"Performance" Through Chemistry

Material for Financial Results Presentation For the Six Months Ended September 30, 2022

Akinori Higuchi, President & CEO Sanyo Chemical Industries, Ltd. Securities code: 4471 Sanyo Chemical



<<u>Notice</u>>

Yen amounts described in this presentation material are rounded down to the nearest unit. Other figures such as ratios are rounded off.

<<u>Disclaimer</u>>

This presentation material contains forward-looking statements including projections based on the assumptions, forecasts and plans as of November 18, 2022. Actual results may differ significantly from such projections due to risks and uncertainties relating to changes in the global economy, state of competition, foreign currency exchange rates, trends in raw material costs and other factors.

<<u>Inquiries about IR</u>> Public Relations Dept. Corporate Planning Division Sanyo Chemical Industries, Ltd.

E-mail: pr-group@sanyo-chemical.group

Sanyo Chemical

Date of Establishment: November 1, 1949

Head Office: Higashiyama-ku, Kyoto-shi

Share Capital: ¥13,051 million

Domestic Branches Offices and Sales & Marketing Offices:

Tokyo, Osaka, Nagoya, Hiroshima, Fukuoka

Domestic Factories:

Nagoya, Kinuura, Kashima, Kyoto, Kawasaki (San Chemical)

Number of Employees (Consolidated Basis):

2,123 (as of September 30, 2022)

Line of Business:

Manufacturing & sales of approx. 3,000 types of performance chemicals

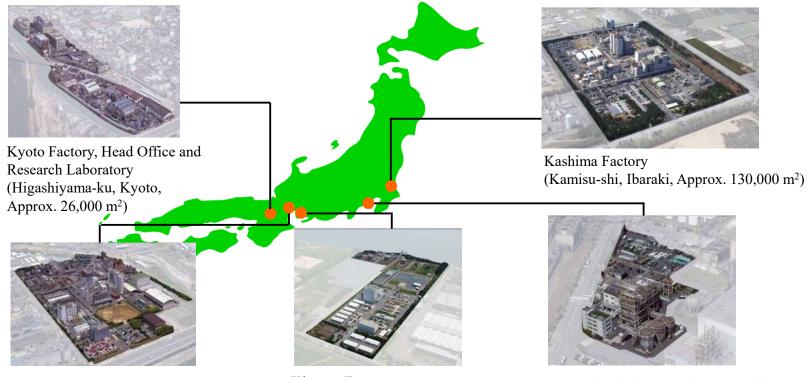
Sanyo Chemical Group

Sanyo Chemical



SANYO KASEI (TAIWAN) LTD.Sanyo Chemical Manufacturing Korea, Ltd.San Nopco (Korea) LimitedSan Nopco (Shanghai) Trading Co., Ltd.DaXiang International Trading (Shanghai) Co., Ltd.San Nopco (Korea) Limited

Domestic Production Bases



Nagoya Factory (Tokai-shi, Aichi, Approx. 100,000 m²) Kinuura Factory (Handa-shi, Aichi, Approx. 140,000 m²) San Chemical Co., Ltd., Kawasaki Factory (Kawasaki-shi, Kanagawa, Approx. 11,000 m²)

Overseas Production Bases

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Overseas Sales Offices

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SANYO CHEMICAL (SHANGHAI) TRADING CO., LTD.

San Nopco (Shanghai) Trading Co., Ltd.

DaXiang International Trading (Shanghai) Co., Ltd.



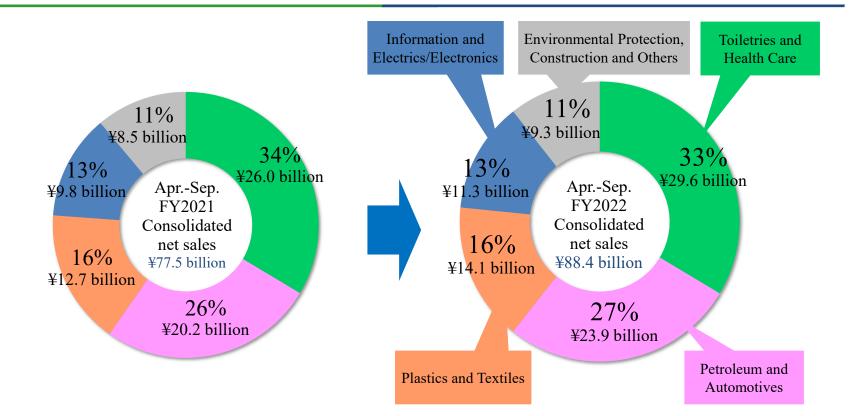
Principal Products by Industrial Field (Segment)



Broad category	Middle category	Principal products
Toiletries and	Toiletries	Surfactants for Detergents, Surfactants for Hair Care Products, Agents for Paper-making
Health Care	Health Care	Superabsorbent Polymers (SAP), Raw Materials for Pharmaceuticals, Germicides/Disinfectants, Surgical Hemostatic Agent, Clinical Diagnostic Reagents for Enzyme Immunoassay (EIA), Potting Resins for Artificial Kidneys
Petroleum and Autom	otives	Thermoplastic Polyurethane Beads (TUB) for the Interior Parts of Automobiles, Raw Materials for Polyurethane Foams (PPG), Lubricant Additives, Additives for Fuel Oil, Water-Soluble Cutting Oil, Halogen-Free Cleaning Agents, Base Materials for Synthetic Lubricants, Paste Resins for Design Models, Resins for Automobile Paints
	Plastics	Permanent Antistatic Agents, Pigment Dispersants, Resin Modifiers, Paint Resins, Defoaming Agents, Raw Materials for Polyurethane Elastomers, Chemical Boards for Models
Plastics and Textiles	Textiles	Chemicals for Textile Manufacturing, Chemicals for Carbon Fibers, Chemicals for Fiberglass, Polyurethane Resins for Artificial and Synthetic Leather
Information and Electrics/Electronics	Information	Polyester Beads (PEB) Used as a Core Component of Polymerization Toners, Toner Binder
	Electrics/Electronics	Electrolytes for Aluminum Electrolytic Capacitors, Adhesive for Electronic Parts, Chemicals for Use in Electronic Parts Manufacturing, UV/EB Curing Resins
Environmental Protection, Construction and Others		Polymer Flocculants for Wastewater Treatment, Cationic Monomer, PPG for Furniture and Heat Insulating Materials, Slurry Chemicals, Reactive Hot-Melt Adhesives, Raw materials for Building Sealants, Cement Chemicals

