation and restoration can reduce weatherrelated disasters while protecting cultures and traditions, landscapes, and our diets.

### Initiatives

To respond to the conservation of the natural environment (biodiversity) and water resources, we conduct risk analysis at each business site.

### Fiscal 2023 Initiatives-

### Heightening Our Awareness of the Importance of Water Resources

Water is vital to the UBE Group. This natural resource performs diverse roles in the chemical industry, including by transferring heat through cooling and steam, as a solvent, and as a cleaning agent.

We monitored and classified water risks at key operational sites with such tools as WRI Aqueduct, a global water risk assessment tool from the World Resources Institute. We confirmed that none of our operations rely excessively on high-risk water sources.

Sites in Thailand and Spain set reduction targets for water use per unit of production and for water recycling rates to prepare for possibly higher water stress after 2030.

### Water Risk Assessment Results

We maintain five water risk levels for our key business sites. We take into account information we secure from the WRI Aqueduct water risk atlas and other external sources, as well as by our sites. There were no intakes from high-risk water sources.

Risk levels	Percentage of total water intake	Business sites	Key risk factors
High	0	Not applicable	
High to moderate	0	Not applicable	
Moderate	3	Key sites in Thailand and elsewhere	Constraints on water supply and demand and droughts
Low to moderate	1 96	Key sites in Spain Key sites in Japan	Flooding
Low	0	Not applicable	

Key business sites in Thailand and Spain formulated the following KPIs, and are addressing projected increases in water stress from 2030.

Business site KPIs	Progress in fiscal 2			
Key sites in Thailand Reduction in water consumption per unit of production from fiscal 2021 levels				
Fiscal 2024: 5% decrease	Fiscal 2023 result: 44.5 increase*			
Water re	cycling rate			
Fiscal 2024: 26%	Fiscal 2023 result: 27.7			
Key site Reduction in water of production from	es in Spain consumption per unit of a fiscal 2022 levels			
Fiscal 2030: 10% decrease	Fiscal 2023 result: 4.0% decrease			
Water re	cycling rate			
Fiscal 2030: 10%	Fiscal 2023 result: 0%			

\* Reason for higher water consumption per unit of production: This increase reflected declining water guality and reduced operational rate at water treatment facilities.

### **Our WASH Initiatives**

We are pushing forward with WASH (water access, sanitation, and hygiene) initiatives in line with Sustainable Development Goal 6, which is Clean Water and Sanitation. These efforts aim to give all people access to safe water for drinking, washing their hands, and toilets and other sanitation facilities.

We are endeavoring to improve WASH conditions at our sites to ensure healthy and safe working environments, notably by:

- Setting WASH targets (access to safe drinking water and handwashing and restroom facilities) at all business sites
- Installing water-saving sensors on taps in office washrooms (Sakai Factory)
- Upgrading water supply systems and stepping up wastewater management (UBE Machinery Group)
- Installing permanent mineral water dispensers (Headquarters)

We have positioned ourselves to contribute to eight targets of Sustainable Development Goal 6, including targets  $6.3^{*1}$  and  $6.4^{*2}$ , by complying with regulations and setting specific goals.

- \*1 Target 6.3: By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally
- \*2 Target 6.4: By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity

### Proximity to Areas Important for Conserving **Biodiversitv**

We draw on the Integrated Biodiversity Assessment Tool and local information of key business sites to

Integrated Report 2024

12023

1.5%

.7%

0%

check the proximity of key business sites to nature conservation areas and locations that are important for conserving biodiversity and constantly check potential impacts and extents.

Not near Ramsar Sites

- The sea level near the Ube area is in the International Union for Conservation of Nature's management category VI for protected areas.
- The national government regulates the seawater area bordering the Ube area, fishing rights there.
- The Suonada and Koto River estuaries bordering the Ube Fujimagari district are Key Biodiversity Areas. They are also among the 500 wetlands in Japan that the Ministry of the Environment has designated as highly important from biodiversity perspectives (No. 400, Koto River, Ariho River, and Asa River estuary (salt marshes, rivers, tidal flats, and brackish water zones)). The ministry also designated the Koto River estuary tidal flats as a highly important marine area for biodiversity (No. 15805).

UBE does not discharge pollutants directly into these water bodies.

### Other Initiatives in Fiscal 2023

### Marine Plastic Waste

- Undertook joint cleanups with neighboring companies
- Exploring closed-loop recycling of plastic bottle caps (UBE Machinery Group)
- Participation in year-end street cleanup organized by a public service society in Ube City (Ube Chemical Factory)
- Patrolled waste storage sites every quarter (Ube Chemical Factory)
- Recycled waste plastic (Ube Chemical Factory)

### **Biodiversity Conservation**

- Took part in forestation initiative (Sakai Factory)
- Conducted a plant environmental seminar (Sakai Factory)
- Participated in Mine Agriculture, Forestry and Fisheries Office's forestation initiatives to protect water (Ube Chemical Factory)
- Helped exterminate Argentine ants by contributing to administrative reports and exterminated nests to prevent infestations from spreading beyond business sites (Ube Chemical Factory)

![](_page_29_Picture_85.jpeg)

Employees participating in the 16th Forest Creation Experiential Activity for Water Conservation

### **Environmental Safety Management**

The UBE Group has made safeguarding the environment, safety, and health top priorities so it can provide products and services that contribute to better lives and achieve solid and sustainable growth.

We defined priority environmental and safety measures under the UBE Group Environmental and Safety Guidelines to reflect the activities of business sites and partner companies\*.

### UBE Group Environmental and Safety Guidelines

We have made it our shared value to prioritize safety in everything we do. This includes ensuring safety and security in the workplace and in local communities, and conserving the global environment.

- 1. We will secure healthy, safe and comfortable working conditions, aiming to eliminate occupational accidents.
- 2. We will ensure the safety and security of facilities and operations, aiming to eliminate facilities accidents.
- 3. We will reduce our emissions of waste and chemical substances, and contribute to establishing a recycling-based society by recycling and effectively using resources.
- 4. We will voluntarily and continuously work to address global environmental issues in order to contribute to a sustainable society
- 5. We will strive to maintain and improve the health of working persons, who give vitality to society and corporations.

### **Environmental and Safety Organization**

Policies and measures relating to such environmental safety components as occupational safety and health, process safety and disaster prevention, and environmental preservation are key management issues. The Group Environment and Safety Steering Committee formulates these policies and measures. The president and CEO chairs the Strategic Management Meeting (Sustainability Committee), which deliberates and decides on them. The meeting also serves as a process safety headquarters prescribed in a ministerial order relating to high-pressure gas safety (HPGS), discussing and determining important matters relating to process safety at certified sites for high-pressure gas. The Board of Directors oversees these activities.

### Structure of Environment and Safety Meetings

![](_page_30_Figure_14.jpeg)

### Implementation of UBE Group Environmental and Safety Measures

Based on the UBE Group's environmental and safety measures, we rigorously implement PDCA cycles to constantly enhance occupational safety and health, safety and disaster prevention, and environmental preservation.

The Outline of Environment and Safety Activities on pages 1-2 of the 2024 Integrated Report Supplementary Information (Environment and Safetv/Quality Assurance) presents our environmental safety activity plans and achievements.

https://www.ube.com/ube/en/assets/images-en/page/ir/ir library/ integrated\_report/pdf/2024/integrated\_report\_environmental\_ safety\_qa\_0.pdf

### Annual RC Activities' PDCA Cycle

![](_page_30_Figure_20.jpeg)

reflect progress with improvements in measures for the following fiscal year.

### Initiatives to Help Create Value and Grow Sustainably

Occupational Safety and Health / Process Safety and Disaster Prevention Quality Assurance and Product Safety

![](_page_30_Picture_24.jpeg)

### Occupational Safety and Health / **Process Safety and Disaster** Prevention

We undertake occupational safety and health as well as process safety and disaster prevention initiatives in keeping with the UBE Group Environmental and Safety Guidelines. The guidelines embody a firm commitment to prioritizing safety in everything we do by ensuring safety and security in workplaces and in communities while protecting the global environment.

### **Occupational Safety and Health**

We aim to eliminate occupational accidents, and endeavor to reinforce and keep enhancing safety initiatives by fostering a culture of safety. We also strive to reduce risks in operations that are prone to major accidents and make them inherently safe.

We prioritize engaging in safety initiatives with partner companies and educating and training them to enhance safety awareness.

![](_page_30_Picture_30.jpeg)

## **Quality Assurance and** Product Safety

We undertake quality assurance and product safety initiatives based on the UBE Group Fundamental Quality Guidelines.

### **Quality Assurance**

We have resolutely implemented a range of measures to prevent improper quality inspection practices from recurring. We are promoting education about quality assurance in terms of both knowledge and awareness for all executives and employees to ensure that they embrace quality assurance activities. We conducted a quality awareness survey among employees in 2023. This survey confirmed that employees at each workplace are becoming vigorously committed to enhancing quality, with a growing percentage of employees prioritizing it.

To shift to specialty businesses, we will bolster quality management to maximize corporate value centered on quality (customer satisfaction) and accelerate efforts to make quality a recognized strength.

Glossarv

\* Partner companies: Including construction and other contractors

We investigate and respond to all accidents with and without causing time and workday losses. We thereafter confirm the effectiveness of these measures and roll them out across our organization to prevent similar incidents.

### Process Safety and Disaster Prevention

We undertake security initiatives to eliminate accidents, and to make facilities safe and secure. We also conduct disaster-preparedness activities to minimize damages in case natural disaster occurs. Our focuses in fiscal 2023 were on eliminating facilities and environmental accidents, improving safety at high-pressure gas facilities, and preparing for natural disasters.

Please see pages 3–5 of the 2024 Integrated Report Supplementary Information (Environment and Safety/Quality Assurance) for details on occupational safety and health as well as process safety and disaster prevention activities and outcomes from initiatives in fiscal 2023.

https://www.ube.com/ube/en/assets/images-en/page/ir/ir\_library/ integrated\_report/pdf/2024/integrated\_report\_environmental\_safety ga 1.pdf

### **Product Safety**

We factor health, safety, and the environment into chemical substance management. We do this by complying with domestic and international chemical control regulations, closely overseeing these substances in the supply chain, continuing to strengthen the functionality of our in-house-developed database to comprehensively manage chemical information, and disclosing Safety Data Sheets (SDS)\* for key products on our website.

In fiscal 2024, we will rebuild the chemical substance management systems of our U.S. sites, where we are expanding our business.

Please see page 17 of the 2024 Integrated Report Supplementary Information (Environment and Safety/Quality Assurance) for details on quality assurance and product safety activities and outcomes from initiatives in fiscal 2023.

https://www.ube.com/ube/en/assets/images-en/page/ir/ir library/ integrated\_report/pdf/2024/integrated\_report\_environmental\_ safety ga 7.pdf

\* Safety Data Sheet (SDS): Documentation containing hazard and toxicity information about chemical substances that manufacturers disclose when supplying chemical substances and products incorporating them

A Conversation about UBE's Talent Vision of Human Capital and the Impact of Its Strategies

# Exploring the diversity and expertise UBE needs to drive specialty chemicals growth

With the clear strategies that pursue growth in specialty businesses and execute structural reforms in basic businesses, the Company's human resources director and a human resources manager of the Spanish base met to exchange views about the diversity and expertise needed to grow in specialty chemicals and to discuss the achievements and challenges of its human resources strategy.

# Diversity vital for specialty chemicals growth

Horie: One of UBE's four management measures to achieve its Vision for 2030 is to enhance human capital. The current medium-term management plan prioritizes enhancing human capital for sustainable growth. What aspects of UBE's human capital strategy are essential to drive specialty chemicals growth?

Kawamura: We have made diversity, equity, and inclusion (DE&I) a top priority in our human capital strategy to achieve specialty chemicals growth. That is because we think that an organization with members from all sorts of backgrounds will enable us to swiftly perceive change and recognize new challenges, making it easier to innovate. We are pushing ahead with measures to enhance diverse human capital activities and work engagement (Please see pages 64 to 69 for details on human capital initiatives.)

Horie: Like UBE. UBE CORPORATION EUROPE S.A.U. (UCE; a manufacturing and sales group company of chemical products in Spain) is transitioning away from such basic businesses as caprolactam and nylon polymers toward specialty chemicals. Tell us about your talent diversity.

Loyarte: Human capital is also a key factor for growth at UCE, which is based in Spain and serves the European market. It is important to understand what sorts of talent we need, and it is also important that individual employees acknowledge that they are in an era of transitioning. In Europe, immigration and changing work-life balances have transformed values. So, like the parent company, UCE is deploying more flexible human resources policies, such as increasing the ratio of female employees.

The key point for UCE is its close proximity to local governments, universities, and other external entities. In shifting to specialty chemicals, diversity is necessary not just in terms of gender and nationality but also in terms of new expertise. We aim to strengthen our talent marketing.

### Initiatives to increase talent diversity

Horie: In what ways do you think UBE and UCE are taking different paths to increase diversity?

Kawamura: We recognize that DE&I is more commonplace in Europe and the United States than in Japan. The equity market also places a high value on efforts to promote women's participation in companies. The data shows differing

Daniel Loyarte Executive Officer CEO UBE CORPORATION FUROPE S.A.U. In charge of Finance & Planning Dept., Legal Dept., IT Dept. and HR Dept.

Ryo Kawamura Executive Officer, CRO, and CCO **UBE** Corporation In charge of Risk Management Dept. Human Resources Dept.. Legal & General Affairs Dept., and Business Reorganization Dept.

### Moderator

Shuko Horie General Manager of Corporate Communications Dept **UBE** Corporation After graduating from university, Ms. Horie managed digital media, public relations, and advertising for a leading travel firm. She joined UBE in 2021 and has served in her current position since April 2024

stock valuations for companies with and without female directors. For us, promoting women's participation is a matter of urgency.

In Japan, the ratio of female managers is mainly a key performance indicator for promoting women's participation, and UBE has also set a target value. However, this is only a numerical target. We believe that it is essential for women to demonstrate their capabilities and work with vigor and enthusiasm, and we need to create an environment and systems to make workplaces rewarding for men and women alike.

Horie: Indeed, there are more and more opportunities for female managers and young female employees to exchange views. I also note efforts to create rewarding workplaces for all.

Lovarte: UCE also intends to strengthen DE&I. Among other things, we see encouraging women as an important factor in diversifying the company. In addition, we recognize that mid-career and foreign national hiring will be a key factor to transform the company. Also, as a member of an international corporate group, it will be even more important to firmly understand what individuals seek and what operating regions such as Europe and South America want and reconcile both.

