

Change and Innovation 3.0

For a Sustainable Future

FY2019-FY2021
Corporate
Business Plan

Updated May 15, 2019



Contents

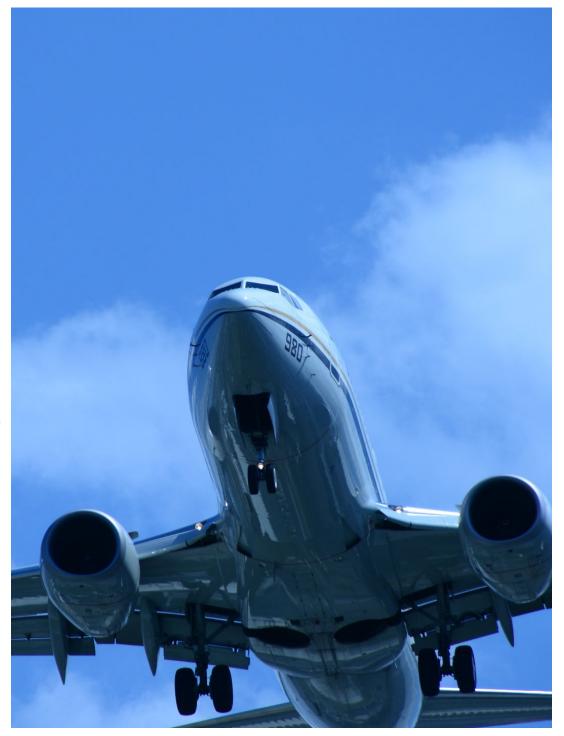
Change & Innovation 3.0 For a Sustainable Future

I	Progress Review for Previous Corporate Business Plan	3
П	New Corporate Business Plan	12
Ш	Business Strategy by Sector	49
IV	Initiatives for Sustainability	69

Ι

FY2016-FY2018

Progress Review for Previous Corporate Business Plan



Change & Innovation 3.0 For a Sustainable Future

Change and Innovation Create New Value







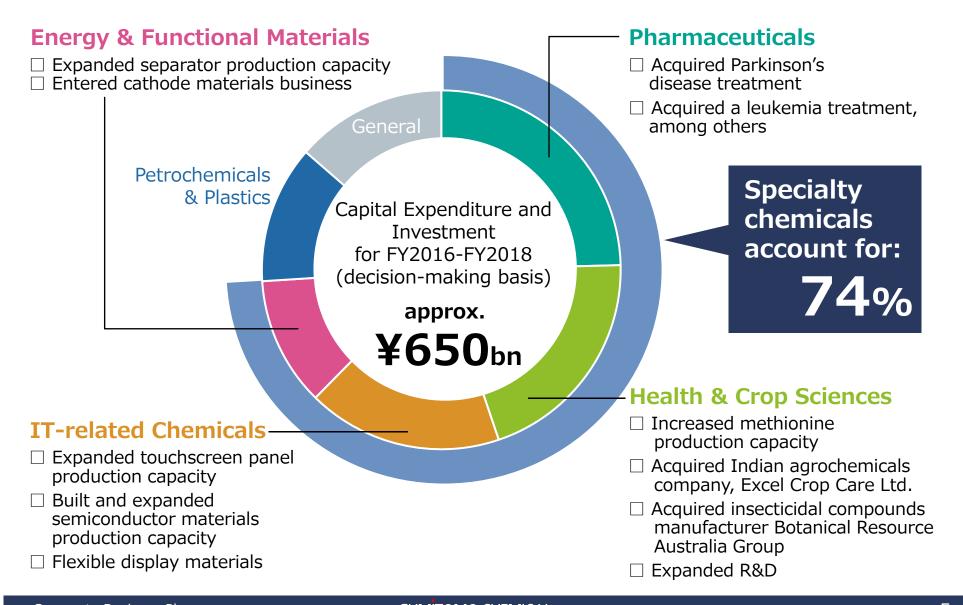
Promote globally integrated management

Ensure full and strict compliance
Establish and maintain safe and stable operations



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

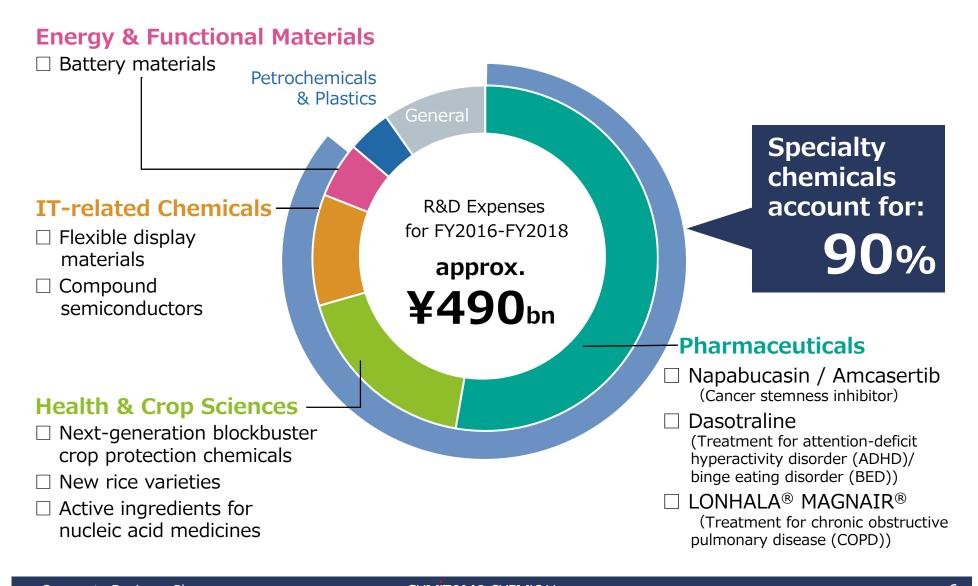
Change & Innovation 3.0 For a Sustainable Future





Research and Development Expenses for FY2016-FY2018

Change & Innovation 3.0 For a Sustainable Future



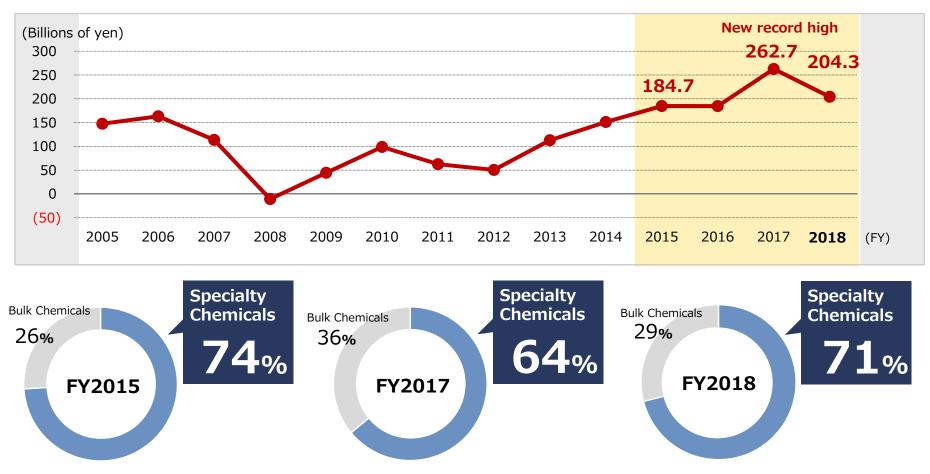


Change in Business Portfolio

Change & Innovation 3.0 For a Sustainable Future

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

Change & Innovation 3.0 For a Sustainable Future

	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
Nanhtha Drice	V40 F00/LI	V45 000 (L)	
Naphtha Price	¥49,500/kl	¥45,000/kl	
Exchange Rate	¥110.92/\$	¥120.00/\$	

