



Change and Innovation 3.0
For a Sustainable Future

FY2019-FY2021 Corporate Business Plan

Updated May 15, 2019

 **SUMITOMO CHEMICAL**

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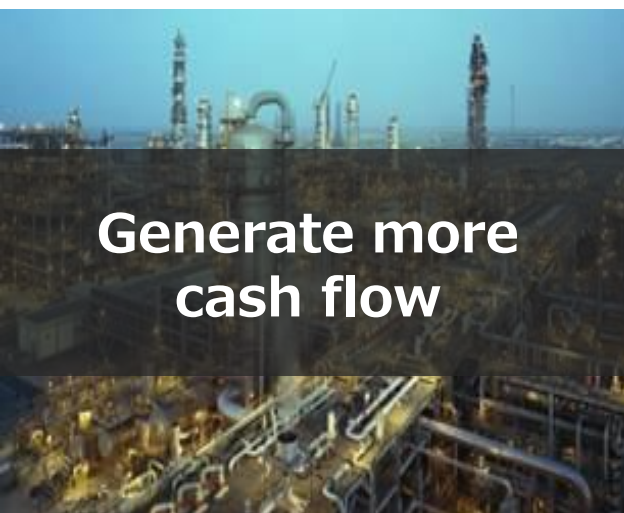
I

FY2016-FY2018

Progress Review for Previous Corporate Business Plan



Change and Innovation **Create New Value**



Promote globally integrated management

Ensure full and strict compliance

Establish and maintain safe and stable operations

Capital Expenditure and Investment for FY2016-FY2018

(decision-making basis)

Change & Innovation 3.0 For a Sustainable Future

Energy & Functional Materials

- ☐ Expanded separator production capacity
- ☐ Entered cathode materials business

Petrochemicals
& Plastics

IT-related Chemicals

- ☐ Expanded touchscreen panel production capacity
- ☐ Built and expanded semiconductor materials production capacity
- ☐ Flexible display materials

Pharmaceuticals

- ☐ Acquired Parkinson's disease treatment
- ☐ Acquired a leukemia treatment, among others

Specialty
chemicals
account for:
74%

Health & Crop Sciences

- ☐ Increased methionine production capacity
- ☐ Acquired Indian agrochemicals company, Excel Crop Care Ltd.
- ☐ Acquired insecticidal compounds manufacturer Botanical Resource Australia Group
- ☐ Expanded R&D

Capital Expenditure and
Investment
for FY2016-FY2018
(decision-making basis)

approx.
¥650bn

Energy & Functional Materials

- Battery materials

Petrochemicals
& Plastics

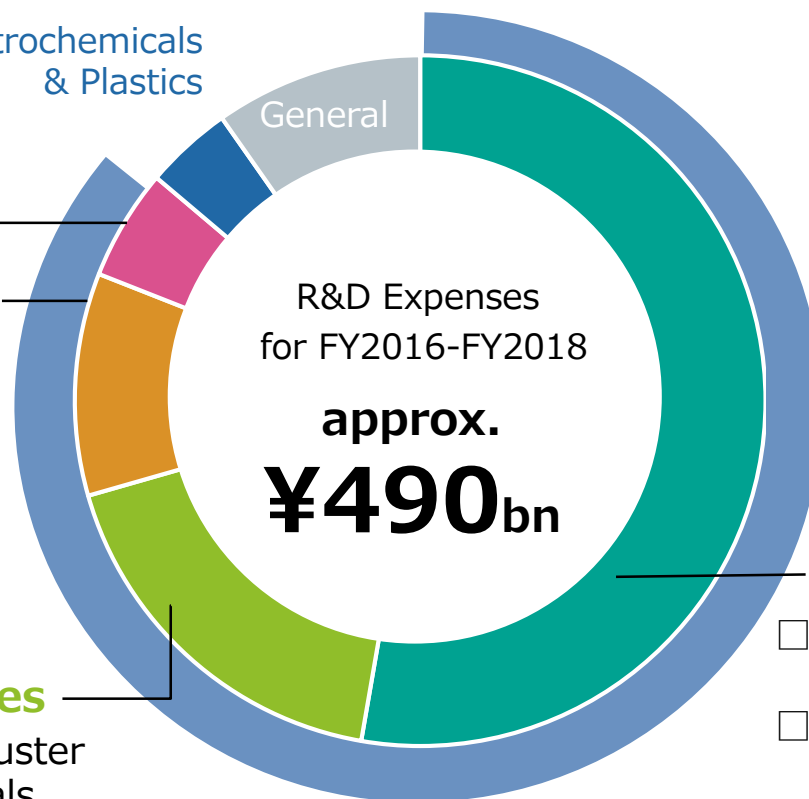
General

IT-related Chemicals

- Flexible display materials
- Compound semiconductors

Health & Crop Sciences

- Next-generation blockbuster crop protection chemicals
- New rice varieties
- Active ingredients for nucleic acid medicines



Specialty
chemicals
account for:

90%

Pharmaceuticals

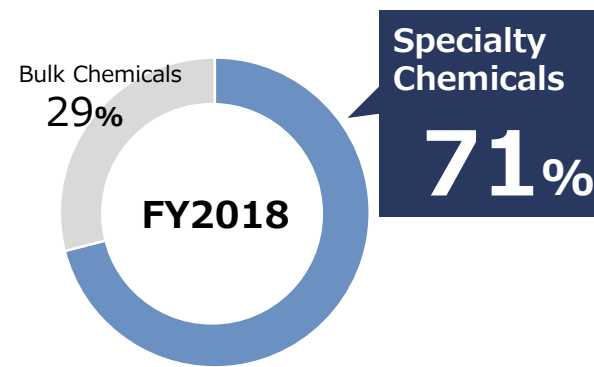
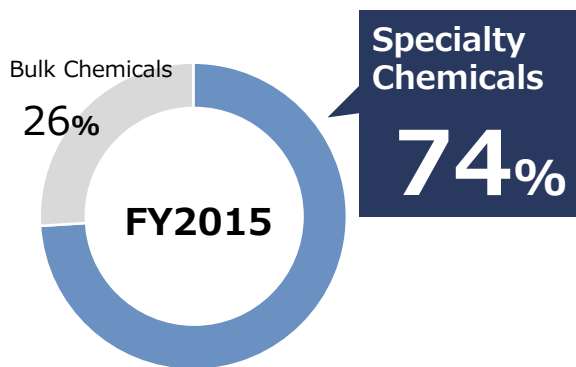
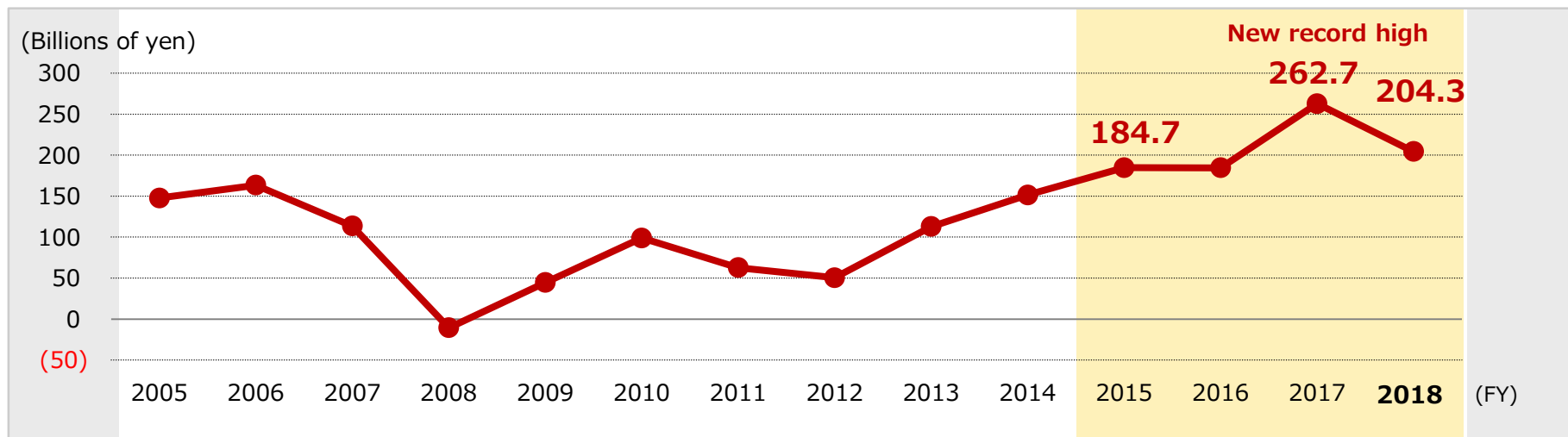
- Napabucasin / Amcasertib
(Cancer stemness inhibitor)
- Dasotraline
(Treatment for attention-deficit hyperactivity disorder (ADHD)/ binge eating disorder (BED))
- LONHALA[®] MAGNAIR[®]
(Treatment for chronic obstructive pulmonary disease (COPD))

Previous Corporate Business Plan: Change in Business Portfolio

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Change in core operating income and its composition

* Through FY2015: sum of operating income and equity in earnings of affiliates under J-GAAP.



Steady increase in profitability of specialty chemicals business

Previous Corporate Business Plan: FY2018 vs. FY2018 Target

Change & Innovation 3.0 For a Sustainable Future

(Billions of yen)

	FY2018	FY2018 Target	Change
Sales Revenue	2,318.6	2,540.0	-221.4
Core Operating Income	204.3	240.0	-35.7
Operating Income (IFRS)	183.0	190.0	-7.0
Net Income attributable to owners of the parent	118.0	110.0	+8.0
Naphtha Price	¥49,500/kl	¥45,000/kl	
Exchange Rate	¥110.92/\$	¥120.00/\$	

* FY2018 and FY2018 target both based on IFRS

Previous Corporate Business Plan: Core Operating Income by Sector

Change & Innovation 3.0 For a Sustainable Future

(Billions of yen)

	FY2018	FY2018 Target	Change	Reason for Change
Specialty Chemicals	149.7	206.0	-56.3	
Energy & Functional Materials	23.0	18.0	+5.0	
IT-related Chemicals	26.2	34.0	-7.8	Yen appreciation
Health & Crop Sciences	19.7	89.0	-69.3	Lower methionine price and decrease in crop protection chemicals sales
Pharmaceuticals	80.8	65.0	+15.8	Increase in LATUDA sales
Bulk Chemicals	61.6	39.0	+22.6	
Petrochemicals & Plastics	61.6	39.0	+22.6	Improved margins of petrochemicals
Others	-7.0	-5.0	-2.0	
Total	204.3	240.0	-35.7	

Change in Cash Flows and Interest-Bearing Debt

(Billions of yen)

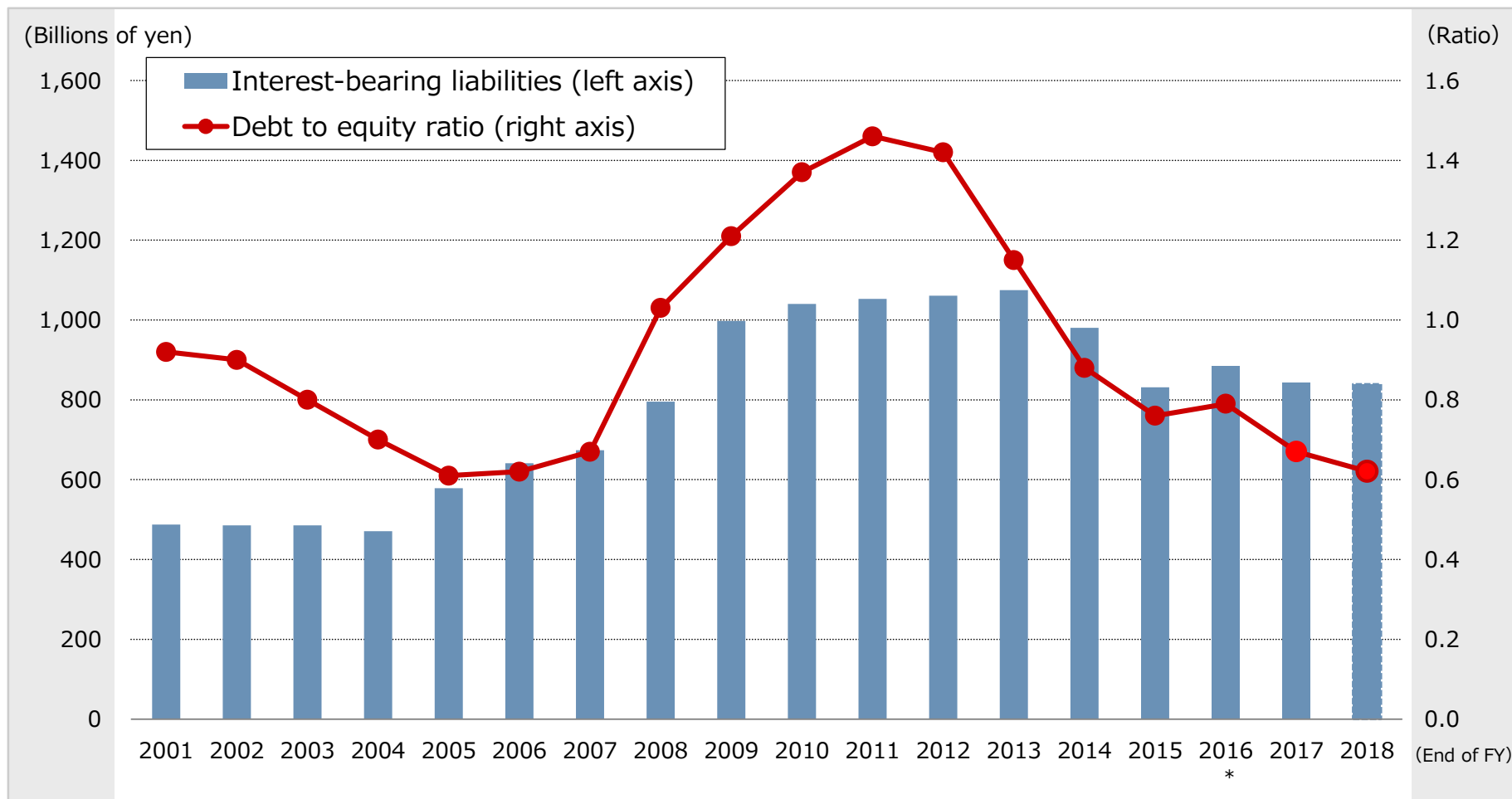
	FY2013-2015	FY2016-2018 (Target)	FY2016-2018
Cash flows from operating activities	716.4	680.0	687.2
Cash flows from investing activities	-245.5	* -800.0	-541.1
Free cash flows	470.9	-120.0	146.1

* Including investment in Rabigh Phase II project

(Billions of yen)

	End of FY2015	End of FY2018 (Target)	End of FY2018
Interest-bearing liabilities	831.5	1,000.0	839.5

Interest-Bearing Liabilities and D/E Ratio



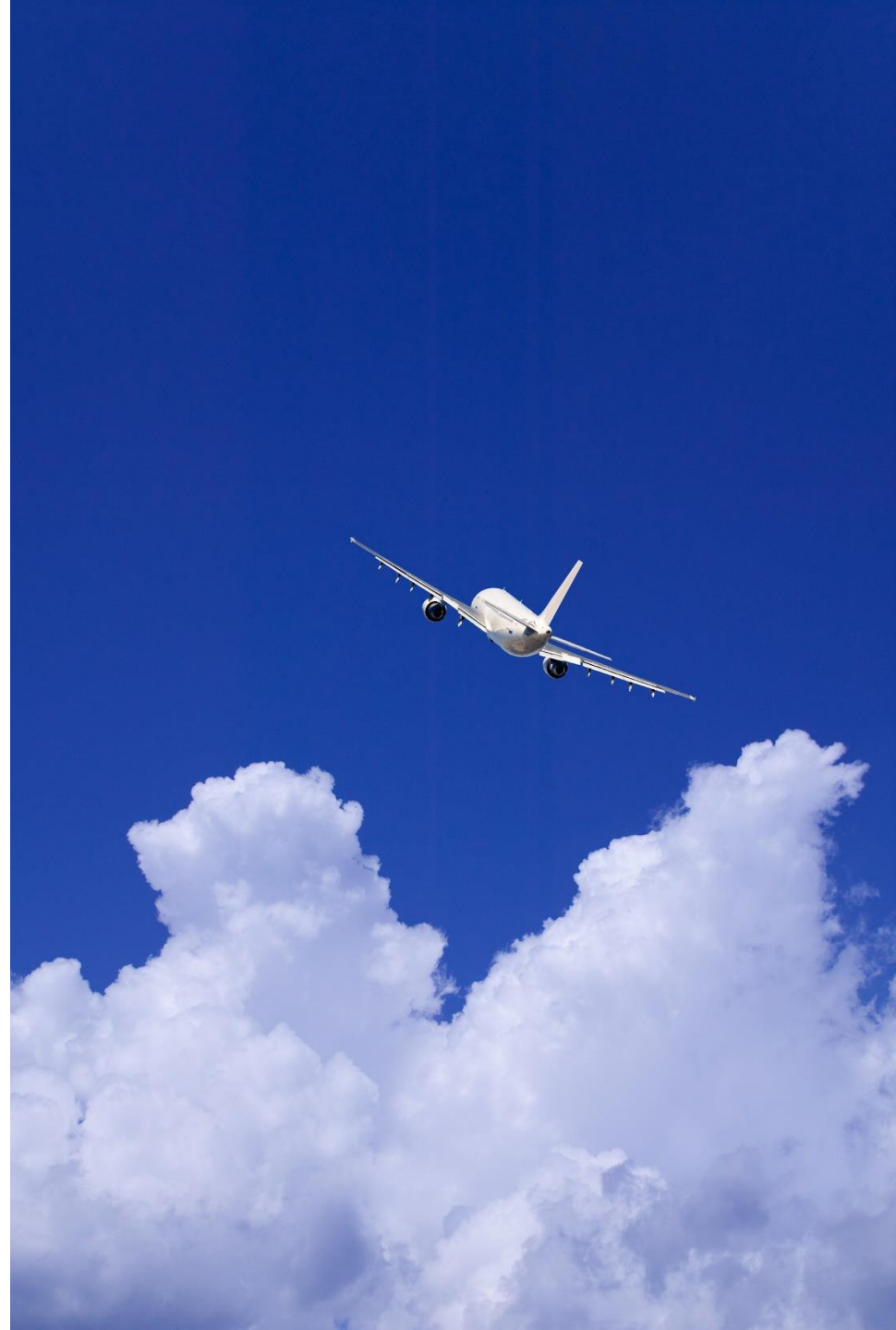
* J-GAAP used through FY2016, IFRS adopted from FY2017.
Information for FY2016 restated in accordance with IFRS.