UCE established an Equality Committee to eliminate discrimination, improve work-life balances, get rid of the gender wage gap, and ensure transparency. From medium- to long-term perspectives, we have undertaken two major initiatives. One is to appoint the female middle managers to the top management level. As part of this effort, last year we produced a video entitled, "Women in the Chemical Industry," which featured interviews with professional women about their thoughts and experiences. We hope to eliminate glass ceilings. We also use SNS in recruiting female talents. The second initiative is the Family Plan, which aims to unite UCE to support families with members that have disabilities, offering an intervention plan that helps them to improve their development, autonomy and social inclusion. It currently covers nine such families. Other activities include collaborating with the Spanish Red Cross Society to provide education and leisure to children at risk of exclusion, and vocational training centers, which also helps to attract talent.

Kawamura: UBE is also extensively hiring people with disabilities. The Family Plan is worth replicating. I believe that there is still much to learn about building relationships with the local community.

As well, we see a need to strengthen UBE's ability to disseminate information. One way to do

this is to publicize our retiree rehiring program. People who have experienced environments different from ours are not only immediately effective but also bring vitality to otherwise rigid organizations and cultures. We want to provide information to those who have left our Company so that they can learn about the new UBE and consider working for us again. Accordingly, we will continue to build our alumni network to reconnect retirees with the Company.

### Expertise needed to grow the specialty chemicals business

Horie: What key considerations are there to develop expertise in specialty chemicals?

Kawamura: At UBE, there are 10 talent categories (marketer, account sales, promoter, technology translator, technology innovator, process innovator, reliability engineer, production specialist, quality assurance specialist, and business data intelligence), each with specific roles, behaviors, skills, knowledge, and mindsets. We encourage each employee to think and select their career path spontaneously and systematically develop talent. We aim to connect to career ownership from employee perspectives to materialize their own career-vision they want to be and, from managerial perspectives, to build a human resources pipeline that systematically develops talent while identifying the shortfalls for each individual.

Loyarte: This is also an important issue for UCE. Our basic business has long been stable, as have our human resources and systems. We need to consider carefully whether we can keep taking the same approaches. Particularly with regard to specialty chemicals, we think it is important to reskill our staff toward this new vision, and at the same time, to recruit people with special skills or marketing backgrounds and appropriately mix external and internal talent. Similarly, we believe that we need to enhance inorganic growth as well, so we will also develop people with financial and mergers and acquisitions expertise.

### Cultivating people to strengthen R&D and expand the specialty chemicals business

Horie: How will the UBE Group develop people to help expand the specialty chemicals business?

Kawamura: R&D talent is the key to growth in specialty chemicals. UBE has explored ways to develop and evaluate such people and motivate them to lead to innovation. For example, the

A Conversation about UBE's Talent Vision of Human Capital and the Impact of Its Strategies

Pharmaceutical Division deployed a specialist system on a trial basis and revised its evaluation system accordingly. We are considering deploying this system Groupwide while checking the outcome of this trial. In fiscal 2023, the Research & Development Division resumed Management of Technology education for researchers for the first time in seven years. We also began accepting employees on secondment from overseas Group companies with a view to driving innovation through people with a range of specialties and perspectives. On top of that, we send engineers to venture companies and plan to extensively send researchers to universities.

Horie: UCE has an R&D center, as we do in Japan. Do you face any challenges in training and recruiting R&D professionals?

![](_page_32_Picture_4.jpeg)

To develop business globally, knowledge of a wide variety of regions is also extremely important, so we respect the advice of local staff.

> Loyarte: We have close ties with nearby universities and have access to sufficient experts, so we are well placed to recruit R&D people. That said, our challenge is to offer a competitive compensation in view of rising labor costs. Also, as the shift to specialty chemicals creates opportunities for new career paths. We are confident that we will establish new positions aligned with these opportunities, thereby offering our talented employees a progressive professional development trajectory within the organization. In other words, we believe that adequate salaries, providing career path opportunities, and tapping external organizations will become important in developing and recruiting R&D people.

Another notable initiative is our Global Business Leader program. We select participants from UBE Group worldwide and have them spend approximately six months on team projects. This is useful not just to retain and secure people and foster individual growth, but also as an excellent vehicle to share market needs, technology trends, and R&D priorities globally.

### People propelling global growth

Horie: With the decision to construct a new plant in the United States, the UBE Group will further accelerate its global growth. While UCE is in Spain, it serves the U.S., Eastern European, and Western Asian markets. What sorts of people or structures do you require to identify diverse market needs and apply them to your business strategy and R&D?

Loyarte: UCE accommodates diverse countries, cultures, and languages. Strong corporate services are accordingly vital to develop marketappropriate strategies, so we need multilingual people. While English is our lingua franca, we have a solid pool of individuals also skilled in other languages. Knowledge of a wide variety of regions is also very important, so we respect the advice of local staff in doing business.

Also, we regularly hold Atlantic Meetings to enhance belonging among employees and strengthen team building. All employees participate in these gatherings to discuss strategic and organizational issues and recognize that each individual is an important member of the organization.

Horie: So, how does the UBE Group define the people who can propel its global growth?

Kawamura: Our concept is that they can build trust with local personnel and collaborate with respect for different cultures and customs. In developing global talent, our global management approach will be important. Appointing Masayoshi Ota to head our Americas operations in April 2024 exemplifies our commitment to change, as he is a managing executive officer with extensive global experience.

Also, English is essential for our people. TOEIC scores show that young employees have a certain level of English proficiency, but the average scores of managers are lower than those of younger employees. We thus required managers to take TOEIC tests from fiscal 2023. We hope that seeing managers take the initiative to learn English will inspire younger colleagues, creating a virtuous cycle.

### People are the source of innovation and value creation

Horie: How does a diverse and highly specialized workforce drive innovation and create value? What benchmarks do you use to measure these contributions?

Kawamura: We foster environments that enable flexible work styles so diverse employees can demonstrate their skills. We measure outcomes through indicators such as reduced working hours. Additionally, we use consolidated ordinary profit per employee as an indicator for performance-linked bonuses to share the awareness that better

![](_page_32_Picture_19.jpeg)

We will keep striving to build a corporate culture that encourages employees to think spontaneously about their careers and realize their own growth.

> working conditions increase productivity. We also established a range of KPIs, including the ratio of female managers, sharing quarterly updates on progress with the entire UBE Group. (Please see pages 64-69 for details of KPIs.)

One example of the success of our efforts to empower diversity is that, while many women used to leave the Company after marrying or having children, more have stayed with us in recent years by taking advantage of various programs.

Loyarte: Our diverse teams bring unique viewpoints that lead to more innovative solutions, while specialized expertise allows for tackling complex problems with depth and precision. This dynamic

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helps us to attract top talent, who are drawn to organizations known for their inclusivity and innovation. To ensure that our teams remain updated on the latest trends, we facilitate training in both soft and hard skills, and monitor the average annual training hours per employee.

Building on the previous example provided by Mr. Kawamura, the integration of women into organizations in Europe is well established. However, to ensure equality, we annually assess gender wage gaps to measure disparities at each level. Additionally, we have established a metric to track the percentage of employees returning to work following maternity or paternity leave. We will continue to monitor the indicators employed by UBE and UCE, along with the outcomes they reveal.

### **Tackling challenges**

Horie: Mr. Loyarte, what insights into UBE's global human resources strategy did you gain through this conversation?

Loyarte: I'm reminded that there are global and local opportunities and challenges. With continued collaboration across cultures and investment in human capital, the UBE Group can keep growing sustainably. Both UBE and UCE are transitioning, and people are central to such change. We are committed to strengthening UCE's talent through reskilling, appropriate evaluation and wages, and collaborating and cooperating with UBE on human resources strategies.

Horie: Mr. Kawamura, what direction do you think the talent strategy of the UBE Group as a whole will take?

Kawamura: This discussion affirmed that formulating and implementing a human resources strategy that is inextricably linked to management strategies is essential to help enhance corporate value sustainably.

For future growth, we will keep striving to build a corporate culture that encourages employees to think spontaneously about their careers and realize their own growth. We will also begin building a career ownership management system that taps digital technology in order to develop human resources that drive specialty chemicals growth.

Horie: It has been a pleasure to hear your views about the UBE Group's talent strategy, our global challenges, and our efforts to overcome them. Thank you very much for your time today.

### Human Capital

### **Basic Talent Strategy Approach to Drive** Growth in Specialty Chemicals

Aligning Talent and Business Strategies It is vital to formulate and deploy a talent strategy that helps materialize management strategies to continuously enhance corporate value in this rapidly changing business climate

To drive the expansion of our specialty chemicals, we seek to become able to generate earnings globally. We have accordingly deployed initiatives under a five-level talent strategy. We are at level 2 under our current medium-term management plan. Here, we focus on building a DX-driven career ownership management framework. We must foster a culture in which employees take the initiative to shape their careers and pursue their own growth. We are thus developing and refining human resources systems and an environment that supports such self-directed approaches.

### **Our Talent Vision**

In April 2022, we renamed ourselves in signaling a commitment to shift toward a business structure centered on specialty chemicals. It was amid that transformation that it became vital for employees to shape their own career paths rather than conform to predefined roles. These considerations prompted us to formulate a talent vision to support our growth strategy

In fiscal 2024, we are striving to ensure that this vision resonates with all employees.

### All employees should be:

- 1. Business professionals who create value and independently drive revenue
- 2. Eager to embrace new challenges with urgency and transformative mindsets
- 3. Lifelong learners dedicated to ongoing improvement
- 4. UBE team members who respect and celebrate diversity among their peers

![](_page_33_Figure_13.jpeg)

### **UBE's Talent Strategy**

In order to foster a more innovative corporate culture in which employees can take control of their own careers, we will identify gaps in the required skill-sets of our employees and offer the appropriate training and career paths as necessary steps in attracting diverse talents and those who will contribute towards our focus on specialization.

### **Basic Talent Strategy Approach to Drive** Growth in Specialty Chemicals

We consider materializing our ideal talent profile a key strategy to propel the growth of our specialty chemicals. We define the relationship between the Company and its employees as one of equality. Both parties have clear roles and responsibilities in implementing and achieving policies.

![](_page_33_Figure_18.jpeg)

### **Key Initiatives and Progress**

Organizations including people with diverse attributes, knowledge, experience, and values are

Talent KPIs					
1)	Results				
2021	2022	2023			
3.3%	4.1%	4.6%			
14.5%	15.0%	15.0%			
31.6%	37.3%	36.1%			
3	0	7			
_	_	99%			
71%	74%	81%			
2.33%	2.70%	2.68%			
22%	23%	23%			
	<ul> <li>2021</li> <li>3.3%</li> <li>14.5%</li> <li>31.6%</li> <li>3</li> <li></li> <li>71%</li> <li>2.33%</li> <li>22%</li> </ul>	Results           2021         2022           3.3%         4.1%           14.5%         15.0%           31.6%         37.3%           3         0           7         7           71%         74%           2.33%         2.70%           22%         23%			

\* We reached our 15% target ahead of schedule, and have set new goals.

![](_page_33_Figure_28.jpeg)

better positioned to anticipate change, identify new challenges, and foster an innovative culture. We set talent KPIs to build the foundations for a corporate culture harnessing diverse and dynamic teams. We review Groupwide progress quarterly and share our findings to reach performance benchmarks.

### **Productivity Enhancement Analysis**

We are creating work environments that allow flexible working arrangements so diverse employees can maximize their potential. Work environments must not only be comfortable but also lead to improved outcomes and productivity. We thus tie performance-linked bonuses to consolidated ordinary profit per employee. We believe that we can achieve sustainable growth by reducing working hours and increasing ordinary profit per capita.

Consolidated Ordinary Profit per Capita and Total Hours Worked per Capita

![](_page_34_Figure_3.jpeg)

### Recruitment

We systematically recruit new graduates and midcareer professionals and are also hiring foreign talent.

In keeping with our business strategy, we stepped up mid-career hiring in fiscal 2023 to secure highly specialized professionals who can go straight into action. Mid-career hires of career-track employees thus accounted for 36.1% of recruits on a domestic consolidated basis.

Under our current medium-term management plan, we target a rate of 50% or more for such professionals in fiscal 2024.

Hiring Breakdown (Parent company)	Number of People (Number of women in parentheses)				
(FY)	2020	2021	2022	20	23
New graduate hires (Career-track employees)	58 (14)	33 (9)	15 (8)	26	(10)
New graduate hires ( <i>Kikanshoku</i> * employees)	69 (10)	36 (7)	32 (0)	33	(9)
Mid-career hires (Career-track employees)	5 (1)	2 (2)	10 (4)	9	(2)
Mid-career hires ( <i>Kikanshoku</i> * employees)	13 (0)	11 (1)	22 (3)	14	(0)
Non-Japanese recruits	1 (0)	2 (1)	0 (0)	2	(1)

\* Technical employees and administrative employees

### Career Development

We are enhancing investments in people to cultivate talent that can achieve growth and drive innovation. We prioritized enhancing internal communication by

	Parent company	
(FY)	2022	2023
Investment in off-the-job training per person*1	¥120,000	¥150,000
Training hours per person*2	17 hours	19 hours

\*1 Calculation methodology: (Total education and training expenses + Labor costs for department overseeing training) / Number of employees on non-consolidated basis (as of fiscal year-end)

\*2 Calculation methodology: (Total hours of group training + Total hours of e-learning) / Number of employees on non-consolidated basis (as of fiscal year-end)

providing some in-person training to augment largely online sessions to boost efficiency and optimize effectiveness. We draw on external e-learning services for job level-specific training to foster a culture in which employees keep growing by taking ownership of career development.

### Diversity, Equity, and Inclusion (DE&I)

We recognize that we have to integrate diverse technologies, expertise, and perspectives to foster innovation so we can overhaul our corporate culture and drive business transformation. We are accordingly fostering gender equality, stepping up recruiting of talented individuals who can hit the ground running, and improving job satisfaction by reviewing our work structure for rehired retirees. We are also broadening career opportunities for individuals with disabilities.

We conduct surveys and enhance opportunities for dialogues to better understand the needs of individuals while expanding our support programs. This is because we prioritize equity and want our people to flourish.

In fiscal 2023, we pushed forward with our rehired retirees program and a Groupwide rollout of DE&I initiatives.

