

# Mitsubishi Chemical Group Investor Day 2023

February 24, 2023



# What you will hear today

- We have achieved solid progress with our Forging the future strategy
- We have an executable plan to continue our transformation journey
- We will deliver 700 oku yen EBITDA growth through innovation focused on market needs
- We will deliver 1,350 oku yen cost improvements, a majority by FY2023
- We will exit petrochemicals and carbon products, and we are making progress
- We will become more digital, leaner and empowered organization
- We will invest for the future and improve the balance sheet and returns to shareholders
- AND we will pursue KAITEKI, the well-being of people and the planet



## The New Mitsubishi Chemical Group (MCG)



## Forging the future update



## Business growth plans



## Our vision for the future

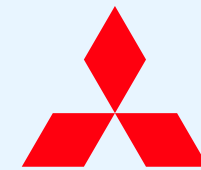
Driving the  
**Forging the future  
transformation**  
resiliently despite current  
economic headwinds

# The New MCG



## Purpose – Our north star –

We lead with innovative solutions  
to achieve KAITEKI,  
the well-being of people and the planet

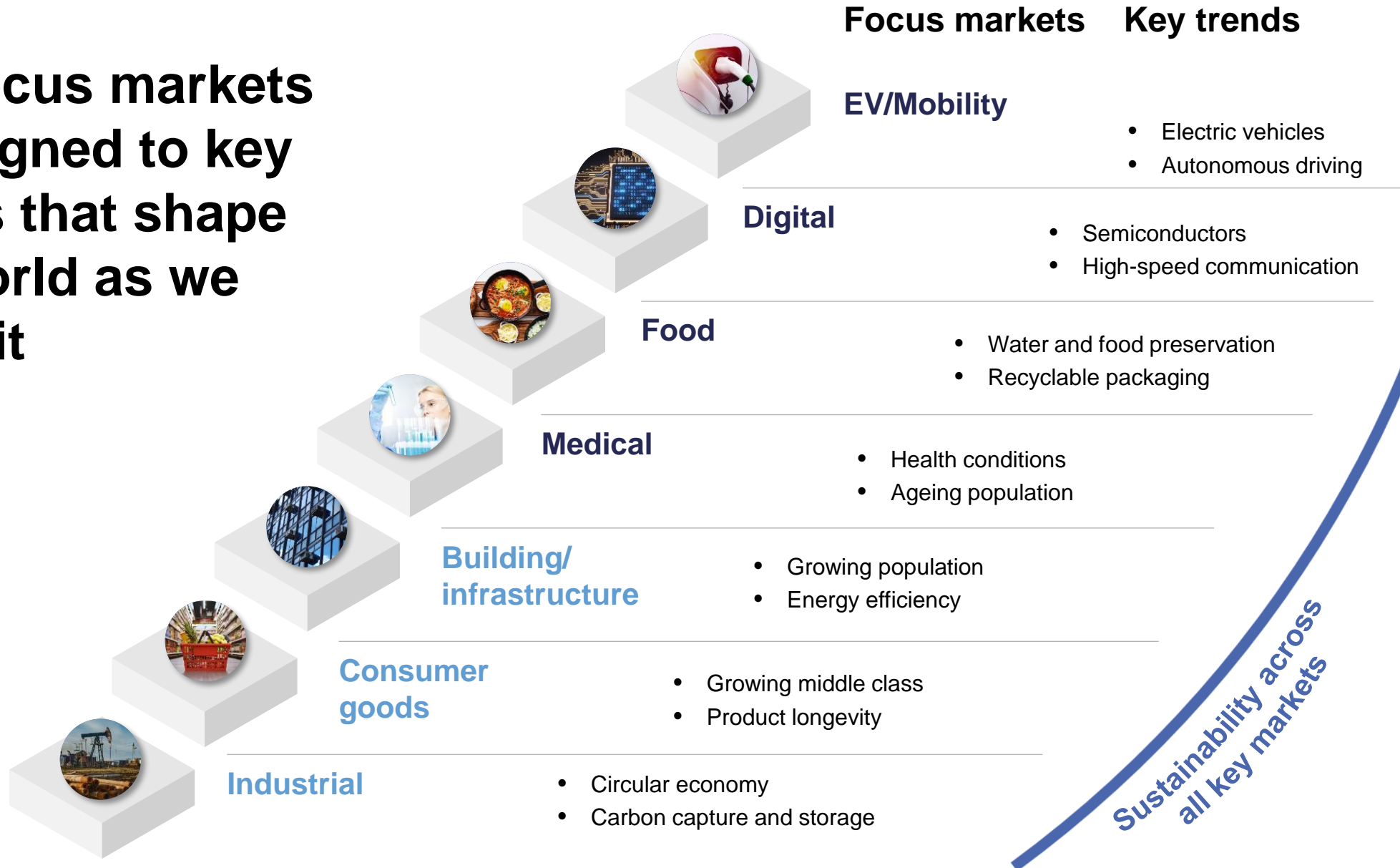


mitsubishi  
chemical  
group

Science.  
Value.  
Life.

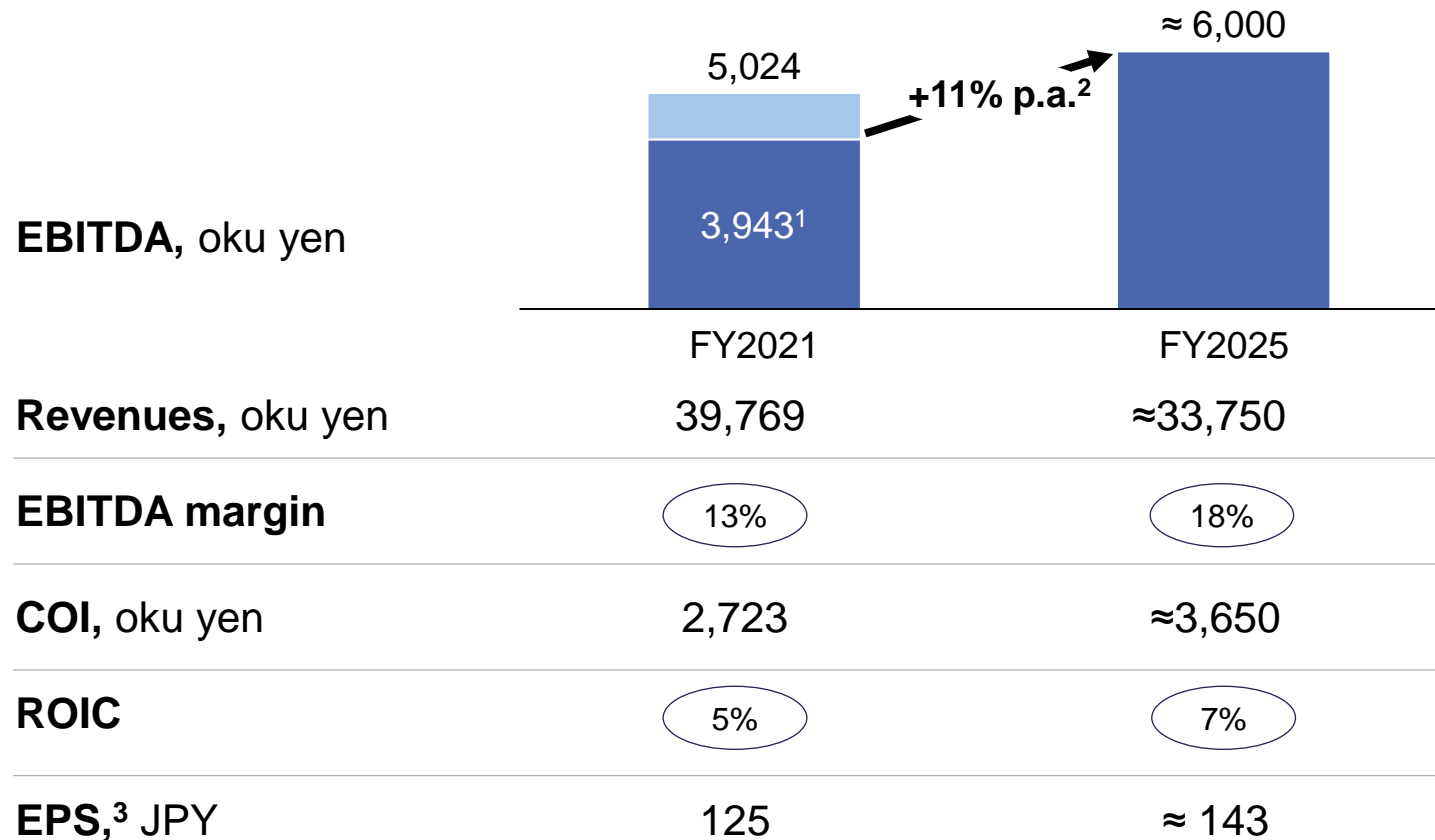
We deliver Value to our people, society, and  
shareholders enabled by Science, and  
contribute to Life

