

# The 4<sup>th</sup> Medium-term Business Plan (2022-2024)

---

**Driving Sustainable Management**

February 7, 2022  
KH Neochem Co., Ltd.

# Contents

1

VISION2030

2

Review of the 3<sup>rd</sup> Medium-term Business Plan

3

## The 4<sup>th</sup> Medium-term Business Plan

▶ Recognition of the Business Environment

▶ Basic Policy and Basic Strategy

**Strategy I** ▶ Further Growth in the Strategic Domains

**Strategy II** ▶ Medium and Long Term Initiatives to Resolve Social Issues

**Strategy III** ▶ Improvement of business framework

▶ Investment Plan

▶ Financial and Capital Strategy

▶ Numerical Management Targets

# A Leading Global Specialty Chemical Company

## Ambitions

- 1 Providing specialty chemicals that contribute to the reduction of global warming and to a better quality of life
- 2 Expansion of products with the largest global share and new businesses in three strategic domains
- 3 Top-class profitability in the chemical industry (Operating income margin of 15%)

2030 CY  
 Net Sales 180 bn yen  
 Operating Income over 25 bn yen

2018 CY  
 Net Sales 101.2 bn yen  
 Operating Income 10.9 bn yen

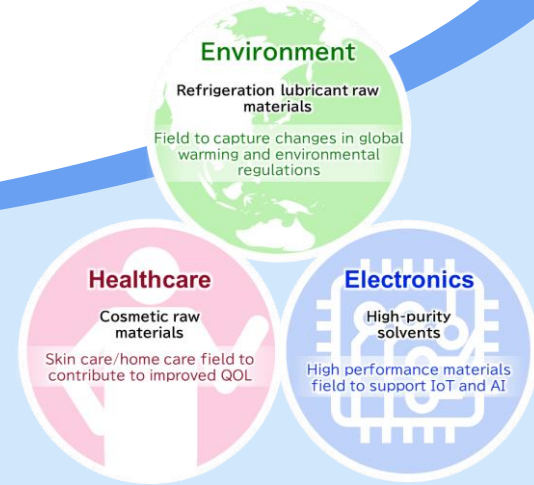
Taking on  
 New Challenges



2019

2022

2030



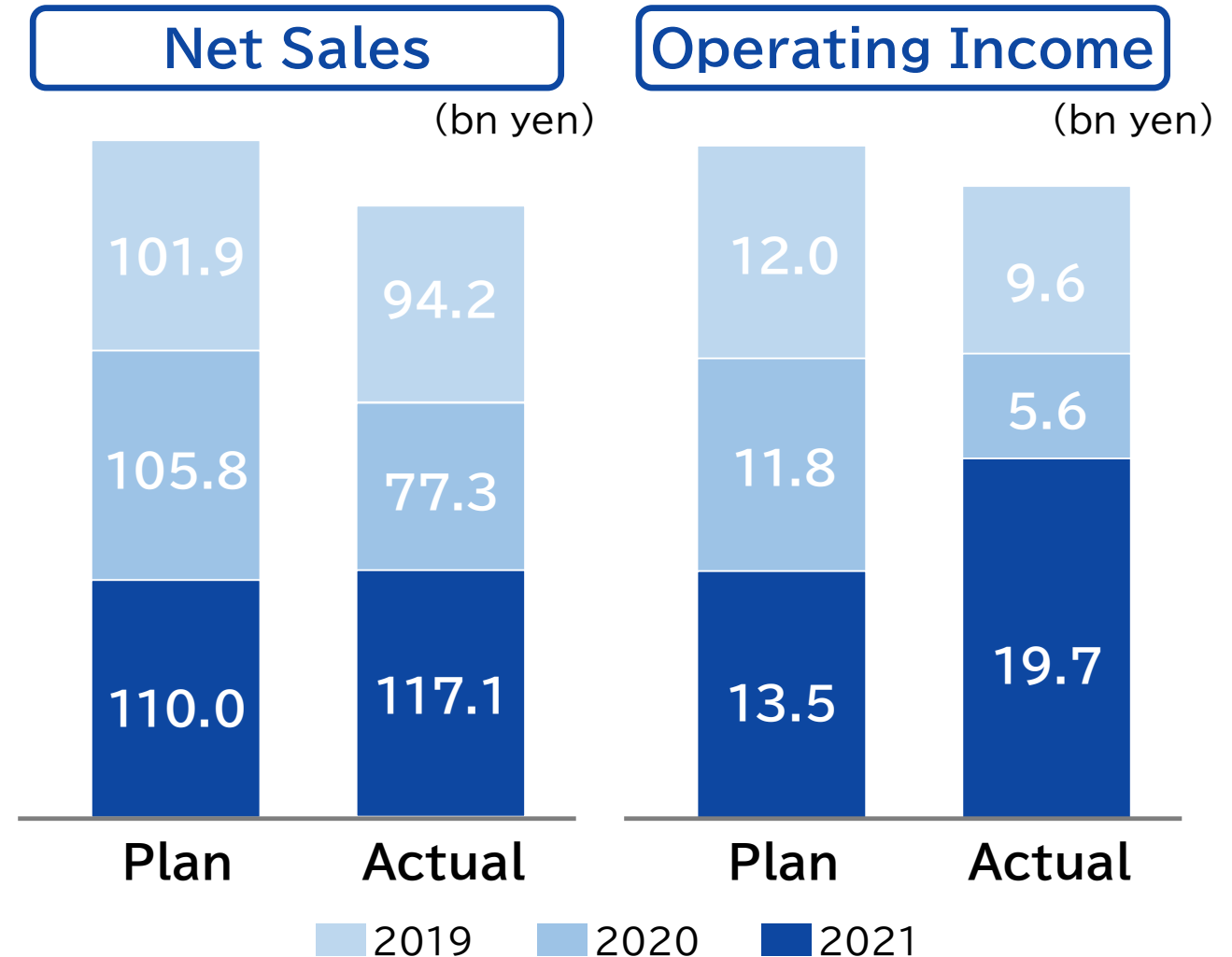
**Environment**  
 Refrigeration lubricant raw materials  
 Field to capture changes in global warming and environmental regulations

**Healthcare**  
 Cosmetic raw materials  
 Skin care/home care field to contribute to improved QOL

**Electronics**  
 High-purity solvents  
 High performance materials field to support IoT and AI

The Group achieved the management targets for the final year of the 3<sup>rd</sup> MTBP with the highest earnings in the past even under the COVID-19 crisis.

	FY2021	
	(Plan)	(Actual)
Net Sales	110.0 bn yen	<b>117.1</b> bn yen
Operating income	13.5 bn yen	<b>19.7</b> bn yen
Return on Equity	18%	<b>28%</b>
Equity ratio	47%	<b>45%</b>



## Despite drastic changes of the business environment, we successfully executed our Basic Strategy for the growth in the medium and long term

	Strategy I Profit Increase by New Facilities	Strategy II Active Investment for the Expansion of Performance Chemical Business	Strategy III Improvement of business framework
Medium-term plan strategy	<ul style="list-style-type: none"> <li>Start up new facilities for refrigeration lubricant raw materials and marketing of new products</li> <li>Operate new facilities for the next generation semiconductor materials</li> </ul>	<ul style="list-style-type: none"> <li>Further increase in production capacity for performance chemicals</li> <li>Create new business through the new research hub</li> </ul>	<ul style="list-style-type: none"> <li>Further introduce facility control system with latest technologies (AI and IoT)</li> <li>Improve work environment and encourage diverse work styles</li> </ul>
Major achievements	<ul style="list-style-type: none"> <li>Started operating new facilities for refrigeration lubricants raw materials and manufacturing new products</li> <li>Started operating equipment for next-generation semiconductor materials</li> </ul>	<ul style="list-style-type: none"> <li>Decided to increase the production capacity of the entire Chiba Plant, mainly for refrigeration lubricants raw materials</li> <li>Started up new research hub (KH i-Lab) and accelerated activities to create new business through open innovation</li> </ul>	<ul style="list-style-type: none"> <li>Introduced advanced plant control systems as planned</li> <li>Introduced new personnel system for managers (specified employment)</li> <li>Formulated and implemented the Business Continuity Plan (BCP) and issued an integrated report</li> </ul>



---

# The 4<sup>th</sup> Medium-term Business Plan

**Driving Sustainable Management**

---

### As the recovery from the COVID-19 crisis, economic growth expands but volatility and uncertainty still increase

- Demand remained firm as the global economy recovering from the COVID-19 crisis
- Impacts of prolonged inflation of the US economy and slowdown risks of the Chinese economy

#### Recognition of the business environment for our company

##### Basic Chemicals

**Solvents & plasticizer raw materials** : Domestic demand is maturing, but demand is steadily expanding mainly in Asia

##### Performance Chemicals

**Refrigeration lubricant raw materials** : Demand is increasing as the air conditioner market expands after the COVID-19 crisis and as refrigerants are amended in the Kigali Amendment and the U.S. EPA regulations.

