

**A Statement of Accounts**  
**For the Six Months Ended September 30, 2014**  
**1st Half Fiscal Year 2014**  
**(1H-FY2014)**

**SANYO CHEMICAL INDUSTRIES, LTD.**

**Takao Ando, President**

<http://www.sanyo-chemical.co.jp/>

Code: 4471



<Notice>

Yen amounts described in this presentation material are rounded down.  
Ratios described in this presentation material are rounded off.

<Cautionary Statement with Respect to Forward-Looking Statement>

This presentation material contains projections based on the assumptions, forward-looking statements and plans about the future of SANYO CHEMICAL INDUSTRIES, LTD. as of November 13, 2014. 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)

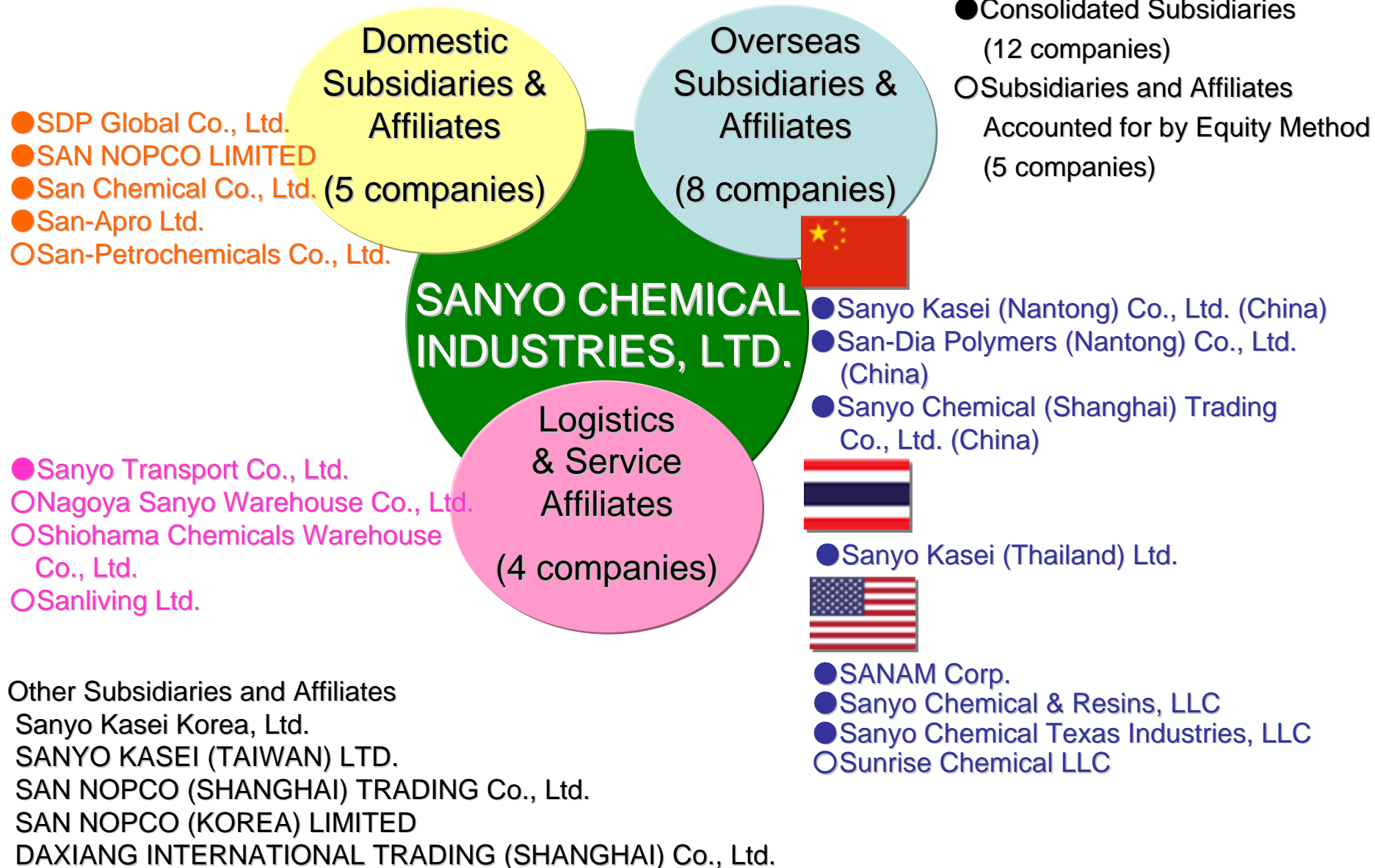
Consolidated Number of Employees:

1,964 (as of September 30, 2014)

Line of Business:

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

# Sanyo Chemical Group



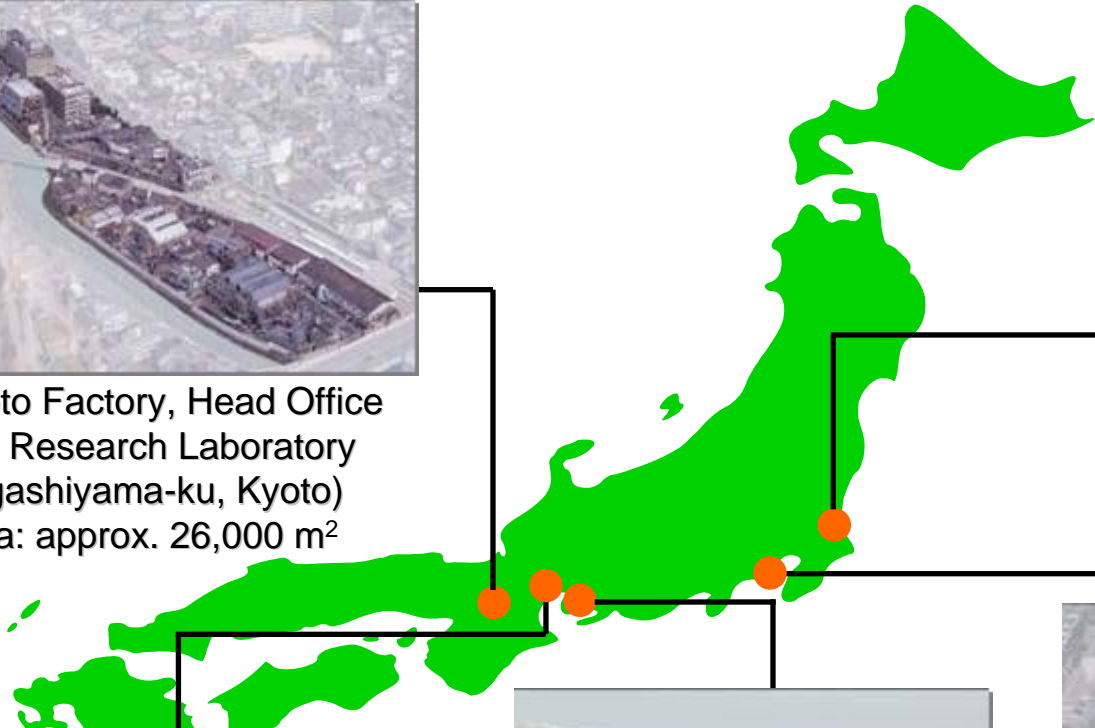
# Domestic Production Bases



Kyoto Factory, Head Office and Research Laboratory (Higashiyama-ku, Kyoto)  
Area: approx. 26,000 m<sup>2</sup>



Kashima Factory (Kamisu, Ibaraki)  
Area: approx. 130,000 m<sup>2</sup>



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




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



San Chemical Co., Ltd. Kawasaki Factory (Kawasaki, Kanagawa)  
Area: approx. 11,000 m<sup>2</sup>



# Overseas Production Bases

 Sanyo Kasei (Nantong) Co., Ltd.



 San-Dia Polymers (Nantong) Co., Ltd.



 Sanyo Kasei (Thailand) Ltd.



 Sanyo Chemical Texas Industries, LLC



 Sanyo Chemical & Resins, LLC


# Overseas Sales Office



 Sanyo Chemical (Shanghai) Trading Co., Ltd.

 SAN NOPCO (SHANGHAI) TRADING Co., Ltd.

 Sanyo Kasei Korea, Ltd.

 SAN NOPCO (KOREA) LIMITED



 Sanyo Kasei (Thailand) Ltd.



 SANYO KASEI (TAIWAN) LTD.



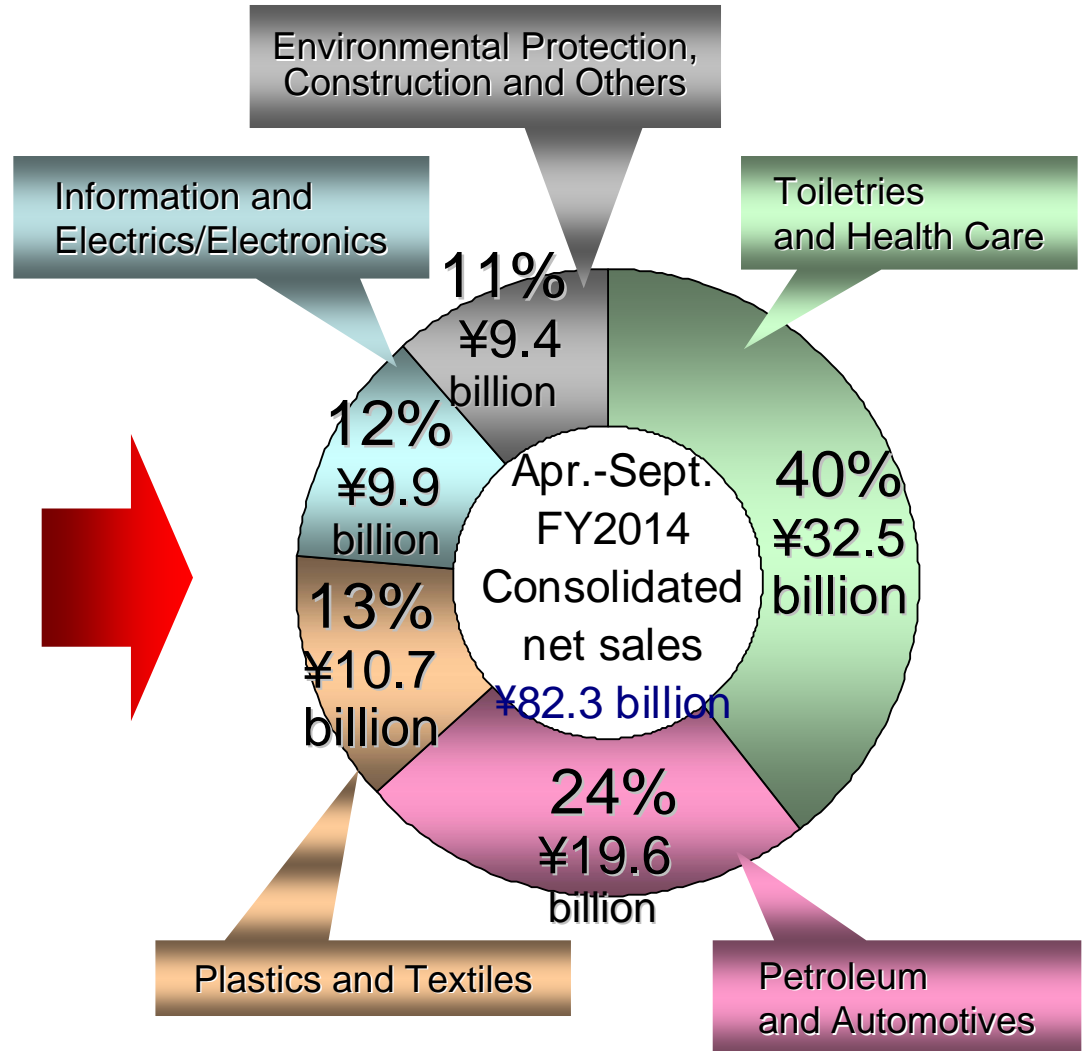
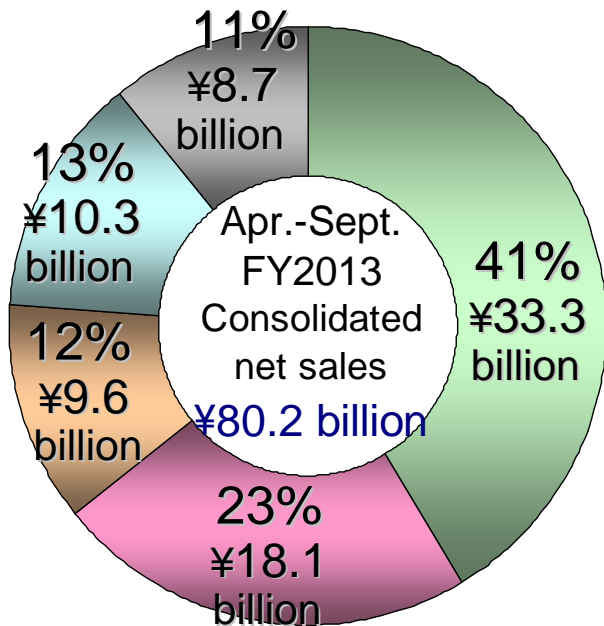
 SANAM Corp.