# Our focus markets are aligned to key trends that shape the world as we know it



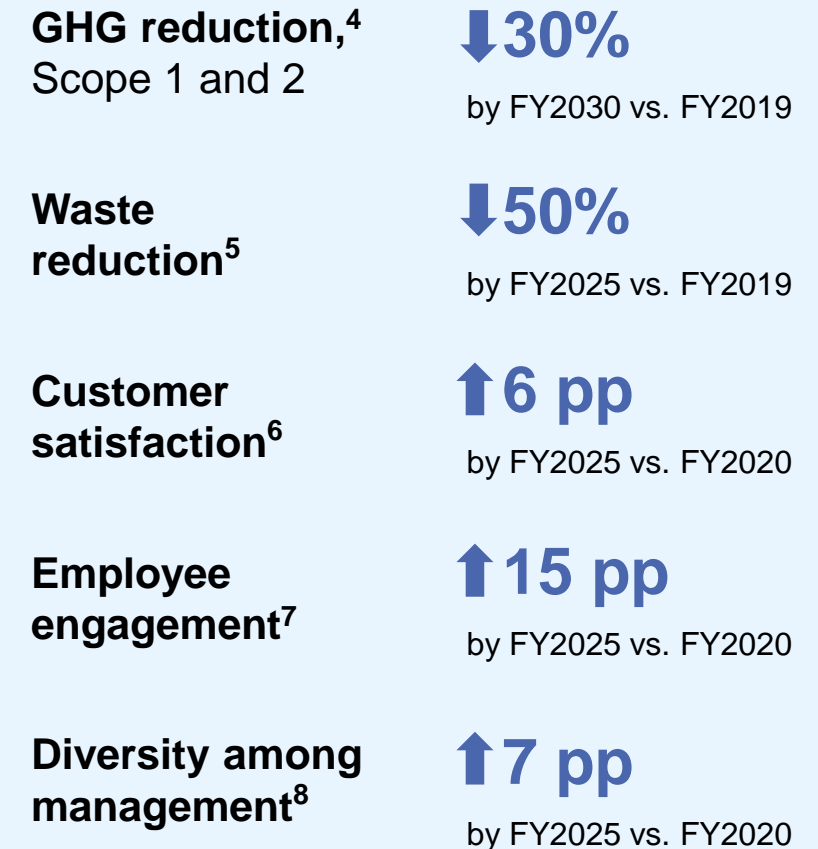
# We remain committed to our transformative Forging the future targets

## Financial targets



1. FY2021 EBITDA excluding Petrochemicals & Carbon Products
2. Organic EBITDA growth excluding Petrochemicals & Carbon Products
3. Basic EPS

## Non-financial targets



4. Estimated based on MCG's 29% reduction target incl. petrochemicals and carbon products, 5. Reduction of land fill waste by FY2025, 6. Level of customer satisfaction based on annual customer survey, 7. Percentage of favorable responses to set items in the employee awareness survey, 8. Percentage of managerial staff with a diversity attribute. Target 40%  
Please note: pp = percentage points



# Forging the future update





# Our Forging the future strategy aims at creating value across 5 key pillars



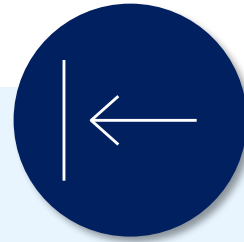
## Growth, performance, sustainability

Shift to global profitable markets  
Focus on selected end applications  
Become a sustainability leader



## Strategic cost transformation

Focus on Health Care restructuring, operational excellence and supply chain optimization, as well as procurement



## Business to exit

Exit the petrochemicals and carbon products business



## Leaner, digital, empowered<sup>1</sup>

Shift to a leaner, digital, and empowered organization and workforce



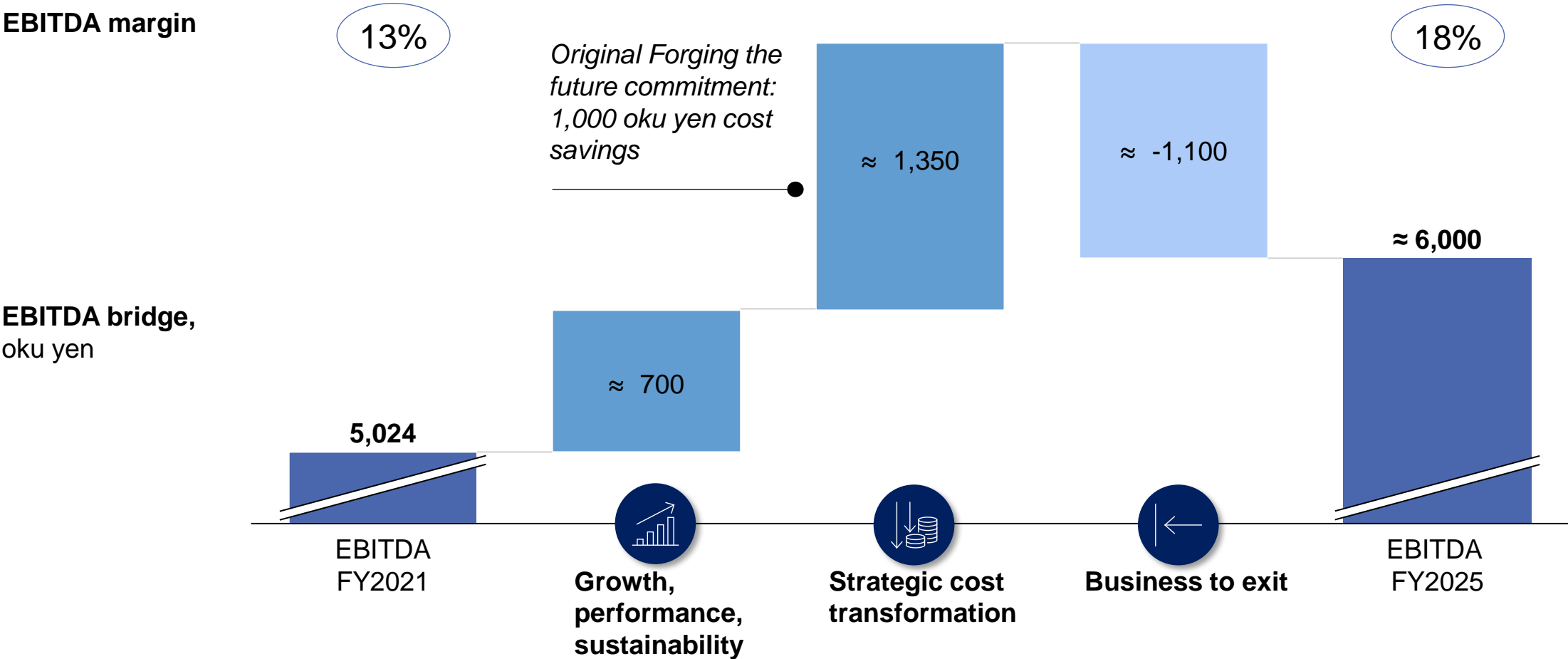
## Strategic capital allocation

Fuel organic growth  
Improve balance sheet for funding future growth

# Three primary pillars will drive EBITDA margin from 13% to 18%



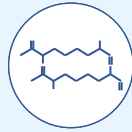
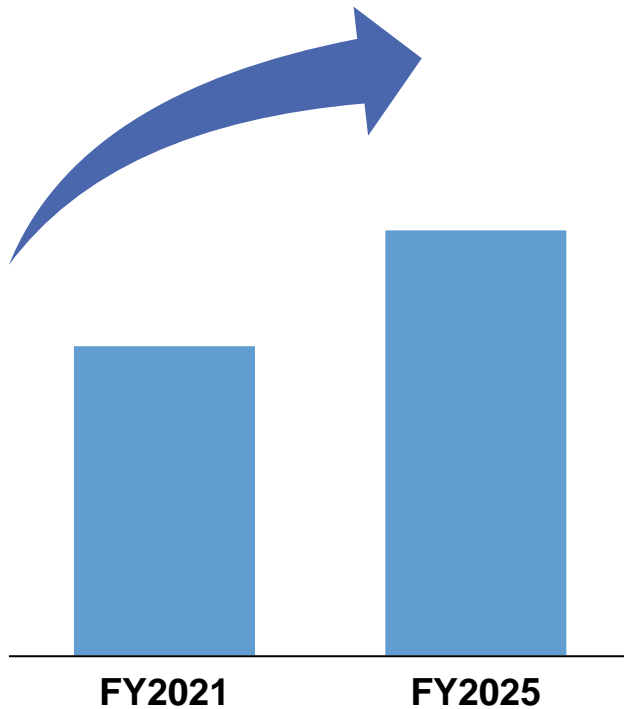
## Incremental FY2021-FY2025 EBITDA effect





