

**NGK INSULATORS, LTD.**

***Nov. 2010***

# *Today's Speakers*

*Name*

*Title*

*Shun Matsushita*

*President & Chief Executive Officer*

*Susumu Sakabe*

*Vice President*

*Finance and Accounting Dept.*

# 1<sup>st</sup> Half Consolidated Financial Results

(¥Bil.)

	<i>03/'10</i>	<i>03/'11</i>	<i>Growth ratio</i>
<i>Net Sales</i>	<i>103.4</i>	<i>120.0</i>	<i>+16%</i>
<i>Operating Income</i>	<i>6.3</i>	<i>16.6</i>	<i>+164%</i>
<i>Ordinary Income</i>	<i>5.8</i>	<i>14.4</i>	<i>+147%</i>
<i>Net Income</i>	<i>3.7</i>	<i>11.0</i>	<i>+194%</i>
<i>Exchange Rate</i>	<i>95</i>	<i>91</i>	<i>¥/US\$</i>
	<i>128</i>	<i>121</i>	<i>¥/ER</i>

## *Points of 1<sup>st</sup> Half Result*

◆ *Sales & Income increased dramatically from the 1<sup>st</sup> Half of previous year .*

### *<Advantages >*

■ *Demand for Automotive related Ceramic Products is active due to the good car sales especially in emerging countries .*

■ *Recovery of demand for Ceramic Components for Semiconductor Production Equipment.*

### *<Disadvantages >*

■ *Power : Decrease of the domestic special procurement of UHV Transmission line project and the change of market in China.*

*Trough of orders of NAS battery overseas.*

■ *Stronger Yen versus US\$ and EUR.*

# Forecast for Fiscal year Ended March 2011

	03/'10	03/'11	(¥Bil.) Growth ratio
<i>Net Sales</i>	235.5	255.0	+8%
<i>Operating Income</i>	23.5	30.0	+28%
<i>Ordinary Income</i>	24.9	30.0	+21%
<i>Net Income</i>	17.8	23.5	+32%
<i>Exchange Rate</i>	94 130	87 116	¥/US\$ ¥/ER

# Highlight of Fiscal Year 2011

◆ *Sales & Income increase from the last fiscal year, varying with each business*

## *<Advantages>*

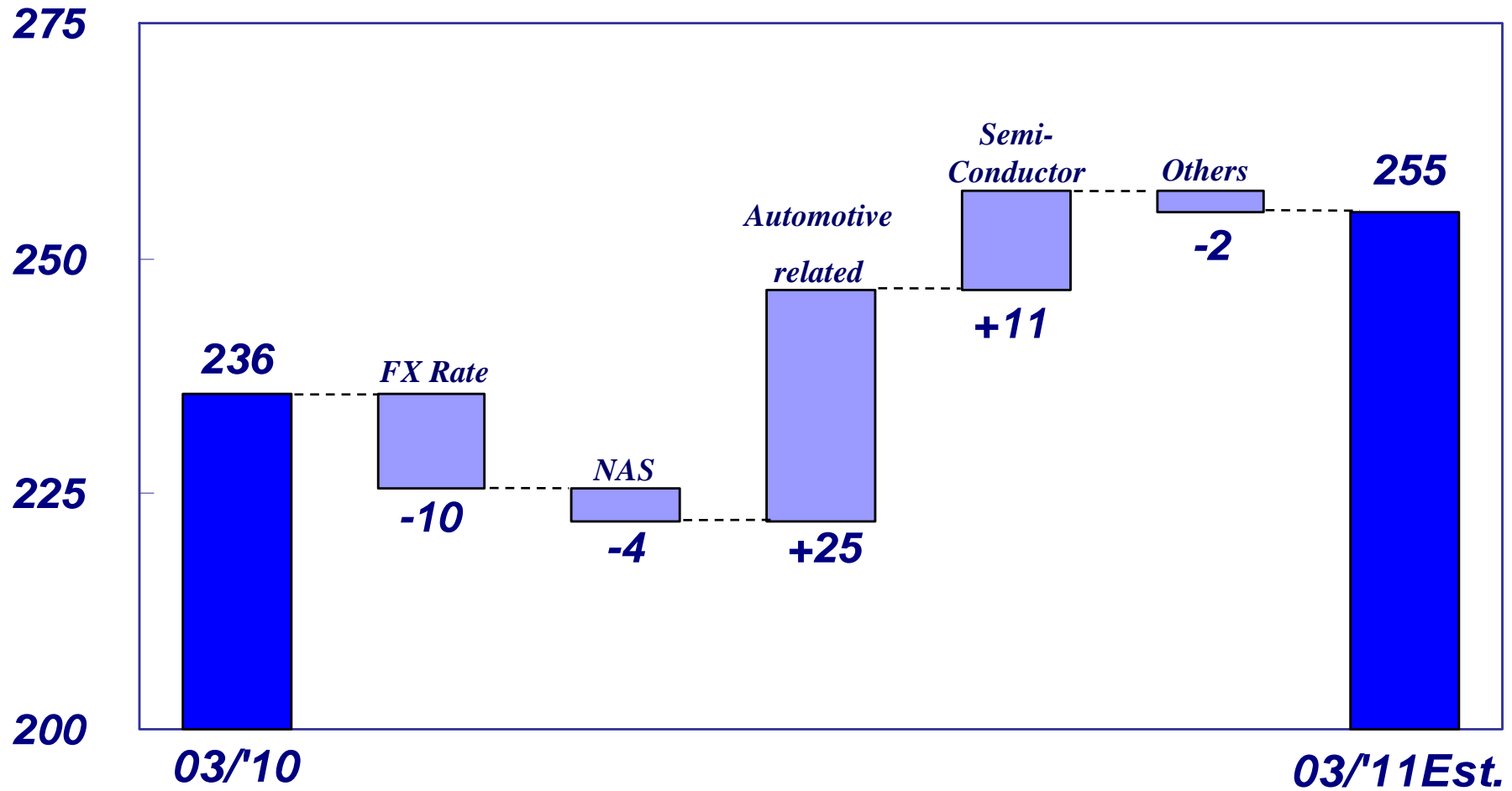
- *Demand for Automotive-related products increases due to the recovery of car sales and tightened emission regulations .*
- *Recovery of demand for Ceramic Components for Semiconductor Production Equipment .*