Consolidated Net Sales by Segment

Sanyo Chemical



(Billions of yen)

Canaalidatad	AprSep.	AprSep.	Year-on-Year Change		
Consolidated	FY2021	FY2022	Amount	Ratio (%)	
Net sales	77.51	88.43	10.92	14	
Operating profit	5.91	3.93	(19.80)	(34)	
Ordinary profit	6.86	7.36	0.50	7	
Profit attributable to owners of parent	4.41	4.71	0.30	7	
Comprehensive income	4.24	6.32	2.08	49	

Revision of Earnings Forecast (September 29, 2022)



We have revised our forecast due to a decrease in sales volume caused by sluggish sales to the automobile industry and delays in product price revisions in response to soaring oil prices.

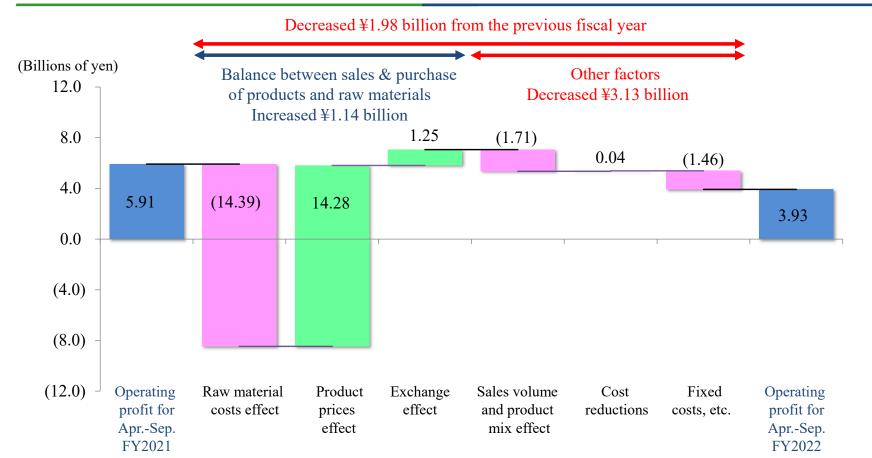
<Assumptions for below forecasts>

share

Price of naphtha produced in Japan: 72 thousand yen/kl, Exchange rate: 140 yen/U.S. dollar (Billions of yen)						
	Initial	forecast	Revised forecast	(September 29)	Change amount	
Consolidated	First half year	Full year	First half year	Full year	First half year	Full year
Net sales	98.5	206.0	89.0	184.0	(9.5)	(22.0)
Operating profit	5.5	12.5	4.0	11.0	(1.5)	(1.5)
Ordinary profit	5.7	13.0	6.2	13.5	0.5	0.5
Profit attributable to owners of parent	3.7	8.5	4.2	9.0	0.5	0.5
Basic earnings per	167.73 yen	385.32 yen	190.34 yen	407.93 yen	—	

Year-on-Year Change in Consolidated Operating Profit by Factor

Sanyo Chemical



Chemical

Sanyo

			(Billions of yen)
	AprSep. FY2021	AprSep. FY2022	Change amount
Operating profit	5.91	3.93	(1.98)
Share of profit (loss) of entities accounted for using equity method	0.38	0.48	0.10
Foreign exchange gains (loss)	0.09	2.62	2.52
Other non-operating income (loss)	0.46	0.32	(0.14)
Ordinary profit	6.86	7.36	0.50
Gain (loss) on sales of non-current assets, loss on retirement of non-current assets	(0.45)	(0.59)	(0.13)
Other extraordinary income (loss)	0.02	(0.09)	(0.11)
Profit before income taxes	6.43	6.68	0.25
Income taxes	(1.79)	(1.68)	0.11
Profit attributable to non-controlling interests	(0.21)	(0.28)	(0.06)
Profit attributable to owners of parent	4.41	4.71	0.30

(Billions of yen)

	March 31, 2022	September 30, 2022	Change amount	Main factors for changes
Current assets	93.7	101.5	7.7	Cash and deposits: (1.0), Notes and accounts receivable - trade, Electronically recorded monetary claims - operating: 2.1, Merchandise and finished goods: 4.2
Non-current assets	106.4	109.7	3.2	
Total assets	200.1	211.2	11.0	
Current liabilities	47.9	54.9	6.9	Accounts payable - trade, Electronically recorded obligations - operating: 6.7
Non-current liabilities	5.2	4.7	(0.5)	
Total liabilities	53.1	59.6	6.4	
Shareholders' equity	130.2	133.2	3.0	Profit: 4.7, Cash dividends paid: (1.8)
Other comprehensive income	14.2	15.5	1.3	Foreign currency translation adjustment: 1.1
Non-controlling interests	2.5	2.7	0.2	
Total net assets	147.0	151.6	4.5	
Total liabilities and net assets	200.1	211.2	11.0	