^{*} FY2018 and FY2018 target both based on IFRS



Core Operating Income by Sector

Change & Innovation 3.0 For a Sustainable Future

	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	
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 & Innovation 3.0 For a Sustainable Future

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

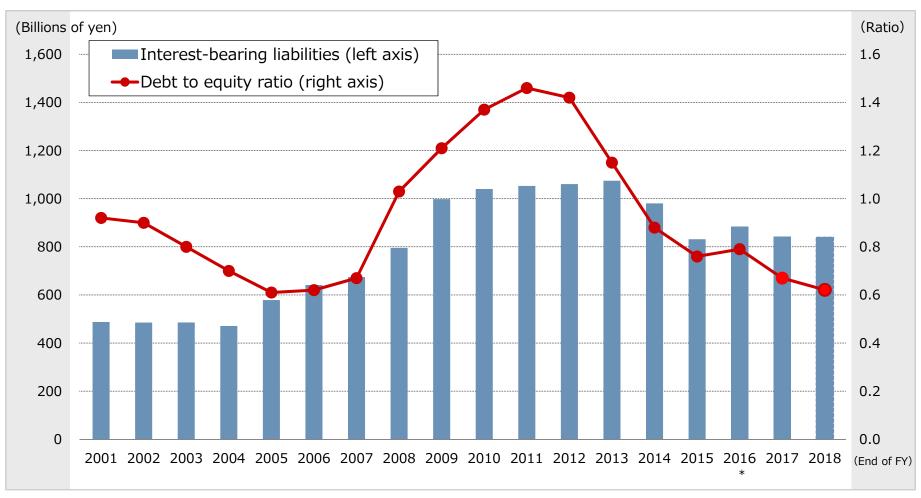
	End of FY2015	End of FY2018 (Target)	End of FY2018
Interest-bearing liabilities	831.5	1,000.0	839.5



Generate More Cash Flow

Change & Innovation 3.0 For a Sustainable Future

Interest-Bearing Liabilities and D/E Ratio



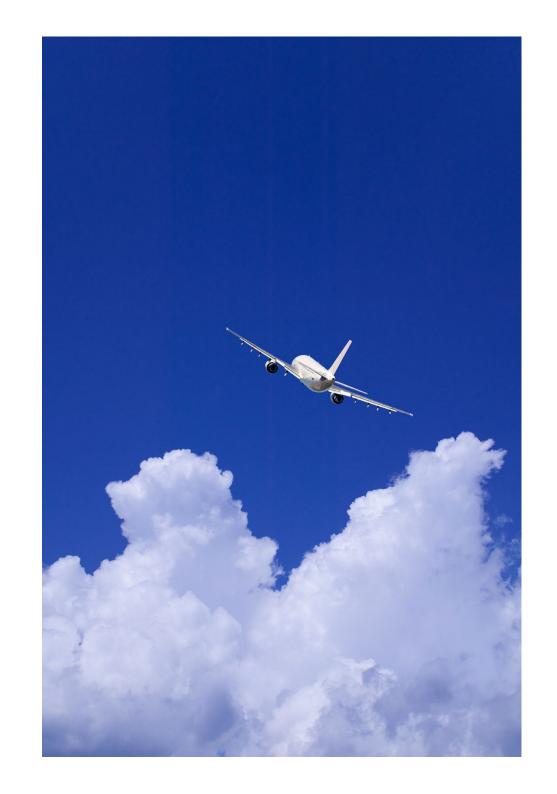
^{*} J-GAAP used through FY2016, IFRS adopted from FY2017. Information for FY2016 restated in accordance with IFRS.

П

FY2019-FY2021

New Corporate Business Plan

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



New Corporate Business Plan

Change & Innovation 3.0 For a Sustainable Future

П	Ne	ew ew	Corporate Business Plan	12
	1		Business Environment	14
	2		Basic Policy	17
	3		Performance Targets	21
	4		Major Action Plan	30



1. Business Environment

Change & Innovation 3.0 For a Sustainable Future

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

Change & Innovation 3.0 For a Sustainable Future



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





New Corporate Business Plan

Change & Innovation 3.0 For a Sustainable Future

I	Ne	ew	Corporate Business Plan	12
	1		Business Environment	14
	2		Basic Policy	17
	3		Performance Targets	21
	4		Major Action Plan	30

Change & Innovation 3.0 For a Sustainable Future

Slogan of new corporate business plan

Change & Innovation 3.0 For a Sustainable Future

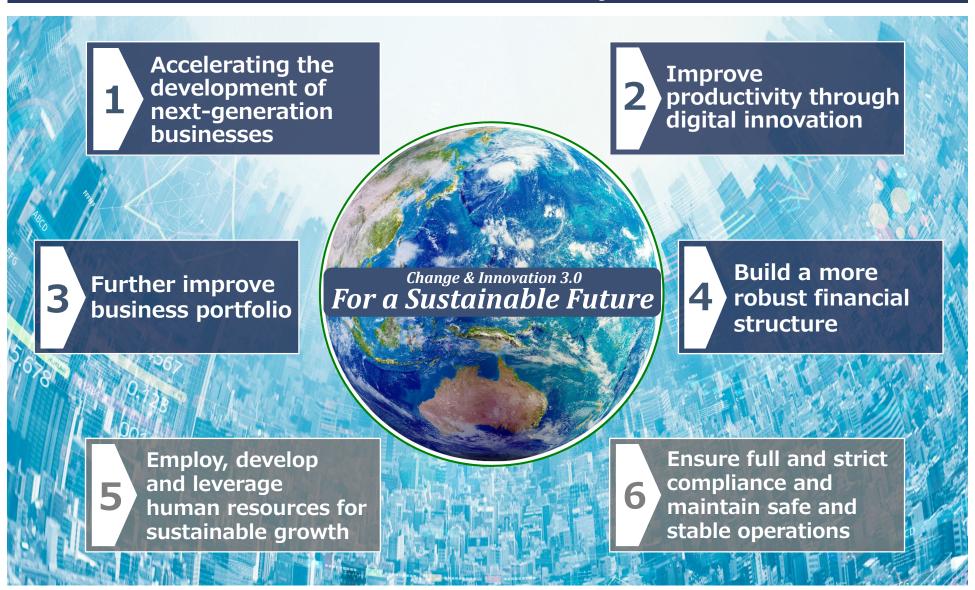
In view of the advent of Society 5.0 (super-smart society)

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



2. Basic Policy

Change & Innovation 3.0 For a Sustainable Future



п

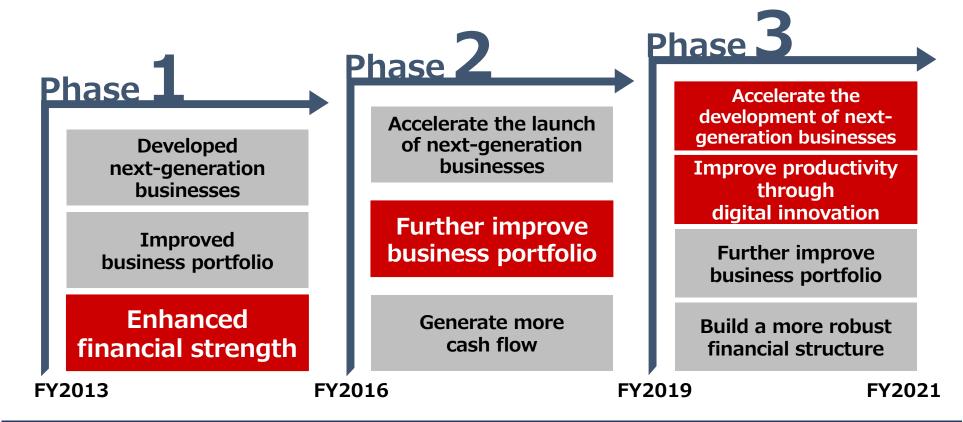
Change & Innovation 3.0 For a Sustainable Future