## *<Disadvantages>*

- *NAS Battery : Delay of orders from overseas and the domestic market of wind energy slows.*
- *Insulator :Decreasing demand and increasing competition in China .*
- *Concern about the backlash from the end of incentives for car sales .*
- *Stronger Yen versus US\$ and EUR (Est. ¥80/\$, ¥110/EUR)*

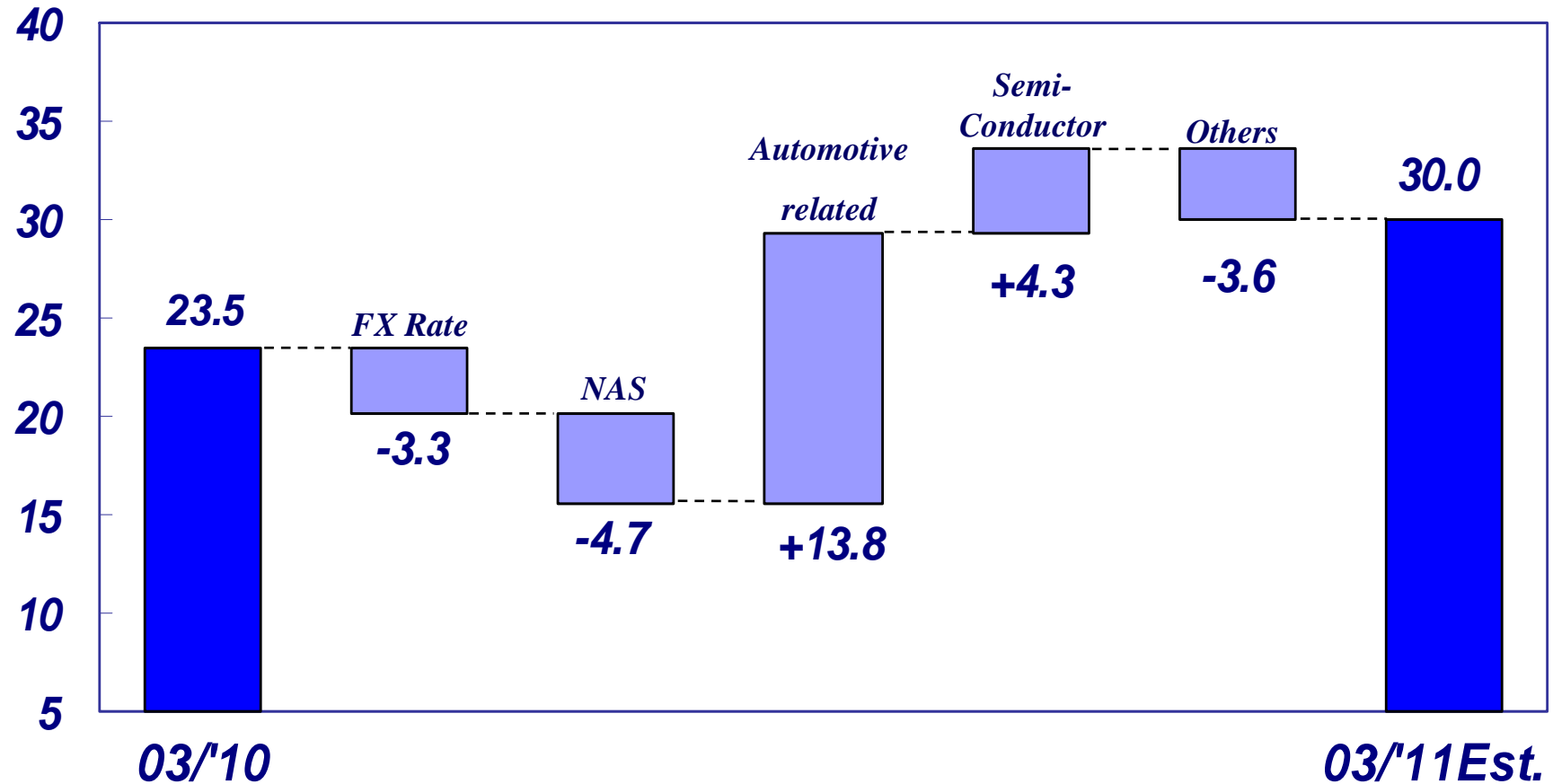
# *Factors of Sales Variation*

¥ Bil.