Consolidated Statements of Cash Flows

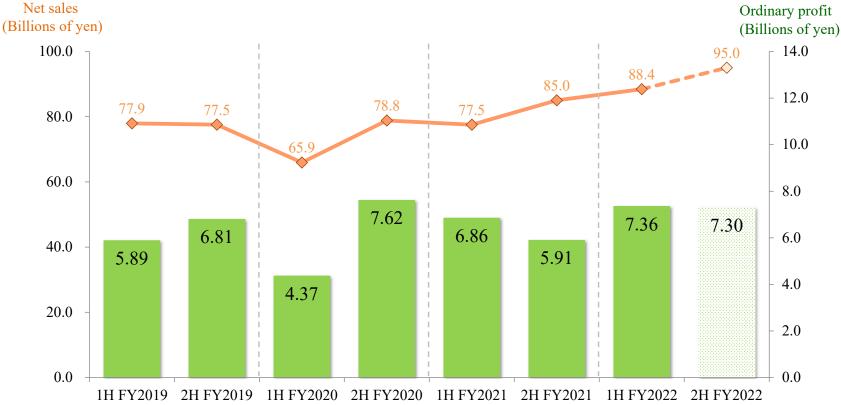
Sanyo Chemical

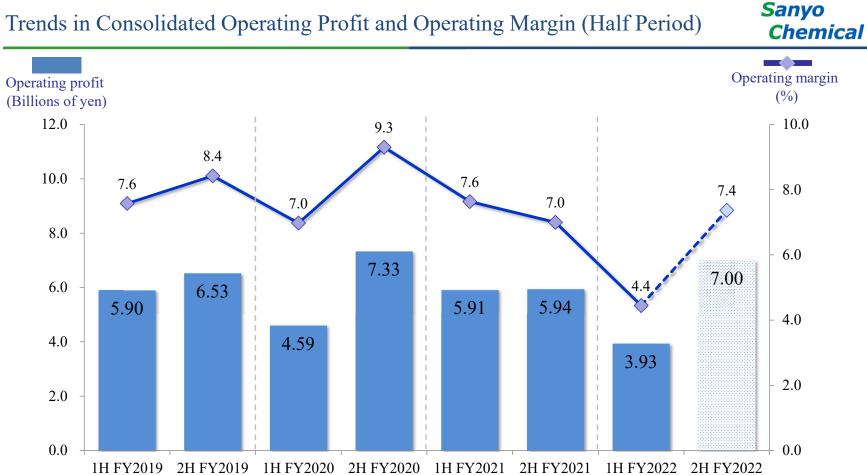
(Billions of yen)

	AprSep. FY2021	AprSep. FY2022	Change Amount	Special notes
Cash flows from operating activities	6.83	6.66	(0.16)	
Profit before income taxes	6.43	6.68	0.25	
Depreciation	4.75	5.02	0.26	
Share of loss (profit) of entities accounted for using equity method	(0.38)	(0.48)	(0.10)	
Decrease (increase) in operating capital	(1.67)	(0.83)	0.83	
Income taxes	(1.48)	(2.34)	(0.85)	
Other, net	(0.81)	(1.37)	(0.56)	
Cash flows from investing activities	(5.58)	(6.45)	(0.87)	Purchase of non-current assets 1H FY2021: (4.32), 1H FY2022: (4.86)
Free cash flows	1.25	0.20	(1.04)	
Cash flows from financing activities	(3.45)	(2.15)	1.29	Loans and Repayment 1H FY2021: (1.40), 1H FY2022: (0.09)
Effect of exchange rate change on cash and cash equivalents	0.11	0.52	0.41	
Net increase (decrease) in cash and cash equivalents	(2.08)	(1.42)	0.66	
Cash and cash equivalents at beginning of period	23.64	18.17	(5.47)	
Increase (decrease) in cash and cash equivalents resulting from change in scope of consolidation	_	0.33	0.33	
Cash and cash equivalents at end of period	21.56	17.08	(4.47)	

Trends in Consolidated Earnings (Half Period)





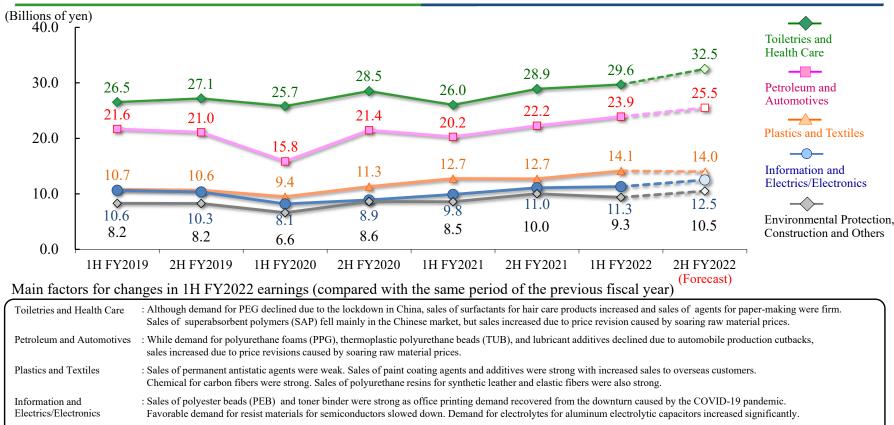


Consolidated Earnings by Segment

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					(Bi	illions of yen)
	Net sales			Operating profit		
Segment	AprSep. FY2021	AprSep. FY2022	Change amount	AprSep. FY2021	AprSep. FY2022	Change amount
Toiletries and Health Care	26.01	29.69	3.68	0.65	0.45	(0.20)
Toiletries	6.86	7.34	0.48			
Health Care	19.15	22.35	3.19			
Petroleum and Automotives	20.27	23.91	3.63	2.05	1.32	(0.72)
Plastics and Textiles	12.74	14.14	1.39	2.00	1.40	(0.59)
Plastics	9.30	9.96	0.65			
Textiles	3.43	4.18	0.74			
Information and Electrics/Electronics	9.89	11.30	1.41	1.16	0.88	(0.28)
Information	5.51	6.41	0.90			
Electrics/Electronics	4.38	4.89	0.51			
Environmental Protection, Construction and Others	8.58	9.37	0.78	0.77	0.64	(0.12)
Research and development expenses for new businesses				(0.73)	(0.77)	(0.03)
Total	77.51	88.43	10.92	5.91	3.93	(1.98)

Sanyo Trends in Consolidated Net Sales by Segment (Half Period)

