

## A Statement of Accounts For the Six Months Ended September 30, 2016 1st Half Fiscal Year 2016 (1H-FY2016)

## SANYO CHEMICAL INDUSTRIES, LTD. Takao Ando, President http://:www.sanyo-chemical.co.jp/ Code: 4471





#### <<u>Notice</u>> Yen amounts described in this presentation material are rounded down. Ratios described in this presentation material are rounded off.

## <<u>Cautionary Statement with Respect to Forward-Looking Statement></u> This presentation material contains projections based on the assumptions, forward-looking statements and plans about the future of SANYO CHEMICAL INDUSTRIES, LTD. as of Nov. 14, 2016. Actual performance results may vary significantly due to a variety of factors affecting the sphere of business that include but are not limited to: the world economy, competitive position, and fluctuations in the exchange rate, raw material costs, and others.

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#### Corporate Data

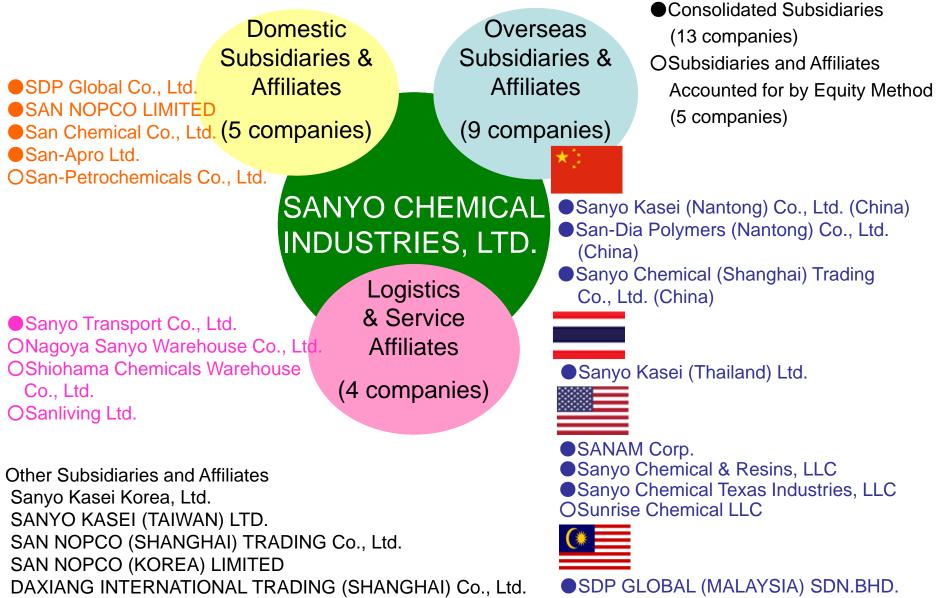
Date of Establishment: November 1, 1949 Head Office: Higashiyama-ku, Kyoto Capital: ¥13,051 million Domestic Sales & Marketing Offices: Tokyo, Osaka, Nagoya, Hiroshima, Fukuoka, Toyama Domestic Factories: Nagoya, Kinuura, Kashima, Kyoto, Kawasaki (San Chemical) Consolidated Number of Employees:

2,018 (as of Sept. 30, 2016)

Line of Business:

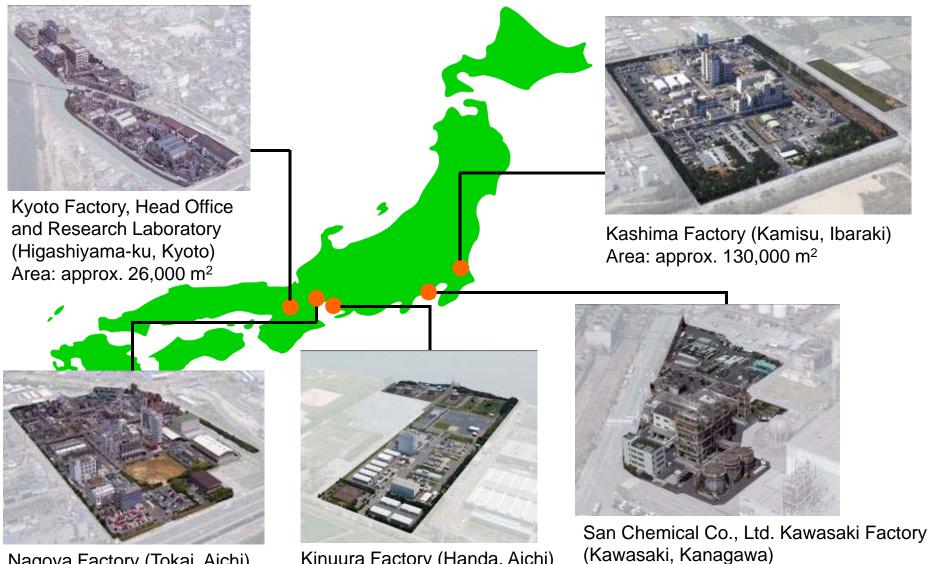
Manufacture & sales of approx. 3,000 types of performance chemicals