We fostered the engagement among rehired retirees by identifying key issues from a survey we conducted in fiscal 2022, implementing reforms in fiscal 2023. The reforms emphasized transparency, clarifying roles for these employees. We introduced a goal-setting interview process, based on shared understanding, and deployed a performance-based evaluation system. In particular, we clarified six specific roles for rehired retirees, including specialists who demonstrate advanced expertise and individuals responsible for handling medium- to long-term strategic projects for which younger workers need support. On top of that, we established a program to foster reskilling and self-development, enabling rehired retirees to further pursue their growth and achievements.

Groupwide DE&I deployments generated feedback from a survey conducted at the unconscious bias training in fiscal 2022 that revealed a strong demand for the entire UBE Group to more proactively pursue DE&I. We responded by exchanging views between Group companies and UBE executives in fiscal 2023, after which each of those companies formulated action plans in a joint workshop. In fiscal 2024, we will analyze outcomes from these plans to identify key issues and keep progressing toward our DE&I goal of fostering innovation by integrating diverse technologies, knowledge, and perspectives.

### Advancing Gender Equality and Developing **Our Talent Pipeline**

We consider gender equality a top priority. To accelerate our efforts in that regard, we set clear targets for increasing the ratio of women in management positions and the overall number of female employees. At the same time, we are expanding various programs that enable workers to balance their careers with childbirth, childcare, caregiving, and other life events, regardless of gender or other attributes. We also encourage men to take childcare leave. The Groupwide leave rate among eligible males has reached 99%.

We are endeavoring to boost women's involvement in decision-making by increasing the number

### Number and ratio of female executives and employees

Role

![](_page_34_Figure_27.jpeg)

in which calculations were made, the leave rate may exceed 100%.

of female managers. We also encourage women's involvement in recruitment and promotion interviews to reflect diverse perspectives. We have accordingly focused on developing talent pipelines across generations and fostering career awareness through interviews and meetings with the president and the human resources director.

Women currently account for 18.8% of our management candidates and 29.4% of other career-track employees. We intend to accelerate increases in those rates.

(FY)	2020	2021	2022	2023
	0	0	1	> 1
nagement	1	1	1	> 3
anagement	3	6	12	12
agement	20	16	10	12
ement	24	23	23	27
	2.8%	4.2%	4.1%	4.8%
t	31	31	37	36
	13.2%	16.8%	18.4%	18.8%
track	56	33	33	37
	22.8%	22.4%	25.4%	29.4%
e hires	14	9	8	10
	24.1%	27.3%	53.3%	38.5%
ees	280	189	229	239
	8.4%	9.2%	10.3%	10.7%

in	2.6%	3.3%	4.1%	4.6%
in the	12.9%	14.5%	15.0%	15.0%

\* Percentage of male employees taking childcare leave was calculated based on number of male employees whose children were born during the relevant year and were eligible for childcare leave (a) divided by the number of men who are taking new childcare leave during that year (b). expressed as a ratio (b/a). Since (b) includes male employees whose children were born in a previous year but did not take leave until the year

For mid-level management, we are exchanging views with our female outside director, the president, and other executives to identify gender equality challenges and opportunities.

The currently low number of senior female managers makes it hard for women to envision clear role models. We aim to strengthen the female talent pipeline by fostering work engagement through our work-life balance programs and by sharing information about ways to enhance job satisfaction.

On top of that, we are working to increase the number of women in science, technology, engineering, and mathematics fields, which is a broader societal challenge. To that end, we are collaborating with educational institutions and local businesses to cultivate talented women in those fields, as part of which we joined a consortium in Yamaguchi Prefecture to accelerate diversity progress.

### Wage gaps between men and women

	Wage gaps between men and women (Ratio of female to male wages)		
(FY)	2022	2023	
All workers	78.8%	78.2%	
Regular workers	79.4%	79.2%	
Contract workers	55.8%	57.9%	

• Disparities come from underrepresenting women in management-level regular and contract worker positions, so we are striving to hire and advance them.

 Many women in regular worker positions do not do shift work, leading to wage gaps from not getting shift and late-night allowances.

### **Employing People with Disabilities**

We have long been committed to expand job opportunities for people with disabilities, having established a specialpurpose subsidiary in 1991 and thereafter launching a network to support the employment of these individuals. Specialized staff for these people work closely with local support organizations, providing ongoing assistance to employees and

![](_page_35_Picture_11.jpeg)

An employee with disabilities working in the shipping department of a Group company

workplaces from the recruitment stage. Specifically, we match individuals to the right tasks and foster progress through career development interviews and performance evaluations. On top of that, we are expanding employment opportunities by tapping our special subsidiary and exploring agricultural roles. In fiscal 2023, we undertook e-learning initiatives to enhance understanding of employment expansion efforts. We will continue to practice social inclusion so everyone can find job

satisfaction and contribute to our progress as valuable team members.

Percentage of Employees with Disabilities\* (Parent company and a special-purpose subsidiary)

![](_page_35_Figure_16.jpeg)

\*Averages during terms

### **Engaging with Employees**

We deepen mutual understanding of departmental challenges and our corporate direction by having the president and employees exchange views.

In fiscal 2023, we extended such discussions to team leaders near the front lines through 13 sessions involving 73 participants.

### Engagement Issues and Responses from Employee Satisfaction Survey

We use a simplified occupational stress survey form to constantly gauge work engagement. From fiscal 2022, we also introduced tools such as WFun<sup>\*1</sup> and K6<sup>\*2</sup> to measure presenteeism<sup>\*3</sup> to make it easy for worksite managers to identify specific groups and their challenges and allow them to easily understand the current situation. We resolve issues by conducting interactive positive mental health workshops in collaboration with external employee assistance program<sup>\*4</sup> services. Also, we share challenges including findings from the labor union's satisfaction assessments in labor-management meetings and other forums. We seek to foster an innovative organizational culture that ensures that all employees feel respected and experience growth, belonging, and contribution.

- \*1 WFun is a guestionnaire that measures functional work impairments stemming from health problems
- \*2 The K6 questionnaire assesses mental health.
- \*3 Presenteeism refers to employees showing up for work but not being fully productive owing to health issues and other factors.
- \*4 External employee assistance programs help address employee mental health and organizational development issues.
- Work Engagement Score

![](_page_35_Figure_28.jpeg)

### **Diverse and Efficient Work Practices**

We maintain a range of work and leave system fostering diverse and flexible working styles. We originally aimed to lower total average working hours to 1,900 annually by fiscal 2025 but reached that goal ahead of schedule in fiscal 2023. We are continuing to share monthly working hour findings with all employees to encourage further reductions, and will step up efforts in this regard in coming years.

In April 2023, we rolled out a program that allows employees to take leave for personal injury or illness, nursing care, childcare, volunteer work, infertility treatment, personal and family anniversaries, and life events. Workers can use the program as a safety net when life's emergencies arise, making it easier for them to take annual paid leave.

In terms of efficiency, we continue to encourage telework and flexible work so employees can perform at their best. Some communication challenges have emerged, however, with online communication becoming more prevalent. We are addressing these issues by fostering work environments encouraging in-office work, encouraging participants to use cameras in online meetings, and ensuring psychological safety while improving productivity.

![](_page_35_Figure_33.jpeg)

1.900

 Overtime hours per employee (Hours) 2.000 1 990 1,973 1 960 1 946

![](_page_35_Figure_36.jpeg)

Note: Figures from fiscal 2023 onward include partner employees.

![](_page_35_Figure_38.jpeg)

Annual paid leave taken Percentage of annual paid leave taken (Days) 88 17.4 16.9 15.7 18.0 15.4 14.0 0.0 2019 2020 2021 2022

### Increasing Job Satisfaction

Our efforts thus far have resulted in positive work environments. We will undertake initiatives that

![](_page_35_Picture_49.jpeg)

1.918

2023 (FY)

![](_page_35_Figure_51.jpeg)

2023 (FY) 0

improve job satisfaction and work engagement.

We maintain a setup in which employees prepare annual career development sheets to explore career plans through interviews with supervisors.

We offer employees various opportunities to pursue new career paths by enabling them to take on roles that interest them. We have accordingly bolstered our job rotation program, provided in-house side job trials, and provided internal transfer opportunities.

### **Health Management Initiatives**

We endeavor to not only manage diseases but also maintain and promote health. We seek to provide workplaces offering physical and mental well-being, enhancing job engagement.

The Strategic Management Meeting discusses health management. In a unified effort with our labor union, we issued a joint declaration on health management as a top message.

We undertake occupational health initiatives, regularly supplying health information to supervisors. We additionally use apps to promote well-being and designate key individuals in each team to lead such enjoyable activities as walking rallies, helping employees to establish good exercise habits.

Our occupational physicians, public health nurses, and hygiene managers collaborate to analyze data and identify issues, providing recommendations for Companywide and site-specific policies. We implement measures to encourage healthy alcohol consumption and address women's health issues. We additionally appoint coordinators to balance work and medical treatment.

In recent years, we have promoted health management across the UBE Group. In fiscal 2023, all 14 companies applying for health management surveys received certification as excellent corporations. Fukushima Ltd., and Ube Logistics Service, Ltd., earned prestigious Bright 500 enterprise designations. By sharing best practices among Group companies, we continue to build workplaces where all of our employees feel safe, secure, and fulfilled.

It is also worth noting that we are working Groupwide to develop systems to ensure safe and secure working conditions even in environments where there are chemical substances and other hazards. Building on our chemical substances handling record management system, we are collaborating with the University of Occupational and Environmental Health, Japan, in a research project that the Ministry of Health, Labour and Welfare funded to improve and expand the system's functions. We developed an app to assist frontlines inputting. Also, we conduct regular training sessions for health and safety managers, led by external instructors, to enhance self-management practices at all workplaces.

### Human Rights

![](_page_36_Picture_2.jpeg)

### **Respect for Human Rights**

The UBE Group has made respecting human rights central to its corporate activities. We formulated the UBE Group Human Rights Guidelines in line with the United Nations Guiding Principles on Business and Human Rights. We will fulfill our corporate social responsibilities.

Details about the UBE Group Human Rights Guidelines are on the UBE Group's website:

https://www.ube.com/ube/en/sustainability

The UBE Group Action Guidelines state our respect for individuals, fostering mutual understanding, and eliminating discrimination based on gender, nationality, race, disabilities, age, social status, religion, beliefs, or sexual orientation. The guidelines oppose inhumane practices, including forced and child labor. They reject ties with individuals or organizations engaging in such activities.

We signed the United Nations Global Compact. We participate in the Human Rights Due Diligence Working Group and the Human Rights Education Working Group of Global Compact Network Japan. We are a permanent member of a corporate human rights liaison council in the Ube-Onoda area, through which we engage in enlightenment activities with neighboring companies.

### Human Rights Training

We created a Groupwide framework to educate employees about human rights based on the UBE Group Human Rights Guidelines. We ensure that all employees understand and embody our stance on human rights in all aspects of business by providing ongoing training. In fiscal 2023, all UBE Group operations in Japan again conducted an e-learning initiative marking Human Rights Week to deepen

understanding of business and human rights and human rights due diligence and our initiatives.

Initiative	Times held	Participants
e-learning	1	7,042 (UBE Group in Japan, including directors)
New employee training	g 1	71 (Parent company)
Job-specific training	1	428 (Parent company)

### Human Rights Due Diligence Progress

We endeavor to identify, prevent, and address any human rights infringements in our activities.

Our procedures are as follows. In view of a rapidly changing human rights situation in recent years and growing social expectations of corporate human rights measures since we formulated our procedures, we are looking to progressively upgrade them and internal structures. 2025-2030

![](_page_36_Figure_16.jpeg)

external website • Educate about human rights through e-learning and

job-specific training

### Human Rights Due Diligence Progress

Initiatives	Specific Initiatives	Results and Future Initiatives
Third-party desktop survey of human rights risks among Group companies by an external agency	Surveyed human rights risks of 18 domestic and 21 overseas group companies based on information from leading nongov- ernmental organizations, media outlets, and social networking services around the world	Survey identified no noteworthy risks
Assess potential human rights risks by surveying e-learning course participants	Listed and tabulated prospective risks and adverse impacts based on Japanese government table of 25 key human rights and human rights risks related to corporate activities	Enhanced counseling channels and bolstered education in view of the high number of respondents identifying harassment as a risk.
Share initiative progress and chal- lenges with key overseas sites	Used United Nations Guiding Principles Reporting Framework Self-Assessment Check Sheet to track site progress and share specific initiatives	Look into rolling out initiatives across organization while factoring in national legal and cultural backdrops
Engage with stakeholders	Relevant departments assessed for dialogue with stakehold- ers	In view of significantly changing human rights landscape in recent years and the expanding of scope of requisite measures, conducted a progressive review of human rights due diligence process and internal systems
Undertake follow-up surveys on effectiveness of measures	Confirmed situation with human rights-related reports through internal reporting channel	Identified seven cases and made improvements through internal guidance
Explicitly state respect for human rights in procurement guidelines and conduct supplier surveys	Please see pages 71–72 for more information on supply chain management.	

Initiatives to Help Create Value and Grow Sustainably

### Supply Chain Management

![](_page_36_Picture_23.jpeg)

Thorough Procurement in Line with Basic **Purchasing Guidelines** 

The UBE Group endeavors to build fair and honest business relationships. We purchase in line with the Basic Purchasing Guidelines-Fair and Equitable Transactions, Objective Assessment in Selection of Business Partners, Legal Compliance and Confidentiality, Green Procurement, and Sustainable Procurement, as disclosed in the procurement information on the UBE Group's website.

Detailed information on these policies is available on the UBE Group's website:

https://www.ube.com/ube/en/corporate/profile/koubai/

### **Declaration on Partnership Building**

On April 1, 2022, the UBE Group joined the Declaration on Partnership Building\*1, through which it

![](_page_36_Picture_30.jpeg)

committed itself to focusing on the following endeavors to build new partnerships with supply chain partners and business operators that create value. Another aim is to promote UBE's founding principle of Coexistence and Mutual Prosperity.

- Pursue coexistence and mutual prosperity throughout the supply chain and newly collaborate with entities of all sizes and affiliations
- Ensure that parent enterprises and subcontractors comply with desirable business practices (promotion standards based on the Act on the Promotion of Subcontracting Small and Medium-sized Enterprises)

### Chemical Business Supply Chain

![](_page_36_Figure_35.jpeg)

### Glossary

- sentative of the company.
- \*2 White Logistics is a movement that Japan's Ministry of Land, Infrastructure, Transport and Tourism, Ministry of Economy, Trade and Industry, and Ministry of Agriculture, Forestry the company

![](_page_36_Picture_45.jpeg)

The UBE Group will complement its supply chain building declaration and draw on its endorsement of White Logistics\*2 activities to collaborate more with logistics companies and enhance its supply chain. It will also add value to its entire supply chain by abolishing promissory notes to optimize payments to suppliers.