# Our business growth and performance key drivers

Approximately 700 oku yen EBITDA increase from “growth, performance, sustainability” pillar



## Performance Products

- Make entire portfolio available globally
- Shift to market-oriented organization



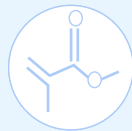
## Industrial Gases

- Grow 4 global regions
- Reinforce and develop capabilities



## Health Care

- Maximize value of priority products in Japan and the US
- Strengthen partnering and establish new sales/development alliances



## MMA

- Build on global #1 position
- Expand alpha technology



# We will grow supported by sustainability trends while becoming more sustainable in our operations

## Emission reduction

**-30%**

reduction in scope 1 and 2 emissions by FY2030<sup>1</sup>

## Sustainability-related products<sup>3</sup>

**20%** of revenue by FY2025

## Net zero

by 2050

## Waste and water management

**-50%**

rate of reduction of landfill waste by FY2025<sup>2</sup>

- 1 VS. FY2019 estimated based on MCG's 29% reduction target incl. Petrochemicals & Carbon Products
- 2 VS. FY2019
3. Products that improve sustainability themes, particularly those of climate change, circular economy, food supply and water conservation



# Innovation underpins MCG's growth performance and sustainability

## New guiding principles

### End-market focus

- Develop Integrated Innovation Strategies with optimal balance of internal R&D and open innovation in each focus market
- Agile product development process as one team together with end-customers to deliver value on time
- Meet changing demand of markets: Now, tomorrow and the day after tomorrow

### New digital capabilities

- Advanced Analytics and Materials Informatics enabling productivity improvements and shorter lead times for customers

### More efficient process

- Seamless transition between long-term research platforms and late-stage product development in collaboration with business
- Aggressive leverage of open innovation: Universities, venture investments, and corporate partnerships across the world

### New business fields

- Establish basis for the next generation of high-profit, high-growth business clusters to enable long-term growth

## Simplified roadmap for EV/Mobility → Battery → Electrolyte



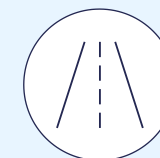
### Now

Unique additives to improve capacity and efficiency of liquid electrolytes



### Tomorrow

Transition to gel electrolytes to balance capacity and safety



### Day after tomorrow

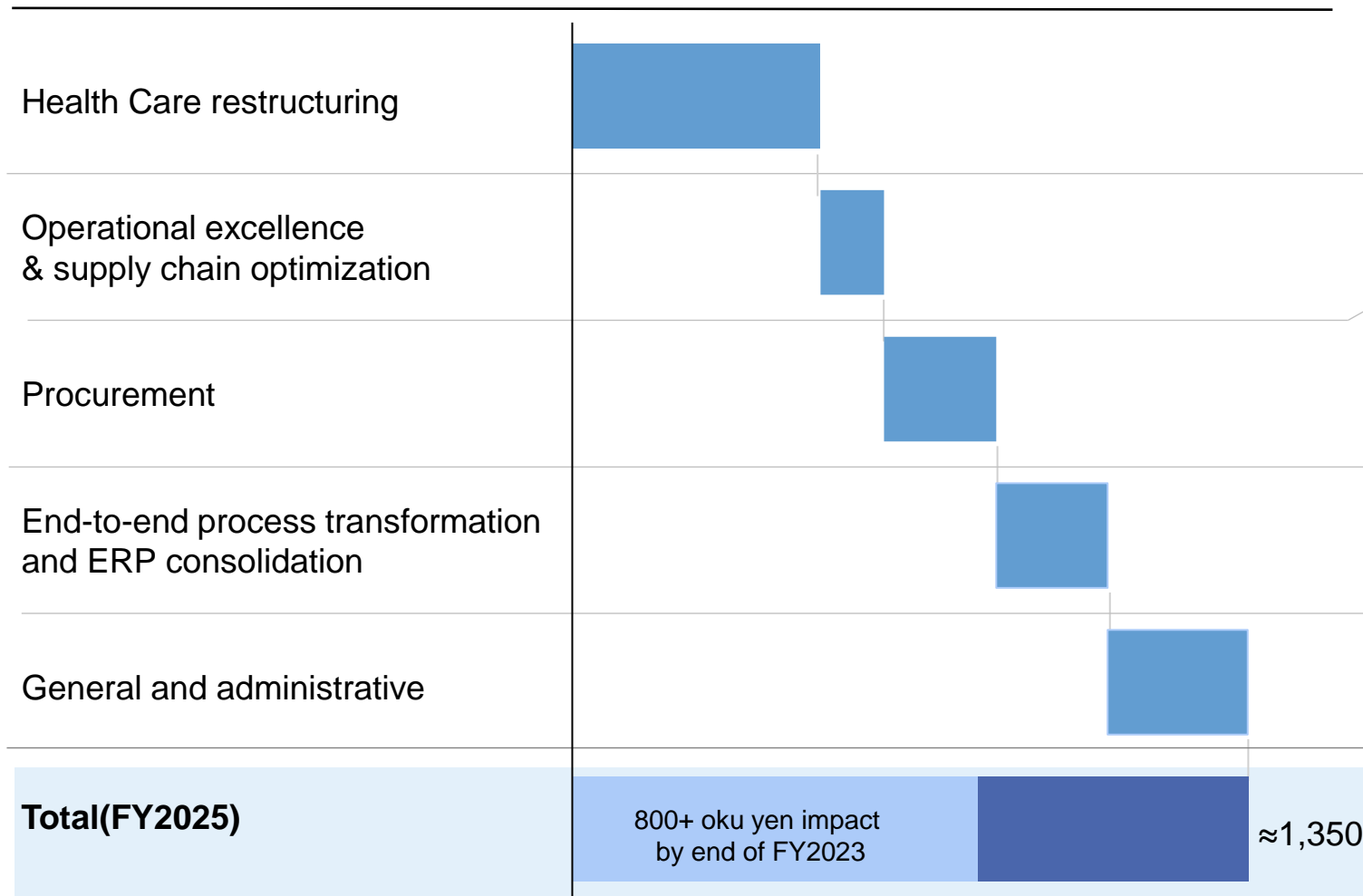
Novel solid electrolytes for higher energy density





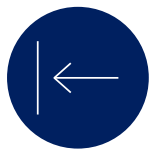
# Cost transformation will exceed original target and achieve a majority by FY2023

## Value creation target FY2025, oku yen



## Key FY2023 actions delivering combined FY2022 and FY2023 savings of 800+ oku yen

- Closure of Medicago and other selected site restructuring
- Rightsized R&D efforts
- Closure of high-cost manufacturing plants
- Procurement: consolidation of indirect supplier base incl. travel mgmt., lease cars, analytics/IT tools, global insurance program, marketing and sales agencies
- End-to-end process: indirect labor optimization
- General and North America organization restructuring
- Office consolidation: downsizing and relocation of offices



# We are committed and making progress to exit the businesses that do not match our growth and sustainability expectations