## Sanyo Chemical Group





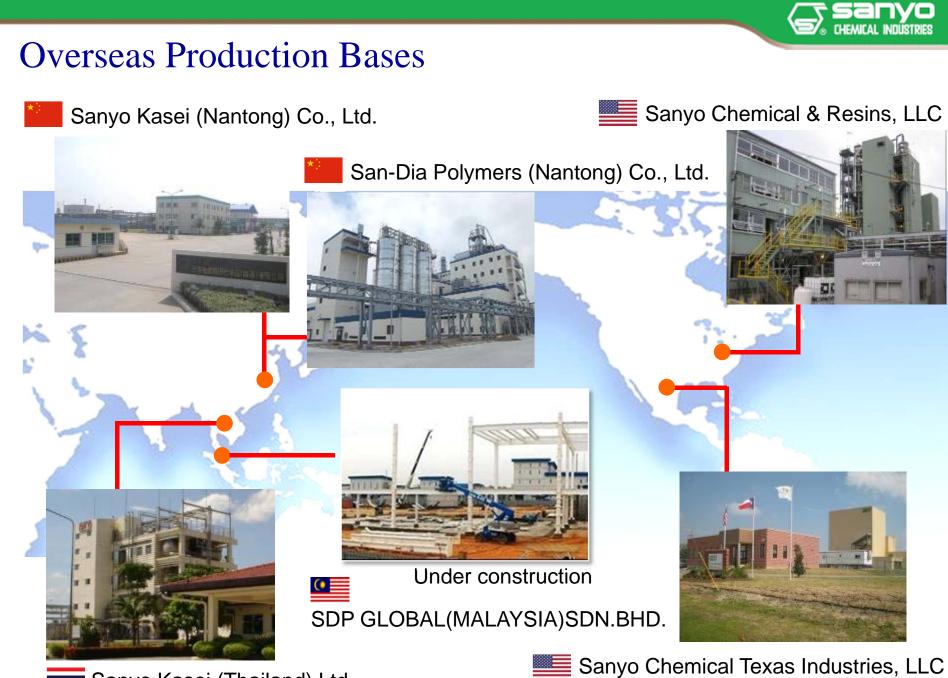
#### **Domestic Production Bases**



Nagoya Factory (Tokai, Aichi) Area: approx. 100,000 m<sup>2</sup>

Kinuura Factory (Handa, Aichi) Area: approx. 140,000 m<sup>2</sup>

Area: approx. 11,000 m<sup>2</sup>



## **Overseas Sales Office**



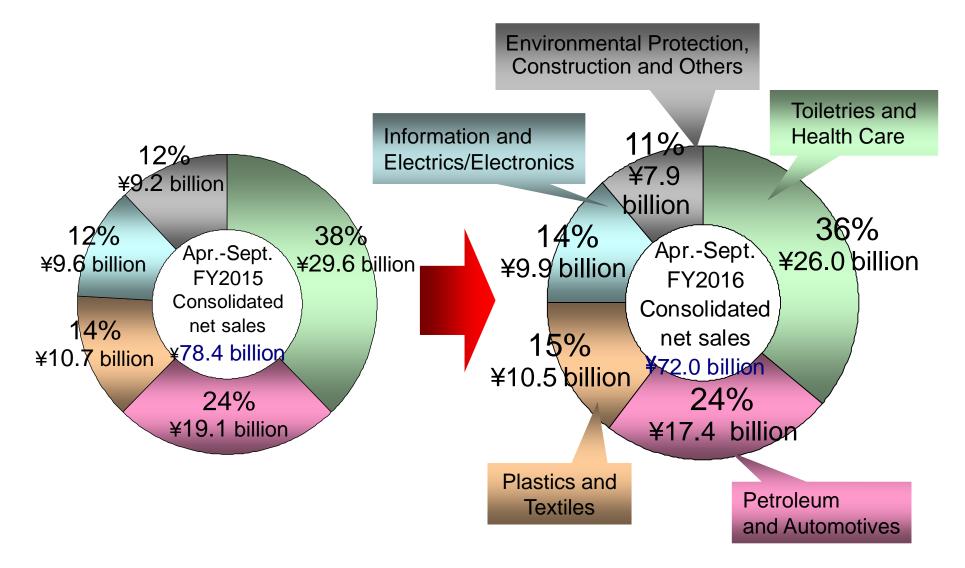


## Principal Products by Product Group

Class.	Sub- Category	Principal Products			
Toiletries	Toiletries	Surfactants for Detergents, Surfactants for Hair Care Products, Agents for Papermaking			
and Health Care	Health Care	Superabsorbent Polymers (SAPs), Base Materials for Pharmaceuticals, Germicides/Disinfectants, Surgical Hemostatic Agent, EIA Diagnostic Reagents, Potting Resins for Artificial Kidneys			
Petroleum and Automotives		Thermoplastic Polyurethane Beads for the Interior Parts of Automobiles (TUBs), Raw Materials for Polyurethane Foams (PPG), Lubricating Oil Additives, Additives for Fuel Oils, Water-Soluble Cutting Fluids, 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, Base Materials for Polyurethane Elastomers, Paint Resins, Chemical Boards for Models			
Textiles	Textiles	Agents for Textile Manufacturing, Chemicals for Carbon Fibers, Agents for Fiberglass, Polyurethane Resins for Synthetic Leather			
Information	Information	Polyester Beads (PEBs) Used as a Core Component of Polymerization Toners, Toner Resins			
and Electrics /Electronics	Electrics /Electronics	Electrolytes for Aluminum Electrolytic Capacitors, Electrolytes for Electric Double- Layer Capacitors, Adhesive for Electronic Parts, Agents 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 Agents, Reactive Hot-Melt Adhesives, Raw materials for Building Sealants, Cement Agents			



### Net Sales by Product Group



Net sales decreased mainly due to appropriate sales price to respond to a fall in raw material costs.

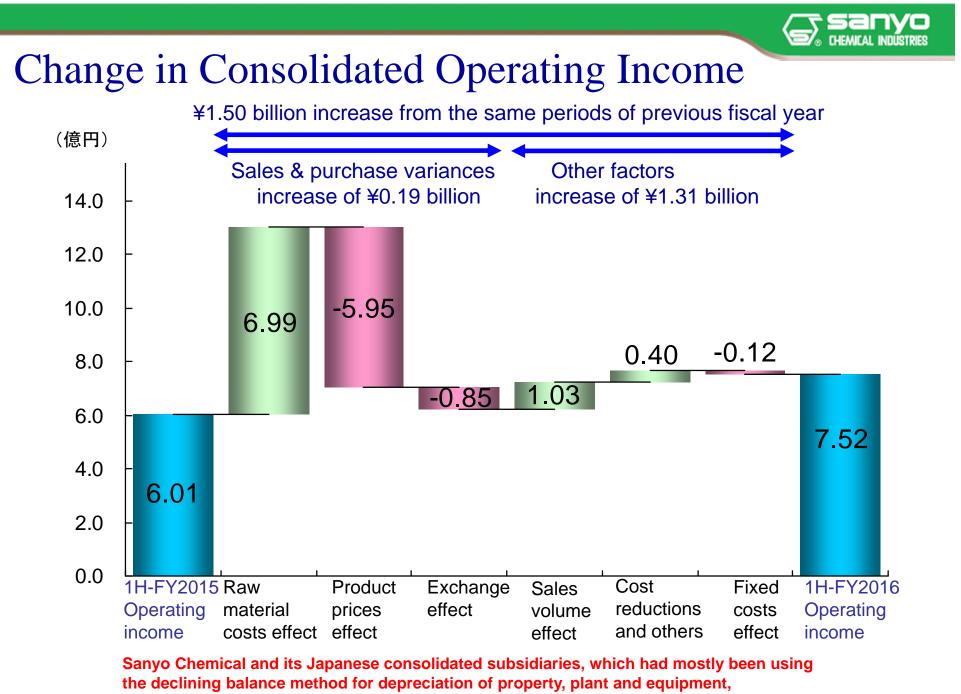
## Results of Operations for 1H in FY2016

(Billions of yen)

Consolidated	Apr	Sept.	Year on Year Change		
Consolidated	FY2015 FY2016		Amount	Ratio (%)	
Net sales	78.43	72.03	(6.39)	(8)	
Operating income	6.01	7.52	1.50	25	
Ordinary income	6.52	7.46	0.93	14	
Profit attributable to owners of parent	3.59	5.15	1.55	43	
Comprehensive income	2.32	1.40	(0.91)	(40)	

(Billions of yen)

Non concelidated	Apr	Sept.	Year on Year Change		
Non-consolidated	FY2015	FY2016	Amount	Ratio (%)	
Net sales	49.67 47.66		(2.01)	(4)	
Operating income	2.72	4.13	1.41	52	
Ordinary income	4.02	5.35	1.33	33	
Net income	2.99	4.23	1.23	41	



adopted the straight-line method from this consolidated fiscal year.