# Principal Products by Product Group

Class.	Sub-Category	Principal Products
Toiletries and Health Care	Toiletries	Surfactants for Detergents, Surfactants for Hair Care Products, Agents for Papermaking
	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 Textiles	Plastics	Permanent Antistatic Agents, Pigment Dispersants, Resin Modifiers, Base Materials for Polyurethane Elastomers, Paint Resins, Chemical Boards for Models
	Textiles	Agents for Textile Manufacturing, Chemicals for Carbon Fibers, Agents for Fiberglass, Polyurethane Resins for Synthetic Leather
Information and Electrics /Electronics	Information	Polyester Beads (PEBs) Used as a Core Component of Polymerization Toners, Toner Resins
	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, 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



# Results of Operations for 1H-FY2014

(Billions of yen)

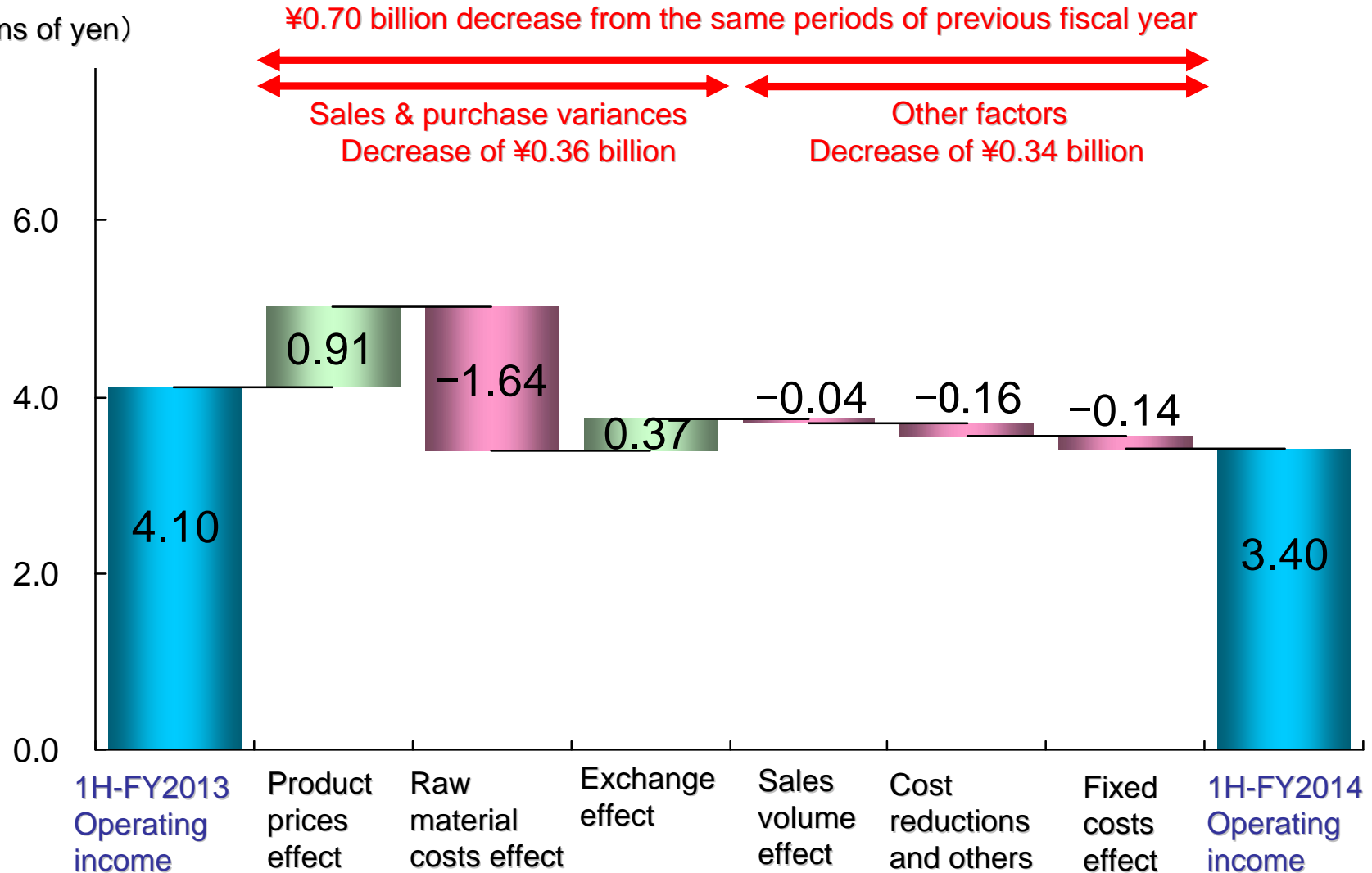
Consolidated	Apr.-Sept.		Year on Year Change	
	FY2013	FY2014	Amount	Ratio (%)
Net sales	80.23	82.31	2.08	3
Operating income	4.10	3.40	(0.70)	(17)
Ordinary income	5.05	3.83	(1.22)	(24)
Net income	2.93	2.27	(0.65)	(22)
Comprehensive income	6.97	2.46	(4.50)	(65)

(Billions of yen)

Non-consolidated	Apr.-Sept.		Year on Year Change	
	FY2013	FY2014	Amount	Ratio (%)
Net sales	49.25	51.58	2.33	5
Operating income	1.71	1.30	(0.41)	(24)
Ordinary income	2.84	2.38	(0.45)	(16)
Net income	2.11	1.73	(0.38)	(18)

# Change in Consolidated Operating Income

(Billions of yen)



# Change in Consolidated Net Income

(Billions of yen)

	Apr.-Sept.		Year on Year Change
	FY2013	FY2014	
Operating income	4.10	3.40	(0.70)
Equity in earnings of unconsolidated subsidiaries and affiliates	0.15	0.33	0.17
Gain or loss on foreign exchange	0.39	0.07	(0.31)
Other non-operating profit and loss	0.40	0.01	(0.38)
Ordinary income	5.05	3.83	(1.22)
Gain and Loss on disposal/sales of property, plant and equipment	(0.29)	(0.32)	(0.03)
Other extraordinary income or loss	0.02	0.01	(0.01)
Income before income taxes and minority interests	4.78	3.52	(1.26)
Income taxes, etc.	(1.40)	(0.94)	0.45
Minority interests	(0.44)	(0.29)	0.15
Net income	2.93	2.27	(0.65)



# Consolidated Balance Sheet

(Billions of yen)

	Mar. 31 2014	Sept. 30 2014	Changed amount	Main Change Factor*
Current assets	81.2	82.6	1.3	Cash and deposits: 0.4, Notes and accounts receivable-trade: 0.1, Inventories: 0.1
Fixed assets	85.2	84.5	(0.7)	Property, plant and equipment: (1.8) Investment securities: 1.3
<b>Assets</b>	<b>166.5</b>	<b>167.1</b>	<b>0.6</b>	
Current liabilities	53.8	52.6	(1.2)	Notes and accounts payable-trade: 0.9, Short-term debt: (1.1), Income taxes payable: (0.4)
Long-term liabilities	8.7	8.7	0.0	Long-term debt: 0.5, Net defined benefit liability: (1.0), Deferred tax liabilities: 0.7
<b>Liabilities</b>	<b>62.6</b>	<b>61.4</b>	<b>(1.1)</b>	
Shareholder's equity	89.9	91.7	1.8	Net income: 2.2, Cash dividends paid: (0.8)
Other comprehensive income	9.2	9.3	0.1	Unrealized gains on other securities: 0.8, Foreign currency translation adjustment: (0.8)
Minority interests	4.7	4.6	(0.1)	
<b>Net assets</b>	<b>103.9</b>	<b>105.7</b>	<b>1.8</b>	
<b>Total Liabilities and net assets</b>	<b>166.5</b>	<b>167.1</b>	<b>0.6</b>	

\* Each figure indicates the changed amount.

# Consolidated Cash Flows

(Billions of yen)

	Apr.-Sept.		Changed amount	Main Change Factor*
	FY2013	FY2014		
Operating activities	7.7	5.7	(2.0)	
Income before income taxes and minority interests	4.7	3.5	(1.2)	
Depreciation and amortization	4.5	4.6	0.0	
Equity in earning of unconsolidated subsidiaries and affiliates	(0.1)	(0.3)	(0.1)	
(Increase) decrease in operating capital	0.2	0.3	0.0	
Income taxes	(1.1)	(1.3)	(0.1)	
Others	(0.5)	(0.9)	(0.4)	
Investing activities	(4.7)	(3.7)	0.9	
Free cash flows	3.0	2.0	(1.0)	
Financing activities	(2.0)	(1.2)	0.7	(1H in FY2014) Loans, Repayment: (0.2), Cash dividends paid: (0.8)
Effect of exchange rate changes on cash and cash equivalents	0.3	(0.3)	(0.6)	
Increase (decrease) in cash and cash equivalents	1.3	0.4	(0.8)	
Cash and cash equivalents at beginning of period	10.1	15.4	5.3	
Cash and cash equivalents at end of period	11.4	15.9	3.6	

\* Each figure indicates the changed amount.

# Forecast for FY2014

(Billions of yen)

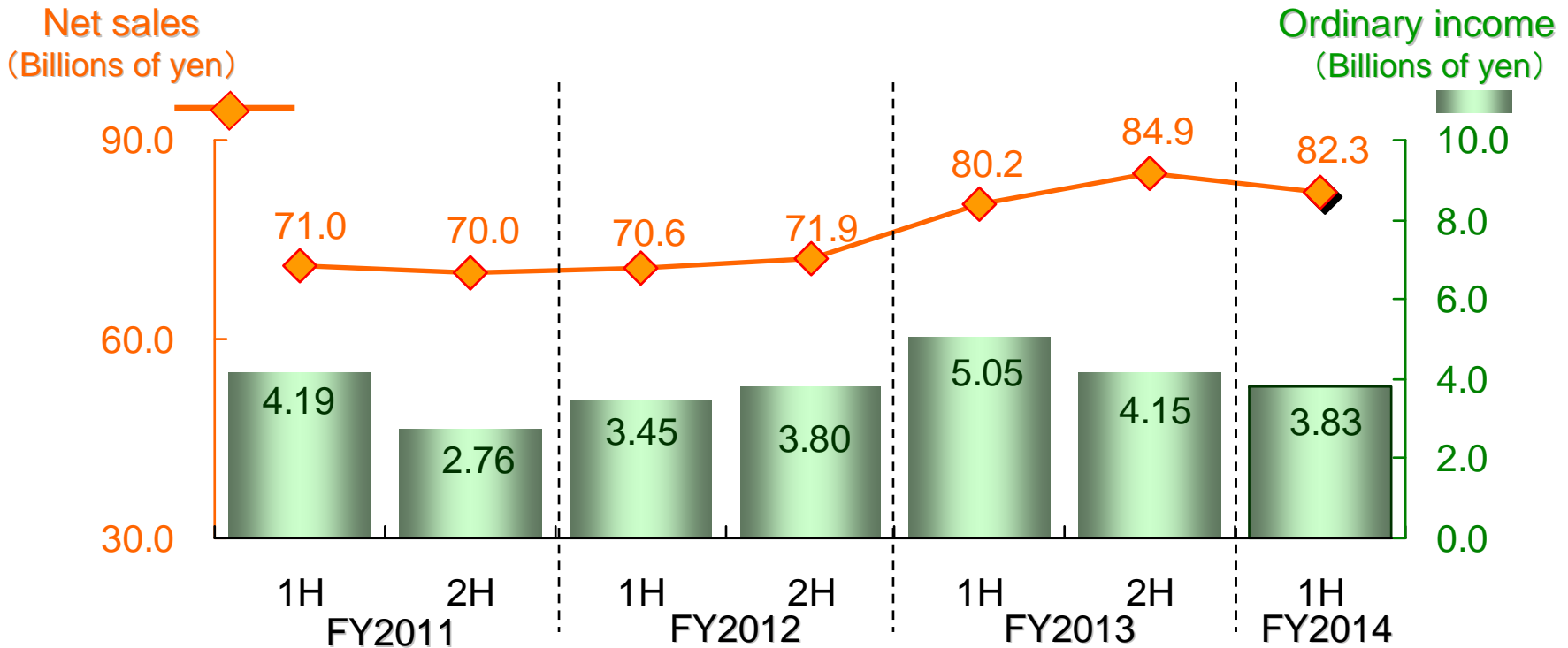
Consolidated	FY2014 Annual	Apr.-Sept. FY2014		FY2013 Annual
	Forecast	Result	Progress to Forecast(%)	Result
Net sales	172.00	82.31	48	165.18
Operating income	8.80	3.40	39	8.11
Ordinary income	10.00	3.83	38	9.21
Net income	6.00	2.27	38	4.91

Non-consolidated	FY2014 Annual	Apr.-Sept. FY2014		FY2013 Annual
	Forecast	Result	Progress to Forecast(%)	Result
Net sales	105.00	51.58	49	102.14
Operating income	3.50	1.30	37	3.21
Ordinary income	5.50	2.38	43	5.36
Net income	4.00	1.73	43	(0.26)

	Precondition*	1H-FY2014	2H-FY2014(Forecast)
Price of Domestically Produced Naphtha (¥1,000/kl)	67.0	70.4	~60.0~
Exchange rate (¥/\$)	102.0	103.0	~110~

\* Each figure indicates at the beginning of the period

# Consolidated Business Trend



	FY2012				FY2013				FY2014	
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q
Price of Domestically Produced Naphtha (¥1,000/kl)	60.6	49.8	55.8	63.8	65.5	63.9	67.8	72.0	69.9	70.9
Exchange rate (¥/\$)	79.4		86.6		98.9		101.5		103.0	

The main change factor of Results in 1H-FY2014 (year on year change)