Change & Innovation

For the next hundredth anniversary

Create New Value

For a Sustainable Future



New Corporate Business Plan

Change & Innovation 3.0 For a Sustainable Future

II	Ne	eW	Corporate Business Plan	12
	1		Business Environment	14
	2		Basic Policy	17
	3		Performance Targets	21
	4		Major Action Plan	30



3. Performance Targets

Change & Innovation 3.0 For a Sustainable Future

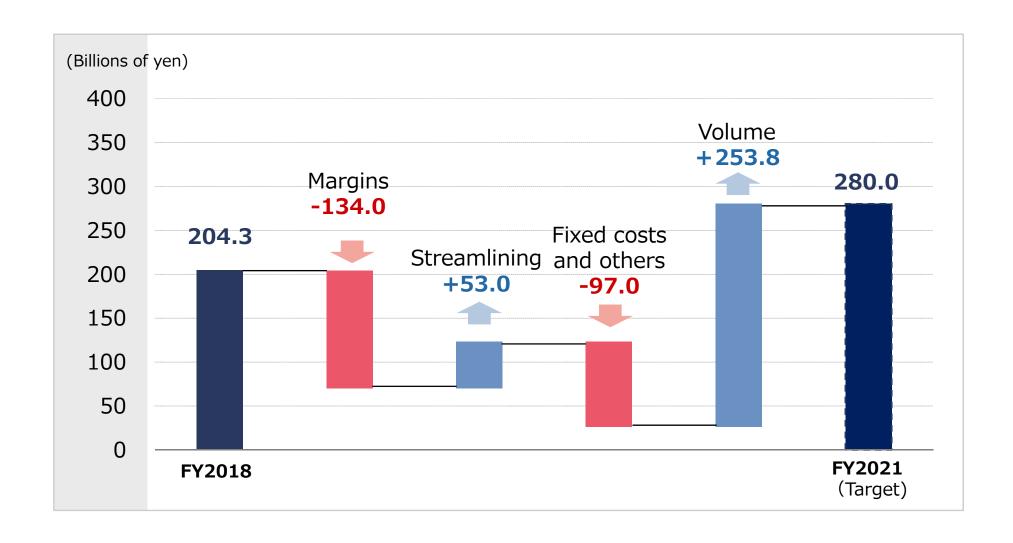
	FY2018	FY2021 Target	Change
Sales Revenue	2,318.6	2,950.0	+631.4
Core Operating Income	204.3	280.0	+75.7
Operating Income (IFRS)	183.0	260.0	+77.0
Net Income attributable to owners of the parent	118.0	150.0	+32.0
Nie wie kleie Duie e	V40 500 // l	V54 000 (LL	
Naphtha Price	¥49,500/kl	¥51,000/kl	
Exchange Rate	¥110.92/\$	¥110.00/\$	



3. Performance Targets:

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

	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

Change & Innovation 3.0 For a Sustainable Future

	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



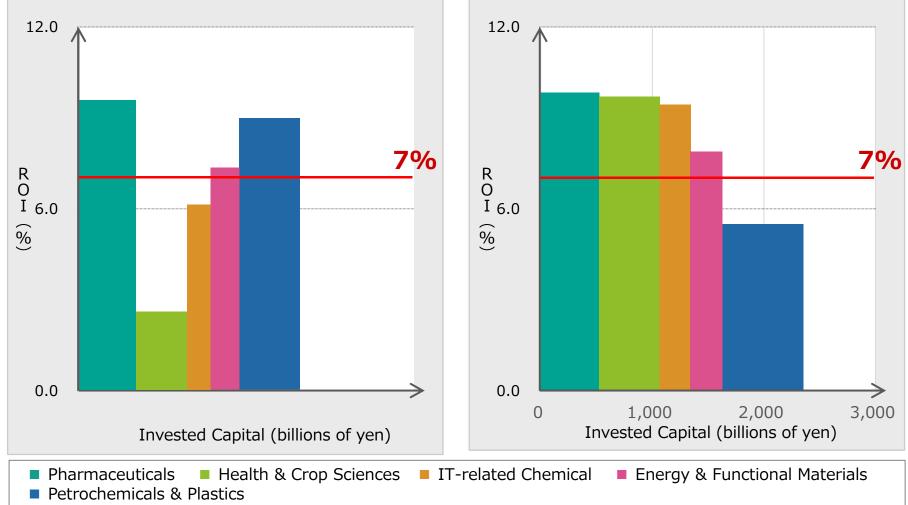
3. Performance Targets:

ROI by Sector

Change & Innovation 3.0 For a Sustainable Future

Invested Capital and ROI by Sector





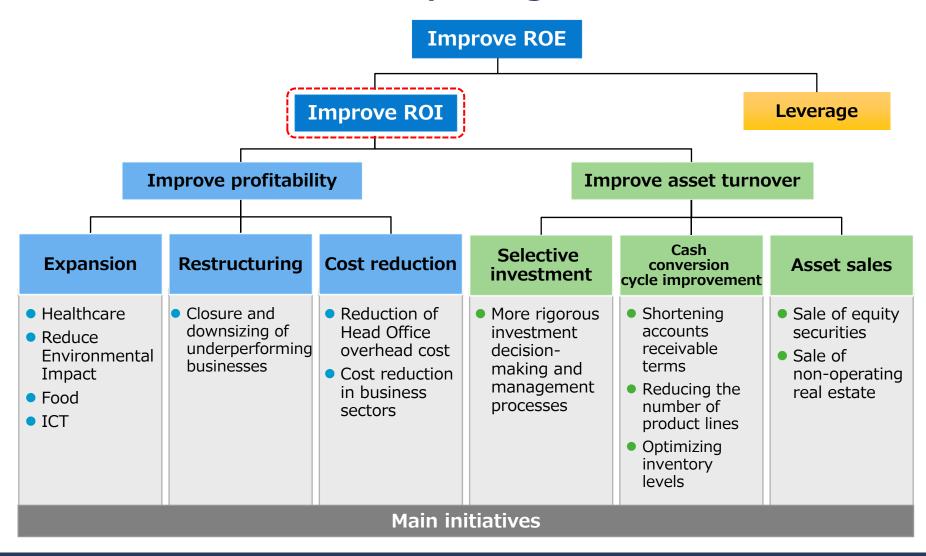


3. Performance Targets:

ROI Tree Diagram

Change & Innovation 3.0 For a Sustainable Future

Initiatives for improving ROI and ROE

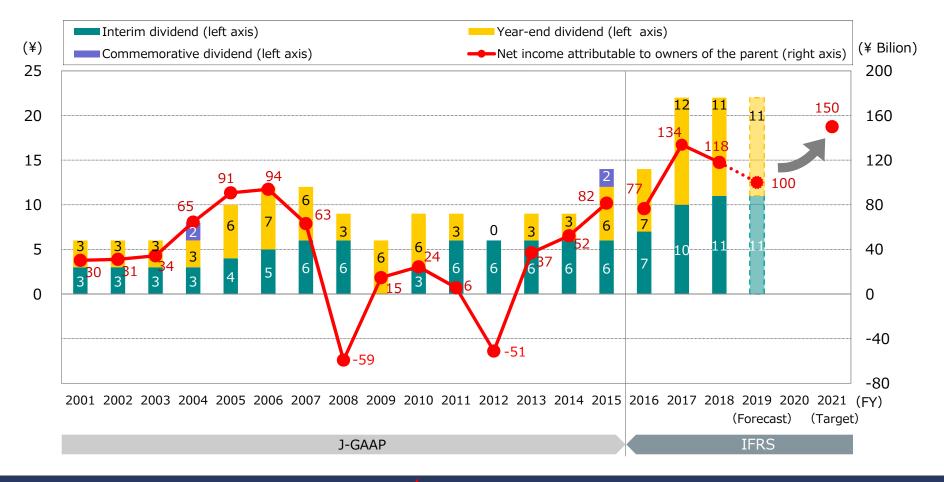




3. Performance Targets: **Dividend Policy**

Change & Innovation 3.0 For a Sustainable Future

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.