<sup>10</sup> 

## Change in Consolidated Net Income

(Billions of yen)

	AprS	Year on Year	
	FY2015	FY2016	Change
Operating income	6.01	7.52	1.50
Equity in losses or earnings of unconsolidated subsidiaries and affiliates	0.16	0.42	0.26
Gain or loss on foreign exchange	0.06	(0.91)	(0.98)
Other non-operating profit and loss	0.27	0.42	0.15
Ordinary income	6.52	7.46	0.93
Gain and Loss on disposal/sales of property, plant and equipment	(0.33)	(0.31)	0.01
Other extraordinary income or loss	0.00	0.00	0.00
Income before income taxes and minority interests	6.20	7.15	0.95
Income taxes, etc.	(2.26)	(1.56)	0.69
Profit attributable to non-controlling interests	(0.34)	(0.43)	(0.09)
Profit attributable to owners of parent	3.59	5.15	1.55



## **Consolidated Balance Sheet**

(Billions of yen)

	Mar. 31 2016	Sept. 30 2016	Changed amount	Main Change Factor*
Current assets	80.9	81.5	0.5	Cash and deposits: 0.9, Notes and accounts receivable-trade, and Electronically recorded monetary claims-operating: (1.4), Inventories: 0.7
Fixed assets	94.3	91.5	(2.7)	Property, plant and equipment: (2.2)
Assets	175.3	173.1	(2.1)	
Current liabilities	42.7	40.8	(1.9)	Notes and accounts payable-trade, and Electronically recorded obligations-operating: (1.3), Short-term debt: 1.3, Accounts payable-facilities: (1.7)
Long-term liabilities	14.2	13.2	(1.0)	Long-term debt: (0.8)
Liabilities	57.0	54.1	(2.9)	
Shareholder's equity	99.6	104.1	4.4	Profit: 5.1, Cash dividends paid: (0.9),
Other comprehensive	12.3	9.2	(3.1)	Unrealized gains on other securities: 0.4, Foreign currency translation adjustment: (3.5)
Non-controlling interests	6.2	5.6	(0.6)	
Net assets	118.2	119.0	0.7	
Total Liabilities and net assets	175.3	173.1	(2.1)	

\* Each figure indicates the changed amount.

### **Consolidated Cash Flows**

(Billions of yen)

 $\langle \Box \rangle$ 

	April-Sept.		Changed	Special Instruction
	FY2015	FY2016	amount	
Operating activities	12.8	9.0	(3.8)	
Income before income taxes and minority interests	6.2	7.1	0.9	
Depreciation and amortization	4.3	3.5	(0.8)	
Equity in earning of unconsolidated subsidiaries and affiliates	(0.1)	(0.4)	(0.2)	
(Increase) decrease in operating capital	4.3	(0.5)	(4.8)	Decrease (increase) in inventories: (3.0)
Income taxes	(1.0)	(1.7)	(0.6)	
Others	(0.7)	1.0	1.7	
Investing activities	(5.7)	(6.6)	(0.8)	
Free cash flows	7.1	2.4	(4.6)	
Financing activities	(5.3)	0.2	5.5	(1H in FY2016) Loans, Repayment: 1.4 (1H in FY2015) Loans, Repayment: (4.2)
Effect of exchange rate changes on cash and cash equivalents	0.0	(1.1)	(1.2)	
Increase (decrease) in cash and cash equivalents	1.8	1.5	(0.3)	
Cash and cash equivalents at beginning of period	16.0	19.3	3.3	
Increase (decrease) in cash and cash equivalents resulting from changes in the fiscal year-end of subsidiaries	-	(0.6)	(0.6)	
Cash and cash equivalents at end of period	17.9	20.3	2.3	

## Forecast for FY2016 and Progress in 1H-FY2016 to Forecast

(Billions of yen)

Consolidated	FY2016 Annual	Ар	rSept. FY2016	FY2015 Annual	
Consolidated	Forecast*	Result	Progress to Forecast(%)	Result	
Net sales	158.00	72.03	46	157.99	
Operating income	13.80	7.52	55	12.48	
Ordinary income	14.50	7.46	51	13.29	
Profit attributable to owners of parent	9.70	5.15	53	6.92	
	*Forecasts annour	nced on April 28	, 2016		
Non-	FY2016 Annual	Ар	rSept. FY2016	FY2015 Annual	
consolidated	Forecast*	Result	Progress to Forecast(%)	Result	
Net sales	99.00	47.66	48	99.69	
Operating income	7.20	4.13	57	5.64	
Ordinary income	9.80	5.35	55	7.88	
Net income	7.80	4.23	54	5.82	

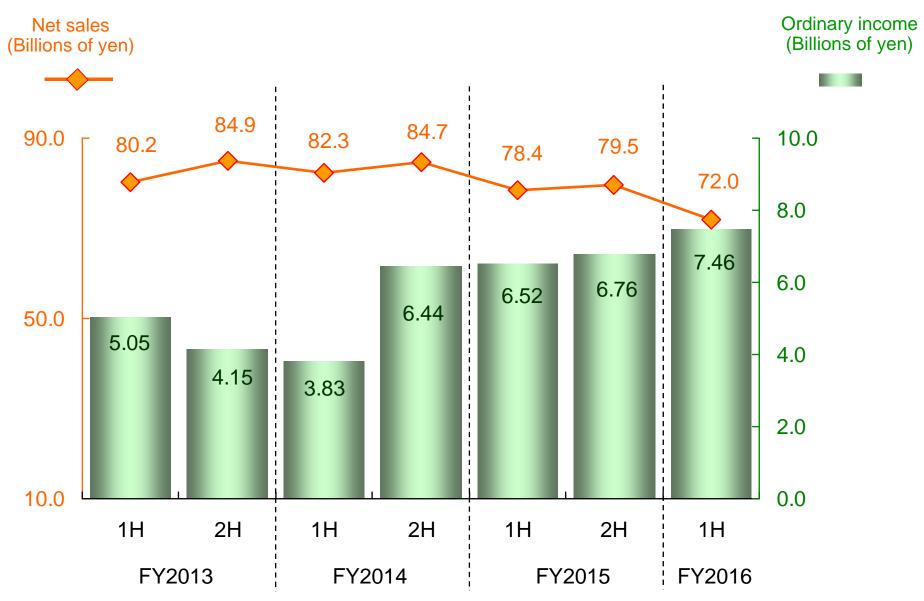
\*Forecasts announced on April 28, 2016

Sanyo Chemical and its Japanese consolidated subsidiaries adopt the straight-line method for depreciation from FY2016. This is expected to result in a decline of approx. ¥1.7 billion in consolidated depreciation and approx. ¥1.4 billion in unconsolidated one.

<Precondition for the forecast>

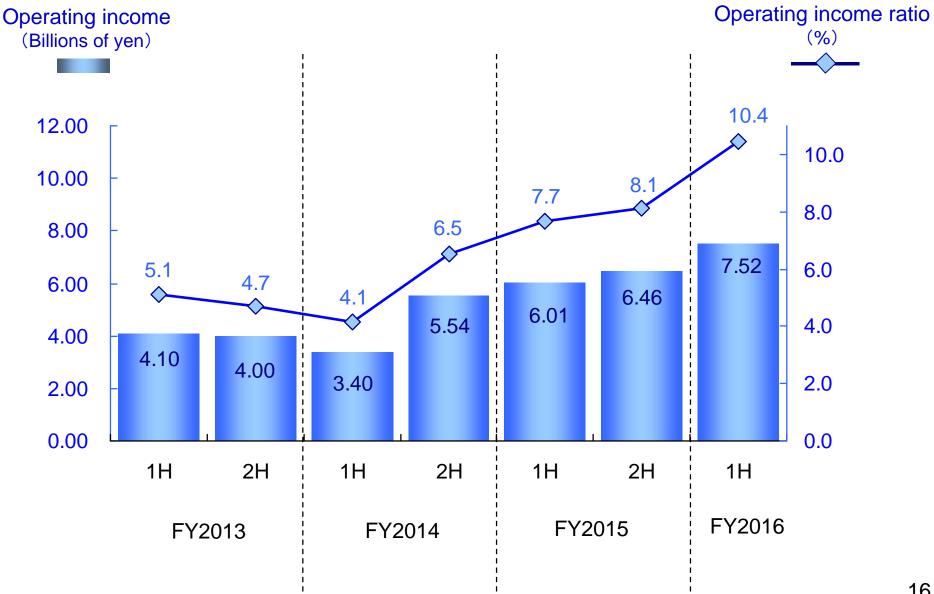
Domestic naphtha price: 35 thousand of Yen/kl, Exchange rate: 105 Yen/US\$

