



Change and Innovation  
**Create New Value**

# **Current Priority Management Issues and Business Strategy**

November 30, 2016

 **SUMITOMO CHEMICAL**

**Masakazu Tokura**  
President

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# Overview of FY2016 Outlook

## FY2016 Forecast vs. FY2015

(Billions of yen)

	<b>FY2015</b>	<b>FY2016 Forecast</b>	<b>Change</b>
<b>Net Sales</b>	2,101.8	1,960.0	-141.8
<b>Operating Income</b>	164.4	120.0	-44.4
(Equity in Earnings of Affiliates)	20.2	30.0	9.8
<b>Ordinary Income</b>	171.2	130.0	-41.2
<b>Net Income</b>	81.5	60.0	-21.5

<b>Naphtha Price</b>	¥42,800/kl	¥32,700/kl
<b>Exchange Rate</b>	¥120.15/\$	¥105.10/\$

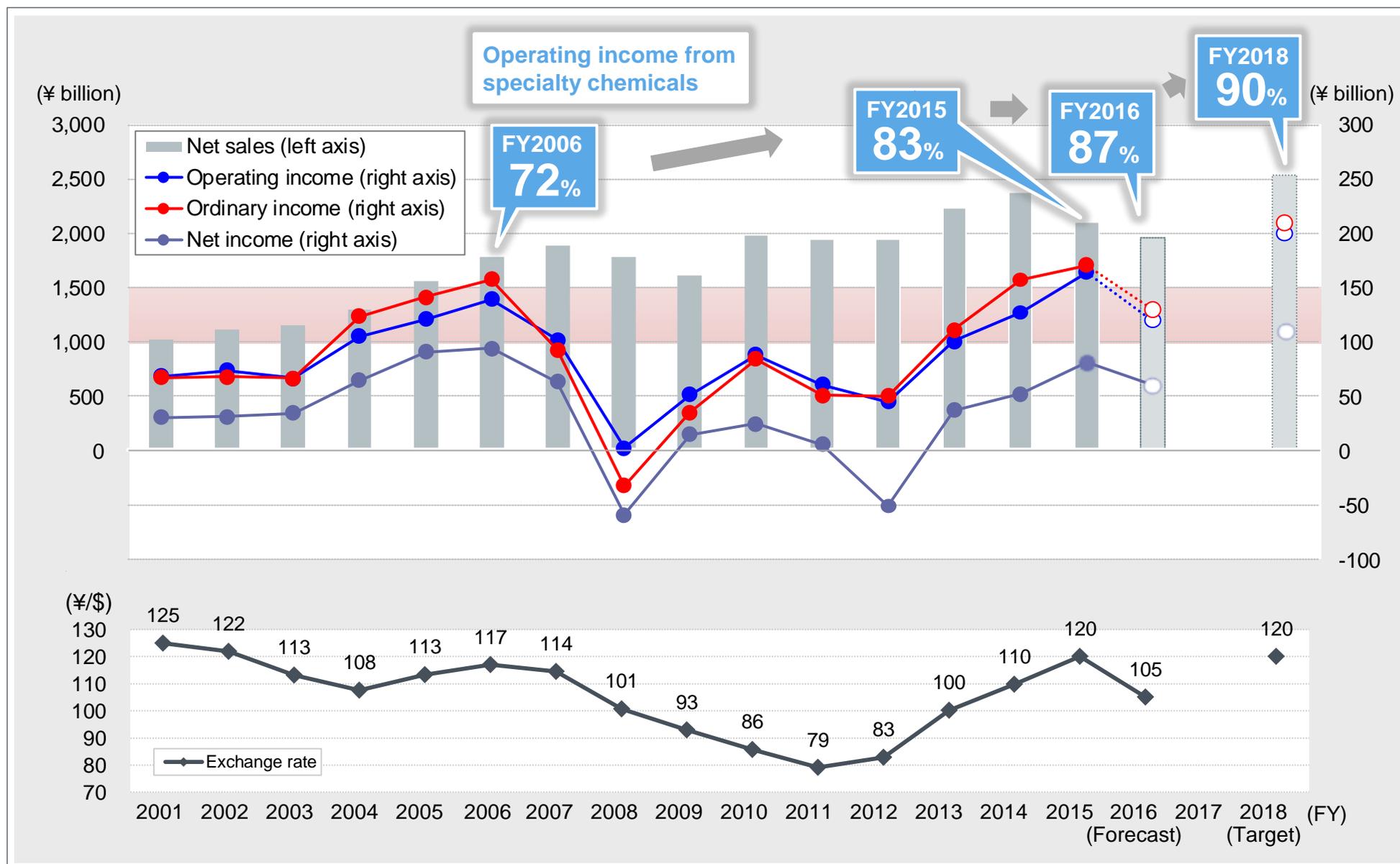
# FY2016 Operating Income Forecast By Sector vs. FY2015

(Billions of yen)

	FY2015	FY2016 Forecast	Change	Reason for Change
<b>Specialty Chemicals</b>	142.9	114.0	-28.9	
<b>Energy &amp; Functional Materials</b>	2.8	3.0	0.2	
<b>IT-related Chemicals</b>	19.9	6.0	-13.9	Stronger yen, lower prices
<b>Health &amp; Crop Sciences</b>	77.5	57.0	-20.5	Stronger yen, lower prices, lower volumes
<b>Pharmaceuticals</b>	42.7	48.0	5.3	Higher volumes
<b>Bulk Chemicals</b>	28.8	17.0	-11.8	
<b>Petrochemicals &amp; Plastics</b>	28.8	17.0	-11.8	Lower margins, lower upfront license fee revenue
<b>Others</b>	-7.2	-11.0	-3.8	
<b>Total</b>	164.4	120.0	-44.4	

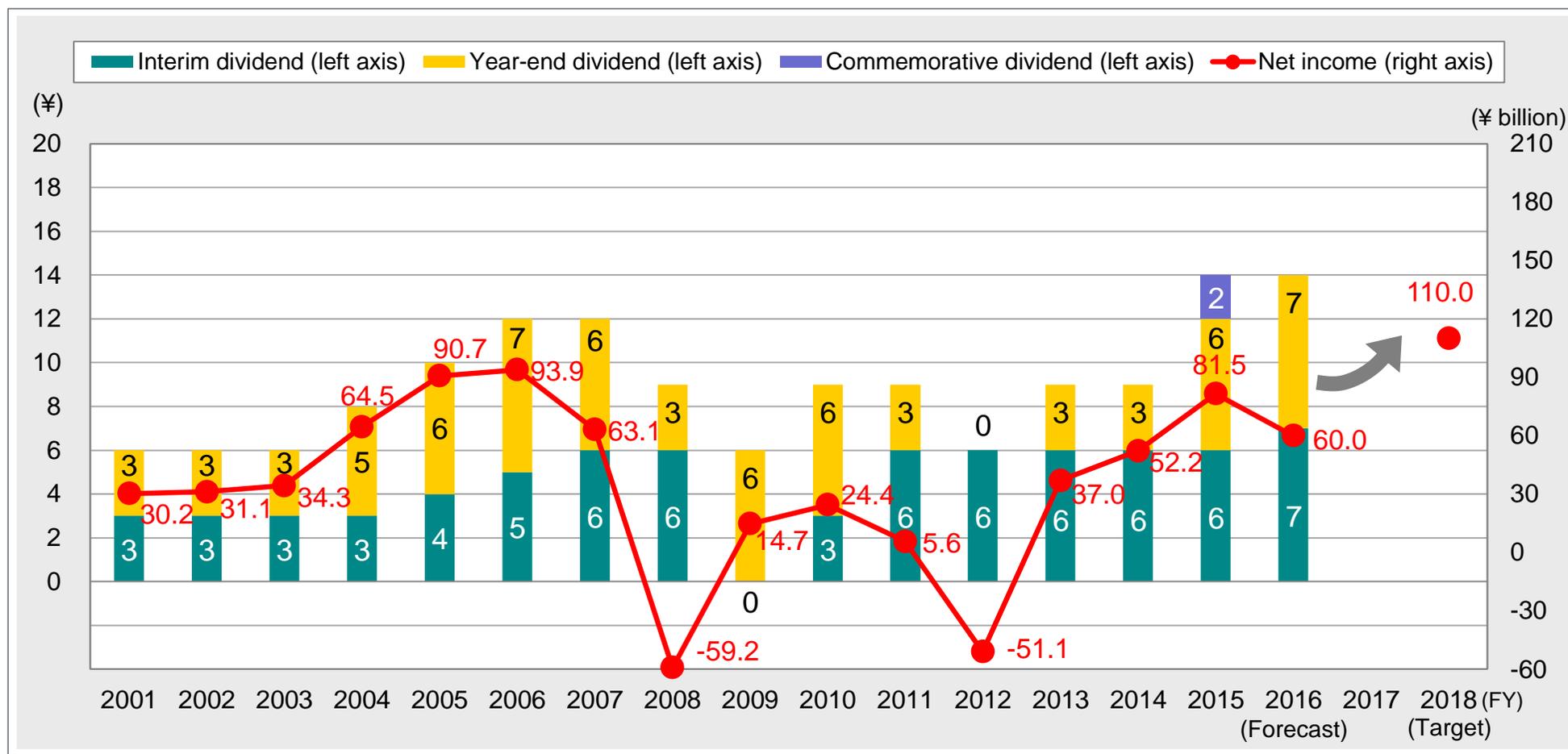
(Note) After the sectors have been revised

# Business Performance



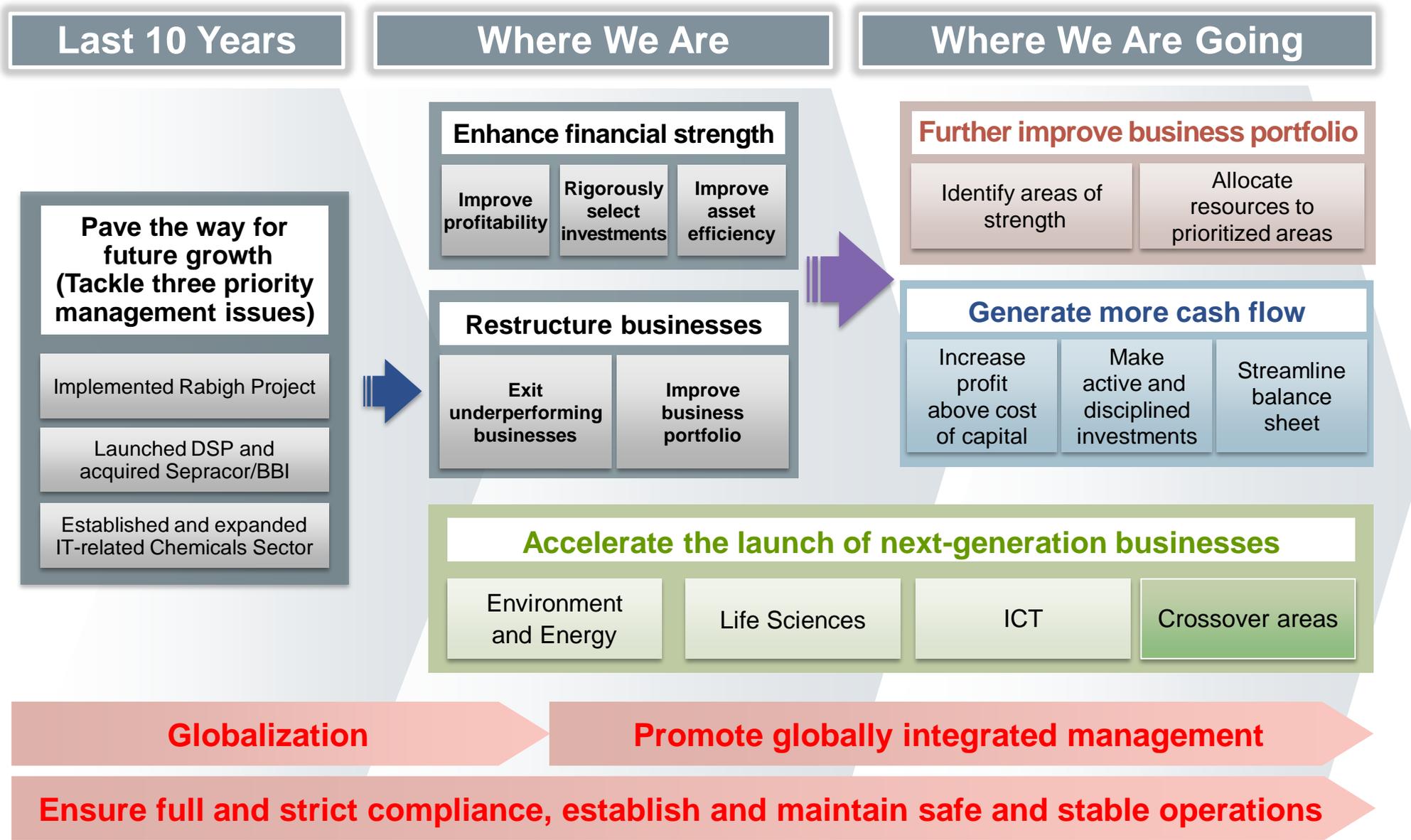
# Dividend Policy

We consider shareholder return as one of our priority management issues and have made it a policy to maintain stable dividend payment, giving due consideration to our business performance and a dividend payout ratio for each fiscal period, the level of retained earnings necessary for future growth, and other relevant factors.



