

# FY2017 Financial Results

President

**Keiichi Kobayashi**

Director, Corporate Executive Vice President, and  
General Manager of the Finance & Procurement

**Hiroyuki Ogiwara**

May 9<sup>th</sup>, 2018

FURUKAWA ELECTRIC CO., LTD

## Forward-Looking Statements

Projections of future sales and earnings in these materials are “forward-looking statements.”

Management offers these projections in good faith and on the basis of information presently available.

Information in these statements reflects assumptions about such variables as economic trends and currency exchange rates.

Forward-looking statements incorporate known and unknown risks as well as other uncertainties that include, but are not limited to, the following items.

- Economic trends in the U.S., Europe, Japan and elsewhere in Asia, particularly with regard to consumer spending and corporate expenditures.
- Changes in exchange rates of the U.S. dollar, euro, and Asian currencies.
- Furukawa Electric Group’s ability to respond to rapid advances in technology.
- Changes in assumptions involving financial and managerial matters and the operating environment.
- Current and future trade restrictions and related matters in foreign countries.
- Changes in the market value of securities held by the Furukawa Electric Group.

Due to the above factors, actual sales, earnings, and other operating results may differ significantly from Looking Statements in these materials. In addition, following the release of these materials, Furukawa Electric Group assumes no obligation to announce any revisions to forward-looking statement in these materials

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**FURUKAWA ELECTRIC CO., LTD.**

# FY2017 Results Highlights

- Operating income totaled **JPY 44.8 billion, up JPY 6.2 billion (up 16%) YoY**  
 Operating income ratio of net sales was on par with last year at **4.6% (up 0.1%)** as a result of increased sales following the rise in copper prices
  - Operating income increased in the **Electronics & Automotive Systems segment and Functional Products segment**
  - **Improvements to the product mix, such as Copper Foil and Copper & High Performance Material Products, had a positive contribution**
- Net income totaled **JPY 28.5 billion, up JPY 11.0 billion (up 62%) YoY**
  - The large increase in net income was attributable to the **growth of operating income and improvements in equity method**

(JPY billion)

	FY2016	FY2017			
	Results	*Previous forecast	Results	YtoY change	Change from previous forecast
Net Sales	843.3	950.0	967.3	+124.0	+17.3
Operating income	38.6	43.0	44.8	+6.2	+1.8
Ordinary income	36.0	45.0	46.9	+10.9	+1.9
Net income attributable to owners of the parent	17.6	25.5	28.5	+11.0	+3.0

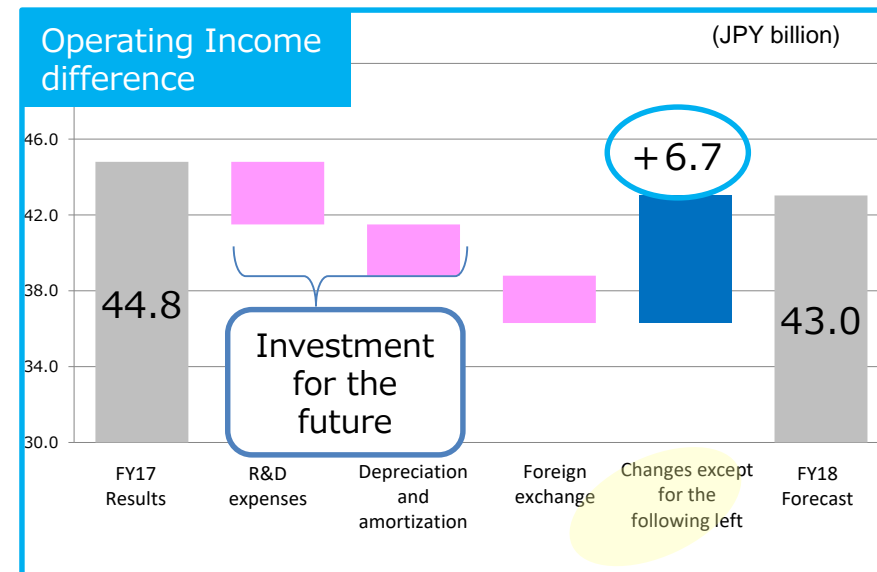
\*Announced on February 6, 2018

- As preparation for achieving the 2020 medium-term management plan, strengthen the **capital and R&D investments** in the key segments
- Strengthen **the cost competitiveness** that is able to respond to changes in the business environment
  - Implement initiatives aimed at company-wide reductions to the cost of manufacturing, including the proactive introduction of automation and IoT/AI and a major review of the existing manufacturing processes
- Continue the **review of low profitable business** based on operating assets

**FY2018 operating income is expected to grow by JPY 6.7 billion YoY, excluding the impact of a stronger yen and higher expenses following increased investments for securing future growth**

(JPY billion)

	FY2017	FY2018	
	Results	Forecast	YtoY change
Net Sales	967.3	1,000.0	+ 32.7
Operating income	44.8	43.0	▲ 1.8
Ordinary income	46.9	43.5	▲ 3.4
Net income attributable to owners of the parent	28.5	23.0	▲ 5.5



# Strengthen the Capital and R&D investments **FURUKAWA ELECTRIC**

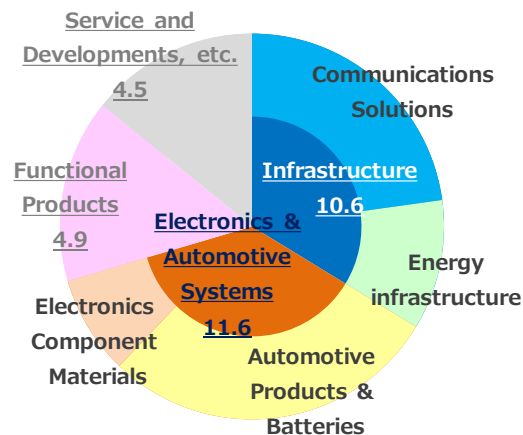
- Increase growth-oriented investments with a focus on the infrastructure and automotive areas
- Communications Solutions: Increase production of optical fiber and cable products in line with the growing demand, and R&D investments in high value-added products
- Energy Infrastructure: Develop a production framework for responding to future market requirements
- Automotive products: Strengthen the production system for harnesses with consideration for the demand for lighter products resulting from advances in vehicle electrification and autonomous driving, and accelerate the development of automotive products, such as next-generation radar that will be required for advanced driving support systems

(JPY billion)

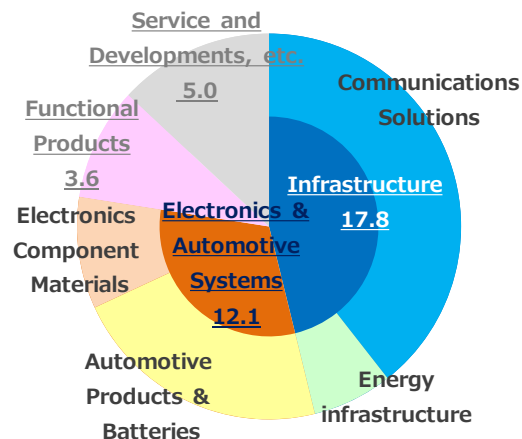
	FY16 Results	FY17 Results	FY18 Forecast	YtoY change
<b>CAPEX</b>	<b>31.6</b>	<b>38.5</b>	<b>54.0</b>	<b>+ 15.5</b>
<b>Depreciation and amortization</b>	<b>23.4</b>	<b>25.1</b>	<b>27.8</b>	<b>+ 2.7</b>
<b>R&amp;D expenses</b>	<b>17.5</b>	<b>19.5</b>	<b>22.8</b>	<b>+ 3.3</b>

## <CAPEX by Segment>

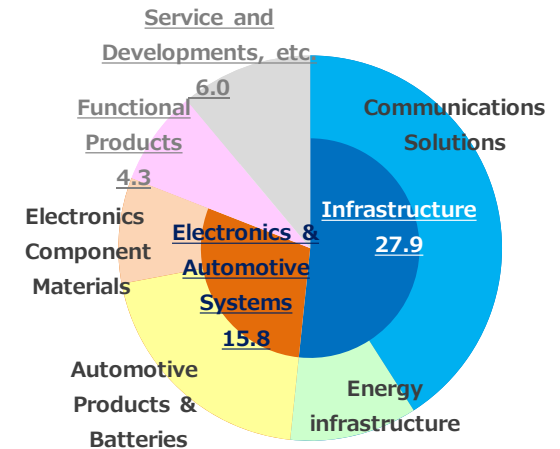
FY16 Results : **31.6**



FY17 Results : **38.5**



FY18 Forecast : **54.0**



# FY2018 Management index

	FY16	FY17	FY18 Forecast
Equity capital ratio	27.6%	29.0%	30%
NET D/E ratio	0.99	0.88	0.9
Total asset turnover ratio (Net sales/ Total assets *1)	1.16	1.24	1.2
Return on operating assets (Operating income/ Operating assets *2)	12.1%	13.1%	12%
ROE	9.3%	12.9%	10%

\*1 Total assets = (beginning balance + ending balance)/2, \*2 Operating assets = inventories + tangible and intangible fixed assets

