UBE

Change & Challenge 2018

Briefing Session for Medium-Term Management Plan

May 18, 2016

Ube Industries, Ltd.

President and CEO Yuzuru Yamamoto

説明内容

Ⅰ Summary of Previous Medium-Term Management Plan and Earnings Forecast for FY2016

Ⅱ New Medium-Term Management Plan

I SUMMARY OF PREVIOUS MEDIUM-TERM MANAGEMENT PLAN PLAN AND

EARNINGS FORECAST FOR FY2016

Summary of Previous Medium-Term Management Plan

■ Achievement of Numerical Targets

		FY2015 Results	Targets
Key Figures	Operating income	¥41.4billion	¥55.0 billion
	Equity capital	¥266.5 billion	¥270.0 billion
Operating income	Return on sales (ROS)	6.5%	7% or above
	Return on assets (ROA)	6.5%	7% or above
	Return on equity (ROE)	7.2%	12% or above

- Fell significantly short of achieving profit targets, particularly in the chemicals segment where there were delays in responding to shifting business conditions including securing cost reductions

  In non-chemicals segments, the cement and construction materials segment outperformed targets

■ Measures Taken Continued structural changes and key capital investments

- Integration of two chemicals companies
- Ceased production for caprolactam chain at Sakai Factory
- Implemented routine maintenance (every other year) at Ammonia Factory (Ube)
- Made Ube Material Industries, Ltd. into a wholly-owned subsidiary
- Merged Ube Machinery Corporation Ltd. and Ube Techno Eng. Co., Ltd.
- Increased production capacity for nylon resin (Spain)
- Increased production capacity for synthetic rubber (Chiba, Malaysia)
- Implemented routine maintenance (every other year) at Ammonia Factory (Ube)
- Increased production capacity for high-performance coatings made from polycarbonate diol (Thailand)
- Adopted waste heat recovery system for power generation at Kanda Cement Factory

■ Future Challenges

Only halfway toward restoring results from the chemicals business

・Issues: Increase cost competitiveness; foster growth-driving products that serve as a cornerstone for revenues

FY2016 Earnings Forecast (Key Figures)

Net sales projected to increase slightly, but operating income and ordinary income expected to decrease. Net income expected to increase due to decreased extraordinarily loss

(Billion yen)

	FY2015	FY2016	YOY
Net sales	641.7	655.0	13.3
Operating income	41.4	35.0	-6.4
Ordinary income	39.6	33.0	-6.6
Net income attributable to owners of the parent company	19.1	20.0	0.9
Interest-bearing liabilities	216.6	210.0	-6.6
Equity capital	266.5	280.0	13.5
Return on equity (ROE)	7.2%	7.3%	0.1%
D/E ratio [times]	0.81	0.75	-0.06
Dividend (per share)	5.0	6.0	
Dividend payout ratio	28%	32%	

FY2016 Earnings Forecast by Business Segment

Chemicals segment to be impacted by routine maintenance at ammonia plant; cement and construction materials segment to be impacted by market conditions for cement exports

(Billion yen)

segment	Net Sales			Operating income		
	FY2015	FY2016	YOY Change	FY2015	FY2016	YOY Change
Chemicals	266.7	278.0	11.3	12.0	9.0	-3.0
Pharmaceuticals	9.2	10.0	0.8	1.1	1.0	-0.1
Cement and Construction Materials	237.3	238.0	0.7	19.8	18.0	-1.8
Machinery	73..4	74.0	0.6	4.6	4.0	-0.6
Energy and Environment	69.0	65.0	-4.0	3.8	3.5	-0.3
Others	16.7	16.0	-0.7	1.1	1.0	-0.1
Adjustments※	-30.9	-26.0	4.9	-1.2	-1.5	-0.3
Total	641.7	655.0	13.3	41.4	35.0	-6.4

*Includes elimination of inter-segment transactions

FY2016 assumptions (business factors):
Exchange rate at ¥110/USD, naphtha at US$430/tonne (CIF), Australian coal at US$69.1/tonne (CIF)

Ⅱ New Medium-Term Management Plan

Change & Challenge 2018: Overview

Corporate Images the UBE Group Targets to Realize

■ Business Principles

“Coexistence and mutual prosperity” and “from finite mining to infinite industry”

■ Group vision

“Wings of technology and spirit of innovation. That's our DNA driving our global success.”

The Ube Group will embrace a frontier spirit in seeking to achieve coexistence with the global community driven by the limitless possibilities of technology, while continuing to create value for the next generation through manufacturing.

■ What we want to become in 10 years

“An enterprise that continues to create value for customers”

The UBE Group will have a positive social impact as a corporate entity having a presence in expanding business domains, by developing products and services that anticipate market needs

Management Strategies

■ Strengthen the business foundation to enable sustainable growth

- Strong focus on profitability. Comprehensive cost reductions. Increase revenues from existing products
- Continue emphasizing cash flow, and implement investments to achieve growth
  Make certain to generate results from investments
- Expand the network of international business locations and foster greater coordination between Group companies in and outside of Japan. Rapidly respond to shifting business conditions globally.
- Restore results from the chemicals business and secure further growth. Restore operating income to the ¥20 billion level, as a launch pad for the next stage of growth

■ Address and be part of the solution for resource, energy, and global environmental issues

- Reduce greenhouse gas emissions throughout supply chains, by reducing energy consumption and increasing recycling
  ➡ FY2021 target: Reduce greenhouse gas emissions by 15% compared with FY2005 levels
- Develop and extend technologies and products that help reduce environmental impact

FY2018 Numerical Targets: Key Figures and Indicators

■ Key Figures

Operating income	¥50.0 billion
Ordinary income	¥49.0 billion

■ Key Indicators

Return on sales (ROS)	6.5% or above
Return on equity (ROE)	9.0% or above

Business Portfolio Segmentation

Target business domains: Environment and energy, mobility, construction and infrastructure, healthcare

	Chemicals and Pharmaceuticals	Cement and Construction Materials	Machinery	Energy and Environment
Developing Fields	New battery materials, specialty inorganic materials (phosphor, optical materials, etc.), biomass fuel, aeronautical fields (tyranno fiber), biomaterials, environmental materials (neutral solidification material, heavy metal immobilizer, etc.)			
Active Growth Businesses	Nylon, synthetic rubber, separators, high performance coatings, pharmaceuticals	fine materials (MOS-HIGE, etc.)	machinery services	
Platform Businesses	Caprolactam and industrial chemicals, fine chemicals, separation membranes, ceramics	cement and ready-mixed concrete, calcia and magnesia, recycling	molding machinery, industrial machinery, steel products	coal, power
Restructuring Businesses	Polyimide, electrolytes			

Developing Fields :The Company will promote growth in these fields to turn them into future sources of income.
Active Growth Businesses :Market expansion is expected and the Company will pursue further growth in its fields of strength.
Platform Businesses :The Company will aim to maintain and expand stable income.
Restructuring Businesses :The Company will revamp their business models and undertake business restructuring.