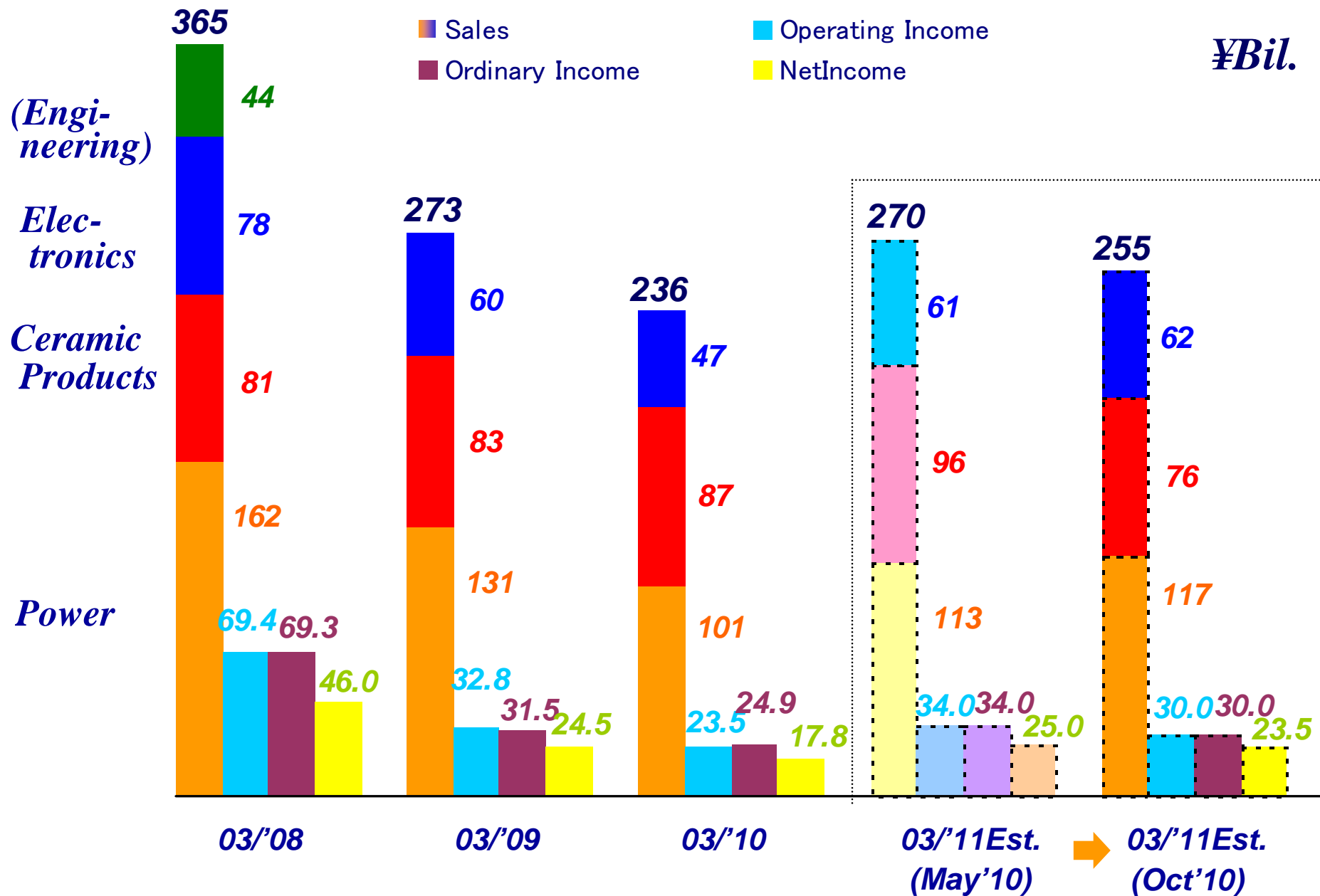
# *Factors of Op. Income Variation*

¥ Bil.





# Sales and Income of NGK



# *Change from Forecast in March 2010*

◆ *Sales & Income are short of the forecast in March 2010*

■ *Ceramic products : firm, because of demand for Automotive Related