#### **Consolidated Business Result Trend**



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## **Consolidated Operating Income Trend**



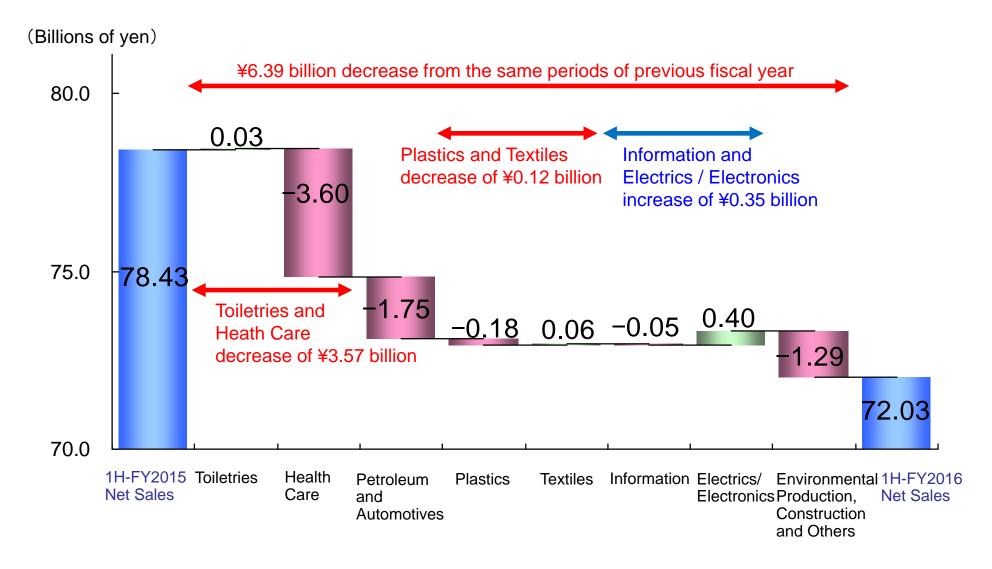
## Results of Operations by Product Group for 1H in FY2016

(Billions of yen)

STRIES

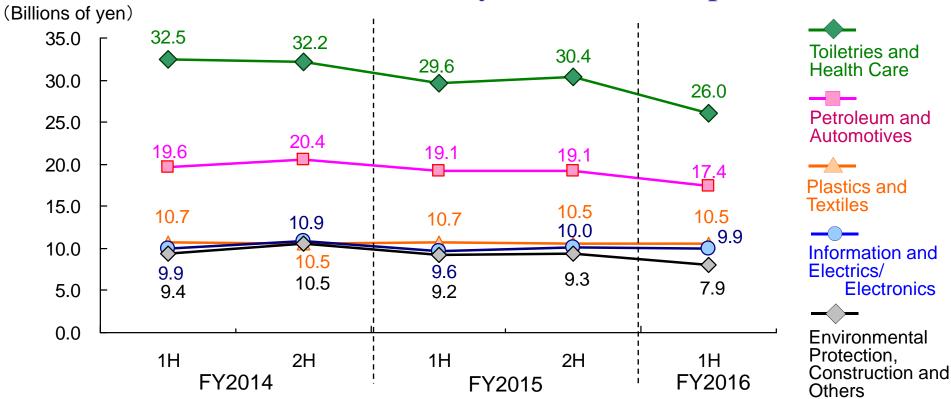
		Net Sales		Operating Income			
Product Group	AprSept.	AprSept.	•	AprSept.	AprSept.	<u> </u>	
	FY2015	FY2016	Amount	FY2015	FY2016	Amount	
Toiletries and Health Care	29.63	26.06	(3.57)	2.40	2.54	0.14	
Toiletries	6.43	6.47	0.03				
Health Care	23.19	19.59	(3.60)				
Petroleum and Automotives	19.16	17.40	(1.75)	0.92	0.80	(0.11)	
Plastics and Textiles	10.71	10.59	(0.12)	1.56	2.09	0.53	
Plastics	7.29	7.11	(0.18)				
Textiles	3.41	3.48	0.06				
Information and Electrics/Electronics	9.62	9.97	0.35	0.70	1.53	0.83	
Information	6.64	6.58	(0.05)				
Electrics/Electronics	2.97	3.38	0.40				
Environmental Protection, Construction and Others	9.29	7.99	(1.29)	0.42	0.53	0.11	
Total	78.43	72.03	(6.39)	6.01	7.52	1.50	

## Change in Consolidated Net Sales by Product Group



CHEMICAL INDÚSTRIES

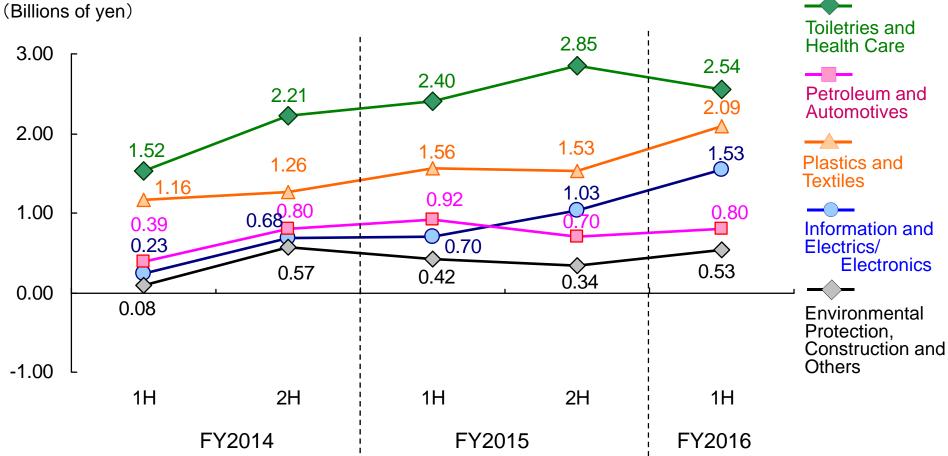
#### Consolidated Net Sales Trend by Product Group



The main change factor of Results in 1H-FY2016 (year on year change)

/		
/	Toiletries and Health Care	: Sales decreased mainly because of appropriate sales price to respond to a fall in raw materials costs, though demand for superabsorbent polymers remained steadily.
	Petroleum and Automotives	: Sales decreased due to appropriate sales price to respond to a fall in raw materials costs for polyurethane foams (PPG), despite sales expansion of thermoplastic polyurethane beads for the interior parts of automobiles (TUBs).
	Plastics and Textiles	: Sales remained unchanged due to stagnant sales of permanent antistatic agents, and polyurethane resins used for synthetic leather and elastomer fiber, despite brisk sales of resin modifiers and agents used in textile manufacturing processes for industrial materials.
	Information and Electrics / Electronics	: Sales remained unchanged because of sales decrease of toner resins for pulverized toners in Europe and the United States, despite brisk sales of electrolytes for aluminum electrolytic capacitors and pressure-sensitive adhesives using for electronic components in addition to temporary increases of demand for polyester beads as a core component of polymerization toners.
	Environmental Protection, Construction and Others	: Sales decreased because sales of polymer flocculants remained flat, and sales of PPG and others were weak.