Target Business Domains

Expand existing and peripheral businesses and foster new businesses, in the four target business domains

Environment and energy
(resource and energy conservation, new materials)

- Battery materials
- Coal
- Power
- Recycling
- New battery materials
- Biomass fuel
- Phosphors
- Optical materials

Mobility
(automotive, rail, aeronautical fields)

- Nylon
- High-performance coatings
- Battery materials
- Synthetic rubber
- Separation membranes
- Molding machinery
- Fine materials
- Tyranno fiber
- New battery materials

Construction and infrastructure
(infrastructure, living environment, smart cities)

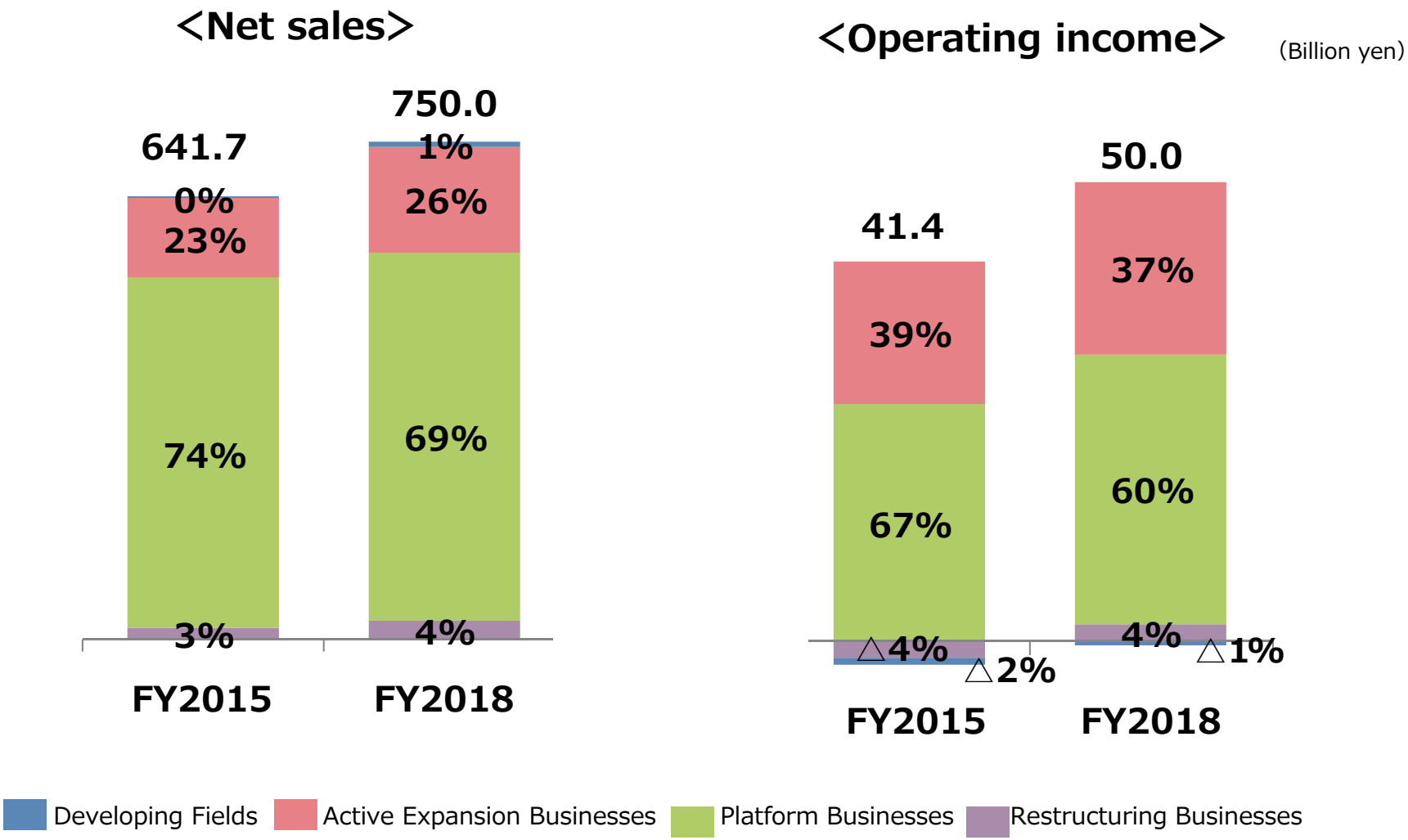
- Ceramics
- High-performance coatings
- Separation membranes
- Cement and ready-mixed concrete
- Calcia and magnesia
- Industrial machinery Steel products
- Neutral solidification material
- Heavy metal immobilizer

Healthcare
(foods, pharmaceuticals, lifestyle enhancement)

- Pharma-ceuticals
- Industrial chemicals
- Fine chemicals
- Nylon
- Biomaterials

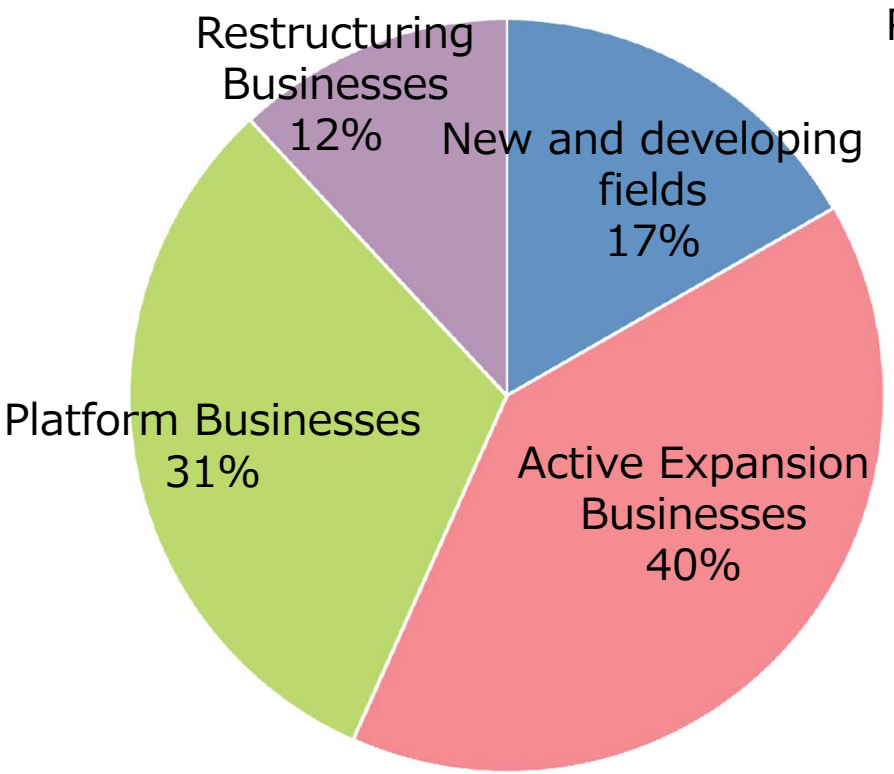
Net Sales and Operating Income by Business Portfolio Categorization