Ceramics, but sales are forecast carefully due to concern about the backlash from the end of incentive in the 2<sup>nd</sup> Half .*

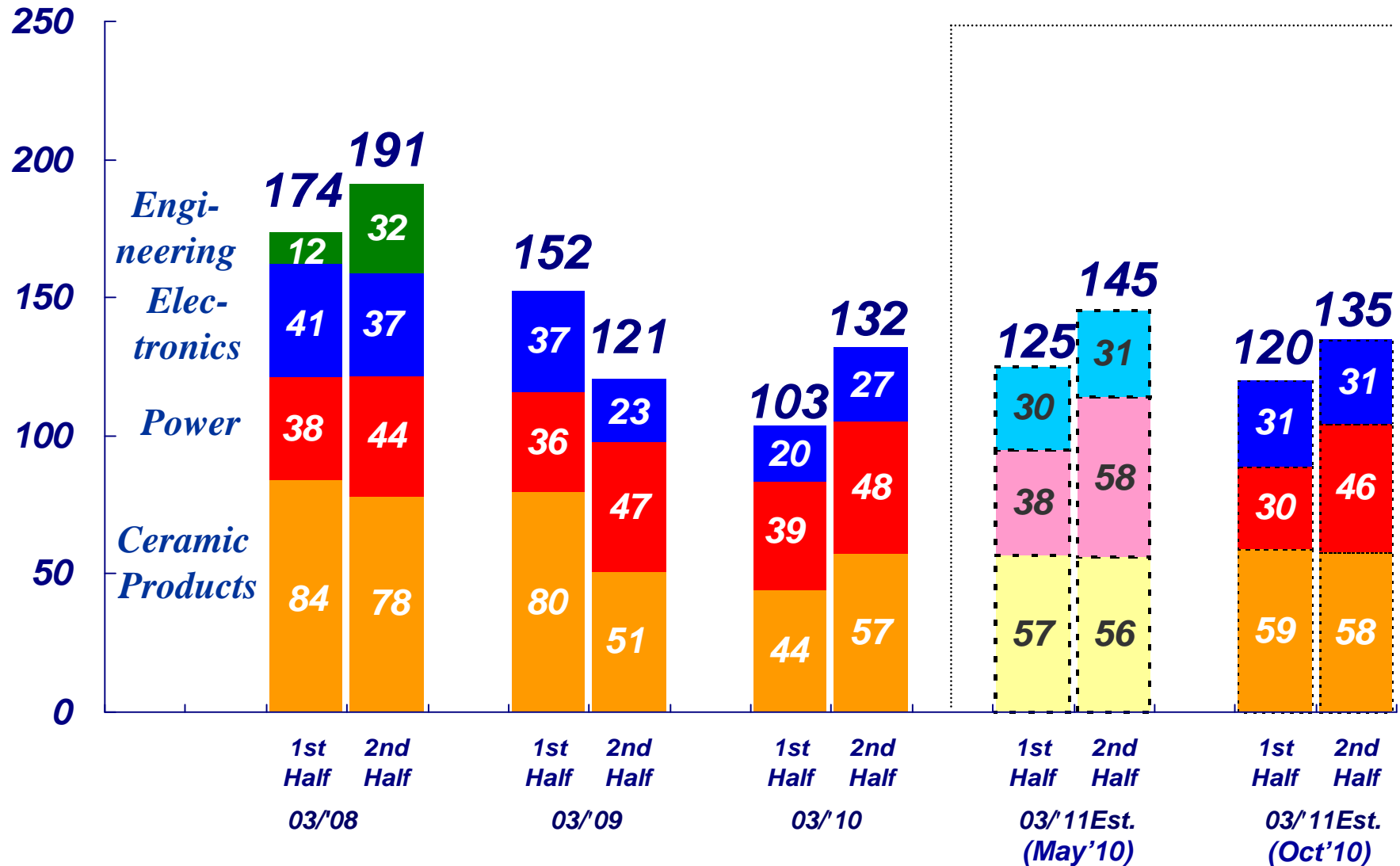
■ *Power : Sales and Income decreased due to the drastic decline of the shipment of Insulator and NAS Battery.*