Please visit the UBE Group's website for more information on the Declaration on Partnership Building. /2022/post-106.html (in Japanese only)

### Sustainable Procurement

The UBE Group has committed to sustainable procurement from business partners and elsewhere across the supply chain to enhance social credibility.

We prioritize suppliers that fulfill our six assessment criteria. These are establishing internal structures, ensuring stable supply and emphasizing quality, engaging in fair transactions, being environmentally friendly, respecting human rights, safety, and health, and practicing information management and disclosure.

For more information on sustainable procurement, see the UBE Group Sustainable Procurement Guidelines on the UBE Group's website. https://www.ube.com/ube/en/asse mages-en/page/corporate profile/koubai/csr\_guideline.pdf

### Supply Chain Risk Management

UBE manages risks based on Companywide rules, defined those related to supply chain as management risks and deal with special care. We emphasize raw materials procurement risks associated

\*1 Declaration on Partnership Building: The Council on Promoting Partnership Building for Cultivating the Future established this framework for building new partnerships. This entity's members include the Cabinet Office and the Small and Medium Enterprise Agency. A company as the ordering party, declares to build a new partnership, by the name of the repre-

and Fisheries launched to improve logistics working environments, with a company as the owner of goods voluntarily committing to action plans, by the name of the representative of

with emerging geopolitical threats and natural disasters, as well as earnings impacts from sudden raw materials market fluctuations. We integrate these risks in routine procurement.

### **Business Partner Survey Regarding** Sustainability

We have conducted business partner sustainability surveys four times since 2012 to assess progress and request improvements where necessary.

We interview partners whose results are below a satisfactory level to help them improve. We will conduct the fifth survey in fiscal 2024, disclosing our findings in the following year. We will review questions in view of stakeholder requests.

### Findings from Fiscal 2021 Survey

In fiscal 2021, we surveyed 271 key suppliers accounting for 90% of the purchase value of materials, construction work, raw materials, fuel oil, and packaging materials. The average score for 6 items (a total of 34 questions) was 3.8 points out of 5, indicating reasonable levels of initiatives and measures. The average score for respecting human rights, safety, and health was high, at 4.3. The score for being environmentally friendly was relatively low, at 3.3. We shared reports on our findings with the surveyed suppliers, interviewing the bottom 10 to encourage improvements. Such an approach helped to lift the average score for the fiscal 2019 survey bottom 10 suppliers from 2.15 points to 3.43.

We increased the number of human rights-related subcategories to seven, from three. These are prohibition of harassment and other inhumane acts, prohibition of child labor, prohibition of forced labor, prohibition of overwork, payments of fair wages, prohibition of discrimination, and respect for such basic rights as freedom of association and collective bargaining. Scores out of 5 averaged at least 4 points, illustrating solid efforts and measures.

Please visit the UBE Group's website for more information on the results of the fourth survey of business partners on sustainability in fiscal 2021

https://www.ube.com/ube/en/assets/images-en/page/corporate/ profile/koubai/customer 01.pdf

![](_page_37_Figure_11.jpeg)

Identify and analyze findings

Busin findin	ess partner survey gs	Large companies	Small and medium-sized enterprises	
		Ca	pital	
	Survey year	Capitalizations exceeding ¥300 million	Capitalizations below ¥300 million	Total
2016	Companies responding	54	154	208
	Score	4.5	3.3	3.6
2019	Companies responding	92	184	276
	Score	4.5	3.5	3.8
2021	Companies responding	88	183	271
	Score	4.5	3.5	3.8

![](_page_37_Figure_14.jpeg)

### Policy on Conflict Minerals

We fulfill our corporate social responsibilities, including safeguarding human rights and the environment, by addressing the issue of conflict minerals. These minerals are illegally exploited and mined under the control of armed groups in the Democratic Republic of the Congo and surrounding regions. Negative outcomes include human rights abuses, environmental destruction, and money laundering. We consider the responsible procurement of raw materials a key corporate duty. If we identify conflict minerals in our supply chain, we immediately halt their procurement. As well as screening prospective raw materials purchases, we conduct regular surveys to ensure that we do not procure conflict minerals.

### Corporate Governance

<ul> <li>Providing more detailed</li> </ul>	🛛 🖲 Ens
explanations and summary	per
materials on important issues	risk
before Board of Directors'	and
meetings has made discussions	cur
more efficient and effective	ma

Detailed information on UBE's corporate governance is available on the UBE Group's website: https://www.ube.com/ube/en/ir/ir library/governance report/

### Overview of Corporate Governance and Internal Controls

![](_page_37_Figure_22.jpeg)

### Basic Approach to Corporate Governance

Our basic mission is to deliver sustainable growth Groupwide and increase corporate value over the medium to long terms. We accordingly deemed it vital to take the following steps to ensure effective corporate governance and operate sustainably to fulfill our responsibilities to all stakeholders, including shareholders, customers, business partners, employees, and communities, and gain their trust.

- Reinforce the Board's business oversight by establishing a framework in which directors who are Audit and Supervisory Committee members with rights to audit and express their opinions can also vote in Board of Directors' meetings
- Expedite implementation by delegating important business decisions to the President and Representative Director

### Board of Directors

In principle, a director who is not concurrently an

### scal 2023

ring proper oversight based on odic reports on internal controls and management, including compliance nformation security and on the nt situation with and measures for the inery and cement-related businesses • Introduced thirdparty assessments of the effectiveness of the Board of

executive officer serves as Chairman of the Board of Directors. In accordance with laws, regulations and the Articles of Incorporation, the Board of Directors stipulates basic corporate policies and key management matters based on the Regulations of Board of Directors and makes decisions about these. It also oversees that directors and executive officers carry out their duties appropriately and efficiently. As a Company with Audit and Supervisory Committee, we are accelerating operational execution by delegating a part of decision-making on important operations to the President and Representative Director while consistently reinforcing supervision.

Key Agenda Items in Fiscal 2023 **Progress with Strategies and Measures** • Overseeing growth strategies, including in expanding specialty businesses and restructuring basic businesses, enhancing human capital for sustainable growth, and driving DX

### Directors' Attendance at Board and Committee Meetings

From April 1, 2023 to Marc	ch 31, 2024	Board of	Audit and Supervisory	Nominating	Remuneration
	Name	Directors	Committee	Committee	Committee
Directors	Yuzuru Yamamoto	13/13 (100%)		2/2 (100%)	3/3 (100%)
	Masato Izumihara	13/13 (100%)			
	Hideo Tamada	13/13 (100%)			
	Masayuki Fujii*1	3/3 (100%)			
	Hirotaka Ishikawa*2	10/10 (100%)			
Outside Directors	Takefumi Fukumizu	13/13 (100%)		2/2 (100%)	3/3 (100%)
	Tsugio Mitsuoka*2	10/10 (100%)		2/2 (100%)	1/1 (100%)
Directors, Members of the Audit and Supervisory Committee	Atsushi Yamamoto*1	3/3 (100%)	4/4 (100%)		
	Masayuki Fujii*2	10/10 (100%)	12/12 (100%)		
Outside Directors, Members of the Audit and Supervisory Committee	Takashi Shoda*1	3/3 (100%)	4/4 (100%)		2/2 (100%)
	Tamesaburo Yamamoto	13/13 (100%)	16/16 (100%)		
	Satoko Suzuki	13/13 (100%)	16/16 (100%)		
	Tatsuya Tanaka*2	10/10 (100%)	12/12 (100%)		

\*1 Retired as of June 29, 2023

\*2 Appointed as of June 29, 2023

### Priority Management Issues

 Overseeing sustainability management implementation, including in terms of addressing environmental issues, ensuring quality assurance and compliance (including with competition laws), and managing risks

### Governance

- Deliberations assessing the effectiveness of the Board of Directors and efforts to address issues
- Discussions about revisions to the Corporate Governance Report
- Evaluation of the business rationale for crossshareholdings, etc.

### Audit and Supervisory Committee

The Audit and Supervisory Committee monitors and verifies the establishment and operations of internal control systems and supervises directors and others executing business in line with laws and regulations and committee regulations.

Principal activities include engaging in regular discussions with the President and Representative Director, auditing executive directors, executive officers, and business divisions, including subsidiaries, and internal control departments. They also encompass gathering necessary information through audit reports from accounting auditors and the internal audit departments, attending such

Activity Report of the Chairman of the Audit and **Supervisory Committee** 

![](_page_38_Picture_16.jpeg)

Tamesaburo Yamamoto Chairman

The Audit and Supervisory Committee, whose members are also directors should not only audit the legality of directors' duties but offer its opinions to ensure that operational execution is appropriate. The committee accordingly presents its audit findings to the Board of Directors every six months and exchanges views with it. At the same time, it has been established as a practice that the management reports to the Board of Directors their responses to previous audit findings, helping

to strengthen the Board's monitoring function and improve governance. Each committee member naturally draws on insights from its activities when expressing opinions as directors at the Board of Directors.

Fiscal 2024 is the final year of the current medium-term management plan and is also a time for exploring and formulating a successor initiative. It is also a period for expanding investment in overseas businesses. Audits will accordingly prioritize efforts to expand the UBE Group's specialty businesses and restructure basic businesses as part of its strategy over the medium to long terms, prioritizing the associated risk management. We will also keep focusing on endeavors to enhance human capital, which is vital to supporting sustainable growth measures.

### Number of Directors

![](_page_38_Figure_22.jpeg)

important gatherings as the Strategic Management Meeting, inspecting important approval documents, and regularly exchanging information with the auditors of subsidiaries.

Outside directors in the Audit and Supervisory Committee attend Nominating Committee and Remuneration Committee meetings to supervise selections and dismissals of directors (excluding those on the Audit and Supervisory Committee) and their remuneration and provide opinions as necessary.

In principle, the Audit and Supervisory Committee meets monthly and otherwise as necessary. There were 16 meetings in fiscal 2023. The attendance rate was 100%.

Audit and Supervisory Committee Percentage of outside directors	Tamesaburo Yamamoto (Chairman)	Outside Independen
	Satoko Suzuki	Outside Independen
	Tatsuya Tanaka	Outside Independen
	Masayuki Fujii	Non-Execut Director,

### Nominating Committee

This entity deliberates on director and executive officer selections and dismissals and succession plans. It provides independent, objective, and effective advice to the Board of Directors. A majority of committee members are independent outside directors, with one of those individuals chairing this body, to ensure independence and objectivity. The committee regularly discusses succession planning for the president. The Board draws on those deliberations to oversee this planning.

![](_page_38_Picture_29.jpeg)

### **Remuneration Committee**

This body deliberates on the compensation of directors (excluding members of the Audit and Supervisory Committee) and executive officers, as well as

e Directoi t Director e Director t Director e Director t Director ive Inside Full-time

Outside Director

several compensation-related programs. It provides independent, objective, and effective advice to the Board of Directors. As with the Nominating Committee, the majority of committee members are independent outside directors, with one of those individuals chairing this body, for independence and objectivity.

Remuneration Committee	Tsugio Mitsuoka (Chairman)	Outside Director Independent Director
Percentage of outside directors	Takefumi Fukumizu	Outside Director Independent Director
66.6%	Yuzuru Yamamoto	Chairman of the Board, Non-Executive Inside Director

### Number of Remuneration Committee Meetings and Details of Activities in Fiscal 2023 Number of meetings: 3

Details of activities:

- Deliberated setting fiscal 2023 performance targets for directors and executive officers
- Deliberated director and executive officer performance evaluations for fiscal 2022 and determination of individual remuneration amounts for fiscal 2023
- Discussed restricted stock remuneration allocations for fiscal 2023

### **Outside Directors**

UBE has appointed outside directors to add independent, third-party viewpoints to the decision-making process and to the monitoring of management to ensure efficiency, transparency, and objectivity from June 2005. In addition, UBE employs a Nominating Committee and Remuneration Committee as advisory bodies to the Board of Directors. Each comprises three members-two outside directors (excluding members of the Audit and Supervisory Committee) and one non-executive inside director (Chairman of the Board)-and is chaired by an outside director.

Also, we convene meetings exclusively for independent outside directors, as well as gatherings that include a non-executive internal director (the Chairman of the Board) to provide in-house information and deepen discussions. These meetings aim to exchange information and share understanding.

### Effectiveness Assessment of the Board of Directors

UBE convenes an annual Evaluation Meeting for Effectiveness of the Board of Directors composed of all directors to hold deliberations on evaluating the effectiveness of the Board of Directors, based on directors' self-assessment of the Board of Directors (to be obtained through questionnaires, etc.). The Board of Directors conducts an evaluation of its effectiveness based on these deliberations.

In fiscal 2023, UBE introduced third-party evaluations of the effectiveness of the Board of Directors. A Board of Directors' meeting in April 2024 consequently determined that its composition and operations in fiscal 2023 were appropriate, featuring active discussions and suitable deliberations and supervision. This confirmed that the effectiveness of Board of Directors which focuses on the supervisory function of management, has been evaluated as being ensured.

The following summarizes issues and key initiatives in fiscal 2023.

### Challenges for fiscal 2023

- 1. Strengthening monitoring of the status of execution of key management issues toward the realization medium- to long-term management plans and promoting speedy initiatives.
- 2. Continuously improving the internal control and risk management systems for the entire group and strengthening supervision of the effectiveness of these measures as a chemical business company, as well as strengthening supervision of the operation of appropriate governance systems for the machinery and cement-related businesses as a holding company.

### Main initiatives for fiscal 2023

1. With regard to key matters for deliberation and reporting, the Company made discussions at Board of Directors more efficient and effective,

as well as conducted appropriate deliberations, by demanding more detailed explanations in advance from the executing side and thorough preparation of summary materials that clearly outline the matters in addition to the agenda documents.

2. The Company provided appropriate supervision by receiving reports on internal controls and risk management, including compliance and information security, as well as the current status and policies of the machinery and cement-related businesses, which are overseen through the Holdings Meeting.