II

FY2019-FY2021

New Corporate Business Plan

- 1. Business Environment**
- 2. Basic Policy**
- 3. Performance Targets**
- 4. Major Action Plan**



II

New Corporate Business Plan 12

1

Business Environment 14

2

Basic Policy 17

3

Performance Targets 21

4

Major Action Plan 30

Global economy and risk factors

**Growth continues at
an annual rate of approx. 3%
Increased volatility and
uncertainty**

Increased
financial risk in
emerging
countries

Trade slowdown
due to the rise of
protectionism

Impact of
US-China
competition for
hegemony on
the global
economic
system

Realization of
potential
geopolitical
risks

Increasing
national debt,
low birthrate
and aging
society
(Japan)

1. Business Environment

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- ☐ Create new value through **digital innovation**
- ☐ Solve issues facing society and contribute to **sustainability** through **innovation**



II

New Corporate Business Plan 12

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Business Environment

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Basic Policy**17**

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Slogan of new corporate business plan

Change & Innovation 3.0
For a Sustainable Future

In view of the advent of Society 5.0 (super-smart society)

- Accelerate **innovation**
- Promote **digital innovation** to improve productivity significantly
- ▶ Contribute to building a **sustainable society**

1

Accelerating the development of next-generation businesses

2

Improve productivity through digital innovation

3

Further improve business portfolio

4

Build a more robust financial structure

5

Employ, develop and leverage human resources for sustainable growth

6

Ensure full and strict compliance and maintain safe and stable operations



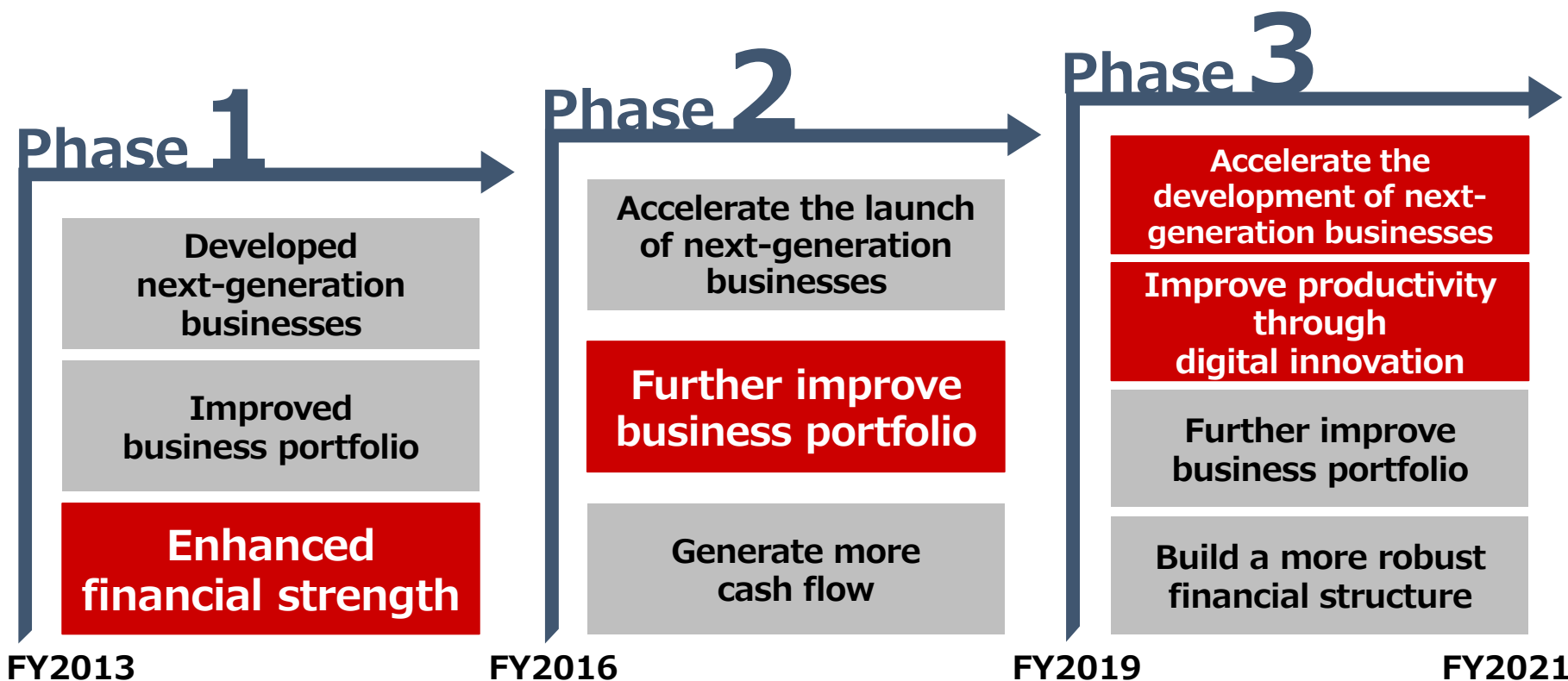
*Change & Innovation 3.0
For a Sustainable Future*

Change & Innovation

For the next hundredth anniversary

Create New Value

For a Sustainable Future



II

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3. Performance Targets

Change & Innovation 3.0 For a Sustainable Future

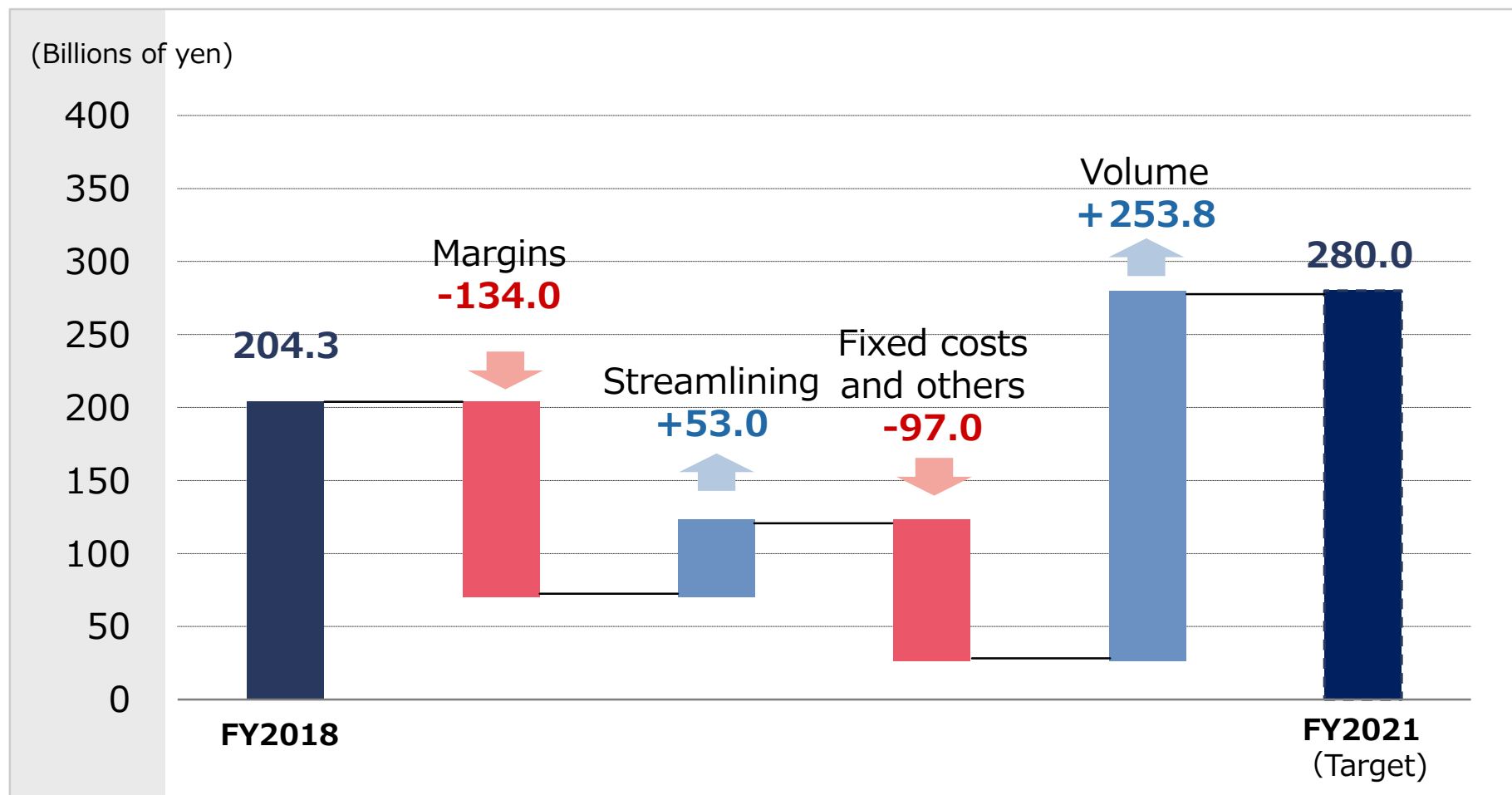
(Billions of yen)

	FY2018	FY2021 Target	Change
Sales Revenue	2,318.6	2,950.0	+631.4
Core Operating Income	204.3	280.0	+75.7
Operating Income (IFRS)	183.0	260.0	+77.0
Net Income attributable to owners of the parent	118.0	150.0	+32.0

Naphtha Price	¥49,500/kl	¥51,000/kl
Exchange Rate	¥110.92/\$	¥110.00/\$

Change In Core Operating Income (FY2018 VS FY2021)

Change & Innovation 3.0 For a Sustainable Future



3. Performance Targets : Sales Revenue by Sector

Change & Innovation 3.0 For a Sustainable Future

(Billions of yen)

	FY2018	FY2021 Target	Change	Reason for Change
Specialty Chemicals	1,509.9	1,980.0	+470.1	
Energy & Functional Materials	282.9	390.0	+107.2	Increase in battery materials sales volume
IT-related Chemicals	396.8	520.0	+123.2	Increase in OLED materials sales volume
Health & Crop Sciences	338.1	480.0	+141.9	Increase in sales volume of crop protection products and methionine
Pharmaceuticals	492.1	590.0	+97.9	Increase in sales volume of pharmaceuticals in North America
Bulk Chemicals	757.5	910.0	+152.5	
Petrochemicals & Plastics	757.5	910.0	+152.5	Increase in sales volume of products of PRC phase II
Others	51.1	60.0	+8.9	
Total	2,318.6	2,950.0	+631.4	

3. Performance Targets: Core Operating Income by Sector

Change & Innovation 3.0 For a Sustainable Future

(Billions of yen)

	FY2018	FY2021 Target	Change	Reason for Change
Specialty Chemicals	149.7	235.0	+85.3	
Energy & Functional Materials	23.0	31.0	+8.0	Increase in battery materials sales volume
IT-related Chemicals	26.2	35.0	+8.8	Increase in OLED materials sales volume
Health & Crop Sciences	19.7	75.0	+55.3	Increase in sales volume of crop protection products and methionine
Pharmaceuticals	80.8	94.0	+13.2	Increase in sales volume of pharmaceuticals in North America
Bulk Chemicals	61.6	49.0	-12.6	
Petrochemicals & Plastics	61.6	49.0	-12.6	Lower margins for MMA
Others	-7.0	-4.0	+3.0	
Total	204.3	280.0	+75.7	

3. Performance Targets: Financial Metrics

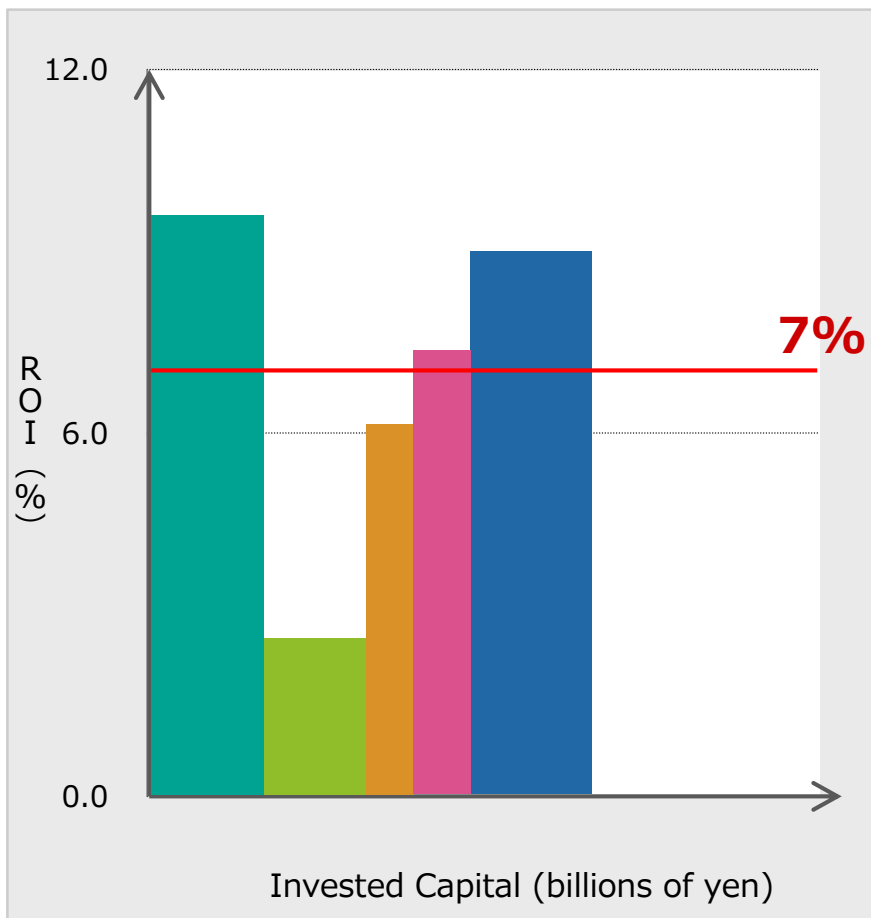
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	FY2015	FY2018	FY2021 Target	Medium- to Long-term Targets Consistently achieve the following targets:
ROE	9.6%	12.3%	12.5%	over 10%
ROI	5.6%	7.3%	7.1%	Over 7%
D/E ratio	0.8	0.6	0.7	approx. 0.7
Dividend payout ratio	31%	30%	—	approx. 30%
Profit growth*	—	—	13%	over 7% per year