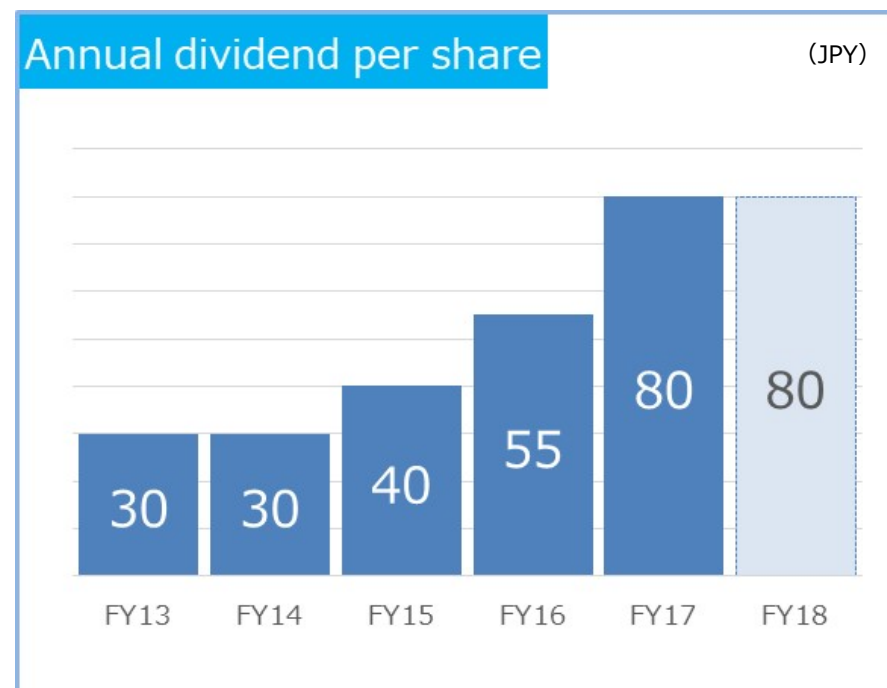
- The FY2017 dividend will be raised JPY 10 from the previous forecast (announced on February 6, 2018), an increase of JPY 25 YoY

	FY16	FY17		FY18 Forecast	(JPY)
		*1Previous forecast	*2Previous forecast		
Annual dividend per share	55	60	70	80	80

\*1Announced on May 10, 2017

\*2Announced on February 6, 2018

We will maintain a stable dividend policy while keeping a good balance between investment in future growth and financial health



※ We conducted a one-for-ten reverse stock split of our company's common shares effective October 1, 2016. Therefore, the dividends per share for FY2013 to FY2015 shown in the graph have been increased 10 fold to make them comparable to the dividends following the reverse stock split.

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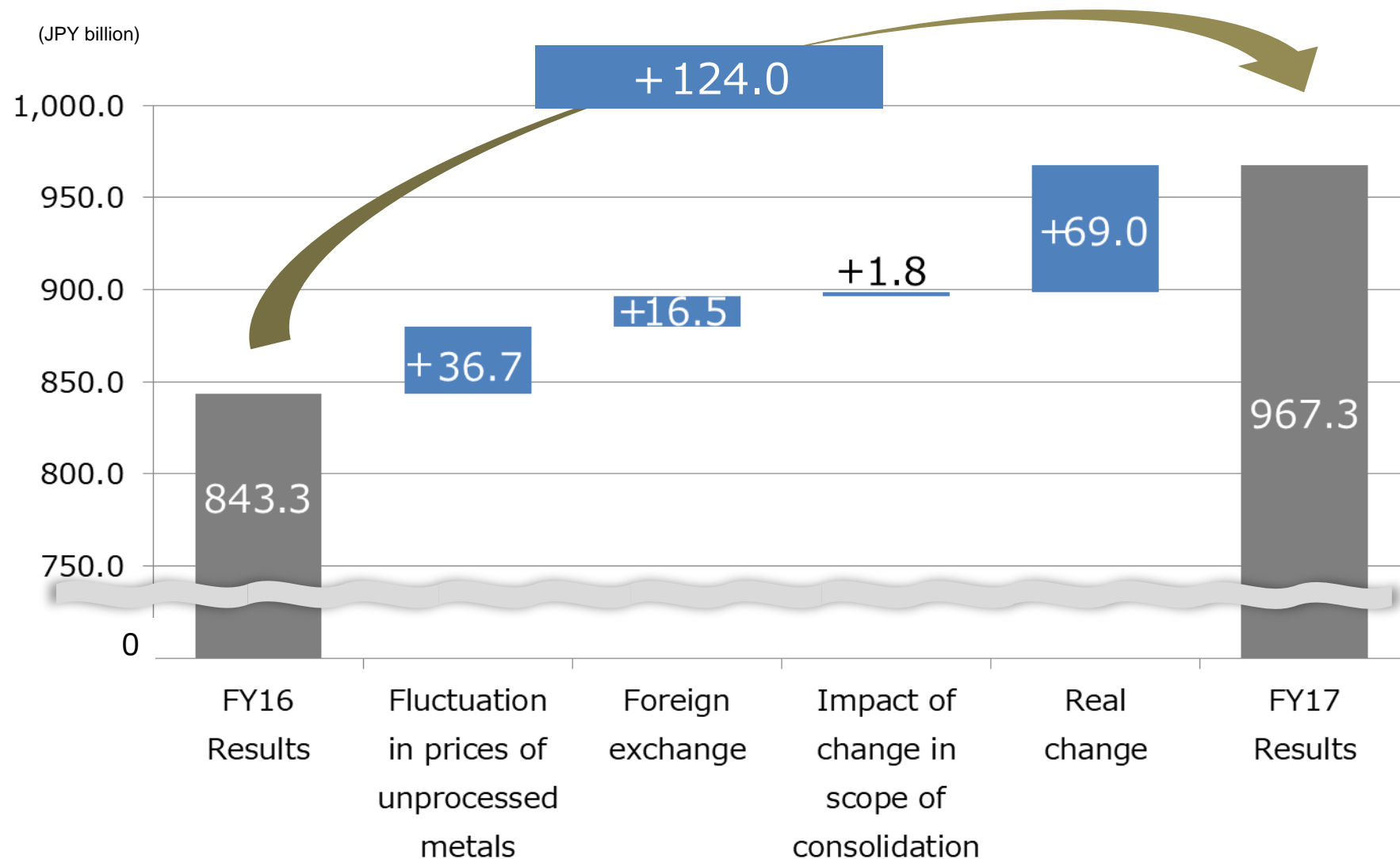
# FY2017 Results

# FY2017 Results - Summary P&L

(JPY billion, JPY/kg, JPY/USD)

