"Performance" Through Chemistry

Material for Financial Results Presentation For the Six Months Ended September 30, 2020

Takao Ando, President & CEO Sanyo Chemical Industries, Ltd.

> 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 16, 2020. 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>>

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

Corporate Data



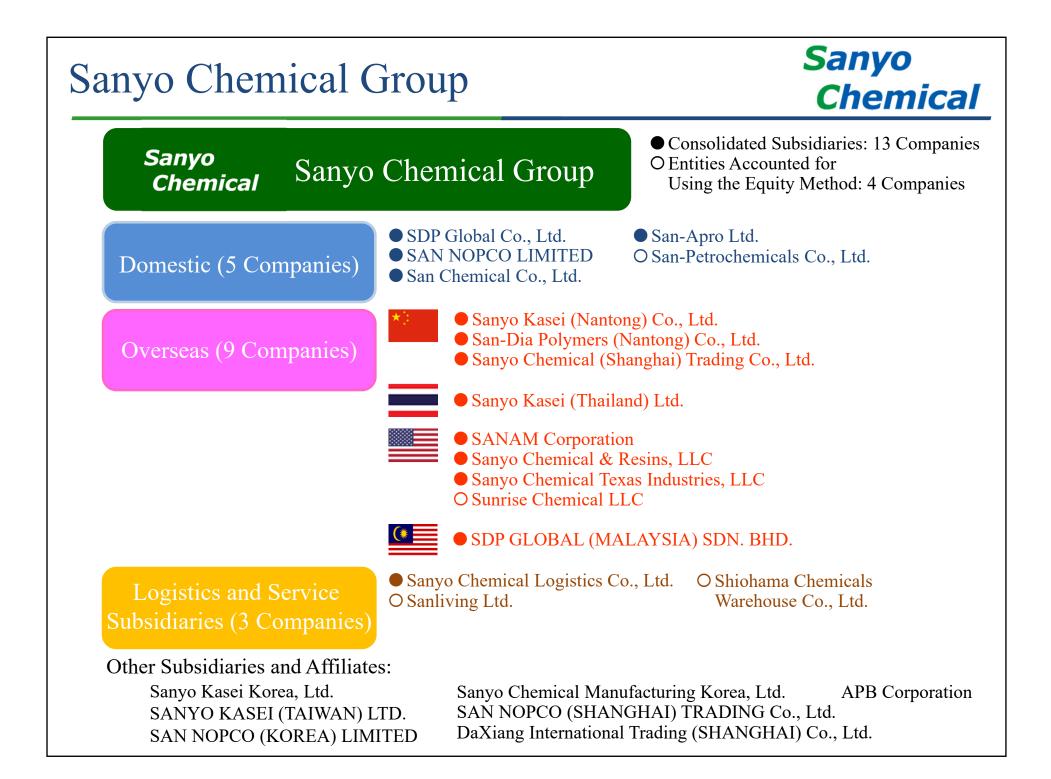
Date of Establishment: November 1, 1949 Head Office: Higashiyama-ku, Kyoto-shi Share Capital: ¥13,051 million Domestic Branches Offices and Sales & Marketing Offices: Tokyo, Osaka, Nagoya, Hiroshima, Fukuoka Domestic Factories: Nagoya, Kinuura, Kashima, Kyoto, Kawasaki (San Chemical)

Number of Employees (Consolidated Basis):

2,114 (as of September 30, 2020)

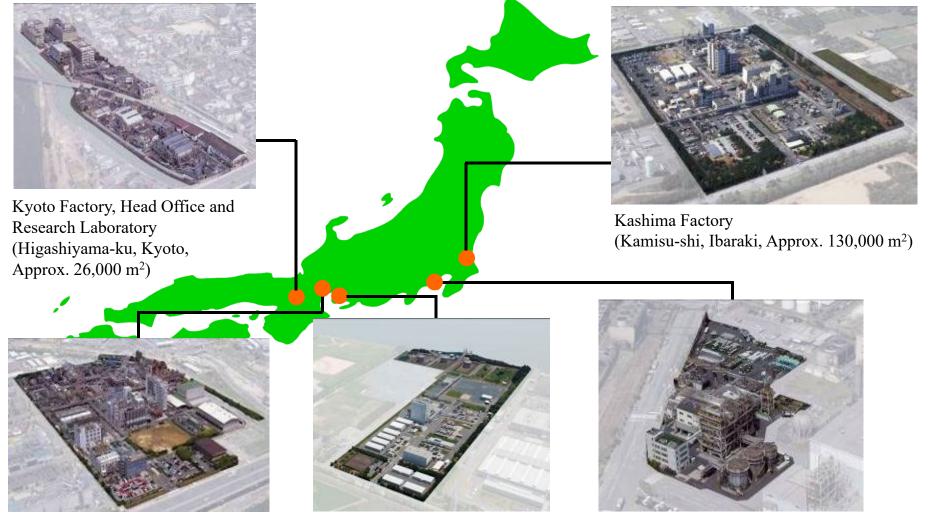
Line of Business:

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



Domestic Production Bases

Sanyo Chemical



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



Sanyo Kasei (Nantong) Co., Ltd.



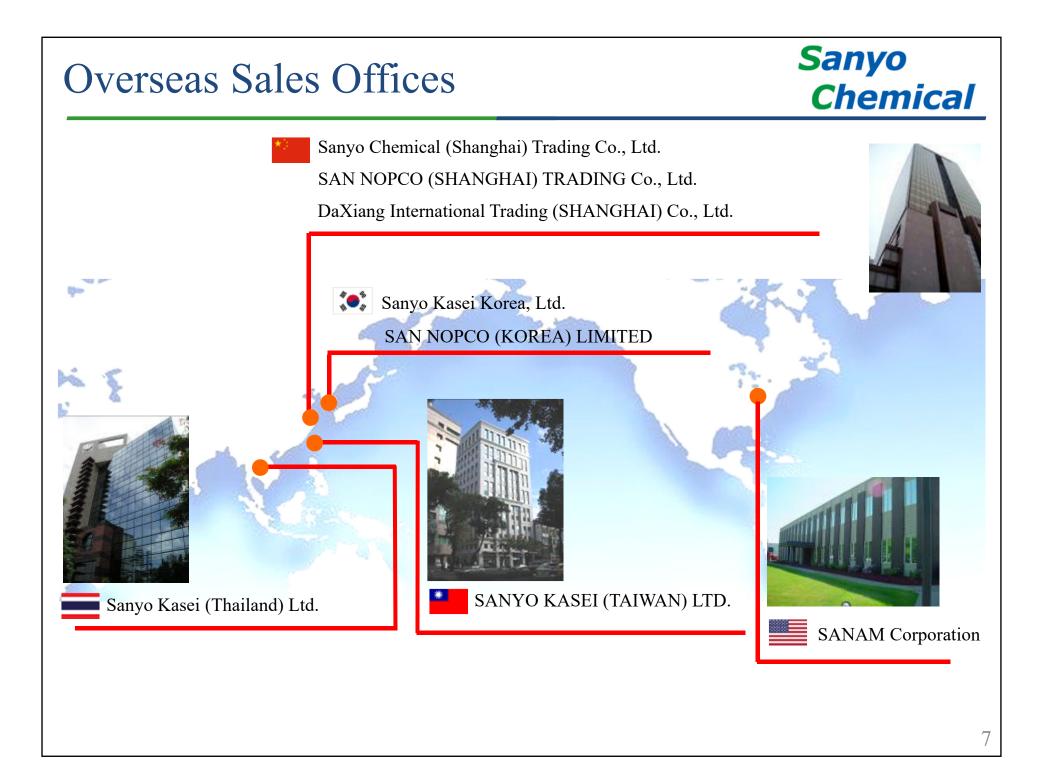






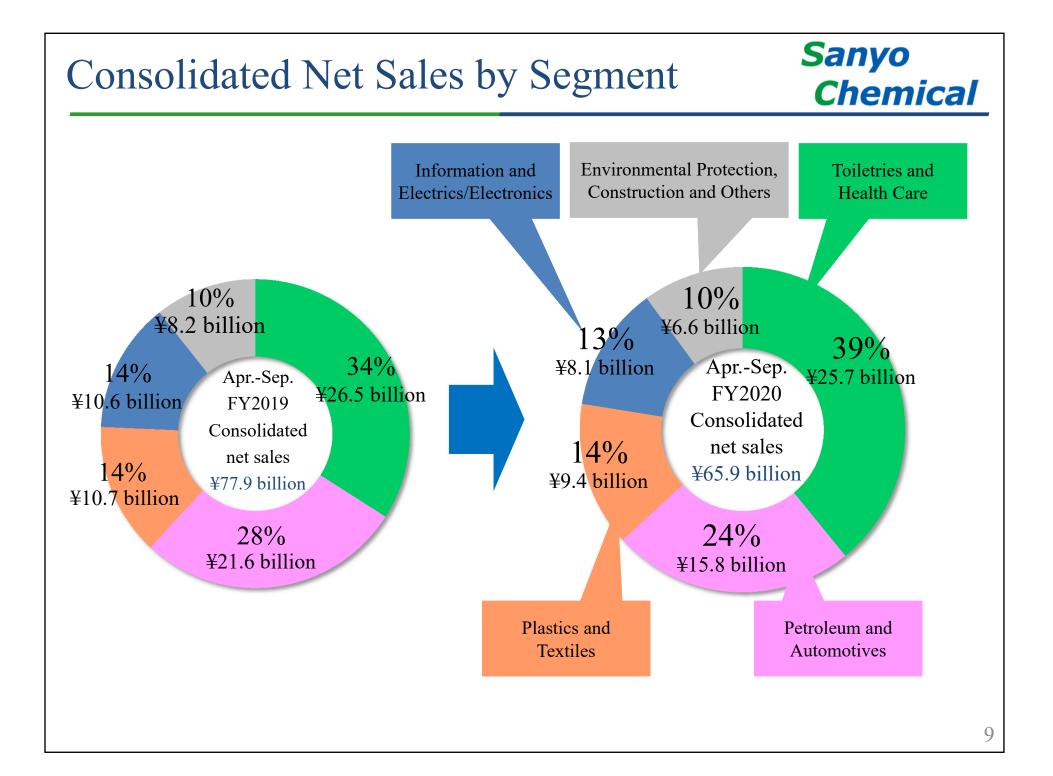
SDP GLOBAL (MALAYSIA) SDN. BHD.