New Corporate Business Plan

Change & Innovation 3.0 For a Sustainable Future

П	Ne	W	Co	rp	orate Business Plan	12
	1	B	usine	SS	Environment	14
	2	Ba	asic F	Poli	СУ	17
	3	Pe	erforr	na	nce Targets	21
	4	M	lajo	r	Action Plan	30
			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 Businesses

Change & Innovation 3.0 For a Sustainable Future

Accelerate the development of next-generation technologies and create new businesses

for a sustainable society



Build innovation ecosystem



Focus domains

Advanced

medical care

Preventive care solutions

Early diagnosis

and health

examination

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

Change & Innovation 3.0 For a Sustainable Future

Health care

Major projects

Nucleic Acid Medicine

Cell Therapy

Theranostics

Frontier businesses (Healthcare solutions not limited to pharmaceuticals)

Nutraceuticals (functional food)

Physical condition

Reducing Environmental Impact

Energy

storage

Energy

saving

Carbon cycle

Focus domains Major Projects

Next-generation battery storage materials

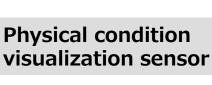
Separation membrane

Waste water processing

Development of low environmental impact bioprocesses based on Synthetic **Biology**

Carbon Capture and Utilization (CCU)related business

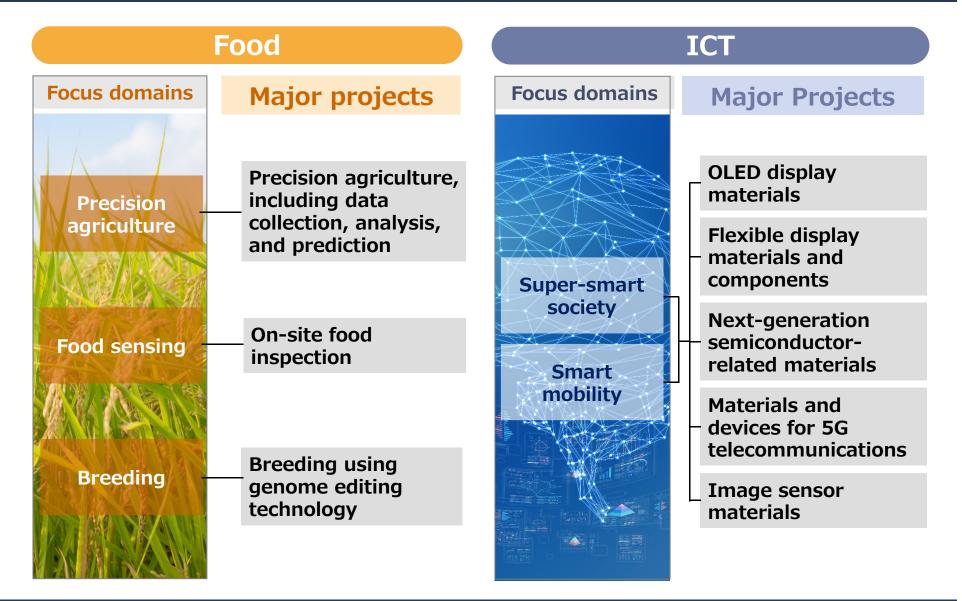
31





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

Change & Innovation 3.0 For a Sustainable Future

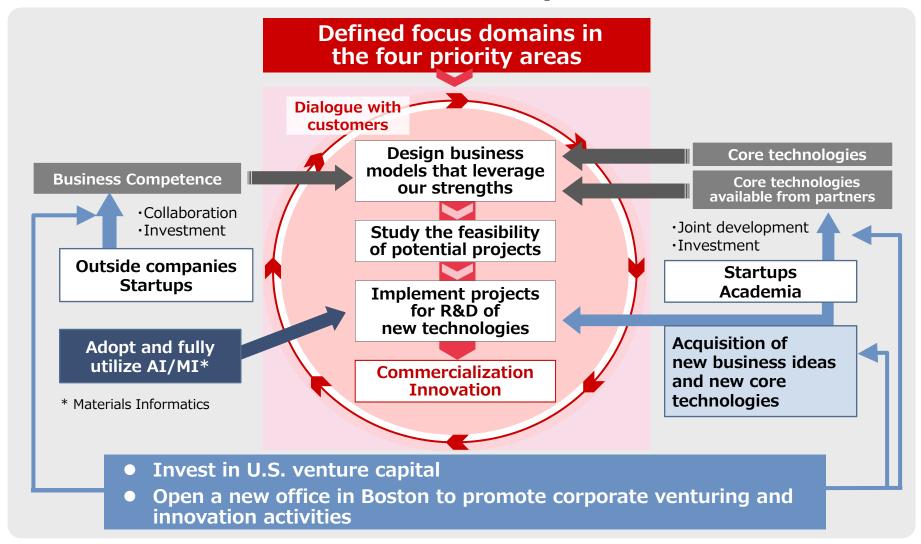




Accelerate the Development of Next-Generation Businesses: Construction of Our Innovation Ecosystem

Change & Innovation 3.0 For a Sustainable Future

Innovation Ecosystem





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

Change & Innovation 3.0 For a Sustainable Future

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

CVI

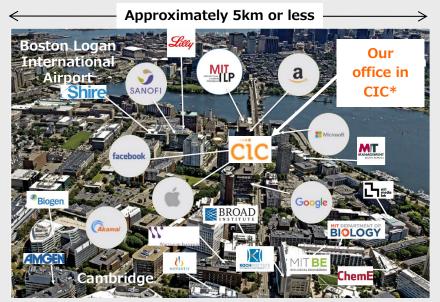
(Corporate Venturing & Innovation Office)

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

New Corporate Business Plan

Change & Innovation 3.0 For a Sustainable Future

New Corporate Business Plan	12
1 Business Environment	14
2 Basic Policy	17
3 Performance Targets	21
4 Major Action Plan	30
Accelerate the Development of Next-Generation Businesses	30
2 Improve Productivity through Digital Innovation	36
3 Further Improve Business Portfolio	41
Build a More Robust Financial Structure	45



Improve Productivity through Digital Innovation

Change & Innovation 3.0 For a Sustainable Future

Significant improvement in efficiency and quality

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

	Previous Initiatives
Digital Plant	Partial introduction of AI and IoT
Digital R&D	Partial introduction of Materials Informatics (MI)
Digital SCM (Including marketing)	Partial introduction of S/4HANA
Digital Office	Partial introduction of RPA Introduction of Office365

Next Steps

Higher-performance production by leveraging AI and IoT

More efficient, higher-performance R&D by leveraging AI/MI

Full-scale introduction of S/4HANA Job standardization and work style reform

Full use of robotics More active communication Paperless

Improve Productivity through Digital Innovation: Digital Plant

Change & Innovation 3.0 For a Sustainable Future

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.