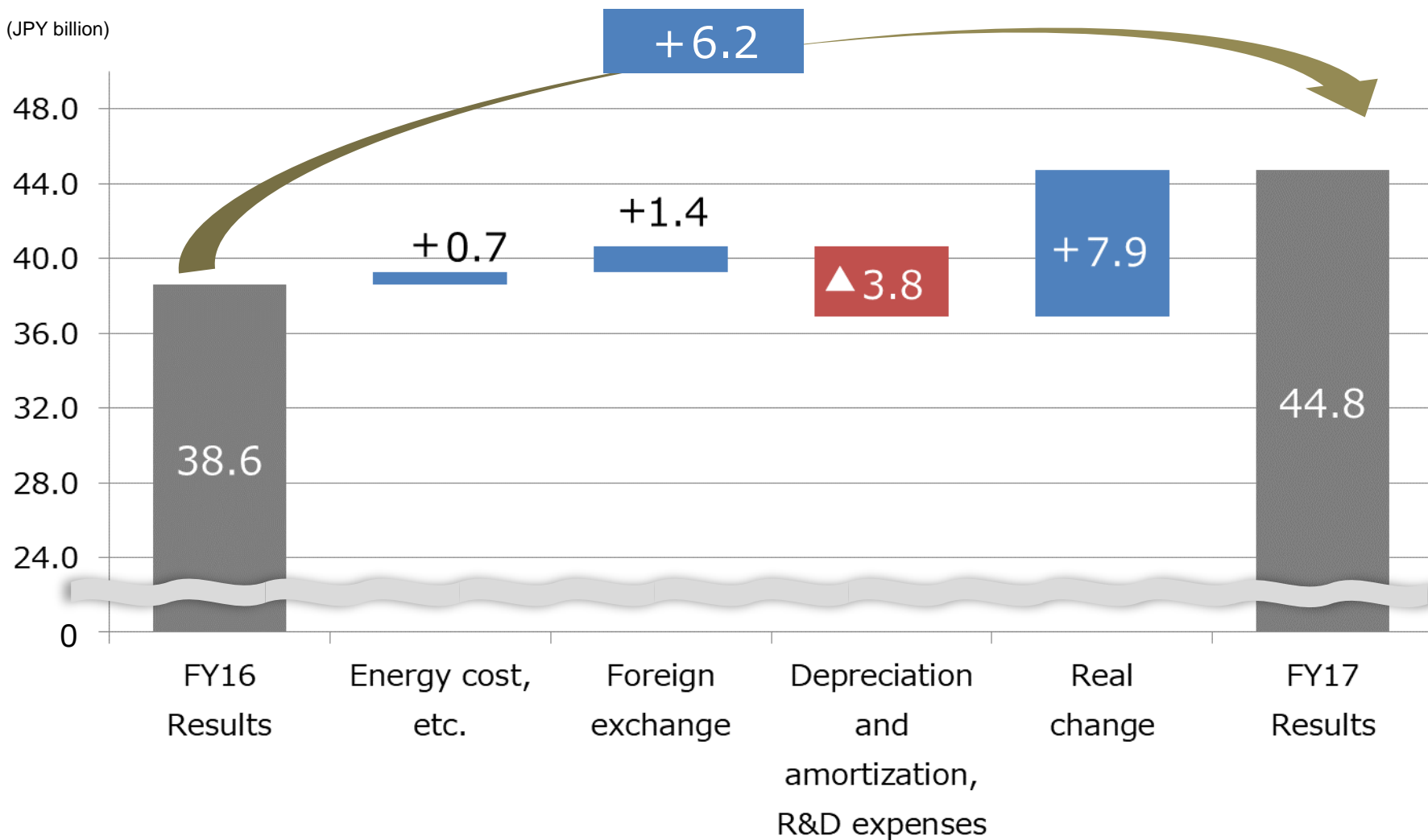
	FY16		FY17		YtoY change		Breakdown of change (Full year)
	a	Q4 b	c	Q4 d	c-a	Q4 d-b	
Net sales	843.3	238.4	967.3	263.9	+124.0	+25.5	+124.0 (+15%) See page 11
Operating income	38.6	14.9	44.8	11.5	+6.2	▲ 3.3	+6.2 (+16%)
(Ratio)	4.6%	6.2%	4.6%	4.4%	+0.1	▲ 1.9	See page 12
Profit/loss in equity method affiliates	0.1	0.6	4.3	0.8	+4.2	+0.2	
Foreign exchange gain/loss	▲ 1.2	▲ 0.0	▲ 1.2	▲ 0.4	▲ 0.0	▲ 0.4	
Ordinary income	36.0	15.2	46.9	12.1	+10.9	▲ 3.1	+10.9 (+30%)
(Ratio)	4.3%	6.4%	4.8%	4.6%	+0.6	▲ 1.8	
Extraordinary income/loss	▲ 8.1	▲ 15.8	▲ 6.4	▲ 11.9	+1.6	+3.9	•Extraordinary income ▲2.7 (12.4 → 9.8)
Income taxes	5.5	▲ 0.9	8.2	▲ 0.1	+2.6	+0.8	•Extraordinary loss +4.3 (▲20.5 → ▲16.2)
Net income attributable to non-controlling interests	4.9	1.7	3.8	1.0	▲ 1.1	▲ 0.7	
Net income attributable to owners of parent	17.6	▲ 1.3	28.5	▲ 0.7	+11.0	+0.6	+11.0 (+62%)
(Ratio)	2.1%	▲ 0.6%	3.0%	▲ 0.3%	+0.9	+0.3	
Average copper price	604	705	757	798	—	—	
Average exchange rate	108	114	111	108	—	—	

# Analysis of Changes in Net Sales (YOY)



# Analysis of Changes in Operating income (YOY)

(JPY billion)



# Net Sales and Operating Income by Segment

(JPY billion)

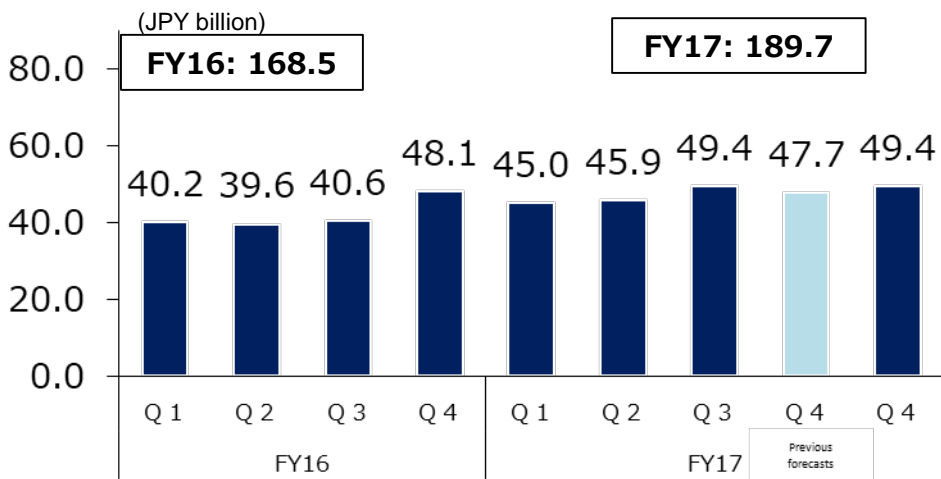
		Full year				
		FY16 Results	FY17 * Previous Forecast	FY17 Results	YtoY Change	Change from previous forecast
Net sales	Infrastructure	263.8	293.0	291.8	+28.0	▲ 1.2
	Communications Solutions	168.5	188.0	189.7	+21.2	+1.7
	Energy infrastructure	95.3	105.0	102.1	+6.8	▲ 2.9
	Electronics & Automotive Systems	455.5	527.0	533.8	+78.3	+6.8
	Automotive Products & Batteries	223.4	242.0	248.1	+24.7	+6.1
	Electronics Component Materials	232.1	285.0	285.6	+53.6	+0.6
	Functional Products	131.5	150.0	153.1	+21.6	+3.1
	Service and Developments, etc.	49.7	50.0	52.9	+3.3	+2.9
	Elimination of intra-company transactions	▲ 57.0	▲ 70.0	▲ 64.3	▲ 7.3	+5.7
	<b>Total</b>	<b>843.3</b>	<b>950.0</b>	<b>967.3</b>	<b>+124.0</b>	<b>+17.3</b>

Operating income	Infrastructure	14.3	11.1	12.8	▲ 1.6	+1.7
	Communications Solutions	14.2	14.1	14.1	▲ 0.1	+0.0
	Energy infrastructure	0.1	▲ 3.0	▲ 1.4	▲ 1.5	+1.6
	Electronics & Automotive Systems	12.8	18.0	18.2	+5.4	+0.2
	Automotive Products & Batteries	10.1	13.0	13.2	+3.1	+0.2
	Electronics Component Materials	2.7	5.0	5.0	+2.3	+0.0
	Functional Products	11.7	14.0	14.0	+2.3	▲ 0.0
	Service and Developments, etc.	▲ 0.1	▲ 0.1	▲ 0.2	▲ 0.1	▲ 0.1
	Elimination of intra-company transactions	▲ 0.0	0.0	0.1	+0.1	+0.1
	<b>Total</b>	<b>38.6</b>	<b>43.0</b>	<b>44.8</b>	<b>+6.2</b>	<b>+1.8</b>

\*Announced on February 6, 2018

# 1 -(1) Infrastructure (Communications Solutions)

## Net sales



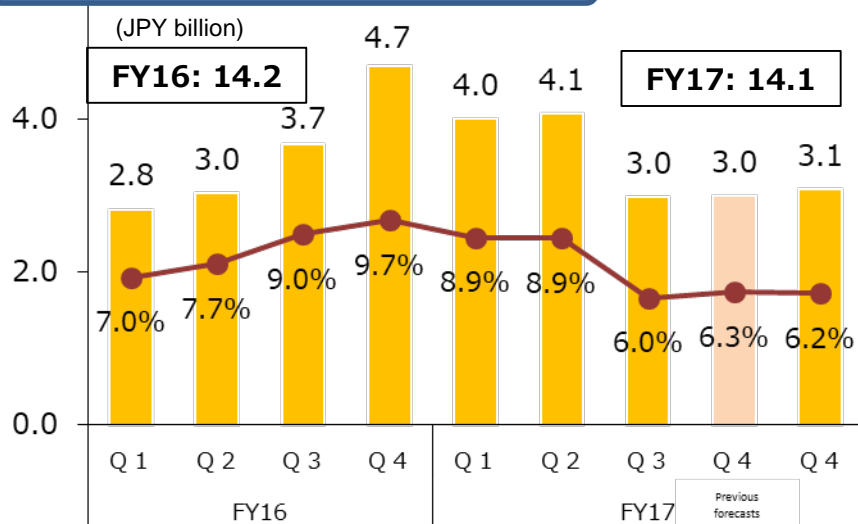
## < Details of FY2017 Operating Income difference >

### YoY difference **JPY ▲0.1 billion**

□: Positive growth factors   ■: Negative growth factors

- Demand for optical fiber was strong worldwide (Recovery in the demand for optical cable in North America was slower than initially forecast)
- Increased demand resulting from progress of FTTH method CATV systems in Japan had a positive contribution
- Decreased income on lower revenue for digital coherent-related products due to an inventory correction in China in the second half