**Electronics materials** : Demand continuously increases for semiconductors with the global expansion of 5G, IoT and AI

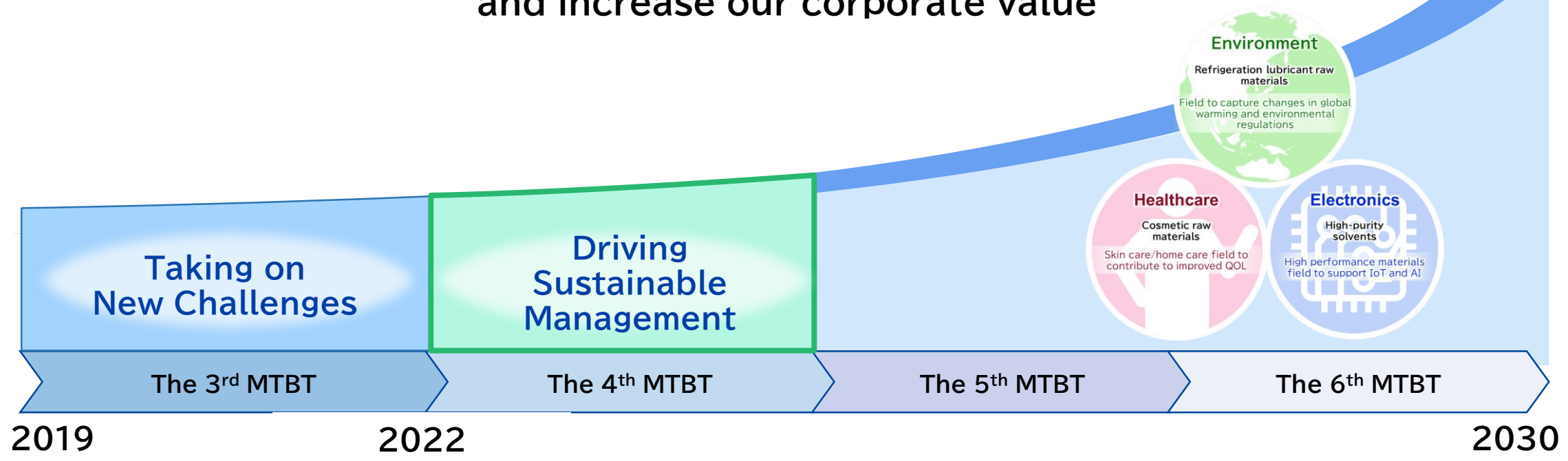
**Cosmetic ingredients** : Demand is expanding in China, South Korea and the Southeast Asia as the COVID-19 crisis calming down

# A Leading Global Specialty Chemical Company

**Basic Policy**  
**Driving Sustainable Management**

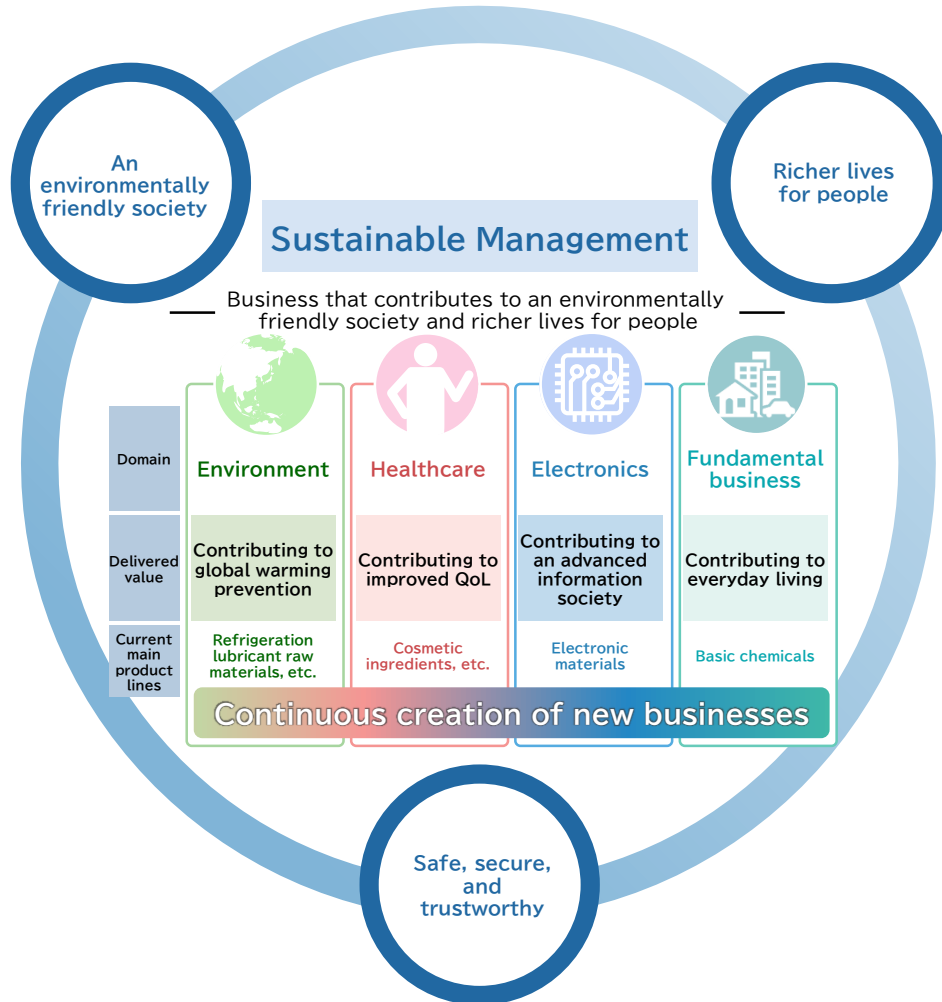
Contribute to achieving a sustainable society and increase our corporate value

2030 CY  
Net Sales 180 bn yen  
Operating Income over 25 bn yen





## We declared Seven Promises to our stakeholders to drive sustainable management



### Seven Promises

1	We will develop businesses that help resolve social issues
2	We will conduct businesses with awareness of reducing our environmental impact
3	We will strive to secure trust through safe and stable operations
4	We will practice management transparency with high ethical standards
5	We will provide a lively work environment that motivates and rewards diverse human resources
6	We will promote responsible supply chain management
7	We will strengthen our earning power

Seven Promises		Materiality
1	We will develop businesses that help resolve social issues	1. Expansion of social problem-solving businesses centered on strategic domains 2. Promotion of innovation 3. Strengthening of intellectual property strategies to strengthen the foundation for growth
2	We will conduct business conscious of reducing our impact on the environment	4. Improvement of energy efficiency and reduction and management of CO <sub>2</sub> and other emissions 5. Proper management of chemical substances
3	We will strive to secure trust through safe and stable operations	6. Safety and disaster prevention at plants with consideration of the local region 7. Responsible and stable supply to customers
4	We will practice management transparency with high ethical standards	8. Strengthening of corporate governance and risk management 9. Compliance 10. Transparent and responsible communication with stakeholders
5	We will provide a lively work environment that motivates and rewards diverse human resources	11. Health and safety of employees 12. Human Resource Development and Recruitment to support sustainable management 13. Improvement of employee engagement and creation of comfortable workplaces to improve productivity
6	We will promote responsible supply chain management	14. Promotion of Corporate Social Responsibility (CSR) procurement
7	We will strengthen our earning power	15. Optimization of business portfolio for stable profit generation 16. Pursuit of higher productivity and efficiency at plants

## Basic Policy

## Driving Sustainable Management

Basic  
Strategy**■ Strategy I. Further Growth in the Strategic Domains**

- Capturing steadily demand for refrigeration lubricants raw materials through the large-scale expansion and reinforcement of facilities
- Responding to increasingly sophisticated customer needs in the electronics domain
- Expanding the lineup in the healthcare domain

**■ Strategy II. Medium and Long Term Initiatives to Resolve Social Issues**

- Accelerating efforts toward carbon neutrality
- Creating early a new business through open innovation and M&A, etc.