# Consolidated Operating Income Trend by Product Group



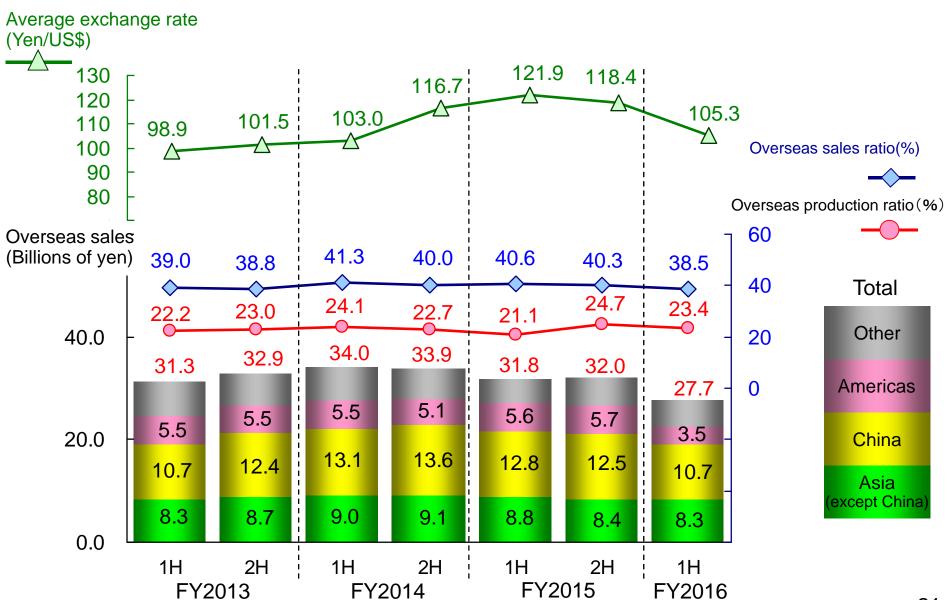
The main change factor of results in 1H-FY2016 (year on year change)

In all segments, profits increased from the same period of the previous fiscal year because of a fall in raw material costs, though the yen got stronger.

On the other hand, profit in the Toiletries and Health Care segment decreased from 2H in the previous fiscal year due to appropriate sales price to respond to a fall in raw materials costs.

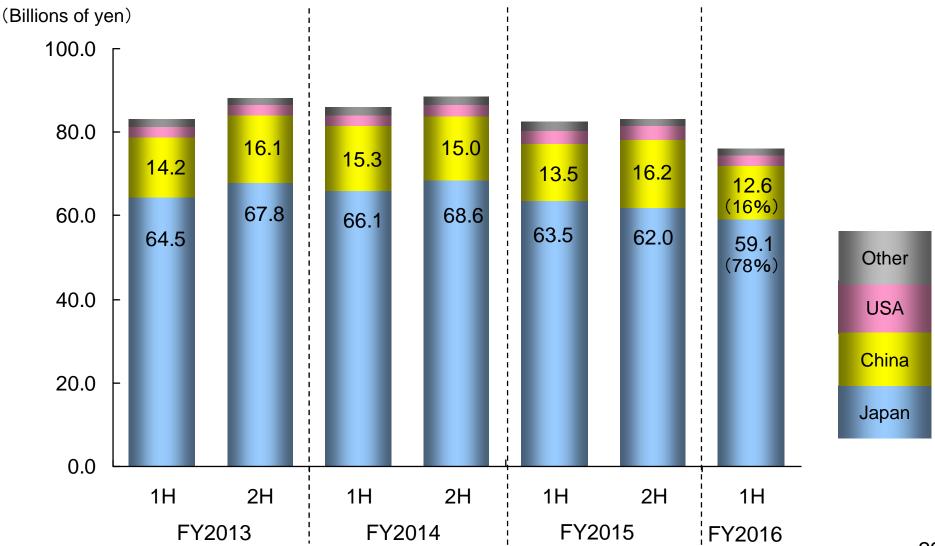


## **Consolidated Overseas Sales Trend**



## Consolidated Net Sales Trend by Geographic Segments

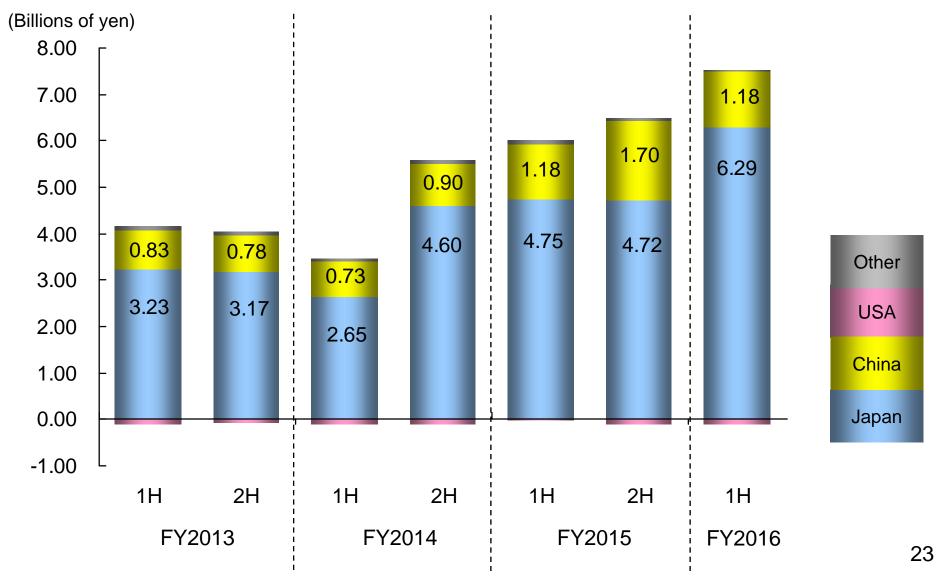
Internal sales among Sanyo Chemical Group are not eliminated.



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#### Consolidated Operating Income Trend by Geographic Segments

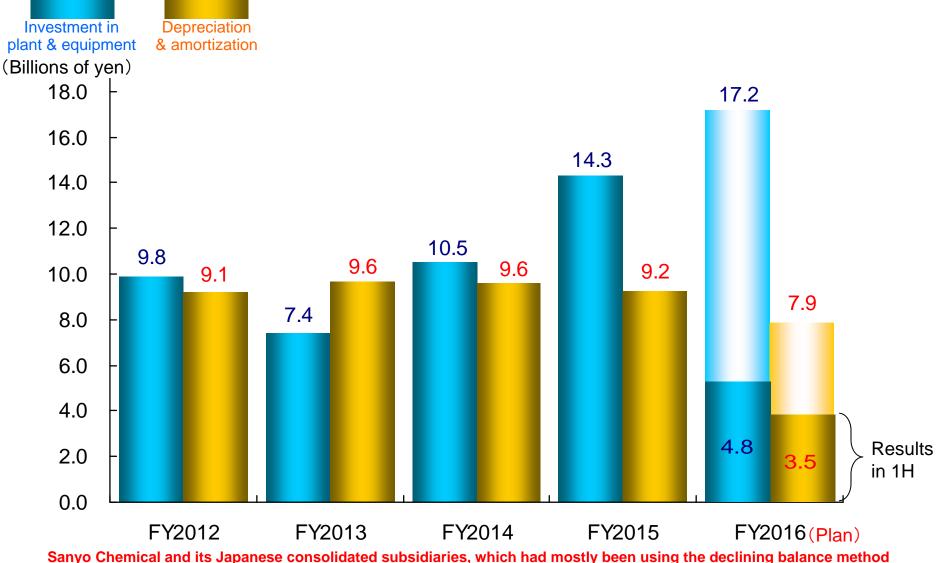
Internal sales among Sanyo Chemical Group are not eliminated.