Earnings boosted by growth of active expansion businesses and resurgence of restructuring businesses



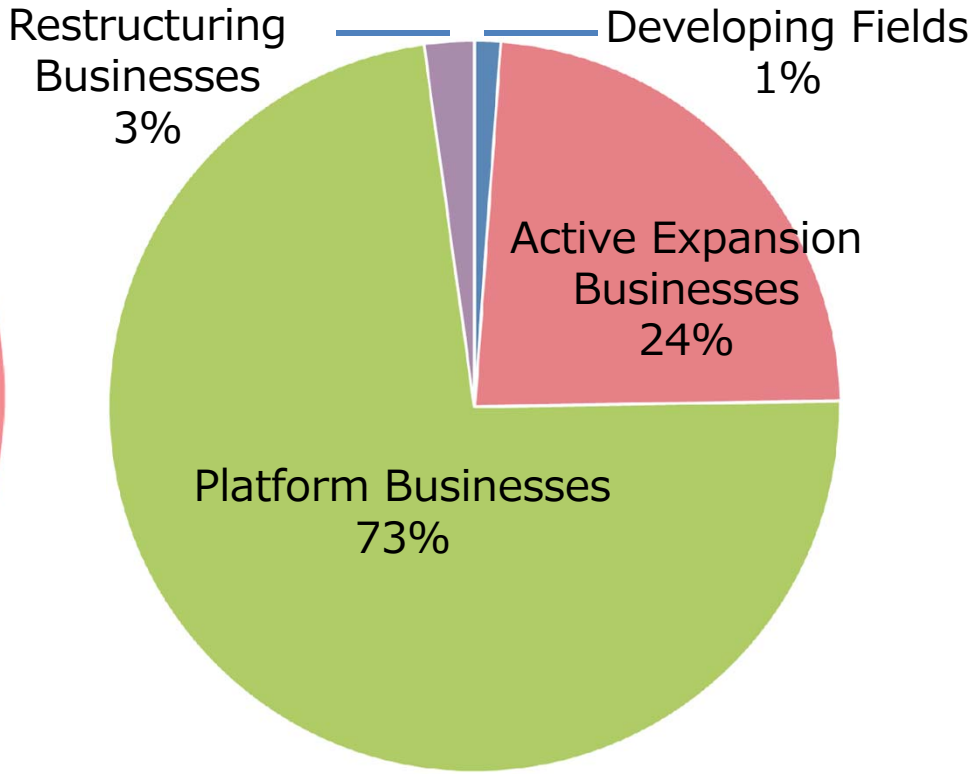
R&D Expenditure and Investment by Business Portfolio Categorization

R&D expenditure over three years: ¥45 billion



Priority allocation toward active expansion businesses and their peripheral businesses

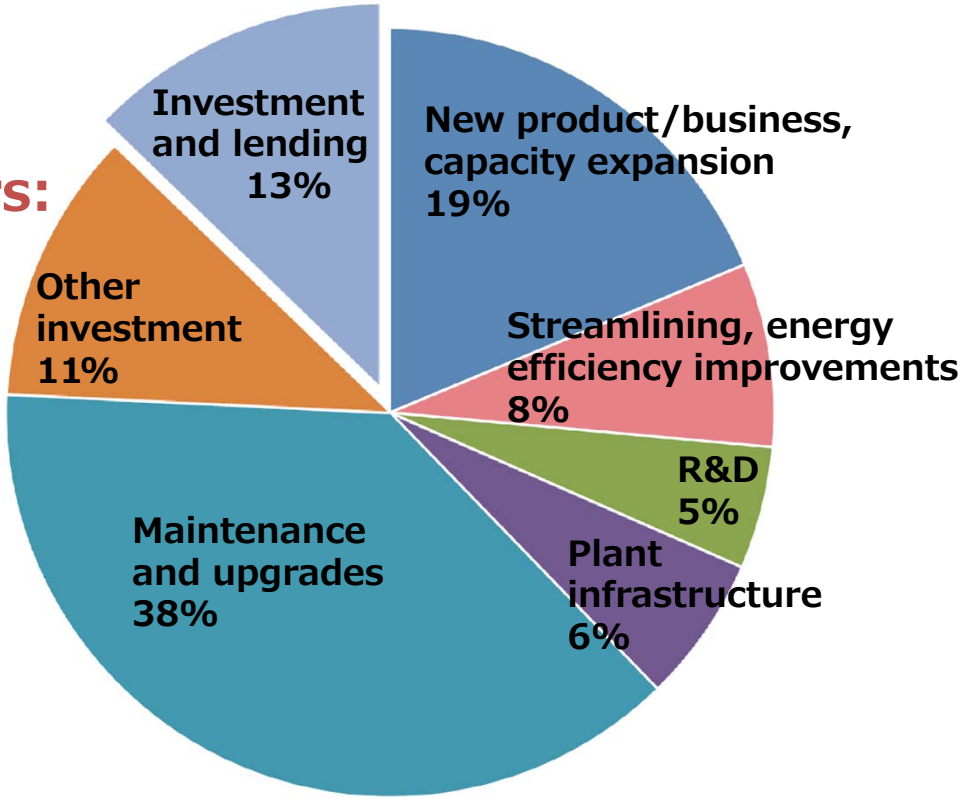
Investments over three years: ¥150 billion



Concentrated investment to streamline platform businesses and increase production capacity for active expansion businesses

Investment Plan and Cash Flow Plan

Investments over three years: ¥150 billion



- Growth investment, streamlining expenditures, and maintenance and upgrades
  → Application of business resources for each area (¥130 billion)
- Investment and lending (including mergers and acquisitions)
  → Strengthen existing businesses and accelerate growth in peripheral businesses (¥20 billion)
- **Three-Year Cash Flow Plan**

Operating cash flow:	176 billion yen
Investment cash flow:	− 150 billion yen
Free cash flow:	26 billion yen

Challenges and Strategies in Key Business Segments: Chemicals and Pharmaceuticals

■ **Chemicals : Fully restore results and foster growth-driving products**

・Four areas: **Nylon, synthetic rubber, separators, and high-performance coatings**

➡ Position as active growth businesses, for priority application of business resources. Comprehensive cash flow management in other businesses, in accordance with the portfolio

・**Further emphasis on cost reduction measures**

➡ Developing features vs. Enhancing cost
Allocating resources for balanced combination of research, development and production technology



Polycarbonate diol (PCD) manufacturing facilities (Spain)

■ **Pharmaceuticals : Changing the revenue structure and getting back on track for growth**

・Expand the pipeline for pharmaceuticals
・Increase revenue generation from pharmaceuticals manufacturing



Proprietary pharmaceuticals: Calblock, Talion, Effient

R&D status of proprietary drugs (in pipeline)