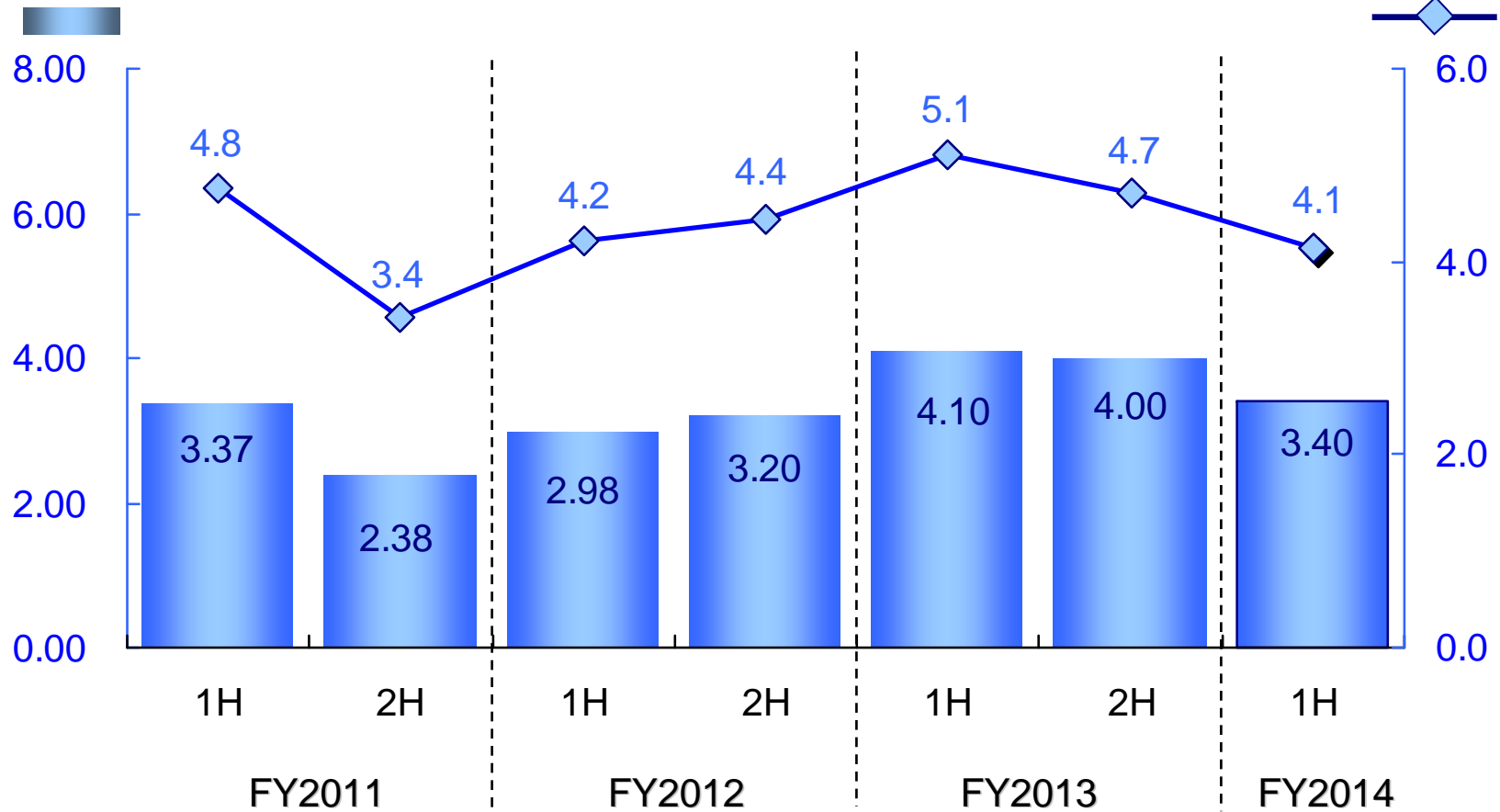
- Net sales increased mainly due to sales expansion of automobile-related products such as PPG.
- Ordinary income decreased mainly because raw material and fuel costs were higher than ones of the same period of the previous fiscal year and exchange gain decreased.



# Consolidated Operating Income Trend

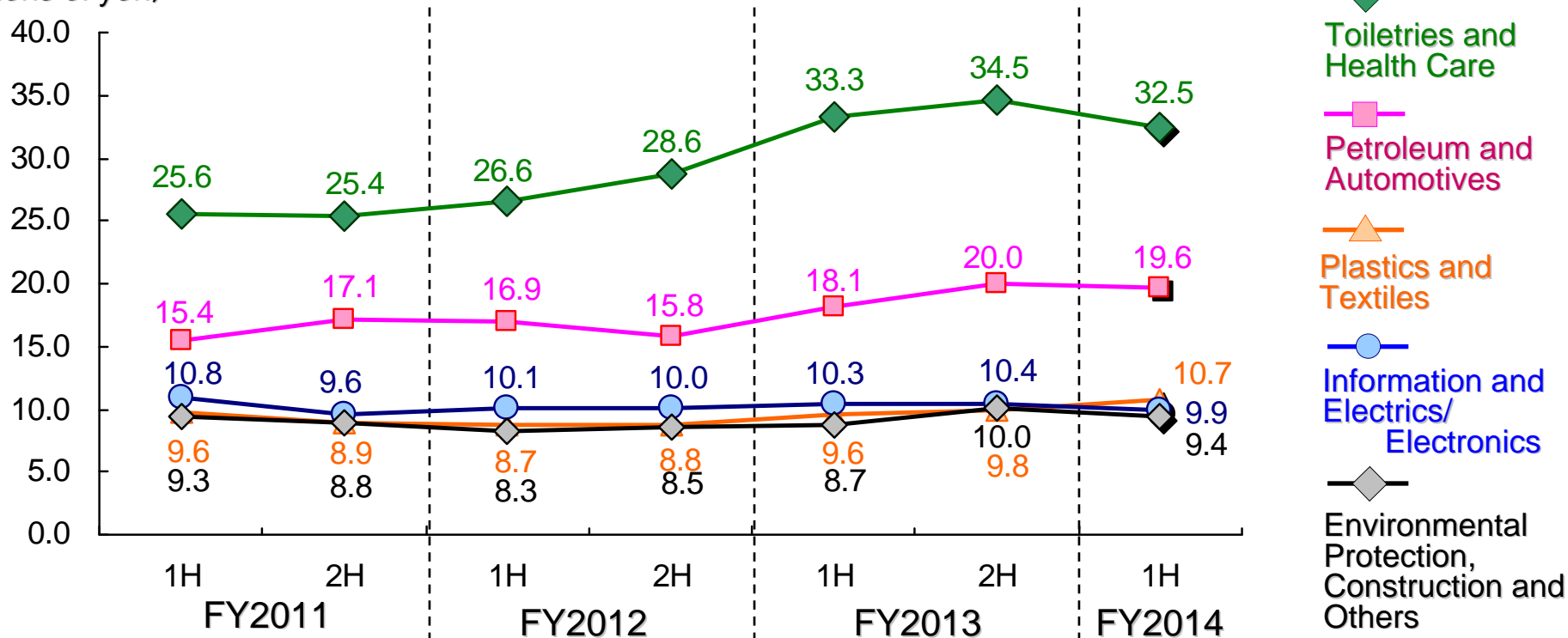
Operating income  
(Billions of yen)

Operating income ratio  
(%)



# Consolidated Net Sales Trend by Product Group

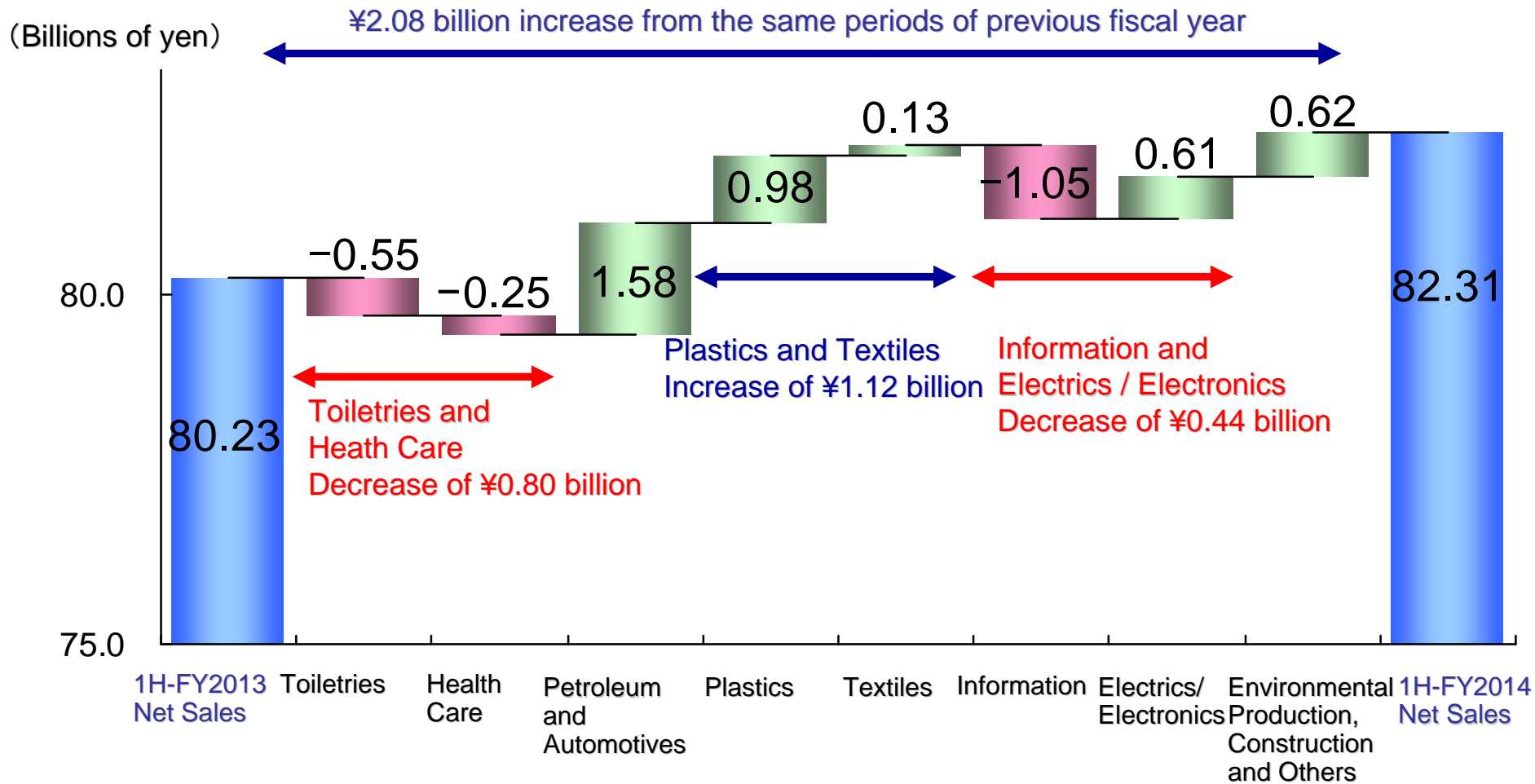
(Billions of yen)



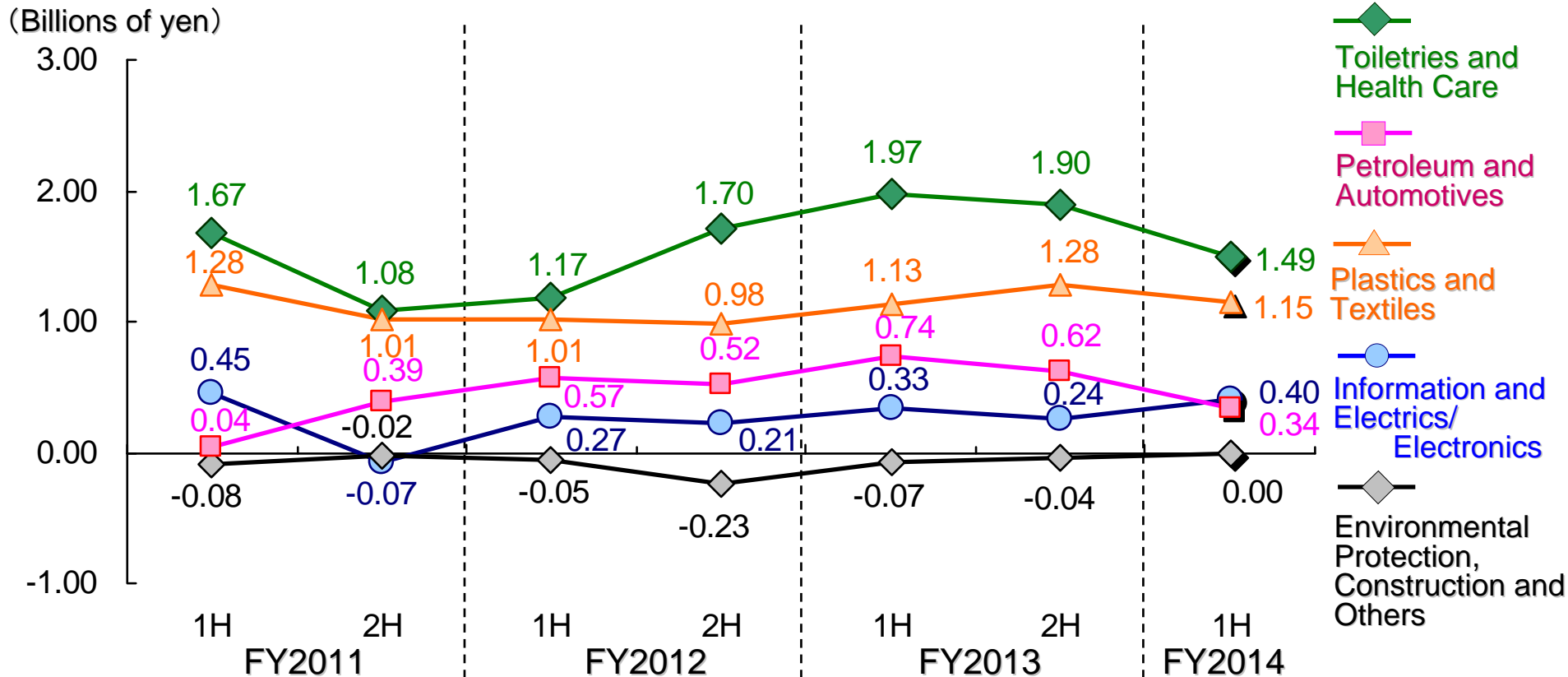
The main change factor of Results in 1H-FY2014 (year on year change)