CHEMICAL INDUSTRIES

## Consolidated Investment in Plant & Equipment,

## and Depreciation & Amortization



for depreciation of property, plant and equipment, adopted the straight-line method from this consolidated fiscal year.

CHEMICAL INDUSTRIES

## Dividends per Share and Consolidated Payout Ratio

		Consolidated Payout Ratio					
	Interim dividend	erim dividend Year-end dividend Annual dividend					
	¥	¥	¥	%			
FY2014	7.50	8.00	15.50	29.1			
FY2015	8.00	9.00	17.00	27.1			
FY2016	9.00	45.0 (Forecast)	_	20.5 (Forecast)			

As Sanyo Chemical conducted a reverse stock split at a ratio of one share for every five shares on October 1, 2016, figures for the dividends per share for FY 2016 are amounts that take into account the reverse stock split, and total annual dividends are shown as "-."

## TOPICS(1)

4 Basic Businesses: Lubricating oil additives business Development of the new products to make a great contribution to the automobile fuel efficiency regulation, ILSAC GF-6

Completion of development of the new products to meet the next engine oil specification, ILSAC GF-6

Under reconstruction of our facilities to manufacture the new products (planed to start operation in 2017)



Main performance of ACLUBE as an additive for lubricating oil is used to improve fuel efficiency in automobiles and other vehicles by reducing the viscosity change of the lubricating oil caused by the temperature, which is known as viscosity index improvers.



## TOPICS(2)

High-Value-Added Products :

Thermoplastic Polyurethane Beads for the Interior Parts of Automobiles (TUBs) In steady sales expansion of TUBs for thinner skins Contribution to the customers' total cost down

by making thinner skins for automobile interiors

Reduction of our manufacturing cost

Conventional way: Coloring before manufacturing beads

Original particle formation process

After improvement: Coloring after manufacturing beads



For the interior parts of automobiles

Cost down due to reduction of switching the manufacturing line!
Detailed response to the customers' various coloring needs!

## TOPICS(3)

## New businesses:

## **Biotechnology and Medical Businesses**

## Functional protein, silk-elastin polymers

## Step up to verification phase of practicability.

Adopted by AMED\* as their funding program, ACT-M: <u>AC</u>celeration of <u>Transformative research for Medical innovation</u>.

Evaluated the probability of silk-elastin polymers to be an effective treatment of intractable cutaneous ulcers, which were difficult to remedy by the conventional treatments.

AMED\*: Japan Agency for Medical Research and Development

This product can be prepared in various forms.



Liquid type



Sponge type



Film type



## TOPICS(3)

New businesses:

Biotechnology and Medical Businesses In-vitro diagnostic agent for Ulcerative Colitis

Japan's first approval !



Reduction of the number of endoscopic examination to monitor the disease course, and patients' physical and economic burdens.

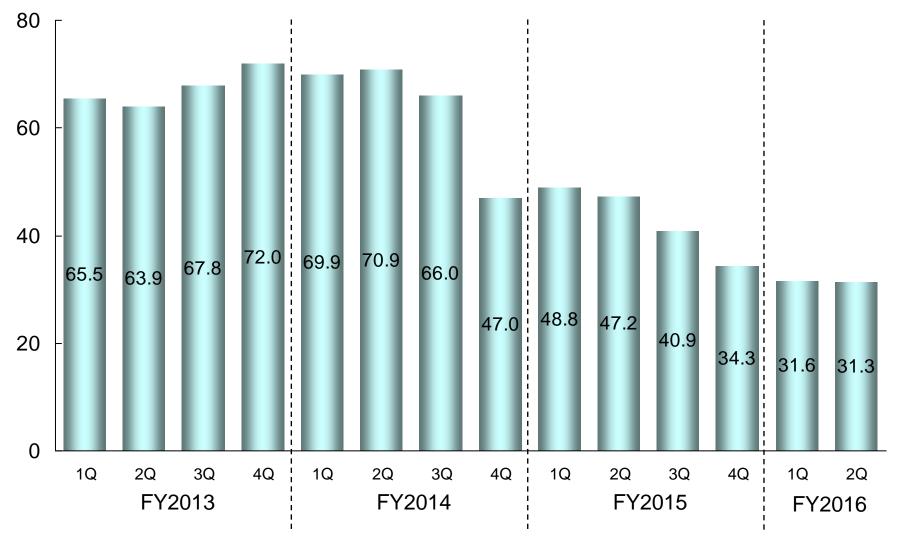
# Expansion of lineup in Biotechnology and Medical Businesses!!



# Reference

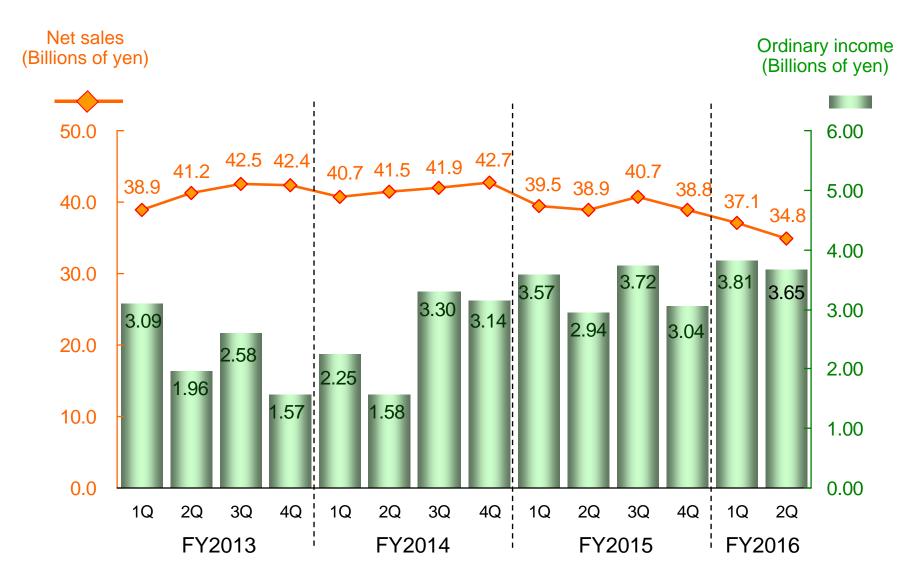
## Transition of Price of Domestically Produced Naphtha

Domestic naphtha price (Thousands of yen/kl)



