

Change and Innovation 3.0: For a Sustainable Future

The Corporate Business Plan (2019-2021) started in 2019 adopts “Change and Innovation 3.0: For a Sustainable Future” as a slogan. The message implicated here is that, in view of the coming Society 5.0 (ultra-smart society), we should accelerate innovation by increasing productivity exponentially through digital innovation, and contribute to creating a sustainable society by solving issues facing society.

It was fiscal 2013 when we adopted “Change and Innovation,” for the first time as the slogan for the Corporate Business Plan. In the past six years, we have steadily moved forward, enhancing our financial strength in phase 1 and further improving our business portfolio in phase 2. For the new Corporate Business Plan, which is now phase 3, we have set six basic policies, including accelerate the development of next-generation businesses and improve productivity through digital innovation.

With regard to accelerate the development of next-generation businesses, we have set out four focus areas: healthcare, reducing environmental impact, food, and ICT. Through collaboration with partners, such as start-up companies and academia, we aim not only to speed up the development and industrial implementation of new technologies, but also to create continuing innovation, including evaluating and implementing systems and organizations to investigate new research areas and commercialize them.

With regard to improve productivity through digital transformation, we are setting up large-scale databases, especially those tied to productivity technology and to R&D, and we are promoting high-level data use with analytics technologies. In this way, we aim to dramatically improve productivity and stabilize quality and operations at manufacturing sites. In R&D, we will accelerate innovation, such as shortening material search and design periods through broader application of materials informatics (MI), as well as creating new insights that cannot be drawn from empirical development alone.

With regard to further improving our business portfolio and build a more robust financial structure, we will make sure to collect cash flows from the capital investments and loans that we have made. We will also enhance our financial strength by rationalizing and improving the cash conversion cycle (CCC).

With regard to employing, developing, and leveraging human resources for sustainable growth and ensuring full and strict compliance and maintaining safe and stable operations, we will continue to strengthen these initiatives because they serve as a source of strength for sustainably continuing our businesses and for achieving further growth.

We will work on these initiatives in the Corporate Business Plan, and achieve sustained growth for Sumitomo Chemical and build a sustainable society by creating both economic and social value.

FY2019-FY2021

For a Sustainable Future

Contributing to the Creation of
a Sustainable Society by Accelerating Innovation

Basic Policy

Accelerate the Development of Next-generation Businesses > P36

Improve Productivity through Digital Innovation > P66

Further Improve Business Portfolio

Build a More Robust Financial Structure > P22

Employ, Develop and Leverage Human Resources for Sustainable Growth

Ensure Full and Strict Compliance and Maintain Safe and Stable Operations

Progress in Fiscal 2019

Petrochemicals & Plastics	<ul style="list-style-type: none"> Rabigh phase II plant started commercial operations. New catalyst plant at Chiba Works started operations. 	> P42
Energy & Functional Materials	<ul style="list-style-type: none"> Tanaka Chemical Corporation concluded an agreement with a European battery manufacturer for sales and manufacturing technology support for cathode material precursor. 	> P46
IT-related Chemicals	<ul style="list-style-type: none"> New plant for photoresists was constructed. Made SANRITZ CORPORATION, a polarizing film manufacturer, into a subsidiary. 	> P50
Health & Crop Sciences	<ul style="list-style-type: none"> Decided to acquire four South American subsidiaries of Nufarm. Merger of two subsidiaries in India was completed. 	> P54
Pharmaceuticals	<ul style="list-style-type: none"> Concluded strategic alliance with Roivant. Progress in development of SEP-363856, a promising next-generation antipsychotic agent. 	> P58
New Businesses and R&D	<ul style="list-style-type: none"> Expanded alliances with startups. Built R&D system for chemical recycling. 	> P36, 64, 71

	(Billions of yen)			FY2019	FY2021 Target*	Targets Consistently achieve the following targets
	FY2019	FY2021 Target*				
Sales revenue	2,225.8	2,950.0	ROE (%)	3.2	12.5	Over 10%
Core operating income	132.7	280.0	ROI (%)	2.4	7.1	Over 7%
Net income attributable to owners of the parent	30.9	150.0	D/E ratio (times)	0.9	0.7	Approx. 0.7 times
Naphtha price (yen/KL)	43,000	51,000	Dividend payout ratio (%)	89.9	—	Approx. 30%
Exchange rate (yen/US\$)	108.70	110.00				

* Prolonged US-China trade friction caused a downturn in petrochemical product prices. Up-front payment of R&D expenses as part of the strategic alliance in the Pharmaceuticals sector also resulted in a lower performance level. It will be difficult to achieve our targets during fiscal 2021. With the following growth drivers, however, we aim to attain our targets in fiscal 2024.


Growth Drivers for Future Sustainable Growth:

- Expansion of agrochemical business, mainly in South America and India.
- Expanding sales of new pharmaceutical products, including those obtained from Roivant through the strategic alliance.
- Expanding sales of new high-functionality products in IT-related Chemicals and Energy & Functional Materials.

Accelerating the Development of Next-generation Businesses


Despite increasing uncertainty over the business environment surrounding Sumitomo Chemical, the chemical industry has a large role to play in addressing social issues including environment, energy, and food issues, and business opportunities for the Company are also expanding. The Corporate Business Plan started in fiscal 2019 set four priority areas: healthcare, reducing environmental impact, food, and ICT. We will work in these areas to resolve issues to create a sustainable society through our business. In these key areas, we will focus on accelerating the development of next-generation businesses.

