

UBE Vision 2030 Transformation — 1st Stage Management Overview Briefing

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UBE Corporation

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UBE / UBE Corporation

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Summary of Previous Medium-Term Management Plan and Earnings Forecast for FY2022

Summary of Previous Medium-Term Management Plan: Achievement of Numerical Targets



- Operating profit fell short of targets on a company-wide basis, but achieved in the chemicals segment.

(Billion yen)

		FY2021	Targets	Difference
Key Figures	Operating profit	44.0	55.0	(11.0)
	Chemicals	35.5	32.0	3.5
	Construction Materials	3.4	16.5	(13.1)
	Machinery	5.1	7.0	(1.9)
	Ordinary profit	41.5	58.0	(16.5)
Key Indicators	Return on sales (ROS)	6.7%	7%	(0.3)%
	Return on equity (ROE)	6.7%	10%	(3.3)%

Summary of Previous Medium-Term Management Plan: Measures Taken



1. Strengthening the platform for business growth

Investments and business restructuring were implemented to realize growth, particularly in the chemicals segment

(1) Capacity increases	Polyimide:	BPDA production line (production capacity increased by 60%) and film production line (production capacity increased by 20%) commenced construction
	Separators:	Separator production line in operation (total production capacity of 320 million m ²)
	Pharmaceuticals:	Fifth pharmaceutical plant in operation
	High-performance coatings:	Second PCD production line in operation (+4,000 tonnes; Thailand)
	Synthetic rubber:	Capacity increases (+22,000 tonnes) and new value-added grade production line (both in Malaysia)
(2) Alliances, mergers, acquisitions	Composites:	Acquired Premium Composite Technology North America Inc. (now UBE Engineered Composites, Inc.; USA)
	Machinery:	Chemical equipment business (acquired from Hitachi Plant Mechanics Co., Ltd.)
(3) Business restructuring, etc.	Cement-related businesses:	Integrated with Mitsubishi Materials Corporation and established Mitsubishi UBE Cement Corporation
	Electrolytes:	Integrated with Mitsubishi Chemical Corporation
	Synthetic rubber:	UBE Elastomer Co. Ltd established
	Phenolic resin:	Absorbed Meiwa Plastic Industries, Ltd.
	Injection molding machines:	Fully integrated with UBE MACHINERY CORPORATION, Ltd.

2. Strengthening corporate governance

Transitioned to a company with an Audit & Supervisory Committee, and improved quality management

3. Addressing and being part of the solution for resource, energy, and global environmental issues

Announced the UBE Group Policy for Achieving Carbon Neutrality by 2050, and raised the 2030 interim target

FY2022 Earnings Forecast



- Lower net sales and operating profits expected due to the split off of the cement-related business and higher raw material and fuel prices. Financial position should improve.

(Billion yen)

Item	FY2021	FY2022	Difference
Net sales	655.3	510.0	(145.3)
Operating profit	44.0	34.5	(9.5)
Ordinary profit	41.5	31.0	(10.5)
Profit attributable to owners of parent	24.5	21.0	(3.5)
Interest-bearing liabilities	241.8	180.0	(61.8)
Shareholders' equity	369.1	380.0	10.9
Return on equity (ROE)	6.7%	5.6%	(1.1)%
D/E ratio	0.66 times	0.47 times	(0.19) times

✓ FY2022 assumptions (business factors):

Exchange rate at ¥125.0/USD Naphtha at US\$850/tonne (CIF) Australian coal at US\$283.0/tonne (CIF)

Reference

Equity method investment loss in the Mitsubishi UBE Cement Group	—	(1.0)	—
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FY2022 Earnings Forecast: Net Sales and Operating Profit by Segment



- Sales in the Specialty Products segment expected to remain strong with profits forecast to increase, while profits in the Polymers and Chemicals segment projected to decline due to impact of higher raw material and fuel prices, etc.

(Billion yen)

Segment*1	Net sales			Operating profit		
	FY2021	FY2022	Difference	FY2021	FY2022	Difference
Specialty Products	60.8	69.0	8.2	11.6	13.0	1.4
Polymers & Chemicals	260.0	302.0	42.0	23.5	18.5	(5.0)
Machinery	97.0	106.0	9.0	5.1	5.0	(0.1)
Others	53.2	60.0	6.8	3.7	2.5	(1.2)
Adjustment*2	184.3	(27.0)	(211.3)	0.1	(4.5)	(4.6)
Total	655.3	510.0	(145.3)	44.0	34.5	(9.5)

*1 Beginning in FY2022, the segmentation was changed from Chemicals, Construction Materials, Machinery, and Others to the four segments: Specialty Products, Polymers and Chemicals, Machinery, and Others, with pharmaceuticals included in Others. This change follows the conversion of cement-related business into an equity-method affiliate. FY2021 results are for reference only, after reclassification to the new segments, with Construction Materials included in Adjustment.

*2 Includes elimination of inter-segment transactions.



UBE Vision 2030 Transformation

UBE Group's Long-Term Vision for 2030

Founding Principles

“Coexistence and mutual prosperity”, “From finite mining to infinite industry”

UBE Corporate Philosophy

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

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.

Vision for 2030

A corporate group centered on specialty chemicals that contributes to the global environment, human health, and an enriched future society

Vision for 2030 – A Corporate Group Centered on Specialty Chemicals



■ UBE Group's new business model



- The list below clarifies the positioning of UBE's major businesses and products in the chemicals field based on future market growth expectations, the UBE Group's strengths, profitability, and other factors, in addition to UBE's long-term vision. The Company uses this information to make decisions on the allocation of management resources.

Business Portfolio Segmentation	Businesses
<p style="text-align: center;">Specialty business</p> <p>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</p>	<p>Polyimide, separation membranes, ceramics, semiconductor gas, separators, composites, fine chemicals, high-performance coatings, pharmaceuticals, phenolic resin</p>
<p style="text-align: center;">Basic business</p> <p>Aim to steadily improve and add to profits</p>	<p>Nylon polymers, caprolactam, ammonium sulfate, industrial chemicals, elastomers, polyethylene films, processed resin products</p>