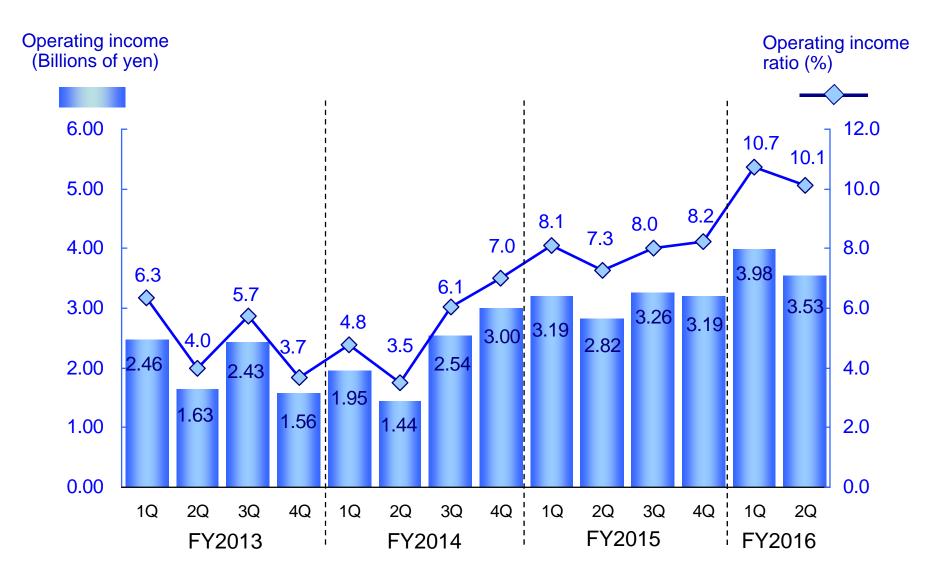
(Ref.-1)

#### **Consolidated Business Result Trend**



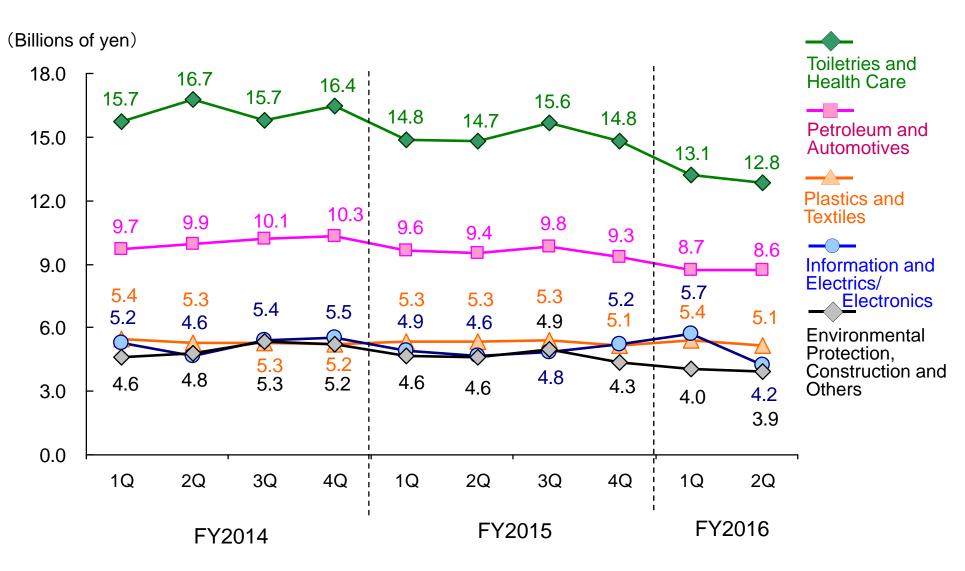
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## **Consolidated Operating Income Trend**

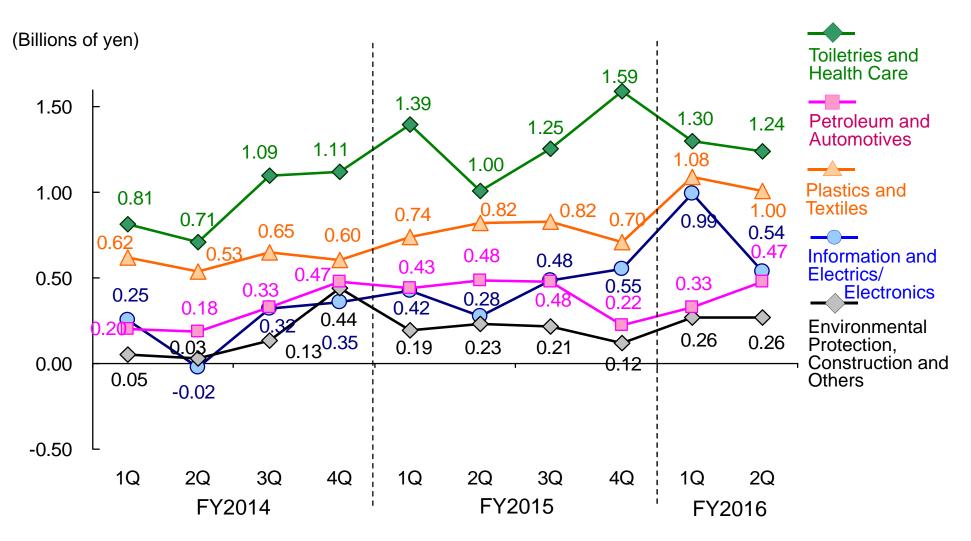


(Ref.-3)