Focus Domains in the Four Priority Areas




Healthcare

Focus Domains	Major Projects
Advanced medical care	Nucleic acid medicine
	Cell therapy
	Theranostics
	Frontier businesses (Healthcare solutions not limited to pharmaceuticals)
Preventive care solutions	Nutraceuticals (functional food)
Early diagnosis and health examination	Physical condition visualization sensor




Reducing Environmental Impact

Focus Domains	Major Projects
Energy storage	Next-generation battery storage materials
Energy saving	Separation membrane
	Waste water processing
Carbon cycle	Development of low environmental impact bioprocesses based on Synthetic Biology
	Carbon Capture and Utilization (CCU)-related business



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

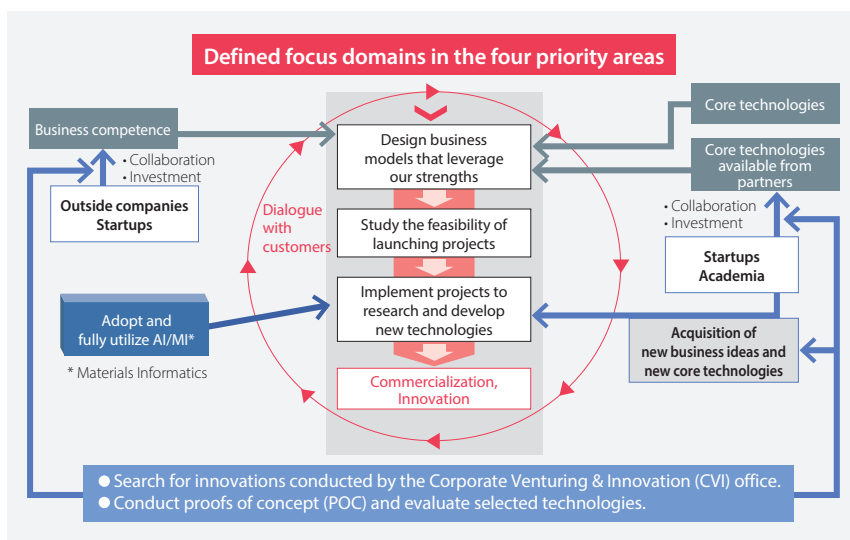


ICT

Focus Domains	Major Projects
Super-smart society	OLED display materials
	Flexible display materials and components
	Next-generation semiconductor-related materials
Smart mobility	Materials and devices for 5G telecommunications
	Image sensor materials

Innovation Ecosystem

In order to ensure that R&D and business development in the four priority areas lead to the development of next-generation businesses, we are constructing an innovation ecosystem (a system that creates continuous innovation).



■ Designing Business Models That Leverage Sumitomo Chemical's Strengths

We established focus areas for our efforts based on the four priority areas, and then distinguished between core technologies we own and those we don't own so that we can design business models that leverage our strengths in each of the focus areas.

■ Obtaining Technologies Available from Partners

We will obtain technologies we need to have through collaboration with startups and academia, and supplement gaps in our business competencies through partnerships with, or investments in, external companies and startups.

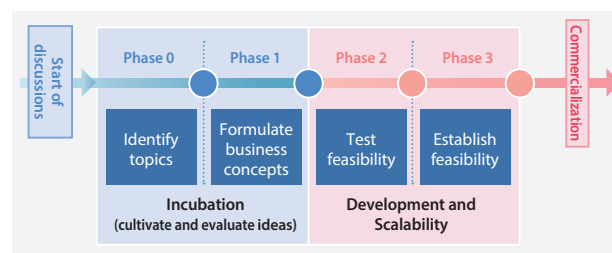
We are contacting startups and academic institutions, and have expanded our activities by setting up three CVI offices to search for promising technologies: Cambridge, in the UK, and San Francisco and Boston in the U.S. We are also enhancing our ability to conduct proofs of concept to evaluate the competitiveness of our competitors' technologies by validating the effectiveness and feasibility of technologies CVI has found. As a result, our alliances with startups resulted in the commercialization of a next-generation stevia sweetener by SweeGen, and investment in Conagen, which is developing materials and processes with the use of synthetic biology.

Active alliances with academic institutions are also being promoted, and we have started joint research with Kyoto University on solid-type batteries.

■ Full Implementation of Stage-gate Management System

In discussions of potential research topics, a stage-gate management system has been fully implemented from fiscal 2019 and has begun operation. In this system, research topics

are divided into four phases from conception of ideas to commercialization.



Phases 0 and 1, the initial phases, are called "Incubation," and Phases 2 and 3, the advanced research phases, are called "Development and Scalability." Research topics at the stage of in-house brainstorming are actively incorporated into phase 0. Meanwhile, the requirements to pass the gate of each phase have been clarified. Pass or fail decisions are made based on in-depth consultation with business sectors as well as research sectors.

It has been our practice that researchers discuss research topics with relevant in-house sectors, external partners, and customers to fully communicate with each other. In addition to this, we expect that active discussion from the incubation stage concerning the strategies for commercialization will accelerate the topic-selection process and generate promising and high-quality projects.

We are thoroughly utilizing digital technologies such as artificial intelligence (AI) and materials informatics (MI) to accelerate development, on top of the above-mentioned initiatives. Furthermore, we aim to generate continuous innovation as we incorporate new ideas and technologies that have come up during the development of research topics or in dialogue with partners.