## Exit timeline for our petrochemicals and carbon products businesses

FY2021

**Strategy**



### Petrochemicals

Form JV with partner,  
drive improvements  
and carve-out

FY2022

**Detailed planning**



Financial carve-out and  
stand-alone reporting  
Exploration of partners

FY2023

**Carve-out**



Identification of  
potential JV partners  
Financial carve-out

FY2024

**JV/Exit**



### Carbon Products

Divest



Exploration of partners  
Active discussions with  
potential partners

Preparation and  
execution of exit

### JV value enhancing benefits

Quick & focused decision making

Synergies to improve cost structure and margin expansion

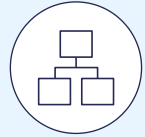
Business portfolio and asset evaluation & optimization

Growth based on new technology both for GX and circular economy

Increased value & healthy position to monetize exit



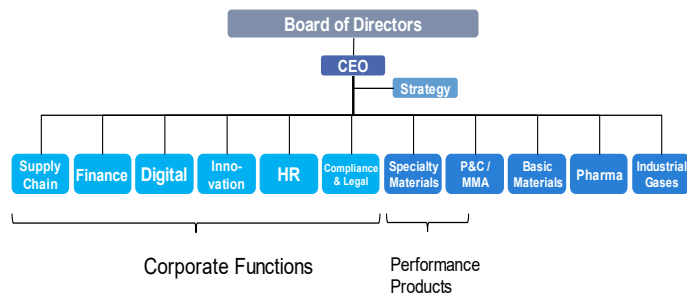
# MCG has set itself a LEANER organizational structure



## New management and governance

- Shift from holding company to corporate structure
- Faster decision making
- New management team

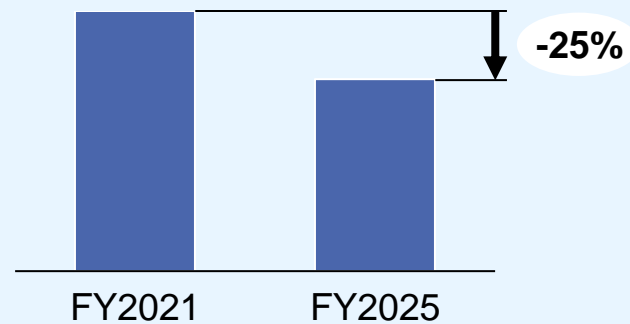
### Final organizational structure<sup>1</sup>



## Entities and location optimization

- Downsizing and optimization of offices globally
- Closing and consolidation of locations

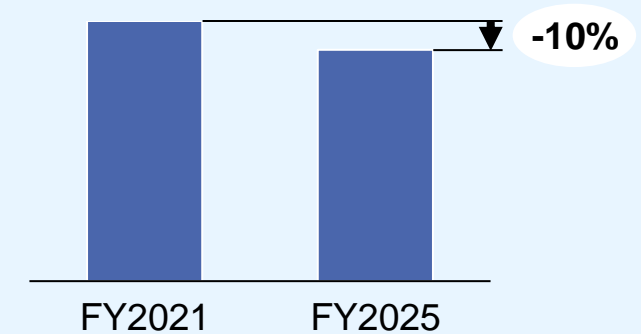
### Number of legal entities<sup>2</sup>



## Simplifying the organization

- Natural attrition and programs
- Redeployment and reskilling of existing employees

### Headcount

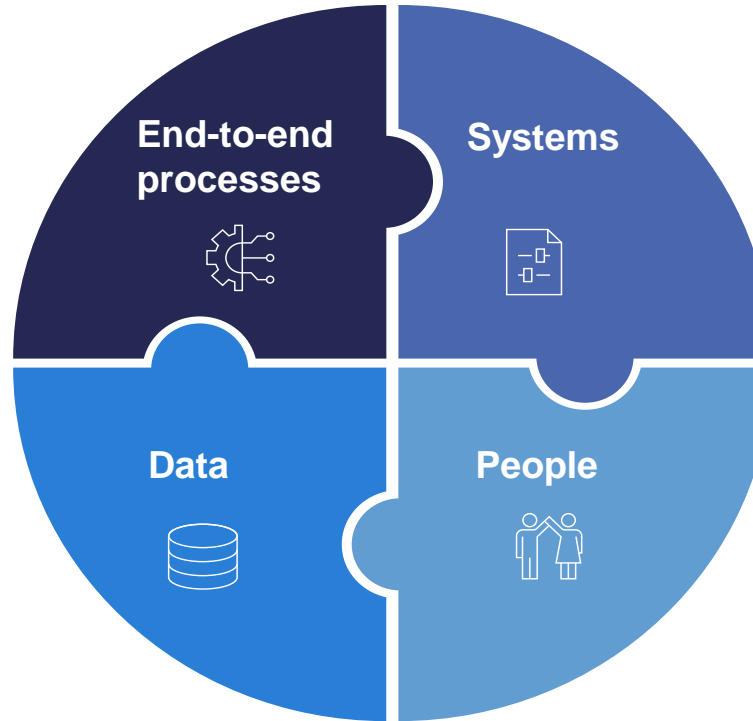




# MCG will become more DIGITAL including technology, data, and digital business models

Complexity of processes currently significantly exceeds industry benchmark

- Automated End-to-end global processes: 90% standardized, 10% differentiated for competitive advantage
- Centralized data governance & data quality standards
- Agile data availability for fast, fact-based decision making



- Future-ready architecture leveraging industry standards
- Consolidation of ERP systems as a backbone for all operations
- Trained and accredited employees
- Global knowledge sharing

## Key items currently in process

Global ERP consolidation & renewal, Global HR System implementation, Procurement, CRM



# We will EMPOWER our employees for this journey

## Our cultural transformation

### Empowered workforce



- Develop next generation of leaders
- Nurture talent for transformation
- Visualize one global organization
- Encourage personal development
- Accelerate diversity in leadership
- Promote cultural change and value creation mindset

### Health and safety



- Maintain appropriate operations and safe facilities
- Monitor and prevent human rights violations and high-risk situations

## Our targets<sup>1</sup>

Empowered workforce<sup>2</sup> **65% → 80%**

Diversity among management<sup>3</sup> **33% → 40%**

Lost-time injury frequency rate **1.18 → 0.71**

Wellness awareness<sup>4</sup> **75% → 85%**

1. FY2020 to FY2025 targets

2. Employee engagement, Percentage of favorable responses to set items in the employee awareness survey.

3. Percentage of managerial staff with a diversity attribute.

4. Percentage of favorable responses to set items in the employee awareness survey.



# Business growth plans





# The committed individuals leading the businesses as of April 1, 2023



**Frank Randall Queen**

Executive Vice President,  
Head of Specialty Materials<sup>1</sup>



**Manabu Chikumoto**

Executive Vice President,  
Head of Basic Materials<sup>2</sup>



**Hitoshi Sasaki**

Executive Vice President,  
Head of Polymers & Compounds / MMA



**Toshihiko Hamada**

President, Chief Executive Officer  
Nippon Sanso Holdings



**Akihiro Tsujimura**

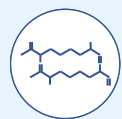
Executive Vice President,  
Head of Pharma

1. Rename “Advanced Solutions” to “Specialty Materials” from April 1, 2023
2. Rename “Petrochemical & Coal business” to “Basic Materials” from April 1, 2023

# Our transformation is governed by a shift towards specialty materials

FY2021 → FY2025

Business  
unit<sup>1</sup>



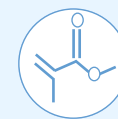
Performance  
Products



Industrial  
Gases



Health Care

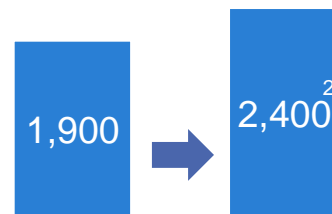
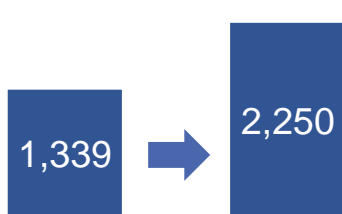


MMA



Petrochemicals &  
Carbon Products

EBITDA,  
oku yen



EBITDA  
margin

12% → 16%

20% → 24%

2% → 15%

17% → 15%

\*Either divested or not a fully consolidated entity in FY2025.  
Profit from JV share in FY2025 is ≈100 oku yen<sup>4</sup>