Sanyo Chemical Texas Industries, LLC



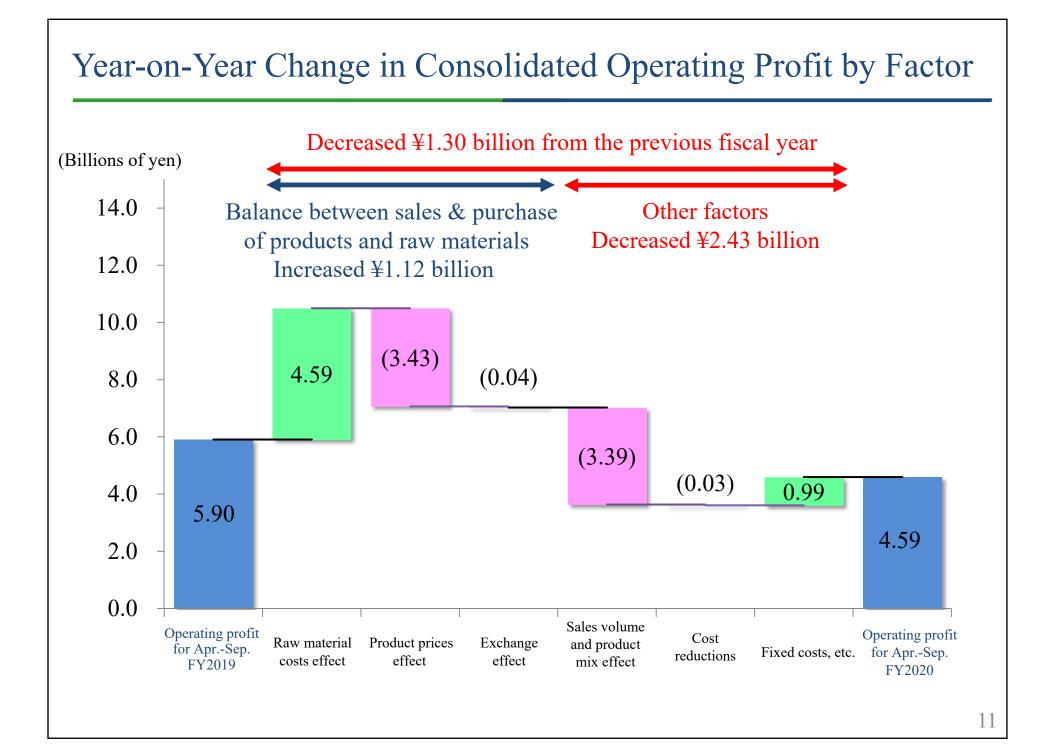
Principal Products by Industrial Field (Segment)

Broad category	Middle category	Principal products
Toiletries and Health Care	Toiletries	Surfactants for Detergents, Surfactants for Hair Care Products, Agents for Paper-making
	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 Automotives		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 and	Plastics	Permanent Antistatic Agents, Pigment Dispersants, Resin Modifiers, Paint Resins, Defoaming Agents, Raw Materials for Polyurethane Elastomers, Chemical Boards for Models
Textiles	Textiles	Chemicals for Textile Manufacturing, Chemicals for Carbon Fibers, Chemicals for Fiberglass, Polyurethane Resins for Artificial and Synthetic Leather
Information and	Information	Polyester Beads (PEB) Used as a Core Component of Polymerization Toners, Toner Binder
Electrics/ Electronics	Electrics/ Electronics	Electrolytes for Aluminum Electrolytic Capacitors, Electrolytes for Electric Double- Layer 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





Concelidated	Apr.	-Sep.	Year-on-Year Change			
Consolidated	FY2019	FY2020	Amount	Ratio (%)		
Net sales	77.94	65.93	(12.01)	(15)		
Operating profit	5.90	4.59	(1.30)	(22)		
Ordinary profit	5.89	4.37	(1.52)	(26)		
Profit attributable to owners of parent	3.79	2.33	(1.46)	(39)		
Comprehensive income	1.75	4.56	2.80	160		



Year-on-Year Change in Consolidated Profit by Factor



	Apr	-Sep.	Change	
	FY2019	FY2020	amount	
Operating profit	5.90	4.59	(1.30)	
Share of profit (loss) of entities accounted for using equity method	0.10	(0.37)	(0.48)	
Gain (loss) on foreign exchange	(0.53)	(0.16)	0.36	
Other non-operating income (loss)	0.41	0.31	(0.09)	
Ordinary profit	5.89	4.37	(1.52)	
Gain (loss) on sales of non-current assets, loss on retirement of non-current assets	(0.49)	(0.47)	0.02	
Other extraordinary income (loss)	0.00	0.01	0.01	
Profit before income taxes	5.40	3.91	(1.49)	
Income taxes	(1.56)	(1.36)	0.19	
Profit attributable to non-controlling interests	(0.05)	(0.21)	(0.16)	
Profit attributable to owners of parent	3.79	2.33	(1.46)	

Consolidated Balance Sheet



	March 31, 2020	September 30, 2020	Change amount	Main factors for changes
Current assets	85.8	82.7	(3.0)	Cash and deposits: 2.9, Notes and accounts receivable - trade, Electronically recorded monetary claims - operating: (6.4)
Non-current assets	93.0	94.9	1.9	Investment securities: 1.7
Total assets	178.8	177.7	(1.1)	
Current liabilities	42.7	39.2	(3.5)	Accounts payable - trade, Electronically recorded obligations - operating: (4.8)
Non-current liabilities	6.0	5.9	(0.0)	Long-term borrowings: (0.7), Deferred tax liabilities: 0.6
Total liabilities	48.7	45.2	(3.5)	
Shareholders' equity	121.4	122.2	0.8	Profit: 2.3, Cash dividends paid: (1.5)
Other comprehensive income	6.1	7.8	1.7	Valuation difference on available-for-sale securities: 1.7
Non-controlling interests	2.4	2.3	(0.0)	
Total net assets	130.0	132.5	2.4	
Total liabilities and net assets	178.8	177.7	(1.1)	

Consolidated Statements of Cash Flows



	Apr	Sep.	Change	Special notes		
	FY2019	FY2020	amount	Special notes		
Cash flows from operating activities	8.12	10.13	2.00			
Profit before income taxes	5.40	3.91	(1.49)			
Depreciation	4.43	4.73	0.29			
Share of loss (profit) of entities accounted for using equity method	(0.10)	0.37	0.48			
Decrease (increase) in operating capital	1.66	1.98	0.31			
Income taxes	(3.16)	(0.85)	2.31			
Other, net	(0.10)	(0.02)	0.07			
Cash flows from investing activities	(5.42)	(5.88)	(0.46)	Purchase of non-current assets 1H FY2019: (4.59), 1H FY2020: (4.73)		
Free cash flows	2.69	4.24	1.54			
Cash flows from financing activities	(2.77)	(0.66)	2.11	Loans and Repayment 1H FY2019: (1.6), 1H FY2020: 1.1		
Effect of exchange rate change on cash and cash equivalents	(0.26)	(0.08)	0.18			
Net increase (decrease) in cash and cash equivalents	(0.34)	3.49	3.84			
Cash and cash equivalents at beginning of period	19.15	18.00	(1.14)			
Increase (decrease) in cash and cash equivalents resulting from changes in the fiscal year-end of consolidated subsidiaries	_	(0.65)	(0.65)			
Increase (decrease) in cash and cash equivalents resulting from change in scope of consolidation		0.11	0.11			
Cash and cash equivalents at end of period	18.80	20.96	2.16			