# Corporate Business Plan

# Corporate Business Plan: Basic Policy



# Corporate Business Plan: Further Improve Business Portfolio

## Identify areas where we have distinct strength and competitive advantage

### Areas for aggressive investment and expansion

- Where we have **technological advantages**
- Where we have market access advantages
- Focus resources on these areas (including M&A)

Expand businesses that consistently yield profit above the cost of capital

### Areas for efficiency improvement

- Where it is difficult to achieve technological differentiation
- Where demand significantly fluctuates
- Enhance cost competitiveness and pursue asset efficiency

Achieve profit above the cost of capital  
Maximize return on investment

**Further improve business portfolio**

# Corporate Business Plan: Generate More Cash Flow

## Enhance financial strength

Improve  
profitability

Rigorously  
select investments

Improve  
asset efficiency

## Generate more cash flow

**Increase profit above  
the cost of capital**

- Strengthen competitiveness
- Reduce costs

**Make active and  
disciplined investments**

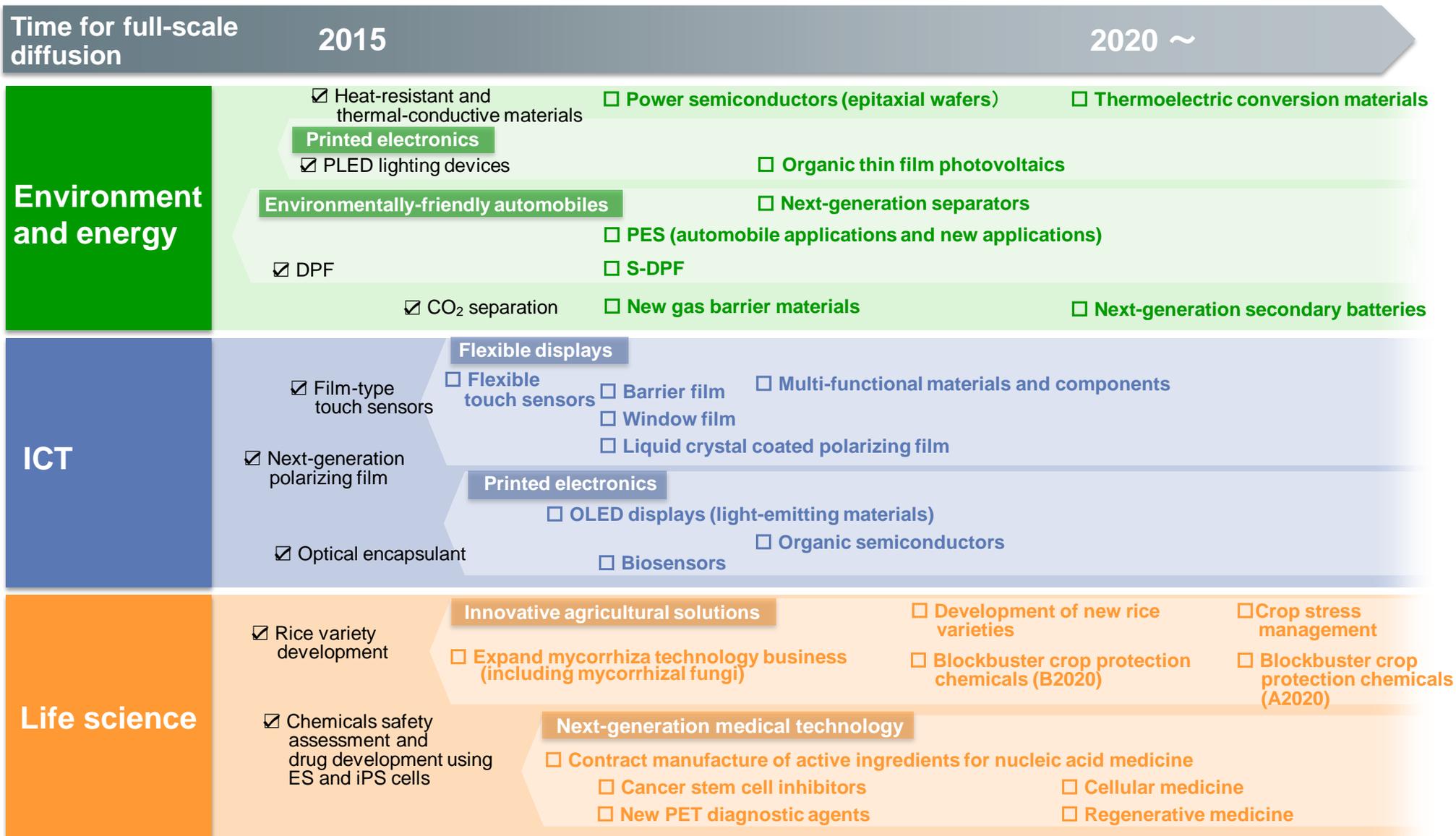
- Identify areas for aggressive expansion
- Identify investment risks

**Streamline  
balance sheet**

- Continuously improve cash conversion cycle
- Sell non-operating, non-strategic assets

**Build and maintain robust earnings power to consistently generate strong cash flow that allows us to take advantage of large-scale investment opportunities when they arise**

# Corporate Business Plan's Basic Policy: Accelerate The Launch of Next-Generation Businesses



✓: Next-generation businesses that have been launched or are to be launched soon.

## Corporate Business Plan: Performance Targets

(Billions of yen)

	FY2015	FY2018 Target	Change
<b>Net Sales</b>	2,101.8	2,540.0	+438.2
<b>Operating Income</b>	164.4	200.0	+35.6
(Equity in Earnings of Affiliates)	20.2	29.0	+8.8
<b>Ordinary Income</b>	171.2	210.0	+38.8
<b>Net Income</b>	81.5	110.0	+28.5
<b>Naphtha Price</b>	¥42,800/kl	¥45,000/kl	
<b>Exchange Rate</b>	¥120.15/\$	¥120.0/\$	

# **Challenges and Strategy for Our Major Businesses**

## **(Efforts to Create New Value)**

- **Progress on Efforts to Create New Value**
- **Cash Flow Management**
- **Accelerating Innovation**

## Challenges and Strategy for Our Major Businesses (Efforts to Create New Value)

- **Progress on Efforts to Create New Value**
- Cash Flow Management
- Accelerating Innovation

# Progress on Corporate Business Plan: Progress on Efforts to Create New Value

## Business Expansion

## Restructuring

### M&A

- Acquired Indian agrochemicals company

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- Acquired a Phase III product candidate for Parkinson's disease

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- Entered cathode materials business

### Organic Growth (Production capacity expansion)

- Decided to expand methionine production capacity

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- Decided to expand separator production capacity

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- Decided to expand polyethersulfone production capacity

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- Expanded touchscreen panel production capacity

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- Proceeding with the construction of Rabigh Phase II Project

---

- Expanded polypropylene compound production capacity

### Organic Growth (Others)

- Decided to expand R&D facilities and experimental field for agrochemicals

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- Agreed to enter new collaboration with Monsanto

---

- Applied for U.S. FDA approval of COPD drug

---

- Advancing development of ADHD drug

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- Advancing development of components for flexible displays

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- Accelerating the shift to high value-added products at TPC

### Already implemented Being addressed

- Offering early retirement program (Sumitomo Dainippon Pharma)

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- S-SBR business consolidation

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- Polarizing film

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- Film business consolidation

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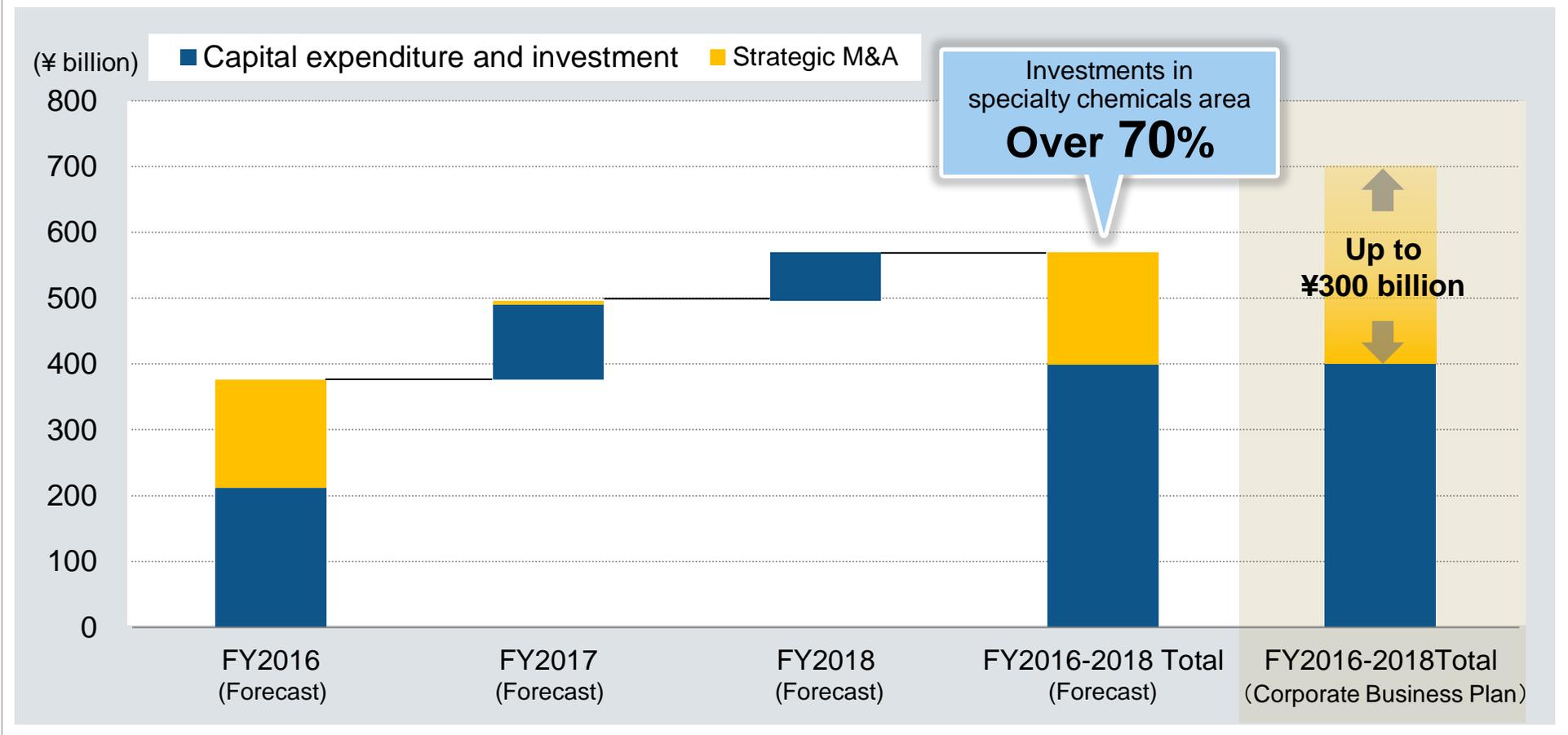
- Caprolactam