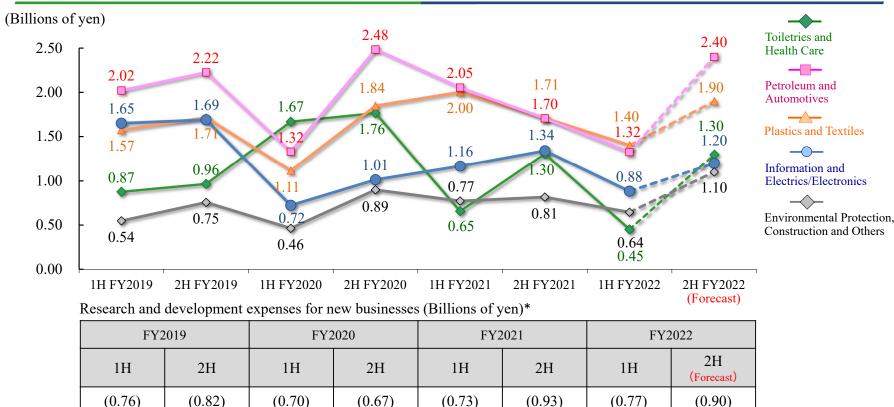


Chemical

: Sales of cationic monomers for polymer flocculants for overseas markets increased, while sales of PPG remained flat due to a lull in demand from staving-at-home ran its course. Environmental Protection, Construction and Others

Trends in Consolidated Operating Profit by Segment (Half Period)





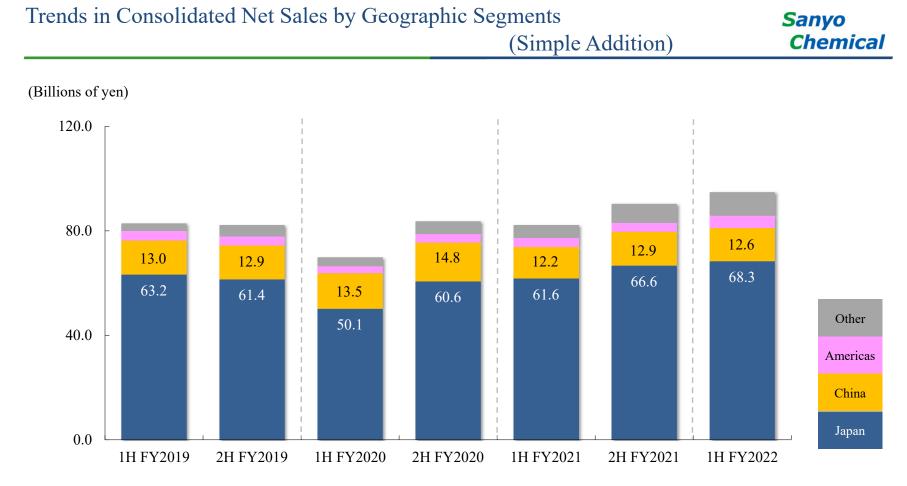
* Research and development expenses for new businesses , which were allocated to each reportable segments so far, are recorded as corporate expenses in the margin.

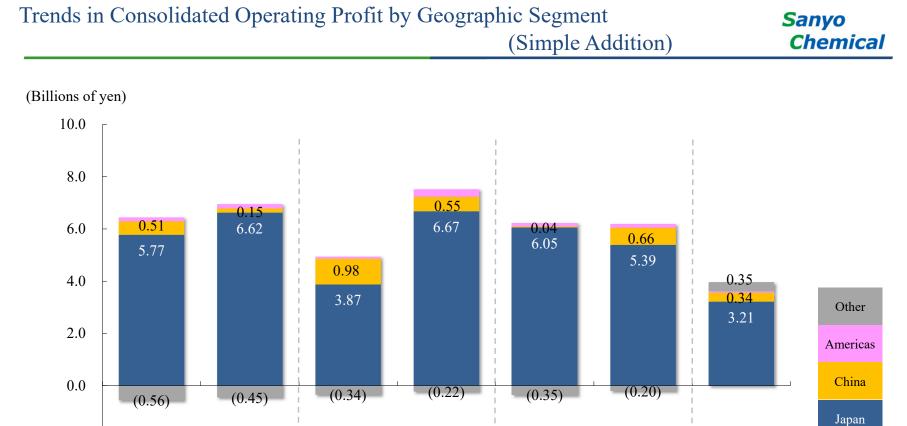
Trends in Overseas Net Sales (Half Period)

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2H FY2020

1H FY2021

2H FY2021

1H FY2022

(2.0)

1H FY2019

2H FY2019

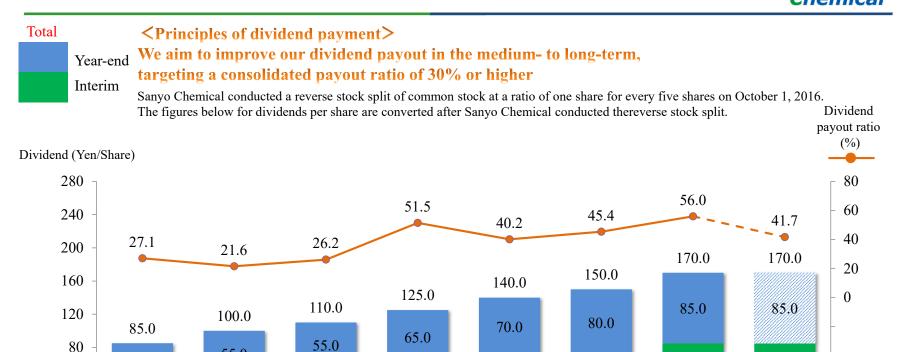
1H FY2020

Capital Investment and Depreciation (Consolidated)



Sanyo

Trends in Dividend per Share and Dividend Payout Ratio (Consolidated)



60.0

FY2018

55.0

FY2017

70.0

FY2019

70.0

55.0

45.0

FY2016

45.0

40.0

FY2015

40

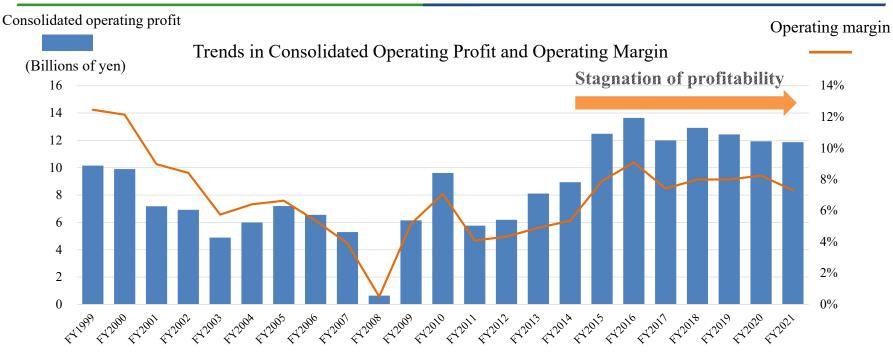
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85.0

85.0

Situation of the company

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Operating profit growth has been sluggish for the last five years, and there is an urgent need to improve profitability.