## Operating income / operating margin

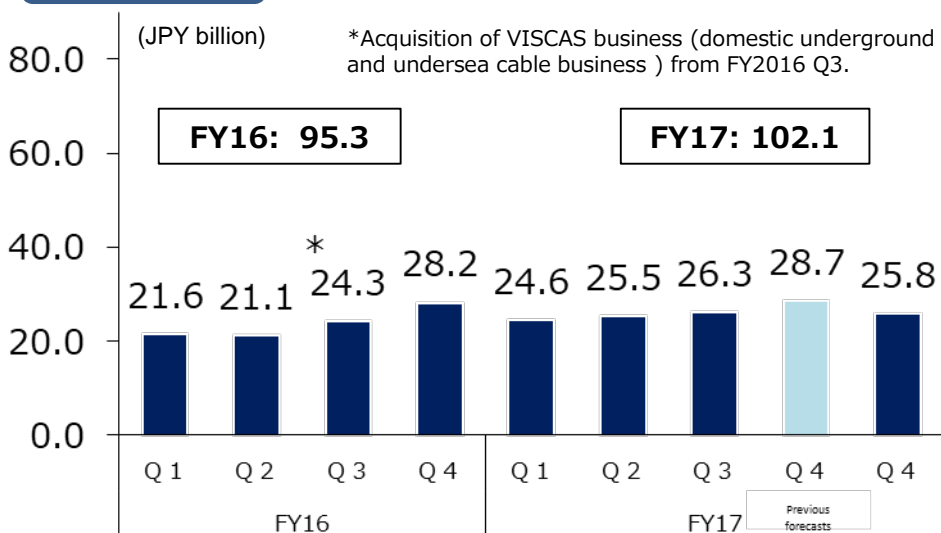


### Previous forecast difference **JPY +0 billion**

- Optical fiber and cable products were roughly according to the forecast
- Impact of the inventory correction in digital coherent products was roughly as forecast

# 1 -(2) Infrastructure (Energy Infrastructure)

## Net sales



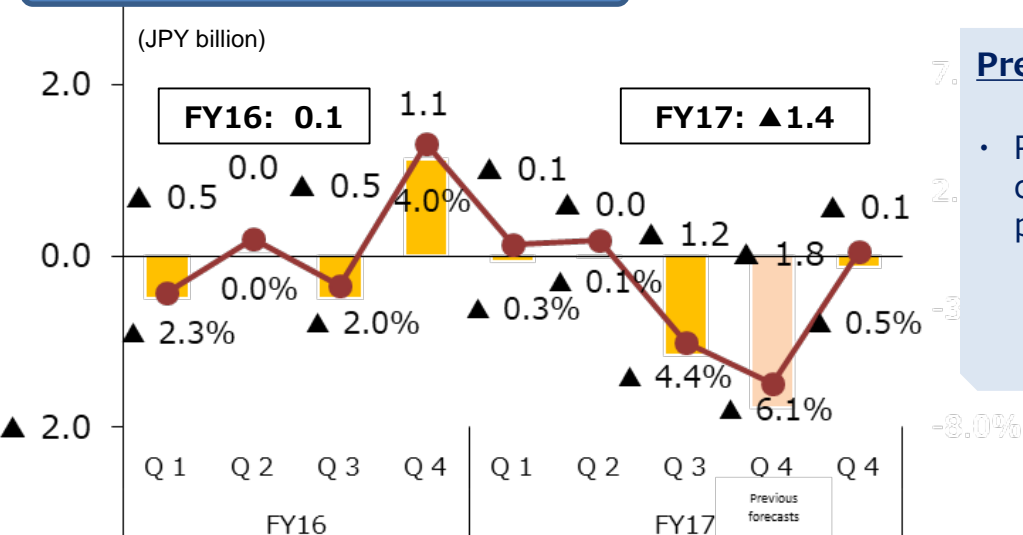
## < Details of FY2017 Operating Income difference >

### YoY difference JPY ▲1.5 billion

□: Positive growth factors ■: Negative growth factors

- Although revenue increased following the acquisition of the cable business of VISCAS Corporation, due to the decreased profitability of export projects
- Decreased income on lower revenue for power transmission and distribution products in Japan

## Operating income / operating margin

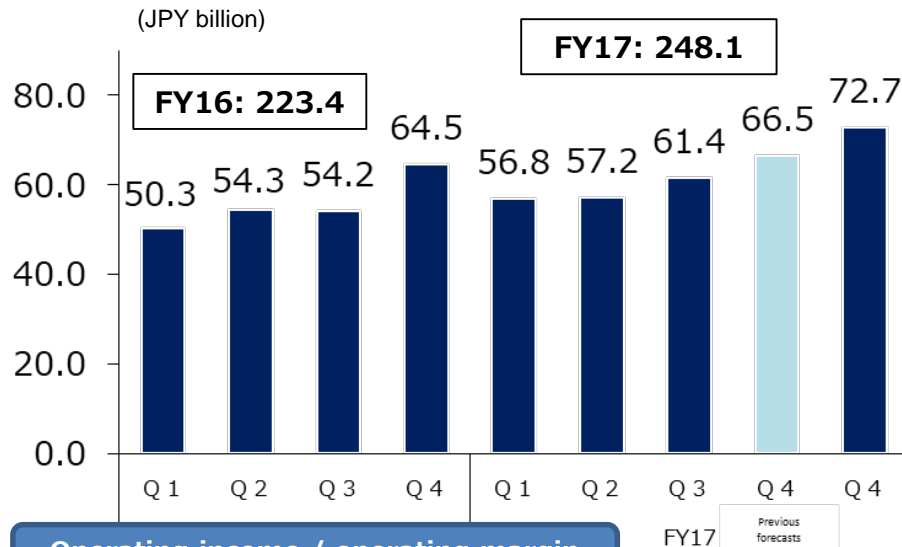


### Previous forecast difference JPY +1.6 billion

- Postponed the recording of the provision for loss on construction projects for order prospective project of power cable for new energy

# 2-(1) Electronics & Automotive systems (Automotive Products & Batteries)

**Net sales**



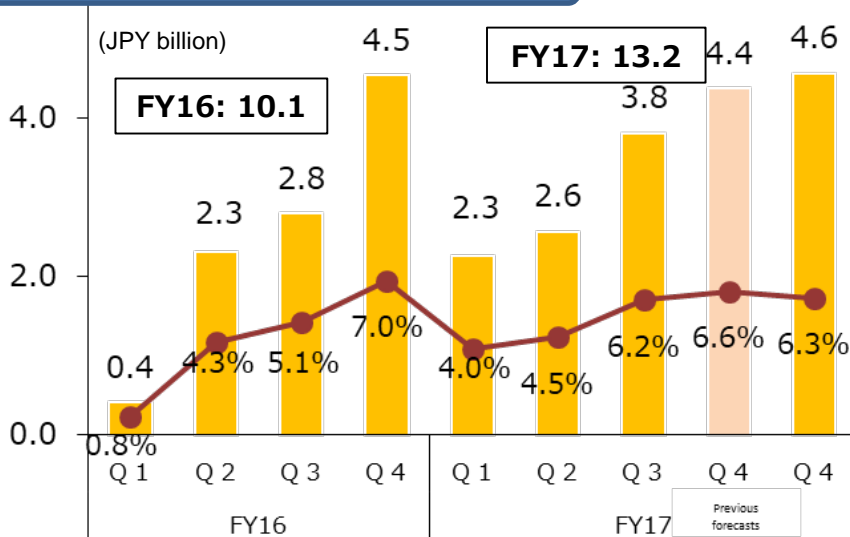
< Details of FY2017 Operating Income difference >

**YoY difference JPY + 3.1 billion**

□: Positive growth factors ■: Negative growth factors

- Sales of the wire harnesses adopted for the new vehicle models were strong
- Improvements to cost of sales, such as increased production efficiency and reduced distribution costs, had a positive contribution

**Operating income / operating margin**



**Previous forecast difference JPY +0.2 billion**

- Sales of the wire harnesses remained strong



# 2-(2) Electronics & Automotive systems (Electronics Component Material)

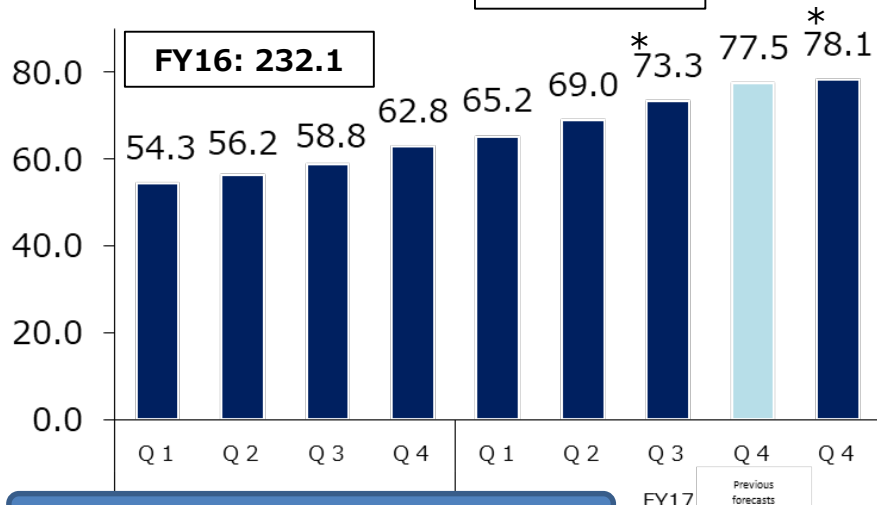
## Net sales

(JPY billion)