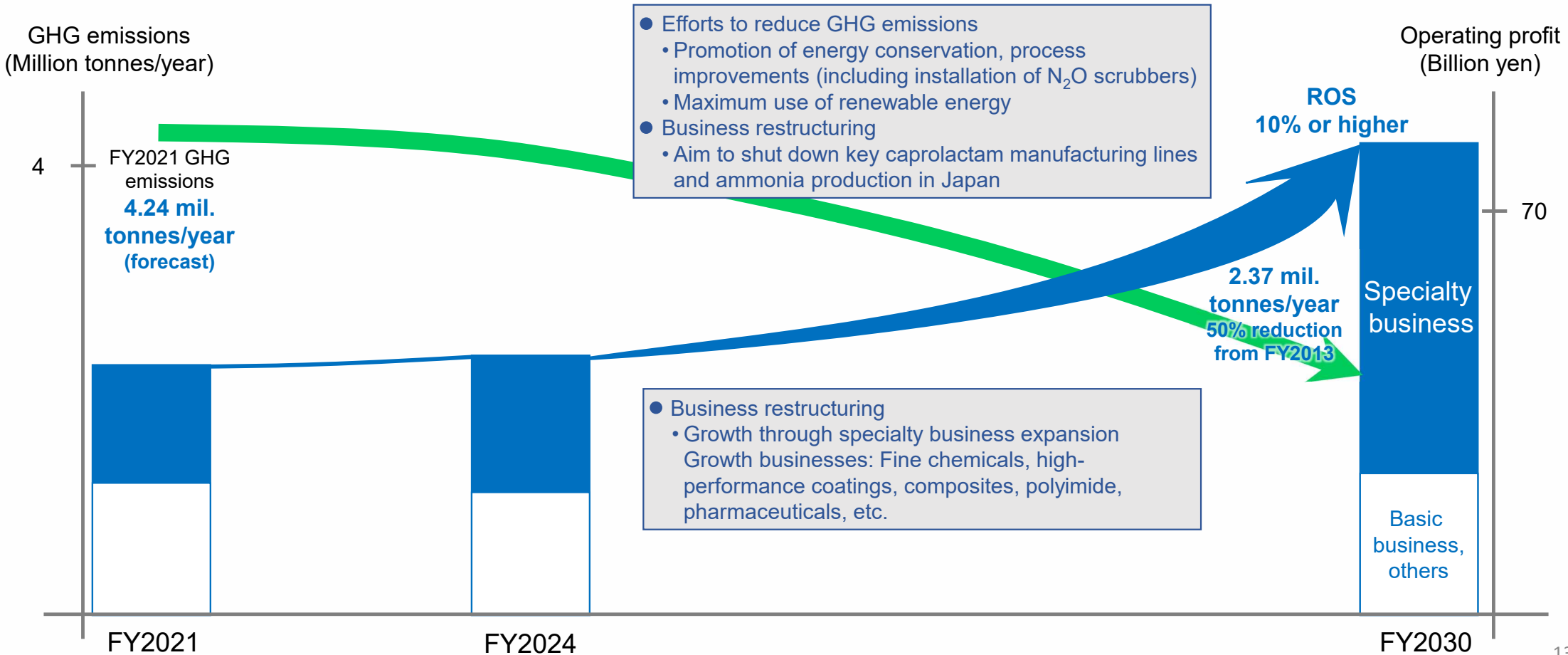
Others: Sales companies outside Japan, logistics and analytical services, real estate business, machinery, etc.

Social needs	Contribution by UBE's specialty products
<p>Global warming countermeasures</p> <p>Clean energy</p>	<p>Electrified vehicles (xEVs): Separators, DMC for electrolytes (lithium-ion batteries), ceramics (substrates, bearings)</p> <p>Fuel cell vehicles (FCVs): Composite (hydrogen tanks), separation membranes (dehumidifying and humidifying)</p> <p>Biogas: Separation membranes (decarbonation)</p> <p>Wind power generation: Ceramics (bearings)</p> <p>Solar batteries: Polyimide</p> <p>Weight-reducing materials: Composites, Tyranno Fiber</p> <p>Eco-tires: VCR (special elastomer)</p>
<p>Health</p> <p>Food safety</p>	<p>Pharmaceuticals: Drug discovery, contract development and manufacturing organization (CDMO) (APIs and intermediates)</p> <p>Medical devices: Separation membranes (humidifying)</p> <p>Organic solvent reduction: High-performance coatings (paints, adhesives)</p> <p>Food packaging: Nylon copolymers</p> <p>Fertilizers: Large-grain ammonium sulfate</p>
<p>Prosperous future</p> <p>Digitalization</p>	<p>Displays, circuit substrates: Polyimide</p> <p>Semiconductors: Resins for encapsulation materials, high-purity gases, high-purity chemicals</p>

Vision for 2030 – Transformation



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



Vision for 2030 — Four Management Measures



1. Promoting structural changes (transformation)

■ Growth investment in specialty chemicals (approx. ¥150 billion until 2030)

		FY2022	FY2030
Polyimide	Increase film production lines	Starts in FY2022, ends in FY2024	
	Increase BPDA production lines	Starts in FY2022, ends in FY2023	Starts in FY2025, ends in FY2030
Separation membranes	Increase yarn spinning lines		Starts in FY2024, ends in FY2026
Ceramics	Increase silicon nitride production lines		Starts in FY2023, ends in FY2025
Separators	Increase separator production lines		Starts in FY2023, ends in FY2025
Composites	Increase production lines in Japan, Thailand, Spain, and USA, and pursue M&As		Starts in FY2022, ends in FY2030
Fine chemicals	New DMC production facilities in USA and Spain		Starts in FY2023, ends in FY2025; Starts in FY2026, ends in FY2030
High-performance coatings	Increase PCD and PUD production lines in Thailand		Starts in FY2022, ends in FY2024
Pharmaceuticals	Expand CDMO (for small molecules and nucleic acids)		Starts in FY2024, ends in FY2030

■ Businesses under consideration for downsizing and/or withdrawal

- Caprolactam in Japan: Has a high energy burden and profitability would be difficult to improve even in the medium to long term
→ Will look into reducing production by shutting down production on key manufacturing lines by FY2024
- Ammonia: Has high GHG emissions, and facilities are aging
→ Aim to shut down this business by 2030
→ Meanwhile, will consider procurement of clean ammonia to meet domestic demand

Vision for 2030 — Four Management Measures



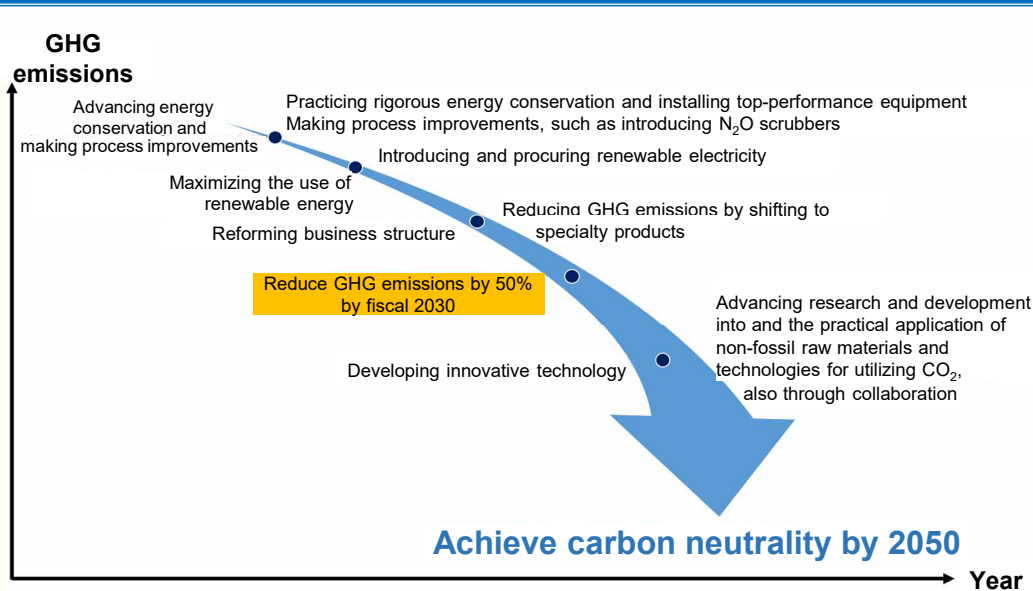
2. Initiatives to address global environmental issues — aiming for carbon neutrality by 2050