**■ Strategy III. Improvement of Business Framework**

- Improving productivity by utilizing the latest technologies, etc., as a driving force
- Creating a corporate culture in which diverse human resources play an active role and maximize results
- Strengthening of governance to enhance management transparency



## Increase profits through the large-scale expansion and reinforcement of facilities as a leading supplier

### 〈Market Environment〉

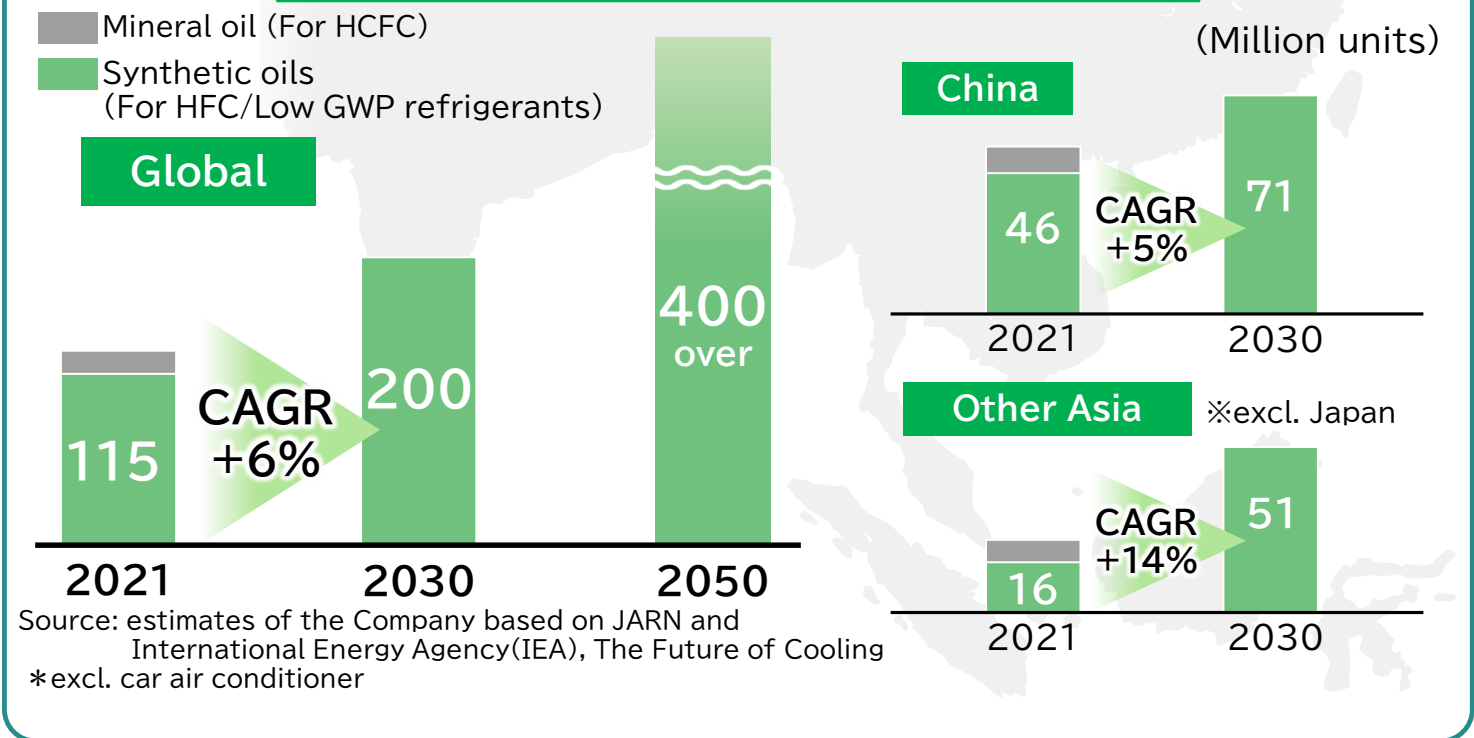
- Market expands mainly in Asia
- Shift to environmentally friendly refrigerants, low GWP refrigerants
- Expanding demand for synthetic oil miscible with low GWP refrigerants



### 〈Our Company Initiatives〉

- ◆ Increase Isononanoic acid production capacity by more than 50% through the large-scale expansion and reinforcement of facilities
- ◆ Expand, reinforce and optimize the production capacity of the entire plant

### Air conditioner market\*





## Increase profits through the large-scale expansion and reinforcement of facilities as a leading supplier

### 〈Market Environment〉

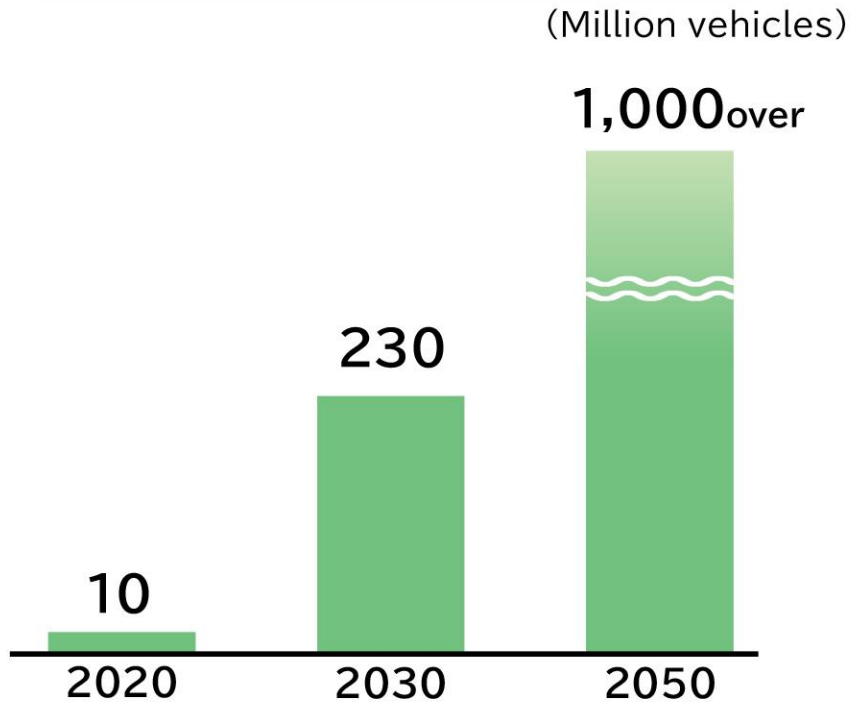
- Shift to electric vehicles (EVs) accelerates worldwide



### 〈Our Company Initiatives〉

- ◆ Incorporate demand for refrigeration lubricants raw materials for EV car air conditioners

### Global EV stock



Source: estimates of the Company based on IEA, The Global EV Outlook 2021







## Aim to increase added value mainly in the growing semiconductor market

### 〈Market Environment〉

- Spread of 5G, IoT and AI
- Expansion of demand for EVs
- Progress in DX



### 〈Our Company Initiatives〉

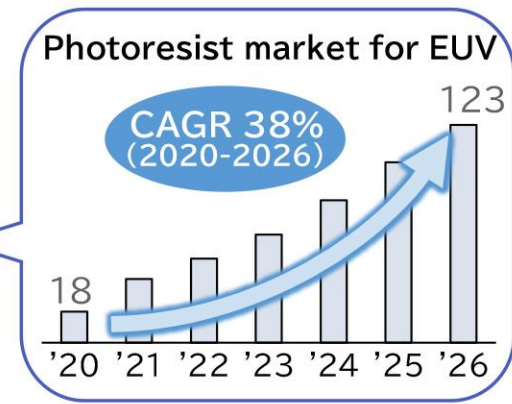
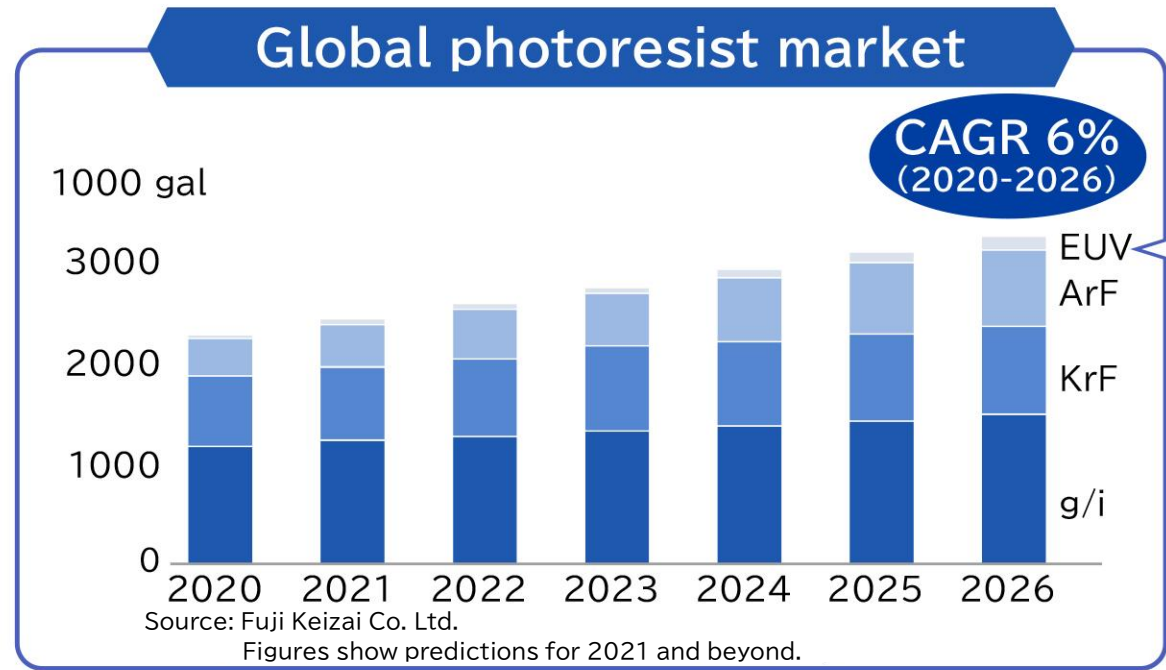
- ◆ Responding to increasingly sophisticated customer needs
  - Strengthening the quality control system by establishing a new quality control building
  - Expanding the supply infrastructure for high-purity solvents
- ◆ Increase added value by utilizing equipment for next-generation semiconductor materials