\* Main factor of the sales increase is raise of copper price

**FY17: 285.6**

**FY16: 232.1**

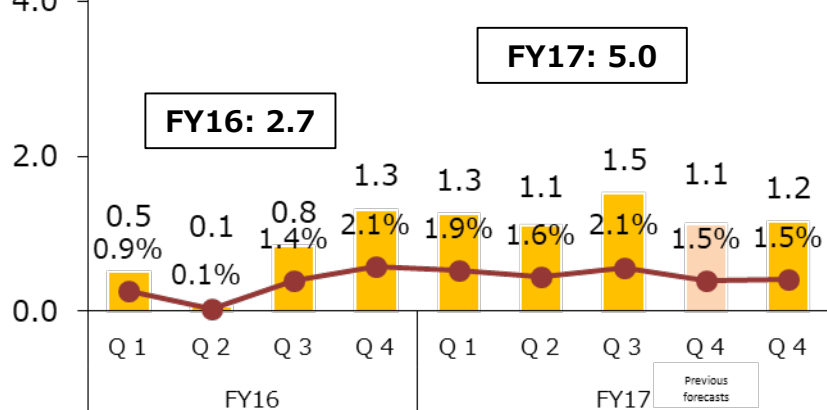


## Operating income / operating margin

(JPY billion)

**FY17: 5.0**

**FY16: 2.7**



## < Details of FY2017 Operating Income difference >

### YoY difference JPY + 2.3 billion

□: Positive growth factors ■: Negative growth factors

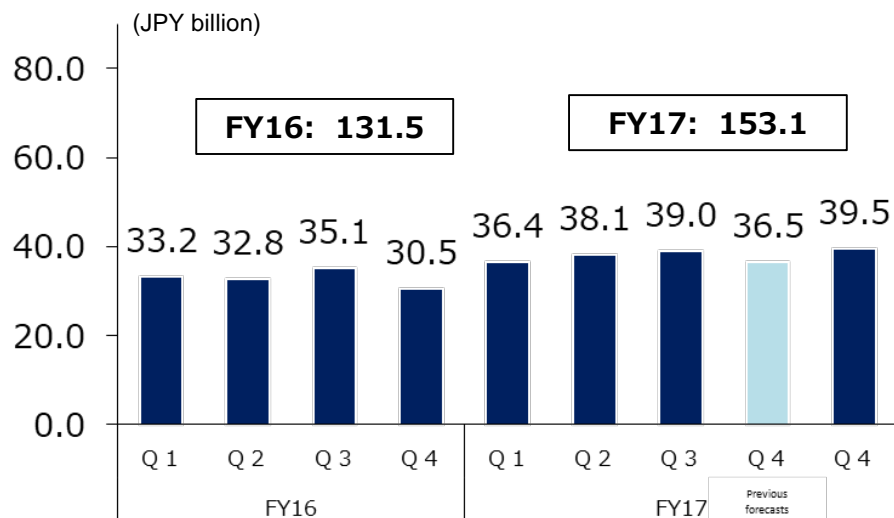
- For copper and high performance materials, income increased on higher revenue as a result of improvements to the product mix and responding to the strong demand through steady production increases resulting from improved productivity
- For magnet wire, sales of products for automotive and smartphone applications were firm

### Previous forecast difference JPY +0 billion

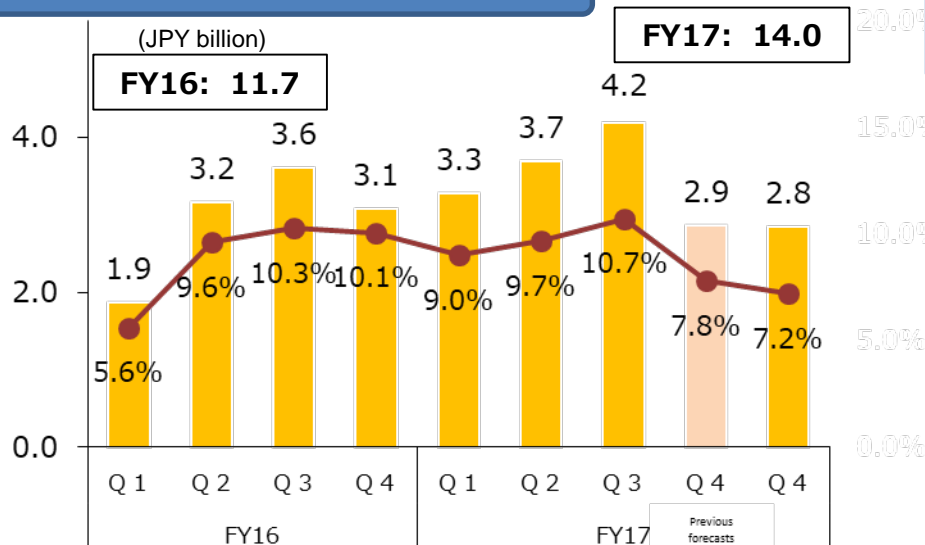
- For copper and copper alloy products and magnet wire, there was a correction in smartphone related products

# 3 Functional Products

## Net sales



## Operating income / operating margin



## < Details of FY2017 Operating Income difference >

### YoY difference JPY + 2.3 billion

□: Positive growth factors ■: Negative growth factors

- For copper foil, backed by a strong demand environment, increased productivity and improvements to the product mix had a positive impact
- Sales of thermal management solution and products increased as a result of the firm demand for data centers despite the sluggish PC market
- Sales of tapes for semiconductor manufacturing declined due to an extremely competitive environment

### Previous forecast difference JPY ▲0 billion

- Extremely competitive environment for tapes for semiconductor manufacturing continued to have an impact
- Impact of the year-end demand corrections in each business was roughly as forecast

# FY2017 Results - BS Summary

(JPY billion)

	End of 16Q4	End of 17Q4	Change	Breakdown of change
	a	b	b-a	
Current assets	382.4	426.1	+43.7	Inventories +9.4
Cash and bank deposits	47.2	50.6	+3.5	
Notes and accounts receivable trade	198.9	224.3	+25.5	
Non-current assets	367.7	389.7	+22.0	Increased by sales increase
Tangible fixed assets	205.5	216.7	+11.2	
Intangible fixed assets	9.7	11.3	+1.6	
Investments and other assets	152.5	161.7	+9.2	
<b>Total Assets</b>	<b>750.1</b>	<b>815.8</b>	<b>+65.7</b>	Impact of new consolidation +5.5
Current liabilities	293.4	330.3	+37.0	Increased by sales increase
Non-current liabilities	219.7	213.4	▲ 6.3	
<b>Total Liabilities</b>	<b>513.1</b>	<b>543.8</b>	<b>+30.7</b>	
Shareholders' equity	194.3	219.2	+24.9	
Accumulated other comprehensive income	12.4	17.3	+4.9	
Net income attributable to non-controlling interests	30.3	35.6	+5.2	
<b>Total Net assets</b>	<b>237.1</b>	<b>272.1</b>	<b>+35.0</b>	
<b>Total Liabilities and Net assets</b>	<b>750.1</b>	<b>815.8</b>	<b>+65.7</b>	
Interest-bearing liabilities	252.5	258.5	+6.0	Impact of new consolidation +3.7
Capital ratio	27.6%	29.0%	+1.4	
NET D/E ratio	0.99	0.88	▲ 0.11	

- ◇ Total assets: Increased compared to the end of last year as a result of higher sales and the impact of higher copper prices and share price
- ◇ Interest-bearing debt: Slight increase due mainly to the impact of the new consolidation

# FY2017 Results – CAPEX, Depreciation & amortization and R&D expenses

(JPY billion)

	FY16 Results	FY17		YtoY change	Change from previous forecast
		* Previous Forecast	Results		
	a	b	c	c-a	c-b
CAPEX	31.6	42.0	38.5	+7.0	▲ 3.5
Depreciation and amortization	23.4	26.5	25.1	+1.7	▲ 1.4
R&D expenses	17.5	19.4	19.5	+2.1	+0.1