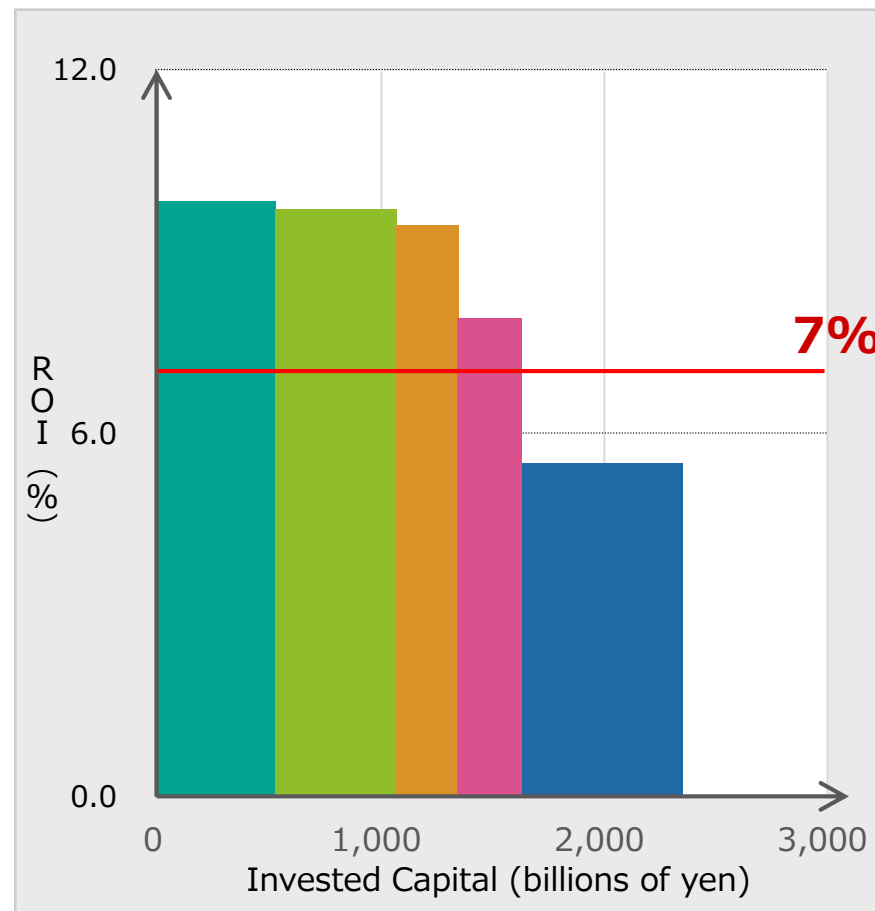
* Compounded annual growth rate of Net Income attributable to owners of the parent from FY2015

Invested Capital and ROI by Sector

FY 2018

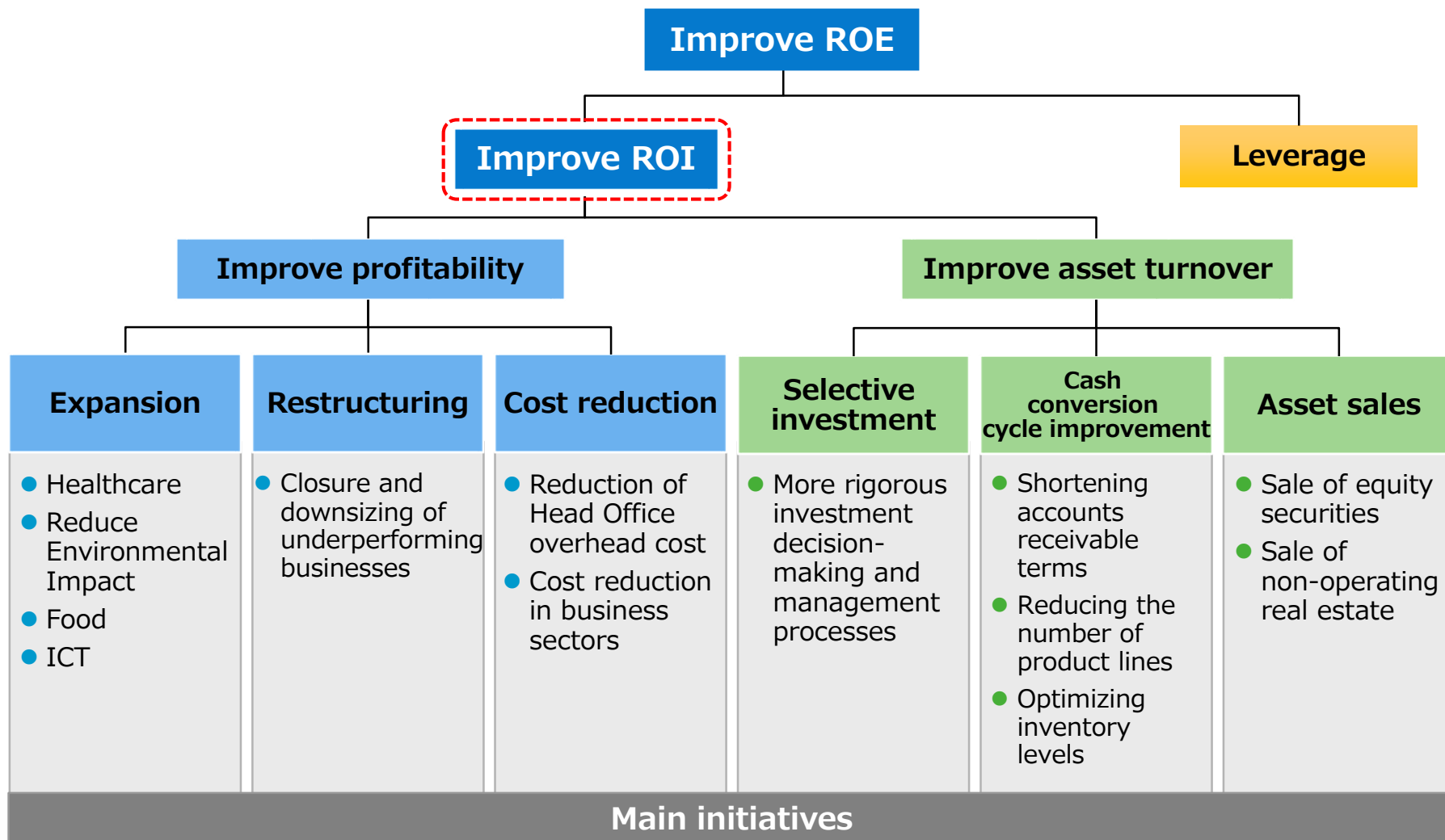


Target for FY2021



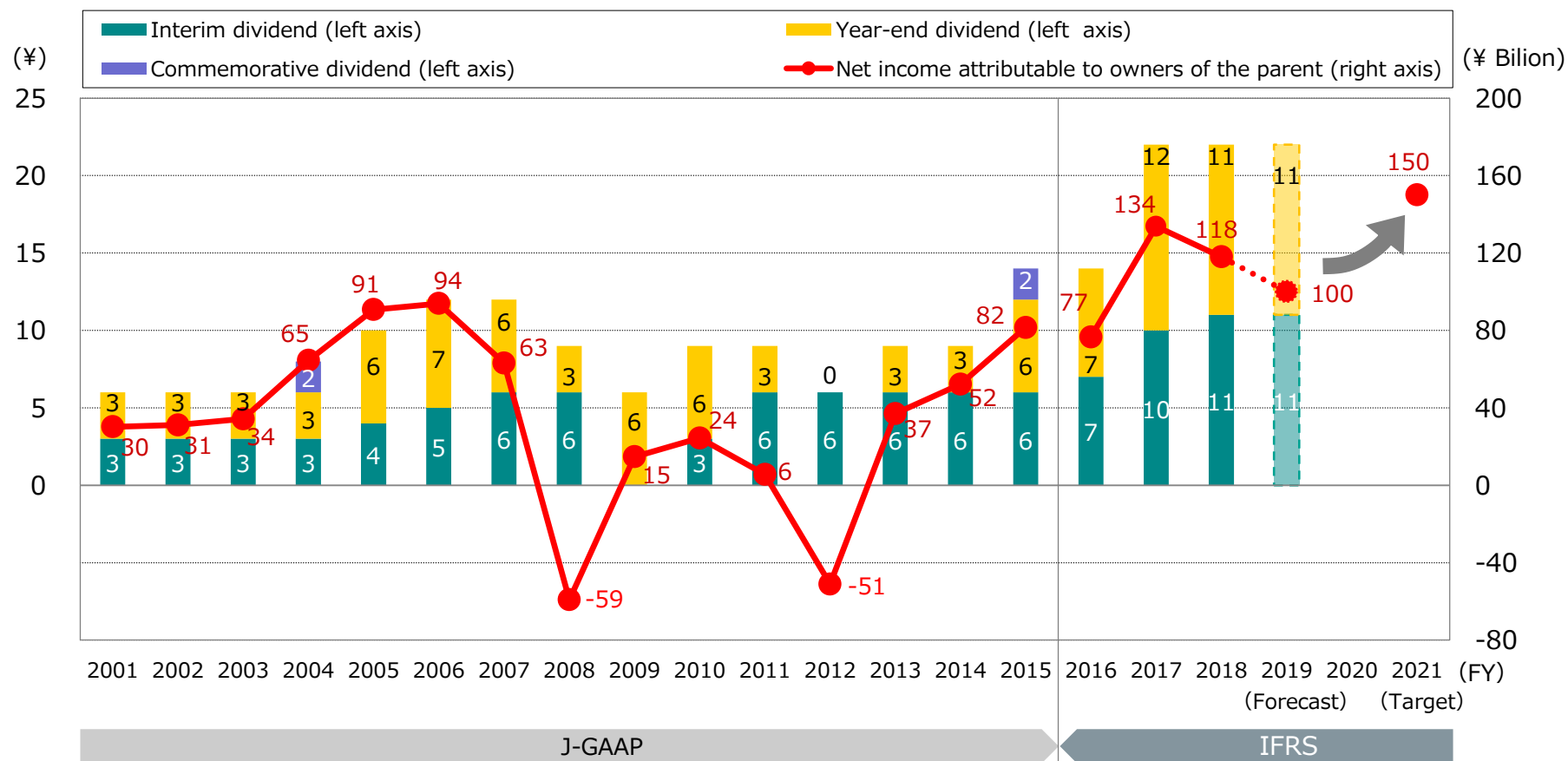
■ Pharmaceuticals
 ■ Health & Crop Sciences
 ■ IT-related Chemical
 ■ Energy & Functional Materials
 ■ Petrochemicals & Plastics

Initiatives for improving ROI and ROE



3. Performance Targets: 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. We aim to maintain a **dividend payout ratio of around 30%** over the medium to long term.



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1 Accelerate the Development of Next-Generation Businesses 30

2 Improve Productivity through Digital Innovation 36

3 Further Improve Business Portfolio 41

4 Build a More Robust Financial Structure 45

**Accelerate the development of
next-generation technologies and
create new businesses**
for a sustainable society

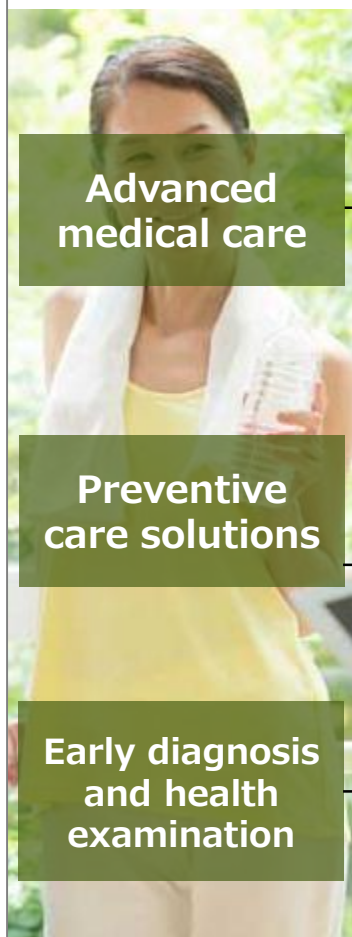


Accelerate the Development of Next-Generation Businesses: Focus Domains in the Four Priority Areas

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Health care

Focus domains



Advanced
medical care

Preventive
care solutions

Early diagnosis
and health
examination

Major projects

Nucleic Acid Medicine

Cell Therapy

Theranostics

Frontier businesses
(Healthcare solutions
not limited to
pharmaceuticals)

Nutraceuticals
(functional food)

Physical condition
visualization sensor

Reducing Environmental Impact

Focus domains



Energy
storage

Energy
saving

Carbon cycle

Major Projects

Next-generation
battery storage
materials

Separation
membrane

Waste water
processing

Development of
low environmental
impact bioprocesses
based on Synthetic
Biology

Carbon Capture and
Utilization (CCU)-
related business

Accelerate the Development of Next-Generation Businesses: Focus Domains in the Four Priority Areas

Change & Innovation 3.0 For a Sustainable Future

Food

Focus domains

Major projects

Precision agriculture

Precision agriculture, including data collection, analysis, and prediction

Food sensing

On-site food inspection

Breeding

Breeding using genome editing technology

ICT

Focus domains

Major Projects

Super-smart society

Smart mobility

OLED display materials

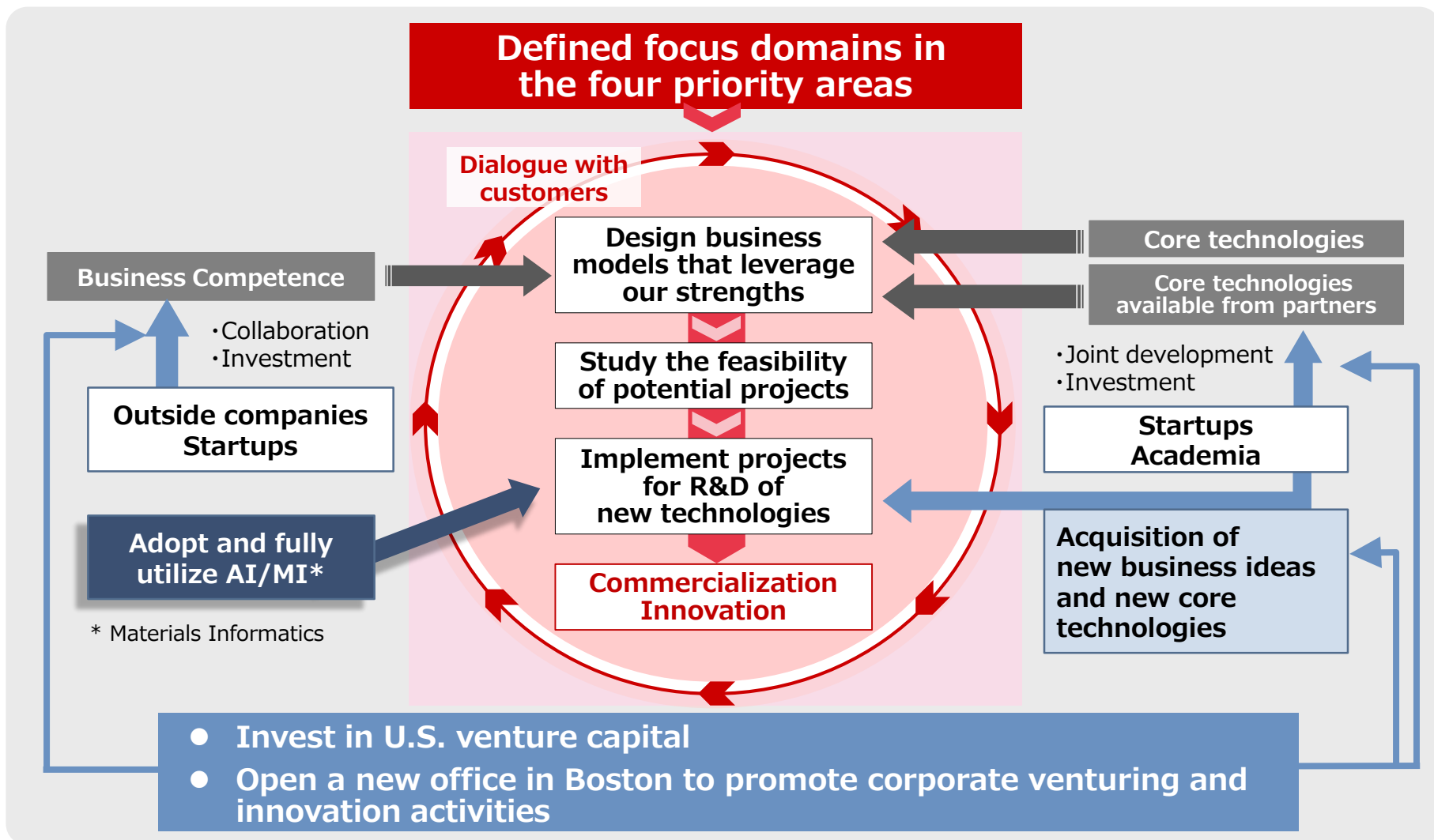
Flexible display materials and components

Next-generation semiconductor-related materials

Materials and devices for 5G telecommunications

Image sensor materials

Innovation Ecosystem



Accelerate the Development of Next-Generation Businesses: Relocation of Our U.S. Innovation Office

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Relocate our corporate venturing and innovation office in U.S. to the Boston/Cambridge area

CVI

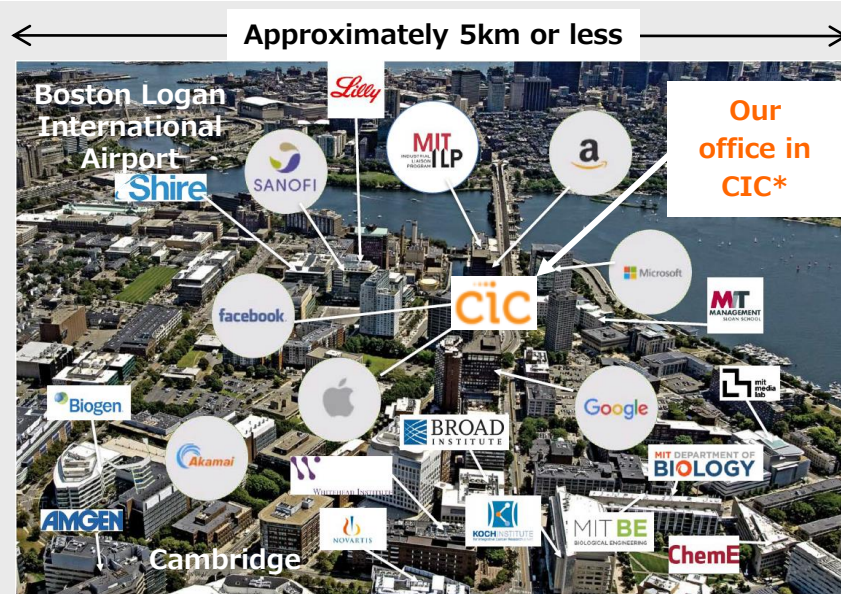
(Corporate Venturing &
Innovation Office)