COI  
margin

7% → 11%

10% → 13%

(2%) → 10%

11% → 11%

ROIC

6% → 10%

4% → >6%

(1%) → 3%

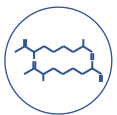
7% → 7%<sup>3</sup>

1. Additional EBITDA from other business units: 107 oku yen in FY2021, ≈250 oku yen in FY2025

2. Midpoint of range as disclosed in Medium-Term Management Plan of Nippon Sanso Holdings rounded up

3. Includes effect of partially complete large investment in US facility, ROIC excl. the investment is 9%

4. Assuming JV COI ≈400 and net income of ≈200 oku yen, 50% ownership



# Performance Products business

## – MCG's engine for profitable growth

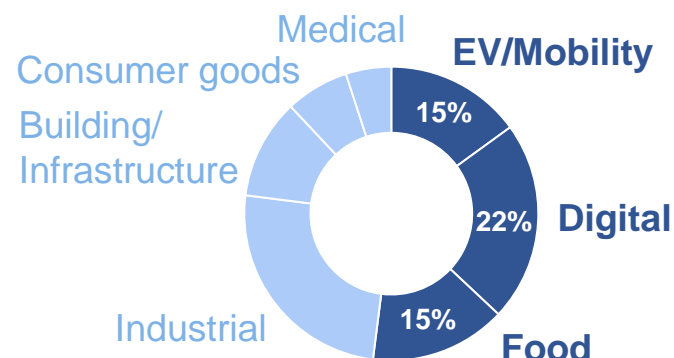
### Strong positioning...

**20%** Global market share of optical polyester film

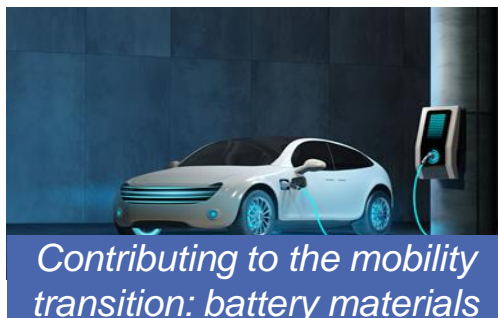
**#1** Supplier of semiconductor cleaning services in Asia and Europe

### ... in growing markets...

EBITDA share by end market, FY2021

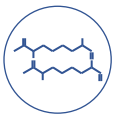


### ... due to capabilities serving key trends



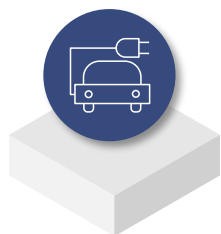
### Strategic focus

- **Move from product-focused to market-oriented organization** confirmed by EV/Mobility pilot in US
- **Grow existing products globally** based on outside-in mapping done by market segment
- **Build sustainable leadership positions** based on existing renewable technologies



# Performance Products – becoming more market oriented

## Key end markets and MCG's products



### EV/Mobility

Market growth<sup>1</sup>:  
>14% p.a.

Projected sales  
growth<sup>2</sup>: 13% p.a.

- Electrolytes
- Fiber reinforced plastics & composites

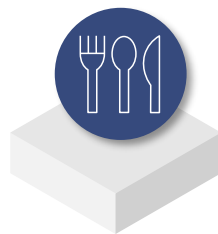


### Digital

Market growth<sup>1</sup>:  
>10% p.a.

Projected sales  
growth<sup>2</sup>: 7-11% p.a.

- Semicon cleaning
- Epoxy resins
- Semicon equipment components



### Food

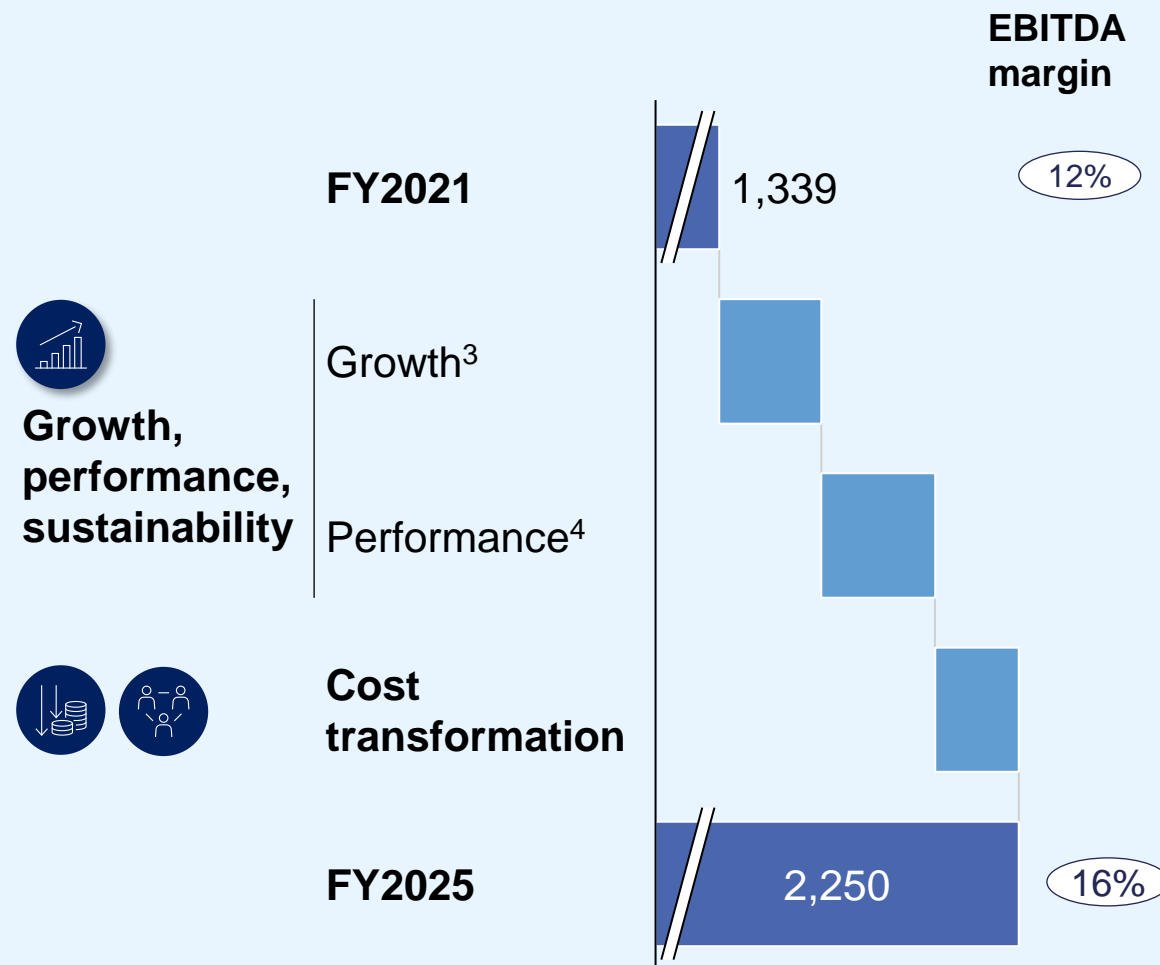
Market growth<sup>1</sup>:  
>7% p.a.

Projected sales  
growth<sup>2</sup>: 7% p.a.