#### 【Business area】

Life Sciences (Health & Crop Sciences)    Life Sciences (Pharmaceuticals)    Environment and Energy    ICT    Bulk Chemicals

# Progress on Corporate Business Plan: Capital Expenditure and Investment Plan

## Capital expenditure and investment plan for FY2016-FY2018 (decision-making basis)



**Two-thirds of investment for FY2016-FY2018 will be decided in FY2016**



**Accelerate our efforts to create new value**

# Life Sciences (Health & Crop Sciences): Challenges and Business Strategy

## Value we create

Offer agrochemicals, agrochemical materials and other solutions that contribute to the improvement of food productivity



### Foundations for value creation

- Capability to develop new agrochemicals
- Lineup and knowledge of biorational products
- Global sales network
- Alliance with major agrochemical manufacturers

## Business trends

### Long-term trends

- Increasing food demand
- Tightening of regulations on agrochemicals
- Industry consolidation
- Competition with off-patent agrochemicals

### Short-term trends

- Decline in methionine price

# Life Sciences (Health & Crop Sciences): Challenges and Business Strategy

## Efforts to Create New Value

### Challenges

- Establish business foundation as a global solution provider in crop protection and environmental health areas

### Business strategy

- Enhance our global footprint
- Accelerate development of new products (B2020, A2020 and in-licensing of third-party products)
- Expand biorational and rice businesses
- Expand methionine business

## Recent initiatives

- ☑ Acquired Indian agrochemical company
- ☑ Decided to enhance methionine production capacity
- ☑ Entry into the rice business
- ☑ Decided to enhance R&D facilities and experimental fields
- ☑ Agreed to build a new partnership with Monsanto

# Life Sciences (Health & Crop Sciences): Enhance Global Footprint

## Acquisition of Excel Crop Care, Indian Agrochemicals Company

### 1 Excel Crop Care Limited

**Business:** Development, manufacture and sale of agrochemicals

**Sales:** 8.8 billion rupees (about 16.3 billion yen) in FY2015

**Headquarters:** Mumbai, India

### 2 Outline of the stock acquisition

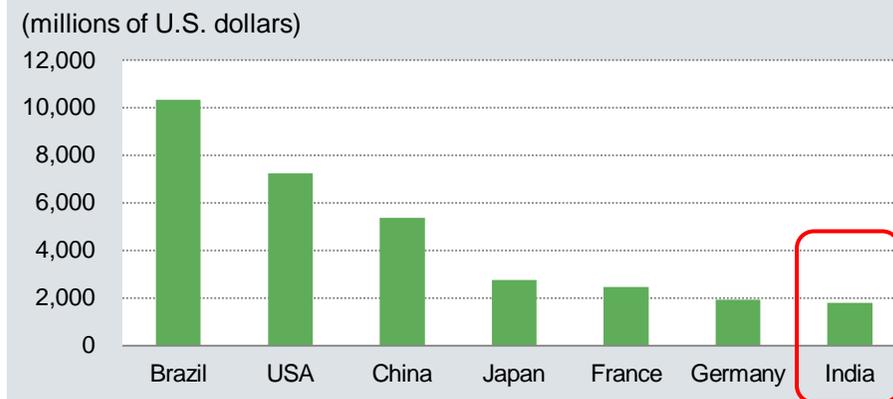
**Acquired stake:** 65%

**Acquisition value:** 9 billion rupees (about 13.9 billion yen)

### Aim of acquisition

- Expand sales channels in India
- Leverage Excel Crop Care's brand

### The world agrochemicals market in FY2015



Source: Phillips McDougall

### Share in the Indian agrochemicals market in FY2014

Top Bayer	12%
2nd Syngenta	10%
2nd United Phosphorus	10%
4th Rallis	8%
5th Excel Crop Care	5%
10th Sumitomo Chemical India	4%

Excel Crop Care and Sumitomo Chemical India combined to become the fourth largest

Aiming to become the market leader in India

Source: Phillips McDougall

**Increase our presence in the growing Indian market and enhance our global footprint**

# Life Sciences (Health & Crop Sciences): Enhance Global R&D Capabilities

## Health & Crop Sciences Business: Global R&D Capabilities



### Construct Biorational Research Center

- Aim: Improve efficiency of development of biorational products
- Completion: in FY2017

**PACE** Agro-chemicals

**Philagro France** Agro-chemicals

### Construct New Synthesis Research Laboratory at Health & Crop Sciences Research Laboratory

- Aim: Improve efficiency and speed of development of agrochemicals
- Completion: June 2018

**MGK** Environmental Health

**VBC** Agro-chemicals

**Valent** Agro-chemicals

### Open new experimental fields (U.S.)

- Aim: Accelerate development of agrochemicals in U.S.
- Completion: in FY2016



**Sumitomo Chemical** Agrochemicals  
Environmental Health

### Open new R&D center (Brazil)

- Aim: Strengthen development of agrochemicals in South America
- Completion: November 2016

**Vector Health International** Agrochemicals  
Environmental Health

**Sumitomo Chemical Enviro-Agro Asia Pacific** Environmental Health  
Feed additives

**Enhance global R&D structure and accelerate agrochemical development**

# Life Sciences (Health & Crop Sciences): Increase Methionine Production Capacity

## Competitive advantage in methionine business

Integrated production from raw material

Advanced production technology

Waste liquid and gas treatment capacity

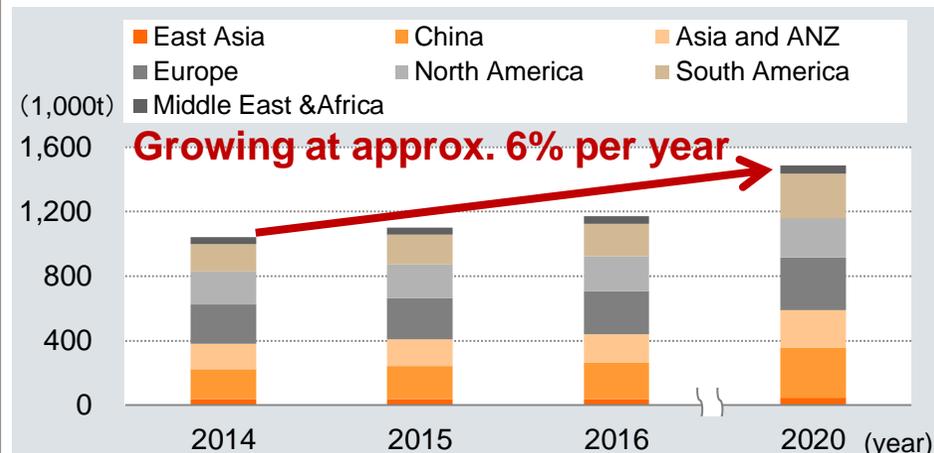
Stable supply of high quality products

## Production capacity expansion

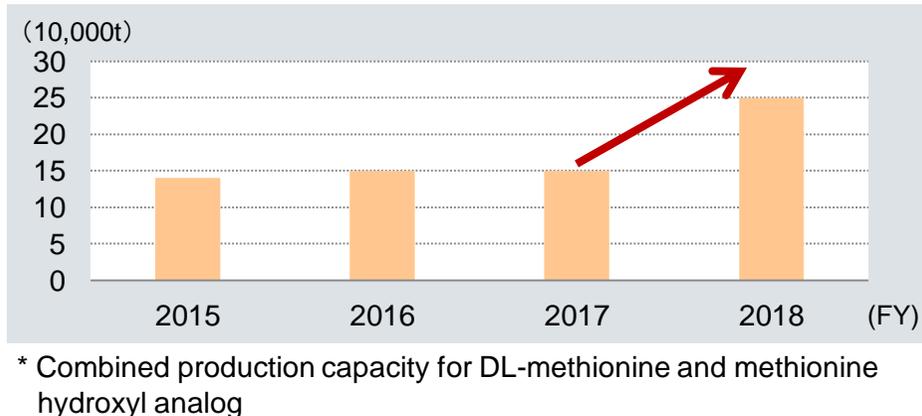
**Product:** DL-methionine  
**Production capacity:** 100,000 tons  
**Location:** Ehime Works  
**Start of operation:** Mid 2018



## Methionine Demand Forecast by Region



## Methionine Production Capacity



**Reinforce our position as Asia's leading methionine player**

# Life Sciences (Pharmaceuticals): Challenges and Business Strategy

## Value we create

Offer pharmaceuticals and diagnostic agents that contribute to the improvement of patients' quality of life



### Foundations for value creation

- R&D capabilities in the areas of psychiatric and neurological disorders and cancer
- Cooperation inside and outside the Group in the areas of regenerative and cellular medicine
- New drug development capabilities and sales networks in Japan and U.S.

## Business trends

### Long-term trends

- Innovation in medical technology
- Increasing pharmaceutical development costs
- Accelerated implementation of policy measures to control national healthcare spending (Japan)
- Industry consolidation

### Short-term trend

- Increased use of generic drugs (Japan)

# Life Sciences (Pharmaceuticals): Challenges and Business Strategy

## Efforts to Create New Value

### Challenges

- Address the patent cliff of Latuda
- Manage the effect of policy measures to promote the use of generic drugs

### Business strategy

- Accelerate the development of products in late-stage development
- In-license and acquire third-party products under-development
- Accelerate the development of regenerative and cellular medicine
- Reform cost structure (Japan and U.S.)