■ FY2030 Target

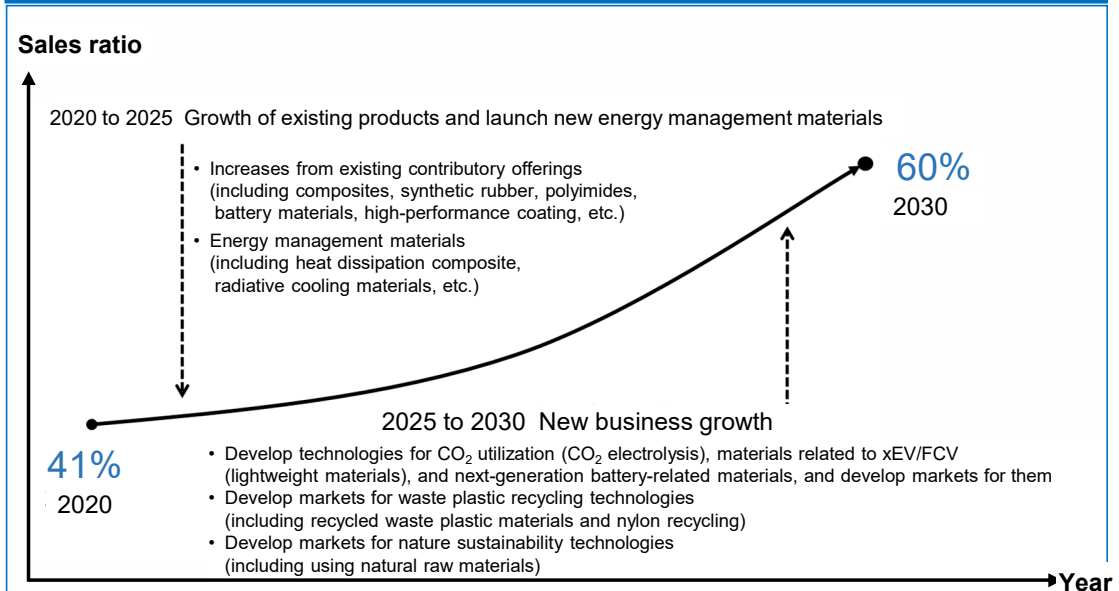
- (1) GHG emission reduction target: 50% reduction compared to FY2013 (previously 20% reduction in the chemicals segment)
- (2) Target percentage of consolidated net sales comprising environmentally friendly products and technologies*: 60% or more (previously 50% or more)

(*Includes products and technologies that help resolve climate change, conserve biodiversity, address the issue of marine plastics, and conserve water resources)

Roadmap for carbon neutrality



Timeline for generating more than 60% of consolidated net sales from environmentally friendly products and technologies by fiscal 2030



3. Enhancing human capital

■ Address diversity and inclusion as a top priority issue

- Making it a driver for global business expansion and creation of new value by creating innovation through the integration of diverse technologies, knowledge, and perspectives

Initiatives: Providing greater opportunities for women, hiring highly specialized mid-career and non-Japanese recruits, boosting motivation of rehired retirees, energizing organizations, respecting human rights, managing health, and creating motivating workplaces

4. Promoting digital transformation (DX)

- Improve labor productivity, achieve more sophisticated utilization of accumulated data, and develop human resources to promote these enhancements
- Further strengthen ability to provide solutions to customers using digital data and technologies, and create new value by reforming business processes through co-creation with customers

- (1) Shift to a business structure focused on specialty chemicals
- (2) Initiatives to address global environmental issues
- (3) Higher work engagement

} Promoting achievement through sophisticated digital platforms



Vision for
2030



UBE Vision 2030 Transformation — 1st Stage

Action plan for the first three years to realize the long-term vision

1. Pursuing global profit growth driven by specialty chemicals

(1) Specialty business expansion

- Focusing investment of management resources to drive further growth and expansion: Increasing production lines for polyimide film and BPDA (Japan), and establishing a new DMC plant (USA)
- Expanding bases outside Japan: Composites (USA and Thailand), high-performance coatings (PCD and PUD; Thailand)
- Driving growth through M&A as well

(2) Strengthening the profitability of basic business

- Securing stable cash flow and steady earnings growth: Fully utilizing facility capacity through safe and stable production
- Strengthening cost competitiveness further: Clarifying target costs and monitoring progress
- Expanding high value-added grades, and developing and launching environmentally friendly products (shift to specialty chemicals): Nylon copolymers, large-grain ammonium sulfate, high-purity nitric acid, VCR, etc.

2. Structural changes in response to global environmental issues

(1) Structural change of the caprolactam chain in Japan

- Establishing a globally optimized production system, shifting production of nylon polymers outside of Japan
- Looking at decreasing production of caprolactam in Japan by shutting down production on key manufacturing lines, due to its high energy burden and uncertainty about improvement in medium- to long-term profitability

(2) Reducing GHG Emissions

- Continuing initiatives on energy conservation and process improvements in production activities, as well as maximizing the use of renewable energy sources

(3) Creating and expanding the provision of environmentally friendly products and technologies

3. Enhancing human capital for sustainable growth

Promoting diversity and inclusion and also striving to improve work engagement throughout the entire Group

(1) Providing greater opportunities for women

Percentage of women in the workforce: 15%

Percentage of women in management positions: 6%

(Indicators for fiscal 2024, on a consolidated basis in Japan)

**(2) Percentage of mid-career recruitment in the workforce (generalist positions): 25% or more,
percentage of non-Japanese recruitment in the workforce (generalist positions): 5% or more (same as above)**

(3) Introducing specialist system, hiring highly specialized mid-career recruits, and enhancing measures for rehired retirees

(4) Creating motivating workplaces and increasing employee satisfaction

4. Enhancing corporate value and creating customer value by promoting DX

(1) Developing digital technology-savvy human resources

(2) Improving operational efficiency and productivity through the use of digital technology

(3) Accelerating the creation of new customer value and new businesses

5. Further improving governance

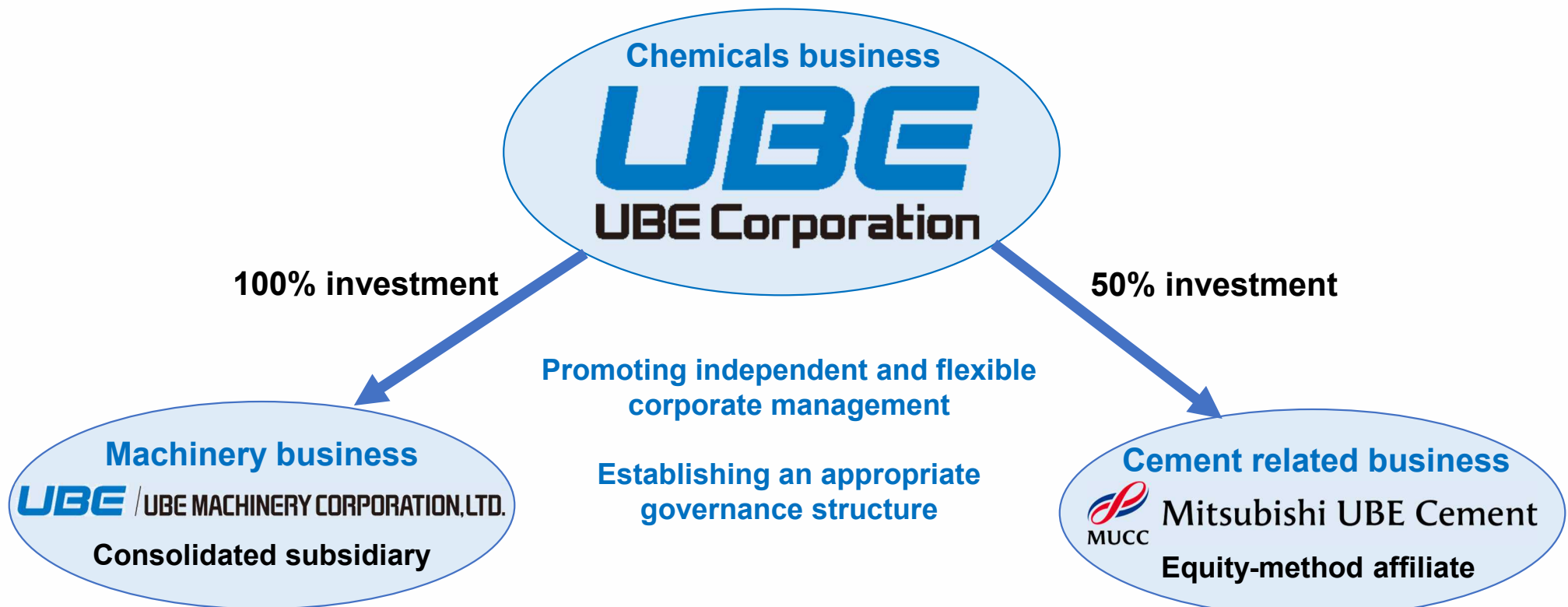
(1) Improving the level of group governance