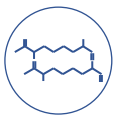
- Emulsifiers
- Packaging films and materials

*Products above account for majority of sales growth*

## EBITDA development, oku yen



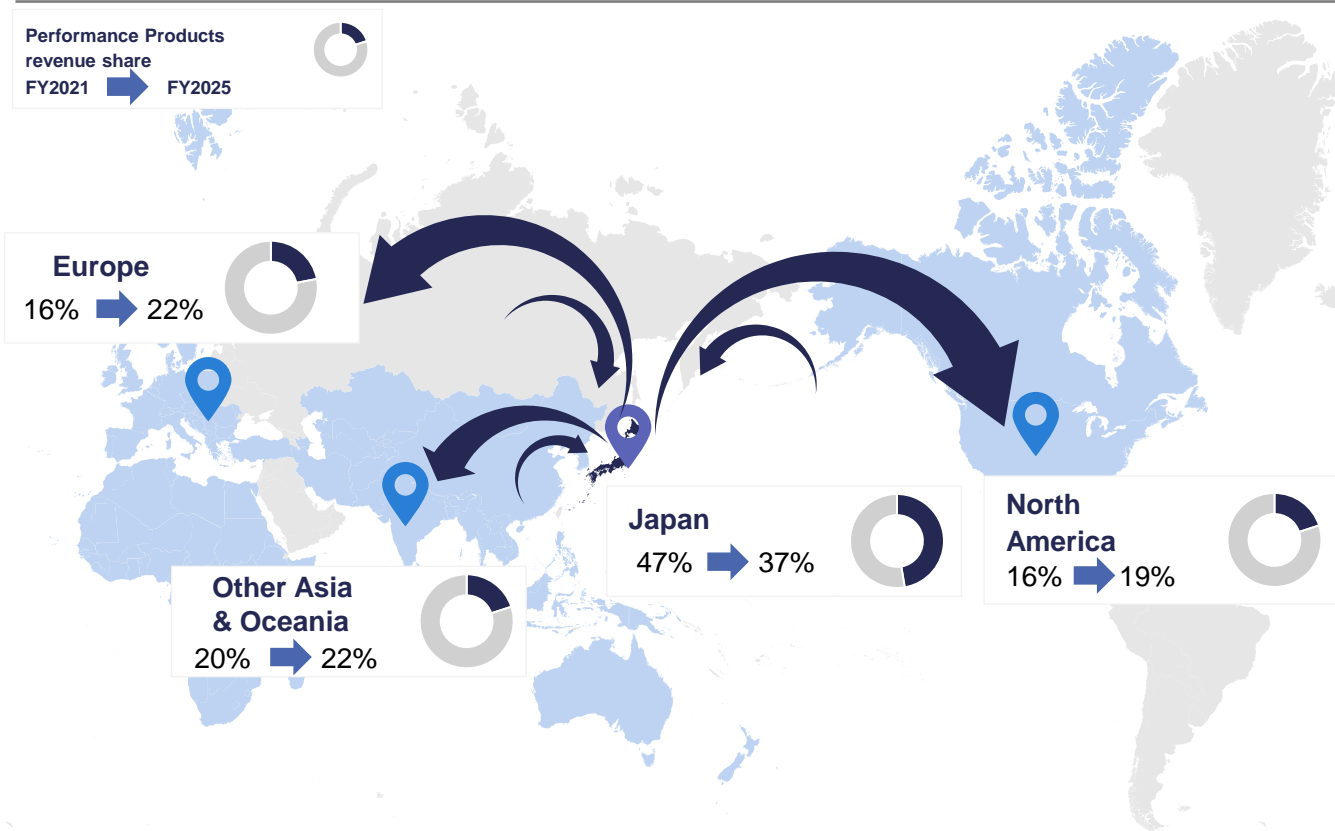




# Performance Products

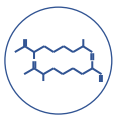
## – making entire portfolio available globally

### We will grow our products globally ...



### ... through the steps we have taken to improve our commercial capabilities

- Regional sales force focused on serving end-markets with all global products
- Customized solutions developed based on respective market needs
- Key account management piloted – “one face to the customer”
- Customer satisfaction measurement and feedback loop piloted, global roll-out in prep
- Enhanced lead and opportunity management process
- Captured quick win cross-sell and up-sell opportunities
- Moved pilot business from cost-up to value-based pricing
- Aligned innovation approach with businesses requirements & timeline



# Performance Products

## – further expanding our sustainability position

### Sustainable brands (selective)

Brand	Chemistry	Type		
		Biobased- route	Bio degradable	Recyclable
BioPBS™	Polybutylene succinate			
DURABIO™	Isosorbide-based polycarbonate			
SoarnoL™	EVOH <sup>1</sup>			
Nichigo G-Polymer™	BVOH <sup>1</sup>			
GOHSENOL™	PVOH <sup>1</sup>			

### DURABIO™ – a truly innovative bio-based engineering plastic



**8,000 t/y**  
production  
capacity

- **Bio-based engineering plastic that combines the advantageous properties of polycarbonate and those of PMMA**
- **Designed for applications requiring exceptional durable transparency and visual appearance**

### Exemplary case: DURABIO™ for green mobility interior

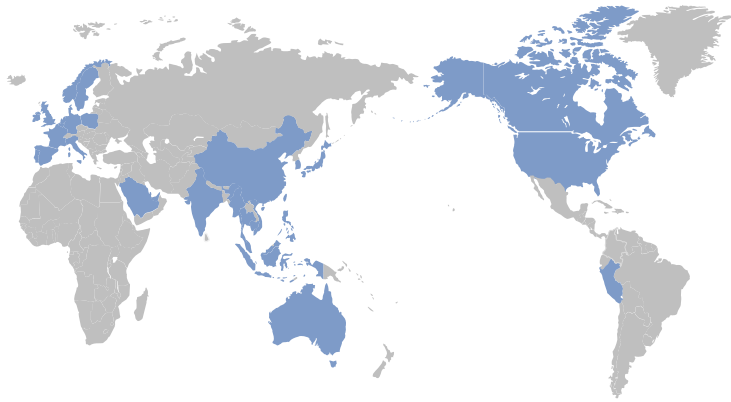
**DURABIO™ used for the rear heater control panel of new model fuel cell electric vehicle "MIRAI," sold by Toyota Motor Corporation**



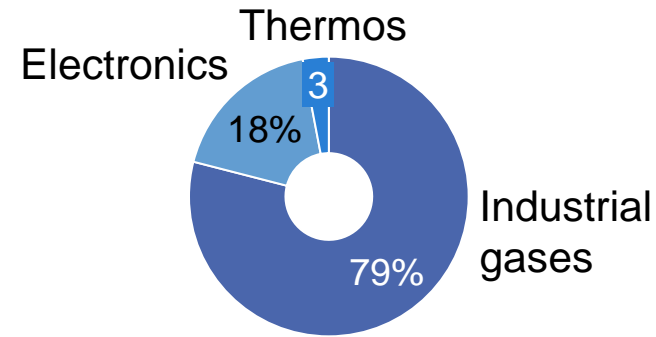


# Industrial Gases business – strong profit contributor

Nippon Sanso Holdings is the #4 global gas player...



Focus regions



Revenue by business, FY2021

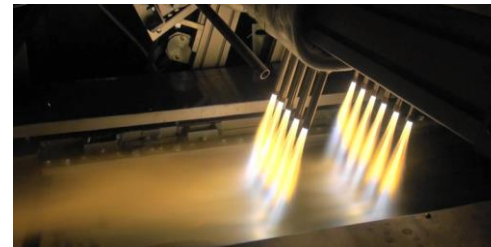
... with applications for high-growth market



ASUs for nitrogen in the semiconductor industry



HyCO plants for hydrogen



Combustion burner that contributes to reducing CO2 emissions



## Strategic focus

- **Grow 4 global regions** (Japan, US, Europe, Asia and Oceania)
- **Reinforce and develop** the Group's comprehensive **capabilities**
- Actively explore opportunities to gain more **synergies between MCG and Nippon Sanso HD**



# Health Care business –spearheaded by pharma business

We are specialized in Health Care solutions and supported by key trends ...