\*Announced on February 6, 2018

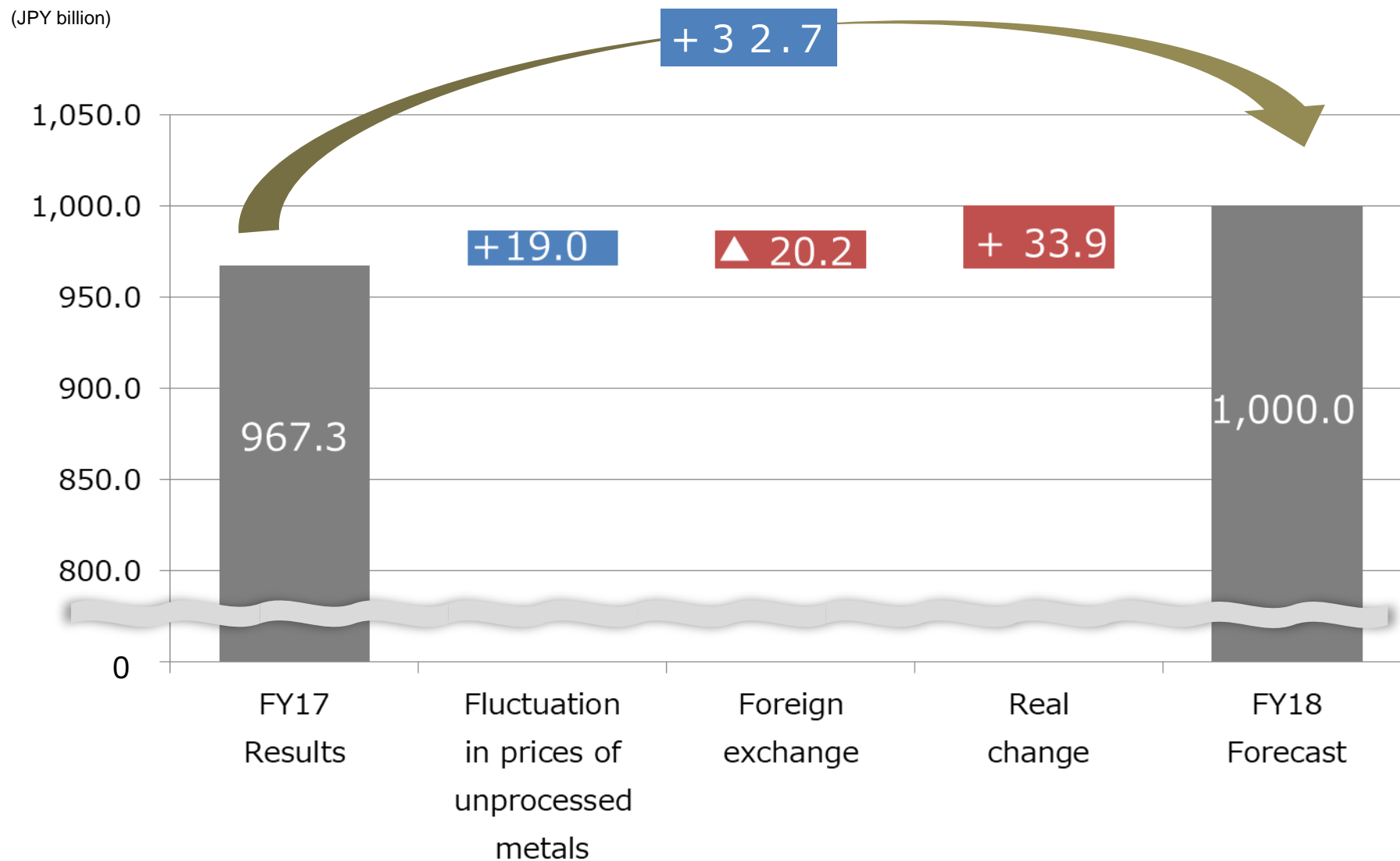
# FY2018 Forecast

# FY2018 Forecast - Summary P&L

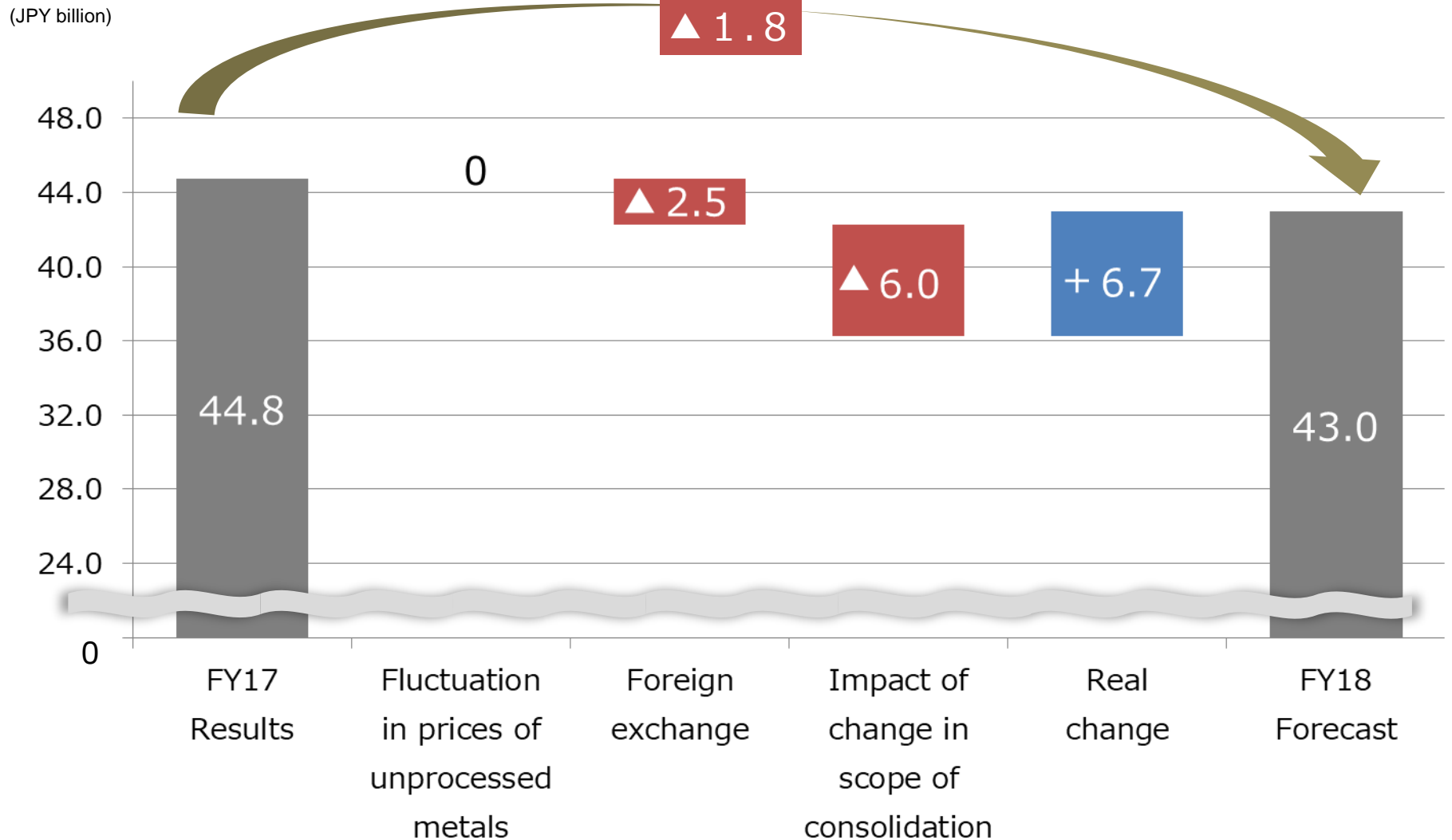
(JPY billion, JPY/kg, JPY/USD)

	FY17 Results	FY18 Forecast	YoY change
	a	b	b-a
Net sales	967.3	1,000.0	+32.7
Operating income	44.8	43.0	▲ 1.8
(Ratio)	4.6%	4.3%	▲ 0.3
Profit/loss in equity method affiliates	4.3	—	—
Foreign exchange gain/loss	▲ 1.2	—	—
Ordinary income	46.9	43.5	▲ 3.4
(Ratio)	4.8%	4.4%	▲ 0.5
Extraordinary gain/loss	▲ 6.4	▲ 8.0	▲ 1.6
Income taxes	8.2	—	—
Net income attributable to non-controlling interests	3.8	—	—
Net income attributable to owners of the parent	28.5	23.0	▲ 5.5
(Ratio)	3.0%	2.3%	▲ 0.7
Average copper price	757	800	
Average exchange rate	111	105	

# Analysis of Changes in Net Sales forecast (YOY)



# Analysis of Changes in Operating income forecast (YOY)





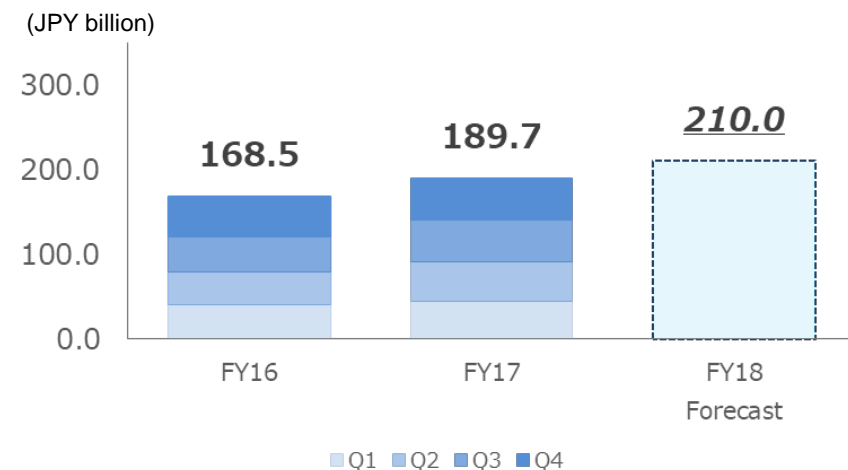
# Net Sales and Operating Income forecast by Segment

(JPY billion)