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The foundation for profit growth in FY2024 will be Profit growth will be centered on conventional businesses with niche, high value-added products.

- Thorough elimination of waste
- Increase production and sales of high value-added products
- Improve profitability of low-profit products (product integration, process improvement, etc.)

Implement mid- to long-term measures to improve profitability in parallel.

• Fundamental reform of production system through renovation of production facilities, etc.

***** Facility maintenance costs exceeding ¥6 billion/year

Thoroughly develop a corporate structure that generates cash.



Material Issues

Our mission is to establish a better society through our corporate activities since the foundation. Sanyo Chemical Group will realize sustainable growth towards future by enhancing both economic and social values in close cooperation with all the stakeholders.

Identification of material issues

Classification	Material Issues	Our Approach
Environment • Support the environment by creating an environment friendly circular- oriented society	Achieve carbon neutrality as Interface Innovator*1	Contribute to carbon neutrality with the interface control technologyONew batteries: Develop functional agentsOPower semiconductors: Improve functionality on GaO-based semiconductorsOCO2 recovery: Develop a new system by utilizing interfacial chemistryOAgriculture: Reduce the environmental impact with Peptide agricultureOWind power: Develop carbon fiber convergents for wind turbine bladesOAutomotive: Improve gasoline consumption with lubricant additives Increase the efficiency of energy use with aluminum electrolytic capacitorsOPlastic recycle: Develop agents for enhancing PP duration during recycling : Replace to natural base raw materials proactively
Life • Support people and their lives by creating a society where people can live healthy and safely. Own cla	Improve QOL by Performance Through Chemistry* ²	Create value in the medical field through new technologies OHeart disease therapy : Develop safe hemostasis with abiotic-derived hemostat OClinical diagnostic reagents : Develop prompt diagnostic reagents to reduce the burden of patients OIntractable diseases : Develop functional proteins for wound and knee joint healing ORegenerative medicine : Improve production efficiency of mesenchymal stem cells Create new value that is closely linked to people's lives OVisualization of smells : Develop innovative electronic nose OPeople-friendly products : Develop cosmetic ingredients using natural origin raw materials

Classification	Material Issues	Our Approach
Society • Society • Support diversity with creating a society where everyone can shine by their personality.	Create innovations by supporting value creation of industry, culture and education	Challenge beyond the boundaries of chemistry with our chemical capabilities OUtilize "UQ Chem" services to link unused chemical knowhow to untapped needs Support various traditional craft industries of Kyoto with our chemical technologies Promote collaboration and alliances with different fields, and investment on startups Promote DX and MI (Materials Informatics) Carry our on-site chemical classes at elementary and junior high schools Participate in the Kyoto Super SDGs Consortium with Kyoto University
	Develop human resources and improve work environment by recognizing diversity	Diversity, Equity & Inclusion (DEI) : Facilitate WakuWaku culture OPromote women's contribution OPromote LGBTQ understanding Join the IKUBOS corporate alliance OPromote health management OIntroduce an internal multiple work system OEnhance communication between management and employees: Morning meetings (lectures to all employees), Camps (discussions with senior general managers), One on One (dialogue with general managers), Dojo (hand-down to managers), and Salons (dialogue among mid-level and young employees)

Classification	Material Issues	Our Approach
Governance • Retain social trust with transparent management	Conduct the risk management thoroughly by strengthening the Guardian function	OStrengthen quality governance by isolating quality assurance from production OEstablish a management system for reputation risks which may be critical to corporate value OStrengthen the legal compliance system OStrengthen the safe and healthy system by utilizing the safety education center
	Implement challenge- oriented and transparent management	 ○Promote "WakuWaku Management": Every department shall be profit-oriented ○Diversify directors: Women directors (22%→30%) and outside directors (>1/3). ○Disclose the skills matrix of directors ○Enhance disclosure of non-financial information ○Enhance dialogue with shareholders, employees, and other stakeholders ○Establish the Sustainable Management Committee

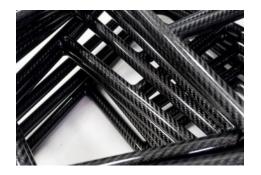
We address these issues while realizing "inspiration of WakuWaku feeling from all the stakeholders", "co-creation of environmental, social and economic values with the stakeholders", and "facilitation of every employee's value creation".



Topics

Expand core business

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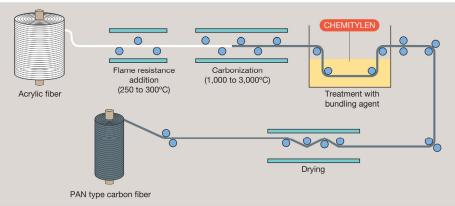


Carbon fiber bundling agent CHEMITYLEN

It is used in the carbon fiber manufacturing process. In recent years, with the increasing demand for renewable energy, carbon fiber has been widely used for wind power generation, and the demand for CHEMITYLEN is also increasing.

Sanyo Chemical invests approximately ¥700 million and starts operations in May 2024, increasing capacity by approximately 50% from the current production capacity.

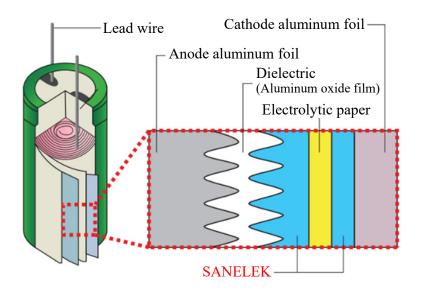
By 2030, we will raise our current sales to about double the current level.