(2) Machinery business, cement-related business: Developing and operating a governance system as a holding company

Positioning and Governance Structure of Machinery and Cement-Related Businesses



- Each business will practice independent management to establish a presence for that business, and UBE will fulfill its governance responsibilities as a shareholder.



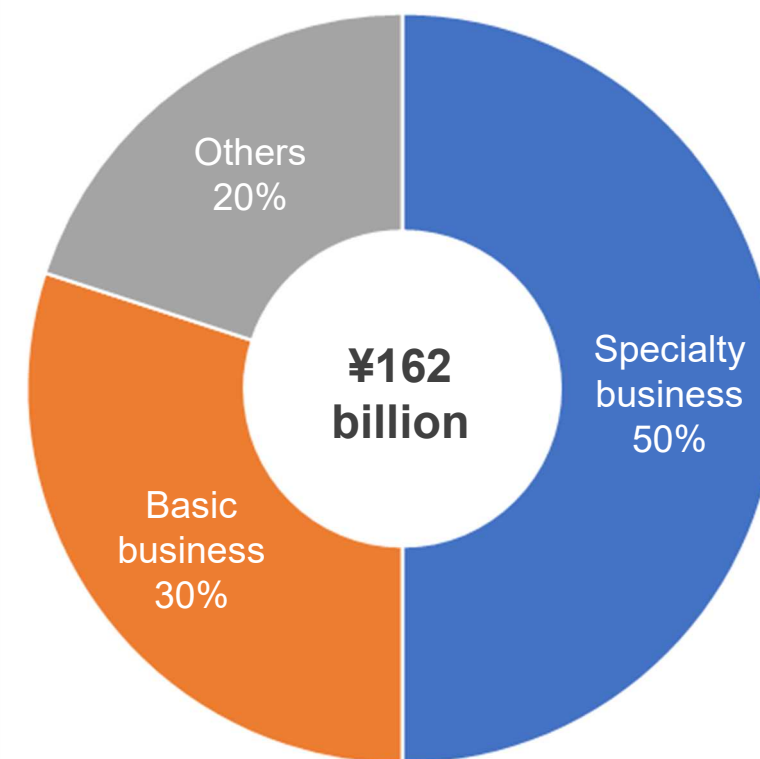
Investments and R&D Expenditure by Business Portfolio Segmentation and Cash Flow Plan



- UBE will accelerate the shift to the specialty business on a global basis, advance restructuring, and plan aggressive investment for further growth in the future.

*Figures in parentheses are results from the previous medium-term management plan (excluding cement-related business).

Investments over three years:	¥130 billion (¥76.1 billion)
Capital investment	→ ¥110 billion (¥69.4 billion)
Other investment (including M&A)	→ ¥20 billion (¥6.7 billion)
R&D expenditure over three years:	¥32 billion (¥31.2 billion)
Total	¥162 billion (¥107.3 billion)



*Machinery segment is included in Others

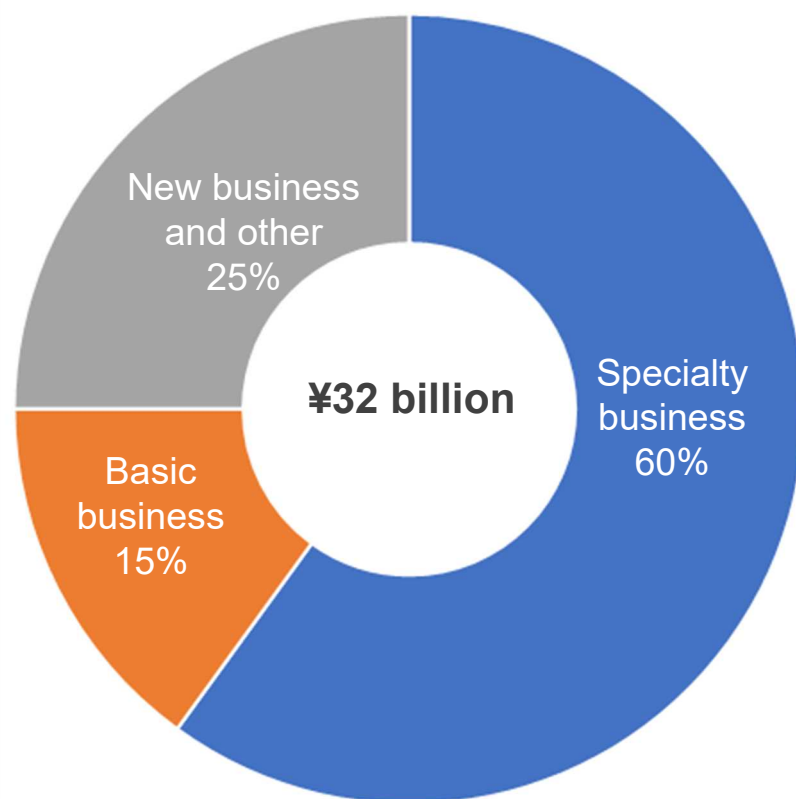
■ Three-Year Cash Flow Plan

Operating cash flow:	¥150 billion (¥113.7 billion)
Investment cash flow:	-¥115 billion (-¥76.7 billion)
Free cash flow:	¥35 billion (¥37.0 billion)

Resource Allocation by R&D Theme and Portfolio



- Strengthen the competitiveness of the specialty chemicals and create new businesses by creating even stronger technologies through the integration of external technologies with UBE's core technologies.
- Establish a strong intellectual property network to help strengthen and expand the specialty chemicals.