## Recent initiatives

- ☑ Acquisition of Parkinson's disease drug\*
- ☑ Filed for U.S. FDA approval of COPD drug
- ☑ Progress in the development of cancer stem cell inhibitor
- ☑ Progress in the development of ADHD drug
- ☑ Launched early retirement program in Japan (Sumitomo Dainippon Pharma)

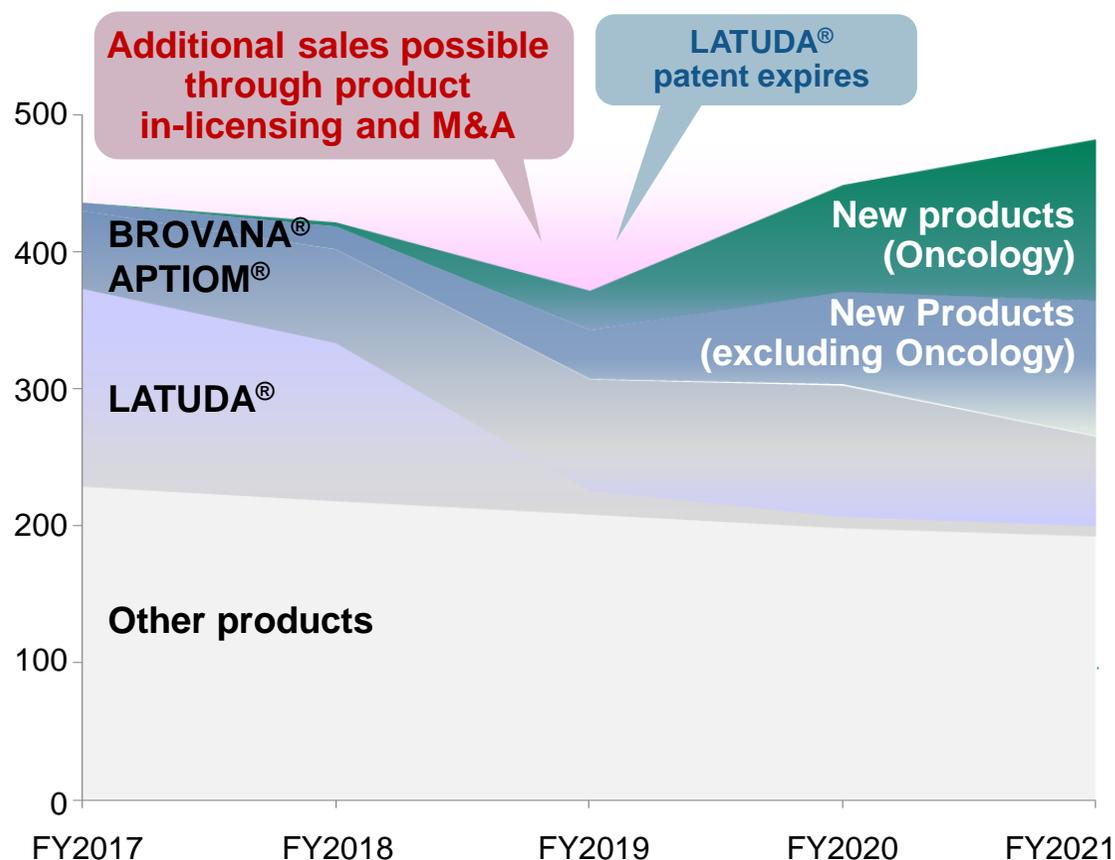
\* Acquired Cynapsus Therapeutics Inc. in October 2016

# Life Sciences (Pharmaceuticals): Post-LATUDA Efforts

Despite an expected earnings decline in FY2019 due to the expiration of the U.S. patents for LATUDA in the second half of FY2018, we aim to achieve an early recovery and growth in FY2020 and beyond by launching new products and expanding their sales

## Net sales

(billions of yen)



## Main launch products (planned)

### Oncology area

- Anticancer drug Napabucasin (Japan and U.S.)
- Anticancer drug Amcasertib (Japan and U.S.)
- Anticancer drug DSP-7888 (Japan and U.S.)

### Other areas

- SUN-101 for chronic obstructive pulmonary disease (COPD) (U.S.)
- Dasotraline for attention deficit hyperactivity disorder (ADHD) / binge eating disorder (BED) (U.S.)
- SB623 for chronic stroke (U.S.)
- APL-130277 for Parkinson's disease (U.S.)
- Lurasidone atypical antipsychotic (Japan)
- DSP-1747 for non-alcoholic steatohepatitis (Japan)

(Assumption) NHI prices to be revised in FY2018 and FY2020

# Life Sciences (Pharmaceuticals): Post-LATUDA Efforts – Product Development

## Application for approval of drug for chronic obstructive pulmonary disease (COPD)

### Efficacy

Chronic obstructive pulmonary disease (COPD)

### Feature

1. Administered by nebulizer\*
2. Short administration time (2 to 3 minutes)

### Development plan

At present:  
Applied for approval (U.S.)  
In FY2017:  
Scheduled for launch (U.S.)



\* Nebulizer: a device used for inhaling a medicinal drug

eFlow®, nebulizer for SUN-101

**Anticipating peak sales of 50 billion yen**

## Acquisition of Parkinson's disease drug\*

### Efficacy

“Off” episodes of Parkinson's disease

### Feature

Sublingual thin film

### Development plan

At present:  
In phase III clinical trials (North America)

FY2017: Submit new drug application

In 2018: Possible approval



Administration of APL-130277

\* Acquired in the transaction of acquiring Cynapsus Therapeutics Inc. in October 2016 for 635 million dollars

**Anticipating peak sales of 50 billion yen**

**Making progress in new product development and in-licensing for post-LATUDA period**

# Environment and Energy: Challenges and Business Strategy

## Value we create

Offer highly functional materials and solutions for environmentally friendly products, such as eco-cars



## Foundations for value creation

- Capability to develop and offer highly functional products
- Manufacturing technology for highly functional products

## Business trends

### Long-term trends

- Demands for sustainable society
  - Measures for addressing climate change issues
  - Measures for addressing energy and resource issues
- Tightening of various regulations
- Global competition

### Short-term trend

- Intensifying competition in some businesses

# Environment and Energy: Challenges and Business Strategy

## Efforts to Create New Value

### Challenges

- Grow the battery component business into a core business
- Nurture eco-car component business

### Business strategy

- Enhance the lineup of battery components and their production capacity
- Expand the use of existing materials in eco-car parts
- Restructure underperforming businesses

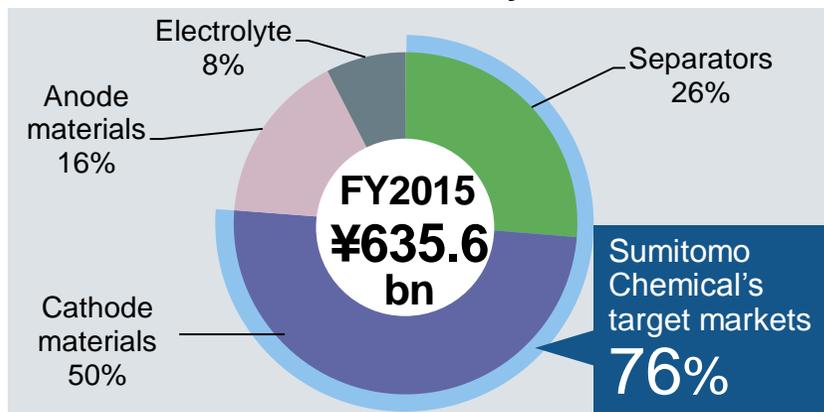
## Recent initiatives and issues being addressed

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> Entered cathode materials business         | <input checked="" type="checkbox"/> Decided to increase PES production capacity |
| <input checked="" type="checkbox"/> Expansion of separator production capacity | <input type="checkbox"/> Began the study of S-SBR business integration          |

Implemented       Issues being addressed

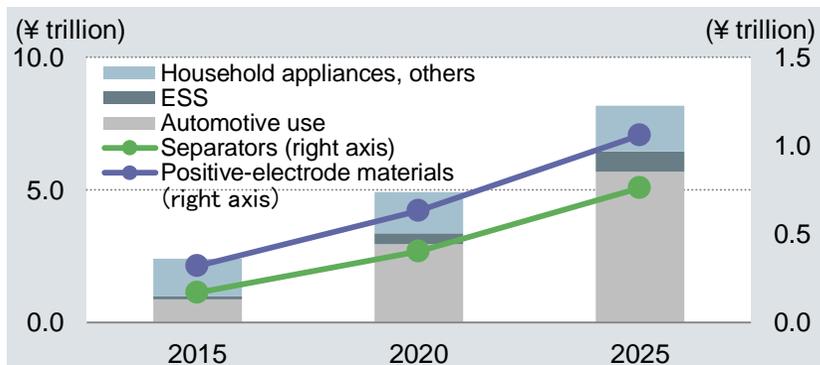
# Environment and Energy: Decided to Increase Lithium-Ion Secondary Battery Separator Production Capacity

## Market for 4 main components and materials of lithium-ion secondary batteries



(Source) "Future Outlook of Energy, Large Scale Secondary Battery, and Materials 2016; Energy Devices" by Fuji Keizai

## Market outlook for lithium-ion secondary batteries and components and materials



(Source) "Future Outlook of Energy, Large Scale Secondary Battery, and Materials 2016; Energy Devices" by Fuji Keizai

## Advantages of aramid-coated separator

High heat resistance, greater safety

Lightweight

Less powder dust

Best suited for high-capacity batteries for automotive and other applications

Increasing demand for use in eco-cars

## Separator production capacity expansion plan

**Production capacity** :South Korea production capacity to be quadrupled

**Start of operation**: In stages from August 2017

### Separator production capacity



	Future
Japan	Approx. 100 million m <sup>2</sup>
South Korea	Approx. 300 million m <sup>2</sup>
<b>Total</b>	<b>Approx. 400 million m<sup>2</sup></b>

**4 times**

**Expand market share of lithium-ion secondary battery separator for automotive use**

# Environment and Energy: Entry into Cathode Materials Business

## Profile of Tanaka Chemical Corporation

**Business:** Manufacture and sale of cathode materials and catalyst raw materials

**Net sales:** Approx. ¥15.3 billion in FY2015

## Became Sumitomo Chemical's subsidiary through private share placement

**Shares acquired:**

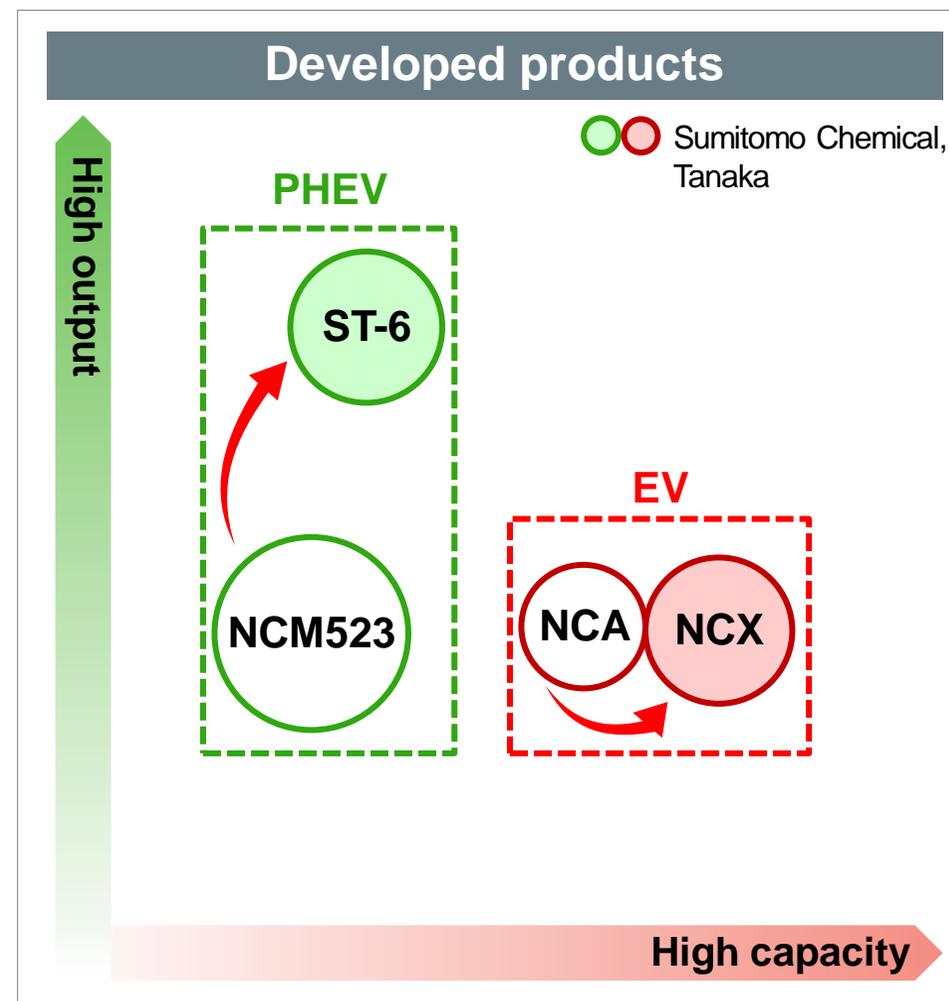
10.5 million  
(subscription value: Approx. ¥6.6 billion)

**Shares owned:**

12.7 million (investment ratio of 50.1%)

## Aim of acquisition

Accelerate development and launch of highly functional cathode materials for automotive batteries by leveraging the two companies' strengths.