Accelerate collaboration with startups and
academia and exploration of new business
opportunities

Advantages of Boston/Cambridge area

- One of the World's largest innovation hubs
- Highest level of concentration of top universities and startups
- Focus on innovative technologies that require long-term commitment, such as drug discovery, biotechnology, materials, and robotics

*CIC : Cambridge Innovation Center



**Building truly valuable partnership through
strengthening access to the U.S. innovation ecosystem**

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3	Performance Targets	21
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1	Accelerate the Development of Next-Generation Businesses	30
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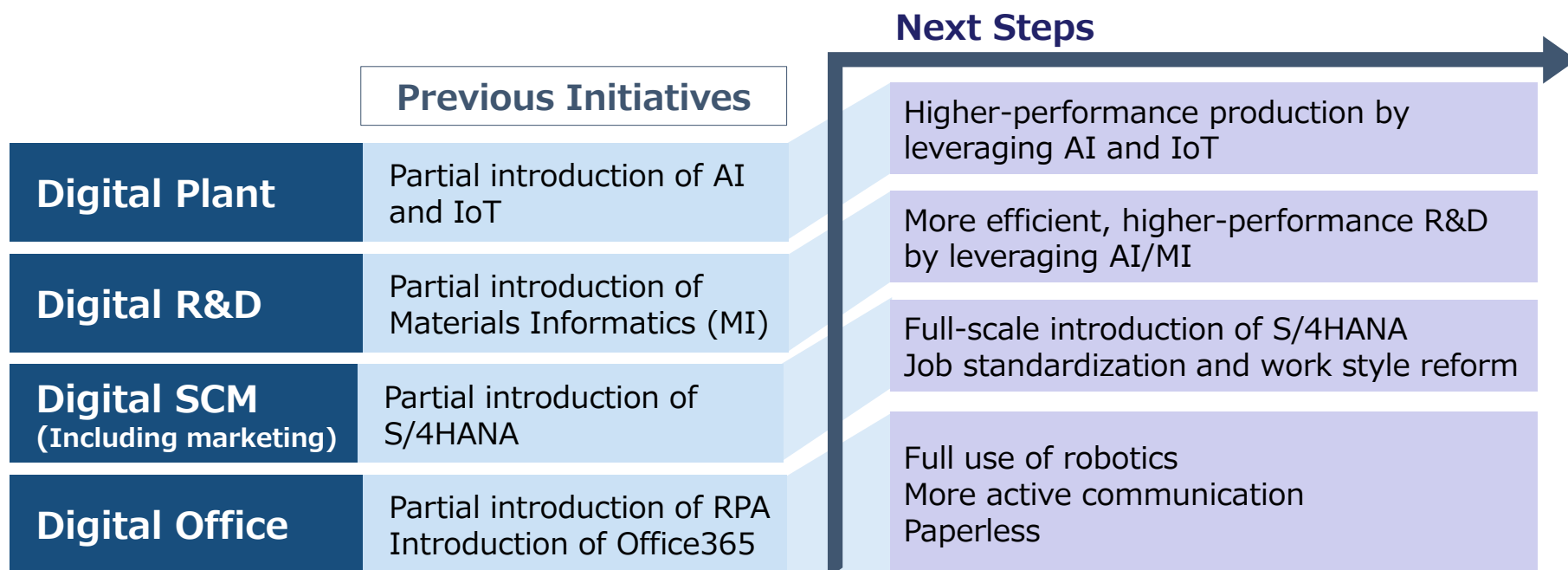
2	Improve Productivity through Digital Innovation	36
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3	Further Improve Business Portfolio	41
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4	Build a More Robust Financial Structure	45
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Significant improvement in efficiency and quality

in production, R&D, supply chain management and administration



**IT-related investment during
the new corporate business plan period : ¥60bn**

By 2065, Japan's labor force will decrease to approximately 60% of 2016*

Urgently requires the development of plant operation systems that help achieve high labor productivity

Necessary elements

Human Resources

- Data scientists
- Data engineers

Software and AI

- Technology for detecting signs of malfunction
- Software sensing technology

IoT Technology

- Development of data platforms
- Workflow optimization

Output

- Support decision making
- Streamline work flows
- Monitor the operation of equipment for signs of malfunction
- Stabilize and automate operations
- Optimize production operations

Vision

Significant improvement in labor productivity

* (Source) Mizuho Research Institute Ltd.

Significant changes in the social environment
provide opportunities to create new businesses

In order not to miss out on these opportunities

Essential to improve the efficiency and
effectiveness of R&D activity

Necessary elements

Human Resource

- Data scientists
- Data engineers

Database (using big data)

- Development of data platforms
- Use of electronic laboratory notebooks

Data Analysis (using AI)

- Development of predictive technology
- Development of Materials informatics platform

Output

- Drastically shorten the time used for searching and designing materials
- New discoveries that cannot be achieved through experimental development

Vision

Improved
productivity in R&D
(accelerate innovation)

Materials
Informatics for
all researchers

Improve Productivity through Digital Innovation: Establish a Digital and Data Science Innovation Department

Change & Innovation 3.0 For a Sustainable Future

Established a Digital and Data Science Innovation Department

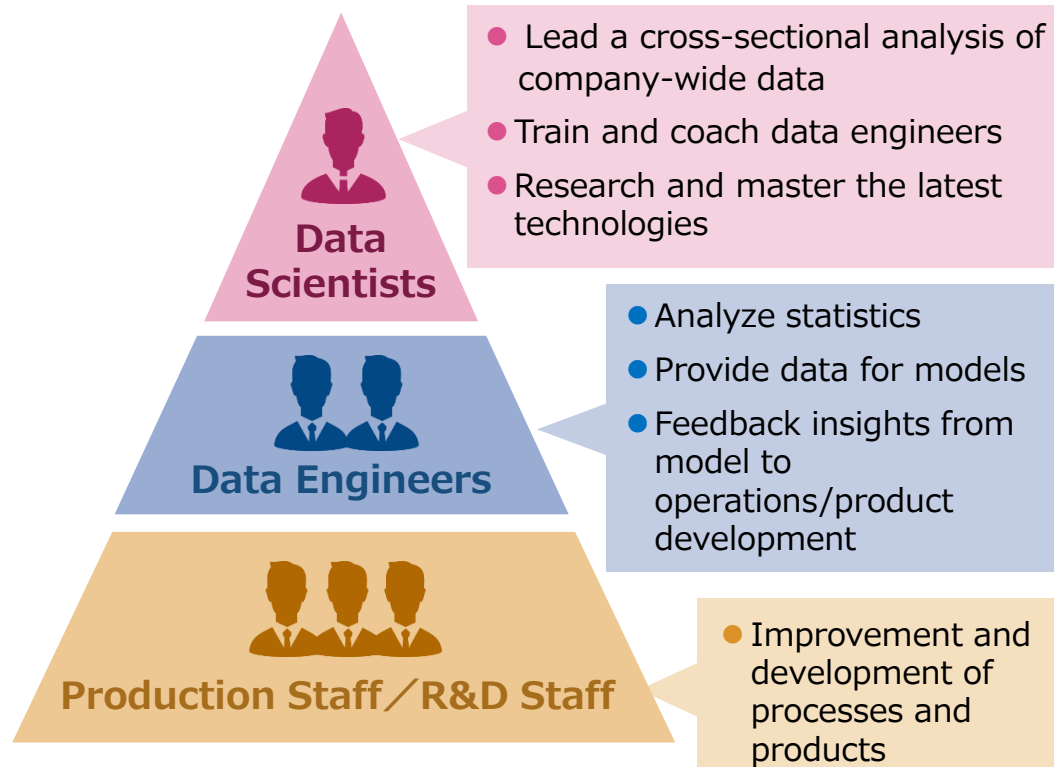
Target

Promote advanced use of large-scale data to improve the effectiveness of production, R&D, sales and other activities

Mission

- Recruit and train **data scientists and data engineers**
- **Develop advanced analytical technologies** for production and R&D data
- Promote advanced **use of large-scale data** through database development

Role of digital human resources



Further digital innovation through full-scale adoption of IT technology

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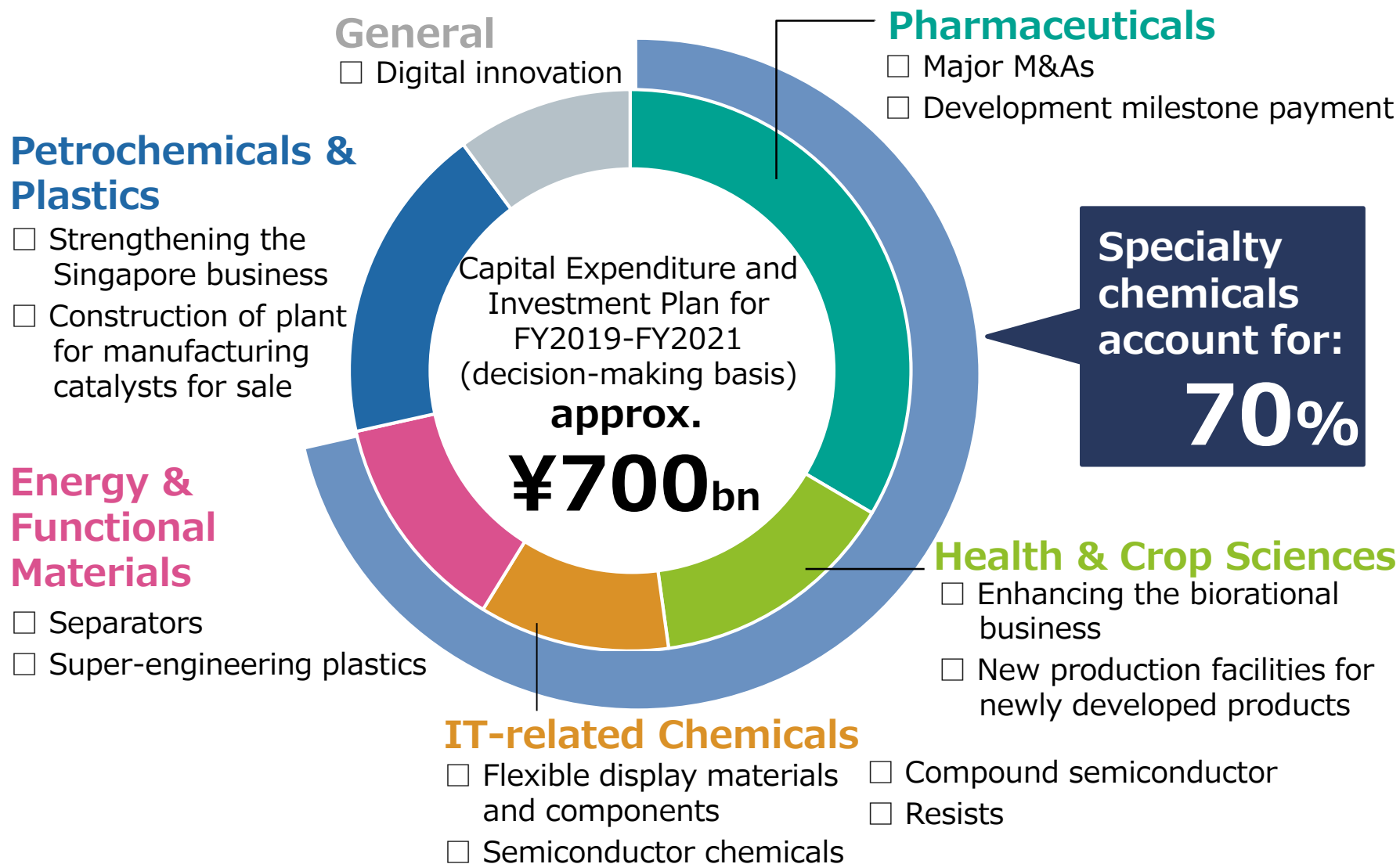
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Further Improve Business Portfolio: Research and Development Expenses Plan for FY2019-FY2021

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Energy & Functional Materials

- ☐ Separators
- ☐ Cathode materials
- ☐ Super-engineering plastics

IT-related Chemicals

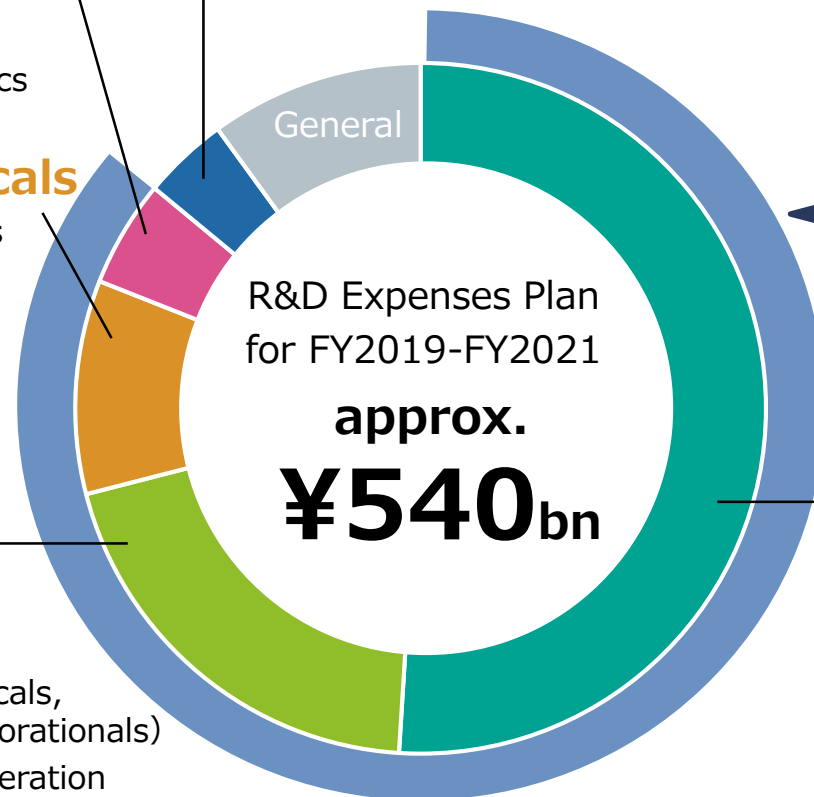
- ☐ Flexible display materials and components
- ☐ Next-generation semiconductor materials
- ☐ New touchscreen panels

Health & Crop Sciences

- ☐ Launch of new products (crop protection chemicals, botanical insecticides, biorationals)
- ☐ Creation of the next-generation development pipeline (crop protection chemicals, biorationals)
- ☐ Development of the next-generation technologies (precision agriculture, utilization of Bio-IoT technology)

Petrochemicals & Plastics

- ☐ Carbon cycle chemistry including carbon capture and utilization (CCU)

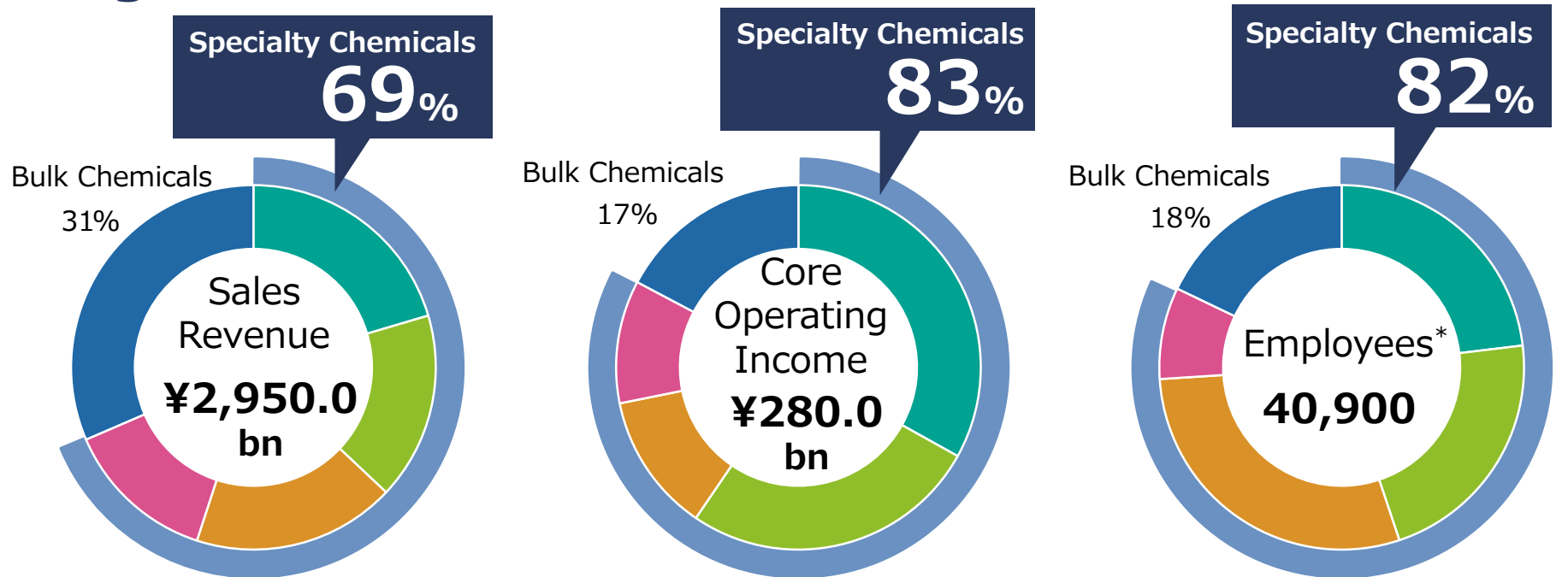


Specialty chemicals account for:
90%

Pharmaceuticals

- ☐ SEP-363856 (atypical antipsychotic)
- ☐ Napabucasin (cancer stem-cell inhibitor)
- ☐ Alvocidib (anticancer drug)
- ☐ Regenerative medicine and cell therapy