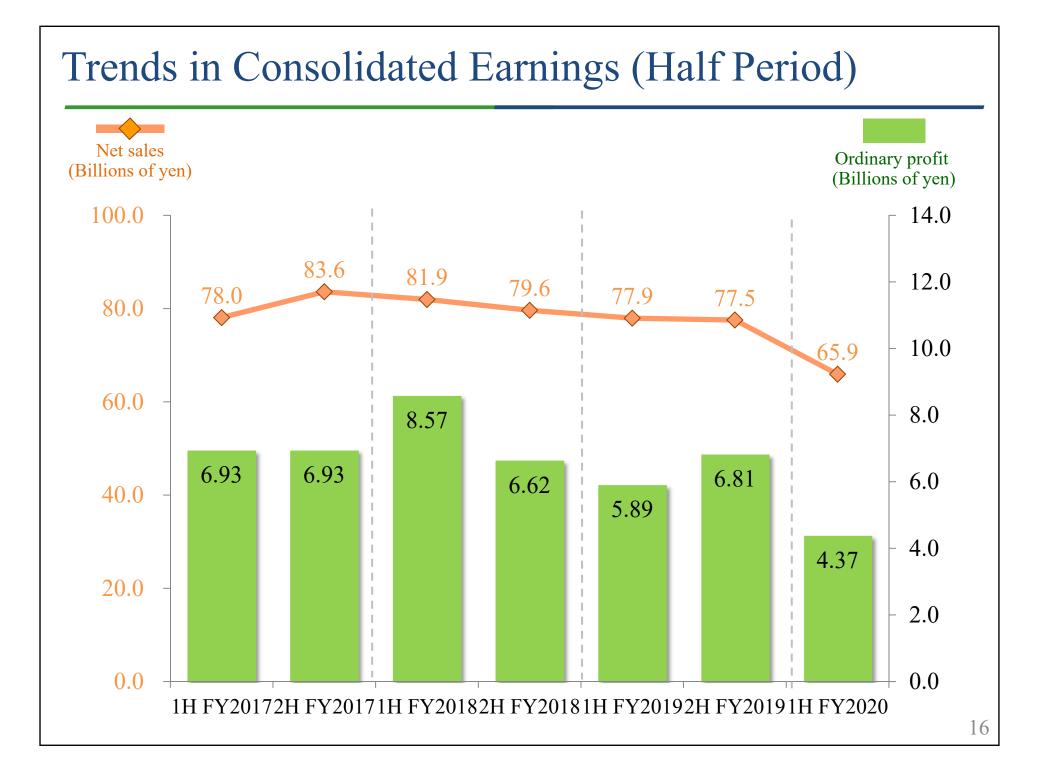
Earnings Forecast for FY2020 and Progress in Apr.-Sep. FY2020

<Assumptions for below forecasts>

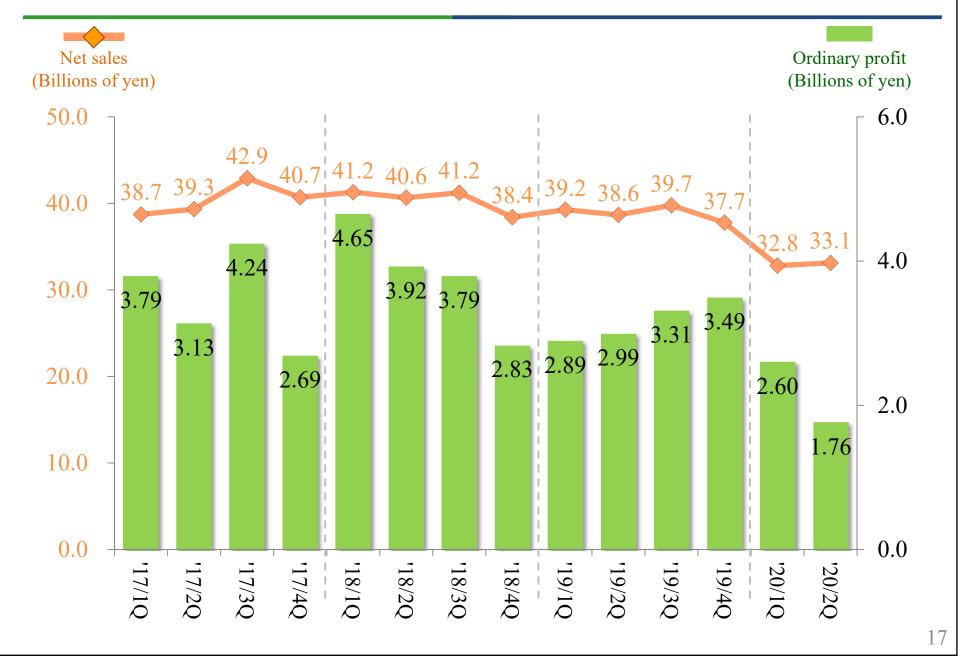
Price of naphtha produced in Japan: 30 thousand yen/kl, Exchange rate: 108 yen/U.S. dollar

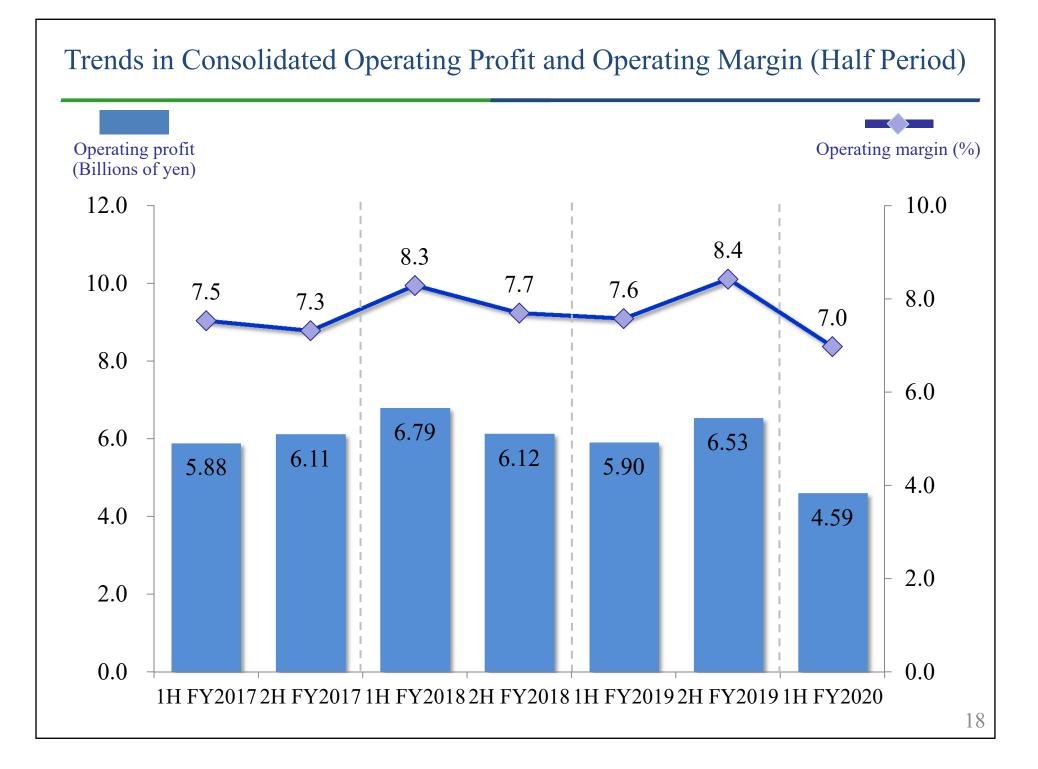
2Q (Apr.-Sep.) Full-year Consolidated Progress (%) Result Forecast* Forecast* Progress (%) 65.93 66.00 100 140.00 47 Net sales 4.59 4.50 102 11.50 40 Operating profit 4.37 4.70 93 36 12.00 Ordinary profit Profit attributable to 33 2.33 90 2.60 7.00 owners of parent

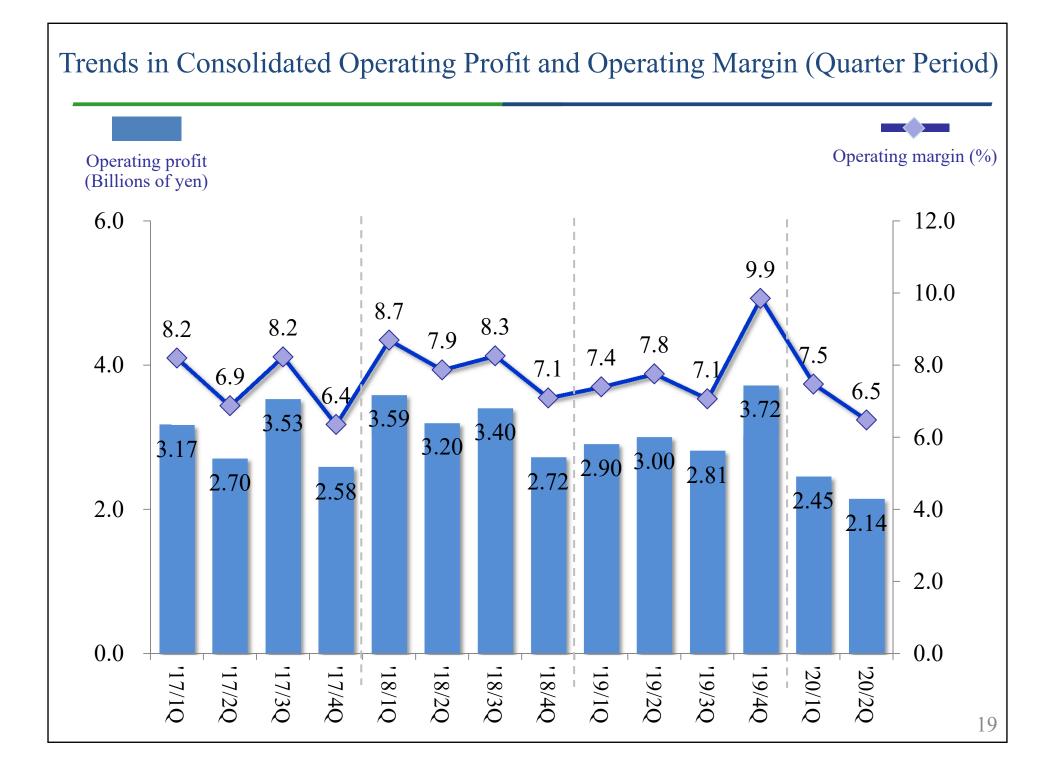
*Forecasts announced on July 31, 2020



Trends in Consolidated Earnings (Quarter Period)