**Entry into the cathode materials business, aiming to have our products adopted for automotive batteries as soon as possible**

# ICT: Challenges and Business Strategy

## Value we create

Offer highly functional components that contribute to the improvement of display performance



## Foundations for value creation

- Close relationships with excellent customers (customer-oriented supply chain)
- Material development capability as a diversified chemicals manufacturer

## Business trends

### Long-term trends

- Maturing LCD markets (Growing production in China)
- Widening use of OLED displays (Growing production in Korea, China, etc.)
- Flexible displays beginning to be adopted

### Short-term trends

- Rebounding demand for LCD materials

# ICT: Challenges and Business Strategy

## Efforts to Create New Value

### Challenges

- Address the generational shift in display technology and growing LCD production in China

### Business strategy

- Establish cost advantage in the LCD component business
- Develop new products in the OLED component business and make investment in a timely manner

## Recent initiatives and issues being addressed

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> Completed the expansion of touch screen panel production capacity | <input type="checkbox"/> Reform cost structure of the polarizing film business (including a restructuring of the supply capabilities) |
| <input checked="" type="checkbox"/> Accelerate the development of flexible display components         |   |

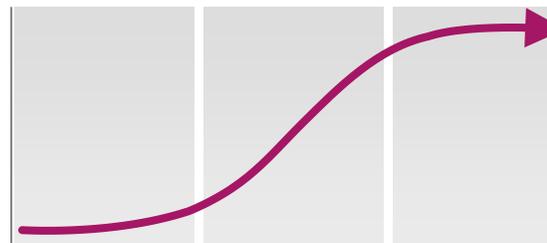
Implemented       Issues being addressed

# ICT: Business Life Cycle Management in ICT Area

## Printed electronics



Development phase



### Our products

- PLED lighting (general lighting)
- Organic semiconductor
- Organic thin film solar cells
- Biosensor

## OLED display (flexible)



Eve of introduction phase



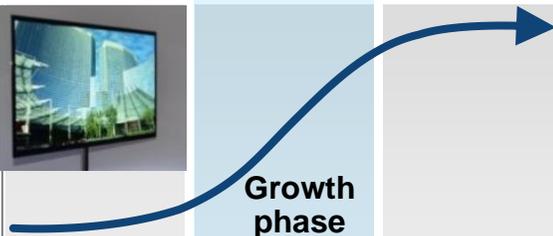
### Our products

- Window film
- Liquid crystal coated-type polarizing film
- Flexible touchscreen panels
- Barrier film

## OLED display (rigid)



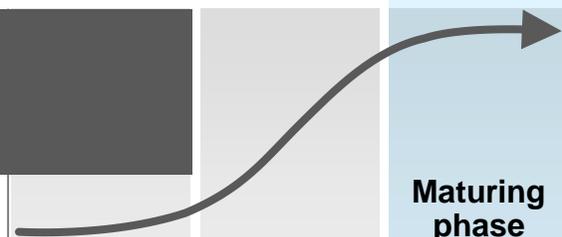
Growth phase



### Our products

- Circularly polarizing film
- Touchscreen panels
- PLED light-emitting materials

## LCD



Maturing phase

### Our products

- Polarizing film
- Color filter
- Color resist
- Aluminum sputtering target, etc.

Past

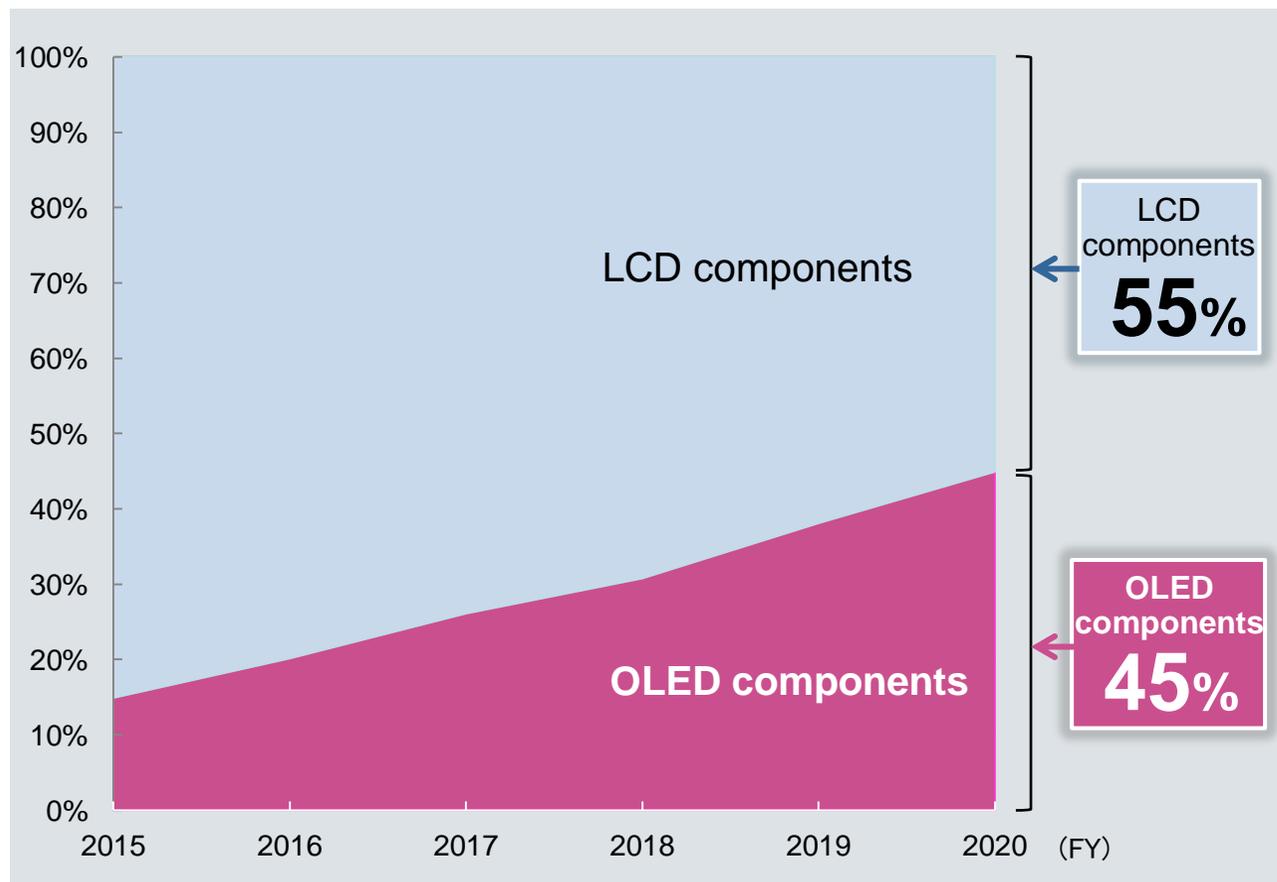
Present

Future

**Develop the next-generation business pipeline in anticipation of generational shift in display technology**

# ICT: Sales Outlook of Display Material Business

## Change in composition of display components sales



## Recent initiatives

### LCD components

- Increased use of materials made in-house
- Restructured production capabilities to enhance competitiveness

### OLED display components

- Expanded touchscreen panel production capacity
- Decided to mass-produce and launch coated retardation film
- Making progress in the development of PLED light-emitting materials

Implemented     Issues being addressed

**Shift the pivot of the business from LCD components to OLED components**

# Bulk Chemicals: Challenges and Business Strategy

## Value we create

Offer petrochemical products sought by customers



## Foundations for value creation

- Access to cost-competitive ethane
- Brand power in the Asian market
- Capability to develop high value-added products
- Close relationships with prominent customers

## Business trends

### Long-term trends

- Stable growth in demand
- Increase in supply from new plants using cost-competitive gases as feedstock

### Short-term trend

- Solid demand and supply balance in the Asian market

# Bulk Chemicals: Challenges and Business Strategy

## Efforts to Create New Value

### Challenges

- Further improve production operations on a region-by-region basis

### Business strategy

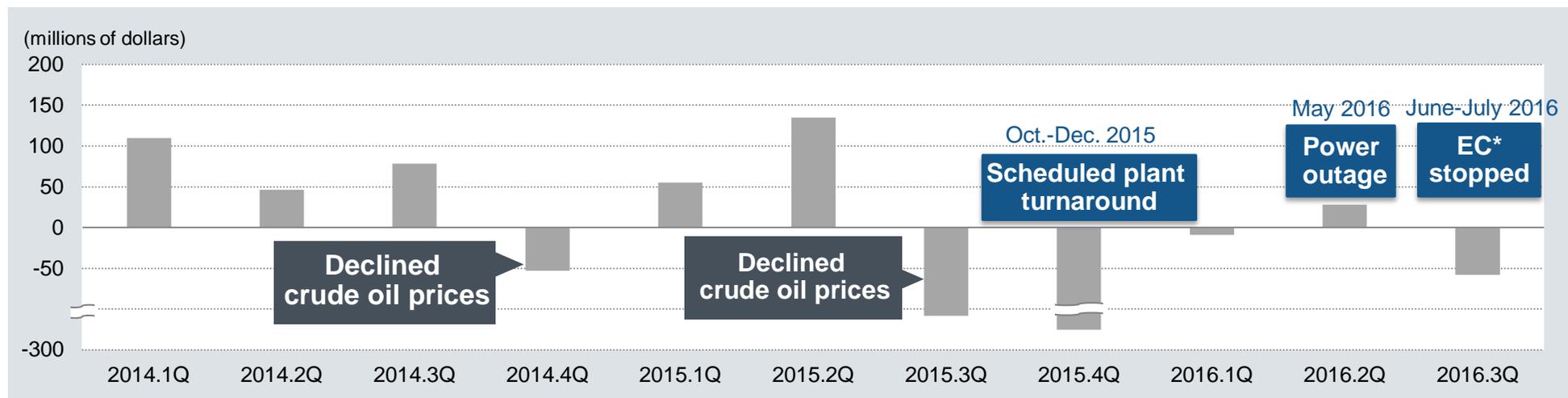
- Enhance high value-added products business (Singapore and Japan)
- Achieve stable operation (Rabigh Phase I project)
- Achieve early start-up (Rabigh Phase II project)

## Recent initiatives and issues being addressed

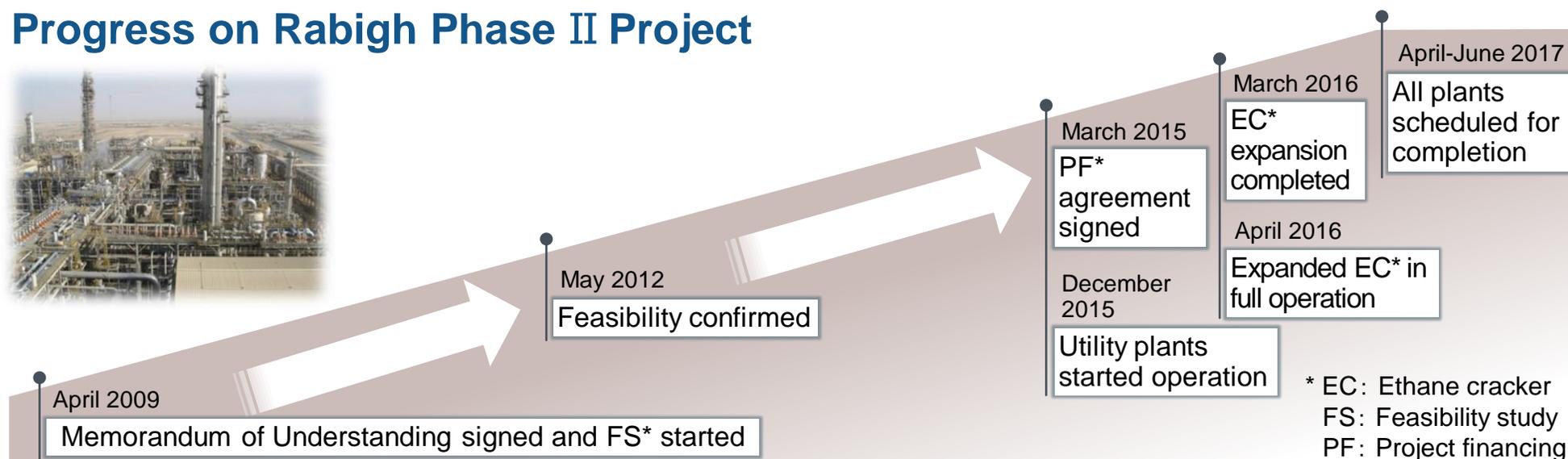
- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Making progress in construction of Rabigh phase II project | <input checked="" type="checkbox"/> Integration of film business   |
| <input checked="" type="checkbox"/> Accelerating the shift to high value-added products at TPC | <input type="checkbox"/> Restructuring of the caprolactam business |
| <input checked="" type="checkbox"/> Expanding polypropylene compound production capacity       | <input checked="" type="checkbox"/> Implemented                    |
|  | <input type="checkbox"/> Issues being addressed                    |