Improve Productivity through Digital Innovation: **Digital R&D**

Change & Innovation 3.0 For a Sustainable Future

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

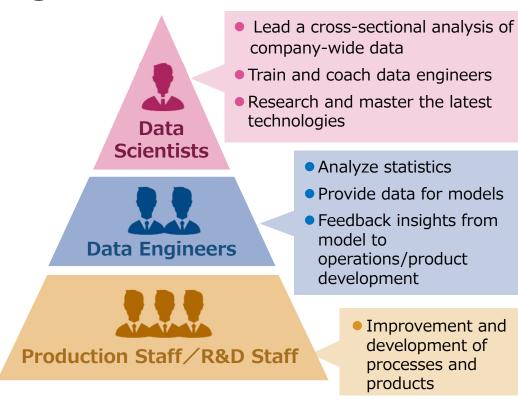
Target

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



New Corporate Business Plan

Change & Innovation 3.0 For a Sustainable Future

II New Corp	orate Business Plan	12
1 Business	Environment	14
2 Basic Poli	СУ	17
3 Performan	nce Targets	21
4 Major	Action Plan	30
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

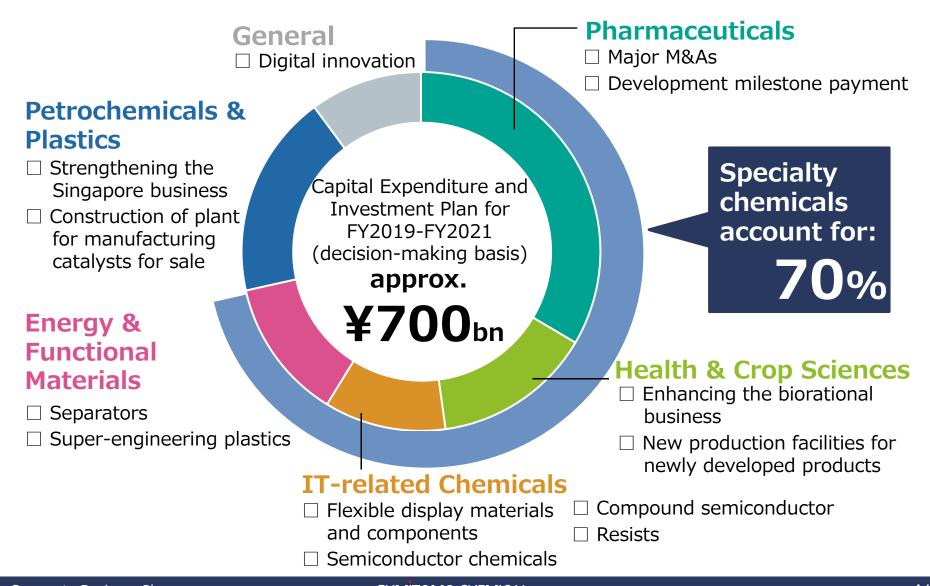
Corporate Business Plan SUMİTOMO CHEMICAL 40



Further Improve Business Portfolio:

Capital Expenditure and Investment Plan for FY2019-FY2021 (decision-making basis)

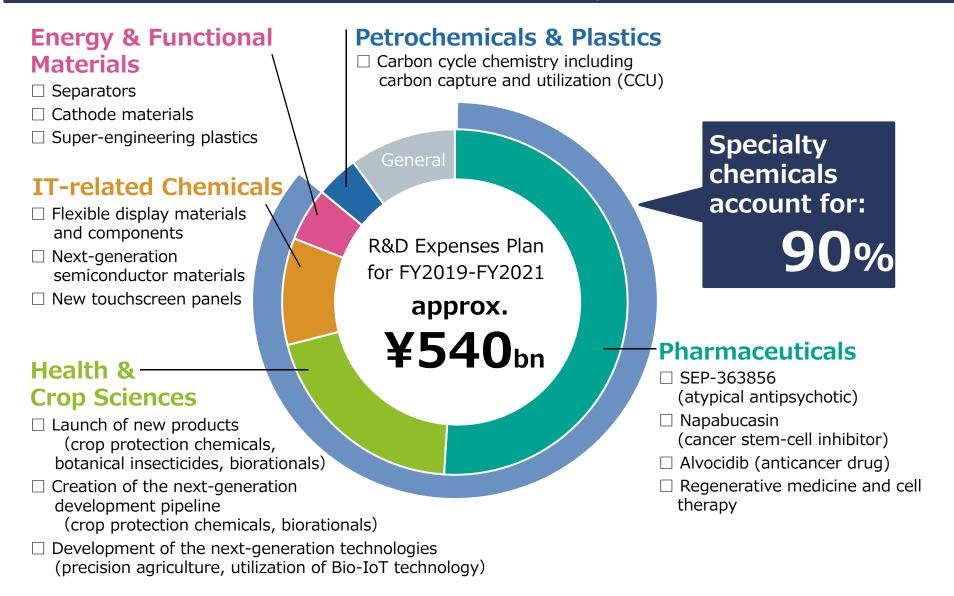
Change & Innovation 3.0 For a Sustainable Future





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

Change & Innovation 3.0 For a Sustainable Future



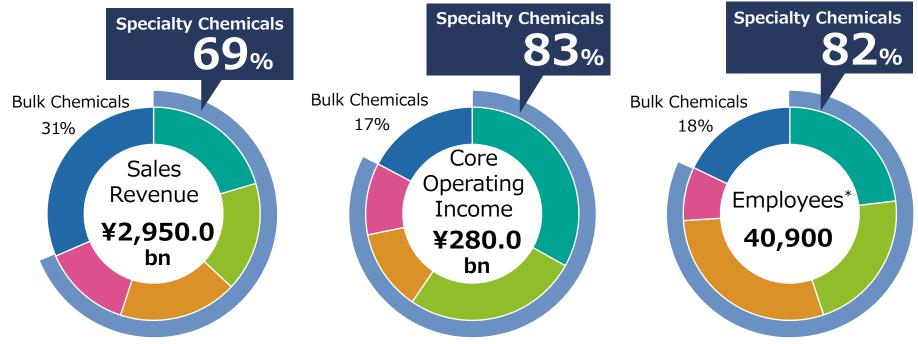


Further Improve Business Portfolio:

Sales Revenue, Core Operating Income, and Employees

Change & Innovation 3.0 For a Sustainable Future

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



New Corporate Business Plan

Change & Innovation 3.0 For a Sustainable Future

II New Corporate	Business Plan 12
1 Business Environn	nent 14
2 Basic Policy	17
3 Performance Targe	ets 21
4 Major Action	Plan 30
	the Development of ation Businesses 30
2 Improve Pr Digital Inno	roductivity through ovation 36
3 Further Im	prove Business Portfolio 41
4 Build a Mor	re Robust Financial Structure 45

Corporate Business Plan SUMİTOMO CHEMICAL 44

Build a More Robust Financial Structure: Financial Strategy

Change & Innovation 3.0 For a Sustainable Future

Policy

- Generate cash flow from the implemented capital expenditures and investments as planned
- 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



Build a More Robust Financial Structure:

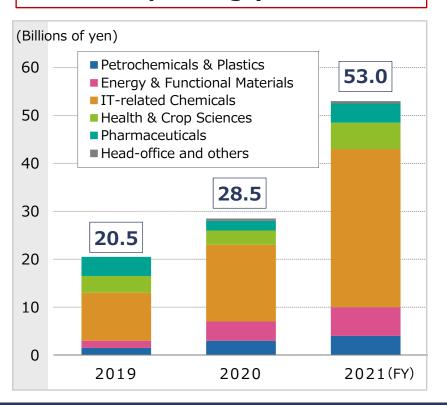
Rationalization & Improvement of Cash Conversion Cycle

Change & Innovation 3.0 For a Sustainable Future

Rationalization

¥53 billion in FY2021

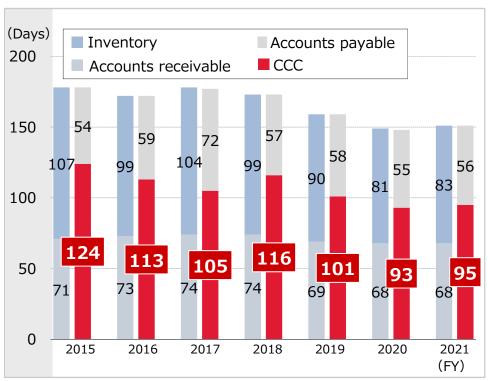
through initiatives such as reducing purchasing costs and improving yields



Improve Cash Conversion Cycle (CCC)