Target for FY2021



* Including contract employees and part-time and temporary staff

Specialty Chemicals

Pharmaceuticals



Health & Crop Sciences



IT-related Chemicals



Energy & Functional Materials



Bulk Chemicals

Petrochemicals & Plastics



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Policy

- 1 Generate cash flow from the implemented capital expenditures and investments as planned
- 2 Manage costs and assets through disciplined financial operations

Improve cash flow

**Rationalization,
shorten cash
conversion cycle**

**Reorganize and exit
under-performing
businesses**

Financial Discipline

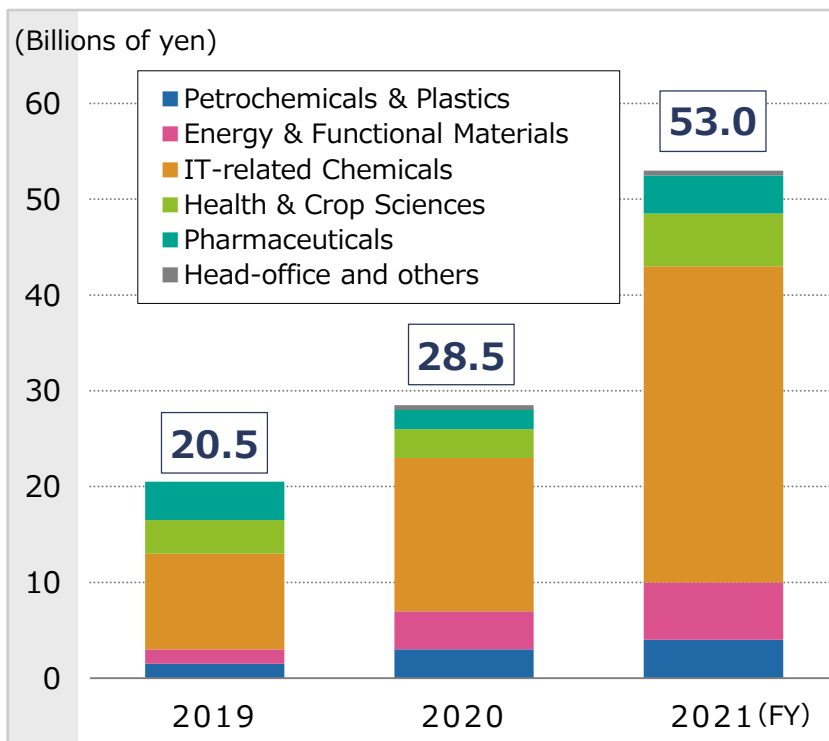
Indicators	Targets
Debt to equity ratio	approx. 0.7
Interest-bearing liabilities	Less than 1.1 trillion yen

Major initiatives

- Total investment over the three years: **less than 700 billion yen**
- **Timely review of capital expenditures and investment plans**
- Thoroughly **utilize cash surplus of the group companies**

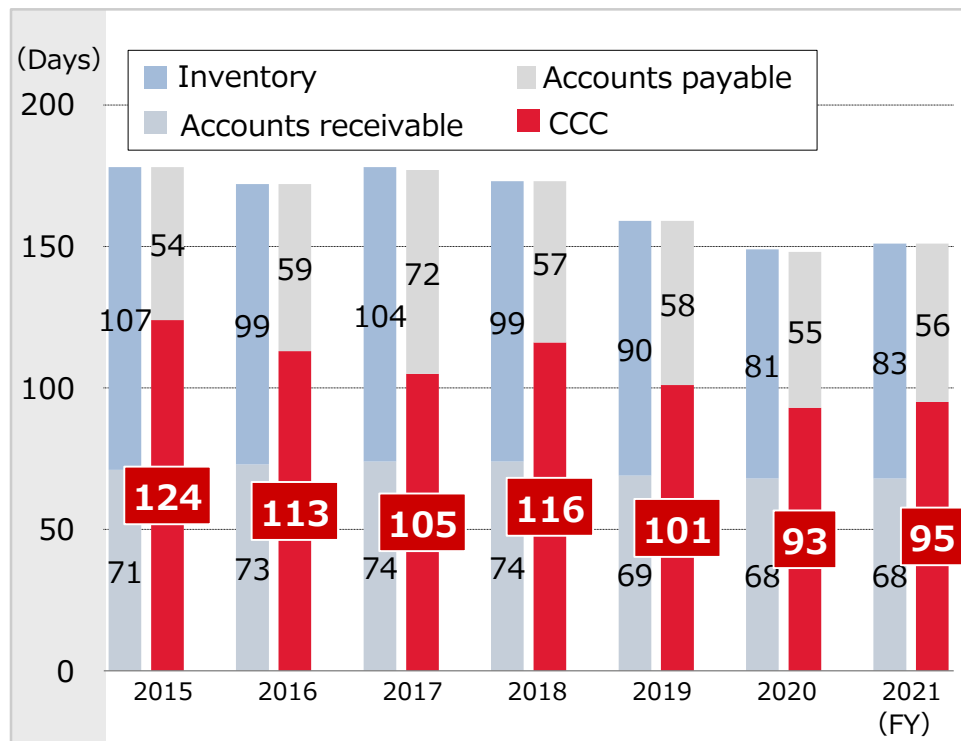
Rationalization

¥53 billion in FY2021
through initiatives such as
reducing purchasing costs and
improving yields



Improve Cash Conversion Cycle (CCC)

Improve CCC by 23% in FY2021
compared with FY2015 by
continuing and strengthening
our initiatives



Build a More Robust Financial Structure: Cash Flow Targets

Change & Innovation 3.0 For a Sustainable Future

(Billions of yen)

	FY2013-FY2015	FY2016-FY2018	FY2019-FY2021 (Target)
Cash flows from operating activities	716.4	687.2	740.0
Cash flows from investing activities	-245.5	-541.1	*-815.0
Free cash flows	470.9	146.1	-75.0

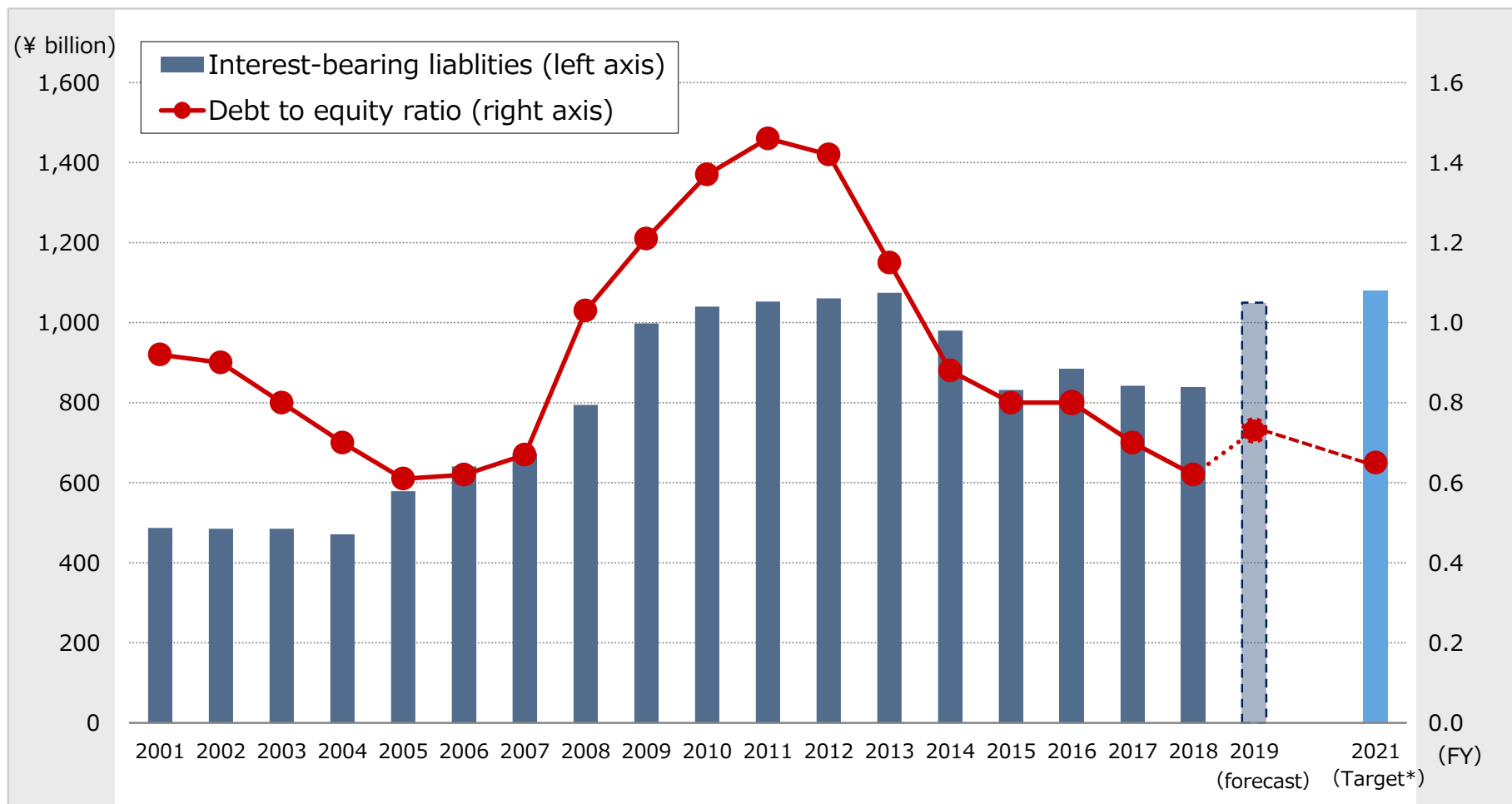
* Including investment in Rabigh Phase II project

(Billions of yen)

	End of FY2015	End of FY2018	End of FY2021 (Target)
Interest-bearing liabilities	831.5	839.5	1,080.0

Interest-Bearing Liabilities and Debt to Equity Ratio

Change & Innovation 3.0 For a Sustainable Future



* Including investment in Rabigh Phase II project

III

Business Strategy by Sector



Long-term goal

Provide customers with new solutions based on high value-added products

Strengths

- Global operation by leveraging the competitive advantages of the three bases in Japan, Singapore and Saudi Arabia
- Strong relations with prominent customers in the Asian market
- Access to low-cost ethane feedstock
- Capabilities to develop high value-added products

Weaknesses

- Relatively small business size compared to the global majors
- Dependence on naphtha, a more expensive feedstock than ethane/shale gas

Opportunities

- Large and deep markets
- Steady growth in demand

Status of the major businesses

Threats

- Establishment of more cost-competitive new plants
- Cyclical business environment
- Country risks

Action plan

- Strengthen domestic business
- Expand capacity and enhance profitability of Singapore business
- Maintain stable operations at PRC phase I and make PRC phase II into a business that constantly contributes to the sector's performance
- Strengthen technology licensing business

Major issues

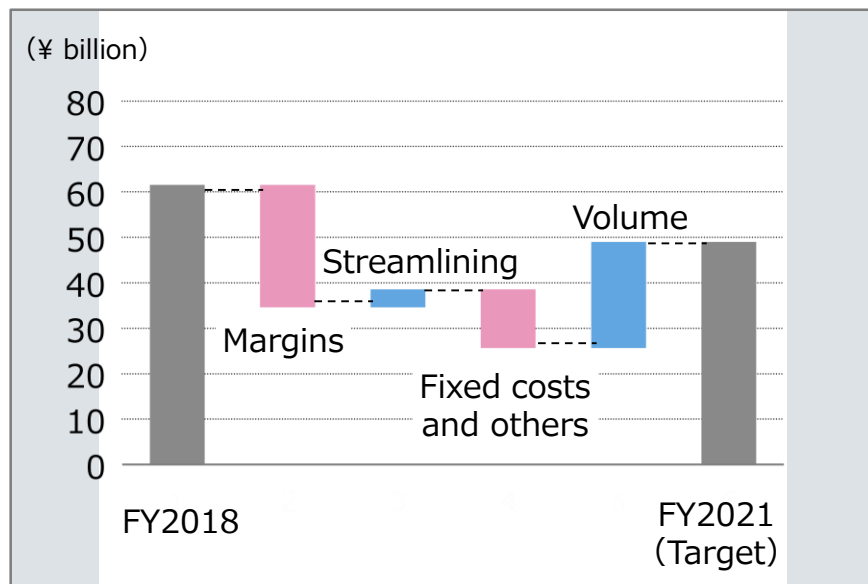
- Restructuring of underperforming businesses
- R&D into carbon cycle chemistry, including carbon capture and utilization technologies, to create a sustainable society

FY2021 Target

Sales Revenue **¥910.0** billion

Core Operating Income **¥49.0** billion

Core operating income variance analysis (FY2018 v/s FY2021)



R&D focus

R&D of plastics products that
contribute to 3R's
(reduce, reuse, recycle)



Lighter packaging

Longer product life

Promotion of reusable products



Refill
pouches

• Returnable
boxes
• Insect-resistant
cereal bags

Sheeting for
agriculture

Refill Pouch



Returnable Box



	Bottle (HDPE)	Large Refill Pouch (EPPE+LLDPE)
Weight of packaging materials(g) per 100g of contents	19	1.8
Transportation efficiency	△	○
Bag drop strength	△	○

	Cardboard paper box	Returnable box (Expanded PP sheet)
Consumption of packaging materials (kg/year)	24.9	1.4
Reusability	×	○
Number of usable times (per year)	1	50
Water resistance Load bearing Cleanness	×	○

Environmental aptitude Utility value

Further enhance environmental friendliness and utilization value of
plastics products contributing to 3R's

Long-term goal

Contribute to solving environmental and energy issues through research and development with a long-term perspective and the resulting innovative technologies

Strengths

- Superior product performance using differentiated technologies
- Reliability of products proved in use by customers

Weaknesses

- Relatively small business
- Cost competitiveness

Opportunities

- Sophistication of performance requirements against the backdrop of increasing battery capacity
- Expansion of the environment- and energy-related markets

Threats

- Market decline due to change in EV promotion policies
- Paradigm shift in secondary batteries

Status of the major businesses

Action plan

- Expand sales of core products (battery materials, super engineering plastics, etc.), accelerate R&D
- Shift to high value-added products
- Improve profitability in underperforming businesses and products

Major issues

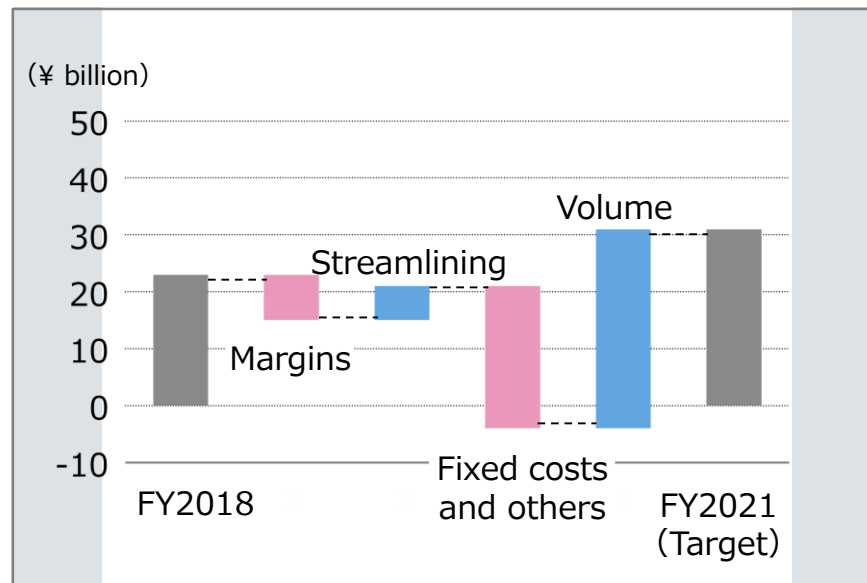
- Create new businesses in the fields of environment and energy and high-performance materials (CO₂ separation membranes, etc.)