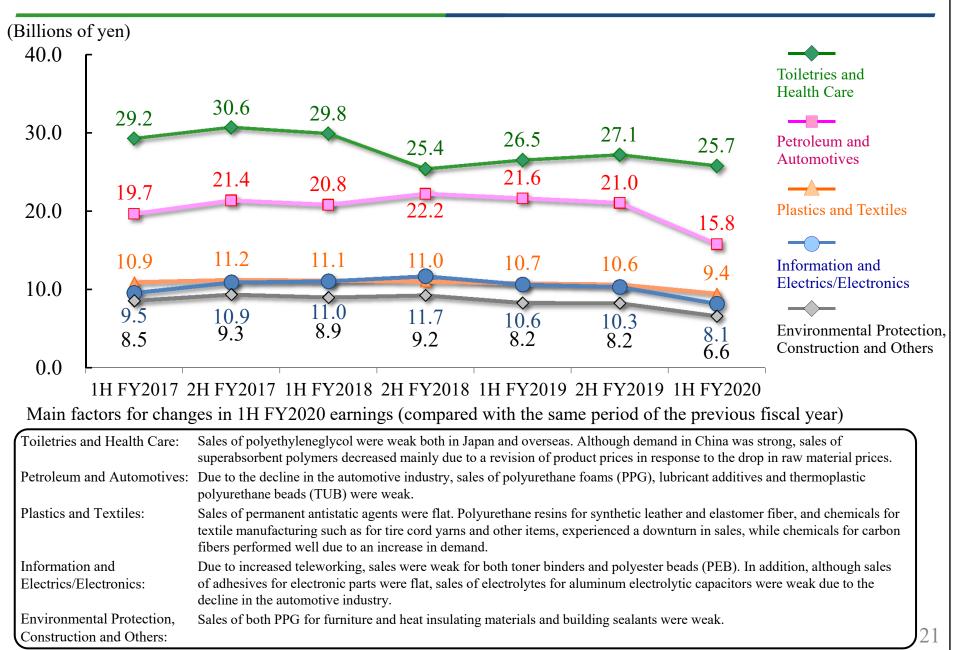


Consolidated Earnings by Segment

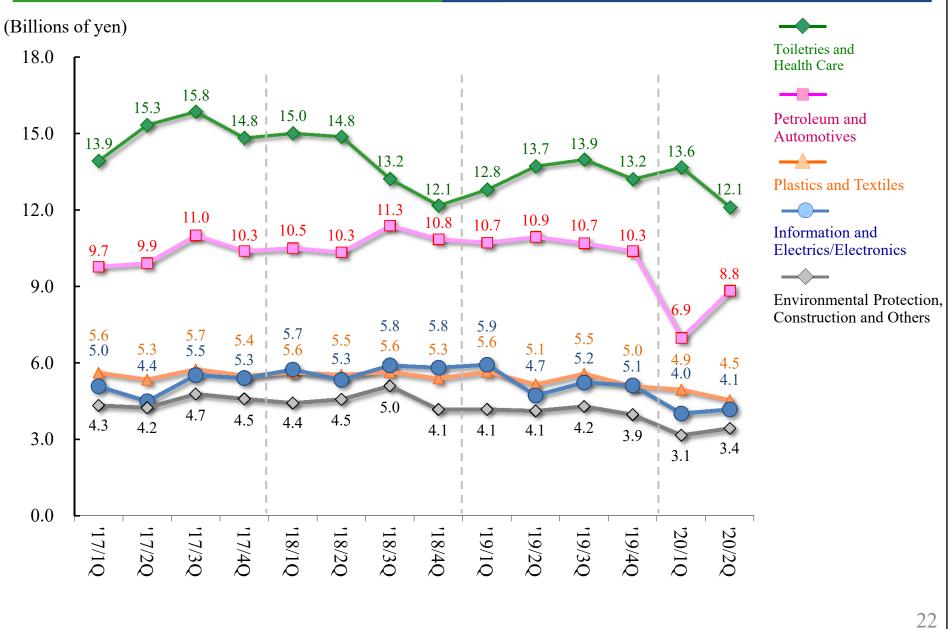
Sanyo Chemical

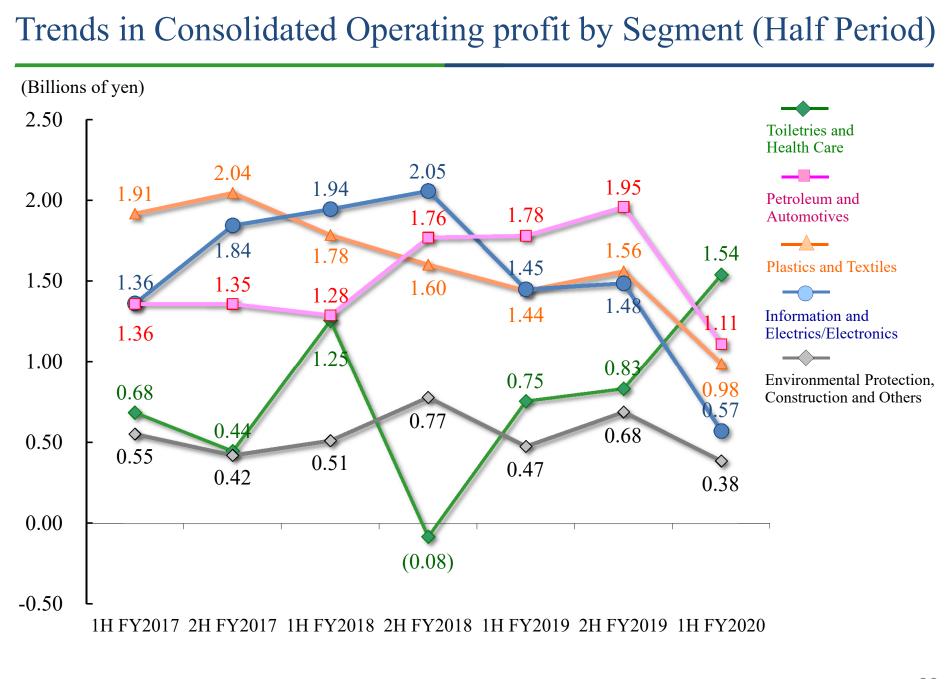
		Net sales			Operating profit			
Segment	AprSep. FY2019	AprSep. FY2020	Change amount	AprSep. FY2019	AprSep. FY2020	Change amount		
Toiletries and Health Care	26.52	25.78	(0.73)	0.75	1.54	0.78		
Toiletries	6.80	6.15	(0.65)					
Health Care	19.71	19.63	(0.08)					
Petroleum and Automotives	21.67	15.84	(5.83)	1.78	1.11	(0.67)		
Plastics and Textiles	10.79	9.49	(1.30)	1.44	0.98	(0.45)		
Plastics	7.82	7.14	(0.67)					
Textiles	2.97	2.34	(0.63)					
Information and Electrics/Electronics	10.64	8.19	(2.44)	1.45	0.57	(0.87)		
Information	7.11	4.68	(2.43)					
Electrics/Electronics	3.52	3.51	(0.01)					
Environmental Protection, Construction and Others	8.29	6.61	(1.68)	0.47	0.38	(0.08)		
Total	77.94	65.93	(12.01)	5.90	4.59	(1.30)		
		20						