Clean room(image)



Equipment for next-generation semiconductor materials





## Demand is expanding mainly in emerging economies as the COVID-19 crisis calming down

### 〈Market Environment〉

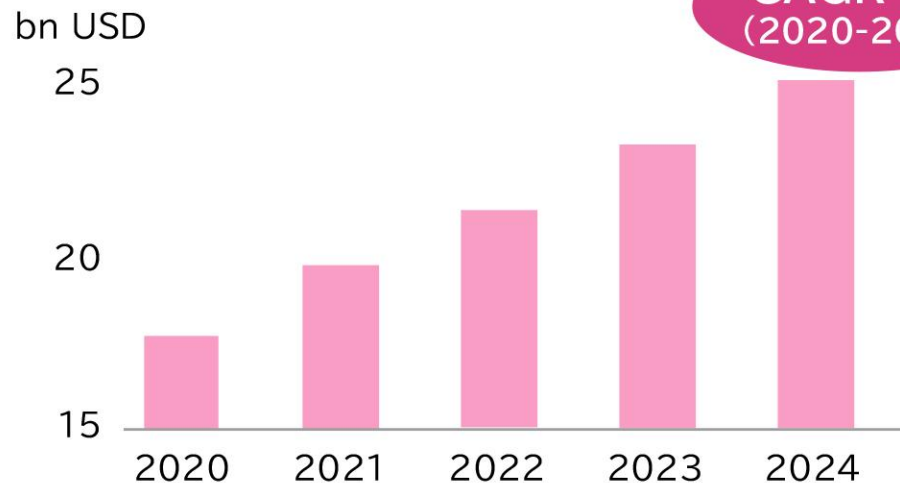
- Population growth and rising income levels in Southeast Asian countries
- Further expansion of e-commerce
- Increasing needs for high functionality and high quality



### 〈Our Company Initiatives〉

- ◆ Expand our sales of 1,3-BG for cosmetic applications
- ◆ Expand our lineup in the Healthcare domain through open innovation
  - Development of new products using natural raw materials

### Asian cosmetics market



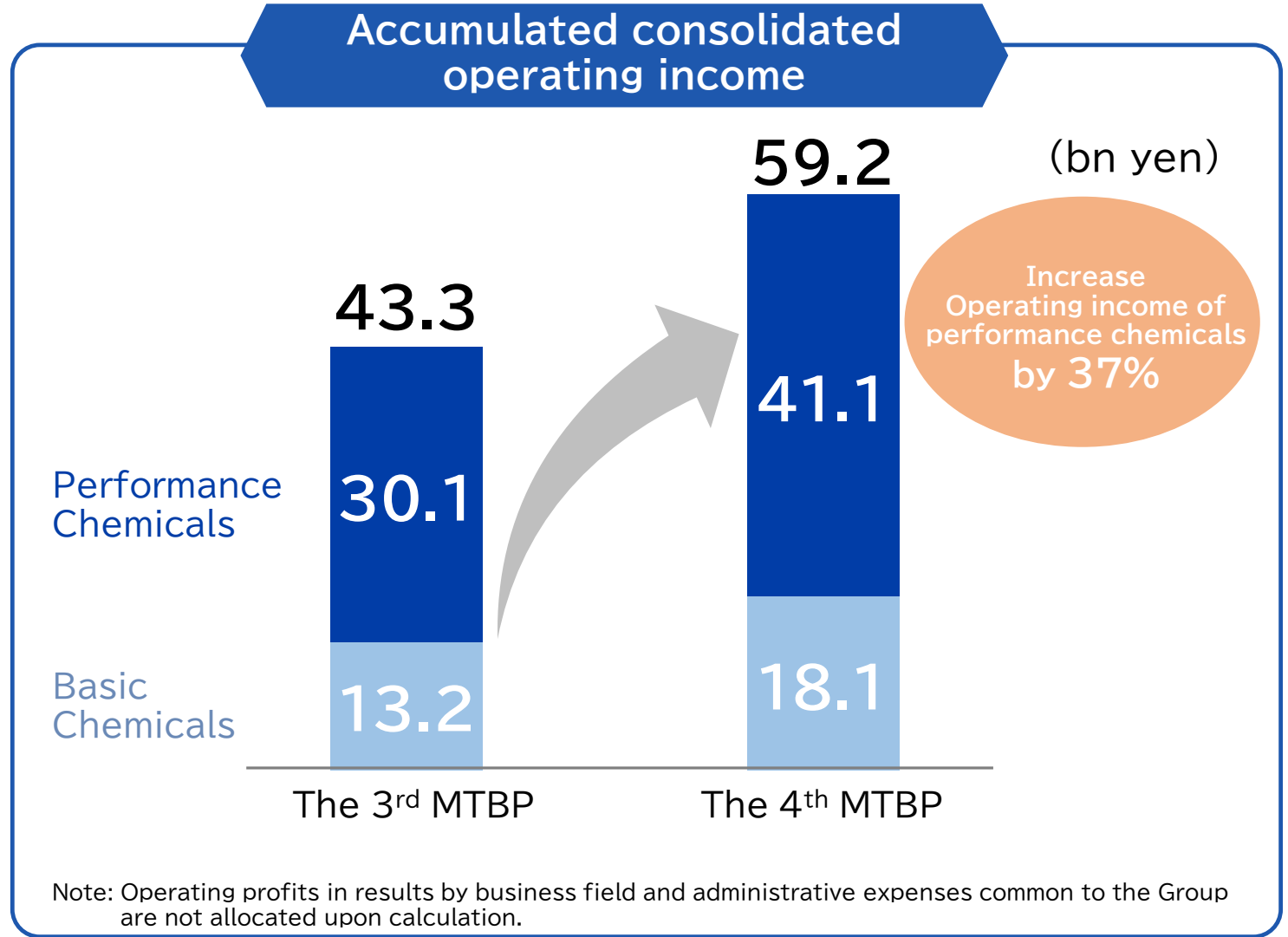
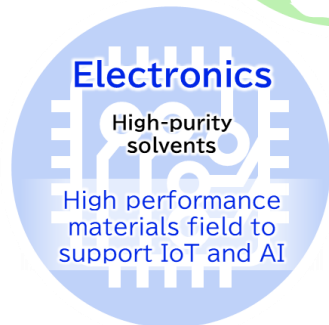
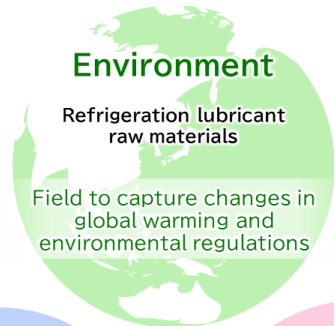
Source: Euromonitor International, Beauty and Personal Care, Market Sizes



## Further increase profits from performance chemicals by implementing various measures

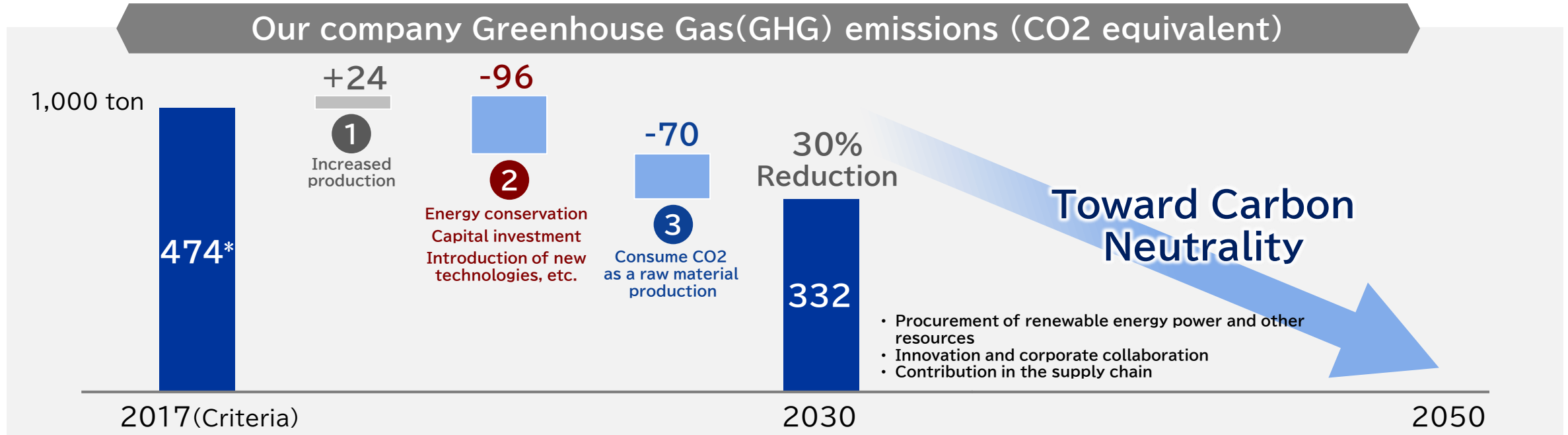
### Performance Chemicals

Refrigeration lubricant raw materials,  
Electronics materials,  
Cosmetic ingredients, etc.