- Toiletries and Health Care** : Sales decreased because surfactants for hair care products intensified price competition.
- Petroleum and Automotives** : Sales increased because sales of PPG significantly expanded overseas and new plant equipments of lubricating oil additives have operated successfully in USA.
- Plastics and Textiles** : Sales increased due to healthy sales of paint, coating agents, permanent antistatic agents and carbon fiber agents.
- Information and Electrics / Electronics** : Sales decreased because demand for polyester beads as a core component of polymerization toners decreased temporarily and overseas production of pulverized toner resins was abandoned despite recovery in demand for electrolytes for aluminum electrolytic capacitors and brisk sales of FPD resins and adhesives for electronic components.
- Environmental Protection, Construction and Others** : Sales increased due to brisk sales of raw materials for building sealants and for polyurethane foams used in furniture and heat insulating materials despite weak sales of polymer flocculant.

# Change in Consolidated Net Sales by Product Group



# Consolidated Operating Income Trend by Product Group



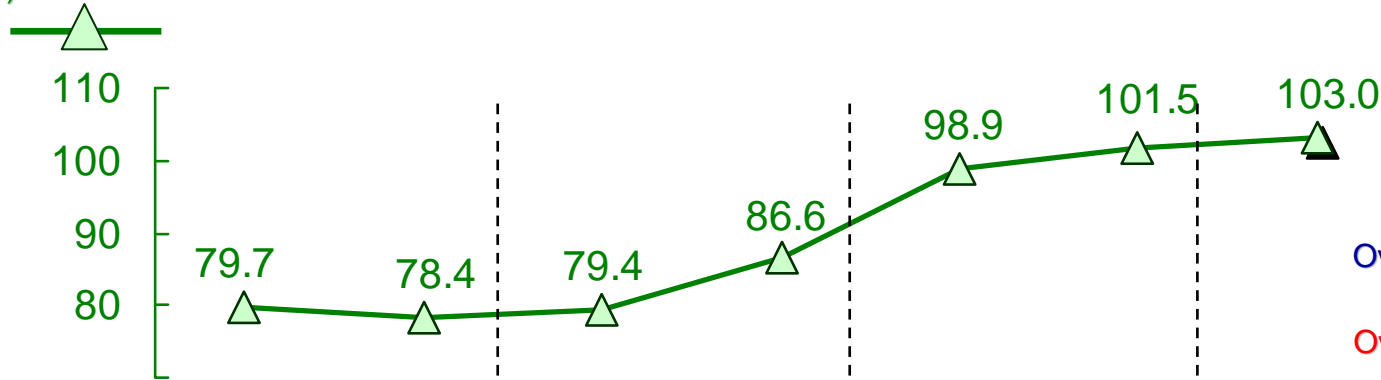
The main change factor of Results in 1H-FY2014 (year on year change)

- Toiletries and Health Care** : Profit decreased because surfactants for hair care products and SAP intensified price competition despite sales expansion of SAP for thinner disposable diapers.
- Petroleum and Automotives** : Profit decreased despite increased sales because PPG and lubricating oil additives were affected by rising raw material and fuel costs.
- Plastics and Textiles** : Profit remained flat due to sales expansion of permanent antistatic agents, etc despite influence of raw material and fuel costs.
- Information and Electrics / Electronics** : Profit increased due to the improving our product mix such as recovery in demand for electrolytes for aluminum electrolytic capacitors.
- Environmental Protection, Construction and Others** : Deficit was reduced due to brisk sales of raw materials for building sealants and for polyurethane foams used in furniture and heat insulating materials.

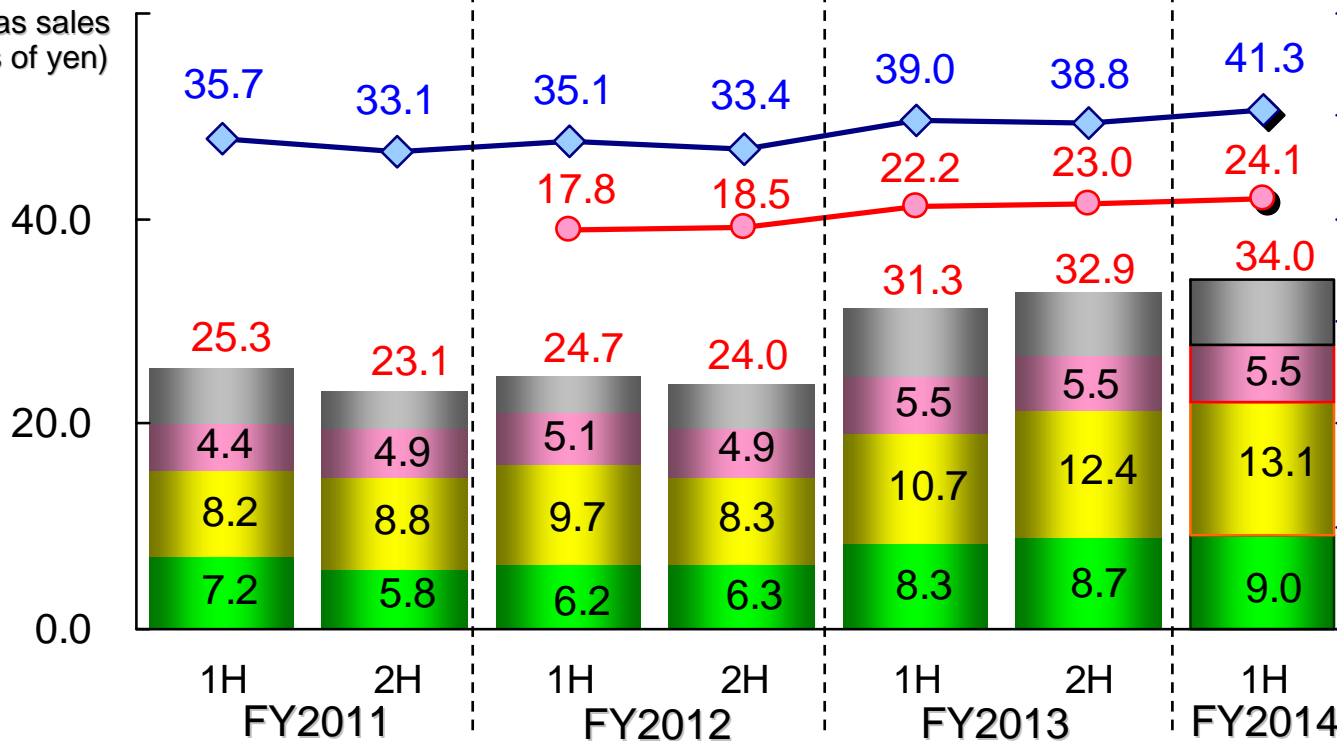


# Consolidated Overseas Sales Trend

Average exchange rate (¥/US\$)



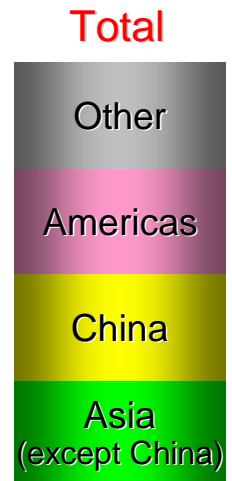
Overseas sales (Billions of yen)



Overseas sales ratio (%)

Overseas production ratio (%)

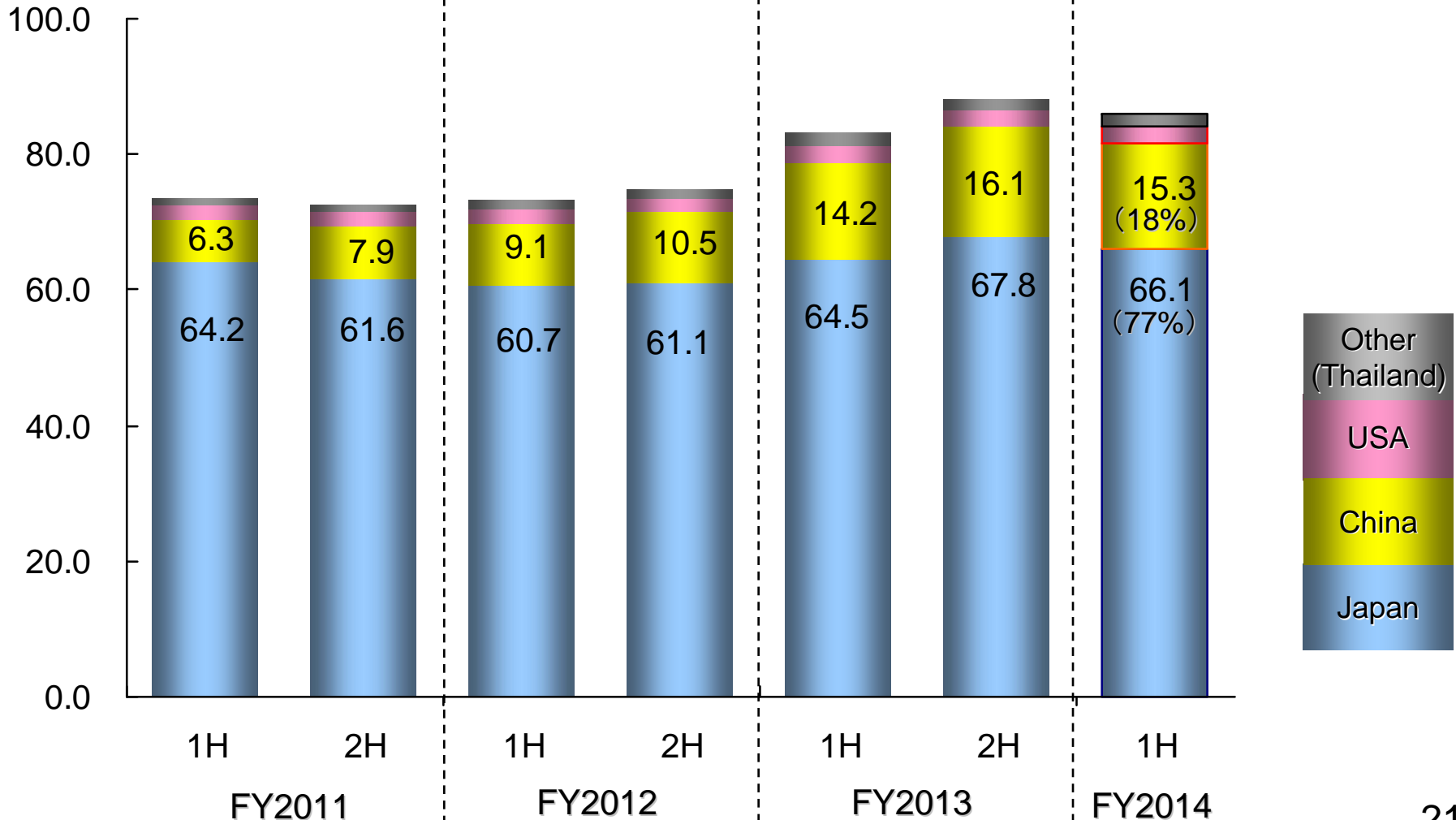
60  
40  
20  
0



# Consolidated Net Sales Trend by Geographic Segments

Internal sales among Sanyo Chemical Group are not eliminated.