R&D projects for new business creation

CO₂ and waste plastic utilization

- CO₂ utilization (CO₂ electrolysis)
- Waste plastic utilization (hydrothermal reaction, waste carpet melt-kneading)

Environmental sustainability

- Bioplastics (biomass-derived polymers, silk proteins)
- Physical antimicrobial materials
- Aquaculture feed additives
- Insect feed
- Moisture absorbent for extracting water from the atmosphere

Energy management

- Heat-dissipating composite materials
- Radiative cooling materials

Life sciences

- Utilization of cell propagation technology

■ Key Figures

Operating profit

¥40 billion

Of which, specialty business: ¥24 billion

Ordinary profit

¥47 billion

Of which, ¥8 billion* factored in as equity method investment profit of the Mitsubishi UBE Cement Group

*Provisional figure assumed prior to launch of the Mitsubishi UBE Cement Group

■ Key Indicators

Return on sales (ROS)

8%

Return on equity (ROE)

8%

Company-Wide Profit/Loss Projections



■ Aim for record profit attributable to owners of parent in FY2024

(Billion yen)

Item	FY2021 Results (1)	FY2022 Targets	FY2023 Targets	FY2024 Targets (2)	Difference (2) – (1)
Net sales	655.3	510.0	520.0	520.0	(135.3)
Operating profit	44.0	34.5	41.0	40.0	(4.0)
Ordinary profit	41.5	31.0	45.0	47.0	5.5
Profit attributable to owners of parent	24.5	21.0	32.0	33.0	8.5

✓ FY2023 and FY2024 assumptions (business factors)

Exchange rate at ¥120/USD Naphtha at US\$850/tonne (CIF) Australian coal at US\$280/tonne (CIF)

Net Sales and Operating Profit by Portfolio Segmentation



(Billion yen)

		FY2021 Results (1)	FY2022 Targets	FY2023 Targets	FY2024 Targets (2)	Difference (2) – (1)
Net sales	Specialty business	123.1	149.0	154.0	167.0	43.9
	Basic business	239.7	268.0	279.0	267.0	27.3
	Machinery business	97.0	106.0	98.0	100.0	3.0
	Other businesses (incl. adjustment)	195.5*	(13.0)	(11.0)	(14.0)	(209.5)
	Total	655.3	510.0	520.0	520.0	(135.3)
Operating profit	Specialty business	20.7	24.5	24.5	24.0	3.3
	Basic business	17.8	11.0	16.5	15.5	(2.3)
	Machinery business	5.1	5.0	5.5	6.0	0.9
	Other businesses (incl. adjustment)	0.3*	(6.0)	(5.5)	(5.5)	(5.8)
	Total	44.0	34.5	41.0	40.0	(4.0)

*Other (incl. adjustment) in FY2021 includes cement-related business transferred to Mitsubishi UBE Cement Group.

(Reference) Net Sales and Operating Profit by Segment



(Billion yen)

		FY2021 Results (1)	FY2022 Targets	FY2023 Targets	FY2024 Targets (2)	Difference (2) – (1)
Net sales	Specialty Products	60.8	69.0	70.0	75.0	14.2
	Polymers & Chemicals	260.0	302.0	320.0	316.0	56.0
	Machinery	97.0	106.0	98.0	100.0	3.0
	Others	53.2	60.0	57.0	54.0	0.8
	Adjustment*	184.3	(27.0)	(25.0)	(25.0)	(209.3)
	Total	655.3	510.0	520.0	520.0	(135.3)
Operating profit	Specialty Products	11.6	13.0	12.5	13.0	1.4
	Polymers & Chemicals	23.5	18.5	24.0	22.0	(1.5)
	Machinery	5.1	5.0	5.5	6.0	0.9
	Others	3.7	2.5	3.5	4.0	0.3
	Adjustment*	0.1	(4.5)	(4.5)	(5.0)	(5.1)
	Total	44.0	34.5	41.0	40.0	(4.0)

*Adjustment includes elimination of inter-segment transactions. Adjustment in FY2021 includes cement-related business transferred to Mitsubishi UBE Cement Group.

IV

Strategy by Business

Specialty Business: Polyimide Strategy



- **Contributing to the market and expanding earnings through product development in response to changes in the external environment**

Immediate Business Conditions

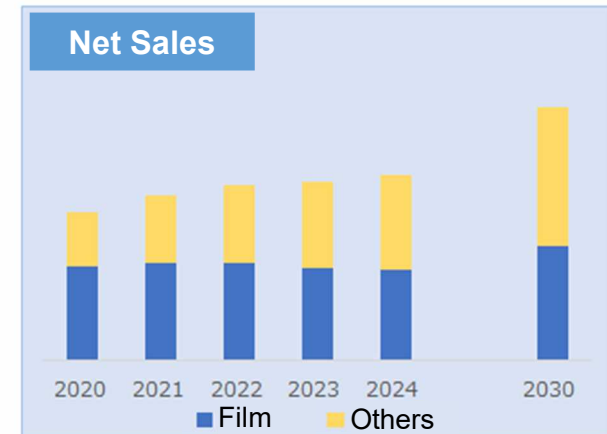
- Strong demand for chip-on-film (COF) for displays
- Growing market for varnishes for flexible OLEDs, especially for smartphones

Summary of Previous Medium-Term Management Plan

- Developed varnishes into a core product in addition to films
- Increased sales for displays, solar cells, and composite release liners, in addition to the application for electronic circuit substrates
- Increased production capacity for raw material BPDA and varnishes

Strategies of Current Medium-Term Management Plan

- Expand the business of varnishes for flexible OLEDs (maintain de facto standard)
- Launch new development themes and set development themes in line with changes in the external environment
 - New varnishes (varnishes for next generation displays, batteries, etc.)
 - New films (5G compatible film)
- Steady implementation of investment plan for production expansion, vertical start-up, and stable operation
 - BPDA manufacturing facilities: Anticipated to go into operation in the second half of FY2023
 - Film manufacturing facilities: Anticipated to go into operation in the second half of FY2024



Examples of polyimide film: Has highest heat resistance among resins

Specialty Business: Separation Membrane Strategy



- Expanding business and strengthening product competitiveness based on the environment and energy field

Immediate Business Conditions

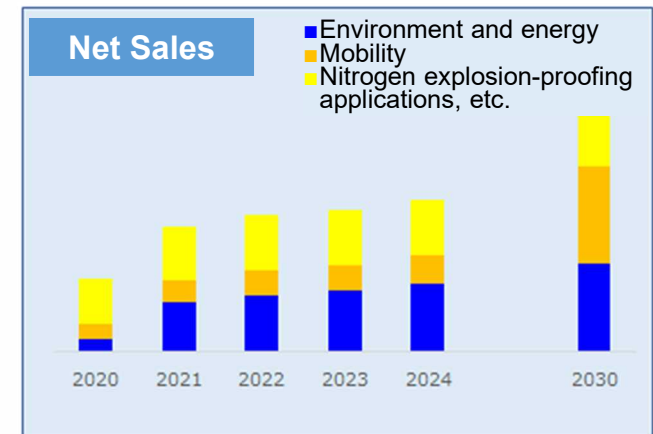
- Biomethane market expanding from Europe and North America to the entire world, driven by environmental and energy policies
- Increasing demand for innovative technologies for gas separation membranes to contribute to carbon neutrality through decarbonization, effective CO₂ utilization, and renewable energy use

Summary of Previous Medium-Term Management Plan

- Developed the biomethane market and grew into one of the pillars of UBE's business
- Nitrogen explosion-proofing applications for aircraft and in resources sector: Demand is on a recovery trend after temporary decline due to the COVID-19 pandemic

Strategies of Current Medium-Term Management Plan

- Concentrate management resources on expanding business revenues in the environment and energy field, especially CO₂ separation membranes for biomethane
- Adapt to fuel cell vehicles, hydrogen, and other technologies demanded by a green society
- Promote DX at production sites to increase production capacity, stabilize quality, and enhance product appeal



Gases are separated by a polyimide hollow membrane mounted inside a container. Products include CO₂ separation membranes for biomethane, nitrogen separation membranes for explosion proofing, and dehumidifying membranes for railroads and instrumentation.