**Aim for carbon neutrality by 2050 and 30% reduction by 2030 (compared to 2017 levels)**

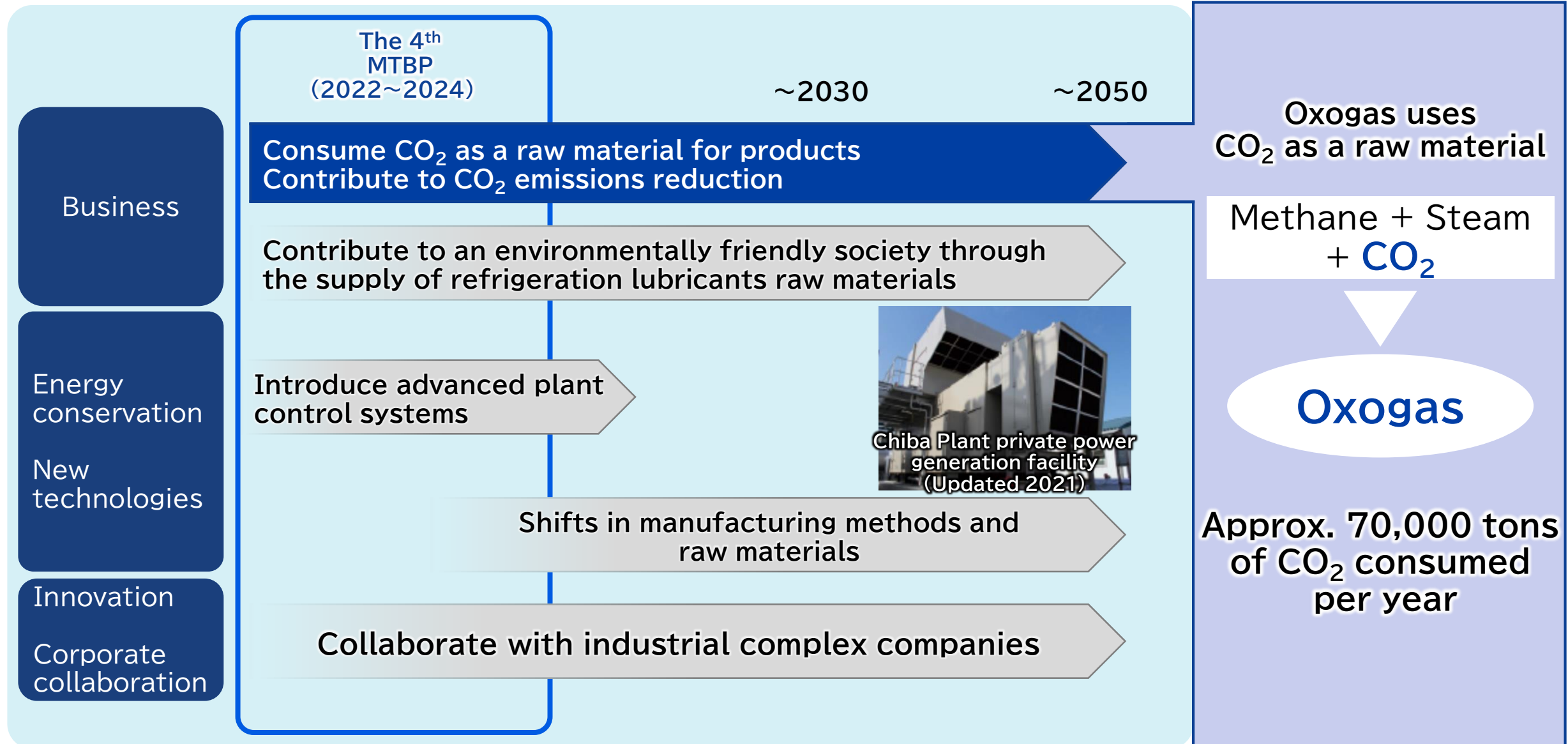


\*reported quantity based on Act on the Rational Use of Energy

**1** Increase our production of refrigeration lubricants raw materials to contribute to achieving an environmentally friendly society

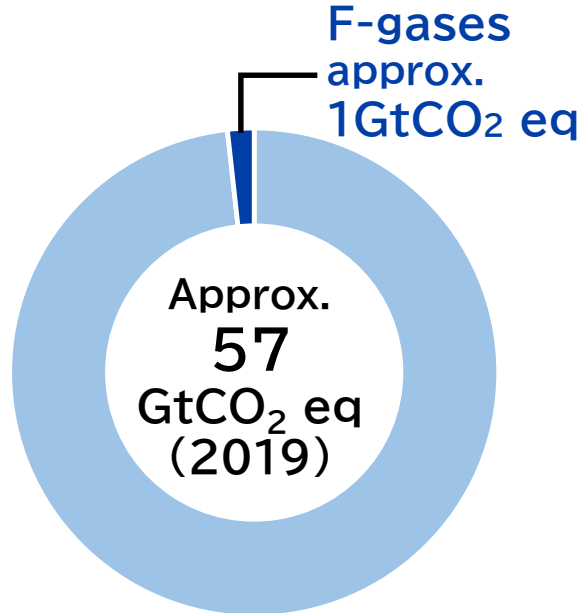
**2** Promote energy conservation by introducing and extending advanced plant control systems  
Consider capital investment for new technologies to reduce GHG emissions

**3** Consume CO<sub>2</sub> as a raw material for production



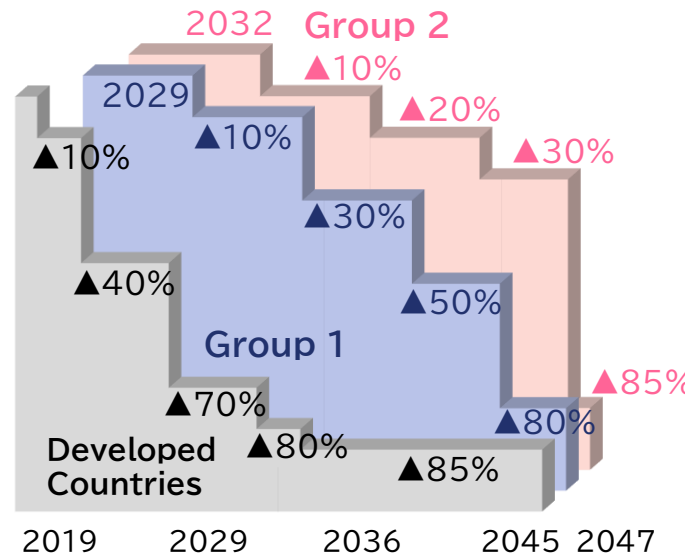
Contribute to global warming prevention through the supply of refrigeration lubricants raw materials

Global Greenhouse Gas Emissions (CO<sub>2</sub> equivalent)



Source: estimates based on PBL Netherlands Environmental Assessment Agency, *Trends in global CO<sub>2</sub> and total greenhouse gas emissions: 2020 Report*

Kigali Amendment HFC phase-down schedule



Expanded demand for air conditioners increases GHG emissions from refrigerants

Switch to environmentally friendly refrigerants is essential

Our refrigeration lubricants raw materials are compatible with environmentally friendly refrigerants

Contribute to global warming prevention

**Sustainable enhancement of our corporate value through social issues**

**Social Issues in Our Strategic Domain**



Medium- to Long-Term

**Acceleration of new business creation through open innovation**

- Co-creation of new technologies with external partners at our KH i-Lab and other open labs
- Investment in startups
- Alliances and M&A