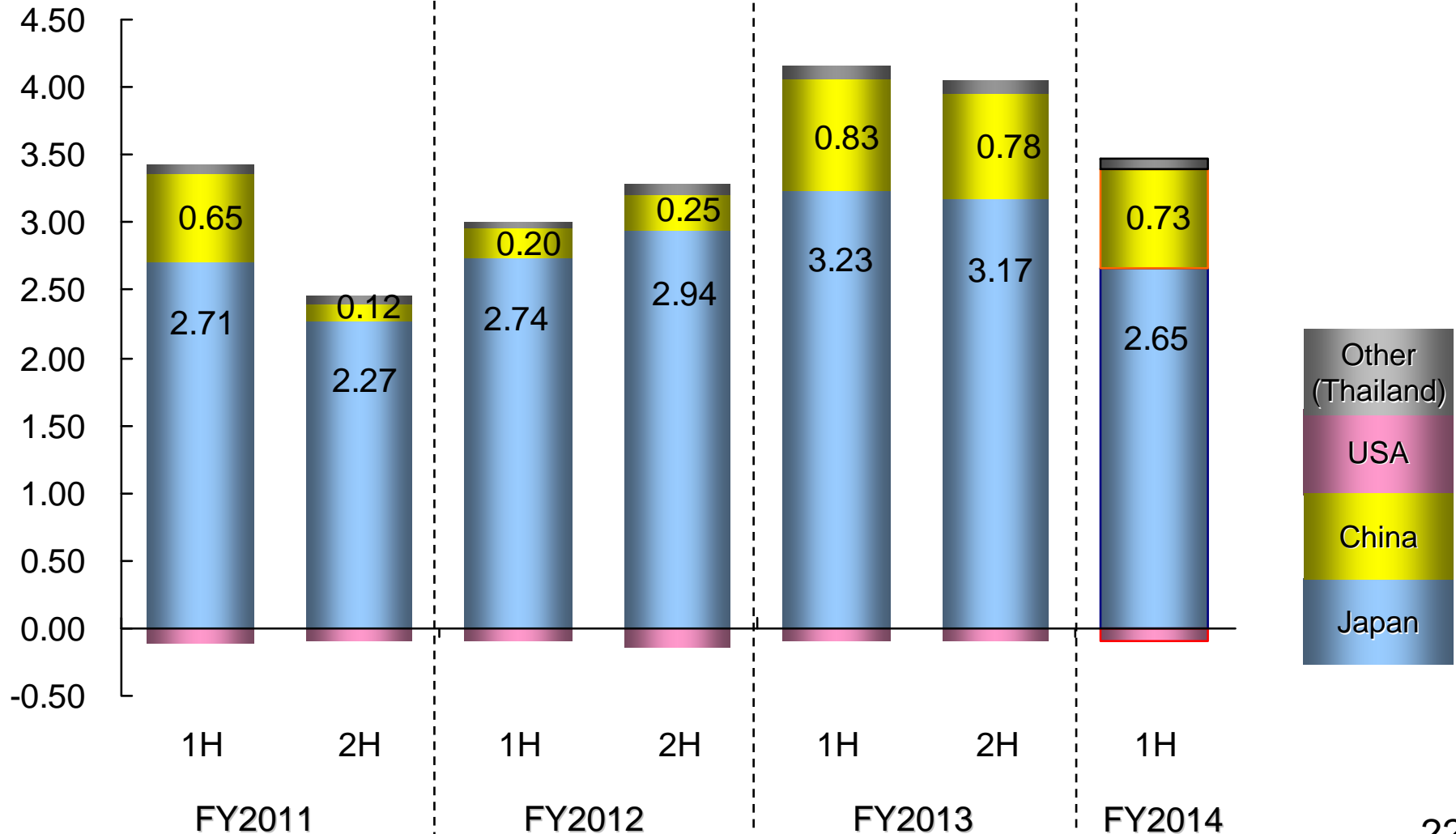
(Billions of yen)



# Consolidated Operating Income Trend by Geographic Segments

Internal sales among Sanyo Chemical Group are not eliminated.

(Billions of yen)



# Strategic Products

## Strategic Products

29 items

*The driving force supporting higher profitability and business expansion*

New growth-driving products

Products related to energy,  
Electronic parts,  
Biotechnology, etc.

Basic products for expansion

SAP, Toner Materials,  
Raw Materials for  
Polyurethane Foams, etc.

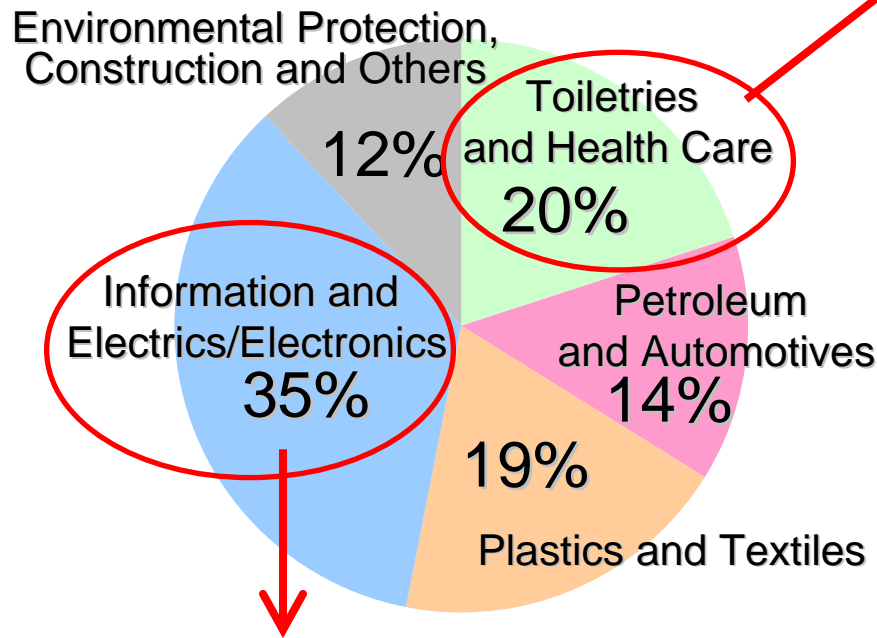
(Billions of yen)

	FY2012		FY2013		FY2014 1H
	1H	Annual	1H	Annual	
Toiletries and Others	1.2	4.6	3.8	8.5	5.2
Automotives	5.2	13.5	7.5	15.4	8.0
Information and Electrics / Electronics	5.7	11.6	5.5	11.2	5.2
Strategic products total	12.2	29.7	16.8	35.2	18.4

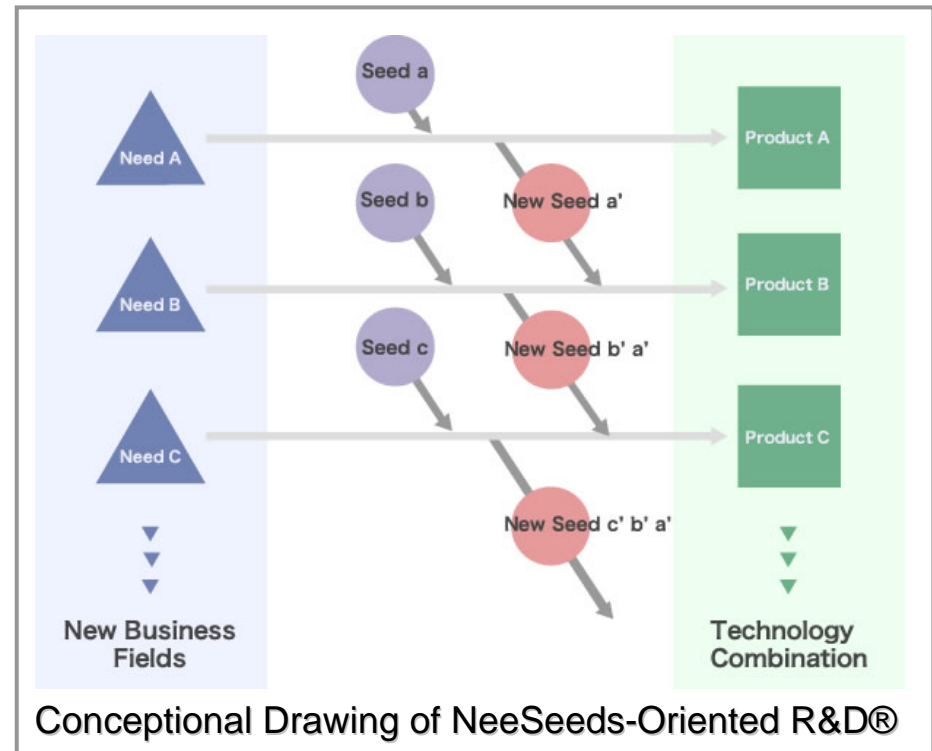
# Allocation of R&D Capabilities

## Allocation of R&D Capabilities

Of which 10% is biotechnology and medical business field



Of which 10% is energy business field and 12% is electronics business field

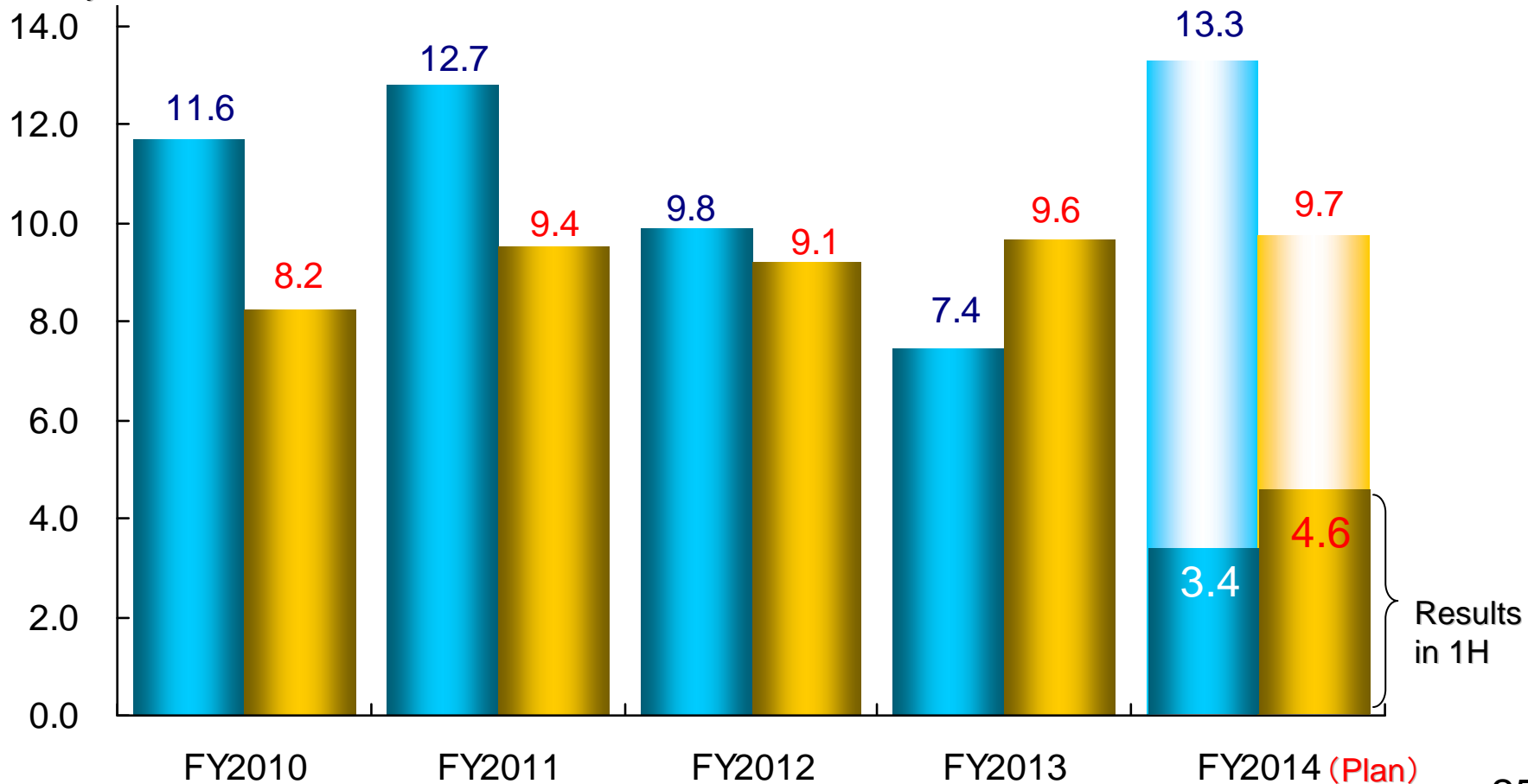


We assign more than 30% of our R&D capabilities to energy, electronics, biotechnology and medical business fields which are the growing fields, and accelerate R&D.

# Consolidated Investment in Plant & Equipment, and Depreciation & Amortization

 Investment in plant & equipment  
 Depreciation & amortization

(Billions of yen)





# Major Investments in Plant and Equipment

(Billions of yen)

	FY2013	FY2014 (Plan)
Investment in Plant & Equipment	7.4	13.3
Depreciation & Amortization	9.6	9.7

\*Notes:

SDN: San-Dia Polymers (Nantong) Co., Ltd.

SKN: Sanyo Kasei (Nantong) Co., Ltd.

SKT: Sanyo Kasei (Thailand) Ltd.