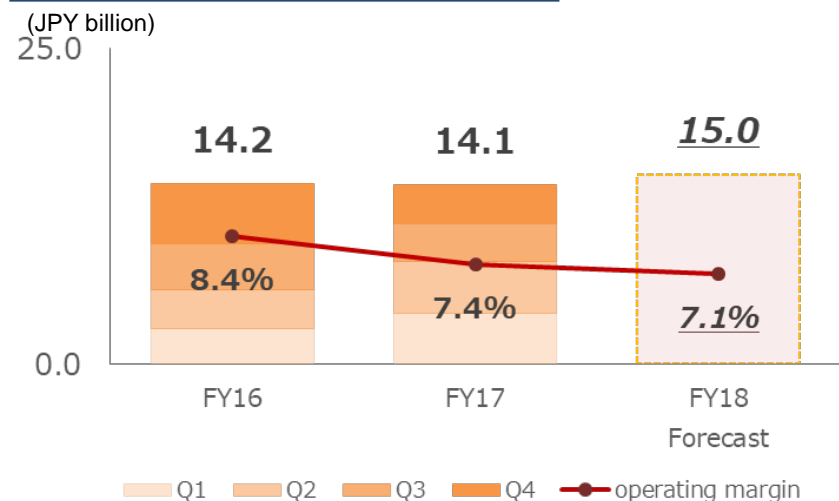
	Full year				
	FY16 Results	FY17 Results	FY18 Forecast	YtoY Change	
Net sales	Infrastructure	263.8	291.8	320.0	+28.2
	Communications Solutions	168.5	189.7	210.0	+20.3
	Energy infrastructure	95.3	102.1	110.0	+7.9
	Electronics & Automotive Systems	455.5	533.8	550.0	+16.2
	Automotive Products & Batteries	223.4	248.1	250.0	+1.9
	Electronics Component Materials	232.1	285.6	300.0	+14.4
	Functional Products	131.5	153.1	155.0	+1.9
	Service and Developments, etc.	49.7	52.9	50.0	▲ 2.9
	Elimination of intra-company transactions	▲ 57.0	▲ 64.3	▲ 75.0	▲ 10.7
	<b>Total</b>	<b>843.3</b>	<b>967.3</b>	<b>1,000.0</b>	<b>+32.7</b>
Operating income	Infrastructure	14.3	12.8	12.0	▲ 0.8
	Communications Solutions	14.2	14.1	15.0	+0.9
	Energy infrastructure	0.1	▲ 1.4	▲ 3.0	▲ 1.6
	Electronics & Automotive Systems	12.8	18.2	17.5	▲ 0.7
	Automotive Products & Batteries	10.1	13.2	12.0	▲ 1.2
	Electronics Component Materials	2.7	5.0	5.5	+0.5
	Functional Products	11.7	14.0	13.5	▲ 0.5
	Service and Developments, etc.	▲ 0.1	▲ 0.2	0.0	+0.2
	Elimination of intra-company transactions	▲ 0.0	0.1	0.0	▲ 0.1
	<b>Total</b>	<b>38.6</b>	<b>44.8</b>	<b>43.0</b>	<b>▲ 1.8</b>

# 1 -(1) Infrastructure (Communications Solutions)

## Net sales



## Operating income / operating margin



## < Details of FY2018 Operating Income forecast and focus >

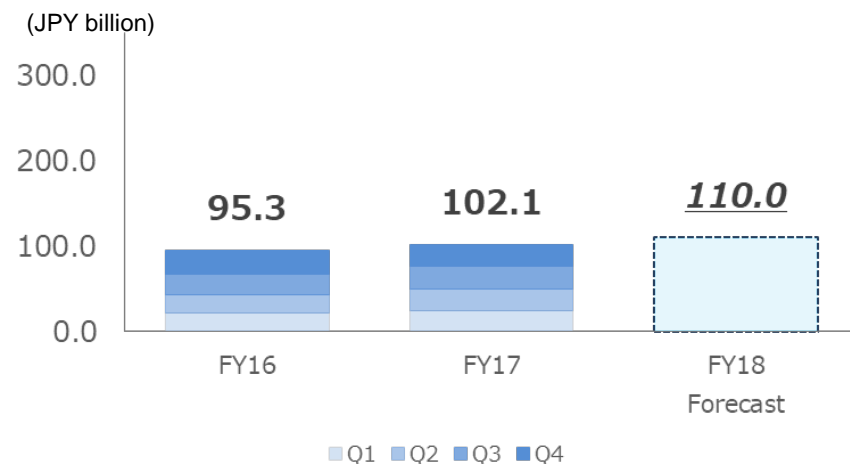
### YoY difference **JPY+0.9 billion**

□: Positive growth factors ■: Negative growth factors  
 ✓ Focus point

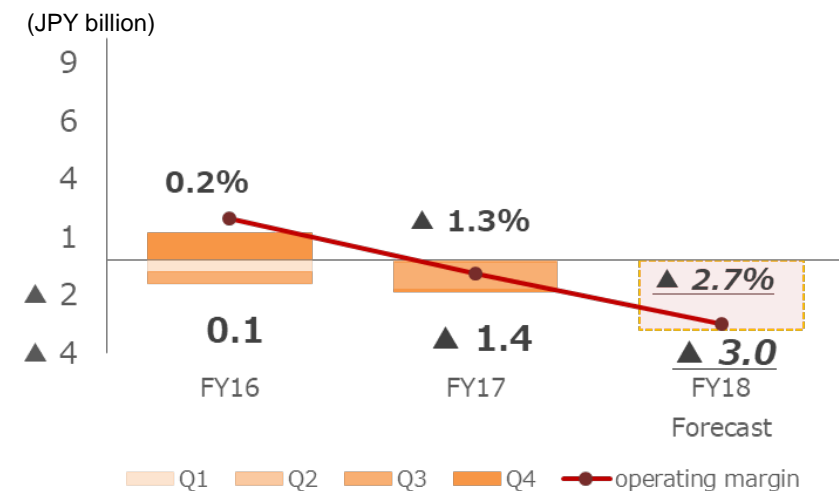
- Demand for optical fiber will remain strong
- For digital coherent products, the inventory correction in the China market is thought to have bottomed out, but uncertainty remains
- Recovery in the demand for optical cable in North America will be weak
- Increased depreciation expenses for the production expansion investments and increased research and development expenses
- Sales and operating income for overseas subsidiaries and optical fiber exports will be affected by differences in the foreign currency exchange rates resulting from a strong yen
- ✓ Steadily implement the capital investment plan for optical fiber and cable products
- ✓ Expand the production capacity and sales of small diameter, multi-core optical fiber cable for supporting the establishment of large capacity networks (6912 core RR cable, etc)
- ✓ Promote the development of next generation products

# 1 -(2) Infrastructure (Energy Infrastructure)

## Net sales



## Operating income / operating margin



## < Details of FY2018 Operating Income forecast and focus >

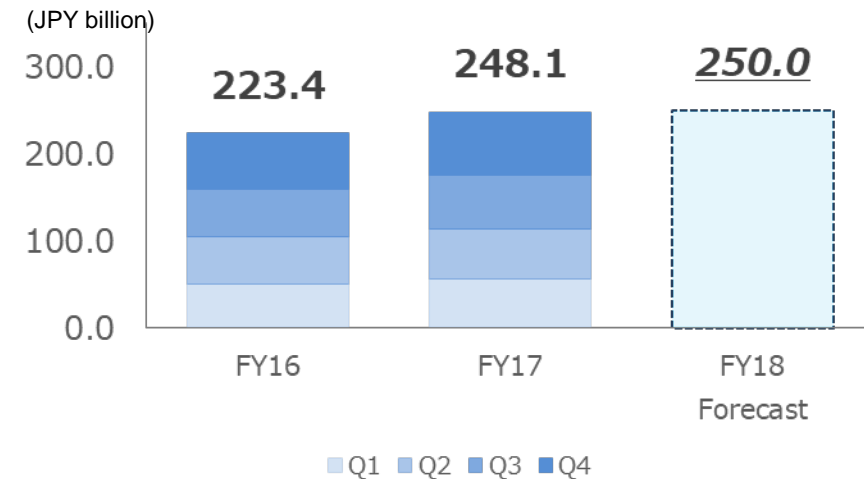
### YoY difference JPY ▲ 1.6 billion

□: Positive growth factors ■: Negative growth factors  
✓ Focus point

- Reduced fixed expenses by restructuring the production base in China
- Profitability of overseas underground cable project orders already received to remain low
- Record the anticipated loss on the order prospective project of power cable for new energy (pushed back from FY2017)
- ✓ Increase orders for ultra high voltage cable in Japan
- ✓ Receive orders for submarine cable projects in Japan and overseas
- ✓ Enhance the capability to execute construction and the equipment for submarine cables
- ✓ Introduce low-voltage aluminum CV cable for building construction and electrical facilities