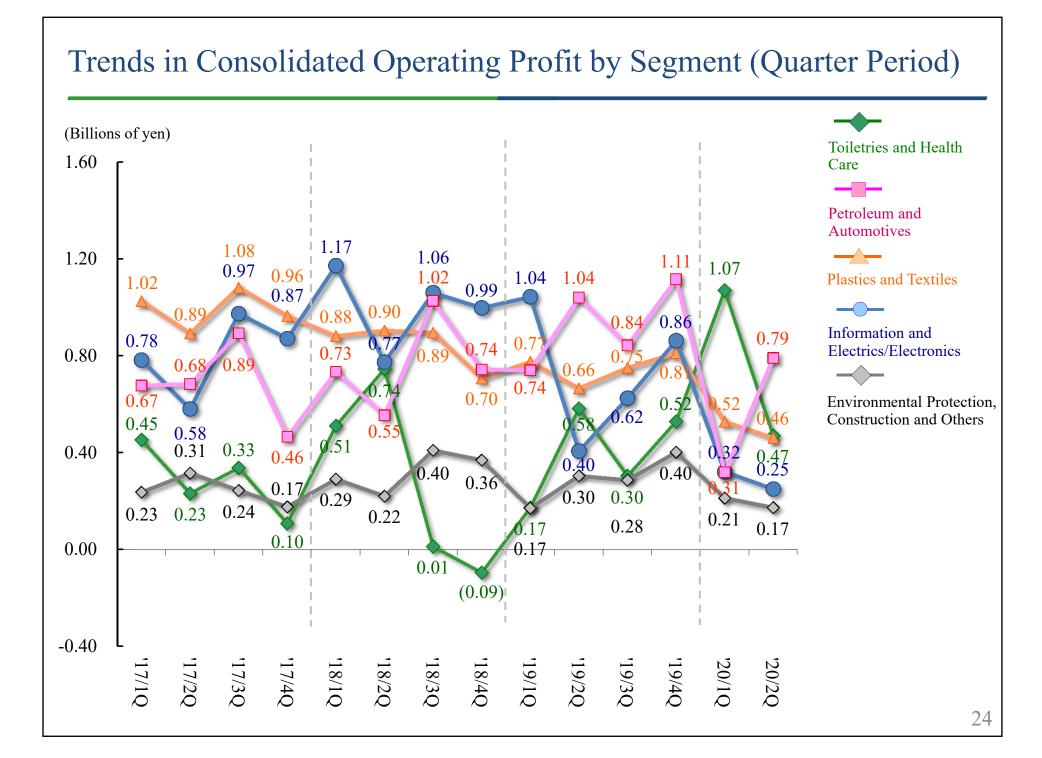
Trends in Consolidated Net Sales by Segment (Half Period)



Trends in Consolidated Net Sales by Segment (Quarter Period)