Specialty Business: Separator Strategy



- Expanding sales in the xEV market, where demand is expected to continue to grow, and pushing the development of applications other than for xEVs

Immediate Business Conditions

- A global trend toward building a decarbonized society is accelerating electrification, particularly of automobiles.
- xEV market is expected to grow as countries set specific electrification goals.
- Growing global demand for batteries is intensifying competition among battery manufacturers, leading to greater demand for increased production capacity and further cost reductions in components.

Summary of Previous Medium-Term Management Plan

- Acquired promising projects, mainly for hybrid electric vehicles (HEVs), but failed to reach full production capacity, including on new manufacturing facilities installed in FY2020, due to the COVID-19 pandemic and other factors
- Developed low-resistance separators required by customers, and establishing differentiated technology in terms of quality, such as foreign matter control

Strategies of Current Medium-Term Management Plan

- Expand sales in both automotive and non-automotive applications
 - Automotive: Maintain a high market share in the HEV market and secure a certain share in the battery electric vehicle (BEV) market
 - Non-automotive: Target areas where the characteristics of dry-type separators can be utilized, such as for high-power electric tools
- Make further cost reductions
- Improve quality satisfaction to fulfill increasingly sophisticated customer performance requirements



Separators separate the cathode and anode in lithium-ion batteries to prevent abnormal heat generation due to short circuits.

Specialty Business: Composite Strategy



- **Aiming to become a solution provider with a global presence as a composite materials manufacturer using various engineering plastics**

Immediate Business Conditions

- Although demand had been on a recovery trend, current market growth is slowing down due to the impact of automobile production cutbacks caused by the shortage of semiconductors and other factors since summer 2021. There are also supply chain disruptions in the European market due to the worsening situation in Ukraine.

Summary of Previous Medium-Term Management Plan

- Strengthened global structure by acquiring Premium Composite Technology North America Inc. (USA, now UBE Engineered Composites, Inc.) in April 2020 following the acquisition of REPOL in Europe in March 2019
- Strengthened development functions by consolidating composite development bases into the Osaka Research & Development Center
- Established production system outside Japan for hydrogen tank liners, tank valve application grades and non-reinforced special grades

Strategies of Current Medium-Term Management Plan

- Push further specialization through the development of new composite fields, including resins other than nylon.
- Accelerate global development of existing value-added products: Expand tank liners and other non-reinforced products (new production lines in USA and Thailand)
- Expand specialty nylon elastomer business
- Develop environmentally friendly products: Material recycling (recycling-oriented business), market launch of composite products using bio-derived materials
- Strengthen technical capabilities through M&A and alliances, expand sales channels, and consider business expansion, including downstream development



Example of nylon composite application: UBE's nylon composite used in high-pressure hydrogen tank liners for Toyota's MIRAI fuel cell vehicle. The high performance required by automotive components is achieved with engineering plastic composites.

Specialty Business: Fine Chemicals Strategy



■ Accelerate international expansion of C1 chemical chain and expand specialty products for sustainable growth

Immediate Business Conditions

- Demand for all products is generally strong, especially for high-purity DMC, which is growing worldwide with the spread of xEVs.
- Internal consumption of diol is growing for environmentally friendly downstream products (PCD, PUD).
- The Company implements price increases to reflect higher raw material, fuel, and logistics costs in product prices.

Summary of Previous Medium-Term Management Plan

- Selected candidate sites and conducted feasibility study for production bases for C1 chemical chain (DMC, EMC, PCD) in USA
- Established a joint venture for 100,000 tonnes of high-purity DMC in Shaanxi Province, China

Strategies of Current Medium-Term Management Plan

- Accelerate international expansion and sustainable growth of the C1 chemical chain: Promote local production for local consumption by establishing DMC production bases in China, USA, and Europe

Investment Plan

China: Complete construction of a 100,000-tonne plant for high-purity DMC in Shaanxi Province, China (to go into operation in 2023 to 2024)

United States: Complete and implement construction plan for new DMC/EMC plant (to go into operation in 2025 to 2026)

Europe: Construct new DMC plant. Consider DMC production from green carbon monoxide (2025 or later)

- Increase production of high-purity catechol for semiconductor applications



DMC manufacturing facility (Japan)

Specialty Business: High-Performance Coating Strategy



■ Promote further business expansion globally as an environmentally friendly product

Immediate Business Conditions

- Demand for automotive applications slowed partly due to the impact of COVID-19, but the shift to environmentally friendly products continued, as demand for water-based and solventless paints increased due to stricter VOC regulations, etc., especially in China.

Summary of Previous Medium-Term Management Plan

- PCD: Completed second manufacturing facility for PCD in Thailand, and achieved high operating rate through increased sales in the Asian region
Expanded sales volume to North and Central America despite delays in increasing sales in some volume zones
- PUD: Made progress building a marketing framework in Asia; To accelerate increased sales in the Chinese market, began establishing a technical service base in Shanghai, which will be fully operational in FY2022
Increased sales volume by 160% compared to the previous medium-term management plan
- Oxetane: Began mass production of oxetane at Thai plant
Increased sales in Asia for 3D printer applications

Strategies of Current Medium-Term Management Plan

- PCD: Increase sales in the Asian region with capacity increase from third manufacturing facility in Thailand (to go into operation in 2023).
Continue to expand sales in North and Central American markets
- PUD: Establish PUD manufacturing facility in Thailand (to go into operation in 2024), commercialize tin-free and solventless grades, and accelerate sales in the Chinese market by fully utilizing the Shanghai lab
- Oxetane: Expand global marketing channels and build light/heat and other curing systems for 3D printers



PCD plant in Thailand: Second manufacturing facility went into operation in October 2020, increasing production capacity to 8,000 tonnes per year.

Specialty Business: Pharmaceutical Strategy



- **Build a stable profit structure and create a foundation for growth with the addition of value-added areas through new drug discovery and technologies**

Immediate Business Conditions

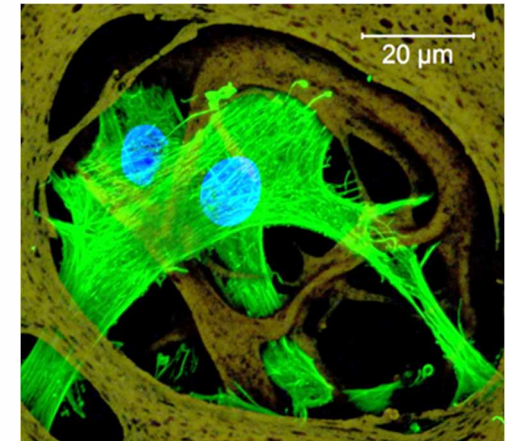
- While small molecule drugs are growing moderately, new modalities such as nucleic acids and biopharmaceuticals are driving the market.
- Diversification of pharmaceuticals is accelerating further, and competition is intensifying in all areas of drug discovery research, development, and manufacturing.

Summary of Previous Medium-Term Management Plan

- Signed co-development agreements with pharmaceutical manufacturers and other parties on multiple drug discovery themes
- Completed fifth pharmaceutical plant and began contract manufacturing of high potency APIs
- Completed a framework for the development of new modalities by introducing nucleic acid synthesis technology, etc.