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Electrolyte Solution for Aluminum Electrolytic Capacitors **SANELEK** The electrolyte uses an amidine compound originally developed by Sanyo Chemical, which neutralizes and eliminates the generated alkali while maintaining the ionic transfer rate. SANELEK overcame leakage, the biggest problem in the capacitor industry.





To respond to a rapid increase in demand for capacitors, such as the electrification of automobiles and the expansion of EVs, the plant will increase its capacity by about 30% with an investment of about ±400 million.

Expand core business



Appearance of the new plant

Permanent antistatic agent **[**PELESTAT][**PELECTRON**]

Increased demand mainly for packaging and transport material applications for electronic devices and precision components, as well as expansion of applications such as explosion-proof applications.

New manufacturing facility at affiliated company Sanyo Kasei (Thailand) Ltd. begins operations.

Total investment: ¥3.4 billion Production capacity: 1,500 tons/year (Total production capacity in Japan and Thailand is 4,700 tons/year)

To increase profits from conventional businesses that are niche, high value-added products.

New Business Trends (Biotechnology and Medical Business) *Sanyo Chemical*

FUJIFILM Sanyo Chemical Healthcare Corporation began manufacturing diagnostic agents in October. (Established in June 2022, FUJIFILM Corporation 51%, Sanyo Chemical 49%)

Manufacture of specialized reagents for Accuraseed[®], an automated chemiluminescent enzyme immunoanalyzer.



FUJIFILM Wako Pure Chemical Corporation and Sanyo Chemical combined both facilities, human resources, and manufacturing know-how to achieve high productivity and further speed up decision-making under integrated organizational management.

- Outline of FUJIFILM Sanyo Chemical Healthcare Corporation -

Head Office : Miegun Komonocho, Mie Representative : Yoshihiro Okada Capital : 100 million yen (FUJIFILM Corporation 51%, Sanyo Chemical 49%) Established : June 17, 2022

Sanyo Chemical

Active materials covered with polymer interface for all polymer batteries

All Polymer Batteries to be operated and commercialized at APB Corporation.



Sanyo Chemical's Role in the All Polymer Batteries

APB Corporation : Management of all polymer batteries business operations, mass production, etc.

Sanyo Chemical : Dedicated to supplying key material of active materials coated with polymer and contributes to enhance performance.

Sanyo Chemical focuses on the battery-related field as a growth field.

Multifaceted study of new material development with interface control technology as core technology. ex.) Development of organic cathode materials for lithium-ion batteries.

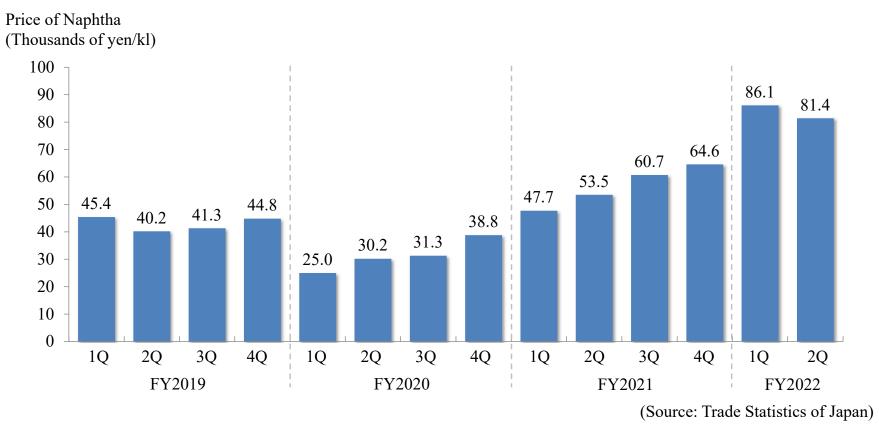
Collaboration with another company (company name withheld) to further reduce weight by changing cathode materials from inorganic to organic materials.

Improve profitability by investing management resources in areas where core technologies can be utilized through "selection and concentration".