The evaluation of the effectiveness of the Board of Directors in fiscal 2023 concluded that this body fulfilled its supervisory role regarding challenge No. 2. For challenge No. 1, however, the assessment was that the Board of Directors needed to increase diversity, strengthen monitoring, and accelerate implementation. Key challenges for fiscal 2024 will include continuing specific initiatives regarding challenge No. 1 and addressing prime challenges identified in a third-party questionnaire. These efforts will focus on bolstering discussions about important business strategies and clarifying human capital strategies to drive growth. Incorporating diverse knowledge and experience and making discussions more vibrant should enhance the effectiveness of the Board of Directors.

### **Director Skills Matrix**

Members of the Board of Directors have a wealth of experience and advanced expertise in corporate management and management strategy, finance and accounting, sales and marketing, manufacturing, technology, R&D, and IT/DX, compliance and risk management, sustainability (environment and society), human resource management, and internationality. We ensure diversity in gender as well as other areas, and choose directors who are members of the Audit and Supervisory Committee for their experience, capabilities, and knowledge of finance, accounting, and legal matters.

	Ctratacut	1 11 101 100 /	Sales /	Technology /	Risk	(Environment	Resource	
Directors	Strategy	Accounting	Marketing	R&D / IT/DX	Management	and Society)	Management	Internationality
Yuzuru Yamamoto	٠			٠	۲			
Masato Izumihara	•	٠	۲			۲		
Yuki Nishida			۲	٠				۲
Hirotaka Ishikawa						•	•	
Outside Directors								
Takefumi Fukumizu	٠			•			٠	
Tsugio Mitsuoka	٠			•		•		
Director, Member of the Audit and Supervisory Committee	i							
Masayuki Fujii		•	۲		٠			۲
Outside Directors, Members of the Audit and Supervisory Committee	e							
Tamesaburo Yamamoto					•	•	•	
Satoko Suzuki		•				•		
Tatsuya Tanaka	٠		۲	٠				٠

### Anticipated Areas and Roles

Corporate management / Management strategy	Oversee efforts corporate mana and manageme
Finance/Accounting	Draw on experie advice regarding
Sales/Marketing	Harness experie marketing polici
Manufacturing / Technology / R&D / IT/DX	Draw on experie advice regarding manufacturing,
Compliance/Risk management	Oversee and ac expertise in con
Sustainability (Environment and Society)	Oversee and ac environmental,
Human resource management	Employ experied development to
Internationality	Draw on experie global deployme

### Director and Executive Officer Remuneration

To ensure transparency and objectivity, the Remuneration Committee, which is chaired by an outside director, with a majority of its members also being outside directors, deliberates individual director compensation (excluding Audit and Supervisory Committee members). The Board of Directors decides the compensation upon the proposal and report of the Remuneration Committee.

### Director and Executive Officer Remuneration System and Method of Calculation

Fixed compensation/ performance-linked remuneration	Structure of remuneration	Name of remuneration	Method of calculation
Fixed compensation	Base compensation	Fixed remuneration for each position	Fixed remuneration for each position
Performance-linked remuneration	Annual incentives	Company performance-linked remuneration	Consolidated ordinary profit in the previous fiscal year × Coefficient for each position
		Remuneration based on evaluation of achievement of annual individual performance targets	Level of achievement of annual targets for each officer
	Medium- to long-term incentives	Remuneration based on evaluation of achievement of medium- to long-term individual performance targets	Level of achievement of 3–5 year medium- to long-term targets for each officer
		Restricted stock remuneration	Ordinary year: Base amount for each position / Average share price during the previous fiscal year + Number of shares carried over from the previous fiscal year
			Adjusted year: Base amount for each position / Average share price during the previous fiscal year × (100% + Grant ratio - 20–30%*) + Number of shares carried over from the previous fiscal year

Note: Directors who are Audit and Supervisory Committee members and outside directors receive base compensation only, at a fixed amount. \* Adjusted in a range from 80% to 130% depending on the level of achievement of the management indicators

Fixed remuneration	Performance-linked remuneration			
Base compensation	Annual incentives	Approx. 10%	Long-term incentives	
Approx. 50% Approx. 30%		ESG-related	Approx. 20%	
The ratios of annual incentives for the President and the Chairman are hi	initiatives			

Note compensation lower, compared to those for other directors and executive officers.

s to resolve UBE's business issues and improve corporate value by leveraging agement experience at companies and knowledge of organizational operations ent strategies

ience and expertise in finance and accounting to deliver sound judgments and ng capital policies, financial strategies, and financial reporting.

ience and expertise in sales and marketing to assess and advise on sales and cies, strategies, and business resource investments

ience and expertise in technological fields to determine the suitability and ng policies, strategies, and management resource investments in product , technology development, R&D, and IT/DX

dvise on compliance and risk management initiatives based on experience and mpliance and risk management

dvise on sustainability initiatives based on experience and knowledge in social, and other sustainability areas

ence and expertise in human resources, labor relations, and human resources evaluate and advise on Group human resources management initiatives

ience and expertise in global business to oversee and advise on the Group's nent and issue resolution efforts

![](_page_39_Figure_40.jpeg)

![](_page_39_Figure_41.jpeg)

Ratios of Base Compensation and Annual and Long-Term Incentives of Directors (Excluding Members of the Audit and Supervisory Committee and Outside Directors) and Executive Officer Remuneration

Total Amounts of Remuneration, etc., for Each Category of Officer, Total Amounts for Each Type of Remuneration, etc., and the Number of Eligible Officers		Breakdown				
		Fixed compensation	Performance-linked remuneration			
(Millions of yen)				Long-term incentives		
Officers	Total remuneration	Base compensation	Annual incentives		Of which, restricted stock remuneration	Number of eligible officers
Directors (Excluding directors who are Audit and Supervisory Committee members)	236	141	37	57	27	7
(Of which, outside directors)	(21)	(21)	(—)	(—)	()	(2)
Directors who are Audit and Supervisory Committee members	81	81	_	_	_	6
(Of which, outside directors)	(43)	(43)	(—)	(—)	()	(4)
Total	318	223	37	57	27	13
(Of which, outside directors)	(64)	(64)	()	(-)	(—)	(6)

### ESG Targets

Materiality

Our annual and medium- to long-term targets include ESG-related initiatives. We draw on ESG initiatives in tackling the pivotal challenges of growth in specialty chemicals and addressing global environmental issues. We set ESG targets for each director, evaluating performance and calculating

compensation to build incentives to reach. ESG goals differ among directors. The amount of remuneration calculated based on the level of achievement of ESG targets accounts for approximately 10% of total remuneration. The same system applies to executive officers.

# Fiscal 2024 ESG targets

1. Growth in specialty

2. Addressing global

human resources

transformation)

environmental issues

3. Hiring and development of

4. Strengthening the manage-

ment platform (corporate

governance and digital

chemicals

### Themes of ESG goals

# Global Environmental Issues\* nvironmental Preservation, Process Safety and saster Prevention

Diversity, Equity and Inclusion (Equal Workplace Opportunities for Women, etc.)

Human Rights and Anti-corruption

Labor Rights and Decent Work

tional Safety, Health and Welfare, Quality Assurance,

Engagement with Local Communities

Compliance

Cooperation with business Partners	- Community origagoment and coolar contribution activities
 Board of Directors, Corporate Governance	Board effectiveness evaluation and executive compensation
 Internal Control System	<ul> <li>Board composition (percentages of members who are women or ou</li> <li>Self-assessment of activities and relevance to the SDGs and the Res</li> </ul>
 Risk Management	Code Corporate governance and internal controls
 Digital Transformation, Operational Improvement	<ul><li>Strengthening auditing</li><li>Relationships with shareholders and other investors</li></ul>

Compliance and corruption prevention

Assessment point examples

\* Global environmental issues: Set guidelines in three priority areas in response to changes in the external environment

G

Governance

S

Social

1. Addressing climate change (carbon neutrality)

2. Contributing to a circular society (circular economy)

3. Contribute to nature conservation and restoration (nature positive)

UBE has been using an executive officer system to separate supervision and business execution since June 2001. The President and Representative Director delegates authority to executive officers, who perform their duties based on management

**Executive Officers** 

**Cross-Shareholdings** 

environmental issues, and formulate GHG emissions reduction goals

• Workstyle reform (labor productivity and work-life balance support)

United Nations Global Compact and Basic Policies for Sustainability

nity ongagement and social contribution activities

Supply chain management and sustainable procurement

Occupational health and safety (occupational safety and workplace environment

Chemical emissions and industrial waste reductions

Disaster prevention and industrial security

Initiatives to prevent occupational accidents

Respect for human and labor rights

Diversity, equity and inclusion

Improving the workplace culture

Communication improvements

Education and training efforts

Health management

improvements)

policies decided by the Board of Directors.

UBE maintains listed and unlisted stocks as necessary to strengthen business alliances, foster relationships, and support its operations. The Board of Directors annually reviews individual listed stocks within UBE's cross-shareholdings. This assessment considers the Company's cost of capital. The

Board of Directors comprehensively determines the appropriateness of maintaining such holdings. If they are no longer strategically valuable, UBE promptly divests them in line with market conditions and other relevant factors. In exercising voting rights tied to these holdings, UBE determines its approval

• Efforts to tackle environmental issues, particular priorities being to sell more environmentally friendly products and technologies, develop technologies that help resolve

• Environmental accounting (environmental conservation costs and economic benefits)

Itside directors) sponsible Care

and disapproval for proposals after a comprehensive judgment based on whether the proposal will produce a return for the Company through an increase in the shareholder value of the investee company.

As of March 31, 2024, UBE held 72 crossshareholdings valued at ¥9,003 million. These comprised ¥8,368 million across 16 listed stocks and ¥635 million in 56 unlisted holdings. These cross-shareholdings represented approximately 2.1% of the Company's consolidated net assets.

![](_page_40_Figure_35.jpeg)

![](_page_40_Figure_36.jpeg)

### General Meeting of Shareholders and Exercise of Voting Rights

UBE issues its Notice of Convocation three weeks before the General Meeting of Shareholders. It ensures that shareholders receive information earlier by also posting the notice on its website and that of the Tokyo Stock Exchange around four weeks before that gathering.

UBE enables shareholders to opt for postal and online voting so they can exercise their voting rights if they cannot attend the meeting. Since institutional and overseas investors hold a significant number of shares, UBE uses an electronic voting platform for them and provides an English translation of the Notice of Convocation on its website and that of the Tokyo Stock Exchange.

We are live streaming the gathering to make it accessible for shareholders unable to attend in person.

At the General Meeting of Shareholders held on June 29, 2023, a total of 21,796 shareholders exercised their voting rights (including 21,634 shareholders who exercised voting rights in writing and via the internet), representing 76.4% of total voting rights.

### **Engagement with Shareholders**

Two-Way Communication through IR Activities We aim to fairly disclose timely and appropriate information. We engage closely with investors and draw on their feedback to improve corporate value. We

accordingly provide extensive opportunities for investors to speak directly with the president and CEO and other members of the management team.

Detailed information is available in the Investor Relations section of the UBE Group's website:

https://www.ube.com/ube/en/ir/

### Key investor relations activities in fiscal 2023

	Main representatives	Times held
Management overview briefing	President and CEO	1 (After the announcement of financial results for the fiscal year)
Earnings briefings	CFO	4 (Quarterly)
Overseas road shows	President and CEO	3 (Individual visits to institutional investors in Europe, the United States, and Asia)
Domestic road shows	CFO	1 (Individual visits to institutional investors in Japan)
Plant tours	Plant department heads	1 (For sell-side analysts)
Business briefings	General managers of business unit (relevant executive officers)	1
Briefings for individual investors	CFO	1
One-on-one meetings with people in charge of exercising the proxy voting rights of institutional investors (shareholder relations meetings)	President and CEO	1 (Meetings with 10 companies)
Small meetings with the President and CEO	President and CEO	1 (For sell-side analysts)
Engagement meetings with outside directors	Outside directors	1 (For buy-side analysts)
Individual meetings with institutional investors and securities analysts Of which, accounted for by ESG meetings	CFO and Corporate Communications Dept.	Around 150 (Including about 40 with non-Japanese institutional investors) About 10

### Key topics and areas of interest

- Specialty business growth strategies
- Restructuring of basic businesses, including overseas sites
- Initiatives to reinforce human resources strategy and human capital
- Efforts to address global environmental issues, particularly climate change

### Feedback to management

Reporting feedback from meetings with analysts and investors at Board of Directors and other gatherings

• Distributing securities firm analyst reports by email and other channels

### Outcomes from engaging with shareholders and other investors

- "We would like more opportunities to meet outside directors."
- $\rightarrow$ We conducted engagement meetings with outside directors for the first time in three years.
- "Please improve disclosure about C1 chemicals, a key focus for UBE."
- →We held a C1 chemicals business briefing.
- "UBE's business is complex. Disclosure materials are hard to understand because they use so much technical terms."
- →In 2024, we created a glossary of business and product terms and published it on our website.
- "I would like more disclosure about the cement-related business, which is now a separate entity." →From fiscal 2024, Mitsubishi UBE Cement has held quarterly earnings briefings, up from semiannually to date.

### Internal Control Systems

We have chief compliance and chief risk officers, and undertake Groupwide internal controls and risk management through the Legal & General Affairs Department, Risk Management Department, Environment & Safety Department, Quality Assurance Department, and other internal control bodies, and through a range of operational committees and risk management committees overseeing compliance, information security, national security export controls, and crisis management.

Detailed information on the Basic Policy for Establishing Internal Control is available on the UBE Group's website: https://www.ube.com/ube/en/corporate/gover

### Compliance

UBE established the UBE Group Action Guidelines as a code of conduct guiding basic behavior within the UBE Group and among constituent members. The guidelines outline the standards and criteria for compliance in corporate activities, which directors and employees are expected to adhere to.

UBE established the UBE C-Line, a hotline that allows executive officers and employees to directly report compliance issues without going through normal channels. This encourages the rapid finding and swift correction of workplace harassment and labor problems, embezzlement and other misconduct, corruption such as bribery, collusion, and other compliance issues. Augmenting an independent external hotline, UBE also set up a hotline for direct reports to a director who is a member of the Audit and Supervisory Committee and a labor union channel. There were 25 internal reports in fiscal 2023. By providing compliancerelated information, e-learning, team coaching, and other programs, UBE continuously educates and enlightens its employees.

### Compliance Framework

![](_page_41_Figure_32.jpeg)

In fiscal 2023, we conducted legal training to educate about the Anti-Monopoly Act, Subcontract Act, Copyright Act, Foreign Exchange and Foreign Trade Act, and other legislation. We also conducted compliance training for Group company managers and meetings with people at overseas offices to foster compliance Groupwide.