Trade name (Development code)	Indication	Current status (Marketing countries)	Future plans
DE-117 Partner: Santen Pharmaceutical Co., Ltd.	Glaucoma and ocular hypertension	**Japan: Currently in late phase 2 and phase 3 clinical trials**	●Priority on gaining approvals in Japan and rest of Asia
SK-1405 Partner: Sanwa Kagaku Kenkyusho Co., Ltd.	Refractory pruritus	**Japan: Currently in phase 1 clinical trials**	●Advance to next phase of clinical trials
Undisclosed	Fibrosis, cancer and immunologic diseases, diabetes complications, respiratory disease, etc.	**Pre-clinical trial stage: Four themes (candidate compounds identified)**	●Rapid transition to development stage. Pursue out-licensing opportunities ●Pursue out-licensing opportunities

Chemicals and Pharmaceuticals: Nylon

1. Nylon 6 Business: Implement Strategies for Securing Growth and High Added Value

Extrusion applications (food grade film, etc.)	Injection molding applications (auto components, etc.)
Become No. 1 in the global market **Product excellence and reliability are competitive strengths** ● Capacity increases: Spain +40 kilotonnes (scheduled to bring online in 2018) Thailand +40 kilotonnes including injection molding (studying) ● Commercialize and develop applications for new film materials (copolymers, etc.)  Food wrapping film	**Expand compound business and build global supply organization** **Keep pace with glocalization by Japanese automakers** ● Internal production (in Ube and Thailand) and outsourced compounding (start supplying nylon 6 glass fiber reinforced products in US, Mexico, China, and Europe, realizing consistent quality) (FY2016) ● Study mergers, acquisitions, and alliances with local companies **Propose optimal materials to address customer needs for diversifying powertrains** (drive systems), such as materials for high-pressure gas tanks, etc.  Hydrogen tank (Toyota Mirai)

2. Strengthen the Nylon Chain

- **Make certain to secure fundamental cost reductions for raw material caprolactam**
- **Growth of nylon 12 chain**
  (expand beyond current applications for multilayer tubes, and secure major new orders)

Chemicals and Pharmaceuticals: Synthetic Rubber

Enhance the level of collaboration with strategic customers: Increase added value through differentiation and specialization

Aggressively pursue joint development with strategic customers (major tire manufacturers)

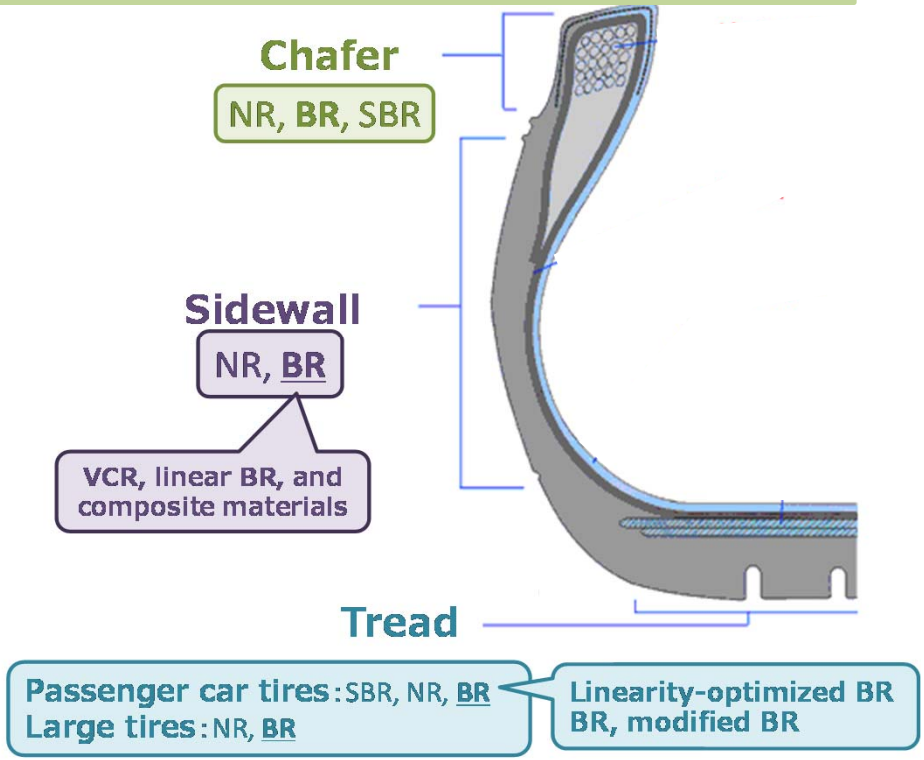
- **Expand the lineup of differentiated and specialized products**, such as vinyl cis rubber (VCR), linear butadiene rubber (BR), and metallocene butadiene rubber (MBR)
  Chiba Factory: 70%→75%, Thai factory: 50%→60%, Malaysian factory: 60%
  ➡ Differentiate from general purpose grades of competitors

Enhance supply chains for reliability

- Have secured stable supplies of butadiene raw material for all plants
- Business continuity plan・Diversify supply chains to secure business continuity

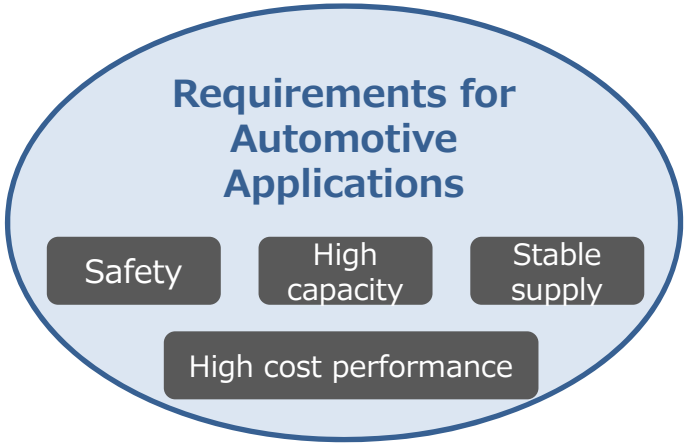
Increase supply capacity to support customer growth