# Bulk Chemicals: Rabigh Project

## Petro Rabigh's Net Income



## Progress on Rabigh Phase II Project



# Progress on Corporate Business Plan: Progress on Efforts to Create New Value

## Business Expansion

## Restructuring

### M&A

- Acquired Indian agrochemicals company

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- Acquired a Phase III product candidate for Parkinson's disease

---

- Entered cathode materials business

### Organic Growth (Production capacity expansion)

- Decided to expand methionine production capacity

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- Decided to expand separator production capacity

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- Decided to expand polyethersulfone production capacity

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- Expanded touchscreen panel production capacity

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- Proceeding with the construction of Rabigh Phase II Project

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- Expanded polypropylene compound production capacity

### Organic Growth (Others)

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- Agreed to enter new collaboration with Monsanto

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- Applied for U.S. FDA approval of COPD drug

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- Advancing development of ADHD drug

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- Advancing development of components for flexible displays

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- Accelerating the shift to high value-added products at TPC

### Already implemented Being addressed

- Offering early retirement program (Sumitomo Dainippon Pharma)

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- S-SBR business consolidation

---

- Polarizing film

---

- Film business consolidation

---

- Caprolactam

#### 【Business area】

■ Life Sciences (Health & Crop Sciences)  
 □ Life Sciences (Pharmaceuticals)  
 ■ Environment and Energy  
 ■ ICT  
 ■ Bulk Chemicals

## Challenges and Strategy for Our Major Businesses (Efforts to Create New Value)

- Progress on Efforts to Create New Value
- **Cash Flow Management**
- Accelerating Innovation

# Cash Flow Management: Cash Flow Target

(Billions of yen)

	2010-2012	2013-2015	2016-2018 (Target)	
			After investments in strategic M&A	(Reference) Before investments in strategic M&A
Cash flows from operating activities	472.3	716.4	680.0	680.0
Cash flows from investing activities	-445.7	-245.5	-800.0	-540.0
Free cash flows	26.6	470.9	-120.0	140.0

(Billions of yen)

	End of FY2012	End of FY2015	End of FY2018 (Target)	
			After investments in strategic M&A	(Reference) Before investments in strategic M&A
Interest-bearing liabilities	1,060.6	831.5	1,000.0	850.0

# Cash Flow Management: Measures to Improve Cash Flows

## Operating cash flows

- Stronger yen than planned  
(Weaker business environment in some businesses)

## Investment cash flows

- Strategic M&A investments implemented
- Increase in capital investment projects

**Lower free cash flows and increased interest-bearing liabilities**

## Measures

### Selective investment

- ✓ More selective investment
- ✓ Quickly decide whether to continue underperforming businesses

### Asset sales

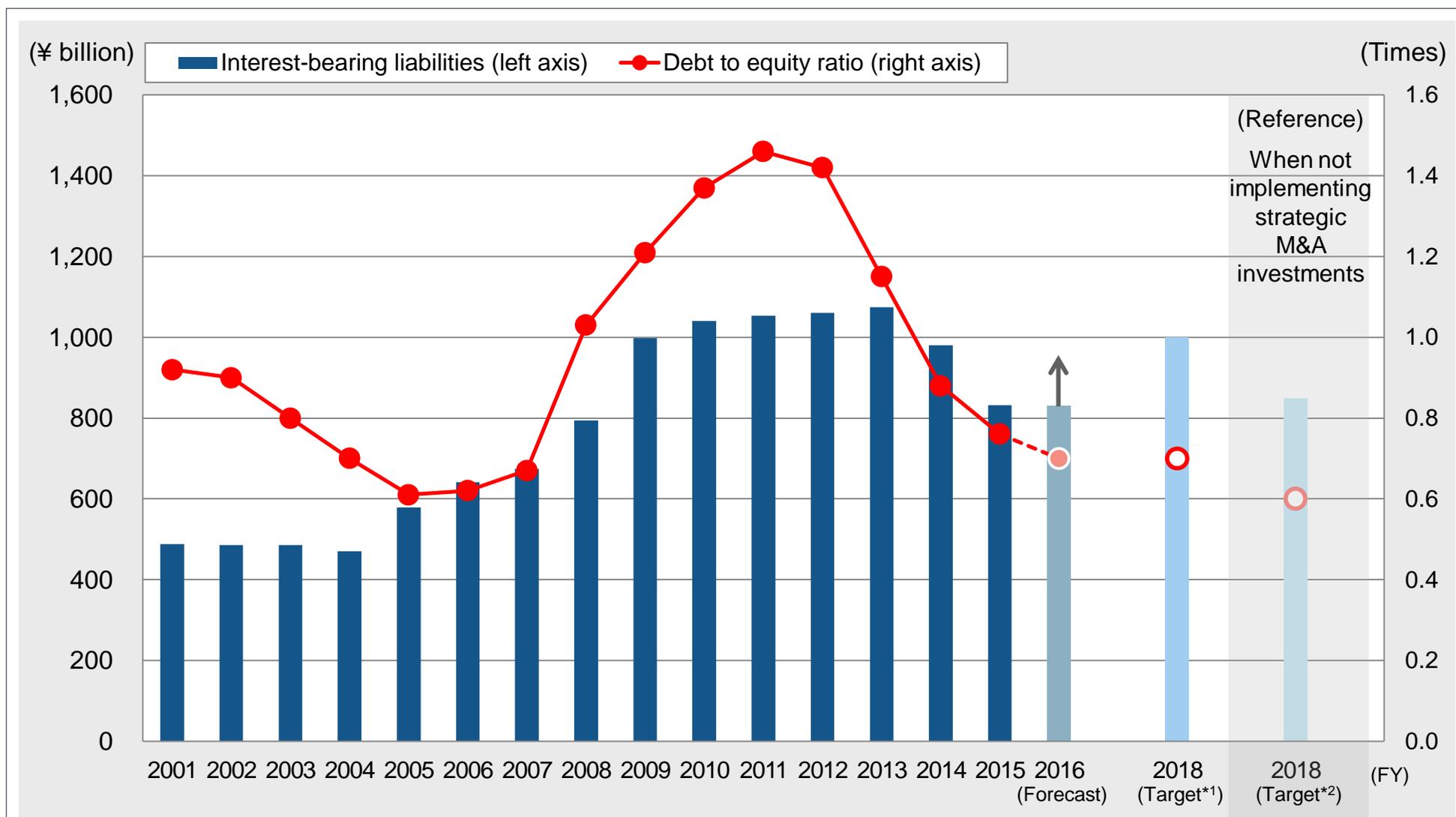
- ✓ Accelerate asset sales

### Others

- ✓ Redouble rationalization efforts
- ✓ Use cash reserves effectively

**Rigorously select and implement investments necessary for sustainable growth, while maintaining sound financial condition**

# Cash Flow Management: Interest-Bearing Liabilities and Debt to Equity Ratio



\*1 Including investment in Rabigh Phase II Project; including the effects of investments in strategic M&A

\*2 Including investment in Rabigh Phase II Project; not including the effects of investments in strategic M&A

## Challenges and Strategy for Our Major Businesses (Efforts to Create New Value)

- Progress on Efforts to Create New Value
- Cash Flow Management
- **Accelerating Innovation**

# Progress in Corporate Business Plan: Accelerating Innovation (IoT Project)

## Digital Global SCM

### Global integration and upgrading of the core business IT system

- Enhancement of external collaborations
- Real time
- Strengthening of data analysis functions
- Enhancement of simulation functions
- Improvement of user interface

Visualize global supply chain information on a real time basis

## Digital R&D

### Sophistication

e.g., Development of new materials from a new perspective

### Efficiency

e.g., Use of AI to improve speed and quality of search and research for patents and papers

### Key technologies and know-how

Sharing know-how for AI utilization

Development of the environment for machine translation

## IoT Project

## Digital Back Office

Paperless

Groupware utilization

Work style innovation and improvement of operational efficiency  
 Greater flexibility of system  
 Reduction of IT system expenses

Digital workspace

Cloud

## Digital Plant

Digital Worker

▶ Improvement of safety and efficiency of work process

Digital Asset

▶ Maximization of facility capacity

Digital Operation

▶ Optimization of operation and improvement of operational efficiency

Digital Infrastructure

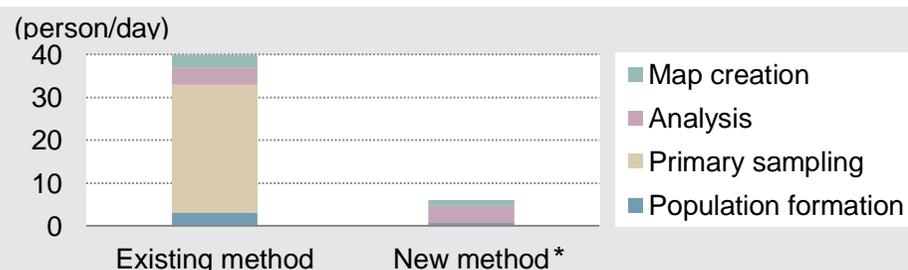
▶ Modernization of digital infrastructure of plants

## Utilizing latest information technologies, including big data and AI in R&D and intellectual property-related activities

### 1 Utilization of information collection and analysis tools



Reference: Case of man-hour reduction in intellectual property landscape study



\* New method: Utilized concept search tool

### 2 Introduction of electronic lab notebook



- Improve efficiency of lab notebook preparation
- Introduce a format to be followed in lab notebook entry, promoting information sharing