Ageing  
population



Need for  
new  
treatments



Increasing  
regulatory  
requirements

... with capabilities in key techniques and applications



*AI-powered drug discovery*



*Precision medicine and  
around the pill solutions*



*Real-world data enabling  
deeper understanding of ALS*




















## Strategic focus

- **Advance precision medicine** through the upgraded R&D processes
- Focus innovation development on rare diseases and **continue to invest in a new pipeline**
- **Leverage partnerships** for development and sales

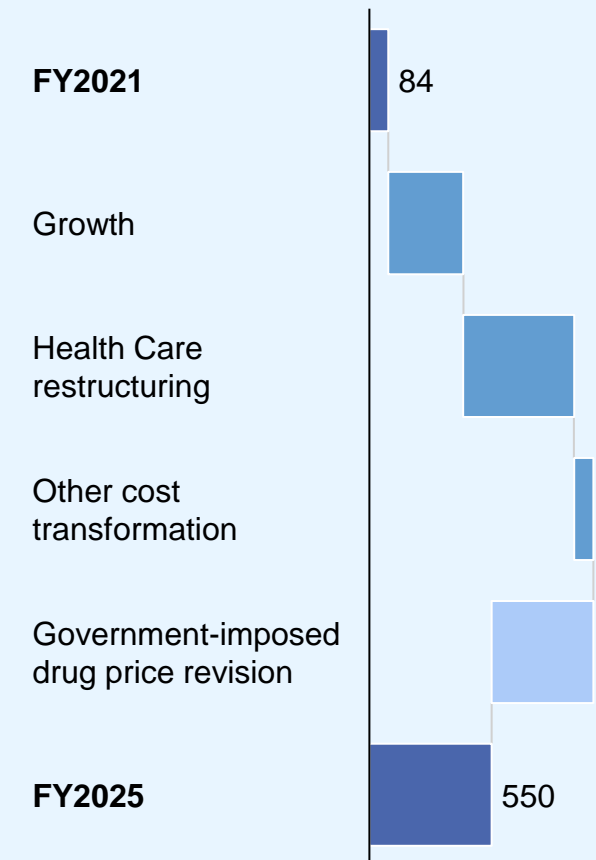


# Health Care – focusing on three core areas and restructuring the business

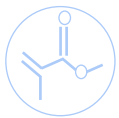
## Focus on precision medicine and addressing patients with unmet needs

				
	<b>Central nervous system</b>	<b>Immuno-inflammation</b>	<b>Diabetes and kidney</b>	<b>Oncology</b>
<b>Focus</b>	 Development  Sales	 Development 		
<b>Targeted indications</b>	ALS Tardive Dyskinesia	Inflammatory bowel disease Erythropoietic protoporphyria	Type 2 diabetes Chronic Kidney Disease associated with Type 2 Diabetes Mellitus	Oncology for rare diseases
<b>Key markets</b>	 	 		 
<b>MCG's key growth products</b>	Radicava Dysval	Stelara MT-7117	Mounjaro Canaglu	MT-2111

## EBITDA development, oku yen







# MMA business

## – cost-advantaged technology leader

Strong technical capabilities in MMA ...

**#1** cost-advantaged  
technology leader

**#1** player by capacity

**#1** share in merchant market



... and growing market based on key end applications



*"Queen of plastics" used in,  
e.g., cars, building materials*



*Application in displays*

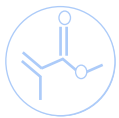


*Usage in coatings*



### Strategic focus

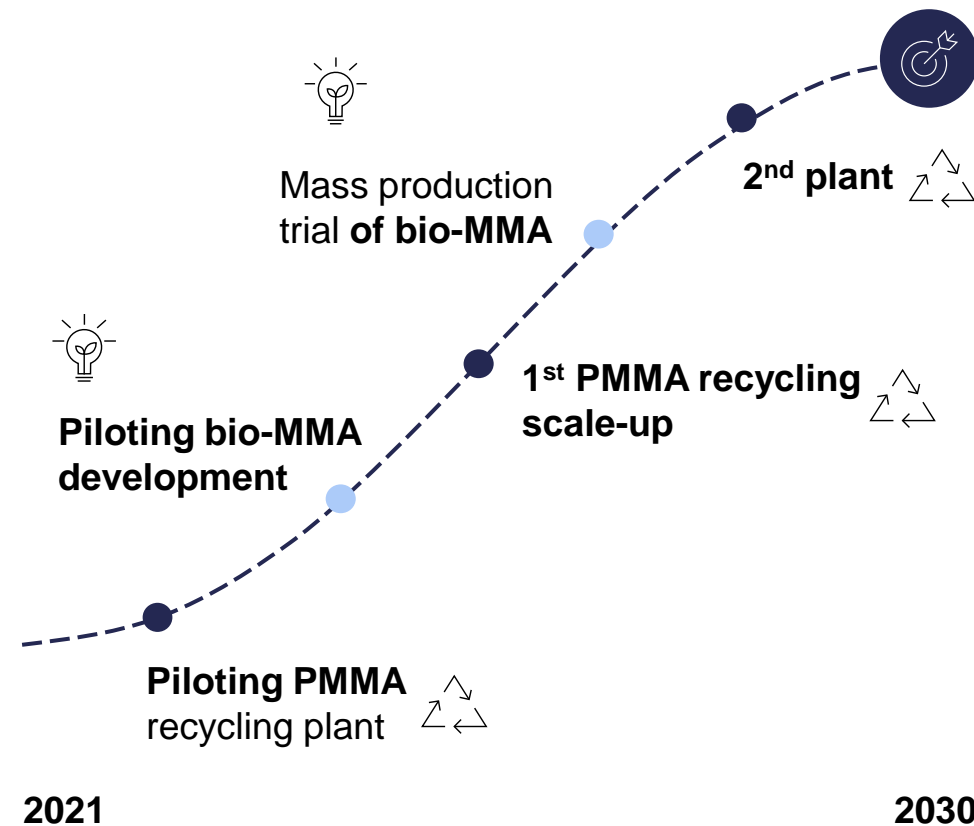
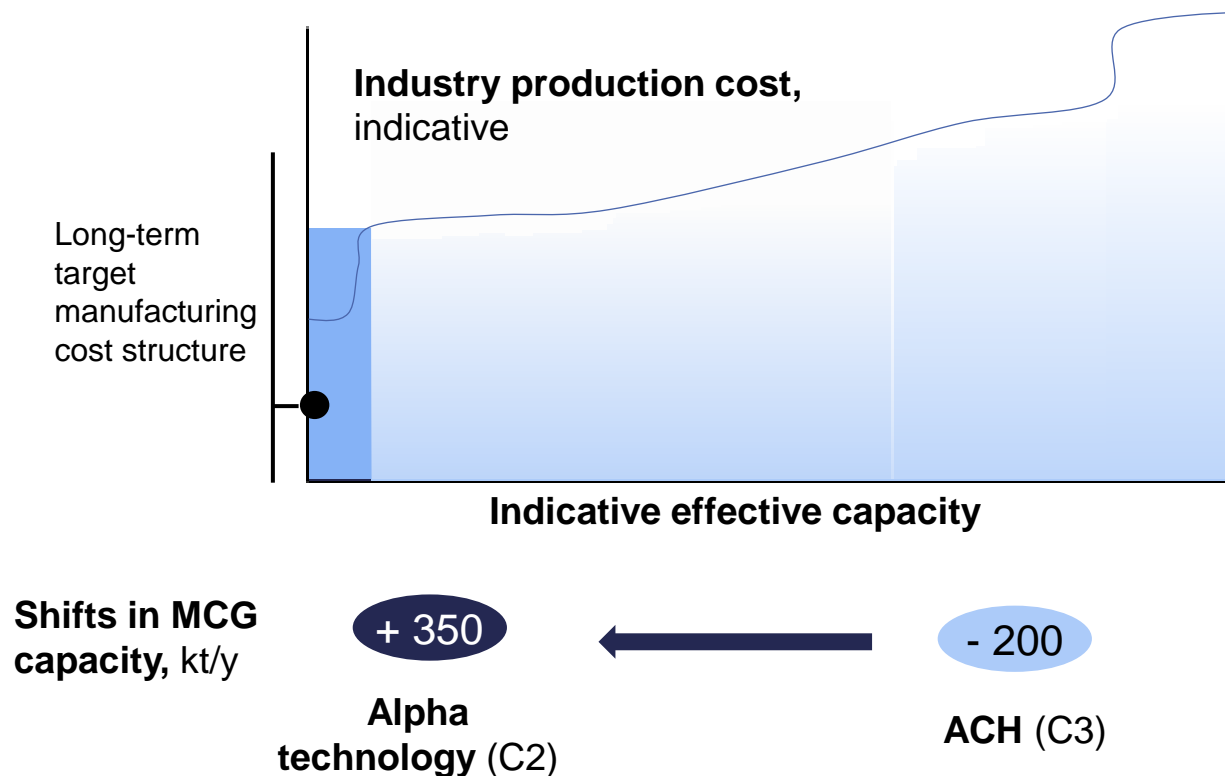
- **Increase productivity**, improve raw material access, and leverage best technology through new footprint
- **Benefit from lower demand volatility** in the US
- **Strengthen sustainability focus** based on existing PMMA recycling and bio-MMA