Strategies of Current Medium-Term Management Plan

- Drug discovery research
Improve the probability of market launch and out-licensing through progress in small molecule drug discovery technologies and diversification of alliance formats
- Examine new business areas in the life science field
Establish a cell culture system using polyimide porous membranes
- CDMO
Strengthen earnings base through new plant construction and reorganization, M&A, alliances, etc.
Establish position as a manufacturer of nucleic acid APIs
Start studying next-generation factory (automation) using ICT



Human fibroblasts in a polyimide porous membrane

Cell culture systems are a focus in the life science field. UBE will build a cell culture system that takes advantage of the features of polyimide porous membranes.

Specialty Business: Ceramics Strategy

Developing Business: Tyranno Fiber Strategy



■ Ceramics: Meet demand in growth areas

Immediate Business Conditions

- Demand is growing for bearings and substrates for the xEV market.

Summary of Previous Medium-Term Management Plan

- Demand recovered significantly in FY2021 after decline in FY2020 due to the COVID-19 pandemic
- Reviewed production system

Strategies of Current Medium-Term Management Plan

- Increase sales and expand business for xEVs, for which demand is expected to increase further
- Reinforce production system to meet strong demand



Examples of ceramics application (silicon nitride powder): UBE's silicon nitride is a high-grade powder produced using a proprietary imide-decomposition process.

■ Tyranno Fiber: Promote development of fibers for CMCs* used in civil aircraft engine components and materials, and establish mass production technologies

*Ceramic matrix composites

Immediate Business Conditions

- Engine development by aircraft manufacturers remains challenging, but is expected to recover to pre-COVID-19 pandemic levels in 2023–2024.

Summary of Previous Medium-Term Management Plan

- Development schedules of clients delayed due to the COVID-19 pandemic
- Developed high-performance grades and improved production technology for the future

Strategies of Current Medium-Term Management Plan

- Conduct stable production of high-performance fibers
- Address remaining fiber issues toward full commercialization of CMCs



Tyranno Fiber® (silicon carbide fibers): Expected to be used as a reinforcing material in aircraft engine components and materials in the future due to its extremely high heat resistance

Basic Business: Nylon Polymer Strategy



■ Strengthening UBE's unshakeable position as a top supplier in the extrusion field by introducing environmentally friendly products

Immediate Business Conditions

- Demand for extrusion applications, including food packaging films, is generally strong.
- Three production bases in Japan, Thailand, and Spain continue to record high operating rates and sell out of production.
- The Company implements price increases to reflect higher raw material and fuel in product prices.

Summary of Previous Medium-Term Management Plan

- Demand remained firm, especially in the Chinese market, despite the price impact of caprolactam market fluctuations
- Made progress in meeting new demand for LiB exterior film and other products, but development of recycled products, biopolymers, and other environmentally friendly products is still in process

Strategies of Current Medium-Term Management Plan

- Expand high value-added grades such as nylon copolymers
 - Optimize nylon polymerization system in Asia
 - Thailand: Secure start-up of nylon copolymers transferred from Japan
 - Japan: Downsize nylon 6 polymerizing capacity
 - Develop environmentally friendly products
 - Establish a pilot plant in Spain to support development of bio-based polymers (construction to begin in FY2022)
 - Develop products that contribute to the 3R Initiative,* such as thinner films
- *Aims for the construction of a sound material-cycle society through the three "R's" (reducing waste, reusing and recycling resources and products).



Food packaging film, an example of a nylon polymer application. Low oxygen permeability makes it suitable for food packaging.

Basic Business: Caprolactam and Ammonium Sulfate Strategy Industrial Chemicals Strategy



- **Caprolactam and ammonium sulfate: Strengthen unified operation of nylon polymer, caprolactam, and ammonium sulfate businesses, and promote high value-added ammonium sulfate**

Immediate Business Conditions

- Demand for caprolactam remains stable and the spread with its main raw material benzene staying firm
- Demand for ammonium sulfate firm overall; Soaring raw material prices due to China's export restrictions on urea, etc., and the worsening situation in Ukraine causing selling prices to rise

Summary of Previous Medium-Term Management Plan

- Caprolactam spreads deteriorated more than expected in 2019–20, but recovered in 2021 as the economy recovered from the COVID-19 pandemic
- Increased production of large-grain ammonium sulfate; UBE's share of the Japanese market increased due to supply concerns for imported nitrogen fertilizers

Strategies of Current Medium-Term Management Plan

- Caprolactam: Consider reducing the scale of production in Japan in FY2024 in line with the reorganization of nylon production lines. Also, reduce the risk of profit fluctuations due to market conditions by reducing external sales volume.
- Ammonium sulfate: While competitors in Japan are expected to reduce production, UBE will push development and sales expansion of value-added grades as well as increase production of large-grain products. Increase production of large grain products in Spain in FY2024, and import Thai products to Japan to maintain and expand market share.
- GHG reduction: Make investments in Thailand and Spain to reduce N₂O, NO_x, etc.

- **Industrial chemicals: Aim to cease operations of the ammonia plant by 2030, and grow specialty businesses that are expected to expand, such as the high-purity nitric acid business**

Immediate Business Conditions

- Ammonia prices rising due to soaring natural gas prices; tight supply and demand conditions continuing due to reduced supply to the market as the situation in Ukraine worsens
- High growth continuing in the market for high-purity nitric acid used in semiconductor applications

Summary of Previous Medium-Term Management Plan

- Captured demand after other companies withdrew from ammonia-related business
- Addressed operational problems associated with aging facilities

Strategies of Current Medium-Term Management Plan

- Improve the optimization plan for the industrial chemicals business following the shutdown of the ammonia plant by 2030
- Enhance production capacity of high-purity nitric acid plant
 - Increase capacity to meet growing demand in the expanding semiconductor market
 - Expand the high-purity nitric acid business by optimizing the nitric acid chain
- Look into and promote procurement of clean ammonia

Basic Business: Elastomer Strategy



- Speed up decision-making and implementation of measures through integration of manufacturing, marketing, and engineering, and focus on specialty products

Immediate Business Conditions

- Soaring raw material prices and ongoing logistics stagnation
- Deteriorating situation in Ukraine impacting synthetic rubber supply-demand balance
- Drop in demand due to lockdowns in China, etc.

Summary of Previous Medium-Term Management Plan

- Split off (established UBE Elastomer Co. Ltd.)
- Expanded production capacity (Thailand: 72,000 to 75,000 tonnes in Nov. 2020, Malaysia: 50,000 to 72,000 tonnes in Dec. 2021)
- Expanded VCR production facilities (three sites in Chiba, Thailand, and Malaysia)

Strategies of Current Medium-Term Management Plan

- Safe and stable production
 - Respond to accident and rebuild the Malaysian site
 - Ensure commitment to safety first and reap the benefits of expanded facilities
- Process and quality improvement
 - Raise productivity and quality through process improvement
- Focus on specialty products
 - Develop and increase sales of high value-added grades
- Global business development
 - Strengthen inter-site cooperation

Manufacturing Site	Start of Operation	Manufacturing Capacity (Thousand tonnes/year)
Chiba	1971	126
Thailand	1997	72 → 75
Malaysia	2015	50 → 72
China	2009	72
Total		320 → 345



Synthetic rubber (VCR/BR): UBE's mainstay products, mainly for automotive tire applications

Machinery: Long-Term Vision

Basic Policies of Medium-Term Management Plan



1. Long-term vision: Pursue greater business value by strengthening earnings base while increasing independence and competitiveness

Vision: Benefit customers by supplying products and services with brand appeal

2. Basic policies of the Medium-Term Management Plan

- Aim to improve the profitability of the product businesses by capturing the globally expanding market needs, such as the shift to xEVs and carbon neutrality, and also aim to expand the servicing business by enhancing solutions-based offerings and providing support for third-party products
- Strengthen the corporate governance system and establish an independent business operation system as a machinery group

3. Business portfolio

- (1) Business aimed at increasing revenues: Servicing (molding machines and industrial machines)
- (2) Business to maintain stable earnings: Industrial machines (products) and steel products
- (3) Business aimed at earnings recovery through business restructuring: Molding machines (products)



emIII Series: Large injection molding machine with energy-saving performance that contributes to carbon neutrality and reduces environmental impact by using water-soluble paints

Machinery: Molding Machines Strategy Industrial Machines Strategy



■ Molding machines: Create new products in response to shift to xEVs

Immediate Business Conditions

- Automotive markets: Amid production cuts due to the COVID-19 pandemic, the shift to xEVs is becoming a global trend.