Improve CCC by 23% in FY2021

compared with FY2015 by continuing and strengthening our initiatives



Corporate Business Plan SUMITOMO CHEMICAL 46



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 ${\, \rm I \! I \! I}$ project

(Billions of yen)

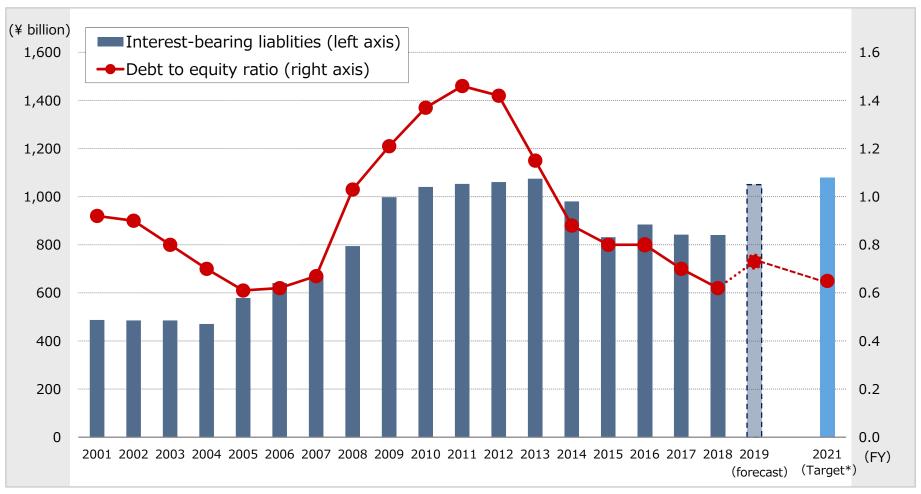
	End of FY2015	End of FY2018	End of FY2021 (Target)
Interest-bearing liabilities	831.5	839.5	1,080.0



Build a More Robust Financial Structure:

Interest-Bearing Liabilities and Debt to Equity Ratio

Change & Innovation 3.0 For a Sustainable Future



 $^{^{*}}$ Including investment in Rabigh Phase ${\, \rm I \! I \! I}$ project



Business Strategy by Sector





Business Strategy – Petrochemicals & Plastics

Change & Innovation 3.0 For a Sustainable Future

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

Opportunities

- Large and deep markets
- Steady growth in demand

Weaknesses

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

Status of the major businesses

Threats

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



Business Strategy – Petrochemicals & Plastics

Change & Innovation 3.0 For a Sustainable Future

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

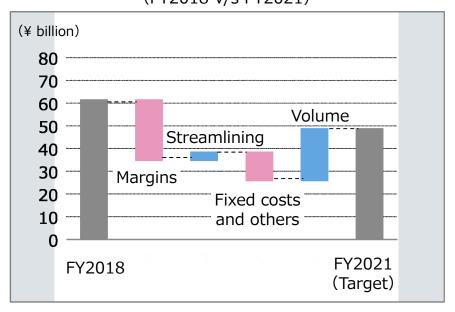
- Restructuring of underperforming businesses
- R&D into carbon cycle chemistry, including carbon capture and utilization technologies, to create a sustainable society

FY2021 Target

Sales Revenue ¥910.0 billion

Core
Operating Income ¥49.0 billion

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





Petrochemicals & Plastics Topics:

Development of Technologies for Environmentally Friendly Products

Change & Innovation 3.0 For a Sustainable Future

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 boxesInsect-resistant agriculture

cereal bags



	Bottle (HDPE)	Large Refill Pouch (EPPE+LLDPE)
Weight of packaging materials(g) per 100g of contents	19	1.8
Transportation efficiency	Δ	0
Bag drop strength	Δ	0



	Cardboard paper box	Returnable box (Expanded PP sheet)
Consumption of packaging materials (kg/year)	24.9	1.4
Reusability	×	0
Number of usable times (per year)	1	50
Water resistance Load bearing Cleanness	×	0

Environmental aptitude

Utility value

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

Corporate Business Plan SUMITOMO CHEMICAL 52



Business Strategy – Energy & Functional Materials Sector

Change & Innovation 3.0 For a Sustainable Future

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

- Relativelly 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

Corporate Business Plan SUMITOMO CHEMICAL 53

Status of

the major

businesses



Business Strategy – Energy & Functional Materials Sector

Change & Innovation 3.0 For a Sustainable Future

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

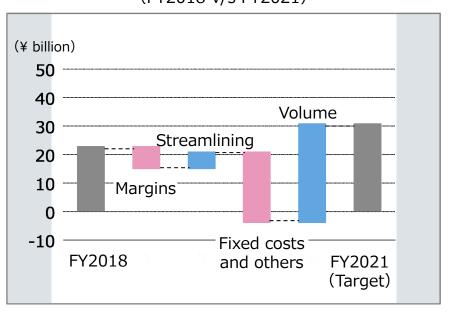
 Create new businesses in the fields of environment and energy and high-performance materials (CO₂ separation membranes, etc.)

FY2021 Target

Sales Revenue ¥390.0 billion

Core
Operating Income ¥31.0 billion

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





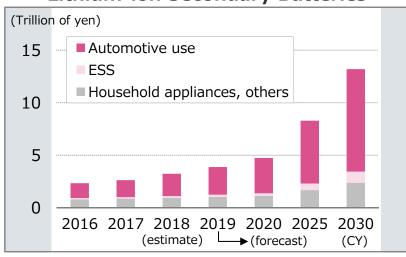
Energy & Functional Materials Sector Topics:

Separator Business

Change & Innovation 3.0 For a Sustainable Future

Increasing demand for high-capacity batteries

Market Outlook for Lithium-ion Secondary Batteries



(Source) "Future Outlook of Energy, Large Scale Secondary Battery, and Materials 2018; Energy Devices" by Fuji Keizai



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 m²	600 million m²
(Ratio of in-house developed substrate)	<25%	>30%



Business Strategy – IT-related Chemicals Sector

Change & Innovation 3.0 For a Sustainable Future

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

Opportunities

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

Weaknesses

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

Status of the major businesses

Threats

 Intensifying competition in the maturing LCD market



Business Strategy – IT-related Chemicals Sector

Change & Innovation 3.0 For a Sustainable Future

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

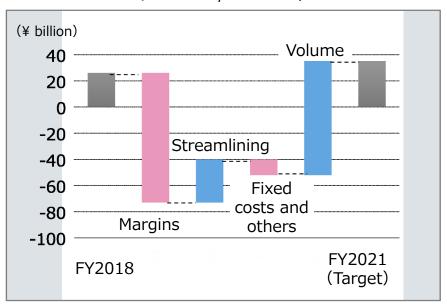
- Develop next-generation businesses
 - Smart mobility
 - Next-generation handsets
 - Sensor material

FY2021 Target

Sales Revenue ¥520.0 billion

Core
Operating Income ¥35.0billion

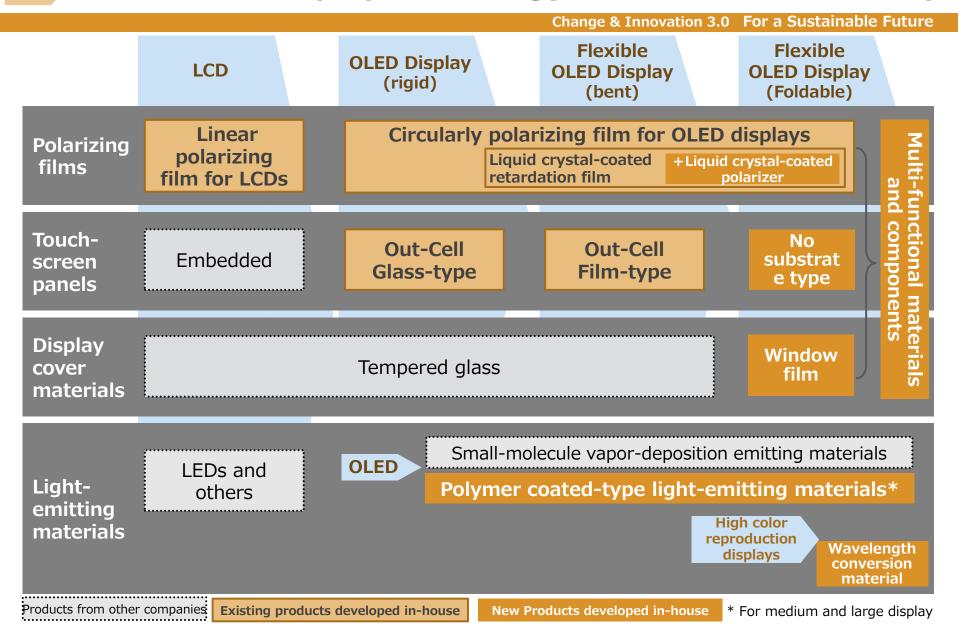
Core operating income variance analysis (FY2018 v/s FY2021)