Reference

Trends in Price of Naphtha Produced in Japan



Sanyo

Chemical

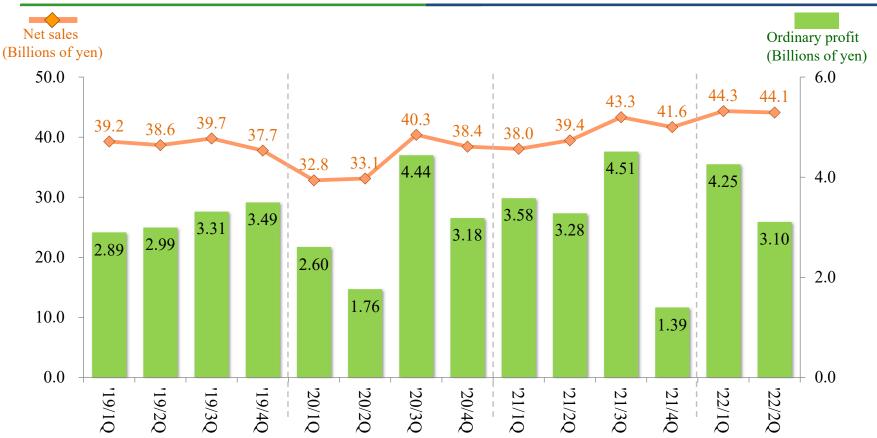
Trends in Consolidated Earnings





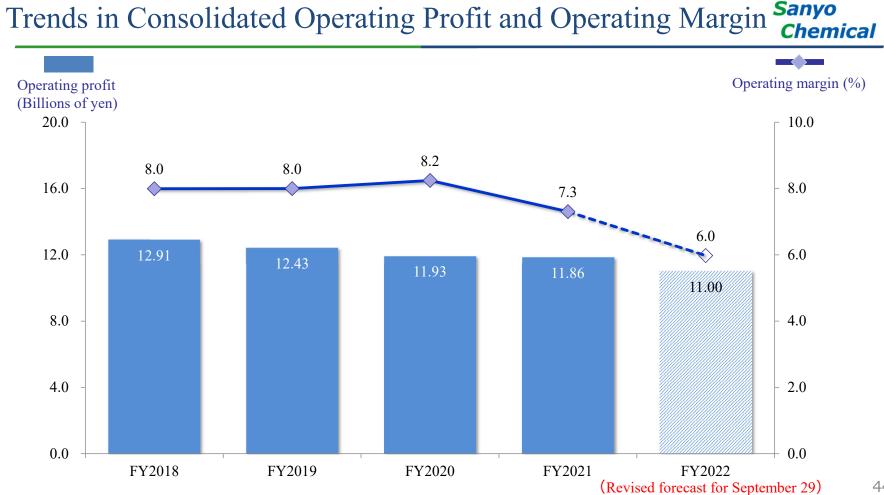
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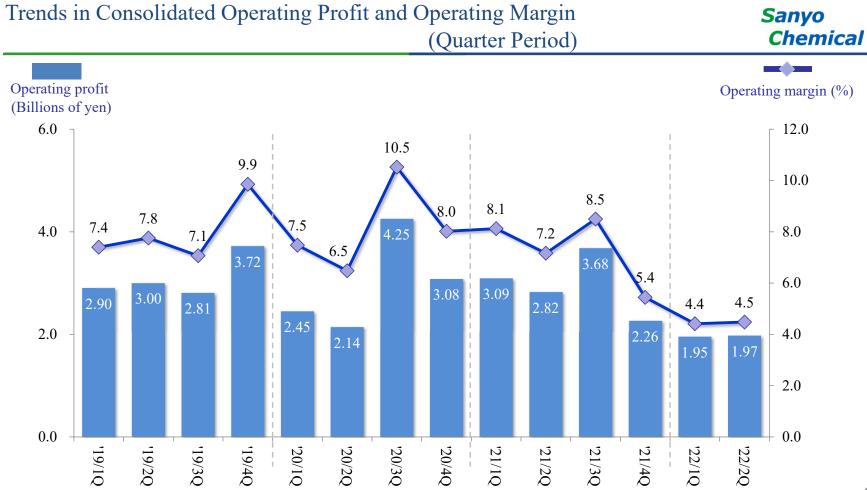
Trends in Consolidated Earnings (Quarter Period)



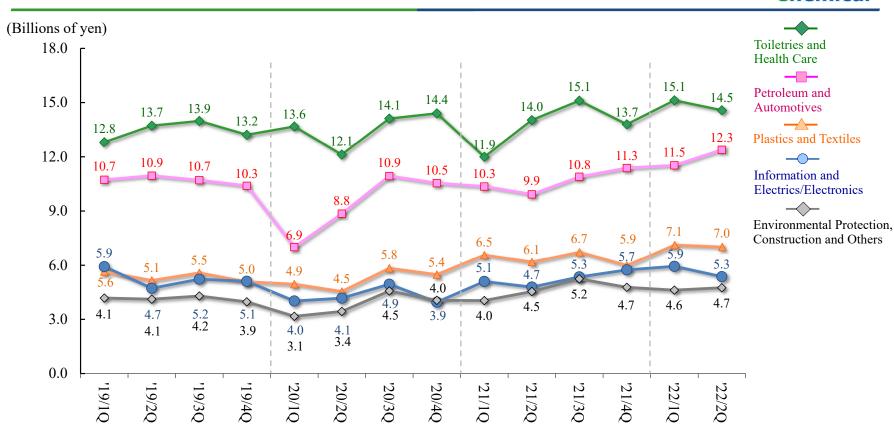
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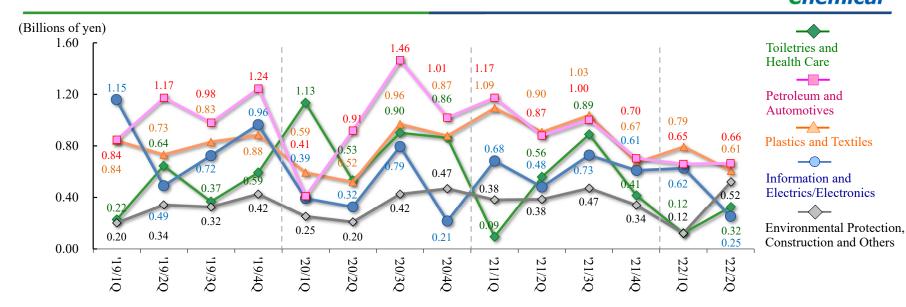




Trends in Consolidated Net Sales by Segment (Quarter Period) Sanyo Chemical



Trends in Consolidated Operating Profit by Segment (Quarter Period) Sanyo Chemical



Research and development expenses for new businesses (Billions of yen)*

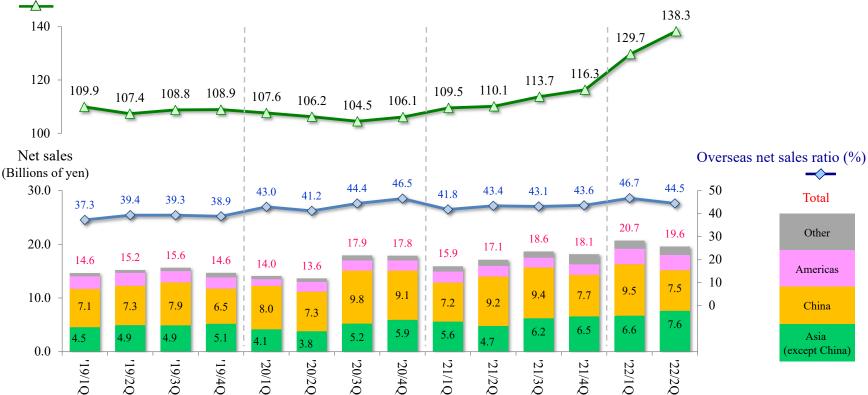
FY2019			FY2020				FY2021			FY2022			
1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q
(0.37)	(0.39)	(0.42)	(0.39)	(0.33)	(0.36)	(0.31)	(0.36)	(0.34)	(0.39)	(0.45)	(0.48)	(0.37)	(0.40)