# MMA – capacity shift towards lower-cost alpha technology and expanding the sustainable MMA portfolio

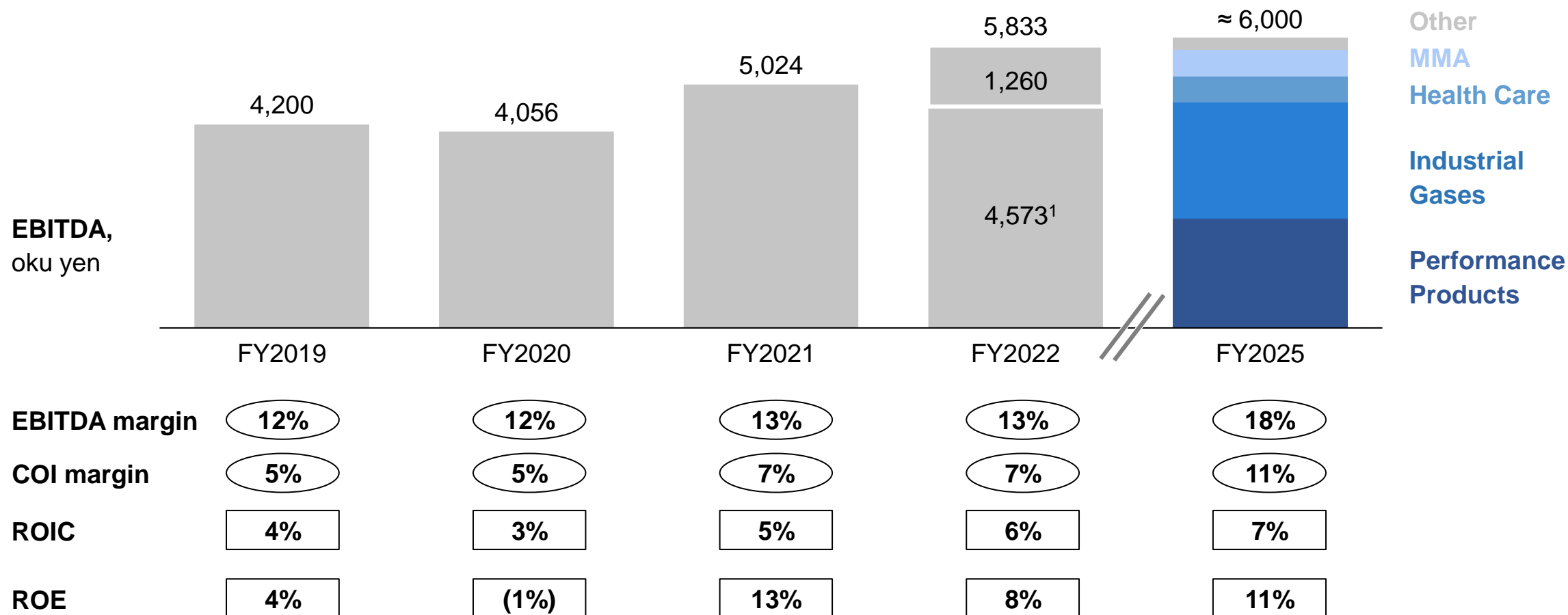
**MCG is the #1 player in MMA leveraging the alpha technology and global footprint ...**

**... and will further strengthen its sustainability offering**



# Performances of the businesses will deliver a strong financial position in FY2025

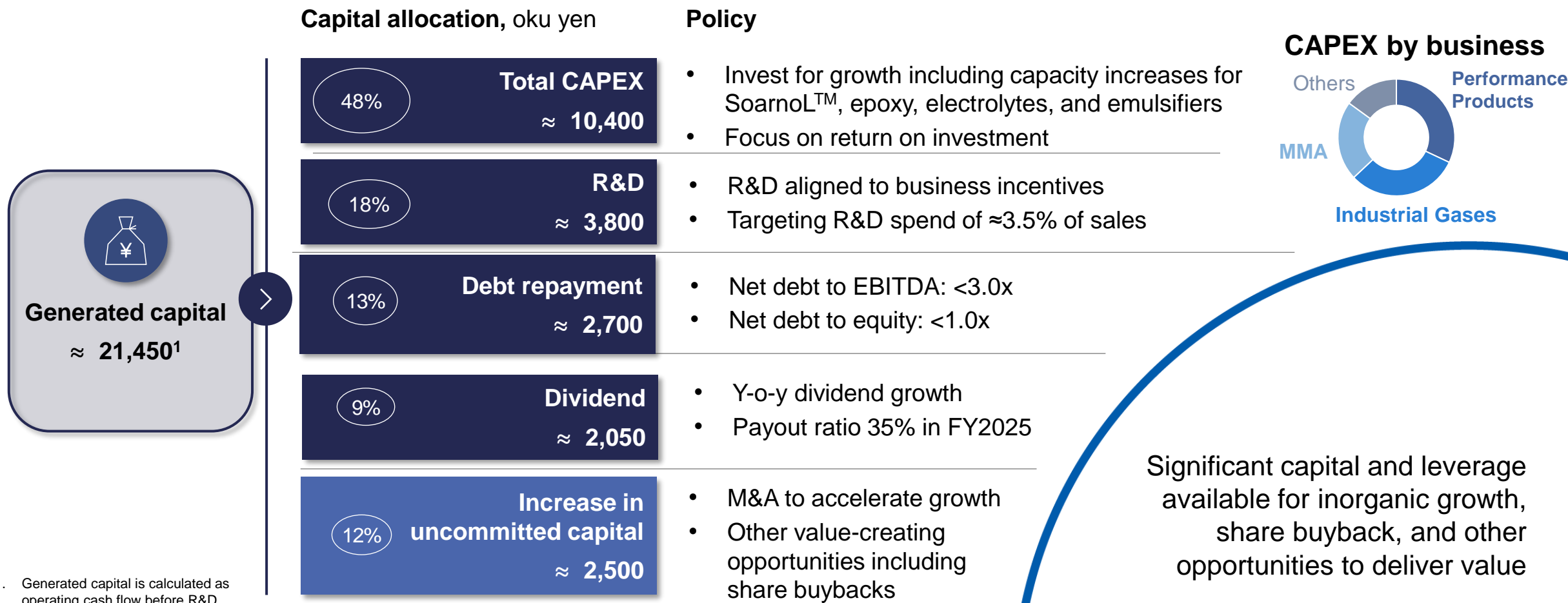
## Evolution of key financials





# The generated capital will fund organic growth, increase shareholder return, and provide a healthier balance sheet

For periods FY2023-FY2025



1. Generated capital is calculated as operating cash flow before R&D plus proceeds from divestments









# Our vision for the future



**“A leading specialty materials group that delivers innovative solutions globally, bringing superior value to our customers, shareholders, and society”**



# Forging the future will be a transformative journey and pave the way to win beyond 2025

Phase 1: Planned		Phase 2: Executed	Phase 3: Accelerate	Phase 4
5 initiatives	FY2021-FY2022	FY2023-FY2025	Beyond FY2025	
 <b>Growth, performance, sustainability</b>	Pathway to more focused portfolio defined	Focused markets, global expansion and commercialization excellence	<b>Positioned to capture transformational impact</b>  	
 <b>Strategic cost transformation</b>	Cost reduction for FY2022 on track, further actions taken	Procurement, Operational excellence, G&A improvement		
 <b>Business to exit</b>	A few divestitures, financial carve-out of Petrochemicals	Carbon Products sale, Petrochemicals JV established		
 <b>Leaner, digital, empowered</b>	Reduced complexity in structure, cultural transformation underway	Global, digital End-to-end processes, fewer locations, diverse & inclusive workspace		
 <b>Strategic capital allocation</b>	Improved net debt/equity	Capital allocation supporting growth, dividends and a healthier balance sheet		

# Major highlights from today's presentation

- We have achieved solid progress with our Forging the future strategy
- We have an executable plan to continue our transformation journey
- We will deliver 700 oku yen EBITDA growth through innovation focused on market needs
- We will deliver 1,350 oku yen cost improvements, a majority by FY2023
- We will exit petrochemicals and carbon products, and we are making progress
- We will become more digital, leaner and empowered organization
- We will invest for the future and improve the balance sheet and returns to shareholders
- AND we will pursue KAITEKI, the well-being of people and the planet

# Q&A

We are happy to answer your questions



**Jean-Marc Gilson**

President,  
Chief Executive Officer



**Yuko Nakahira**

Executive Vice President,  
Chief Financial Officer

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