IT-related Chemicals Sector Topics:

Advance in Display Technology and Our Product Lineup





Initiatives in the Mobility Sector

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



* Glass fiber reinforced polypropylene

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



5G-related Materials Lineup

Change & Innovation 3.0 For a Sustainable Future

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





Business Strategy – Health & Crop Sciences Sector

Change & Innovation 3.0 For a Sustainable Future

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

Status of the major businesses

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

Weaknesses

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

Threats

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



Business Strategy – Health & Crop Sciences Sector

Change & Innovation 3.0 For a Sustainable Future

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

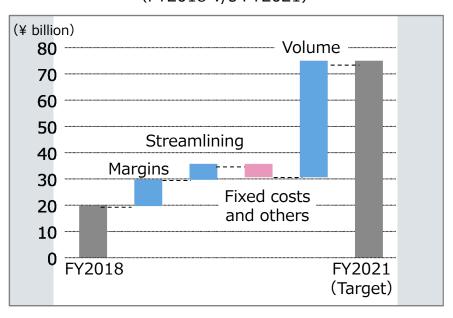
- Establish a global footprint in the crop protection business
- Further strengthen the crop protection business (agriculture-related supplies, precision agriculture)

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:

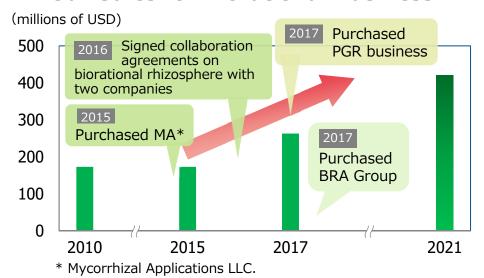
Expansion of Our Biorational Business

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%

Our Sales for Biorational Business



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

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





Business Strategy – Pharmaceuticals Sector

Change & Innovation 3.0 For a Sustainable Future

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

Status of the major businesses

Opportunities

- Innovation in healthcare technology
- Increasing health awareness

Threats

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



Business Strategy – Pharmaceuticals Sector

Change & Innovation 3.0 For a Sustainable Future

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

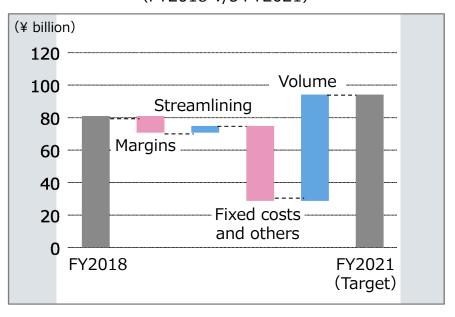
- Enhance drug development capabilities and improve the success rate in R&D
- Maintain earnings power after Latuda's loss of exclusivity

FY2021 Target

Sales Revenue ¥590.0 billion

Core
Operating Income ¥94.0 billion

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





Pharmaceutical Sector Topics:

Regenerative Medicine and Cell Therapy

Change & Innovation 3.0 For a Sustainable Future

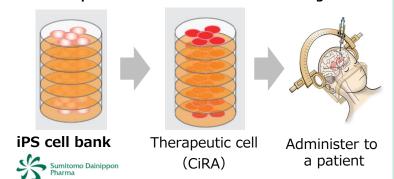
Initiatives in Regenerative Medicine & Cell Therapy Business

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

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



Contract production of PET reagents*1

日本メジフィジックス株式会社







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

Corporate Business Plan SUMİTOMO CHEMICAL 66

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



Bioscience Research Laboratory

Change & Innovation 3.0 For a Sustainable Future

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.



Genome research

Molecular technologies

- High-sensitivity and integrated analysis
- Drug discovery screening and evaluation



Protein analysis research

Molecular technologies

 "Omics" technologies for safety assessment



Development of advanced digital information technologies



Microbiology research

Cellular technologies

- Microorganism utilization technology
- Microbiota analysis (analysis of the flora of diverse fungi)