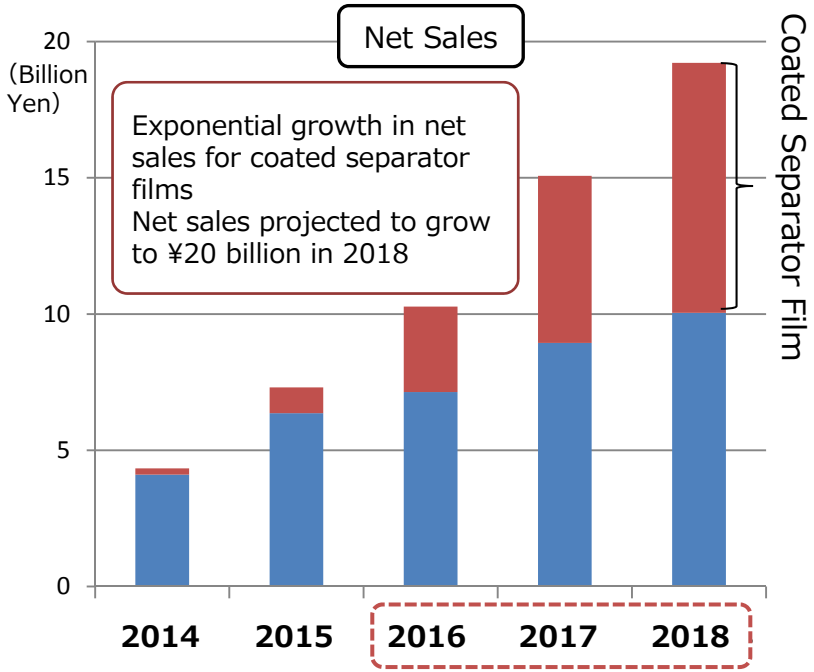
- Increase capacity at Malaysian plant
  Scheduled to increase capacity to 72 kilotonnes during FY2018
- Ongoing study for construction of fifth plant



Chemicals and Pharmaceuticals: Separator

Meet growing demand for automotive applications and increasingly sophisticated market requirements





Growth of Coated Separator Films

Growth of automotive market
Track record for automotive applications
Further develop technology and expand production capacity

○Further enhance competitiveness

- Raise productivity and increase production capacity by deploying new processes
- Further capitalize on advantages of proprietary dry process in automotive market (high input/output, safety)
- Further integration between UBE's technology and the high-speed precision coating technology of Hitachi Maxell, Ltd.

○Expand the product lineup (enhance development)

- High-strength, thin separators for high-capacity cells used for EVs
- Low-temperature shutdown separators for high-safety cells
- Development of organic coatings to enhance thermal resistance and adherence strength
- Expand the product lineup for coatings

Establish a position as the leading manufacturer of separators for automotive applications

Chemicals and Pharmaceuticals: High-performance coatings

Accelerate business development as a solution provider

Polycarbonate diol (PCD): Raw material for high-grade polyurethane resin.
Strengthen the global framework for supply and R&D

⇒ **Develop new demand and accelerate business development in new markets** as the No. 1 manufacturer in the world

Polyurethane dispersion (PUD) materials:

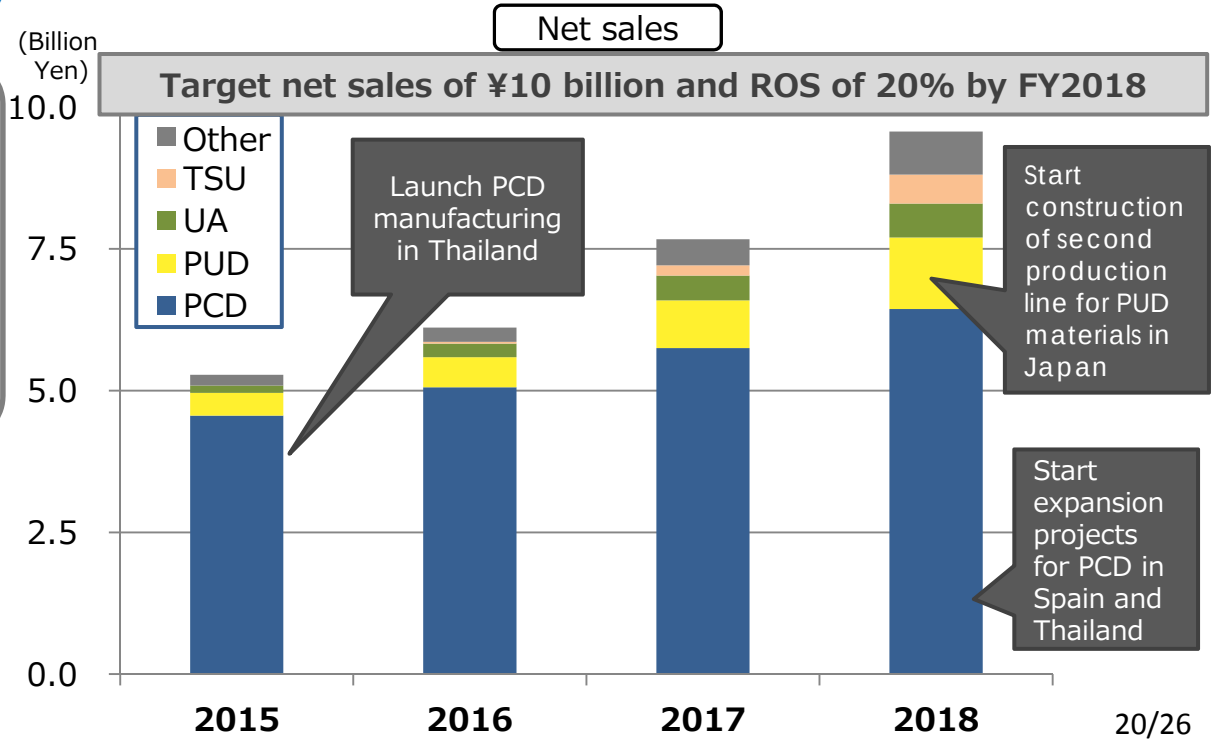
⇒ Strengths in providing solutions by **leveraging resin design** and **formulation technology working** upstream to PCD raw material
Expand facilities and aggressively develop business including through M&A activity

New products: Launch new products such as **urethane acrylate** (UA) and **thermoplastic urethane** (TSU)

Market for high-performance polyurethane is growing
(for automotive, interior and exterior building materials, synthetic leather, etc.)

○**Features of products made from PCD**
- ■**Environmentally friendly** (durable, low VOCs)
- ■**High added value** (high quality feel, texture, and outer appearance)





Chemicals and Pharmaceuticals: Polyimides, Electrolytes

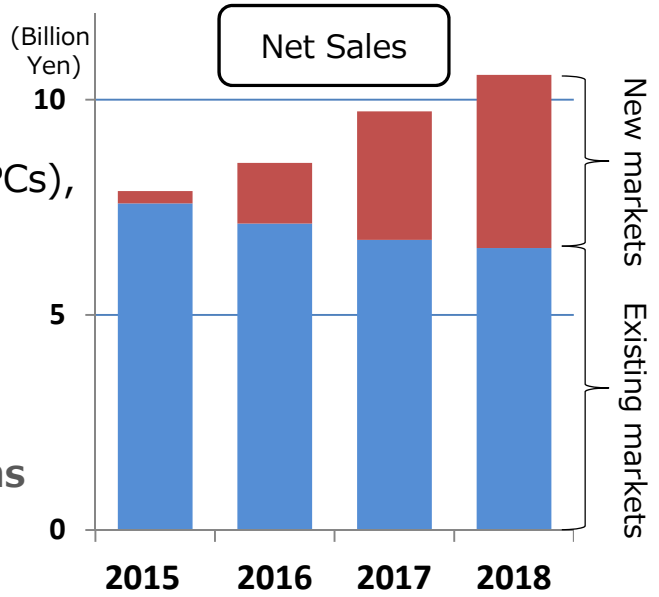
Comprehensive cost reductions and business restructuring