FY2021 Target

Sales Revenue **¥390.0** billion

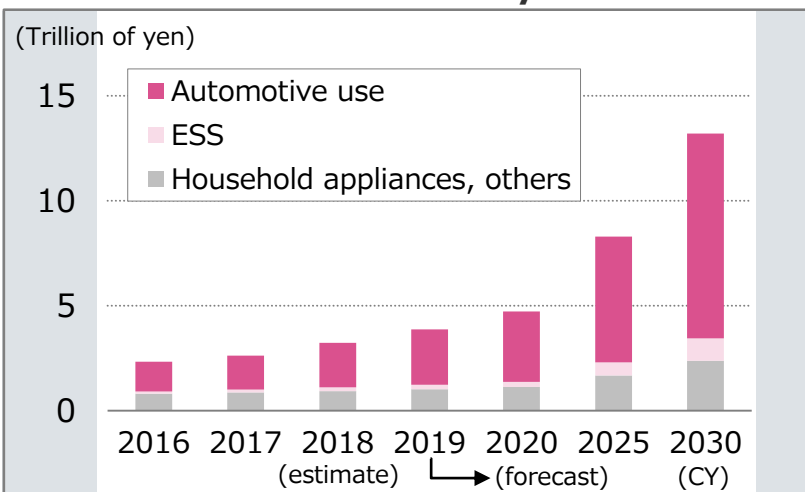
Core Operating Income **¥31.0** billion

Core operating income variance analysis (FY2018 v/s FY2021)



Increasing demand for high-capacity batteries

Market Outlook for Lithium-ion Secondary Batteries



SSLM Co., Ltd.

Initiatives to expand lithium-ion secondary battery separator business

1 Expand production capacity

Timely decision-making for investment in response to growing demand

2 Deep cost reduction

Increase coating speed; adopt low-cost materials; reduce coating volume, etc.

3 Development of new substrates

Meet the requirements for high-capacity batteries

New Corporate Business Plan Targets

	FY2018	FY2021
Volume	300 million m ²	600 million m ²
(Ratio of in-house developed substrate)	<25%	>30%

Long-term goal

Deliver new value that responds to the changes in the ICT industry by leveraging our material development capabilities in collaborative development with customers

Strengths

- Offering a wide range of display materials
- Established market needs-driven supply chains
- Material development capabilities as a diversified chemical company
- Nano-level micro surface analysis technology

Weaknesses

- Heavy reliance on some specific products
- High sensitivity to exchange rate movements

Opportunities

- Fast-growing organic LED displays market
- Rising demand for flexible displays
- Expanding Chinese semiconductor market

Status of the major businesses

Threats

- Intensifying competition in the maturing LCD market

Action plan

- Structural reform of polarizing film business
- Secure returns from the investment in the semiconductor materials business
- Expand touchscreen panel product portfolio

Major issues

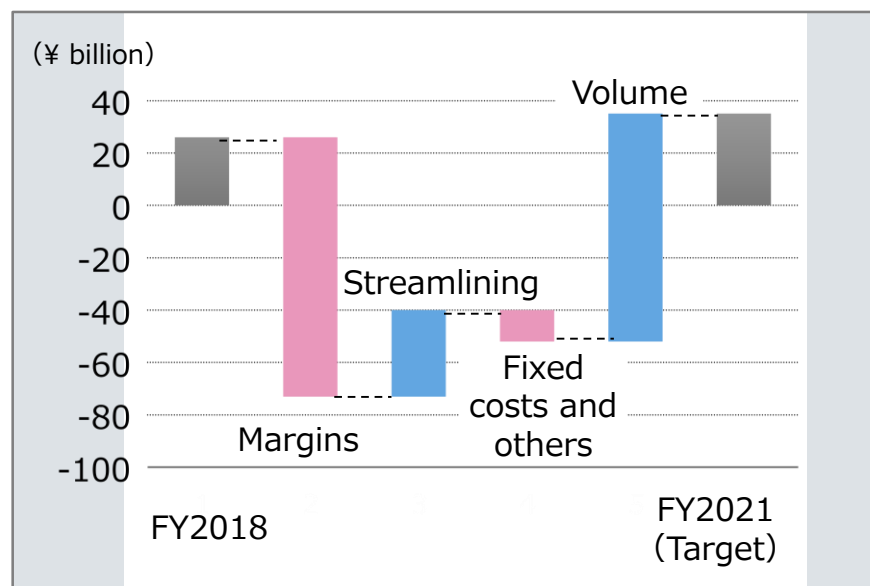
- Develop next-generation businesses
 - ▣ Smart mobility
 - ▣ Next-generation handsets
 - ▣ Sensor material

FY2021 Target

Sales Revenue **¥520.0** billion

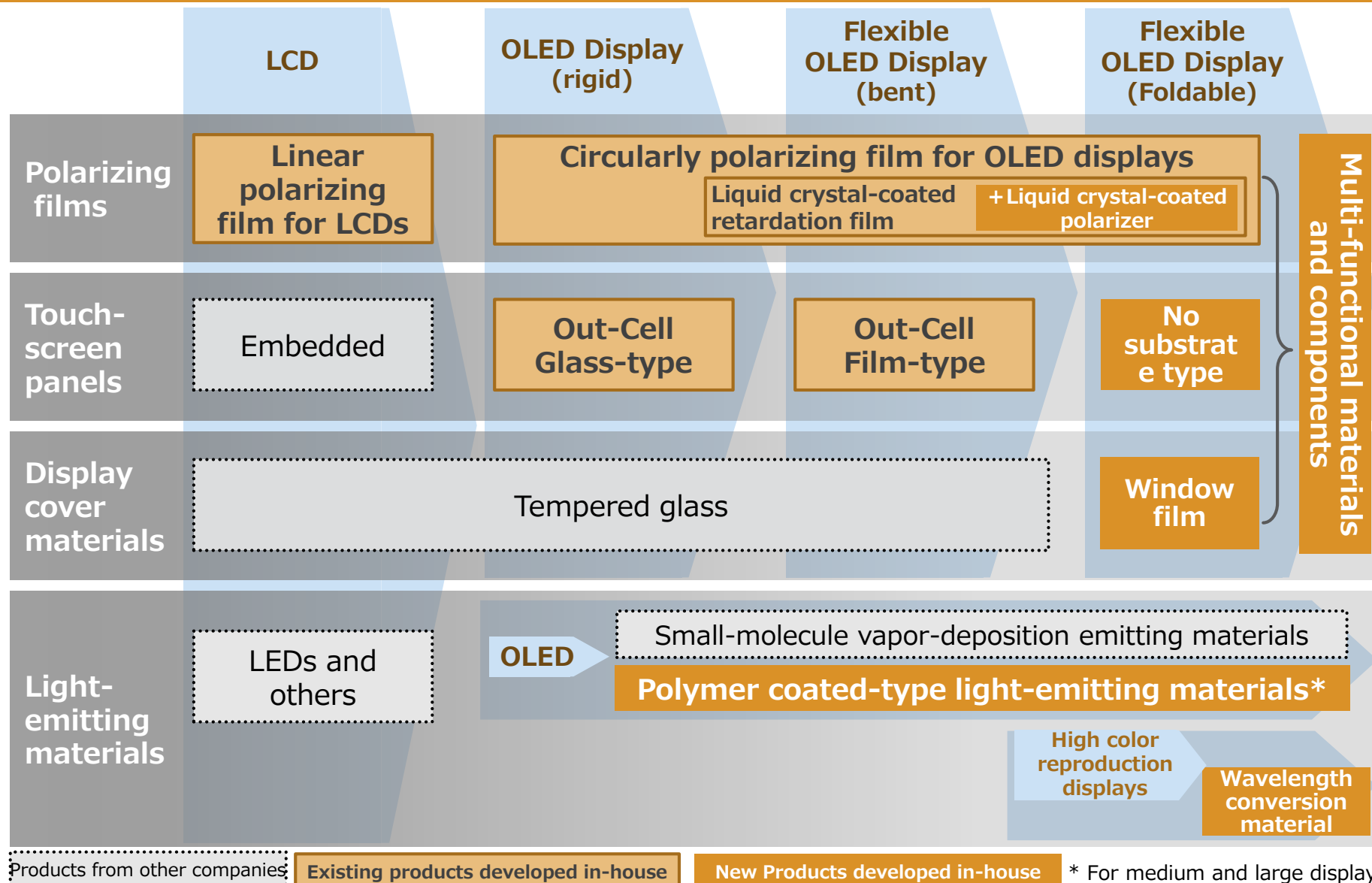
Core Operating Income **¥35.0** billion

Core operating income variance analysis (FY2018 v/s FY2021)



Advance in Display Technology and Our Product Lineup

Change & Innovation 3.0 For a Sustainable Future



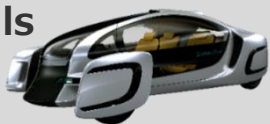
Focusing on developing components and materials to support the automotive industry's transformation with an eye toward the CASE (connected, autonomous, shared, electric) era

Petrochemicals & Plastics Sector

Resins

- PMMA
- GFPP*

Windscreen,
roof materials



Developed PMMA-based
transparent resin



革新的研究開発推進プログラム
IMPACT
Impulsing Paradigm Change through Disruptive Technologies Program

Functional Materials Sector

Super Engineering Plastics

- PES
- LCP

-
- #### Lithium-ion Battery Materials
- Separators
 - Cathode materials
 - High purity alumina

IT-related Chemicals Sector

Sensor

- Epiwafers for VCSEL

Display materials

- High-durability polarizing films
- High-durability touchscreen panels
- Polymer OLED materials

* Glass fiber reinforced polypropylene

Characteristics of 5G communications

High speed, large capacity

Low delay

Multiple simultaneous connections

Not only to bring a significant improvement in mobile phone services, but to open up new business opportunities in areas such as autonomous driving and telemedicine.

Our 5G-related materials

- **LCP**
(High frequency substrate materials for 5G communications)
- **GaN epiwafers**
(5G communication wireless base station)
- **GaAs epiwafers** (5G devices)

Battery and display-related materials

- Polarizing films for OLED
- Touchscreen panels
- Flexible display materials
- GaAs epiwafers for VCSEL
- Separators
- Cathode materials
- Alumina



Long-term goal

Contribute to solving global issues related to food, health, hygiene and the environment by leveraging our excellent research and development capabilities

Strengths

- Excellent R&D capabilities and the robust development pipeline of crop protection chemicals and biorationals
- Differentiated technologies and products in niche areas
- Products with high market share
- Alliances with major overseas agrochemical companies
- Offering total solutions

Weaknesses

- Relatively small business size compared to the competing majors
- Need to establish global sales channels

Opportunities

- Increasing food demand due to the growing global population
- Growing agriculture-related businesses
- Opportunities in peripheral and downstream segments of the household insecticide business

Status of the major businesses

Threats

- Tightening of the regulations on crop protection chemicals
- Increased competition with off-patent crop protection chemicals
- Consolidation in the major agrochemical companies

Action plan

- Strengthen and expand biorationals business
- Develop and launch new crop protection chemicals steadily
- Expand methionine sales and strengthen earnings power
- Accelerate the global expansion of the environmental health business
- Develop the nucleic acid medicine business and expand the application of the technology

Major issues

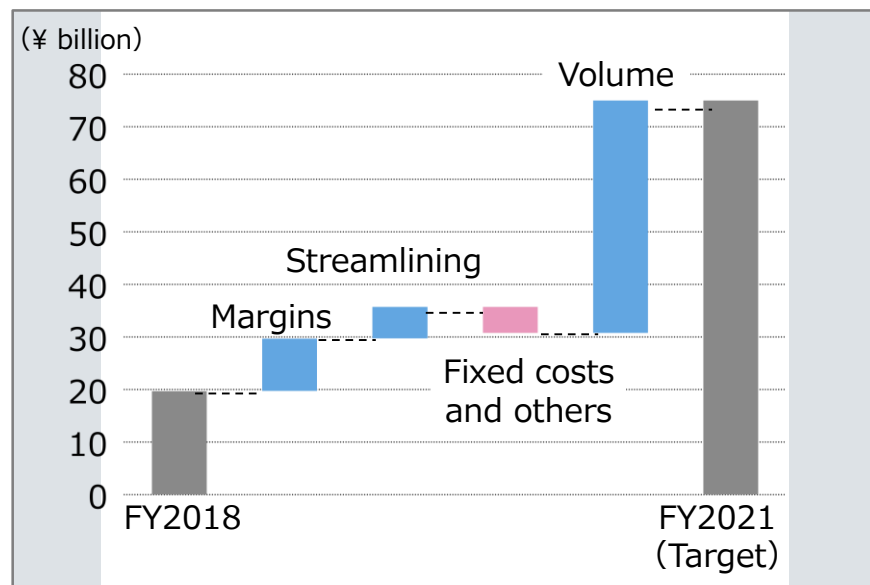
- Establish a global footprint in the crop protection business
- Further strengthen the crop protection business (agriculture-related supplies, precision agriculture)

FY2021 Target

Sales Revenue **¥480.0** billion

Core Operating Income **¥75.0** billion

Core operating income variance analysis (FY2018 v/s FY2021)



Health & Crop Sciences Sector Topics: Expansion of Our Biorational Business

Change & Innovation 3.0 For a Sustainable Future

Global Sales of Biorational-related Products (for Agriculture)

	Market size	Annual growth rate
Microbial pesticides	¥50 billion	8-10%
Plant growth regulators (PGR)	¥33 billion	3-5%
Biorational rhizosphere	¥28 billion	10%
Botanicals	¥10 billion	5-7%

Botanicals (Plant-derived)

- Growing reputation for organic agriculture and natural products
- Synergies through acquisition of Botanical Resources Australia (Technologies for improving pyrethrum seeds and extracting natural substances)

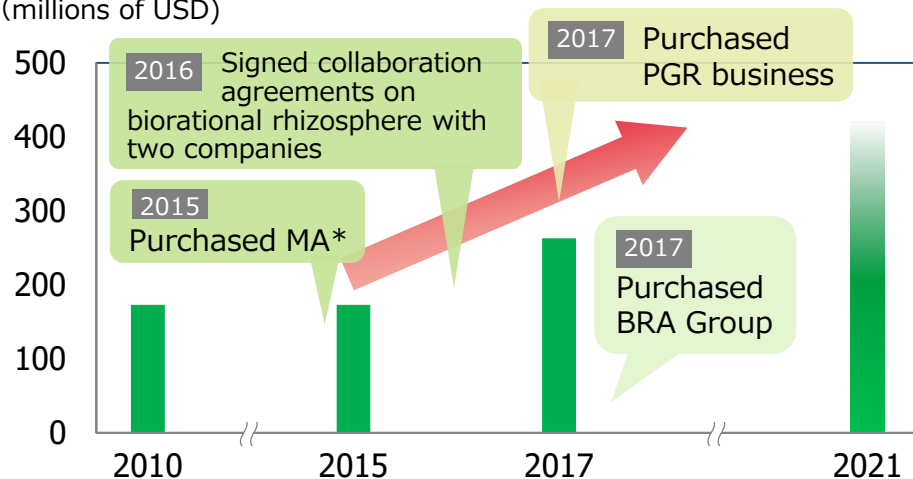


Expand from household and public hygiene fields to agriculture

Develop new botanical insecticides

Our Sales for Biorational Business

(millions of USD)



* Mycorrhizal Applications LLC.

Biorational rhizosphere (mycorrhizal fungi/ rhizobium/ soil microorganism etc.)