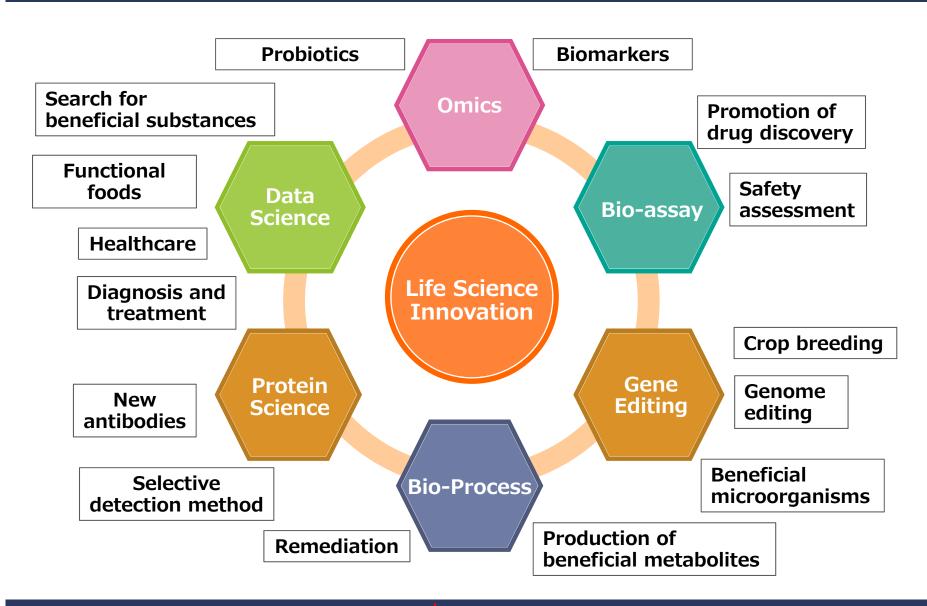


Bioscience Research Laboratory Established



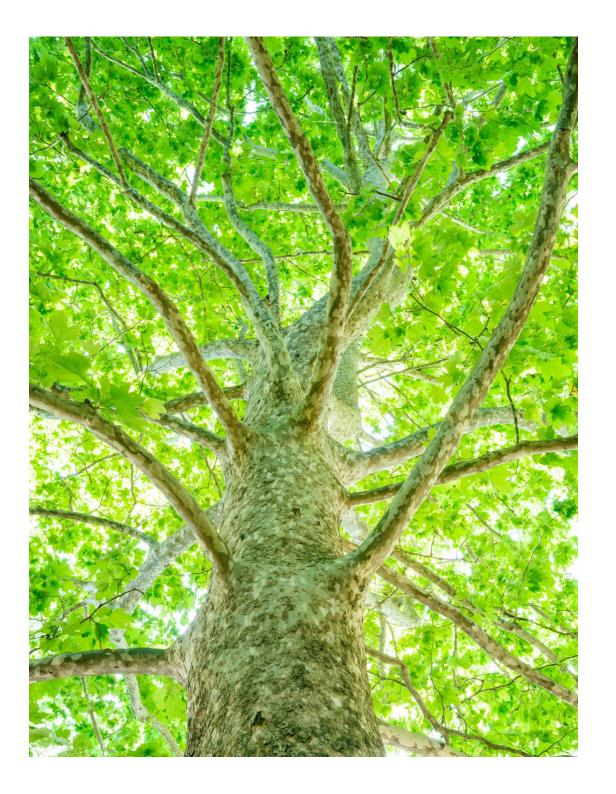
Bioscience: New Research Themes

Change & Innovation 3.0 For a Sustainable Future



IV

Initiatives for Sustainability





Established Basic Principles for Promoting Sustainability

Change & Innovation 3.0 For a Sustainable Future

Basic Principles for Promoting Sustainability

Principle

Creating economic value which helps create social value

Principle

Contribution to solving globally vital issues

Principle

Active participation in global initiatives

Principle

Collaboration with stakeholders

Principle

Top management commitment and participation by all

Principle 6

Enhancing corporate governance





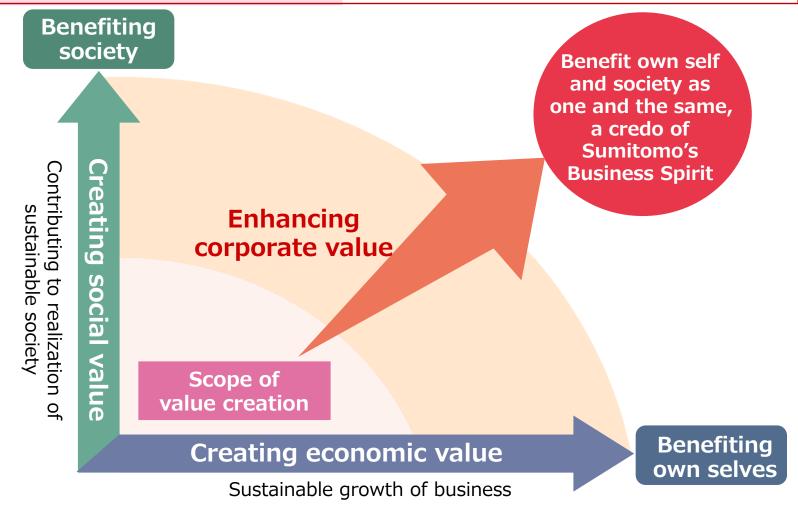
Image of Enhancing Corporate Value

Change & Innovation 3.0 For a Sustainable Future

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 Definition of Material Issues

Change & Innovation 3.0 For a Sustainable Future

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



Initiatives for Global Environment Issues

Change & Innovation 3.0 For a Sustainable Future

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

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

TCFD guidance

Our Efforts

Risk Management

Certified by SBT



Fuel conversion

October 2018, first certified among diversified chemical companies

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

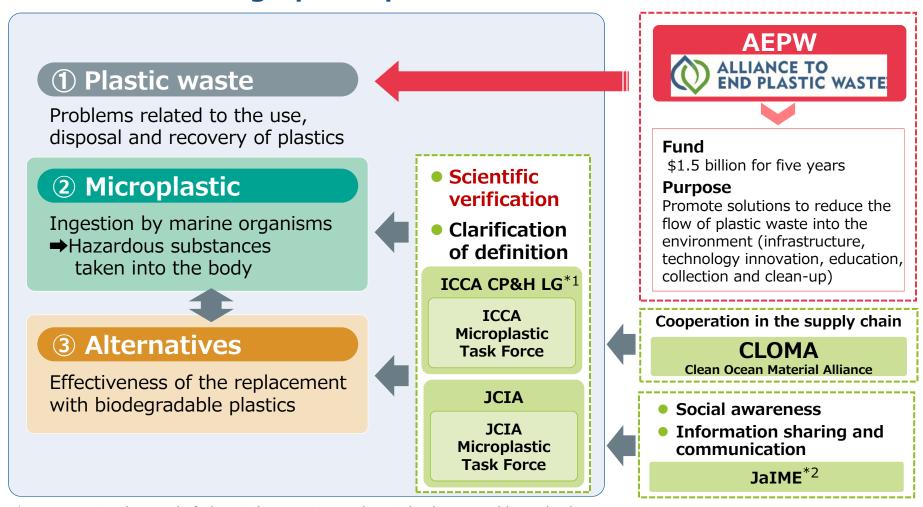
(including 20 Japanese companies)



The Issue of Plastic Waste

Change & Innovation 3.0 For a Sustainable Future

Our efforts through participation in external initiatives



- *1 International Council of Chemical Associations, Chemical Policy & Health Leadership Group
- *2 Japan Initiative for Marine Environment

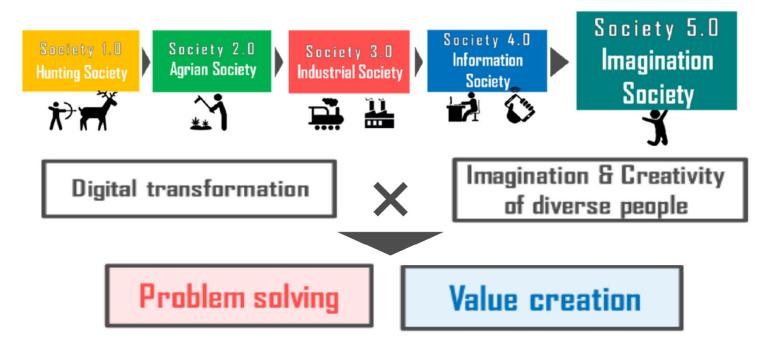


Society 5.0 "Imagination Society"

Change & Innovation 3.0 For a Sustainable Future

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



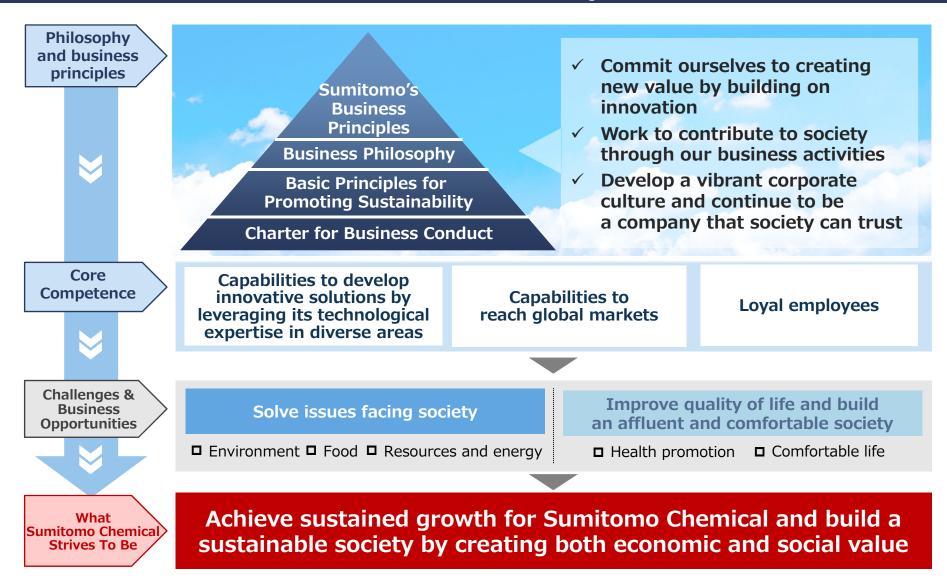
(Source) "Society 5.0 –Co-creating the future" by Keidanren

Corporate Business Plan SUMITOMO CHEMICAL 75



What Sumitomo Chemical Strives To Be

Change & Innovation 3.0 For a Sustainable Future



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.