**Sustainable enhancement of corporate value**

**Environmentally friendly materials**

- Develop marine biodegradable resin

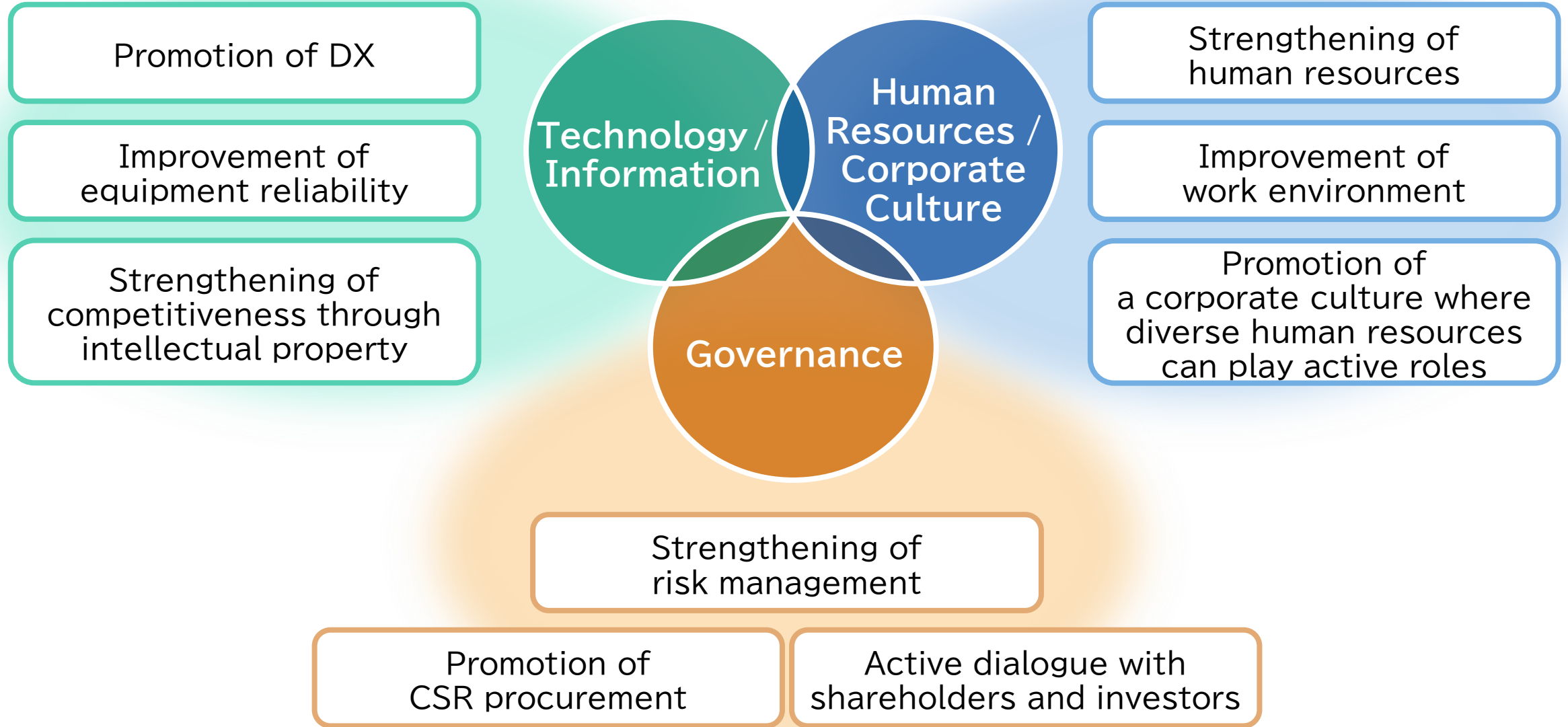
**Electronic material**

- Expand new business products for cutting-edge semiconductors

**Healthcare materials**

- Develop raw materials for pharmaceuticals

Strengthen the business foundations  
to drive sustainable management through various measures





Technology /  
Information

Improve productivity by utilizing  
latest and emerging technologies as driving forces

## Promotion of DX

- ▶ Improvement of safety and productivity through Smart Industrial Safety
- ▶ Introduction of a predictive diagnosis system to detect faults due to plant apparatus aging before they occur
- ▶ Introduction of a shipping system



## Improvement of equipment reliability

- ▶ Restructuring of preventive maintenance process based on risk assessment

Human Resources /  
Corporate Culture

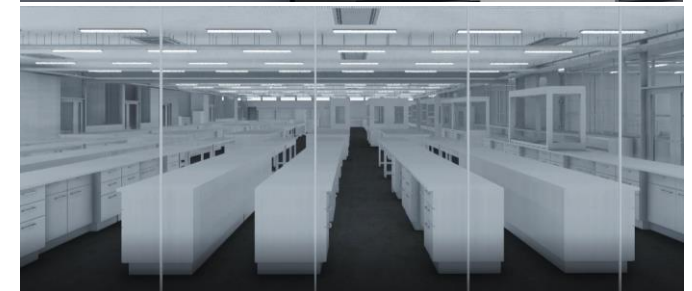
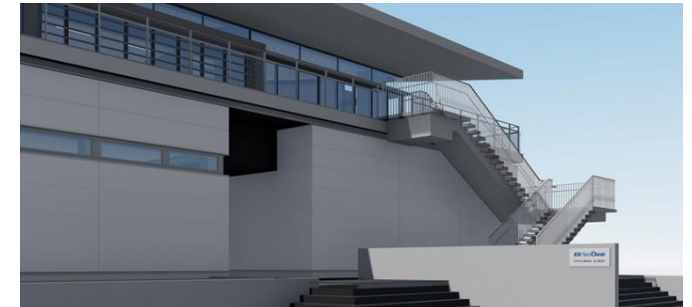
**Create a corporate culture where diverse human resources can play active roles and maximize their performance**

## Strengthening of human resources

- ▶ Introduction of a new personnel system (specified employment) for non-managerial position employees
- ▶ Securing of diverse human resources and promotion of employees
- ▶ Improvement of employee engagement

## Improvement of work environment

- ▶ Establishment of new Quality Control Building (Yokkaichi Plant: completion scheduled in March 2022)
- ▶ Improvement of workplace safety and productivity, promotion of work style reform through systematic renewal of plant office buildings



## Governance

### Strengthen corporate governance to enhance management transparency

#### Strengthening of risk management

- ▶ Identification of important risks by using risk maps and implementation of countermeasures

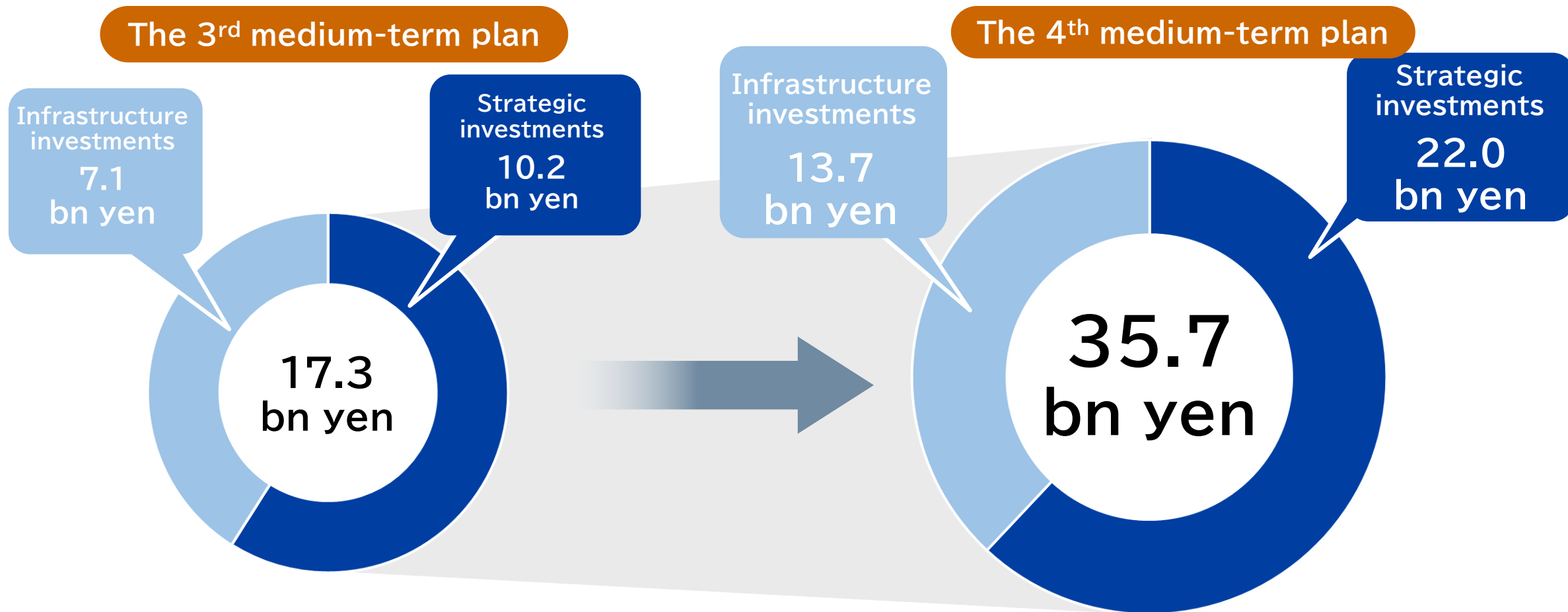
#### Active dialogue with shareholders and investors