(Billions of yen)

			Fiscal Year in Operation	Total Investment
Non- consolidated	Introduction of a SAP system to manage the operation of overseas subsidiaries		2013-14	0.4
	Production facilities for adhesive for electronic parts		2015	0.2
	Renovation work of new production office (Kyoto factory)		2015	0.1
Sub- sidiaries*	SDN	SAP Production facilities	2015	5.4
	SKN	Lubricating oil additives production facilities	2015	0.2
	SKT	Organic synthesis production facilities	2014	0.1
Technical center		2014	0.1	

# Consolidated Dividends per Share & Payout Ratio Trend

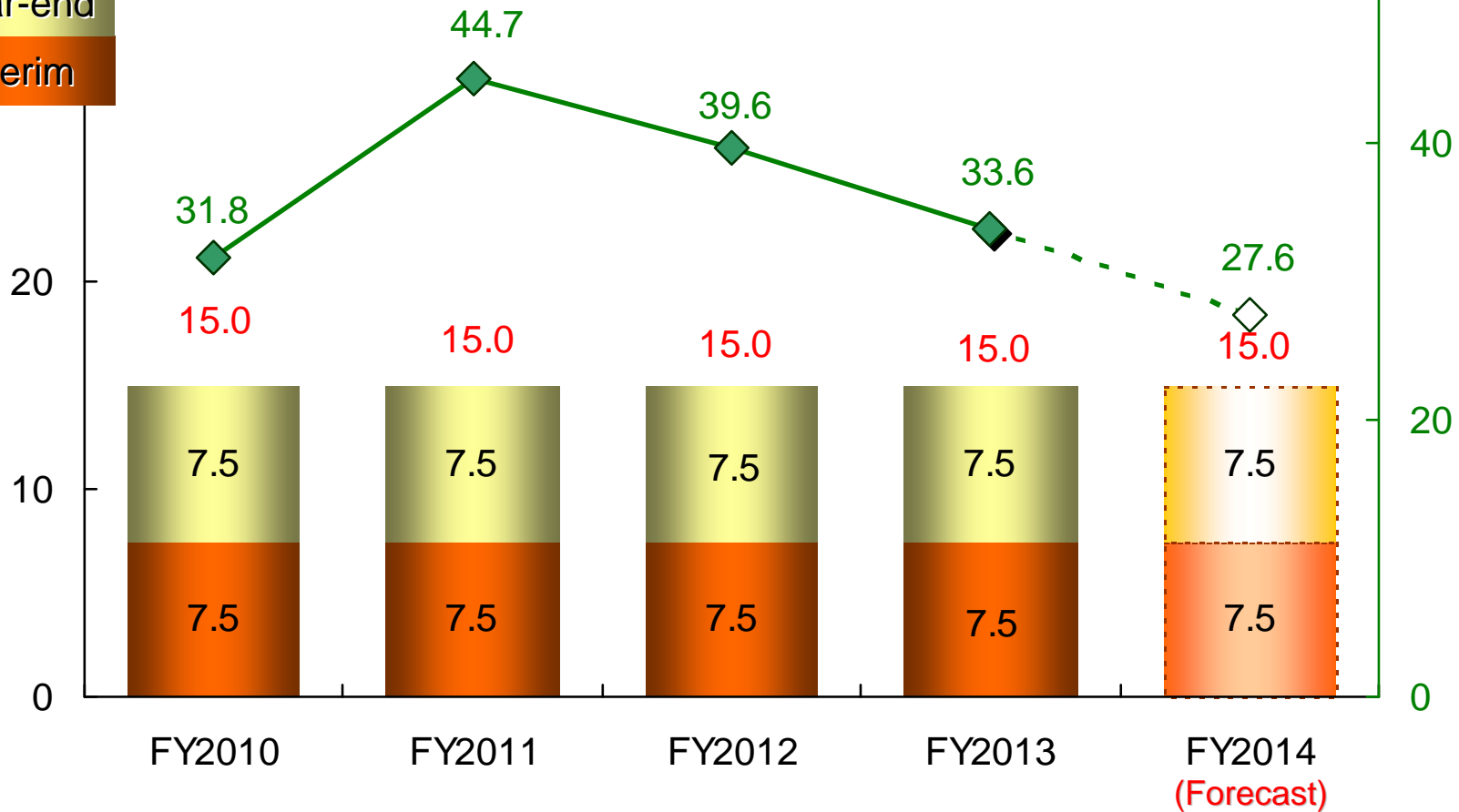
Dividends  
(Yen/share)

Annual

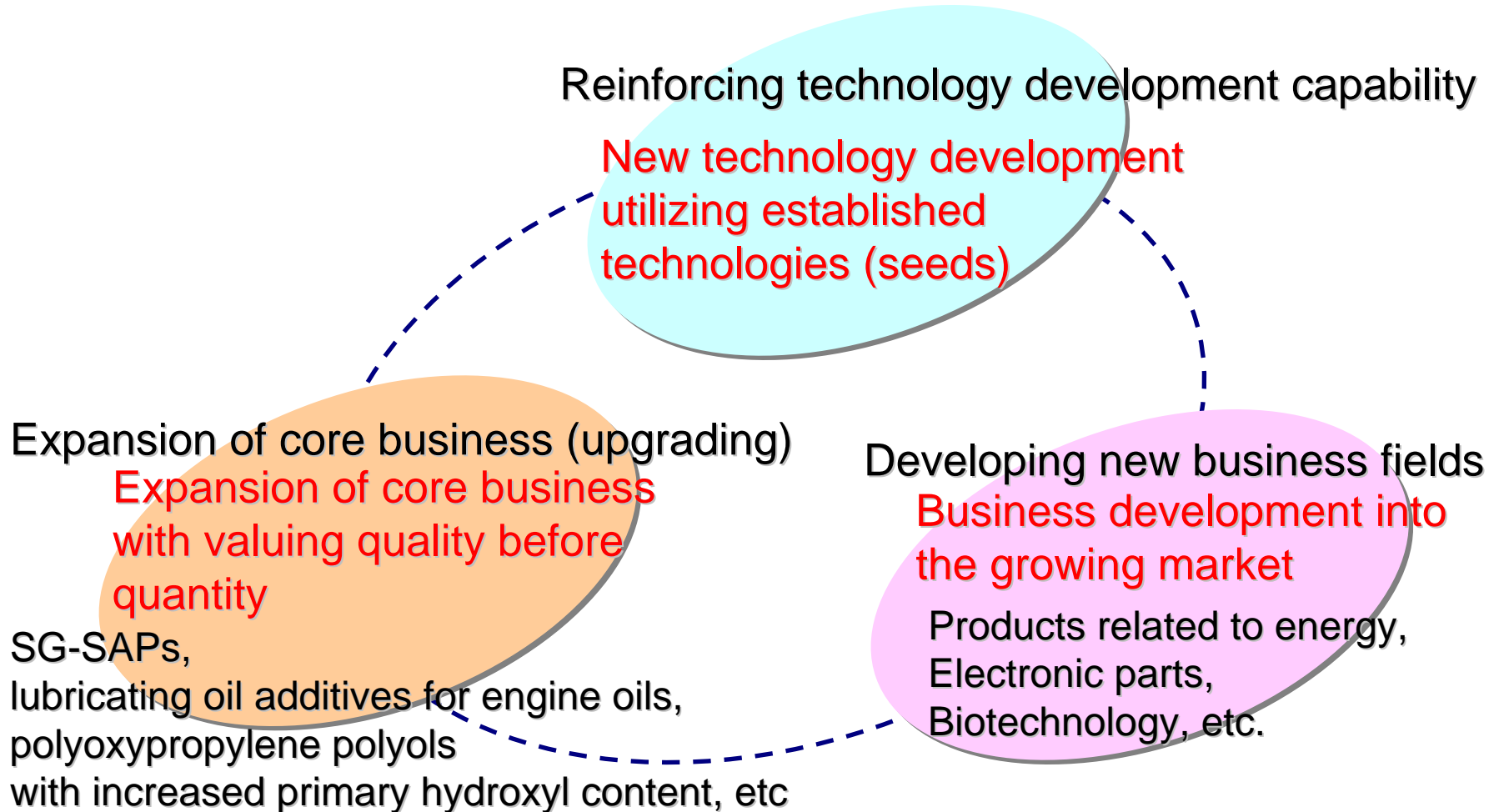
Year-end

Interim

Payout ratio  
(%)



# Topics (1) Our Differentiation Strategies



R&D activities based on both the upgrading of established business and developing new business fields with technological development capabilities as the driving force.

# Topics (2) Boosting production capacity of high-performance polyoxypropylene polyols\*

\*This product is also used as PPG

- Location : Kinuura factory
- Production capacity: 4,400t/y (Current) ⇒ 7,200t/y (After expansion)
- Scheduled completion date: April 2015

## 【Our PPG Business】

- We have an **approx. 30% share** of the Japanese market (70 billion yen industry).
- We continue to gradually boost production capacity of the pilot plant for polypropylene polyols using new manufacturing technology.

## What is PPG?

- Raw materials for polyurethane foams (PPG) are used for automobile interior materials, cushioning materials for furniture, heat insulating materials, building sealants and coating film waterproof materials.
- Global cost competition intensifies.
- PPG is expected to grow at a 1-4% annual rate in the world. (Slight deceleration of growth in FY2014.) (PPG grows at a 5-8% annual rate in China and markets in Japan and Korea are saturated.)



AOA plant at the Kinuura Factory to boost production capacity of the pilot plant

# Topics (2) Boosting production capacity of high-performance polyoxypropylene polyols

## Features of high-performance polyoxypropylene polyol PRIMEPOL

- It inhibits the generation of by-products and reduces the deterioration of properties. Polyurethane foams using it have lower density than conventional ones while maintaining equivalent strength.
- This product exhibits high reactivity in a urethanization reaction. A side reaction with the moisture in the air is hardly induced.



- ⇒ Improving durability of polyurethane foams
- ⇒ Contributing to weight saving



Using high-performance polyoxypropylene polyol

- ⇒ Shortening the executing time
- ⇒ Improving hydrophobicity
- ⇒ Preventing from blistering (cf. the upper right picture)



Using conventional polyoxypropylene polyol

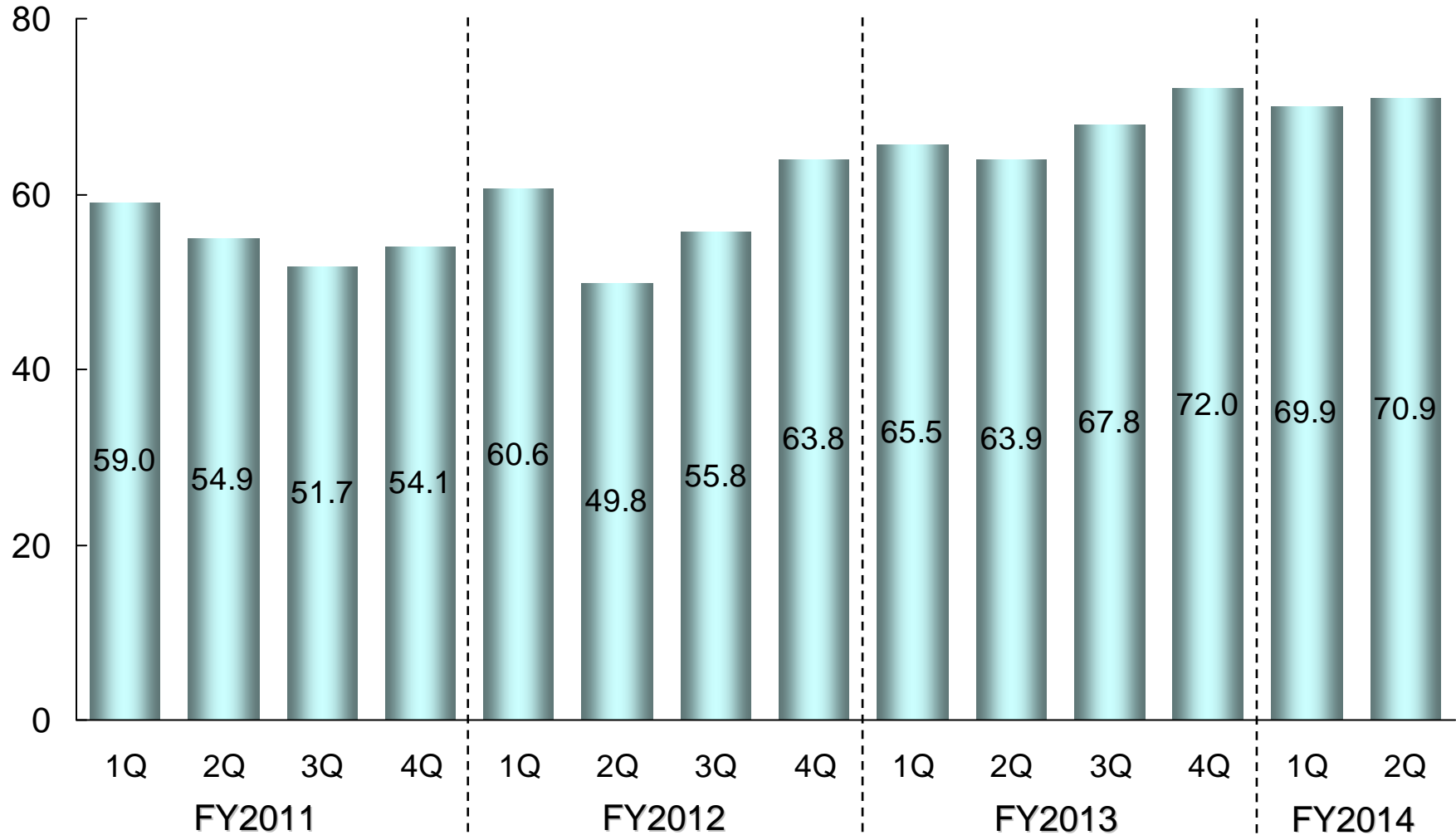
In 2013, we received the Award of the Society of Polymer Science, Japan For the technological development and industrialization of high-productivity and high-quality polyether polyol using new manufacturing technology.