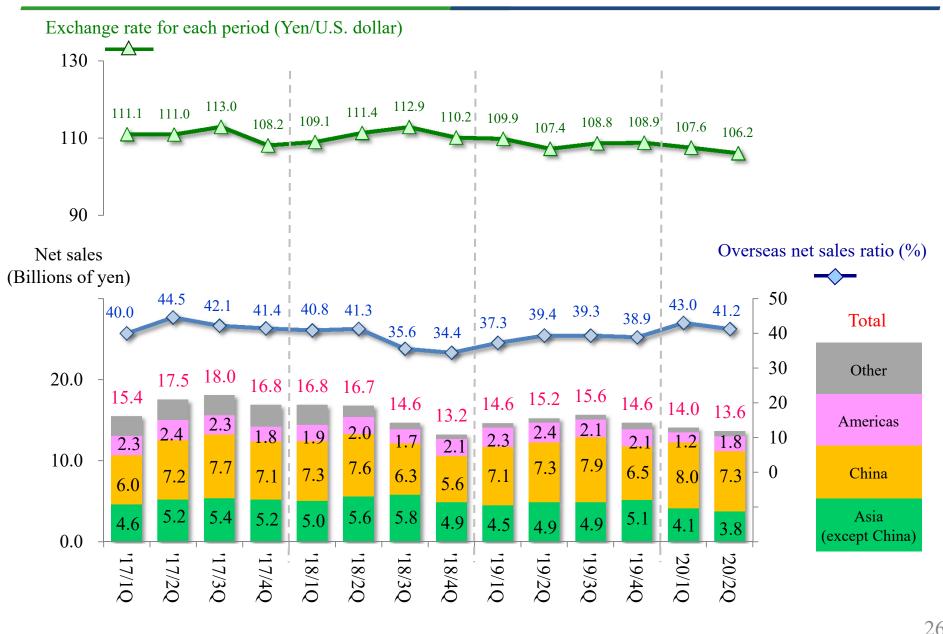


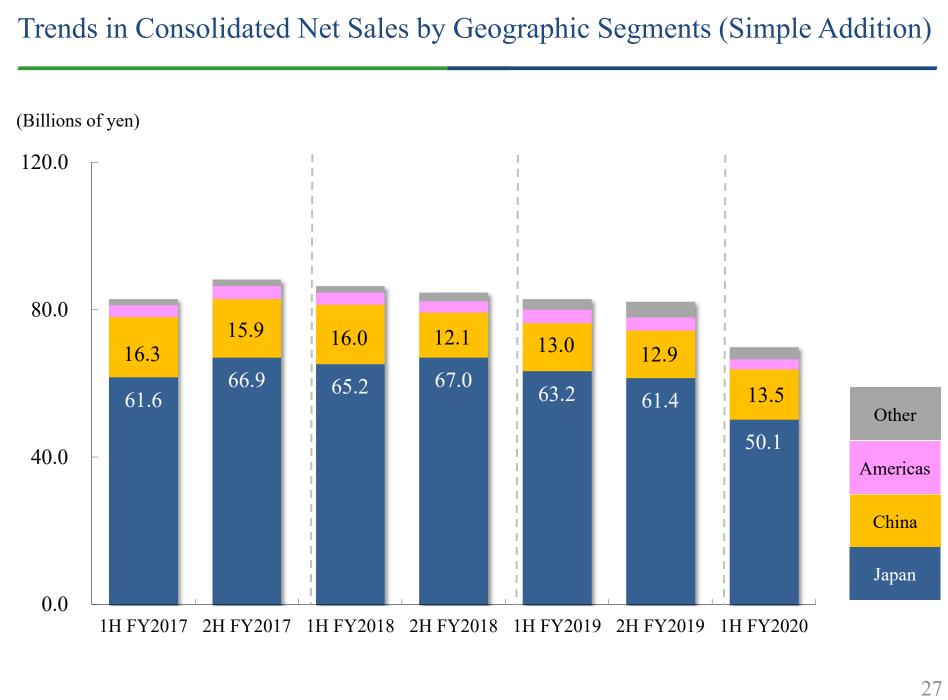


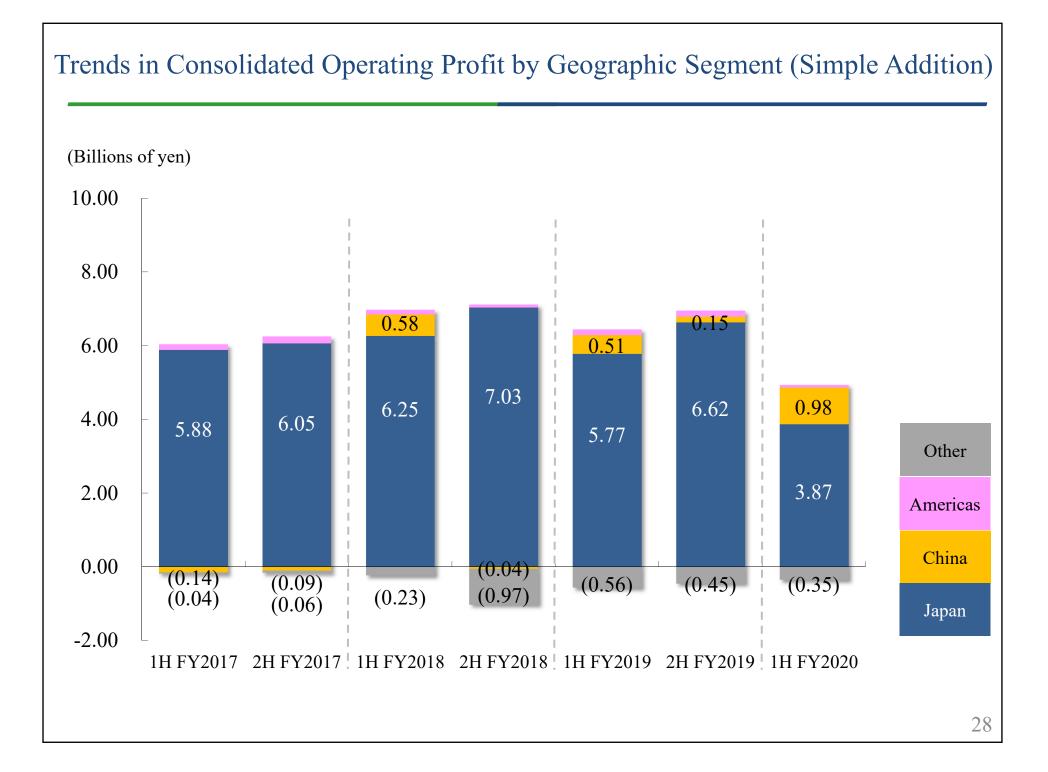


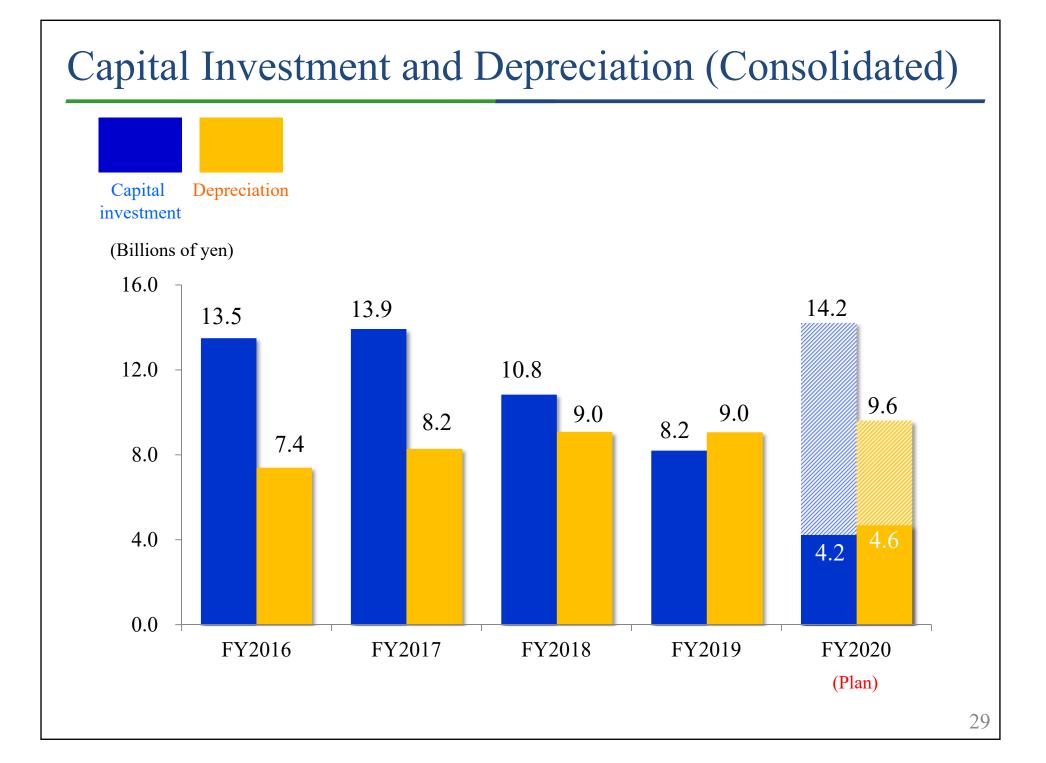
Trends in Overseas Net Sales (Half Period) Exchange rate for each period (Yen/U.S. dollar) 130 -111.6 111.1 110.7 110.3 108.8 108.6 106.9 110 Overseas net sales ratio (%) 90 Overseas production Net sales volume ratio (%) (Billions of yen) 50 60.0 42.1 41.8 42.3 41.0 39.1 38.3 Total 35.0 40 50.0 29.4 24.3 23.8 24.7 23.6 23.3 30 Other 21.4 40.0 20 30.0 Americas 4.2 4.0 4.8 4.8 4.2 10 3.8 3.0 20.0 0 14.8 11.9 14.5 14.9 14.4 15.4 China 13.3 10.0 Asia 10.7 10.7 10.6 9.8 10.1 9.4 7.9 (except China) 0.0 1H FY2017 2H FY2017 1H FY2018 2H FY2018 1H FY2019 2H FY2019 1H FY2020

Trends in Overseas Net Sales (Quarter Period)

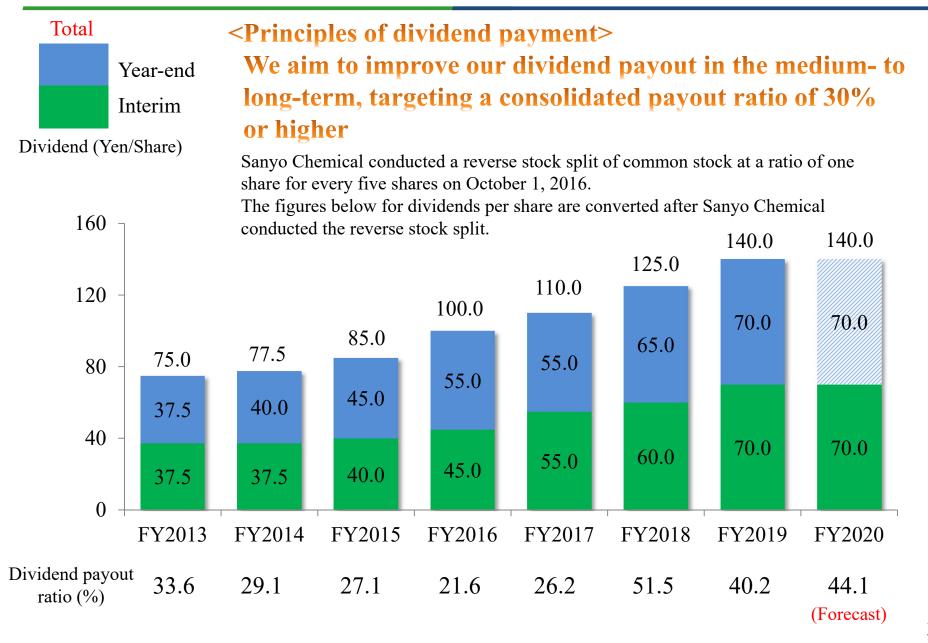








Trends in Dividend per Share and Dividend Payout Ratio (Consolidated)



Topics (Cancellation of Business Integration)



Global outbreak of the novel coronavirus disease (COVID-19) Plunge in the oil and oil product markets, and other factors

Outlook for the performance, etc. of both companies as well as for the financial, economic, market and other elements of the business environment, which served as the basis for the agreement on this business integration, had become uncertain



October 21, 2020

Announcement of cancellation of the business integration by way of joint share transfer with Nippon Shokubai Co., Ltd. and the termination by mutual agreement of the final agreement concerning the business integration

 \diamondsuit Basic strategies remain unchanged

Solution business, shift to high value-added products, work style reforms (shift to flexible and diverse ways of thinking and work styles), etc.

 \diamond Both companies will continue to maintain a good relationship

Topics (Received Korean Industrial Award)

November 3, 2020

At the Foreign Company Day held by the Korea Foreign Company Association (FORCA), the Company received an industrial award from the South Korean government



Chemical

Sanyo

Industrial award: Among the government awards in South Korea where many foreign companies are located, the industrial award is the next award after the industrial order of merit and is awarded to foreign investors in recognition of their contributions to and achievements in foreign industries, including the scale of investments and introduction of advanced technologies.

Sanyo Chemical Group established SAN NOPCO (KOREA) LIMITED in 1987 and Sanyo Kasei Korea, Ltd. in 2008.

Sanvo Chemical

In 2018, the Company established Sanyo Chemical Manufacturing Korea, Ltd. for the production of ACLUBE, which is one of the main businesses of the Company. (Operations are scheduled to begin in 2021.)

Sanvo Chemica



Left: Industrial award; Right: Award certificate



President Ando of the Company participating in the online ceremony

Topics (All Polymer Battery)

Sanyo Chemical

Demonstration trials have begun into installing all polymer battery (APB) in AUV (autonomous underwater vehicle) manufactured by Kawasaki Heavy Industries, Ltd.



All polymer battery used (external casing)



Exterior of AUV made by Kawasaki Heavy Industries

APB Fukui Plant

- Interior construction and equipment orders are in progress → Aim to complete the construction by the end of April 2021
- Build a sample shipment organization \rightarrow Aim to complete in the second half of 2021



Topics (Silk-Elastin)

Sanyo Chemical

Adoption for Acceleration Transformative Research for Medical Innovation (ACT-M) of Japan Agency for Medical Research and Development (AMED), aiming for use of silk-elastin in the treatment of meniscus injuries

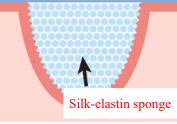


Press conference at Hiroshima University

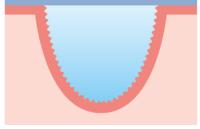
Because the effectiveness of silk-elastin as a scaffold for meniscal repair (transplant substrate) was confirmed according to animal testing conducted at Hiroshima University, research and development that is more specific will proceed toward clinical applications.



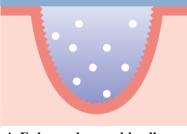
1. Skin wound (bedsore, diabetic ulcer, burn wound, etc.)



2. Application of silk-elastin sponge



3. Dissolved by exudate and becomes a gel (5–6 hours after application)



4. Enhanced wound healing (cell scaffolds)

A physician-initiated clinical trial for use as a wound healing material was completed by Kyoto University, and company clinical trials are currently being prepared.

Topics (Promotion of Diversity)



The Company was recognized for the second consecutive year with the Gold rating, the highest rating in the PRIDE Index 2020, for its initiatives related to LGBTQ and other sexual minorities.



work with Pride



This rating reflects Sanyo Chemical's respect for the diversity, personality and individuality of our employees and our efforts in improving the environment and organization, aiming to be a company where diverse human resources can work, based on our belief that participation by diverse human resources is necessary for further development of the Company and will contribute to society.

If there are 100 people, there are 100 genders. Of course, everyone is different. Working to create a company and society where each and every person feels important.