## 2-(1) Electronics & Automotive systems (Automotive Products & Batteries)

### Net sales



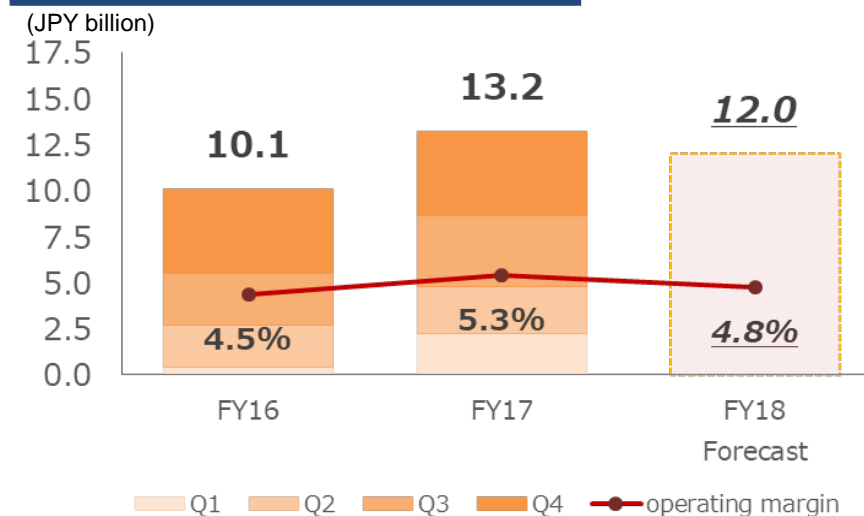
< Details of FY2018 Operating Income forecast and focus >

### YoY difference JPY ▲ 1.2 billion

□: Positive growth factors ■: Negative growth factors  
✓ Focus point

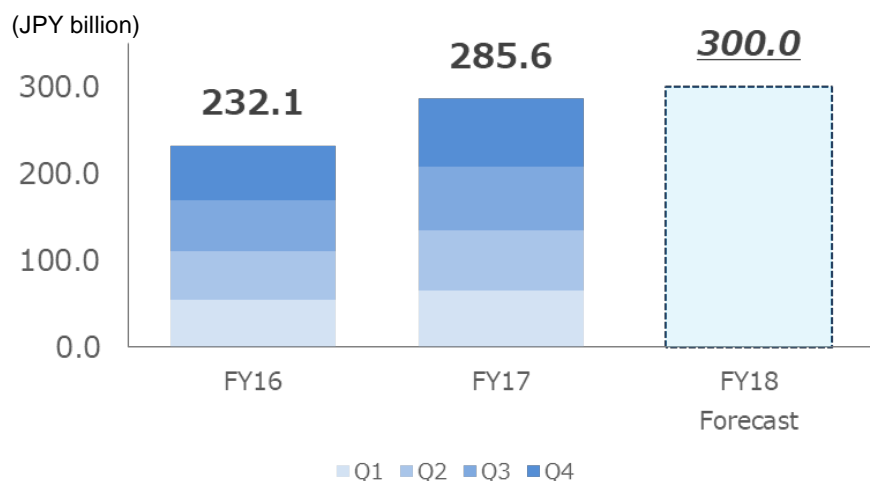
- For wire harnesses, although the differences in product mix will have a negative impact, sales will continue to be firm
  - As an entrance into the electric vehicle market, start deliveries of high-voltage harnesses and high-voltage components
  - Increase in fixed costs such as depreciation expenses and research and development expenses directed towards projects from 2020
  - ✓ In relation to ADAS, complete development and start sales promotion activities for the next generation high-performance BSS\* and next generation high precision radar
  - ✓ Proactively acquire the demand for reduced weight resulting from advances in vehicle electrification and autonomous driving
- \*BSS; Battery State Sensor

### Operating income / operating margin

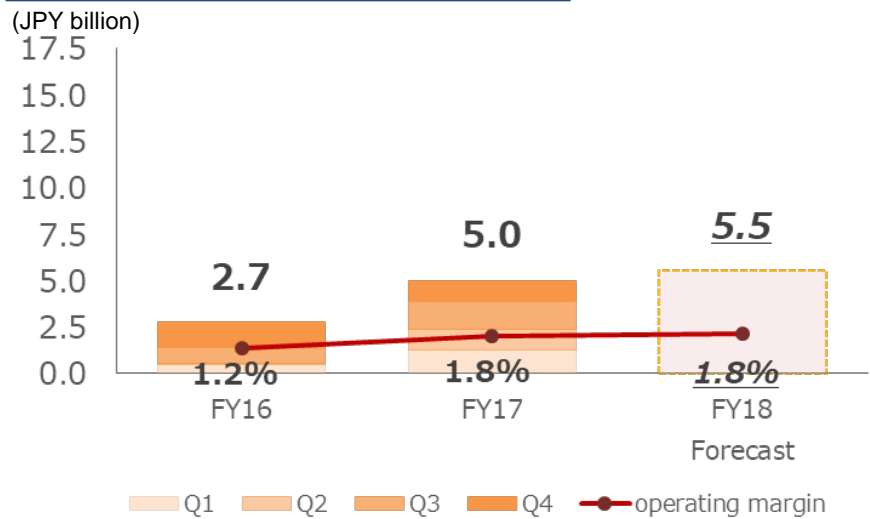


# 2-(2) Electronics & Automotive systems (Electronics Component Material)

## Net sales



## Operating income / operating margin



## < Details of FY2018 Operating Income forecast and focus >

### YoY difference JPY+0.5 billion

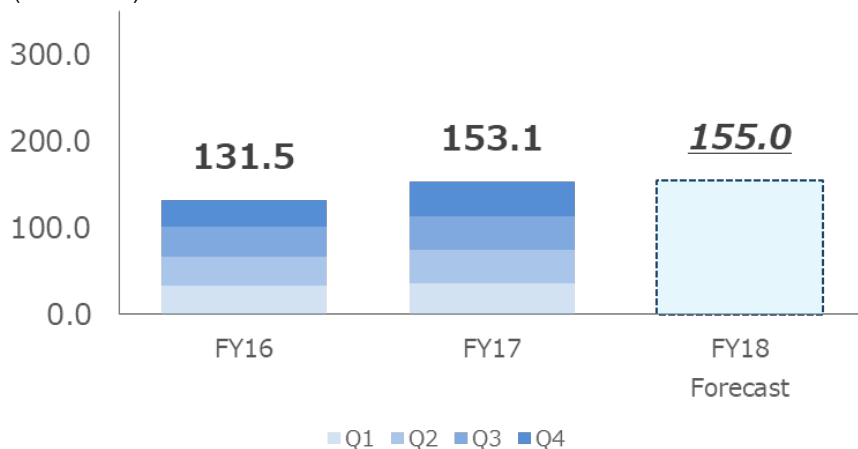
□: Positive growth factors ■: Negative growth factors  
✓ Focus point

- For copper & high performance material products, expect continued benefits from improvements to the product mix in line with market needs and increased productivity
- For magnet wire, expect continued increased income on higher revenue from automobile and smartphone applications
- ✓ Improve the product mix and increase productivity
- ✓ Introduce new alloys in response to the increased functionality of electronic devices
- ✓ Expand the models for which the automobile magnet wire is adopted, and increase sales in overseas markets

# 3 Functional Products

## Net sales

(JPY billion)



## < Details of FY2018 Operating Income forecast and focus >

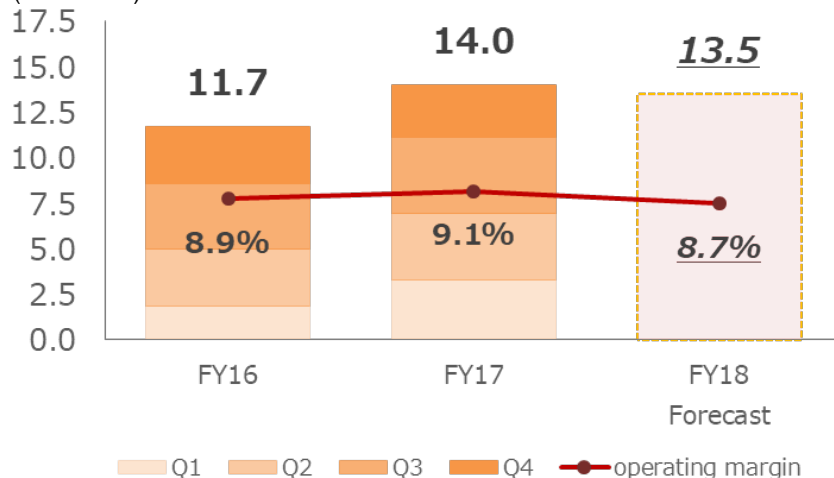
### YoY difference JPY ▲ 0.5 billion

□: Positive growth factors ■: Negative growth factors  
✓ Focus point

- For copper foil, backed by a continued strong demand environment, further improve the product mix in line with market needs
- For thermal management solution & products and memory disks, although the demand for PCs will decline, data center demand will be firm
- Extremely competitive environment in tapes for semiconductor manufacturing will continue
- ✓ Improve the product mix and increase productivity
- ✓ Develop new markets, and propose new uses
- ✓ Develop next generation products

## Operating income / operating margin

(JPY billion)



Segment	Sub-segment	Business Division
<b>Infrastructure</b>	<b>Communications Solutions</b>	Optical Fiber and Cable Products
		FITEL Products
		Broadband Solutions Business
	<b>Energy Infrastructure</b>	Power Cable
		Industrial Cable & Power Cable Accessories
<b>Electronics &amp; Automotive Systems</b>	<b>Automotive Products &amp; Batteries</b>	Automotive Products
		Batteries
	<b>Electronics Component Material</b>	Electric Conductor
		Magnet Wire
		Copper & High Performance Material Products
		Copper Tube
		<b>Functional Products</b>
Thermal Management Solution & Products		
Memory Disk		
Copper Foil		
<b>Service and Developments, etc.</b>		

Thank you very much  
for your attention.