- ▶ Proper disclosure of information requested by the Prime Market of the Tokyo Stock Exchange
- ▶ Promotion of IR and SR activities with expanded coverage of non-financial information such as ESG, in addition to business performance and strategies



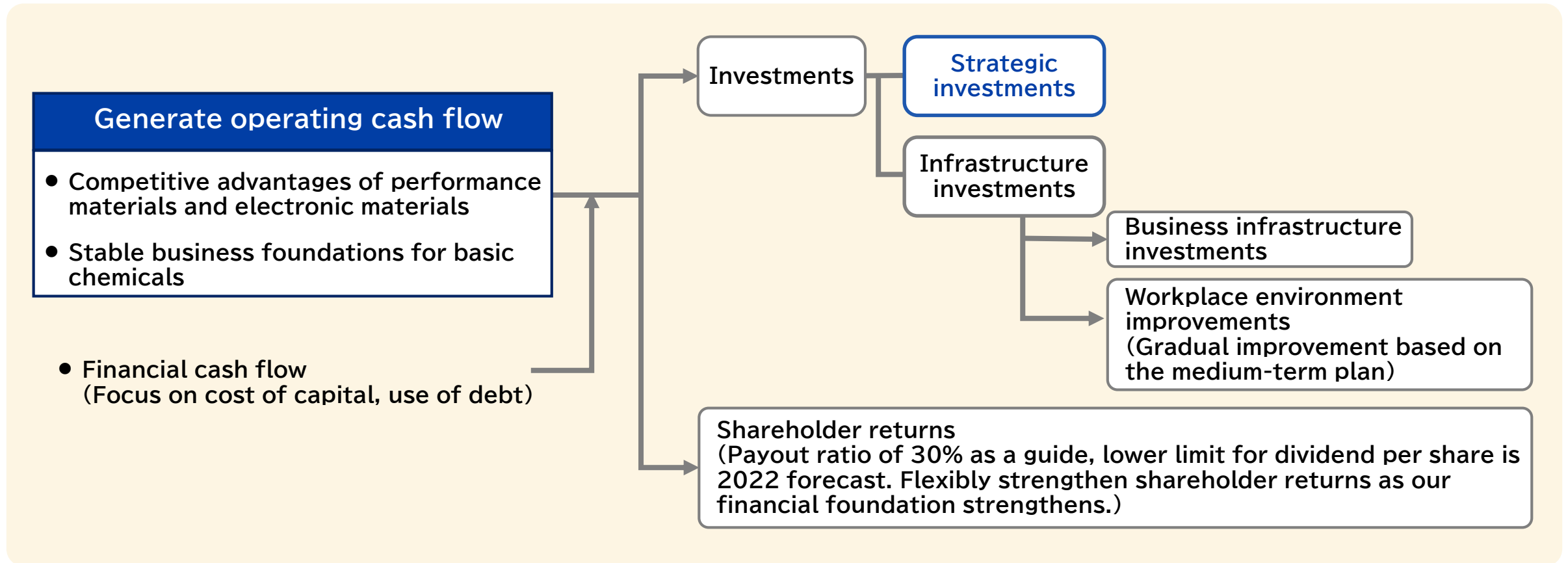


Expand for sustainable growth  
both infrastructure investments and strategic investments



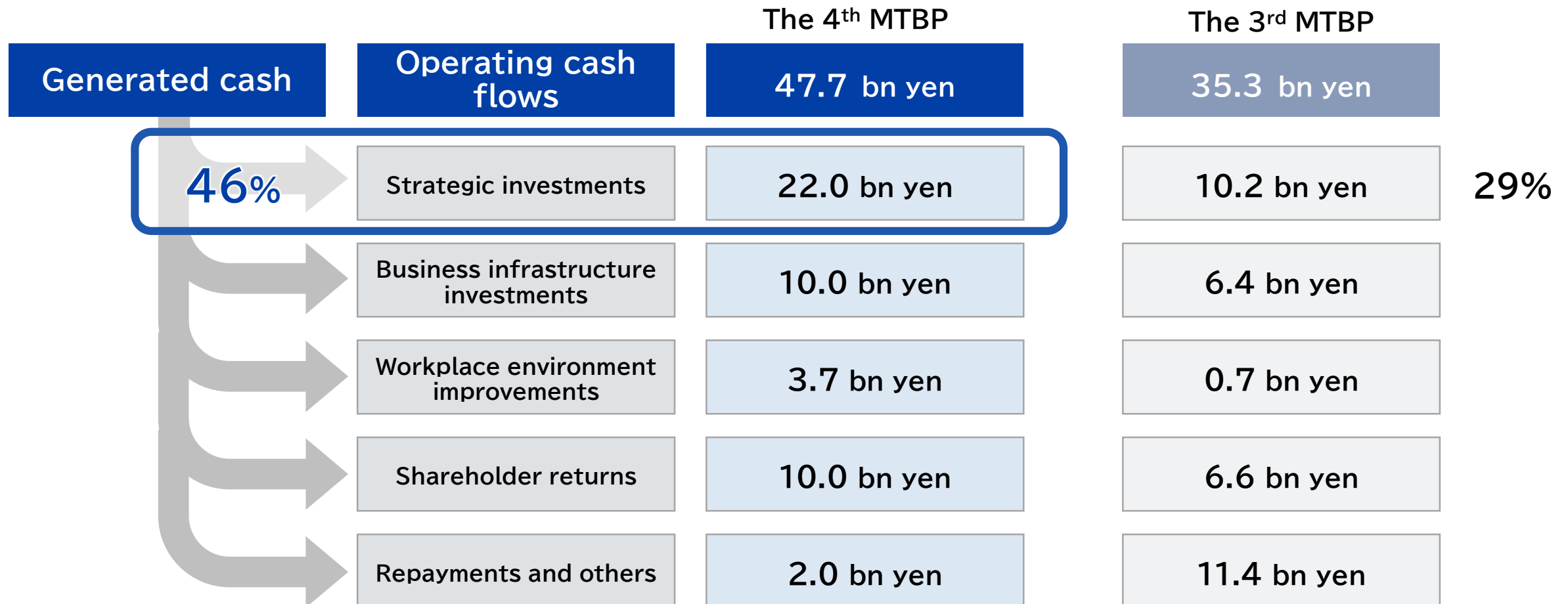
## Basic Policy

- Further shift to strategic investments thanks to the improvement of financial soundness
- Stably implement shareholder returns based on growth in the medium and long term