### Preventing Corruption

Chapter 3 of the UBE Group Action Guidelines, titled Fairness and Integrity, states a commitment to maintaining healthy relationships with governments and regulators. The objective is to prevent the bribery of public officials in Japan or abroad as well as other forms of corruption. We accordingly formulated the UBE Group Policy on Bribery Prevention, and provide e-learning and collective training courses for executives and employees. We maintain a framework that if such matters of concern as suspected bribery of public officials, excessive entertainment with business partners, exchanges of money and goods, or collusion come to light through our internal hotline, compliance officers and departments collaborate to swiftly inquire into the facts and take the necessary measures.

In fiscal 2023, there were no incidences of corruption, which would be subject to disciplinary proceedings, resulting in no payment of fines and charges. Please visit the Compliance section of the UBE Group's website for the UBE Group Policy on Bribery Prevention. https://www.ube.com/ube/en/sustainability/

### Information Security (Cybersecurity)

Cyberattacks and other information security threats have surged in recent years as digitization has advanced and social conditions have changed. These considerations prompted us to create a suitable structure to safeguard our operations. This effort entailed appointing a chief information security officer (the executive officer overseeing the Information Systems Department). We additionally set up the Information Security Committee to advise that officer and plan and deliberate on key related matters.

On top of that, we formulated our Information Security Guidelines to ensure that we rigorously disclose, use, preserve, and manage information properly and implement and constantly review information security measures on an ongoing basis. Also, we conduct regular in-house training for all executives and employees to ensure that they understand the importance of information security. Through these and other initiatives, we strive to safeguard information and enhance our standing as a good corporate citizen.

Please visit the Information Protection and Management section of the UBE Group's website for details on our information security manage ment structure and information security guidelines. https://www.ube.com/ube/en/sustainability

### **Corporate Governance**

### Directors (As of June 26, 2024)

Chairman of the Board and Director

Yuzuru Yamamoto 1977 Joined the Company Executive Officer, UBE Machinery Corporation, Ltd. 2003 President and Representative Director of UBE Machinery Corporation, Ltd. Executive Officer 2007 Managing Executive Officer 2010 Senior Managing Executive Officer 2013 Representative Director and Senior Managing Executive Officer 2015 President and Representative Director, President and Executive Officer, and Group CEO 2019 Chairman of the Board and Representative Director Chairman of the Board and Director (current position) 2020 Outside Director, The Yamaguchi Bank, Ltd. 2021 Outside Director, Yamaguchi

Financial Group, Inc. (current

Masayuki Fujii

Audit and Supervisory Committee Member

Director

position)

Director Masato Izumihara 1983 Joined the Company General Manager, Corporate Planning Dept. and Investor Relations & Public Relations Dept. 2010 Executive Officer 2011 Director, and Executive Officer Director, and Managing Executive Officer 2015 Managing Executive Officer 2018 Director, and Senior Managing Executive Officer 2019 President and Representative Director, President and Executive Officer, CEO (current position) Representative Director

President and Representative

### Yuki Nishida

1987 Joined the Company 2015 General Manager of Battery Materials and Fine Chemicals Business Unit, Chemicals Company 2016 Executive Officer

Hirotaka Ishikawa

Director CFO

Managing Executive Officer 2022 Senior Managing Executive Officer 2024 Representative Director, Senior Managing Executive Officer (current position)

**Outside Director** 

2004

Industry

2006

2007

2008

2009

2013

2017

2021

2022

1980

Takefumi Fukumizu

International Trade and Industry (currently the Ministry of

Economy, Trade and Industry)

Bureau of Economy, Trade and

Director-General, for Regional Economic and Industrial Policy

Director-General, Small and

Medium Enterprise Agency

Executive Director, NEDO

President, Japan Testing Center for Construction

for Construction Materials (current position)

Outside Director of the

Company (current position)

Joined Ishikawajima-Harima Heavy Industries Co., Ltd.

Yuzuru Yamamoto

and Director

(currently IHI Corporation)

Vice President, Japan Alcohol

Advisor, Japan Testing Center

President, NEDO

Corporation

Materials

Director-General, Kansai

Joined the Ministry of

### Hirotaka Ishikawa

Director

Joined the Company 2022 General Manager of Accounting & Finance Dept. 2023 Director, Executive Officer (current position) Director, Audit and Supervisory Committee Member Masayuki Fujii

# 1985 Joined the Company General Manager, Corporate

2023

Planning Dept. 2015 Executive Officer 2019 Director, and Managing Executive Officer

### Outside Director Tsugio Mitsuoka

Director, Audit and Supervisory Committee Member (current position)

> Yuki Nishida Representative Director

Masato Izumihara Chairman of the Board President and Representative Director CEO

position)

Operations, IHI Corporation Managing Executive Officer, President of Aero Engine & Space Operations

Executive Officer, Vice President

of Aero Engine & Space

2014

Director. Managing Executive Officer, President of Aero Engine & Space Operations 2016 Representative Director and President, Chief Operating Officer 2017 Representative Director and President, Chief Executive Officer Representative Director and Chairman of the Board and President, Chief Executive Officer Representative Director and Chairman of the Board, Chief Executive Officer 2021 Representative Director, Japanese Aero Engines Corporation (current position) Representative Director and Chairman of the Board, IHI Corporation Chairman, The Society of Japanese Aerospace Companies Outside Director of the Company (current position) 2024 Director and Chairman of the Board, IHI Corporation (current

Outside Director, Audit and Supervisory Committee Member Tamesaburo

### Yamamoto

1998 Professor, Faculty of Law, Keio University 2006 Examiner, Certified Public Accountant Examination Examiner. New Bar Examination 2010 Director. Japan Association of the Law of Trust 2015 Director Japan Association of Private Law 2022 Outside Director, Audit and Supervisory Committee Member of the Company (current position) 2023 Professor Emeritus Keio University (current position)

Takefumi Fukumizu

Outside Director

Outside Director, Audit and Supervisory Committee Member

Satoko Suzuki

Registered certified public

Representative, opened Suzuki Satoko CPA Office

1996

2003

2005

2006

2019

2022

accountant

### Tatsuya Tanaka

Outside Director,

Audit and Supervisory

Committee Member

Joined Tohmatsu & Co Joined Fujitsu Limited (currently Deloitte Touche Tohmatsu LLC)

Director of the Board & Vice Presi Fujitsu (China) Holdings Co., Ltd. 2012

Corporate Executive Officer, Manufacturing Industry Business Fujitsu Limited 2013

General Manager, Asia Region

Representative Director

Chairman of the Board

(current position) General Manager, Manufacturing Industry Business Unit, Manufact Registered tax accountant Industry, Logistics, and Sales Gro

201/

2015

2012 Director, NPO Accounting & Tax Professionals Network

2015 Supervisory Director, Ichigo Hotel REIT Investment Corporation (current position)

2019 Outside Director, Bull-Dog Sauce Co., Ltd. 2020

Chairman of the Board, Fuiitsu Outside Director, Marketing Limited Audit and Supervisory Committee Member of Chairman of the Board Fujitsu Japan Limited the Company (current position)

2023 Outside Auditor Helios Techno Holding Co., Ltd. (current position)

Outside Director and Audit and Supervisory Committee Member, Sojitz Corporation (current position)

> Tsugio Mitsuoka Tamesaburo Yamamoto Outside Director

Outside Director Audit and Supervisory Committee Member

![](_page_42_Picture_38.jpeg)

	2021 Outside Director, Nippon Light Metal Holdings Company, Ltd. (current position)
dent,	2022 Senior Adviser, Fujitsu Japan Limited Adviser, Tsukishima Kikai Co., Ltd. (currently Tsukishima Holdings Co., Ltd.) (current position)
Unit,	2023 Outside Director, Audit and Supervisory Committee Member of the Company (current position) Outside Director, Asahi Mutual Life Insurance Company (current position)
uring up	A

Corporate Senior Vice President, and

Corporate Executive Officer, SEVP

and General Manager, Asia Region Corporate Executive Officer, SEVP

### **Executive Officers**

(As of June 26, 2024)

President & Executive Officer

Masato Izumihara

Senior Managing Executive Officers

Yuki Nishida Keiichi Nagata

Managing Executive Officers

Hisaaki Yokoo Masayoshi Ota Yoichi Funayama Futoshi Takase

Senior Executive Officer

Watchara Pattananijnirundorn

Executive Officers

Hirofumi Nonaka Hirotaka Ishikawa Kazunori Yukimoto Ryo Kawamura Shinya Takahashi Kenji Hoshino José Ignacio Iglesias Yoichi Yoshida

Satoko Suzuki Outside Director Audit and Supervisory Committee Member

Tatsuya Tanaka Outside Director Audit and Supervisory Committee Member

![](_page_43_Picture_1.jpeg)

The UBE Machinery Group operates in line with the purpose it established in fiscal 2023, which is to contribute to better tomorrows for society by caring for the environment and continuing to generate the value that customers demand.

### Long-Term Vision

### Enhance business value by reinforcing the revenue base while becoming more autonomous and competitive Goal: Contribute to customers with products and after-sales services offering brand value

- Keep developing products that match market needs
- Realize DX by providing ICT and AI-based after-sales services globally

### Principal Products and Businesses

- Molding machines
- (Die-casting machines, extrusion presses, and injection molding machines)
- Industrial machinery
- (Kilns, vertical mills, transportation systems, water screening equipment, crushers, and chemical equipment), bridges, and grab buckets
- After-sales services
- Steel products
- (Billets and castings)
- Control boards

### **Business Policies under the Medium-Term** Management Plan

We seek to enhance the profitability of product businesses by capitalizing on globally expanding market needs, such as the shift to xEVs and carbon neutrality. At the same time, we look to expand after-sales service businesses by developing new proposals and catering to the products of other companies.

The UBE Machinery Group will reinforce corporate governance and establish an independent business operation.

### Numerical Targets

### (Rillions of ve

	202	2022 2023		23	202	24 (FY)
	Original targets	Results	Original targets	Results	Original targets	Forecasts
Net sales	¥106.0	¥96.9	¥98.0	¥96.9	¥100.0	¥104.0
Operating profit	5.0	5.2	5.5	7.2	6.0	7.0

![](_page_43_Picture_22.jpeg)

### Fiscal 2024 Business Strategy

### Molding Machine Business

Giga casting has attracted attention as a die-casting technology that can cut automobile manufacturing costs by integrally molding vehicle body parts. We provide ultra-large die-casting machines for giga casting. whose improved quality rates and equipment utilization and other benefits meet customer requirements and are fueling a shift to xEVs in the automotive sector. In fiscal 2023, we received an order for a die-casting machine with a clamping force of 6,500 metric tonnes, making it one of the most powerful such setups in Japan. Starting with that offering, we will keep boosting our production capacity for ultra-large die-casting machines, for which demand should rise in coming years.

For injection molding machines, we are similarly responding to growing demand for larger, more multifunctional plastic parts amid the transition to xEVs by developing a range of new products. These include ultra-large machines as well as laborsaving and automated molding systems. At the same time, we are catering to prevailing needs by creating recycling molding and other environmentally friendly technologies that are gaining attention for daily necessities and industrial materials. As well as reinforcing our North American business, a strength for the UBE Machinery Group, we will expand globally by bolstering operations in the expanding Indian market.

### Industrial Machinery Business

We will expand our business by providing products and after-sales services that meet the needs of

### SWOT Analysis

### Strengths

- We have a robust record in serving the auto tive, electric power, cement, steelmaking, a other key sectors, and have earned solid customer reputations for our efforts.
- We can draw on numerous domestic and o seas operations to quickly cater to various customer needs in everything from developn through after-sales services.
- With one of the biggest processing facilities Japan and talented engineers, we deliver m facturing capabilities that customers trust.

### Opportunities

- There are accelerating efforts in carbon neu product recycling, and other areas across s to contribute to a better environment.
- One plant can manufacture ultra-large mold machines to cater to the transition to xEVs.
- Demand for after-sales services and support robust across diverse markets, including fo and other companies' products.

carbon-neutral and other environment-related markets. We will also provide various equipment for large capital investment projects that leverage such government grant programs as Japan's Long-Term Decarbonization Power Source Auction.

In land and marine equipment, we will develop new businesses while focusing on expanding aftersales service operations.

### After-Sales Services

We will increase earnings in the UBE Machinery Group's repair, consulting, and upgrade after-sales service categories. In repairs, we will endeavor to enhance customer satisfaction by reinforcing our structure for timely spare parts supplies and a structure that ensures nimble engineer responses. We will also seek to expand business through proposal-based services that tap ICT and by offering services for products from other companies.

### Steel Products Business

We will continue to transition our business structure

![](_page_43_Figure_45.jpeg)

UBE Corporation

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omo- and over- nent s in nanu-	<ul> <li>Weaknesses and Countermeasures</li> <li>While our broad product lineup is a plus, the small businesses of our offerings expose us to economic fluctuations.</li> <li>Countermeasures: We will focus on creating core businesses that are impervious to economic downturns by developing technologies and markets in environmental and other fields with growth potential and exploring alliances.</li> </ul>
utrality, society ding rt is r global	<ul> <li>Threats and Countermeasures</li> <li>While technological development is progressing in carbon neutrality, DX, and other respects, there are concerns about negative impacts on corporate value, such as from slow sales stemming from delays in delivering product value or addressing technological needs.</li> <li>Countermeasures: We will collect timely information from customers and other sources to develop technologies and improve systems.</li> <li>Intensifying competition in terms of pricing and delivery owing to rocketing raw materials and fuel costs and longer delivery times for electrical components, as well as delays in customer capital investment decisions, could affect our business.</li> <li>Countermeasures: We will secure business opportunities, such as by proposing lower product costs, shorter lead times, and government subsidy usage.</li> </ul>

from quantity to quality while taking advantage of our production capacity to manufacture special steel types and specially sized billets and large castings, which are our strengths. In addition, we will take on the challenge of entering new fields as one of our industry's few castings manufacturers.

### Sustainability-Related Initiatives

We will develop and supply equipment and after-sales service products that contribute to xEV uptakes and energy conservation. We will also develop processes and equipment that increase the recycled materials usage. We will supply equipment related to offshore wind, hydroelectric power, ammonia, and biomass. As well, we will recycle and neutralize medical and industrial waste and introduce CO<sub>2</sub>-free electricity. Such ongoing efforts to shrink our environmental footprint will contribute to communities and society at large.