Summary of Previous Medium-Term Management Plan

- Developed products and processes to reduce the weight of automotive parts
- Reviewed injection molding machine lineup to strengthen competitiveness
- Expanded servicing business revenues by enhancing preventive maintenance and upgrade offerings for facilities and functions

Strategies of Current Medium-Term Management Plan

- Launch appealing products that are compatible with the shift to xEVs
- Roll out competitively priced products for global markets such as in North America and Asia
- Make investments to expand sales to the Chinese market
- Further advance digital transformation (DX) of servicing business

■ Industrial machines: Expand business by developing products and processes for the renewable energy and product recycling markets

Immediate Business Conditions

- Demand for coal-fired power generation (independent power producer; IPP) facilities is peaking out, while demand from conversion to biomass power generation is increasing.
- Demand for products to help achieve carbon neutrality is increasing, including offshore wind power equipment, ammonia fuel-related equipment, biomass fuel-related equipment for storage, transport, pulverization, etc.

Summary of Previous Medium-Term Management Plan

- Developed models compatible with resource recycling and started exploring expansion of alliances
- Conducted searches for creation of successor business to coal-fired power plants

Strategies of Current Medium-Term Management Plan

- Capture demand for biomass handling for power plants
- Enter the offshore wind power and fuel ammonia equipment markets with large structure manufacturing technology
- Strengthen alliances that benefit business expansion in large structure manufacturing for offshore wind power plants

- **Aiming to be a global company with the industry's highest level of efficiency and profitability, and leading the industry by taking the initiative in tackling environmental changes such as pursuit of carbon neutrality**

Strengthening the foundation of the Japanese cement business and contributing to a circular economy

- Maximize synergies by improving efficiency throughout the value chain, such as by optimizing the production framework and restructuring the sales and distribution system, including the downstream ready-mixed concrete business
- Contribute to the development of social infrastructure and a circular economy.

Investing in growth drivers

- Direct the management resources generated from the cement business in Japan toward concentrated investment in businesses that are anticipated to generate future growth in and outside of Japan. This includes overseas cement and ready-mix concrete business and high-performance inorganic materials business based on high-quality limestone.

Addressing global environmental issues

- Establish a roadmap and implement measures to achieve carbon neutrality by 2050 as a new company

Formulating a new medium-term management plan as a new company



Masato Izumihara (left), president of UBE, and Naoki Ono (right), president of Mitsubishi Materials, at a press conference (September 2020)



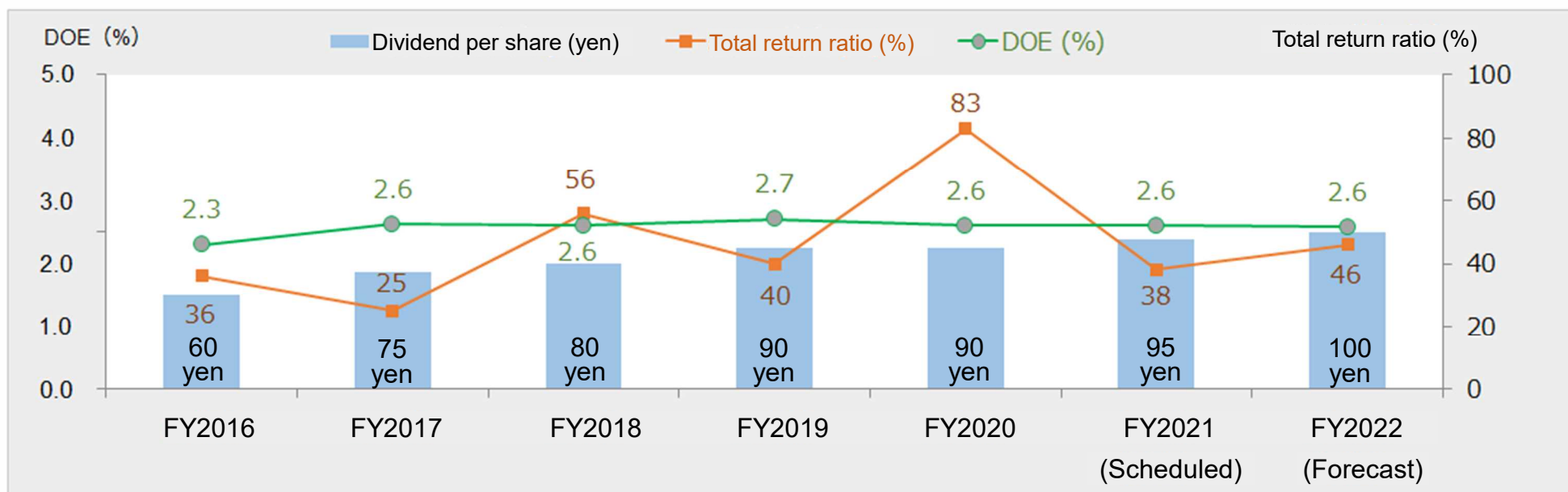
Shareholder Returns

Shareholder Returns



- Aiming to further enhance shareholder value in the future based on a basic policy of continuing to pay consistent dividends while investing aggressively for growth

Dividend on equity (DOE) 2.5% or above
 Consolidated total return ratio 30% or higher (average over three years)



Notes:

1. UBE conducted a consolidation of shares by consolidating every 10 shares into one share effective October 1, 2017. The dividend per share for FY2016 has been converted based on the shares after the share consolidation.
2. The Company implemented share repurchase programs of ¥5 billion in FY2016 and ¥10 billion in FY2018 and FY2020.

VI Reference

Long-Term Vision: 2030

Addressing Global Environmental Issues

GHG emission reduction target:

50% reduction compared to FY2013

Target percentage of consolidated net sales comprising environmentally friendly products and technologies:

60% or more

Medium-term Management Plan: FY2024

Numerical Targets

Key Figures

Operating profit ¥40 billion
(Of which, specialty business: ¥24 billion)

Ordinary profit ¥47 billion

Key Indicators

ROS 8%

ROE 8%

Shareholder Returns

DOE 2.5% or above

Consolidated total return ratio 30% or higher*¹

Goals for Equal Workplace Opportunities for Women*²

Percentage of women in the workforce 15%

Percentage of women in management positions 6%

*1. Average over three years

*2. On a consolidated basis in Japan



The forecasts contained in this presentation are based on certain assumptions judged to be reasonable by the Company when preparing this report. Actual results can vary significantly from forecasts, due to changes in a wide range of conditions. These conditions can include the economic status of major markets, demand and supply of products, prices for raw materials and fuel, interest and foreign exchange rates, and other prevailing conditions that can impact the business results of the Company.

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