● **Polyimides : Accelerate new business development**

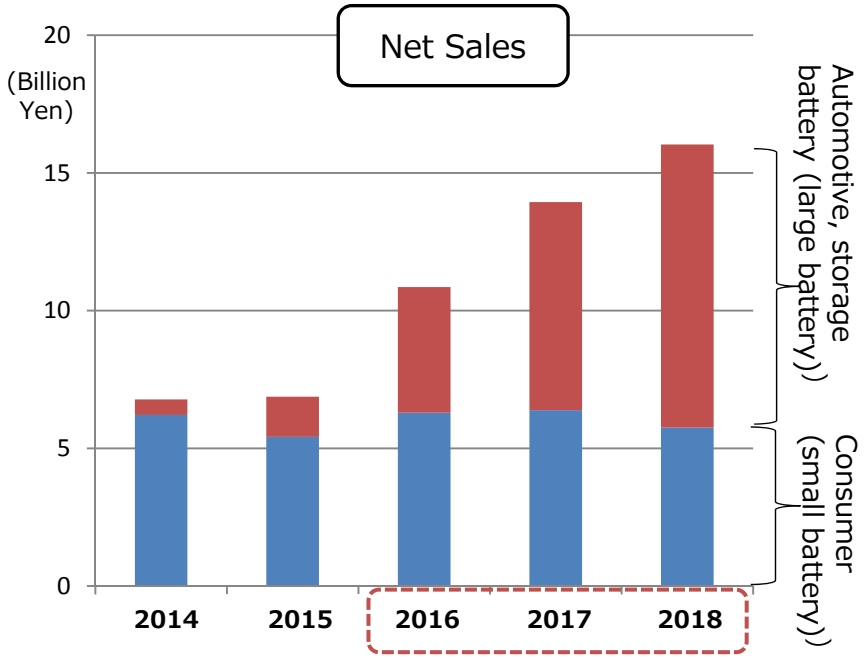
Varnishes : Focus on developing varnishes for flexible displays

Films : Increase the market share for flexible printed circuits (FPCs), such as new VT films, etc.

Increase sales of films for double-sided COF



● **Electrolytes :** **Accelerate business development for automotive and storage battery applications**



○**Increase sales, targeting large battery applications**

- Maintain market share for high-end consumer applications
- Develop proprietary additives for automotive and storage battery applications
  ⇒ Propose new features
- Effectively leverage UBE's intellectual property

Pursue differentiation and establish UBE's presence in the automotive market as a true electrolyte manufacturer

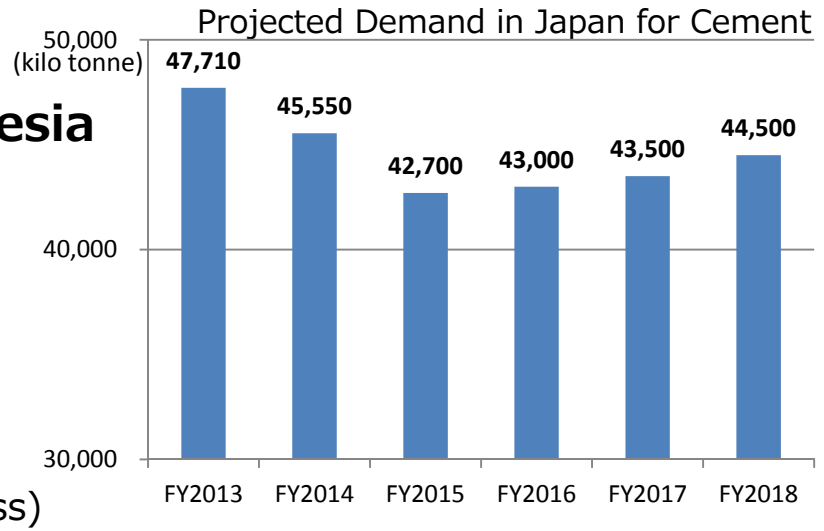
Cement and Construction Materials

Maintain and Enhance Revenues from Platform Businesses

- **Cement, ready-mixed concrete, recycling, limestone, calcia, and magnesia**
  - ○Cost reductions, production streamlining
  - ○Increased use of waste
- **Enhance the level of collaboration with Group companies**

  Maximize synergies within the Group

  ○Business restructuring and integration (resource business, construction materials business)



Expand and Extend Growth Strategies

- **Expand the business areas and scope**

  International business, fine materials

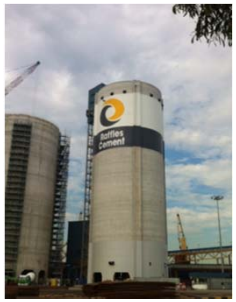
  ○Securing steady cement export customers

  ➡ Equity stake and joint ventures

  ○Growth of MOS-HIGE (filler for automotive applications)

  ➡ Expand production facilities outside of Japan

  ○Increase sales of neutral solidification material and heavy metal immobilizer



Raffles Cement
(partly owned by Ube Industries)



Magnesium oxysulfate whisker
(MOS-HIGE)

Machinery and Energy & Environment

■Machinery : Expand network of international business locations and foster greater cooperation to increase revenues from international markets

●Molding machinery, industrial machinery

・Enhance competitiveness of products in growth markets including the automotive sector and infrastructure sector such as power plants and cement.

➡Ongoing cost reductions and product development

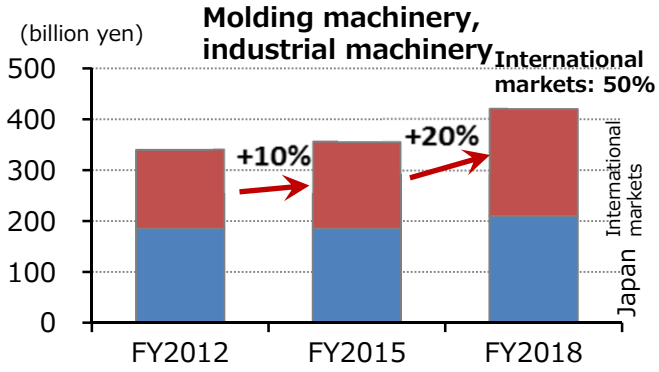
➡Globally launch new models that anticipate customer needs

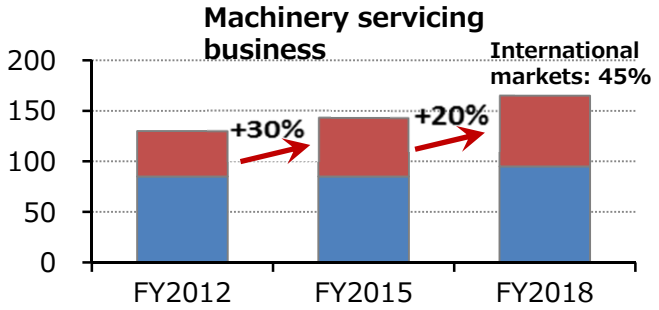
●Machinery servicing business:

・Expand the servicing business focusing on Americas and Asia

➡Enhance the network of international business locations, and propose solutions for customer support and servicing

Net Sales





■Energy & Environment :

Make energy costs more competitive and continue to generate steady revenues

●**Coal:** Procure at low prices, develop port facilities, expand capacity of Coal Center (storage facility)

●**Power generation:** Implement systematic and efficient upgrades for older private power plants



Coal Center

Leverage strategic technology where UBE holds a competitive advantage, to develop new businesses

- Accelerate R&D to develop new businesses in the four businesses domains
- Enhance advanced technologies in the strategic technology areas and pursue open innovation

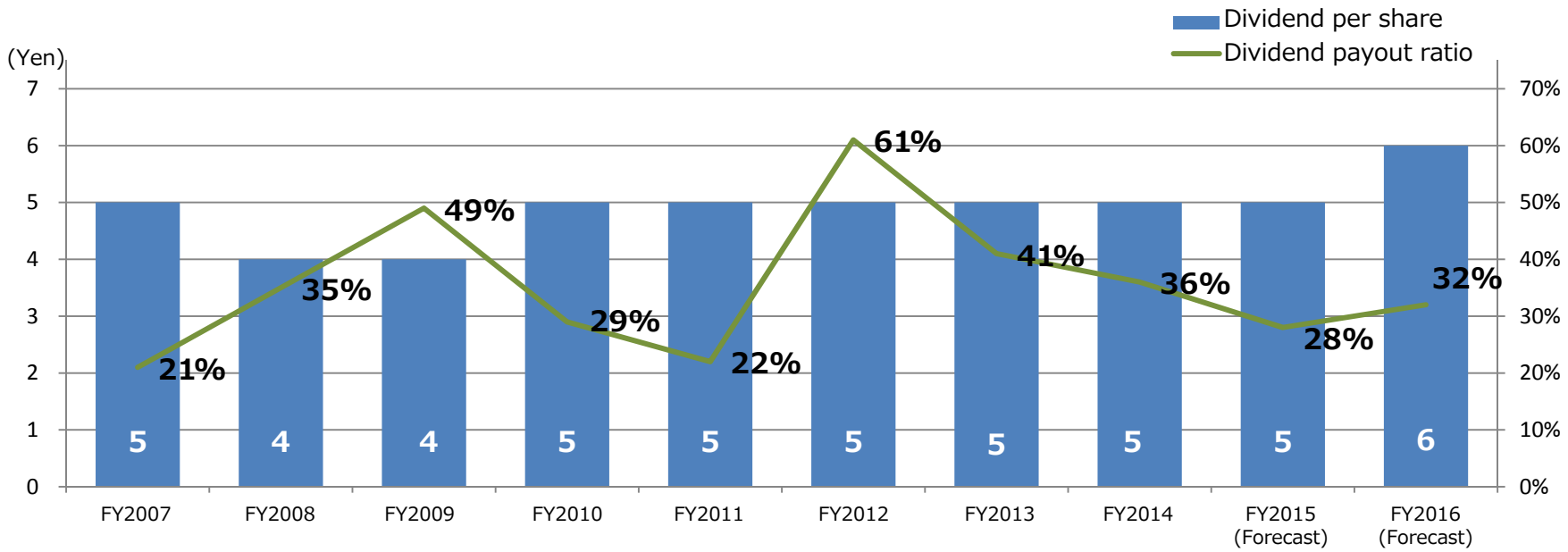
Business Domain	Field of R&D (Developing and New Fields)	Strategic Technology Areas
Mobility	New battery materials CMC for next-generation jet engines (Tyranno fiber) Power control-related materials Components and materials for intelligent solutions	Performance design Higher-order structural control technology Composite technology Performance evaluation
Environment and energy	Phosphors for next-generation white LEDs Biomass fuel Waste recycling technology Next-generation energy components and materials	
Construction and infrastructure	Environmental materials (heavy metal immobilizer, neutral solidification material) Chemicals for construction and infrastructure	
Healthcare	Bioreactor components and materials Next-generation healthcare components and materials	

Shareholder Dividends (Dividend Policy)

Maintain and improve financial health
Increase ownership equity to apply toward future investment
Endeavor to pay out consistent dividends

➡ **Targets dividend payout ratio at 30% or higher**

Shareholder Dividends



[Note: Dividend is paid in the following fiscal year]

Wings of technology
Spirit of innovation

UBE

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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Reference: Projection for Numerical Targets

■ Targets for FY2018 (Final Year of the New Medium-Term Plan)

Key Indicators

	Unit	FY2015 Results	FY2018 Targets
D/E ratio	Times	0.81	Below 0.65
Return on equity	%	39.2	40.0 or above
Return on sales	%	6.5	6.5 or above
Return on equity	%	7.2	9.0 or above

Key figures for profit and loss statement and balance sheet

Net sales	Billion Yen	641.7	750.0
Operating income	Billion Yen	41.4	50.0
Ordinary income	Billion Yen	39.6	49.0
Net income attributable to owners of the parent company	Billion Yen	19.1	29.0
Interest-bearing liabilities	Billion Yen	216.6	200.0
Equity capital	Billion Yen	266.5	320.0

Reference: Net Sales and Operating Income Projection by Segment

Positioning the chemicals segment as a growth driver, while maintaining and enhancing the platform for generating sustainable revenues in non-chemicals segments