## Mitsubishi UBE Cement Corporation (MUCC)

![](_page_44_Picture_1.jpeg)

We seek to constantly evolve as a global company in keeping with our corporate philosophy of "Continue to support the future of the planet by providing the highest guality with the best technology and services."

### Fiscal 2023 Performance

Mitsubishi UBE Cement became profitable in fiscal 2023 after posting a loss in fiscal 2022 owing to higher costs from soaring energy prices both in Japan and overseas and the impact of a production structure review. The cement business in Japan rebounded during the year by lifting its price per metric tonne by ¥5,000 in response to surging energy and other costs and by leveraging more lowcost thermal energy. Overseas earnings also saw a significant improvement from the previous fiscal year, due largely to early penetration of the price increases in the U.S. ready-mixed concrete business.

### Results

(Billions of yen)	(FY)	2022	2023	2024 (Forecast)
Net sales		¥576.3	¥585.3	¥605.0
Overseas business		140.1	178.1	195.0
Operating profit (loss)		(28.4)	45.7	43.0
Overseas business		8.0	30.7	28.0
Ordinary profit (loss)		(25.8)	47.7	42.0
Profit (loss) attributable to owners of parent		(47.3)	24.6	21.0
Cement demand in Japa (millions of metric tonne)	In	37.24	34.58	35.00
Coal price (\$/metric tonn	ie)	\$356	\$142	\$180

Note: The above coal prices are for reference only; actual purchase prices may differ.

### Medium-Term Management Strategy

Vision for 2030 Corporate group with leading technology

and high profitability by maximizing the synergistic effects of business integration

> Infinity with Will 2025 -MUCC Sustainable Plan 1st STEP-(Fiscal 2023 to 2025)

### Overview of First Year of the Medium-Term Management Strategy (Fiscal 2023)

During the fiscal year under review, we reached our mandatory goal of becoming profitable, reflecting such factors as price increases in Japan and abroad. Operating profit was ¥45.7 billion, surpassing our ¥39 billion target for fiscal 2025.

### **Progress with Priority Actions under** Medium-Term Management Strategy

- Top Priorities

1. Strengthening and Cost Reduction of **Domestic Cement Business** In the cement business in Japan, demand was down, while materials, logistics, labor, and other costs remained high. We were nonetheless able to significantly improve earnings in fiscal 2023 by passing on costs and taking such steps as extensively using low-cost thermal energy.

### 2. Business Growth in the U.S. and Exploration of New Business Sites

While cement demand in Southern California declined slightly, supply and demand continued to be tight. In addition, inflation drove costs higher. We tackled these challenges by reinforcing our supply structure for cement and ready-mixed concrete and by swiftly passing costs on, maintaining a robust performance in the United States.

Also, we launched a new overseas business planning project, and are seeking new operational locations.

### 3. Promotion of Global Warming Countermeasures

By 2030, we seek to cut carbon dioxide emissions by 40% from 2013 levels by realizing the unique and feasible decarbonization schemes as a cement company, becoming carbon-neutral by 2050.

Other Priority Actions In fiscal 2023, we steadily implemented initiatives to consolidate our position and sow seeds for new growth.

### 4. Strengthening and Expansion of Domestic Value Chain

- Mineral resources business strategy
- Implemented passing on costs in prices of limestone and magnesia products
- Organizational and business restructuring
- · Reorganized plants in Kyushu
- Established MUCC Construction Materials Corporation Integrated high-performance product business (MU
- MATEX Co., Ltd.)
- Integration of limestone sales business (MUCC Mineral Products Department)

### 5. Enhancement of R&D and Business Management Research and development strategy

· Focused on environmental measures and creating new businesses

### Human resources strategy

- Reorganized and placed people appropriately
- Digital transformation strategy
- Built a task force team for DX promotion
- Trained digital transformation personnel and increased literacy in this area
- New supply chain system under construction

### Issues to Addressed under Medium-Term Management Strategy

Although fiscal 2023 earnings exceeded projections, the domestic cement business climate has become increasingly challenging owing to various factors. These include domestic demand declining more than expected and a range of costs increasing owing to

logistics issues in 2024, etc. We will nonetheless establish a solid business platform in Japan by building an optimal production and logistics structure and setting prices to ensure sustainability. On top of that, we will accelerate our growth strategy by exploring new overseas locations and undertaking business schemes that drive decarbonization.

We thereby aim to achieve our fiscal 2030 goals of ¥75 billion in operating profit, a consolidated ROE of at least 8%, and an ROA of at least 6%.

![](_page_44_Figure_44.jpeg)

(¥28.4 billion)

\* Excluding a one-time gain of ¥5 billion from Environment and Energy Business

### **Carbon Neutrality Initiatives**

Under our medium-term management strategy, we made promotion of global warming countermeasures one of the top priorities. In fiscal 2023, we established the Carbon-Neutral Technology Office and a related committee to drive progress by enhancing our organizational structure. We are undertaking a range of initiatives to become carbon neutral by 2050 and reach an interim target of lowering carbon dioxide emissions by 40% from 2013 levels by 2030.

Promotion of Global Warming Countermeasures

Looking to realize the unique and feasible decarbonization schemes as a cement company

1. Reduce carbon dioxide emissions 2. Collect 3. Utilize

![](_page_44_Figure_52.jpeg)

concrete In collaboration with Shimizu Corporation, we developed an environmentally friendly concrete that replaces approximately 80% of cement with blastfurnace slag, a by-product of steel manufacturing. This reduces carbon dioxide emissions from production by about 80% compared to conventional concrete.

# process

# • Jointly developing environmentally friendly

# Initiating world's first ammonia co-combustion test with actual equipment in the cement manufacturing

We used existing facilities at Ube Cement Plant to initiate pilot combustion using ammonia as a heat energy source in a cement kiln (combustion furnace) and a calciner. Ammonia is gaining attention as a next-generation energy source because of its zero carbon dioxide emissions during combustion. For this testing, we will gradually increase the ammonia co-combustion rate, aiming for a 30% heat value, address any challenges related to energy conversion, and implement appropriate countermeasures.

### • Jointly assessing advanced carbon capture and storage<sup>\*1</sup> and carbon capture, utilization and storage\*2 projects

We embarked on joint studies with Mitsui & Co., Ltd., for carbon capture and storage between Malaysia and Japan for carbon dioxide emissions from cement manufacturing processes in a drive to achieve carbon neutrality. We additionally began a joint study of carbon capture, utilization and storage with Osaka Gas Co., Ltd.

\*1 Carbon dioxide capture and storage technology separates and collects carbon dioxide from exhaust gases and stores it underground. \*2 Carbon dioxide capture, utilization and storage technology separates and collects carbon dioxide from exhaust gases and utilizes it or stores it underground.

# 4. Store

Surplus Storage Offset Concrete absorption

Other industries. etc

### Initiatives

### 1. Low-carbon cement

• Joint development of environmentally friendly concrete (carbon dioxide emissions around 80% lower than from conventional concrete)

### Carbon-neutral energy conversion

- •Began constructing an ammonia co-combustion demonstration test facility
- (under a grant from Yamaguchi Prefecture) Waste utilization
- •Planned to establish a waste plastic collection site •Expanded waste plastic processing facilities

### 2. CO<sub>2</sub> capture technology

• Evaluating solid absorbent materials and other technologies

### 3. Methanation

•Successfully completed pilot test of carbon dioxide separation and recovery from kiln exhaust gas and methane synthesis

### Mineralization

- Currently researching and developing direct carbonation method employing waste concrete and other materials (under Green Innovation Fund Project of New Energy and Industrial Technology Development Organization)
- Participated in conference on industry-governmentacademia collaboration

### 4. Storage

•Undertook joint study with Mitsui & Co. and Osaka Gas

### Segment Results Overview

In fiscal 2023, consolidated net sales decreased due to the significant impact of the sluggish sales of nylon polymers and caprolactam in the Polymers & Chemicals segment, affected partly by the slowdown of the Chinese economy, despite the effect of the acquisition of a contract drug development and manufacturing organization (API Corporation) in December 2022.

Operating profit increased despite sluggish sales of fine chemicals and industrial chemicals in the Polymers & Chemicals segment, mainly due to stable sales of separation membranes in the Specialty Products segment and after-sales services in the Machinery segment, as well as an increase in royalty revenues in the Pharmaceutical Business.

Ordinary profit and profit attributable to owners of parent both increased due to the increase in operating profit, as well as the improvement in share of profit of entities accounted for using the equity method as a result of efforts to raise selling prices in the cement-related business (Mitsubishi UBE Cement Corporation, an equity-method affiliate) to reflect soaring coal and other energy prices.

The graphs on this page show consolidated net sales and operating profit.

![](_page_45_Figure_6.jpeg)

Note: The UBE Group determined the provisional accounting treatment related to the business combination of a contract drag development and manufacturing organization in fiscal 2023. The finalized accounting treatment is being applied in each reported figure for fiscal 2022

### **Specialty Products**

	Billion	Change	
Fiscal Year	2022	2023	FY20
Net sales	62.2	63.8	2.0
Operating profit	10.2	12.1	18.

- The Polyimide Business recorded a decrease in net sales due to sluggish demand for large displays and smartphones.
- The Separation Membrane Business recorded an increase in net sales thanks to the continued stable demand for CO<sub>2</sub> separation membranes for biomethane production.
- The Ceramics Business recorded an increase in net sales thanks to strong demand for bearings and substrates for electric vehicles.
- The Separators Business recorded a decrease in net sales due mainly to the impact of weak demand in the first half, although sales were strong in the second half in line with the recovery of automobile production.

The Specialty Products segment as a whole recorded increases in both net sales and operating profit thanks to strong performance in the Separation Membrane Business and the Ceramics Business.

### **Polymers & Chemicals**

	ana	earnings C
Billions of yen		Change
2022	2023	FY20
293.4	257.2	(12.3
2.6	2.4	(6.4
	Billions 2022 293.4 2.6	Billions of yen           2022         2023           293.4         257.2           2.6         2.4

### Performance Polymers & Chemicals Business

- The Composite Business recorded an increase in net sales due to the recovery trend in automobile production.
- The Nylon Polymer Business recorded a decrease in net sales despite stable demand in some overseas regions because demand for nylon film for food packaging was generally weak.
- The Caprolactam & Ammonium Sulfate Business recorded a decrease in net sales because sales volume declined due to a drop in demand and selling prices also fell due to a decline in market prices of raw materials such as benzene and ammonium.
- The Industrial Chemicals Business recorded a decrease in net sales due to weak shipments resulting from sluggish demand for ammonia in Japan and lower selling prices in line with declining international market prices.
- The Fine Chemicals Business recorded a decrease in net sales due to intensifying competition associated with a decline in product market prices and sales volume.

### Elastomer Business

Net sales of the Elastomer Business were at the same level as the previous fiscal year, despite weak

Integrated Report 2024

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### Revenues UD and earnings UP

e from 022 6% 2%

### Revenues **down** down

from )22 3)% l)%

demand in Japan for automotive tires and other uses, because overseas shipments remained steady.

The Polymers & Chemicals segment as a whole recorded decreases in both net sales and operating profit due to the significant impact of sluggish sales of the Fine Chemicals Business and the Industrial Chemicals Business, although there was no biennial inspection of the ammonia product factory.

Machinery	Revenu	and earnings <b>UP</b>	
	Billions	Change from	
Fiscal Year	2022	2023	FY2022
Net sales	96.9	96.9	(0.0)%
Operating profit	5.2	7.2	36.9%

- The Molding Machine Business recorded an increase in net sales, despite the impact of sluggish capital investment in the automobile industry in the first half, due to recovery in the second half and stable performance of after-sales services.
- The Industrial Machines Business recorded an increase in net sales due to an increase in sales of products and stable performance of after-sales services.
- The Steel Products Business recorded a decrease in net sales due to a decrease in sales volume caused by declining demand both in Japan and overseas.

As for the Machinery segment as a whole, net sales remained at the same level as the preceding fiscal year due to the significant impact of the decline in sales in the Steel Products Business despite the steady performance of the Molding Machine Business and the Industrial Machines Business. However, operating profit increased due to solid performance of after-sales services in both the Molding Machine and Industrial Machines Businesses, as well as lower raw materials and fuel prices in the Steel Products Business.

Others	Re	evenues <b>up</b>	and earnings <b>UP</b>
	Billions	of yen	Change from
Fiscal Year	2022	2023	FY2022
Net sales	73.1	80.5	10.1%
Operating profit	2.6	4.5	75.2%

- The Pharmaceutical Business recorded an increase in net sales due to strong sales of our own pharmaceuticals and contract pharmaceuticals, as well as the effect of the acquisition of a contract drug development and manufacturing organization in December 2022. Royalty revenues also increased.
- The Power Producer Business recorded a decrease in net sales due to a decline in the prices of electricity sold in line with the fall in coal prices.

The Others segment as a whole recorded increases both in net sales and operating profit due largely to the acquisition of a contract drug development and manufacturing organization and an increase in royalty income in the Pharmaceutical Business.