- Sales expansion of mycorrhizal fungal products from MA, and launch of its mixture products
- Launch of other rhizobium products
- Sales expansion of biological nematocide for seed treatment



Long-term goal

Contribute to the improvement of people's quality of life through the development of innovative medical and healthcare solutions

Strengths

- Drug development platform in the areas of psychiatric and neurological disorders and cancer
- Development capabilities and manufacturing know-how for cellular medicine derived from allogeneic iPS cells
- Network with academia and biotech companies
- Pipeline in development for psychiatry & neurology, oncology, and regenerative medicine and cell therapy
- Strong development and manufacturing capabilities for radioactive isotope labeling agents

Weaknesses

- Limited capabilities to bear the burden of R&D costs
- Emergence of generic drugs due to the loss of exclusivity for major products

Opportunities

- Innovation in healthcare technology
- Increasing health awareness

Status of the major businesses

Threats

- Accelerated implementation of medical expense control measures in Japan
- Changes in the health insurance systems overseas
- Consolidation in the pharmaceutical industry

Action plan

- Strengthen innovation through new drug discovery approaches
- Launch new products in oncology
- Explore frontier fields
- Develop Theranostics business and strengthen the competitiveness of existing radioactive diagnostics business

Major issues

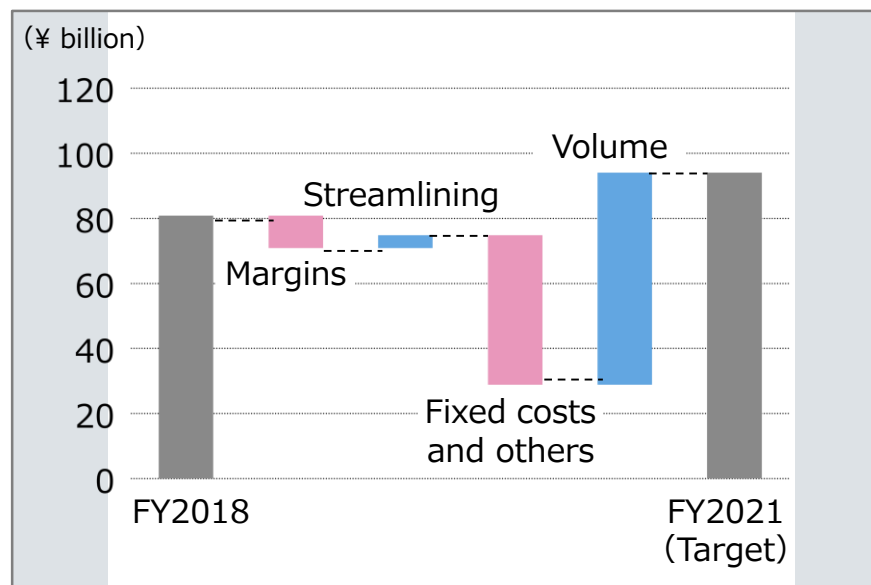
- Enhance drug development capabilities and improve the success rate in R&D
- Maintain earnings power after Latuda's loss of exclusivity

FY2021 Target

Sales Revenue **¥590.0** billion

Core Operating Income **¥94.0** billion

Core operating income variance analysis (FY2018 v/s FY2021)



Initiatives in Regenerative Medicine & Cell Therapy Business

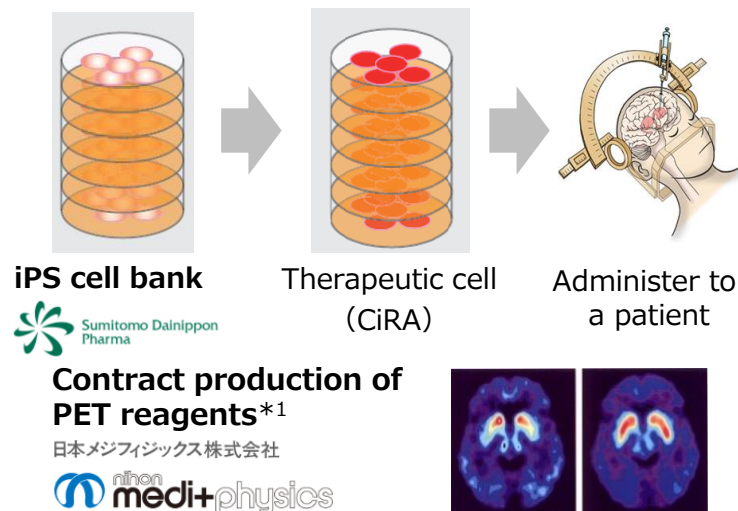
Proposed indication, etc.	Partnering	Region (planned)	Clinical research/ Clinical study
Chronic stroke (SB623)	SanBio	North America	Completed Phase 2b study Development strategy and launch target under consideration
AMD (age-related macular degeneration)	Healios RIKEN	Japan	In progress: clinical research Preparing to start clinical study
Parkinson's disease (Designated as a "SAKIGAKE")	Kyoto Univ CiRA	Global	In progress: investigator-initiated clinical study (Phase 1 / 2 study) (Japan)
Retinitis pigmentosa	RIKEN	Global	Preparing to start clinical research
Spinal cord injury	Keio Univ Osaka National Hospital	Global	In progress: clinical research

*1 PET Image Source (Neurotherapeutics (2011) 8:549-561) *2 Launch schedule is based on our plan and not agreed on by partners.

Kyoto University Hospital and CiRA are conducting investigator-initiated trials for treatment of Parkinson's disease using iPS cells.

Our cooperation in clinical study

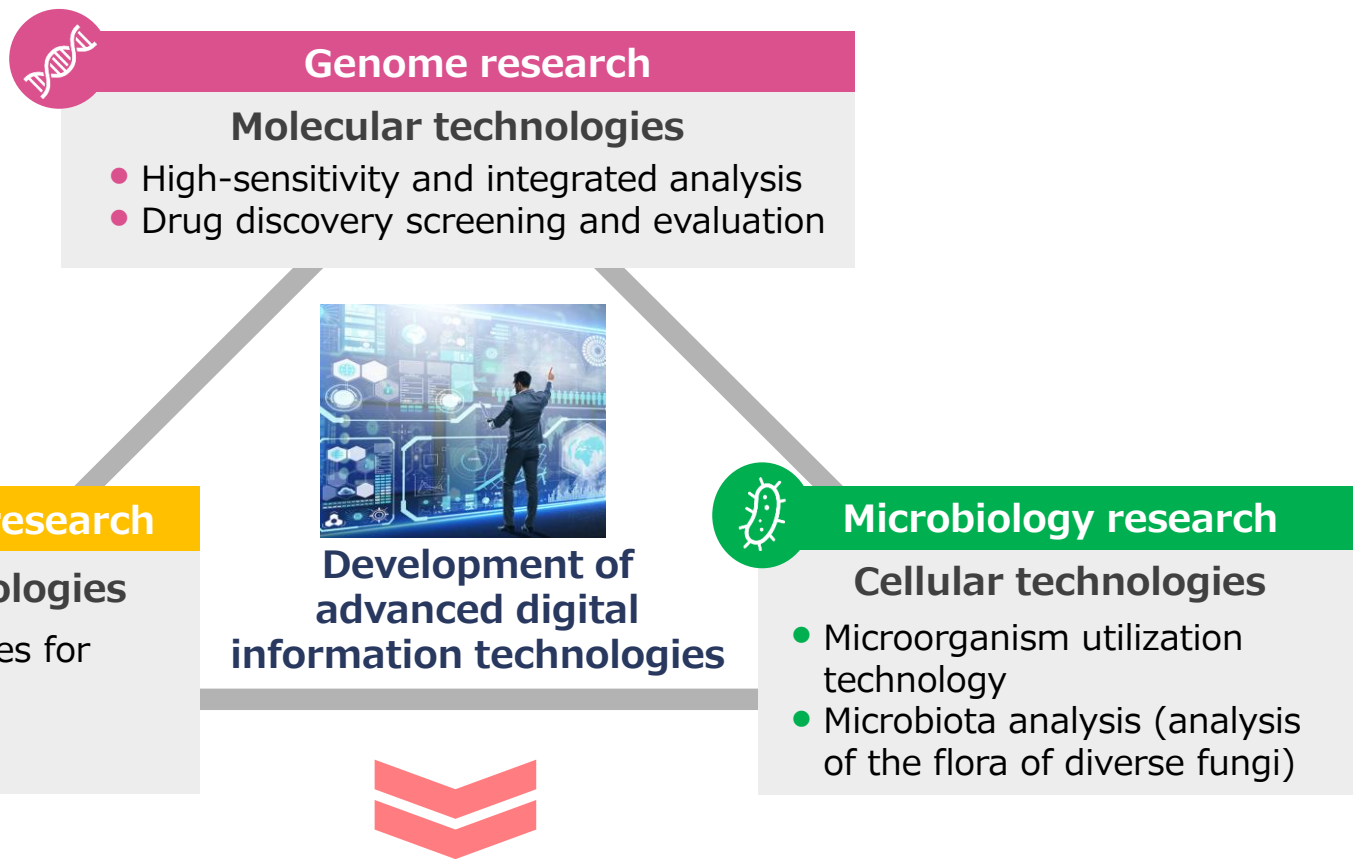
Treatment process with cellular medicine using iPS cells



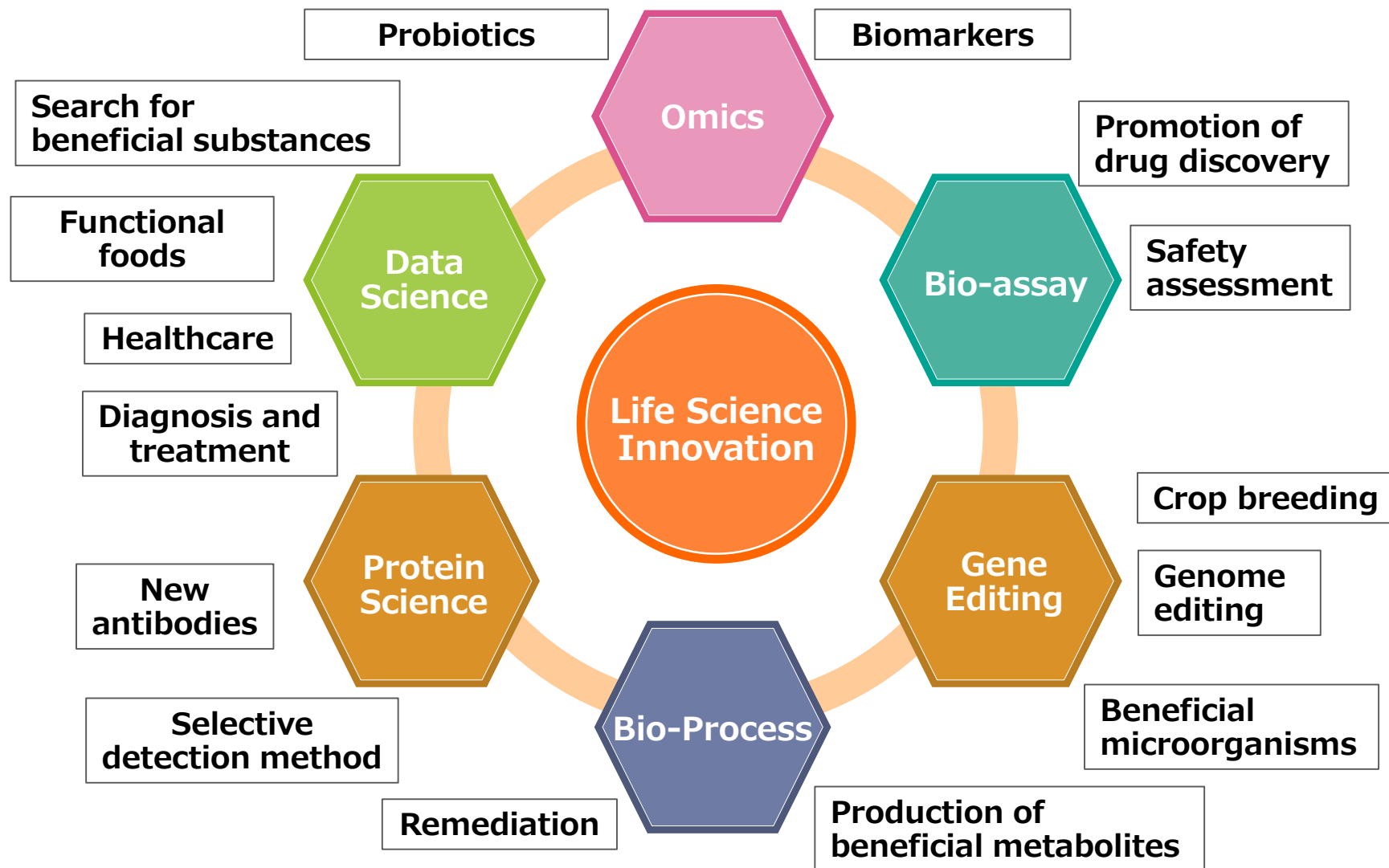
Dainippon Sumitomo Pharma will file an application for approval based on the data from the trials, aiming to launch this product in FY2022*2

Expected to grow into a core business for the Pharmaceuticals sector by 2030

Applying our advanced technologies related to the development of pharmaceuticals, crop protection chemicals and other chemicals, microbial engineering, and chemicals safety assessment to a broad range of research activities.

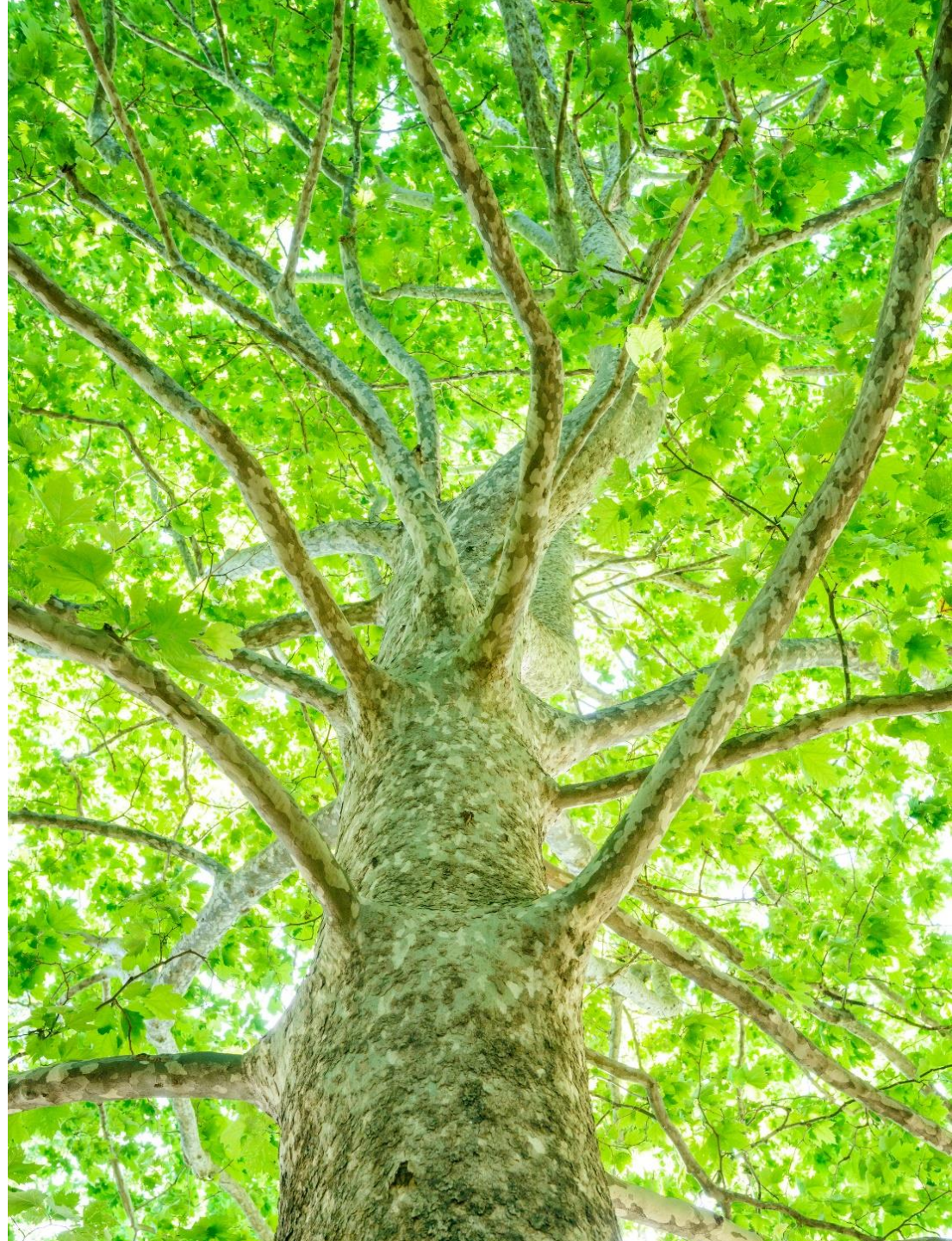


Bioscience Research Laboratory Established



IV

Initiatives for Sustainability



Basic Principles for Promoting Sustainability

Principle 1 Creating economic value which helps create social value

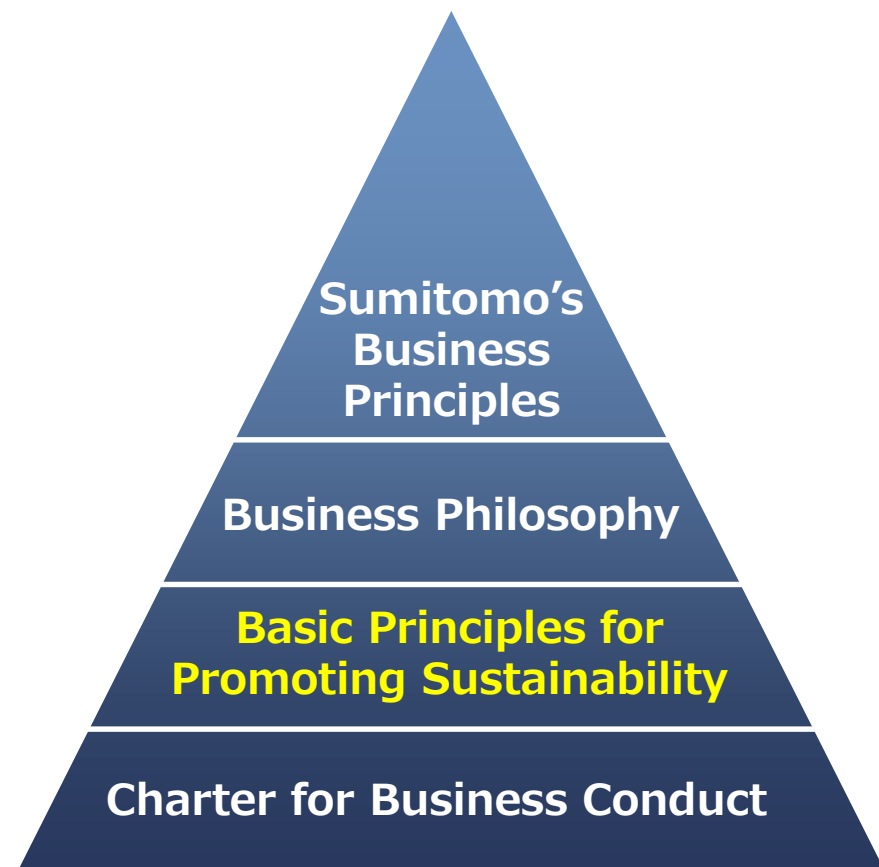
Principle 2 Contribution to solving globally vital issues