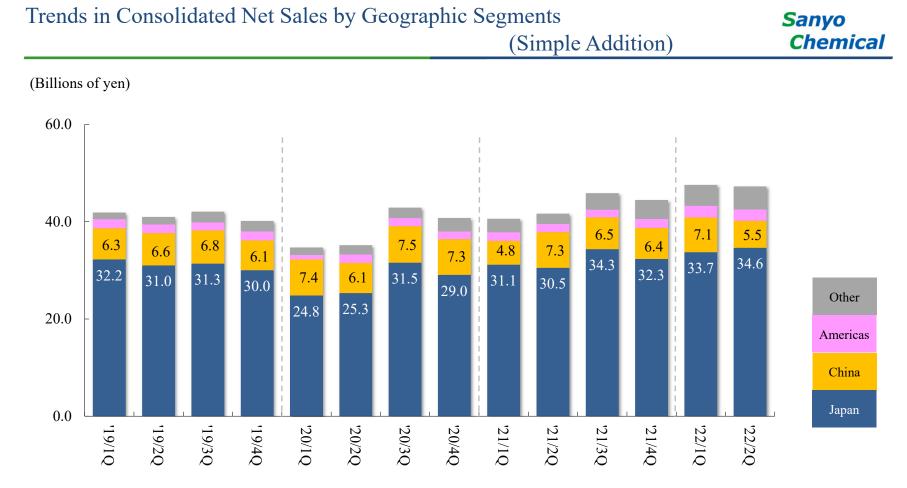
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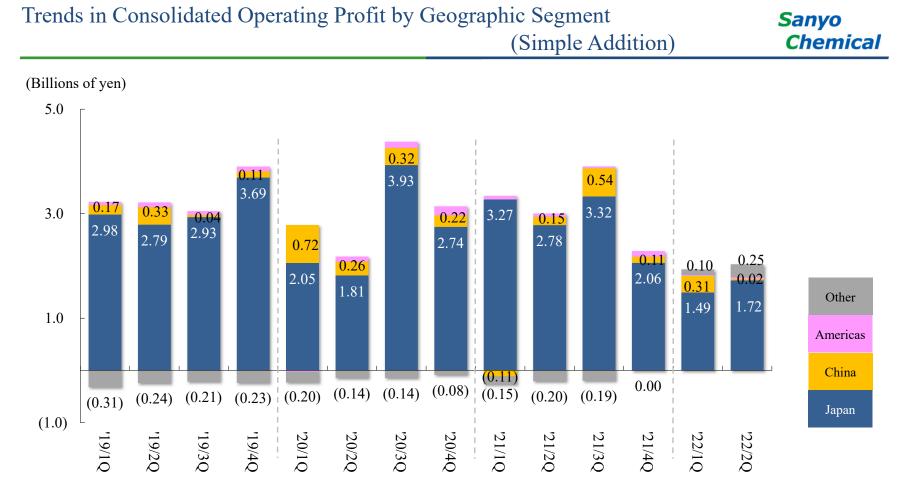
Trends in Overseas Net Sales(Quarter Period)

Sanyo Chemical









Company Name	Abbr.	Share of Voting Rights	Line of Business		
SDP Global Co., Ltd.	SDP	Sanyo Chemical Industries, Ltd.	Manufacture and sales of superabsorbent polymers		
SAN NOPCO LIMITED	SNL	Sanyo Chemical Industries, Ltd.	Manufacture and sales of chemicals for pulp & paper, coating chemicals, a wide range of industrial chemicals, etc.		
San Chemical Co., Ltd.	SCC	lindustries litd	Manufacture of raw materials for polyurethane foams, etc.		
San-Apro Ltd.	SA	Sanyo Chemical Industries, Ltd. 50% Evonik International Holding B.V. 50%	Manufacture and sales of curing accelerators for epoxy resins, urethane catalysts, etc.		
Sanyo Chemical Logistics Co., Ltd.	_	Sanyo Chemical Industries, Ltd.	General trucking business Warehousing		

Overseas Consolidated Subsidiaries

Company Name	Country of incorporation	Abbr.	Share of Voting Rights	Line of Business
Sanyo Kasei (Nantong) Co., Ltd.	China	SKN	Sanyo Chemical Industries, Ltd. 10	^{0%} Manufacture of surfactants, polyurethane resins, etc.
San-Dia Polymers (Nantong) Co., Ltd.	China	SDN	SDP Global Co., Ltd. 10	0% Manufacture and sales of superabsorbent polymers
SANYO CHEMICAL (SHANGHAI) TRADING CO., LTD.	China	SCST	Sanyo Chemical Industries, Ltd. 10	^{0%} Sales of surfactants, polyurethane resins, etc.
Sanyo Kasei (Thailand) Ltd.	Thailand	SKT	VIV Interchem Co. Ltd., Toyota	9% Manufacture and sales of surfactants, 1% polyurethane resins, etc.
Sanyo Chemical America Incorporated	USA	SCA	Sanyo Chemical Industries, Ltd. 10	Holding company of U.S. consolidated subsidiaries Sales of lubricant additives, polyurethane beads, etc.
Sanyo Chemical Texas Industries, LLC	USA	SCTI	Sanyo Chemical America Inc. 10	0% Manufacture of polyurethane beads
SDP GLOBAL (MALAYSIA) SDN. BHD.	Malaysia	SDPM	SDP Global Co., Ltd. 10	Manufacture and sales of superabsorbent polymers
Sanyo Kasei Korea, Ltd.	Korea	SKK	Sanyo Chemical Industries, Ltd. 10	^{0%} Sales of lubricant additives, surfactants, etc.

Company Name	Abbr.	Share of Voting Rights		Line of Business		
San-Petrochemicals Co., Ltd.	SPCC	Sanyo Chemical Industries, Ltd. ENEOS Corporation	50% 50%	Manufacture of raw materials for synthetic rubbers		
Sunrise Chemical LLC [USA]	SRC			Manufacture of raw materials for synthetic rubbers		
APB Corporation	APB	Ltd.		Research, development, manufacture and sales of All Polymer Battery		
Shiohama Chemicals Warehouse Co., Ltd.	_	Ltd.	50% 50%	Warehousing		

And one other company