### **Five-Year Financial Summary**

			Fiscal Year		
Results of Operations (Millions of yen)	2019	2020	20211	2022	2023
Net sales	¥667,892	¥613,889	¥655,265	¥494,738	¥468,237
Breakdown of net sales by reportable segmen	ts				
Chemicals <sup>2</sup>	286,041	259,380	341,493	_	_
Specialty Products <sup>2</sup>	_	_	_	62,158	63,750
Polymers & Chemicals <sup>2</sup>	_	_	_	293,388	257,175
Construction Materials <sup>2</sup>	303,037	282,855	221,476	_	_
Machinery	90,799	78,727	96,987	96,921	96,886
Others <sup>2</sup>	4,576	3,117	3,411	73,110	80,491
Adjustment	(16,561)	(10,190)	(8,102)	(30,839)	(30,065)
Operating profit	34,033	25,902	44,038	16,210	22,456
Ordinary profit (loss)3	35,724	23,293	41,549	(8,745)	36,333
Profit (loss) before income taxes	30,364	22,433	36,794	(2,652)	35,068
Profit (loss) attributable to owners of parent	22,976	22,936	24,500	(7,034)	28,981
Financial Position (Millions of yen)					
Total assets	¥727,269	¥769,710	¥837,954	¥732,681	¥789,034
Total current assets	303,956	331,727	394,689	283,116	295,678
Total property, plant and equipment, net	330,042	331,223	332,757	209,038	222,158
Total investments and other assets	93,271	106,760	110,508	231,592	262,474
Total liabilities	372,822	389,075	443,919	351,050	359,679
Total current liabilities	199,336	200,440	249,174	172,232	198,221
Total long-term liabilities	173,486	188,635	194,745	178,818	161,458
Total net assets	354,447	380,635	394,035	381,631	429,355
General					
Net income (loss) per share (Yen)	¥ 227.33	¥ 226.79	¥ 249.31	¥ (72.54)	¥ 298.59
Cash dividends per share (Yen)	90.00	90.00	95.00	95.00	105.00
Shareholders' equity per share (Yen)	3,287.73	3,549.52	3,813.16	3,726.39	4,210.11
Return on sales (ROS) (%)	5.1	4.2	6.7	3.3	4.8
Return on assets (ROA) (%) <sup>4</sup>	5.2	3.7	5.4	(0.7)	5.1

• Results and Corporate Data

### **Five-Year Non-Financial Summary**

		Fiscal Year					
ent		2019	2020	2021	2022	2023	_
GHG emissions (Scope 1)1		3,710	3,280	4,060	3,400	3,140	kt-CO2e/y
GHG emissions (Scope 2)1		590	510	520	420	370	kt-CO2e/y
onsumption	UBE Group	22,140	20,920	10,644	7,841	7,486	Thousands of MWh
Industrial waste generated	UBE Group in Japan	561,591	476,127	522,644	285,780	277,386	t
Waste for external final disposal		6,463	6,347	5,895	5,159	4,887	t
Industrial waste recycling ratio		69	72	73	75	72	%
Water resource withdrawals <sup>2</sup>		212	202	212	370	414	Million m <sup>3</sup>
Water discharges <sup>2</sup>		163	152	159	345	385	Million m <sup>3</sup>
f employees	UBE Group	10,890	10,897	9,849	8,028	7,882	Number of people
Percentage of women in the workforce		13.3	13.5	14.6	16.7	16.1	%
	UBE Group in Japan	_	12.9	14.5	15.0	15.0	%
Percentage of women in management positions		4.4	3.6	4.3	6.9	5.3	%
		_	2.6	3.3	4.1	4.6	%
Percentage of mid-career hires (Career-track employees)		_	_	31.6	37.3	36.1	%
Non-Japanese national hires		_	_	3	0	7	Number of people
Percentage of male employees taking childcare leave		_	_	_	_	99	%
Percentage of annual paid leave taken		_	_	71	74	81	%
uate hires	Parent company	103	127	69	47	59	Number of people
f newly registered patents1		354	271	236	177	178	Number of cases
Number of patents held <sup>1</sup> Lost work time injury frequency rate <sup>1</sup>		4,192	4,026	3,225	2,899	2,789	Number of cases
		0.19	0.38	0.38	0.60	0.69	
nce							
f directors		9	9	9	10	10	Number of people
Of which, number of outside directors		4	4	4	5	5	Number of people
Percentage of outside directors		44.4	44.4	44.4	50.0	50.0	%
Of which, number of female directors		0	0	0	1	1	Number of people
Percentage of female directors		0.0	0.0	0.0	10.0	10.0	%
	ent ssions (Scope 1) <sup>1</sup> ssions (Scope 2) <sup>1</sup> insumption Industrial waste generated Waste for external final disposal Industrial waste recycling ratio ource withdrawals <sup>2</sup> charges <sup>2</sup> f employees ge of women in the workforce ge of mid-career hires ack employees) nese national hires ge of male employees taking leave ge of annual paid leave taken uate hires f newly registered patents <sup>1</sup> f patents held <sup>1</sup> time injury frequency rate <sup>1</sup> nce f directors number of outside directors ge of female directors number of female directors ge of female directors	ent ssions (Scope 1) <sup>1</sup> usions (Scope 2) <sup>1</sup> UBE Group Industrial waste generated Waste for external final disposal Industrial waste recycling ratio ource withdrawals <sup>2</sup> charges <sup>2</sup> UBE Group in Japan ge of women in the workforce uBE Group in Japan ge of women in management uBE Group in Japan ge of mid-career hires ack employees ack employees taking leave ge of annual paid leave taken uate hires ge of annual paid leave taken uate hires f patents held <sup>1</sup> time injury frequency rate <sup>1</sup> f directors number of outside directors ge of outside directors ge of female directors ge of female directors ge of female directors	ent2019ssions (Scope 1)1UBE Group 22,140insumptionUBE Group 10,80066,663Industrial waste generatedUBE Group 10,80069ource withdrawals2163ource withdrawals2UBE Group 11,3310,890f employeesUBE Group 11,3310,890ge of women in the workforceUBE Group 11,3310,890ge of women in management 10 eof male employees taking 10 and 10 a	end20192020ssions (Scope 1)1UBE Group3,7103,280usions (Scope 2)1UBE Group22,14020,920Industrial waste generatedAr6,1276,4636,347Waste for external final disposal Industrial waste recycling ratio purce withdrawals2UBE Group 10,8906972Charges2163152202charges2UBE Group 11,3313,5010,897ge of women in the workforce pe of mid-career hires ack employeesUBE Group 11,349an10,897ge of mid-career hires ack employeesUBE Group 11,349ange of mid-career hires ack employeesUBE Group 11,349ange of male employees taking er of male employees taking feavedParent Companyif patents held1UBE Group 11,349anif patents held1UBE Group 11,349anif patents held1UBE Group 11,349anif patents held1UBE Group 10,3127if patents held1UBE Group 10,3if patents held1UBE Group 10,30.12if patents held1UBE Group 10,30.12if patents held1UBE Group 10,30.12if patents held1UBE Group 10,30.12if patents held1UBE Group 10,30.13127-<	Fiscal Yea20192020202120192020202120103,2804,060sisions (Scope 2)*4859industrial waste generated22,14020,92010,644Waste for external final disposa industrial waste recycling ratio ource withdrawais*561,591476,127522,644Musterial waste recycling ratio ource withdrawais*6,4636,3475,895Industrial waste recycling ratio ource withdrawais*6,4636,3475,89516 employees1086 cmp in Japan10,89010,8979,84916 employees108 cmp in Japan113.514.616 ef orwenn in management ge of mid-career hires ack employees108 cmp in Japan113.514.610 ef ormale employees taking ge of manual paid leave taken in deam1031276016 patents held*108 cmp in Japan1031276017 patents held*108 cmp in Japan1031276016 patents held*103127606017 patents held*103127606016 patents held*108 cmp in deam1031276017 patents held*10110.710312716 patents held*10112860,326017 patents held*10112710312717 patents held*101128606016 patents held*10441,4241,	Induction (Scope 1)*IEC (INC (INC (INC (INC (INC (INC (INC (IN	Here the set of

has been applied. 2. As the cement-related business became an equity-method affiliate, on April 1, 2022, our reportable segments were changed to four new segments: Specialty Products, Polymers & Chemicals, Machinery, and Others. The Pharmaceutical business, which was previously included

6.9

69

101,319

10,890

in the Chemicals segment, has been integrated into the Others segment.

Notes: 1. We have adopted the "Accounting Standard for Revenue Recognition" (Accounting Standards Board of Japan Statement No. 29, March 31, 2020) since fiscal 2021. The respective figures from fiscal 2021 onward indicate the amounts after the aforementioned accounting standard

6.7

65

96,807

9,849

(1.9)

36

8,028

97,041

7.5

36

7,882

97,073

6.6

66

101,144

10,897

3. Based on Japanese GAAP

Number of consolidated subsidiaries

Return on equity (ROE) (%)5

Number of employees

Shares of common stock issued (Thousands)<sup>6</sup>

4. ROA = (Operating profit + Interest and dividend income + Share of profit of entities accounted for using equity method) / Average total assets

5. ROE = Profit attributable to owners of parent / Average shareholders' equity

6. Shares of common stock issued excluded treasury stock

Notes: 1. Figures exclude those for the cement-related business transferred to Mitsubishi UBE Cement.

2. Figures for fiscal 2022 and beyond include cooling seawater for private power generation.

### Investor Information

# **UBE** Corporation

OBE Corporation	(As of March 31, 2024
Establishment	1897
Consolidated Companies	52 (36 consolidated subsidiaries and 16 equity-method affiliates)
Fiscal Year	April 1 to March 31
Common Stock	Outstanding: 97,073,310 shares (excluding treasury stock of 9,126,797 shares)
Paid-in Capital	¥58.4 billion
Annual General Shareholders' Meeting	June
Stock Exchange Listing	Prime Market of Tokyo Stock Exchange (Code: 4208)
Transfer Agent and Share Registrar	Mitsubishi UFJ Trust and Banking Corporation, 1-4-5, Marunouchi, Chiyoda-ku, Tokyo 100-8212, Japan
Independent Auditors	Ernst & Young ShinNihon LLC

	Shareholder	Share Units Owned	Percentage of Voting Rights			
Major Shareholders	1 The Master Trust Bank of Japan, Ltd. (Trust Account)	16,286,700	16.78%	Shareholder		
	2 Custody Bank of Japan, Ltd. (Trust Account)	6,160,920	6.35%	Composition		
	3 SUMITOMO LIFE INSURANCE COMPANY	2,000,000	2.06%	Securities Companies 3.63%		
	4 DFA INTL SMALL CAP VALUE PORTFOLIO	1,792,455	1.85%			
	5 Nippon Life Insurance Company	1,600,009	1.65%	Individuals		
	6 THE YAMAGUCHI BANK, Ltd.	1,548,264	1.59%	and Others Financial		
	7 JPMorgan Securities Japan Co., Ltd.	1,454,014	1.50%	35.12%		
	8 JP MORGAN CHASE BANK 385781	1,321,545	1.36%	Foreign		
	9 SSBTC CLIENT OMNIBUS ACCOUNT	1,250,874	1.29%	Companies, etc. 22.96%		
	10 The Norinchukin Bank	1,237,409	1.27%	Other		
	Note: As UBE holds 9,126,797 shares of treasury stock, we are excluded from the major shareholders stated above. Percentages of voting rights are calculated by subtracting the number of shares of treasury stock.					

![](_page_47_Figure_5.jpeg)

![](_page_47_Figure_6.jpeg)

Morningstar, Inc., and/or one of its affiliated companies (individually and collectively, "Morningstar") has authorized UBE Corporation to use of the Morningstar® Japan ex-REIT Gender Diversity Tilt Logo ("Logo") to reflect the fact that, for the designated ranking year, UBE Corporation ranks within the top group of companies comprising the Morningstar® Japan ex-REIT Gender Diversity Tilt Index® ("Index") on the issue of gender diversity in the workplace. Morningstar is making the Logo available for use by UBE Corporation solely for informational purposes. UBE Corporation's use of the Logo should not be construed as an endorsement by Morningstar of UBE Corporation or as a ecommendation, offer or solicitation to purchase, sell or underwrite any security associated with UBE Corporation. The Index is designed to reflect gender diversity in the workplace in Japan, but Morningstar does not guarantee the accuracy, completeness or timeliness of the Index or any data included in it. Morningstar makes no express or implied warranties regarding the Index or the Logo, and expressly disclaims all warranties of merchantability or fitness for a particular purpose or use with respect to the Index, any data included in it or the Logo. Without limiting any of the foregoing, in no event shall Morningstar or any of its third-party content providers have any liability for any damages (whether direct or indirect), arising from any party's use or reliance on the Index or the Logo, even if Morningstar is notified of the possibility of such damages. The Morningstar name, Index name and the Logo are the trademarks or services marks of Morningstar, Inc. Past performance is no guarantee of future results.

Results and Corporate Data

### About this Integrated Report

### **Executive Officer Declaration**

Thank you for taking the time to read this report. This publication focused on presenting UBE's accelerating specialty business growth strategy, which includes the Company's C1 chemicals deployment in the North American market. It also sought to enhance content relating to sustainability initiatives, including human capital strategies underpinning the growth of the specialty businesses.

In producing this report, we presented top management with feedback from annual meetings with several institutional investors about this publication. We identified issues that needed addressing before we started planning this edition. At the production stage, we collaborated with relevant departments to gather the most up-to-date and appropriate information, editing it as intended.

over the medium through long terms.

	HIPOTAKA I. Director Executive Offi Corporate Co Accounting D
Reference Guidelines —	International Integrated Re Ministry of Economy, Trac and Company-Investor Di
Reporting Period	- This report covers fiscal 2 information before and aft
Scope of Coverage —	- UBE Corporation consolic
Fiscal Year-End of —— the Company	- March 31 The fiscal year ended Mar
Forward-Looking ——— Statements	This report contains forwar and results for the future. information available to th Certain risks and uncer from any projections press limited to, the economic of product development, exo

![](_page_47_Figure_16.jpeg)

I hereby declare that the editorial process and the published content are valid and genuine. I hope that this report will help you understand the UBE Group's ability to generate value

### Ishikawa

icer, CFO, with responsibility for Sustainability Dept., ommunications Dept., Corporate Planning Dept., Dept., and Finance Dept.

![](_page_47_Picture_24.jpeg)

eporting Framework of the IFRS Foundation de and Industry (METI) Guidance for Integrated Corporate Disclosure ialogue for Collaborative Value Creation

2023, ended March 31, 2024, and also includes activities and ter that term.

dated subsidiaries, and non-consolidated subsidiaries

rch 31, 2024, is fiscal 2023.

ard-looking statements regarding UBE's plans, outlook, strategies, All forward-looking statements are based on judgments derived from ne Company at the time of publication.

rtainties could cause the UBE Group's actual results to differ materially sented in this report. These risks and uncertainties include, but are not circumstances surrounding the Company's business, competition, change rates, and revision of related laws and regulations.

### The UBE Group publishes information for its stakeholders through a variety of media.

Integrated Report covers basic and important information for our stakeholders.

(Environment and Safety/Quality Assurance) for detailed information on environment and safety.

Please refer to the UBE Group's website for detailed information on specific areas.

### Investor Relations

Management policies, finances, results, and shareholder information and IR materials are available in the Investor Relations section of the UBE Group's website:

https://www.ube.com/ube/en/ir/

### Sustainability

Information regarding sustainability, environmental and safety initiatives, compliance, risk management, corporate governance, human rights and labor, and quality are available in the Sustainability section of the UBE Group's website:

https://www.ube.com/ube/en/sustainability/

# UBE Corporation

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https://www.ube.com/ube/en/

![](_page_48_Picture_3.jpeg)

![](_page_48_Picture_4.jpeg)