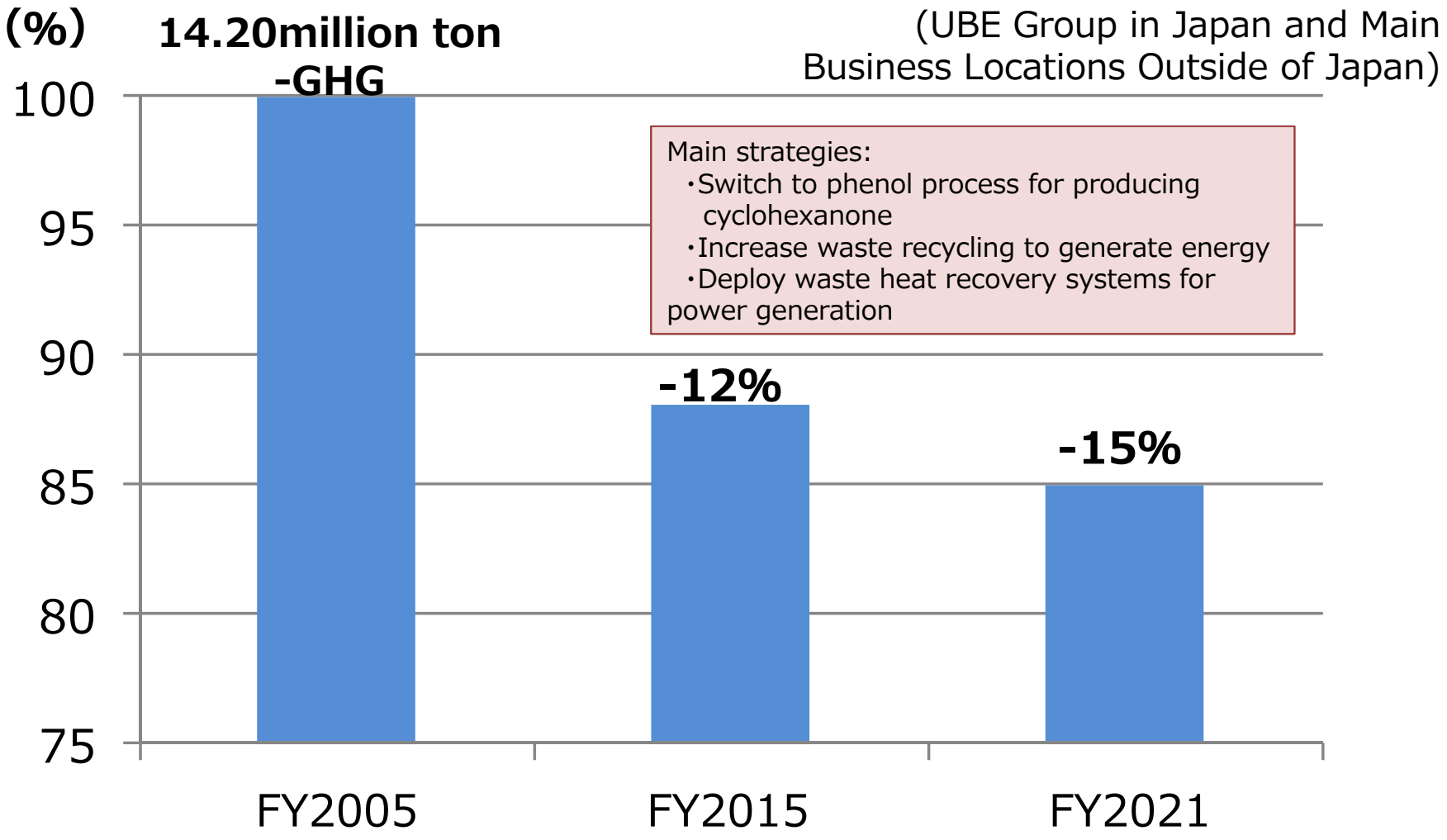
(Billion Yen)

segment	Net sales			Operating income		
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Adjustments※	-30.9	-28.0	2.9	-1.2	-1.5	-0.3
Chemicals	641.7	750.0	108.3	41.4	50.0	8.6

*Includes elimination of inter-segment transactions

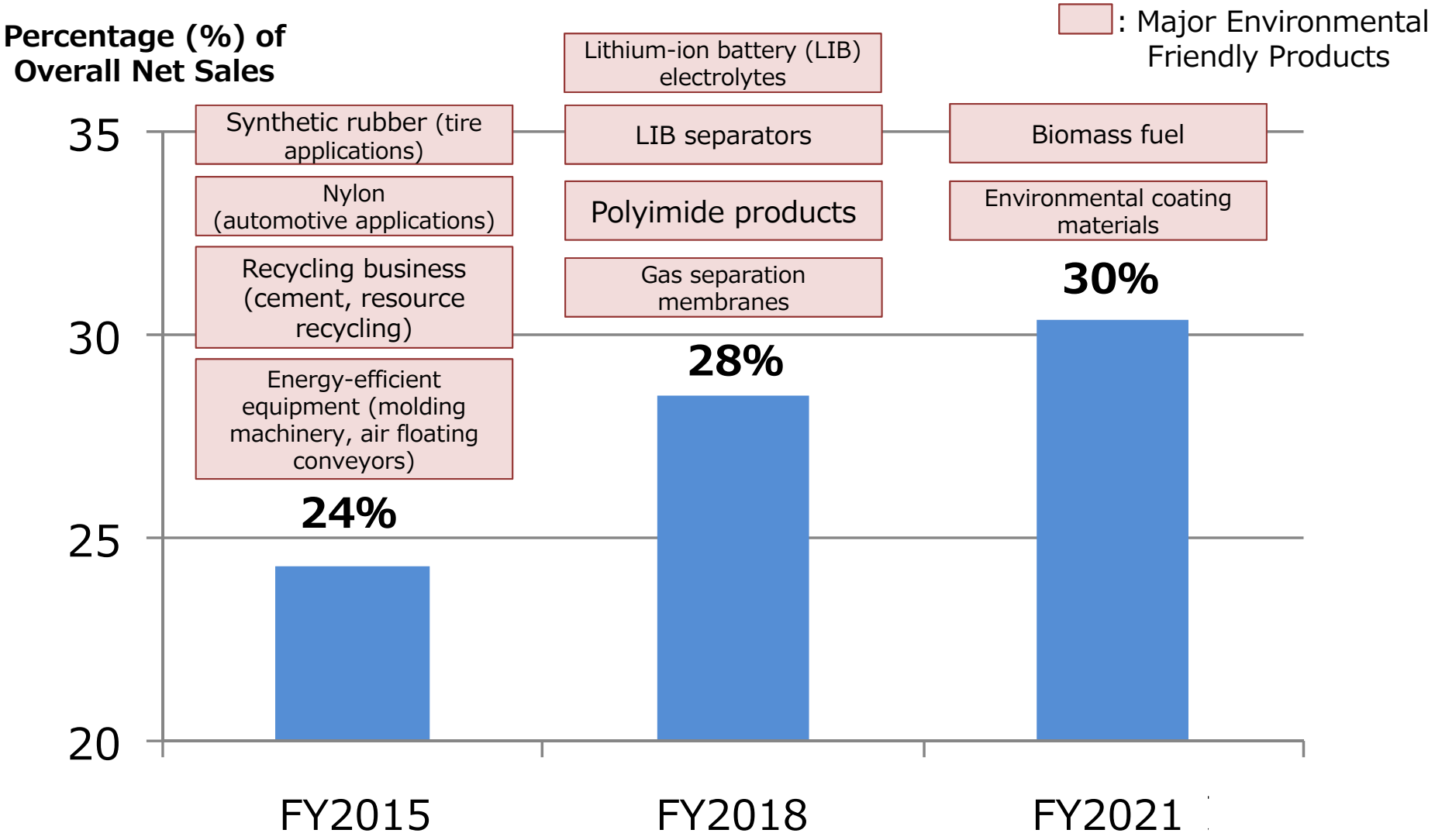
FY2018 assumptions (business factors):
Exchange rate: ¥110/USD, naphtha at US$540/tonne (CIF), Australian coal at US$74.5/tonne (CIF)

Reference: Greenhouse Gas Emission Reduction Target in Japan



Target: Reduce emissions by 15% by FY2021, compared with FY2005 levels

Reference: Growth of Environmental Business



Target: Environmental business to account for 30% or more of overall net sales by FY2021