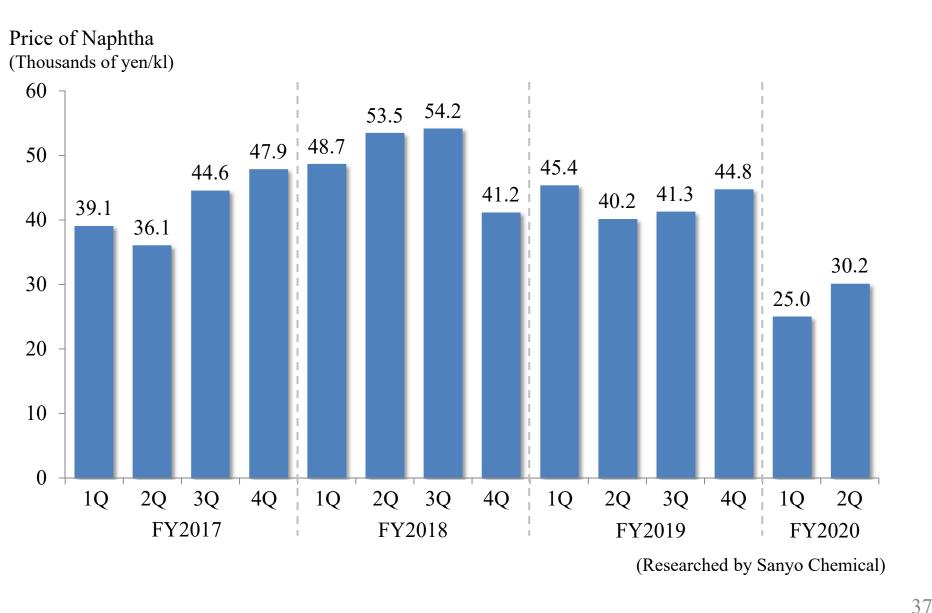


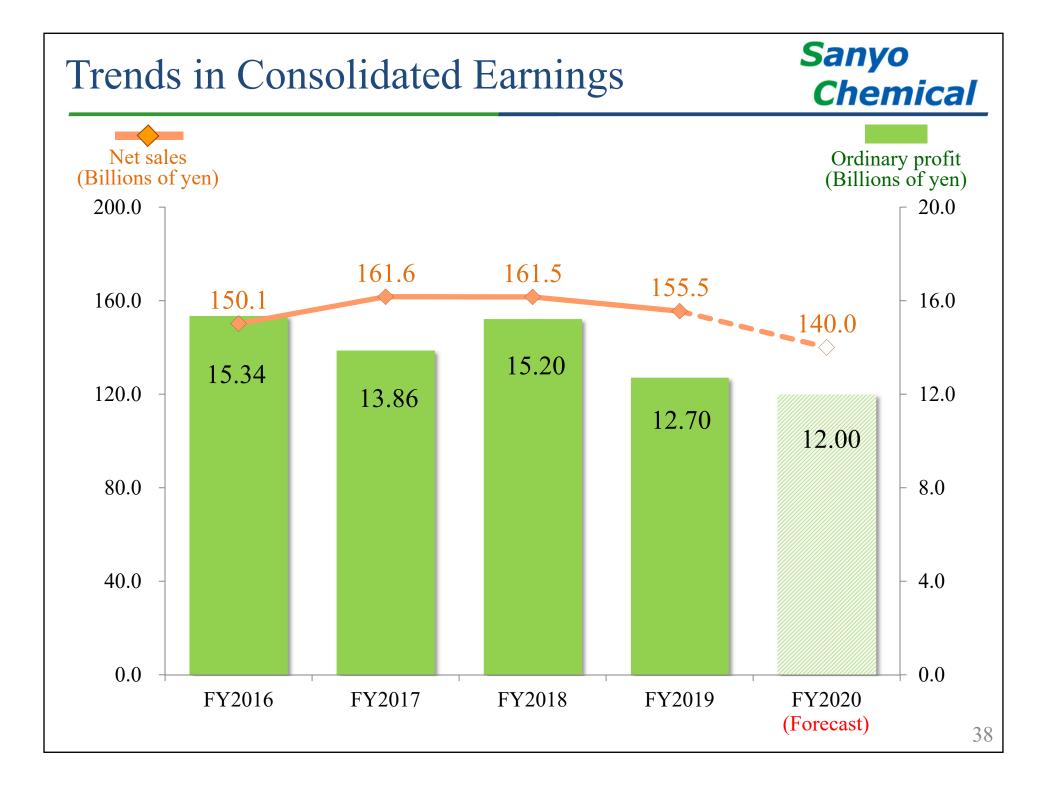
In August 2020, the Group welcomed the YouTuber Kazue-Chan, who has been working to raise awareness of LGBTQ issues, as part of its LGBTQ initiatives.

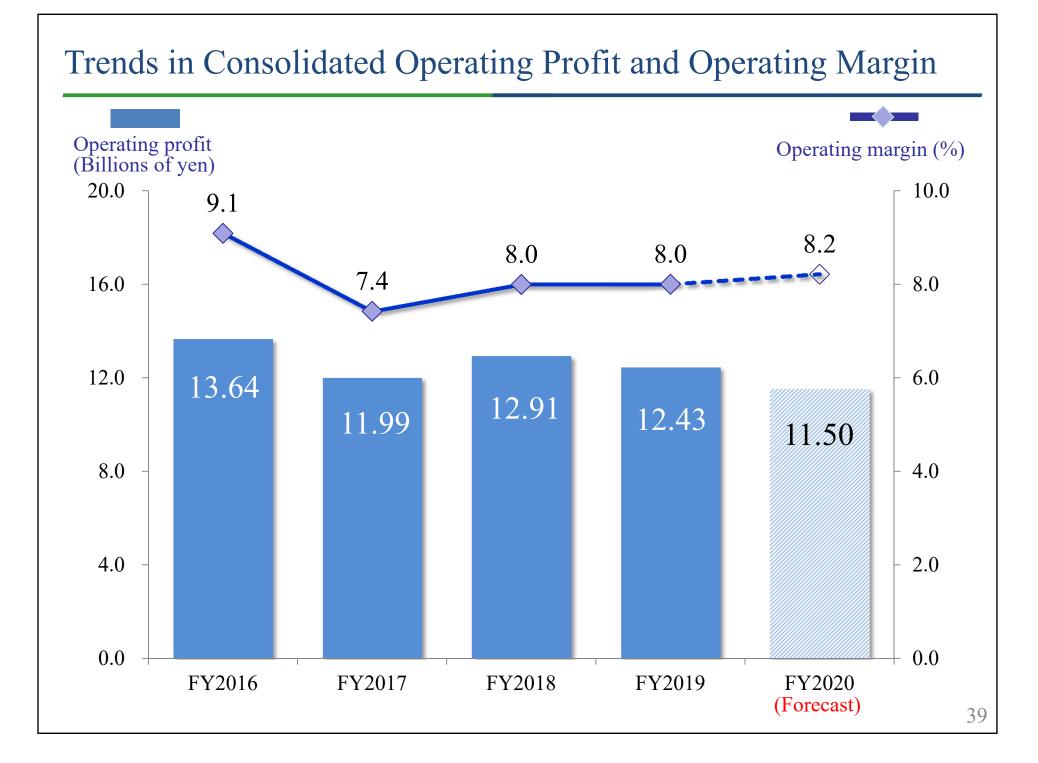


Reference

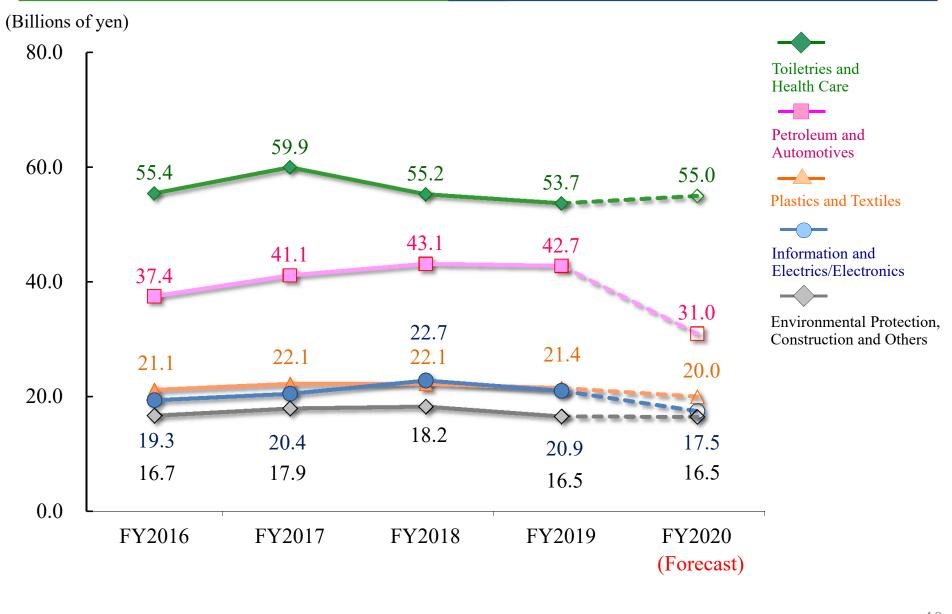
Trends in Price of Naphtha Produced in Japan