# Reference



# Transition of Price of Domestically Produced Naphtha

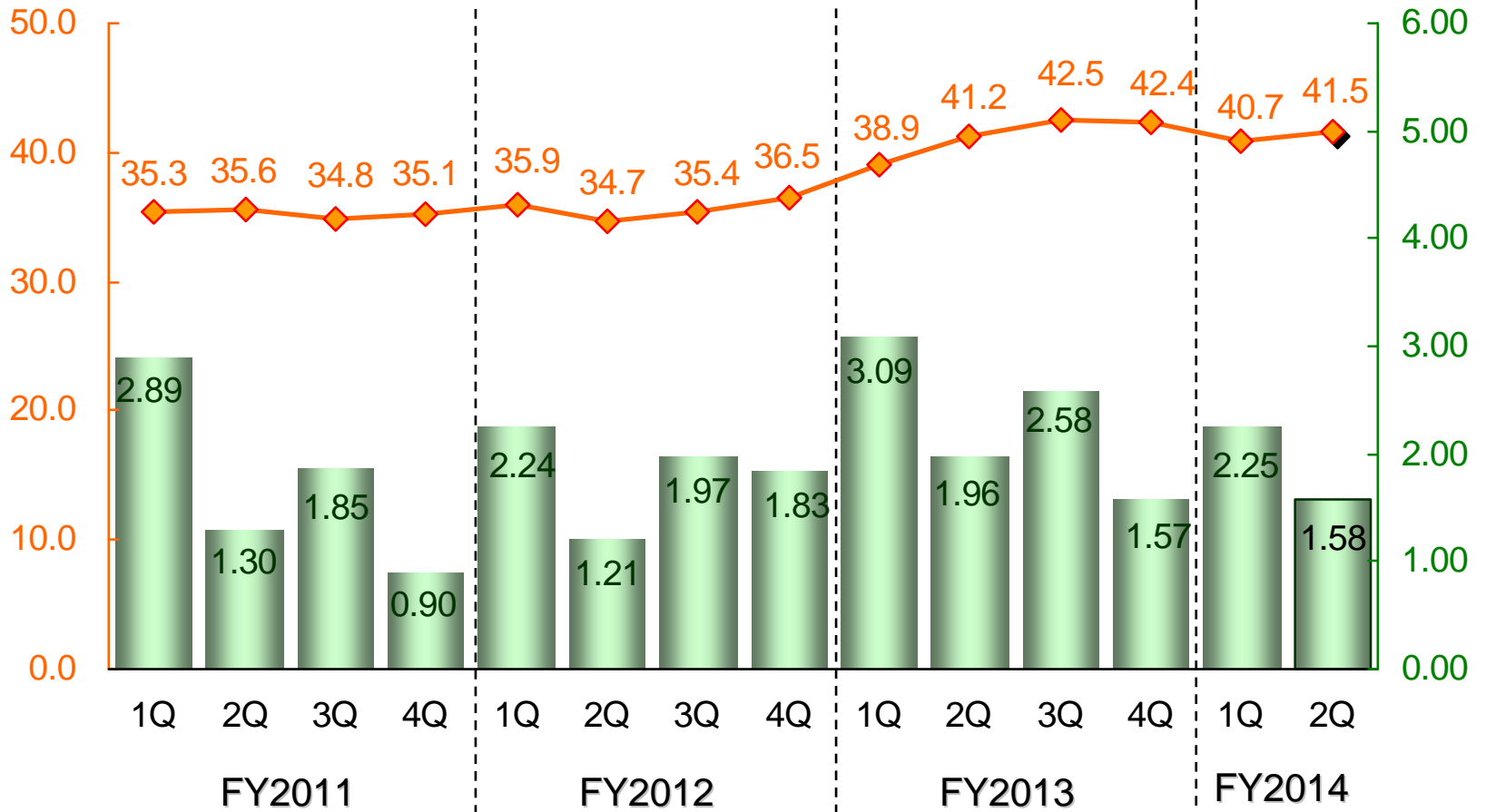
Domestic naphtha price  
(Thousands of yen/kl)



# Consolidated Business Result Trend

Net sales  
(Billions of yen)

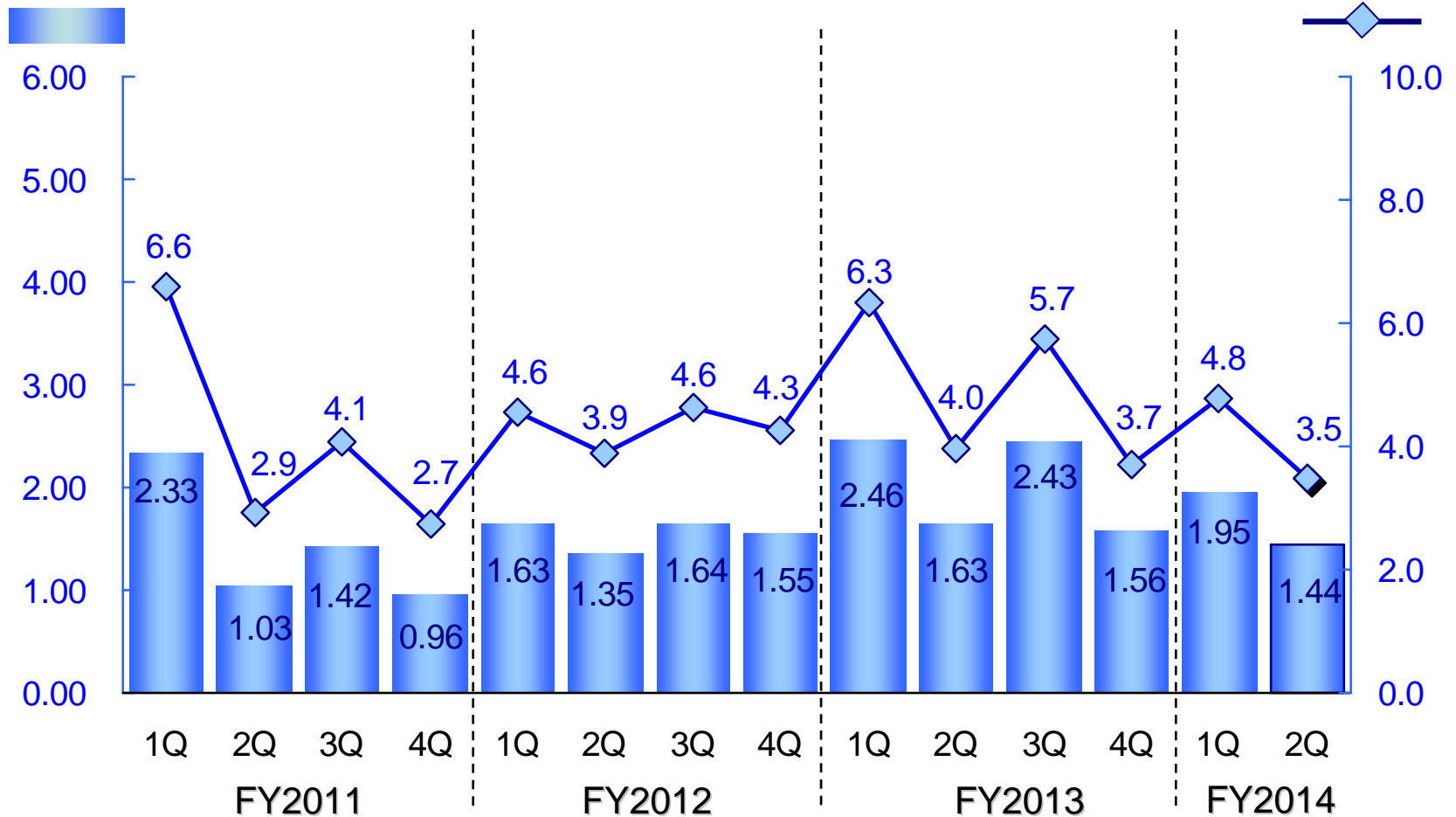
Ordinary income  
(Billions of yen)



# Consolidated Operating Income Trend

Operating income  
(Billions of yen)

Operating income  
ratio (%)



# Results of Operations by Product Group for 1H in FY2014

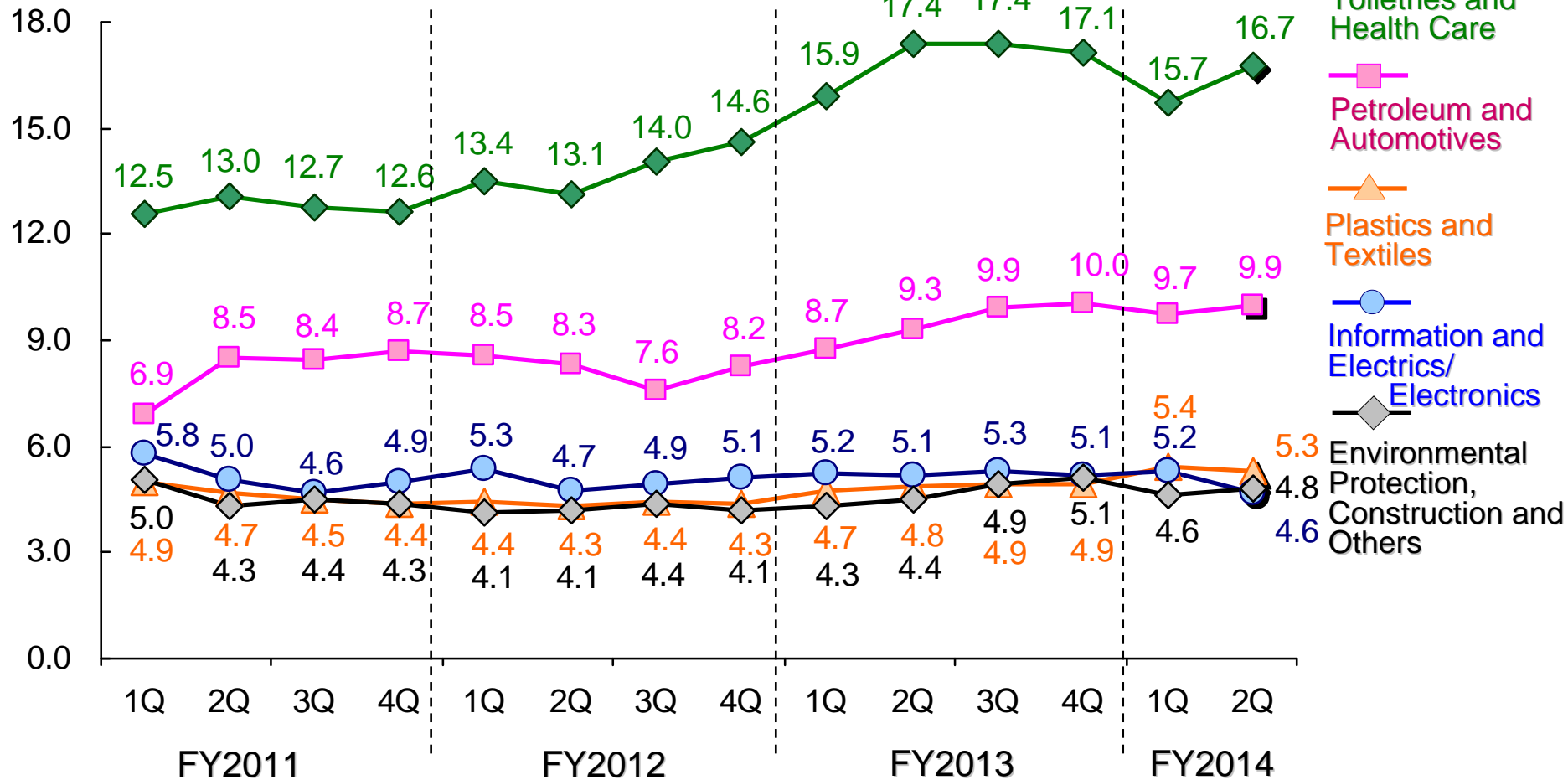
(Billions of yen)

Product Group	Net Sales			Operating Income		
	Apr.-Sept. FY2013	Apr.-Sept. FY2014	Changed Amount	Apr.-Sept. FY2013	Apr.-Sept. FY2014	Changed Amount
<b>Toiletries and Health Care</b>	<b>33.32</b>	<b>32.51</b>	<b>(0.80)</b>	<b>1.97</b>	<b>1.49</b>	<b>(0.47)</b>
Toiletries	6.90	6.35	(0.55)			
Health Care	26.41	26.16	(0.25)			
<b>Petroleum and Automotives</b>	<b>18.10</b>	<b>19.68</b>	<b>1.58</b>	<b>0.74</b>	<b>0.34</b>	<b>(0.39)</b>
<b>Plastics and Textiles</b>	<b>9.63</b>	<b>10.75</b>	<b>1.12</b>	<b>1.13</b>	<b>1.15</b>	<b>0.02</b>
Plastics	5.96	6.94	0.98			
Textiles	3.67	3.80	0.13			
<b>Information and Electrics/Electronics</b>	<b>10.37</b>	<b>9.93</b>	<b>(0.44)</b>	<b>0.33</b>	<b>0.40</b>	<b>0.07</b>
Information	7.77	6.71	(1.05)			
Electrics/Electronics	2.60	3.22	0.61			
<b>Environmental Protection, Construction and Others</b>	<b>8.79</b>	<b>9.42</b>	<b>0.62</b>	<b>(0.07)</b>	<b>(0.00)</b>	<b>0.07</b>
<b>Total</b>	<b>80.23</b>	<b>82.31</b>	<b>2.08</b>	<b>4.10</b>	<b>3.40</b>	<b>(0.70)</b>

(Ref.-4)