## Consolidated Net Sales Trend by Product Group

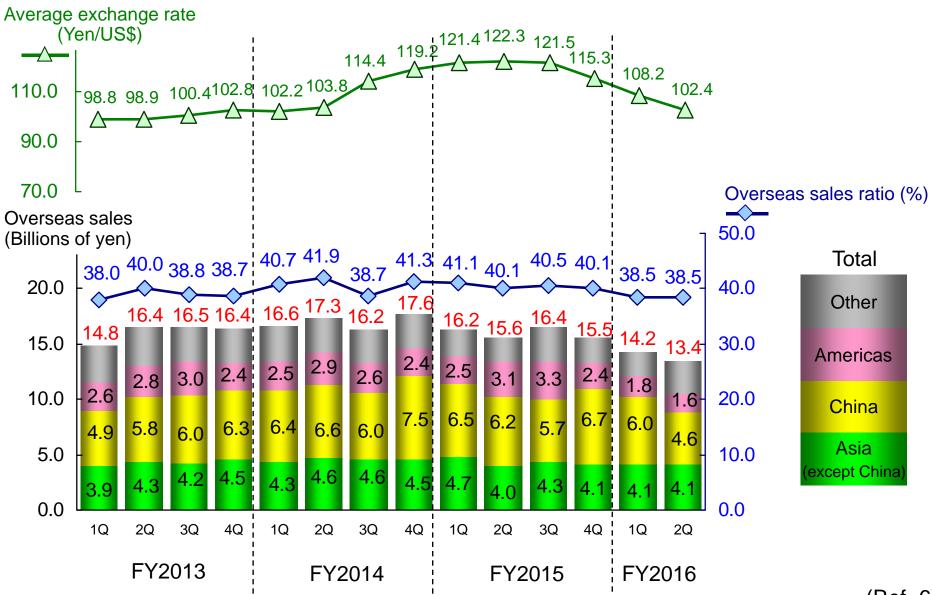


## Consolidated Operating Income Trend by Product Group





#### **Consolidated Overseas Sales Trend**



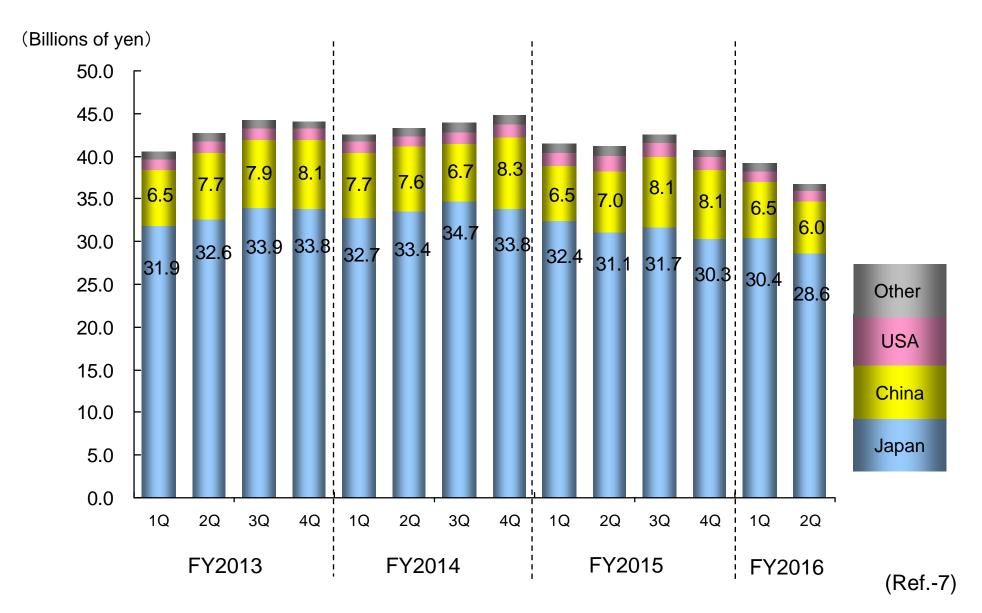
(Ref.-6)

## Consolidated Net Sales Trend by Geographic Segments

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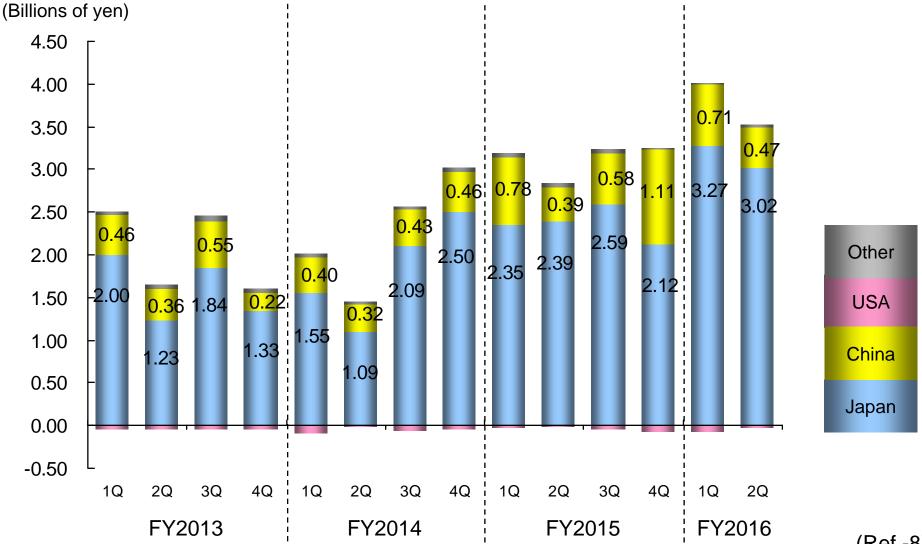
CHEMICAL INDUSTRIES

Internal sales among Sanyo Chemical Group are not eliminated.



#### Consolidated Operating Income Trend by Geographic Segments

Internal sales among Sanyo Chemical Group are not eliminated.



(Ref.-8)

## Results of Operations by Geographic Segments

## for 1H in FY2016

(Billions of yen)

		Net Sales		Operating income			
	AprSept. FY2015			AprSept. FY2015	AprSept. FY2016	Changed Amount	
Japan	63.57	59.17	(4.39)	4.75	6.29	1.54	
USA	3.38	2.43	(0.94)	(0.03)	(0.10)	(0.07)	
China	13.55 12.69		(0.85)	1.18	1.18	0.00	
Other (Thailand)	2.02	2.02 1.62		0.08	0.04	(0.03)	
Total*	78.43	72.03	(6.39)	6.01	7.52	1.50	

\* Internal sales among segments are eliminated.

## Domestic Consolidated Subsidiaries (5 companies)

Company Name	Abbr.	Equity Ownership		Line of Business
SDP Global Co., Ltd.	SDP	Sanyo Chemical Toyota Tsusho		Manufacture and sales of superabsorbent polymers
SAN NOPCO LIMITED	SNL	Sanyo Chemical	100%	Manufacture and sales of agents for pulp & paper, coating agents, a wide range of industrial agents, etc.
San Chemical Co., Ltd.	SCC	Sanyo Chemical JX Nippon Oil & Energy		Manufacture of raw materials for polyurethane foams, etc.
San-Apro Ltd.	SA	Sanyo Chemical Air-Products	50% 50%	Manufacture and sales of curing accelerators for epoxy resins, urethane catalysts, etc.
Sanyo Transport Co., Ltd.	_	Sanyo Chemical	100%	General trucking

## Overseas Consolidated Subsidiaries (8 companies)



Company Name	Abbr.	Equity Ownership		Line of Business
Sanyo Kasei (Nantong) Co., Ltd. [China]	SKN	Sanyo Chemical	100%	Manufacture of surfactants, polyurethane resins, etc.
San-Dia Polymers (Nantong) Co., Ltd. [China]	SDN	SDP Global	100%	Manufacture and sales of superabsorbent polymers
Sanyo Chemical (Shanghai) Trading Co., Ltd. [China]	SCST	Sanyo Chemical	100%	Sales of surfactants, polyurethane resins, etc.
Sanyo Kasei (Thailand) Ltd. [Thailand]	SKT	Sanyo Chemical Toyota Tsusho and others	89% 11%	Manufacture and sales of surfactants, polyurethane resins, etc.
SANAM Corporation [USA]	SANAM	Sanyo Chemical	100%	Holding company of U.S. consolidated subsidiaries. Sales of lubricating oil additives, toner resins, etc.
Sanyo Chemical &Resins, LLC [USA]	SCR	SANAM	100%	Manufacture of lubricating oil additives
Sanyo Chemical Texas Industries, LLC [USA]	SCTI	SANAM	100%	Manufacture of polyurethane beads
SDP GLOBAL (MALAYSIA) SDN.BHD. [Malaysia]		SDP Global	100%	Manufacture and sales of superabsorbent polymers

# Subsidiaries and Affiliates Accounted for by Equity Method (5 companies)

Company Name	Abbr.	Equity Ownership		Line of Business
San-Petrochemicals Co., Ltd.	SPCC	Sanyo Chemical JX Nippon Oil & Energy		Manufacture of raw materials for synthetic rubbers
Sunrise Chemical LLC [USA]	SRC	SANAM 50% JX Nippon Chemical Texas 50%		Manufacture of raw materials for synthetic rubbers
Nagoya Sanyo Warehouse Co., Ltd.	_	Sanyo Chemical 1	100%	Warehousing
Shiohama Chemicals Warehouse Co., Ltd.	_	Sanyo Chemical JX Nippon Oil & Energy	50% 50%	Warehousing
Sanliving Ltd.	SL	Sanyo Chemical 1	100%	Real estate, insurance and agency