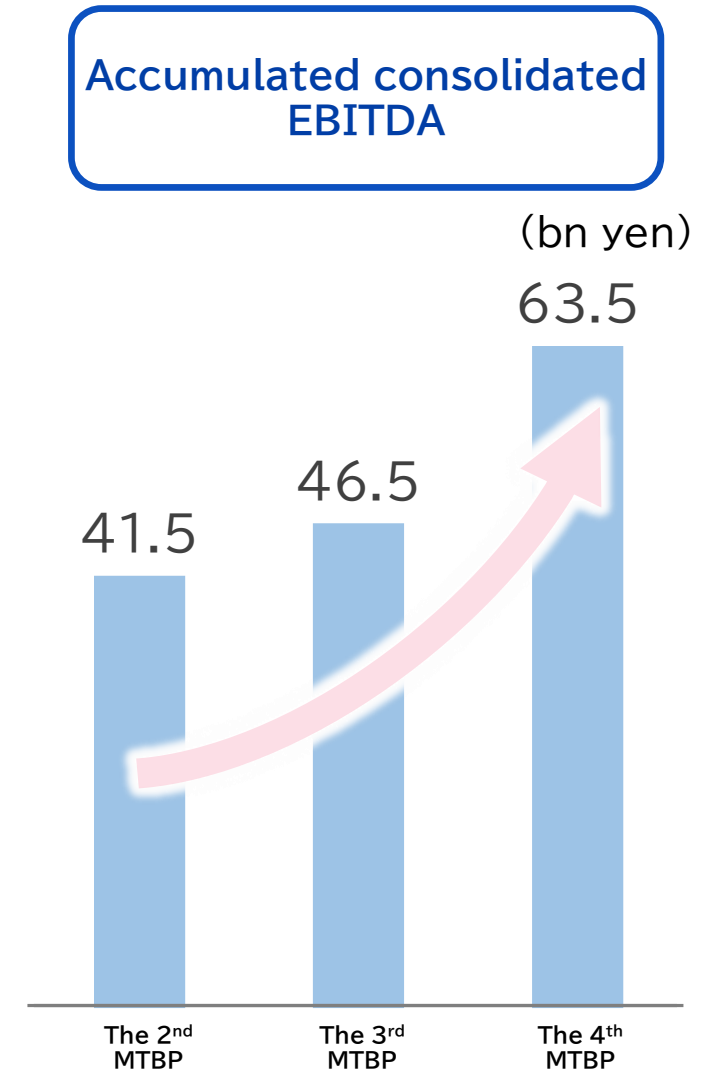
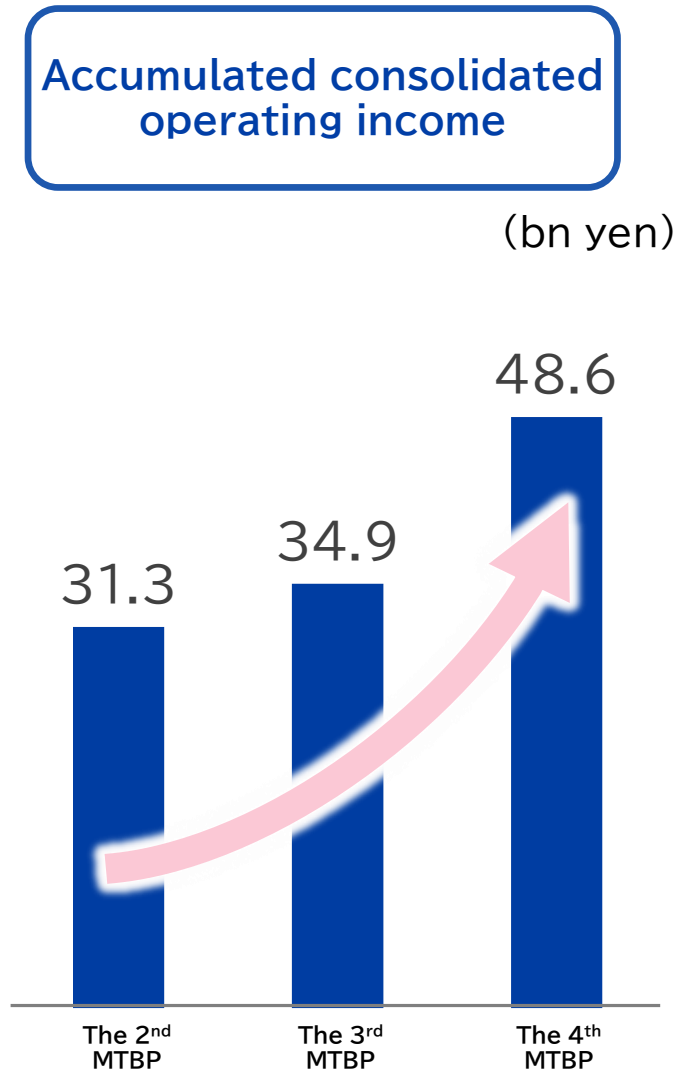
## Capital Allocation

- Operating cash flow increased by 12.4 billion yen from the 3rd medium-term plan
- More aggressively allocate capital to strategic investments (the 3rd medium-term plan: 29%, the 4th medium-term plan: 46%)



Accumulated consolidated operating income	<b>48.6 bn yen</b>
Accumulated consolidated EBITDA	<b>63.5 bn yen</b>
Return on Equity	<b>Over 15%</b>

Assumption: Domestic naphtha :60,000 yen/KL  
Exchange rate:113yen/USD

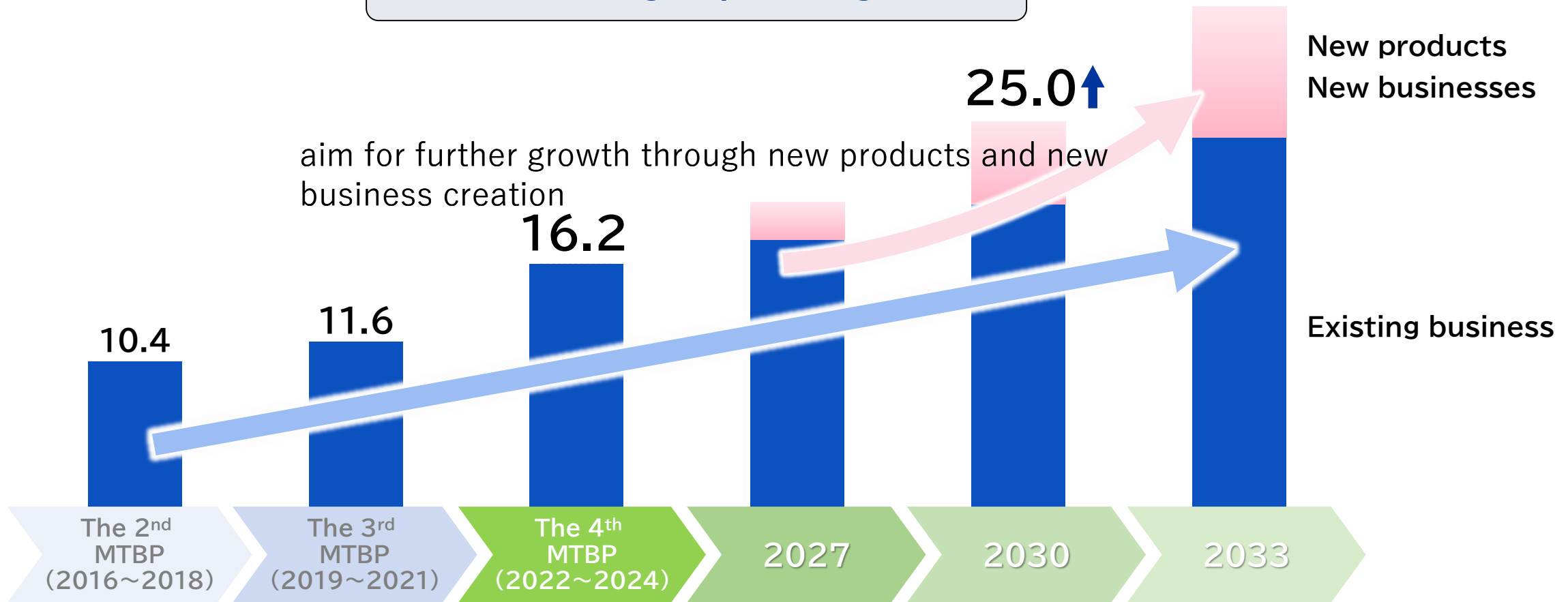


Note: EBITDA = Operating income + Depreciation + Amortization of goodwill

**Aim for further growth through new products and new business creation in addition to achieve steady growth in existing business**

Trend in average operating income

(bn yen)



# Targets for 2024

Materiality Issue No.	Key Performance Indicator	Targets for 2024
1	Rate of increase in sales volume of refrigeration lubricants raw materials (compared to 2021)	over 17% increase
2, 3	Number of collaborations with external organizations in research and development	over 10 per year
4	Greenhouse Gas(GHG) emissions (CO <sub>2</sub> equivalent)	30% reduction from FY2017 level (2030 target)
4	Energy intensity	1% or more improvement per year
5	Volume of final landfill disposal of industrial waste	1% or less of waste generated
6	Systematic introduction of Smart Industrial Safety	Production achieved as planned
7	Production plan achievement status	Implementation as planned
8	Identification of important risks by using risk maps and implementation of countermeasures	Implementation as planned
9	Number of compliance education and training sessions at all sites	over 5 times per year
10	Number of dialogues with investor	over 220 times per year
11	Number of employee accidents resulting in lost workdays	0
12	Ratio of female employees in managerial career track positions	over 15%
13	Rate of recruited personnel leaving work (in less than 3 years)	less than 10%
13	Engagement survey score	10% or more improvement
13	Rate of taking of annual paid leave	over 80%
14	Coverage ratio of Corporate Social Responsibility (CSR) questionnaire survey of main raw materials (based on purchase amount value)	over 70%
15	Operating income of core products (performance materials + electronic materials)	over 14.1 billion yen
15	ROE	over 15%
16	Improvement of productivity through introduction of advanced control systems	Introduced as planned and productivity increased
16	Status of progress in DX-related installations	Implementation as planned

Note: Materiality Issue No. 15 is consolidated, while No. 1-14 and 16 are not consolidated.

Operating profits in results by business field and administrative expenses common to the Group are not allocated upon calculation.

## **Notice**

This material is intended for information purposes only, and does not constitute investment advice, a recommendation or an offer or solicitation to purchase or sell any securities, funds or strategies to any person in any jurisdiction in which an offer, solicitation, purchase or sale would be unlawful under the securities laws of such jurisdiction. The opinions expressed are as of February 25, 2022 and are subject to change without notice. Reliance upon information in this material is at the sole discretion of the reader. Investing involves risks.

Contact:  
KH Neochem Co., Ltd.  
<https://www.khneochem.co.jp/contact>