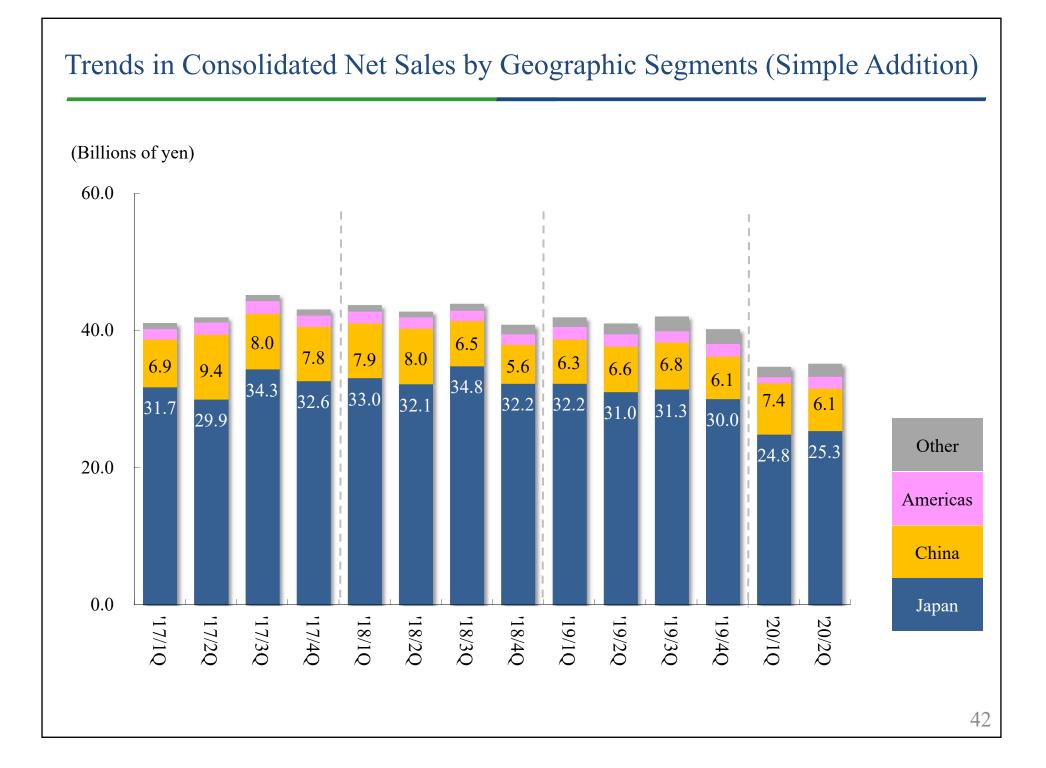


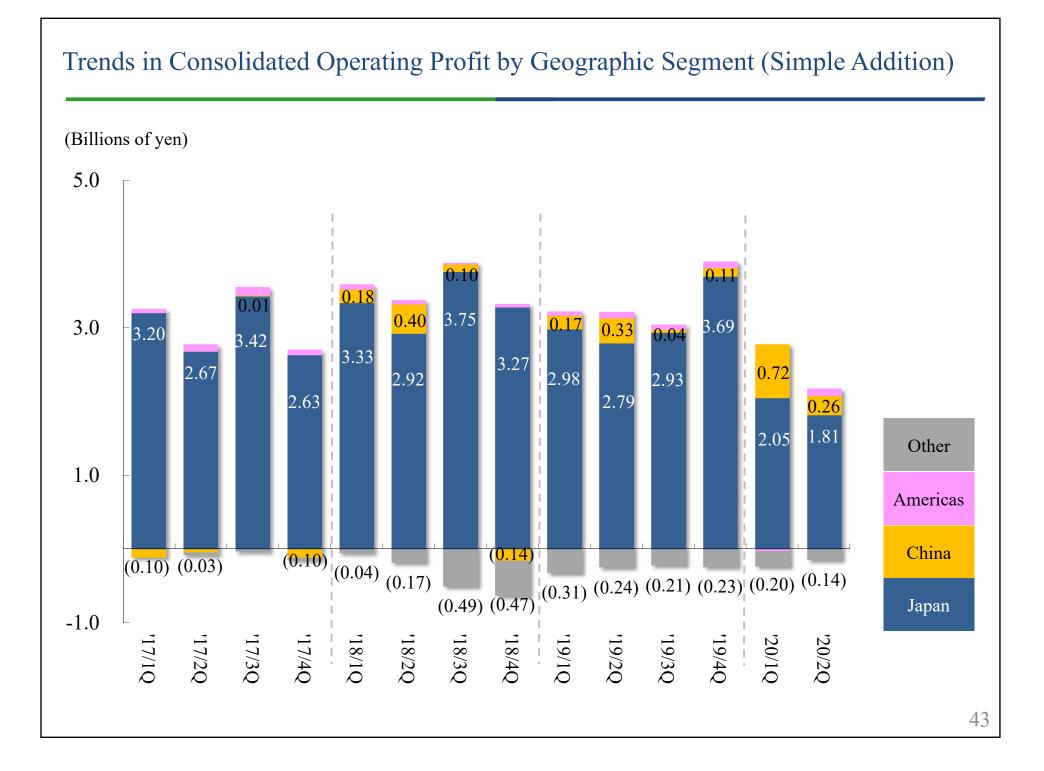


Trends in Consolidated Net Sales by Segment



Trends in Consolidated Operating Profit by Segment (Billions of yen) 6.0 Toiletries and Health Care ____ Petroleum and Automotives 4.17 4.00 3.96 **Plastics and Textiles** 4.0 3.74 3.59 3.38 3.28 3.20 Information and 3.00 Electrics/Electronics 2.77 2.79 2.73.05 2.93 Environmental Protection. 2.11 2.54 Construction and Others 2.0 1.59 1.29 1.13 1.76 -\$ 1.17 1.16 1.13 0.98 0.97 0.0 FY2016 FY2017 FY2018 FY2019 FY2020 (Forecast)





Domestic Consolidated Subsidiaries (5 Companies)



Company Name	Abbr.	Share of Voting Rights		Line of Business
SDP Global Co., Ltd.	SDP	Sanyo Chemical Industries, Ltd. 100% N.		Manufacture and sales of superabsorbent polymers
SAN NOPCO LIMITED	SNL	anyo Chemical 100% pu		Manufacture and sales of chemicals for pulp & paper, coating chemicals, a wide range of industrial chemicals, etc.
San Chemical Co., Ltd.				Manufacture of raw materials for polyurethane foams, etc.
San-Apro Ltd.	SA	Sanyo Chemical Industries, Ltd. Evonik International Holding B.V.		Manufacture and sales of curing accelerators for epoxy resins, urethane catalysts, etc.
Sanyo Chemical Logistics Co., Ltd.	_	Sanyo Chemical Industries, Ltd.	100%	General trucking business

Overseas Consolidated Subsidiaries (8 Companies)



Company Name	Country of incorporation	Abbr.	Share of Voting Rights		Line of Business
Sanyo Kasei (Nantong) Co., Ltd.	China	SKN	Sanyo Chemical Industries, Ltd.	100%	Manufacture of surfactants, polyurethane resins, etc.
San-Dia Polymers (Nantong) Co., Ltd.	China	SDN	SDP Global Co., Ltd.	100%	Manufacture and sales of superabsorbent polymers
Sanyo Chemical (Shanghai) Trading Co., Ltd.	China	SCST	Sanyo Chemical Industries, Ltd.	100%	Sales of surfactants, polyurethane resins, etc.
Sanyo Kasei (Thailand) Ltd.	Thailand	SKT	Sanyo Chemical Industries, Ltd. VIV Interchem Co. Ltd., Toyota Tsusho Corporation, etc.	79% 21%	Manufacture and sales of surfactants, polyurethane resins, etc.
SANAM Corporation	USA	SANAM	Sanyo Chemical Industries, Ltd.	100%	Holding company of U.S. consolidated subsidiaries Sales of lubricant additives, polyurethane beads, etc.
Sanyo Chemical & Resins, LLC	USA	SCR	SANAM Corporation	100%	(Factory closed)
Sanyo Chemical Texas Industries, LLC	USA	SCTI	SANAM Corporation	100%	Manufacture of polyurethane beads
SDP GLOBAL (MALAYSIA) SDN. BHD.	Malaysia	SDPM	SDP Global Co., Ltd.	100%	Manufacture and sales of superabsorbent polymers

Entities Accounted for Using the Equity Method (4 Companies)



Composer Nome	A le le re	Chara of Vating Dichts		Line of Dusinger
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	SANAM Corporation JX Nippon Chemical Texas Inc.	50% 50%	Manufacture of raw materials for synthetic rubbers
Shiohama Chemicals Warehouse Co., Ltd.	_	Sanyo Chemical Industries, Ltd. ENEOS Corporation	50% 50%	Warehousing
Sanliving Ltd.	SL	Sanyo Chemical Industries, Ltd.	100%	Real estate, insurance agency