Principle 3 Active participation in global initiatives

Principle 4 Collaboration with stakeholders

Principle 5 Top management commitment and participation by all

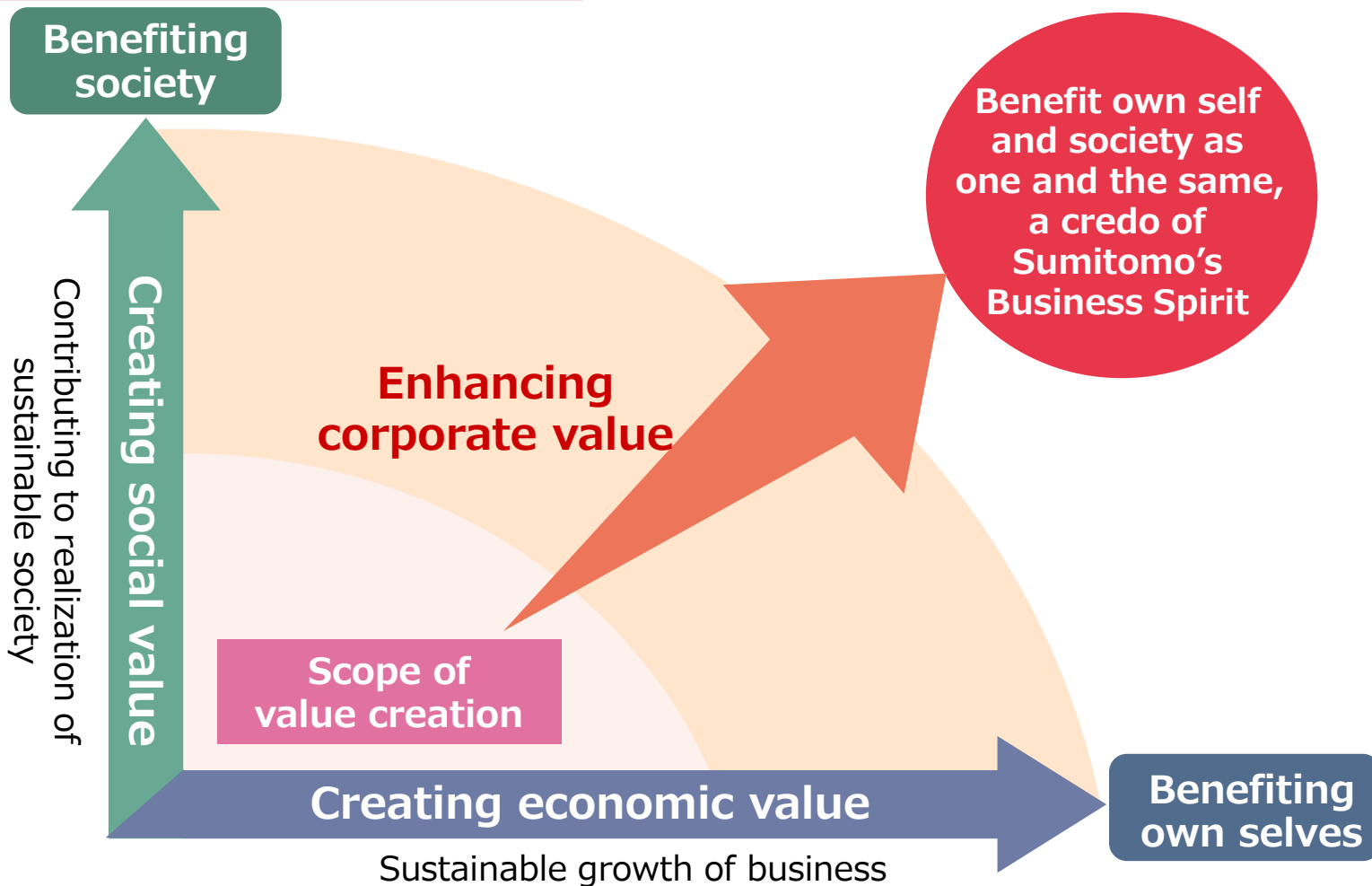
Principle 6 Enhancing corporate governance



Credo constituting the Sumitomo Spirit

"Our business must benefit own self and society as one and the same"

Our business must benefit ourselves and at the same time serve the interests of the nation and society.



Our Seven Material Issues

Material issues for social value creation

☐ Contribution to reducing environmental impact

- Mitigation of climate change
- Contribution through products and technologies
- Efficient use of energy and resources
- Contribution to the recycling of plastic resources

☐ Contribution to solving food issues

☐ Contribution to solving healthcare issues

☐ Contribution to ICT innovation

Material issues for value creation in the future

☐ Promotion of technology innovation and research and development

☐ Initiatives for digital innovation

☐ Promotion of diversity

Achieve sustainable value creation by working on material issues

Participation in external initiatives



Since August 2018: Joined in the "TCFD Study Group," led by the Ministry of Economy, Trade and Industry for mobilizing green finance through proactive corporate disclosure

December 2018:

METI Issued TCFD guidance

December 2018~: Joined WBCSD Chemical Sector's project to formulate TCFD guidance

Our Efforts

Risk Management

Certified by SBT



October 2018,
first certified
among
diversified
chemical
companies

Fuel conversion

Technology
development

Expanding Opportunities (Contributing through own business)

Sales of environmentally friendly products

Sumika Sustainable Solutions
Expand sales of the products
designated as SSS

Reduction of emissions throughout
the product life cycle

Reduction of emissions from our own operations + Contribution through environmentally friendly products



Selected as
**Climate
Change
A List
2018**

Disclosed information

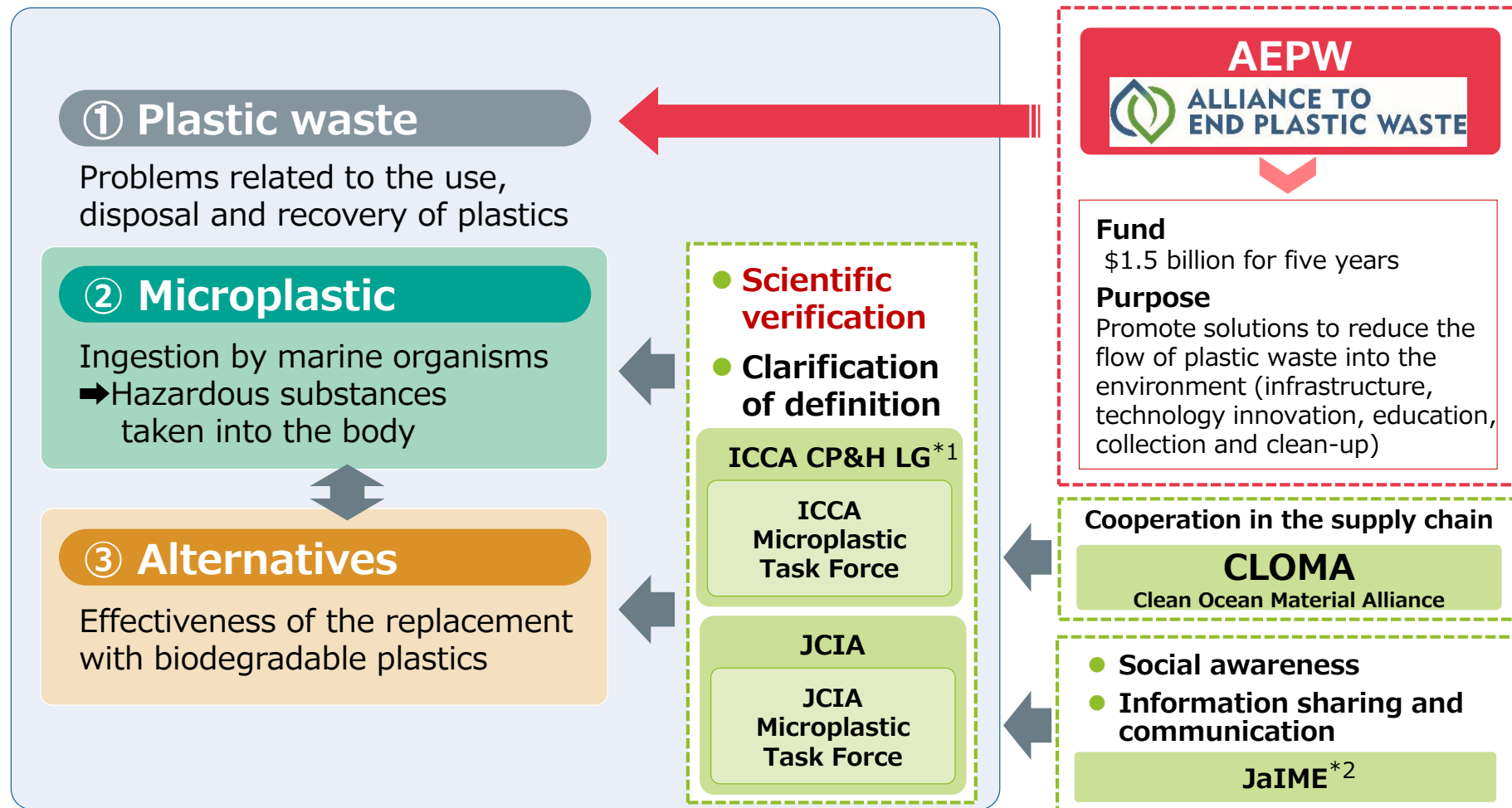
approx.
7,000
companies

A List

126

(including 20 Japanese
companies)

Our efforts through participation in external initiatives

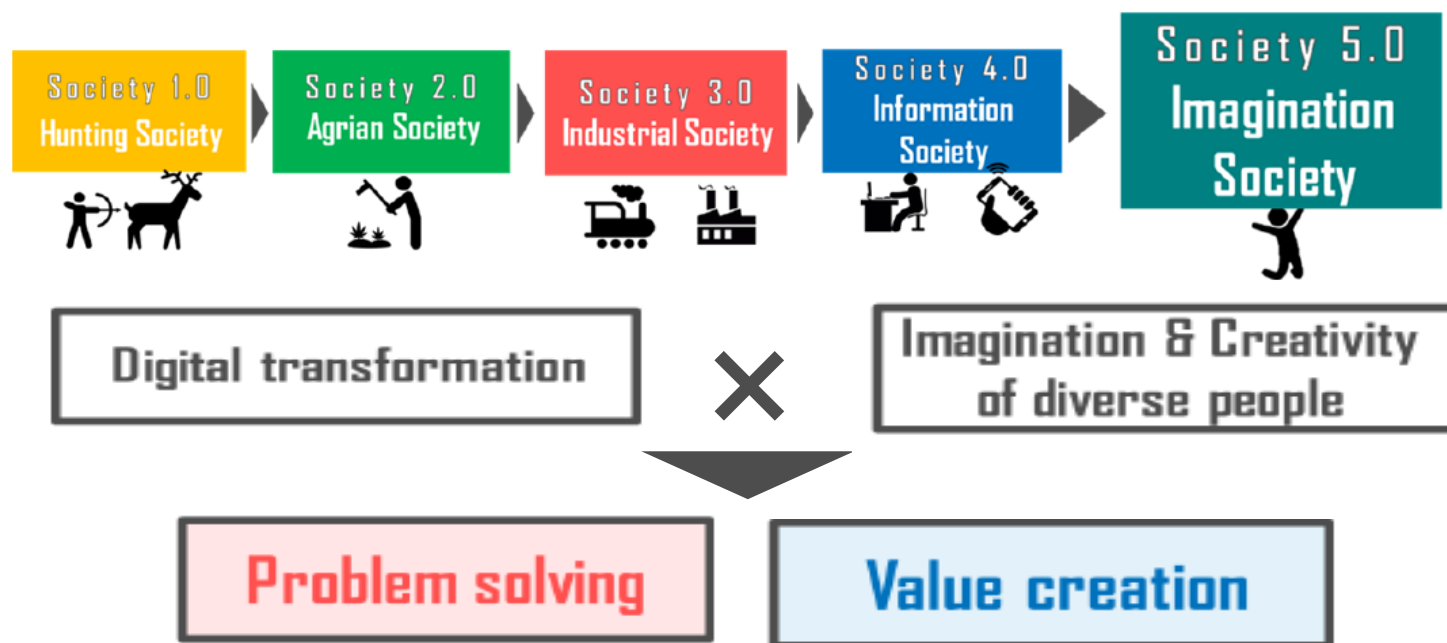


*1 International Council of Chemical Associations, Chemical Policy & Health Leadership Group

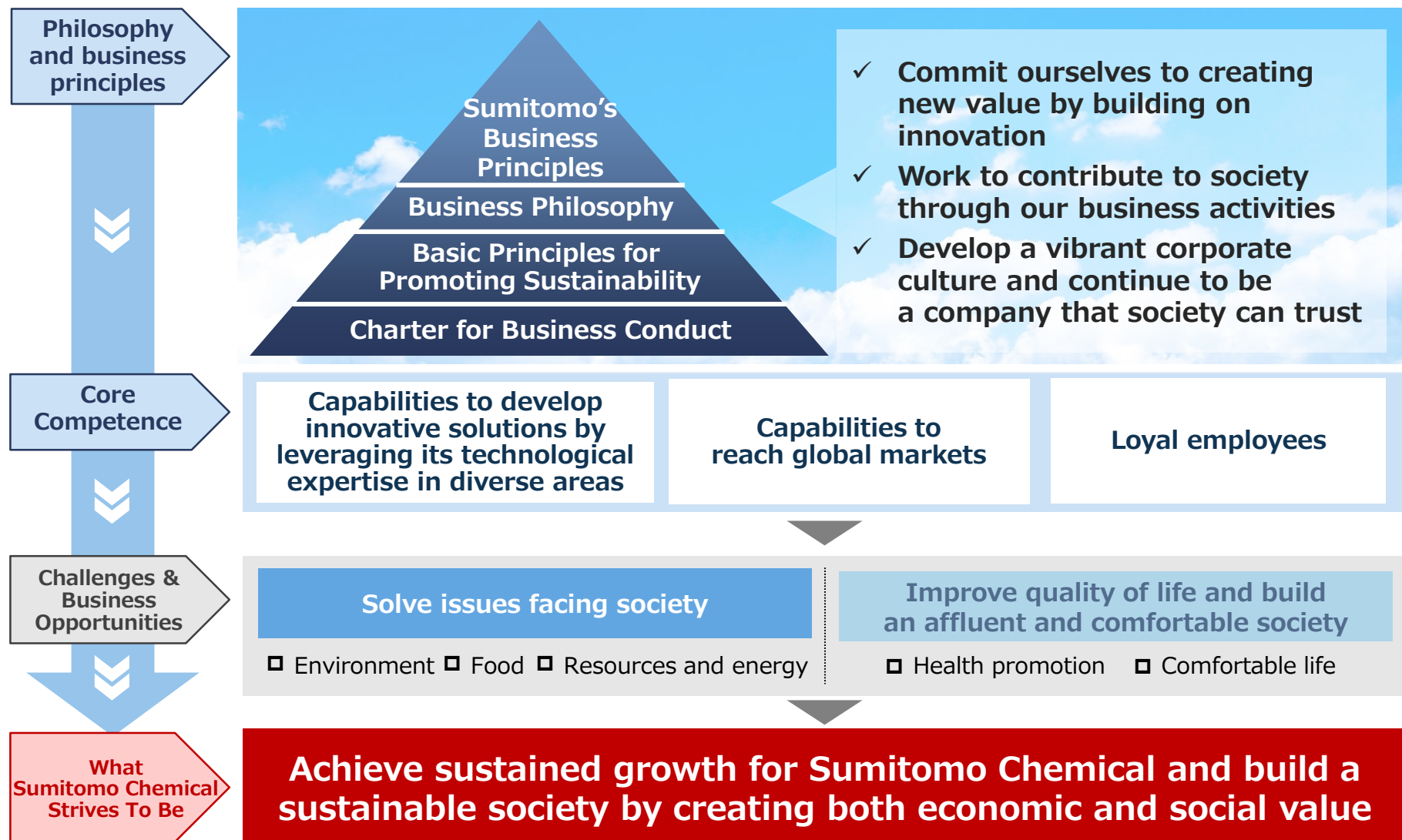
*2 Japan Initiative for Marine Environment

Society 5.0 will be an Imagination Society, where digital transformation combines with the imagination and creativity of diverse people to solve social problems and create value.

Society 5.0



(Source) “Society 5.0 –Co-creating the future” by Keidanren



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.