Improve R&D productivity

### 3 Utilization to support decision-making (under consideration)

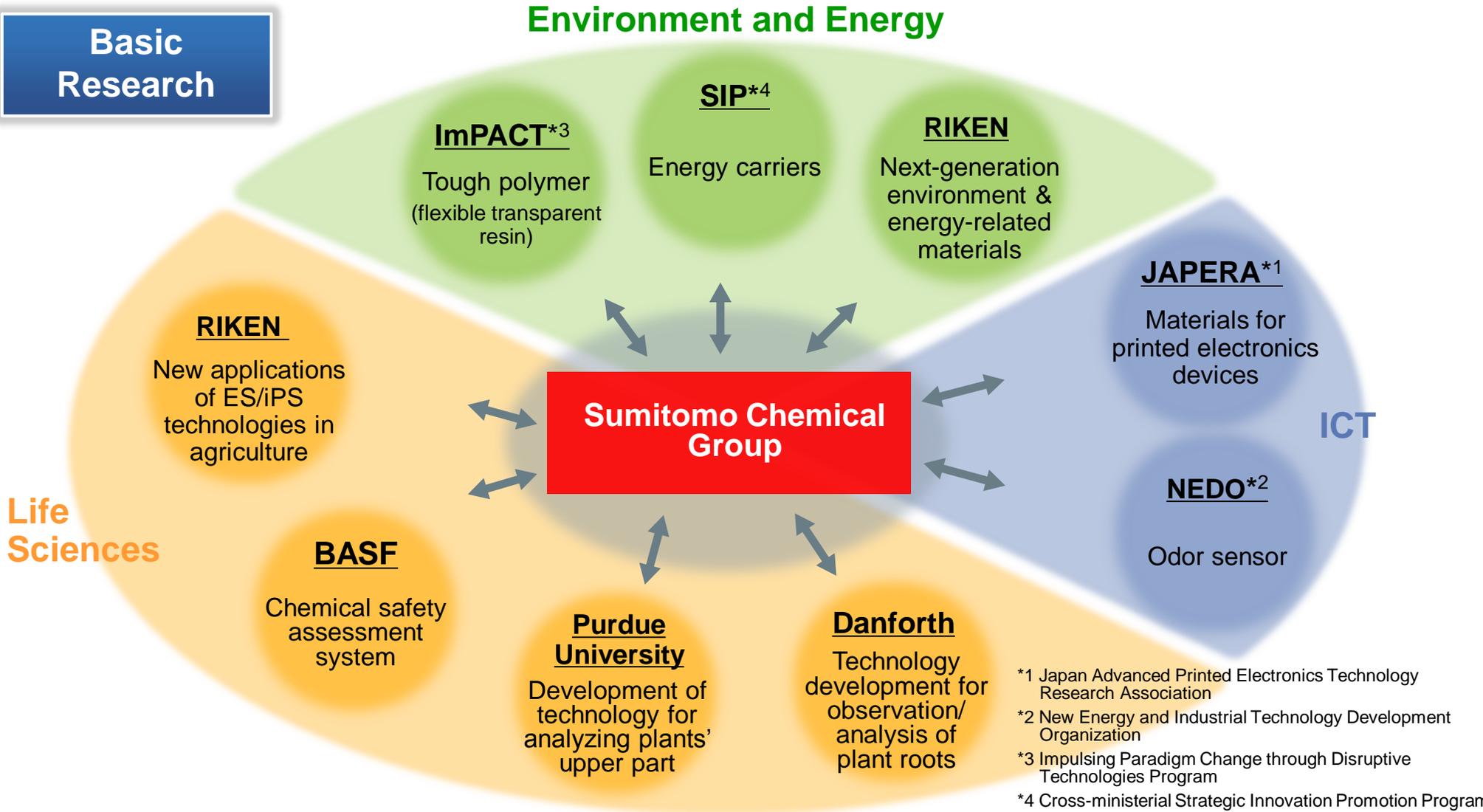
- Utilization of big data inside and outside the company



**Improve productivity of R&D activities and accelerate the launch of next-generation businesses**

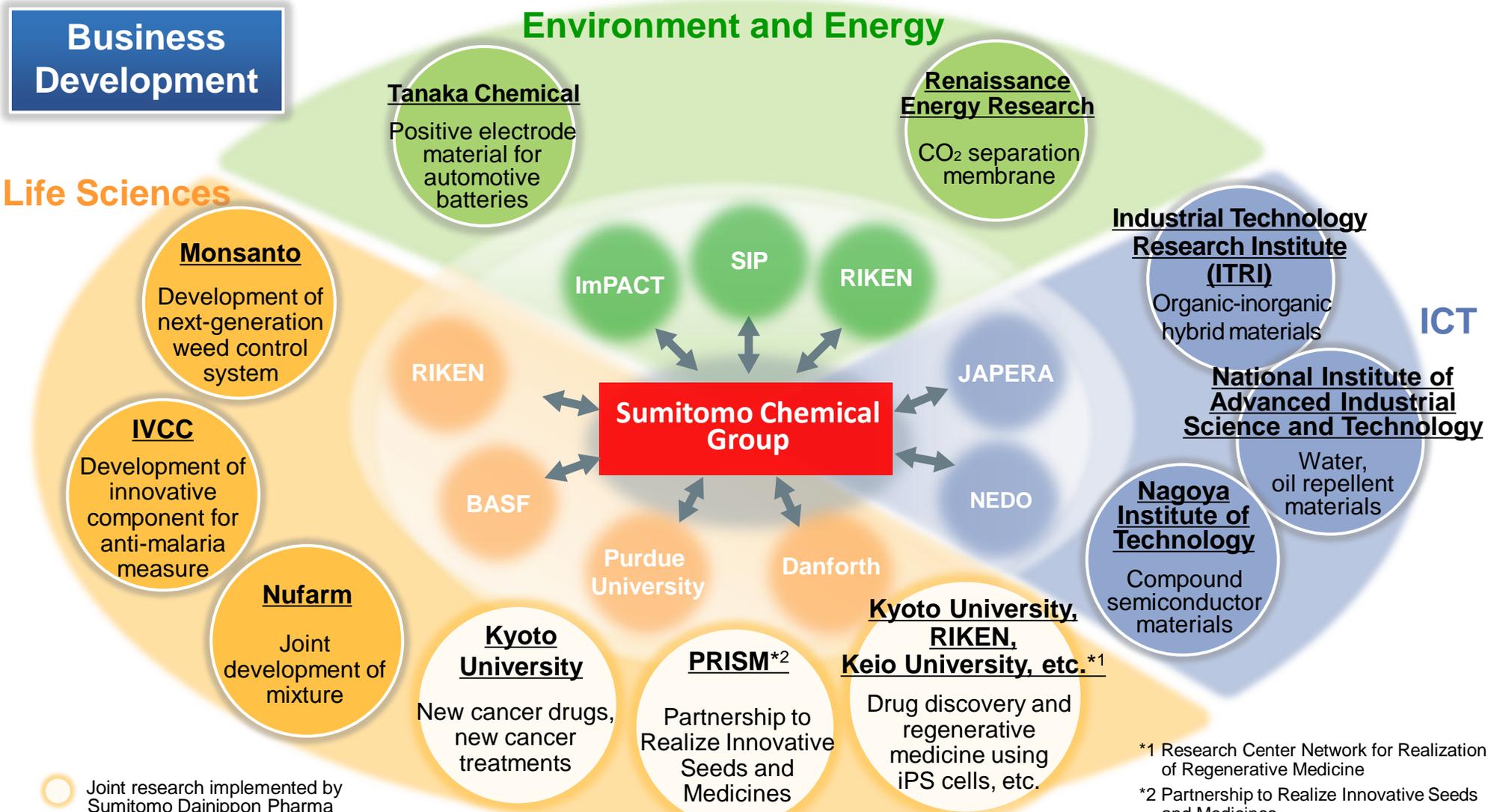
Progress in Corporate Business Plan: **Accelerating Innovation** (Technology Development by Open Innovation)

**Basic Research**



**Accelerate the development of next-generation businesses by leveraging both internal and external expertise**

Progress in Corporate Business Plan: **Accelerating Innovation** (Business Development by Open Innovation)



**Accelerate the development of next-generation businesses by leveraging both internal and external expertise**

# Sumitomo Chemical's Value Creation

# What Sumitomo Chemical Strives To Be

**Business  
Philosophy**

- ◆ Commit ourselves to creating new value by building on innovation
- ◆ Work to contribute to society through our business activities
- ◆ Develop a vibrant corporate culture and continue to be a company that society can trust

**Core  
Competence**

Capabilities to develop innovative solutions by leveraging its technological expertise in diverse areas

Capabilities to reach global markets

Loyal employees



**Challenges  
&  
Business Opportunities**

Solve issues facing society

- Environment
- Food
- Resources and energy

Improve quality of life and build an affluent and comfortable society

- Health promotion
- Comfortable life



**Achieve sustained growth by creating new value through innovative technologies**

# Achieve Sustained Growth

## Medium- to long-term targets

Consistently achieve  
the following targets:

**ROE**

over **10%**

**ROI**

over **7%**

**D/E ratio**

approx.  
**0.7** times

**Dividend  
payout ratio**

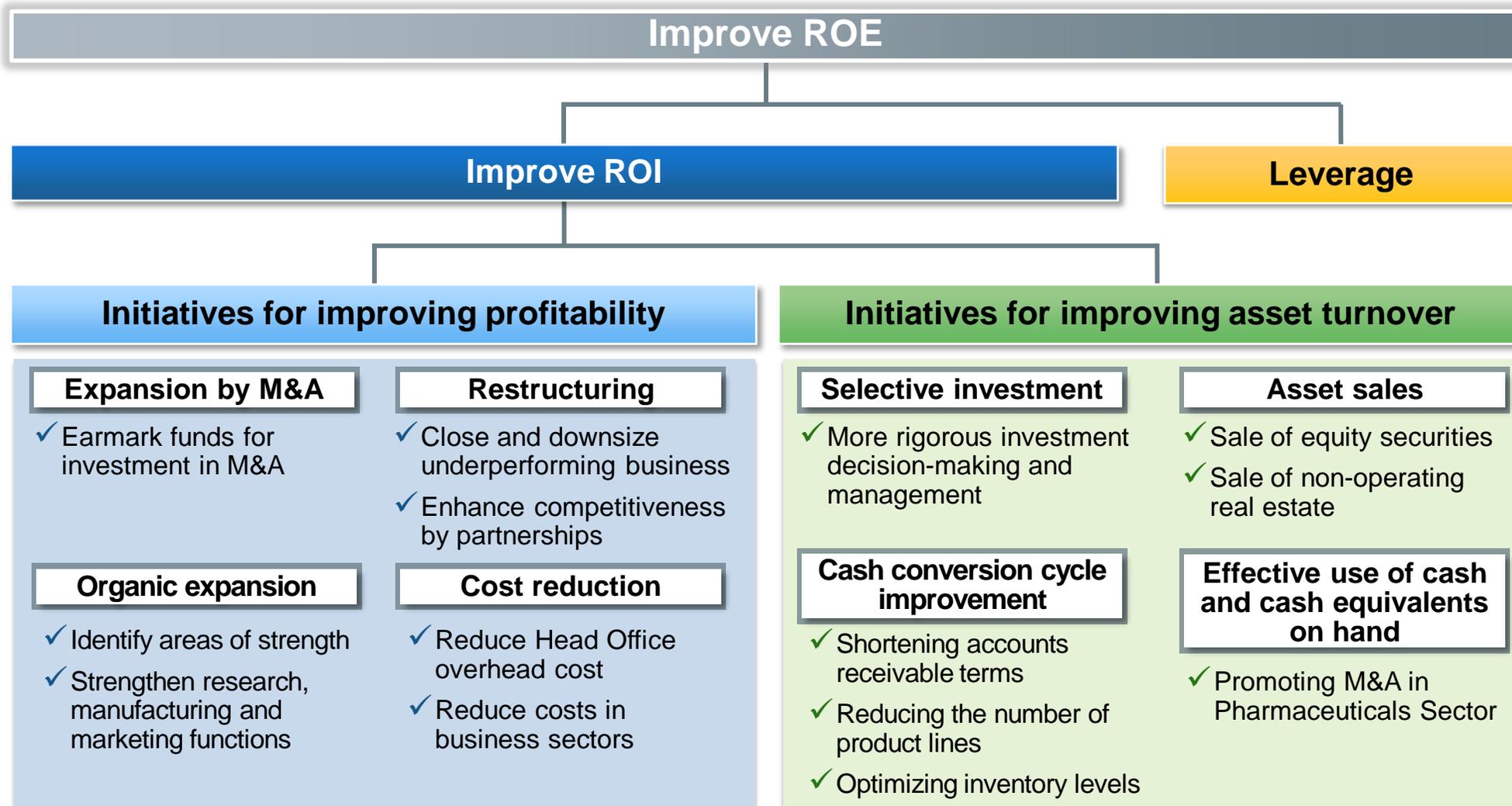
approx. **30%**

**Profit  
growth**

over **7%**  
per year

**Become a more resilient Sumitomo Chemical  
that achieves sustained growth**

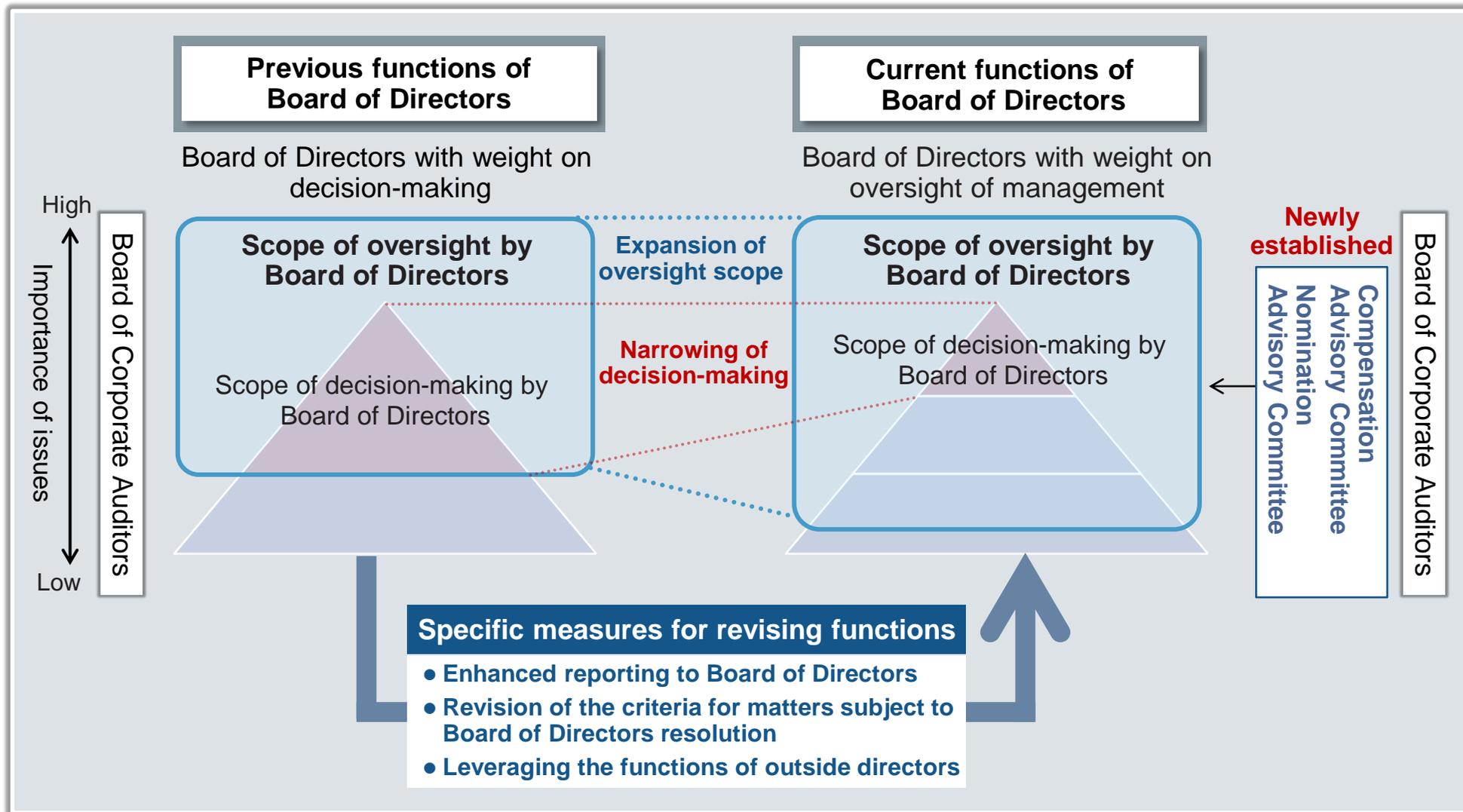
# Initiatives For Enhancing Enterprise Value



**Promote initiatives for enhancing enterprise value (ROI)**

# ESG Initiatives: Corporate Governance

## Change in the Functions of Board of Directors



# ESG Initiatives: SDGs

## SDGs (Sustainable Development Goals)

The Sustainable Development Goals, adopted by the United Nations in 2015, consist of 17 goals and 169 targets, and represent a historical agreement involving all 193 UN member nations

## Sumitomo Chemical's initiatives towards achievement of SDGs

Time	Initiatives
Sep. 2015	SDGs adopted at United Nations Sustainable Development Summit
Feb. 2016	SDGs discussed at SCC's CSR Promotion Committee
May 2016	SDGs webpage opened on SCC's website
June 2016	Launched <b>Sustainable Tree</b> program Workshop held at the Officers Liaison Meeting (4 times)
July 2016	Internal seminars (twice with 400 participants in total)
Aug 2016	Presented SCC's policy on SDGs in its CSR report  Reported its SDGs initiatives at the Board of Directors Meeting

## Reference: 17 Sustainable Development Goals



An initiative for officers and employees to post on a dedicated website their ideas as to what they can do at work and in their private life to bring about a society with hope for future.

Period: 100 days from June to October 2016

Target: Officers and employees of all group companies

Number of posts: 6,005 in total

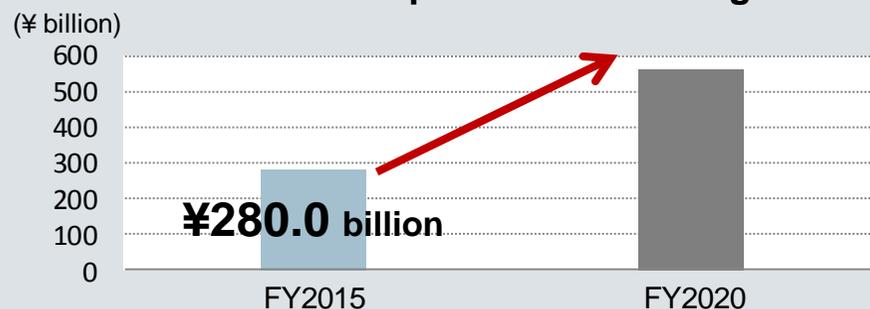
# ESG Initiatives: Sumika Sustainable Solutions

## What are Sumika Sustainable Solutions?

We certify as “Sumika Sustainable solution” our products and technologies that contribute to mitigating global warming and reducing environmental burden. We promote the development and the use of these products and Technologies while also enhancing information disclosure to support the efforts to achieve the SDGs and build a sustainable society.

**Certified products and technologies:  
21 products (Nov.2016)**

### Sales of certified products/technologies



**Sales volume to be quickly doubled**

## Certified products and technologies

**1** Contribution to promoting the use of EVs

- Lithium-ion secondary battery separator Pervio®



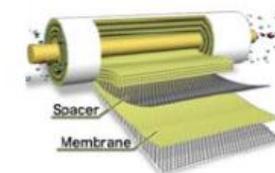
**2** Contribution to fuel efficiency improvement by reducing the weight of aircraft

- Polyethersulfone Sumikaexcel®



**3** Significant energy saving in CO<sub>2</sub> separation in hydrogen production

- CO<sub>2</sub> separation membrane



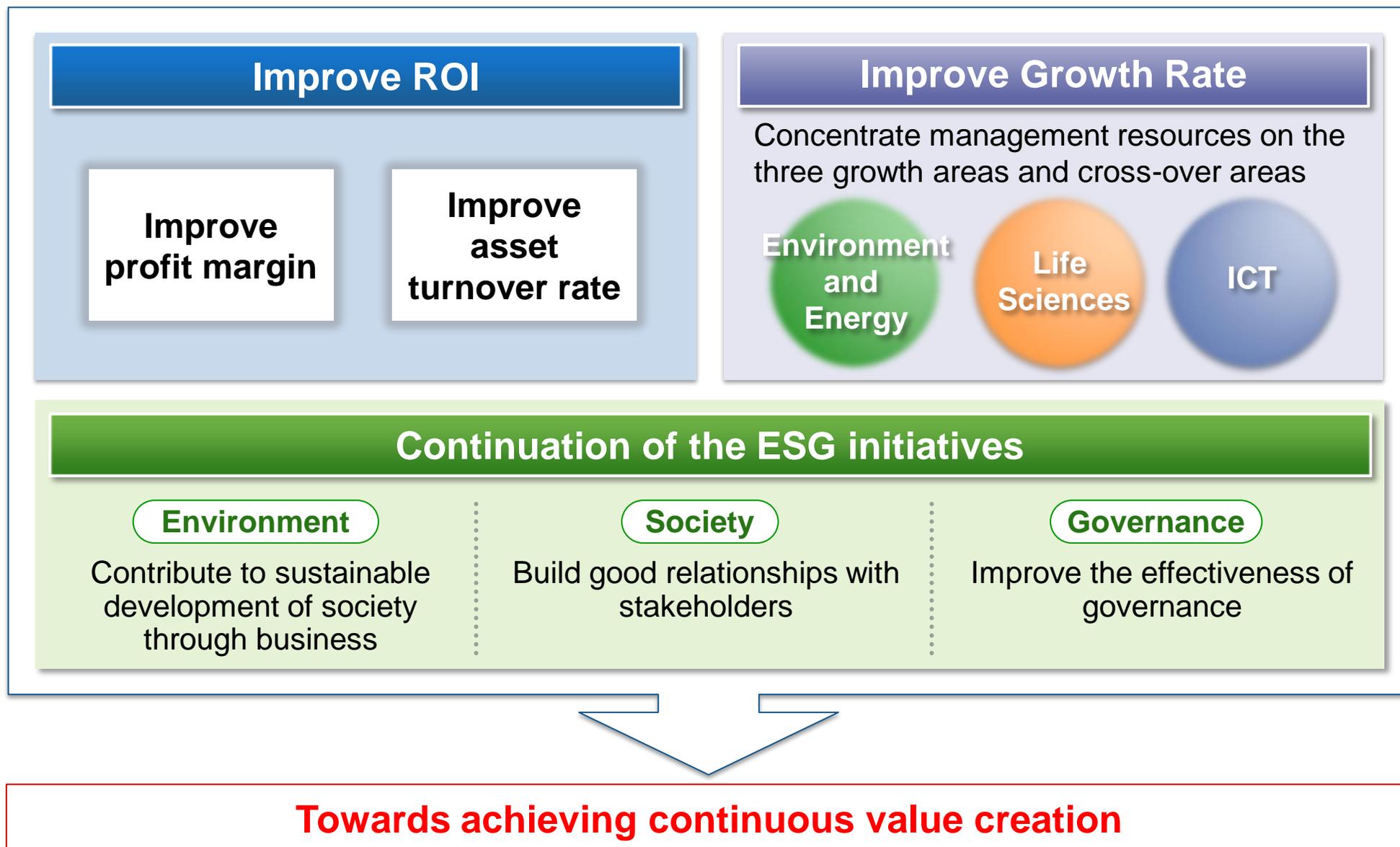
**4** Reduced GHG emissions by reducing the nitrogen content in livestock waste

- Feed additive methionine Sumimet®



**Offer solutions to build a sustainable society → Contribute to measures for mitigating global warming**

# Sumitomo Chemical's Value Creation



# Creative Hybrid Chemistry



### Cautionary Statement

Statements made in this document with respect to Sumitomo Chemical's current plans, estimates, strategies and beliefs that are not historical facts are forward-looking statements about the future performance of Sumitomo Chemical. These statements are based on management's assumptions and beliefs in light of the information currently available to it, and involve risks and uncertainties.

The important factors that could cause actual results to differ materially from those discussed in the forward-looking statements include, but are not limited to, general economic conditions in Sumitomo Chemical's markets; demand for, and competitive pricing pressure on, Sumitomo Chemical's products in the marketplace; Sumitomo Chemical's ability to continue to win acceptance for its products in these highly competitive markets; and movements of currency exchange rates.