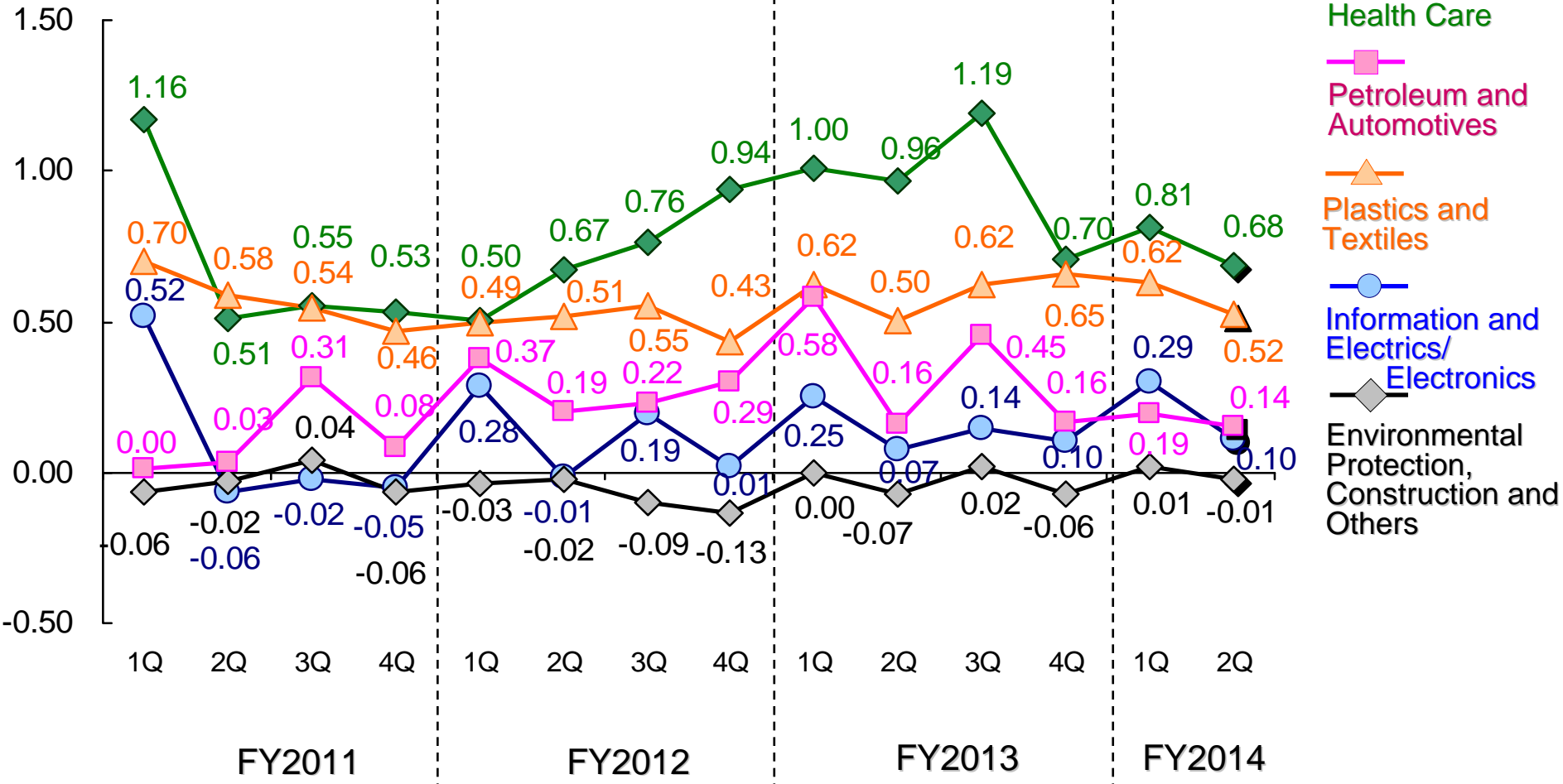
# Consolidated Net Sales Trend by Product Group

(Billions of yen)



# Consolidated Operating Income Trend by Product Group

(Billions of yen)

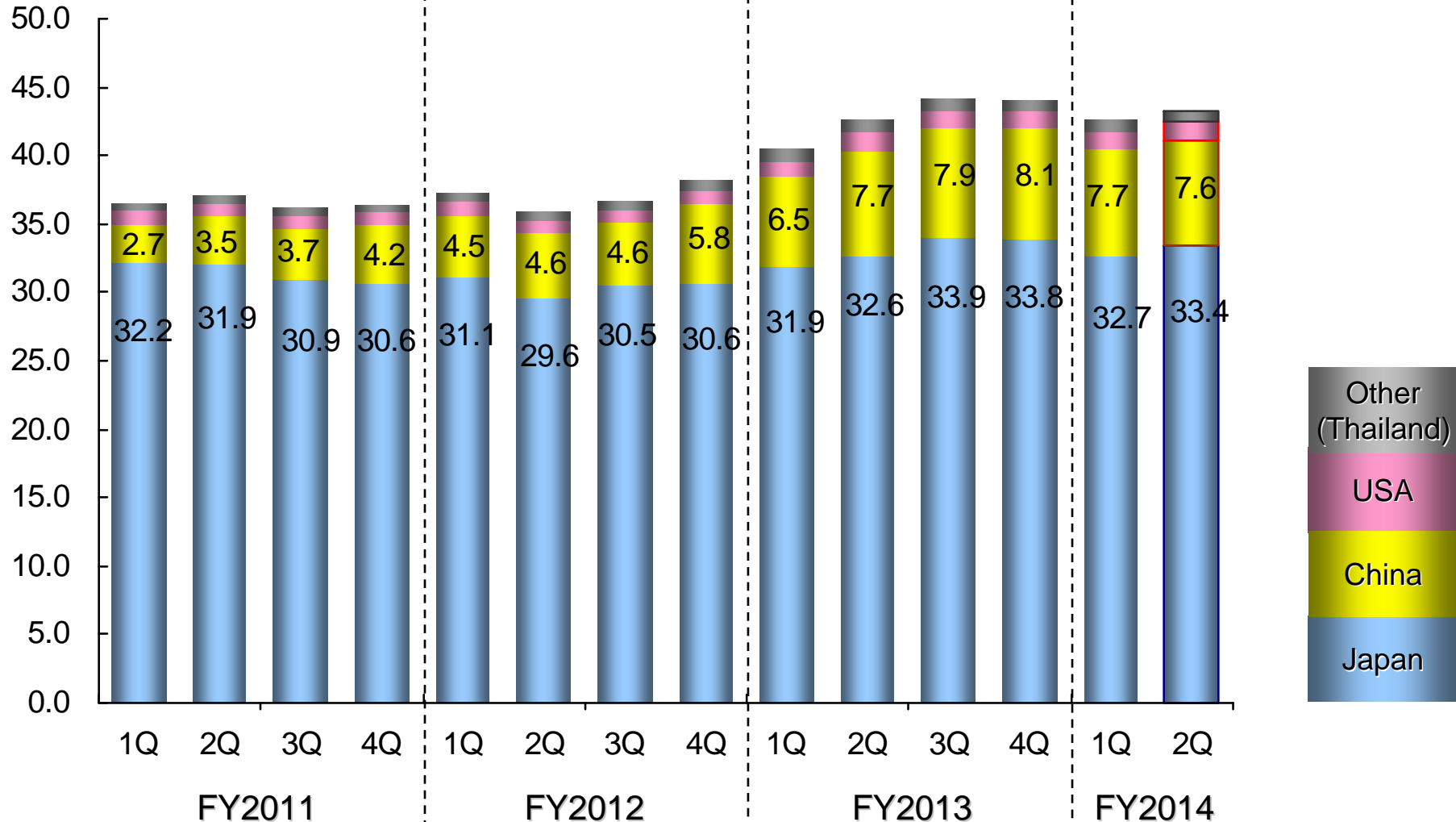




# Consolidated Net Sales Trend by Geographic Segments

Internal sales among Sanyo Chemical Group are not eliminated.

(Billions of yen)



# Results of Operations by Geographic Segments

## for 1H in FY2014

(Billions of yen)

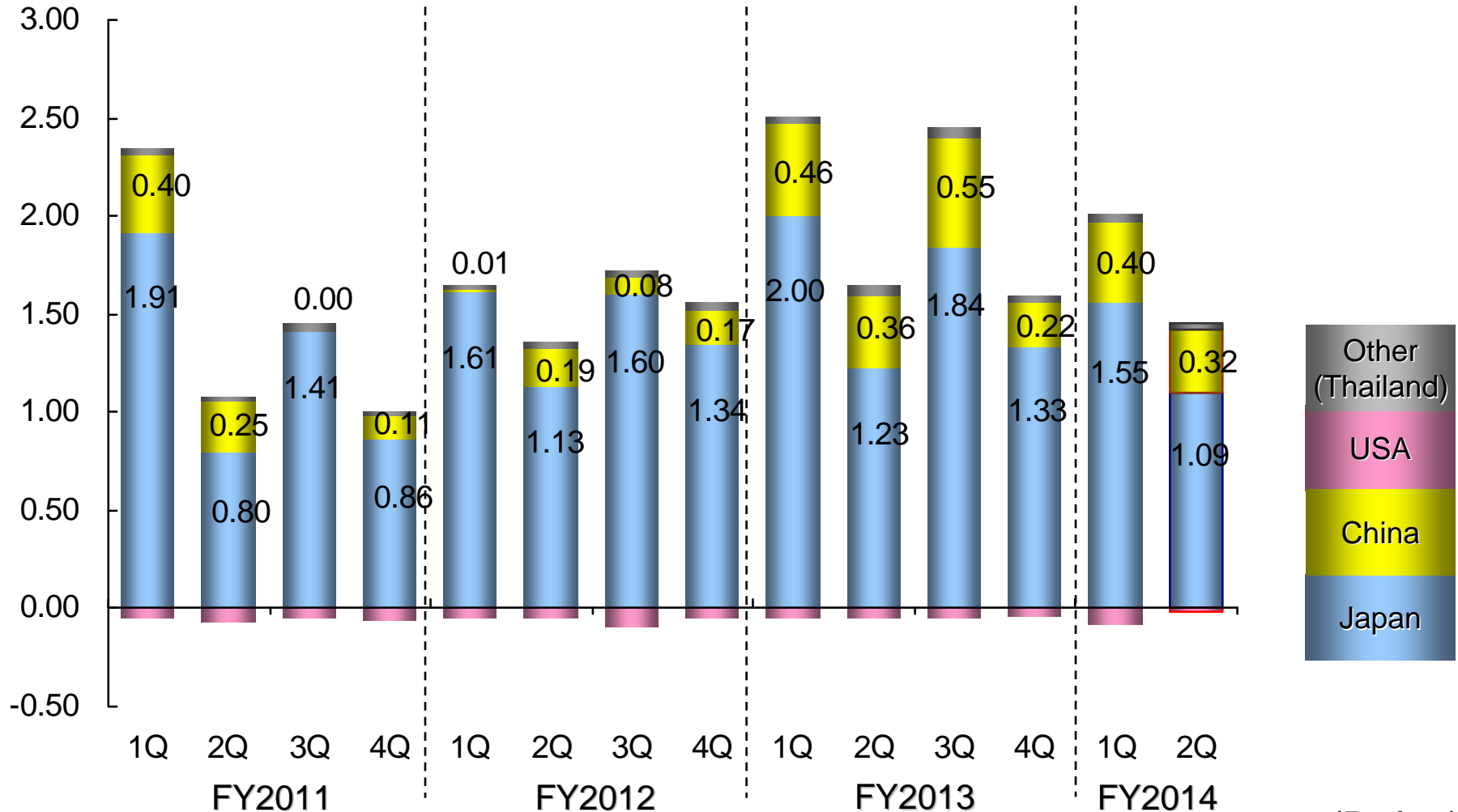
	Net Sales			Operating income		
	Apr.-Sept. FY2013	Apr.-Sept. FY2014	Changed Amount	Apr.-Sept. FY2013	Apr.-Sept. FY2014	Changed Amount
Japan	64.56	66.17	1.61	3.23	2.65	(0.57)
USA	2.54	2.60	0.05	(0.09)	(0.10)	(0.00)
China	14.25	15.37	1.12	0.83	0.73	(0.09)
Other (Thailand)	1.74	1.72	(0.02)	0.08	0.07	(0.00)
Total*	80.23	82.31	2.08	4.10	3.40	(0.70)

\* Internal sales among segments are eliminated.

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(Billions of yen)



## Domestic Consolidated Subsidiaries (5 companies)

Company Name	Abbr.	Equity Ownership	Line of Business	
SDP Global Co., Ltd.	SDP	Sanyo Chemical Toyota Tsusho	70% 30%	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	50% 50%	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 (7 companies)

Company Name	Abbr.	Equity Ownership		Line of Business
Sanyo Kasei (Nantong) Co., Ltd. [China]	SKN	Sanyo Chemical	100%	Manufacture and sales 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, polyurethane beads, etc.
Sanyo Chemical & Resins, LLC [USA]	SCR	SANAM	100%	Manufacture of lubricating oil additives, etc.
Sanyo Chemical Texas Industries, LLC [USA]	SCTI	SANAM	100%	Manufacture of polyurethane beads

## 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	50% 50%	Manufacture of raw materials for synthetic rubbers
Sunrise Chemical LLC [USA]	SRC	SANAM JX Nippon Chemical Texas	50% 50%	Manufacture of raw materials for synthetic rubbers
Nagoya Sanyo Warehouse Co., Ltd.	—	Sanyo Chemical	100%	Warehousing
Shiohama Chemicals Warehouse Co., Ltd.	—	Sanyo Chemical JX Nippon Oil & Energy	50% 50%	Warehousing
Sanliving Ltd.	SL	Sanyo Chemical	100%	Real estate, insurance and agency