■ *Yen keeps stronger versus US\$ and EUR*

*¥90 / \$ → ¥87 / \$、 ¥120 / EUR → ¥116 / EUR*

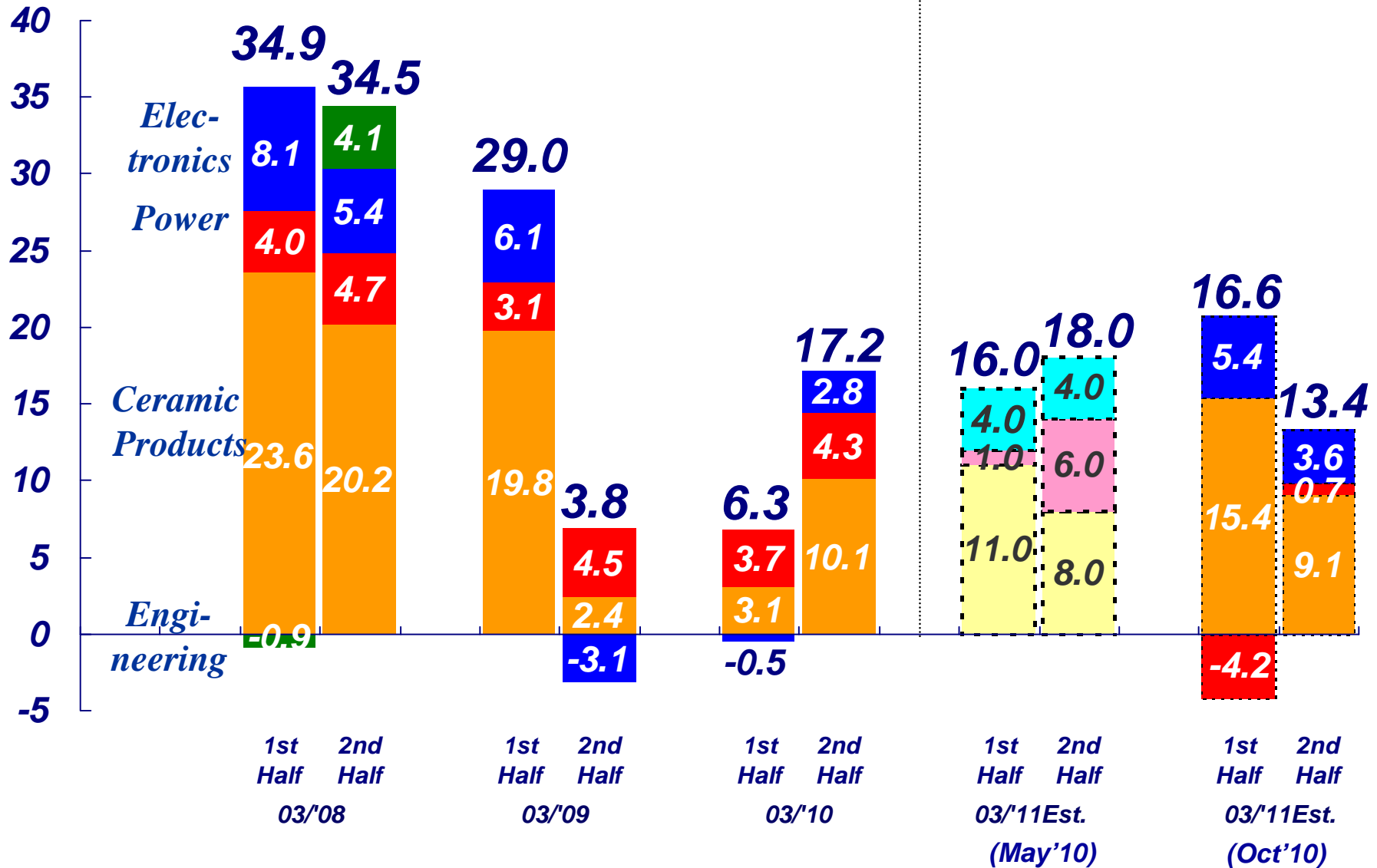
# Net Sales of NGK / Half Term

¥ Bil. *After consolidation elimination*



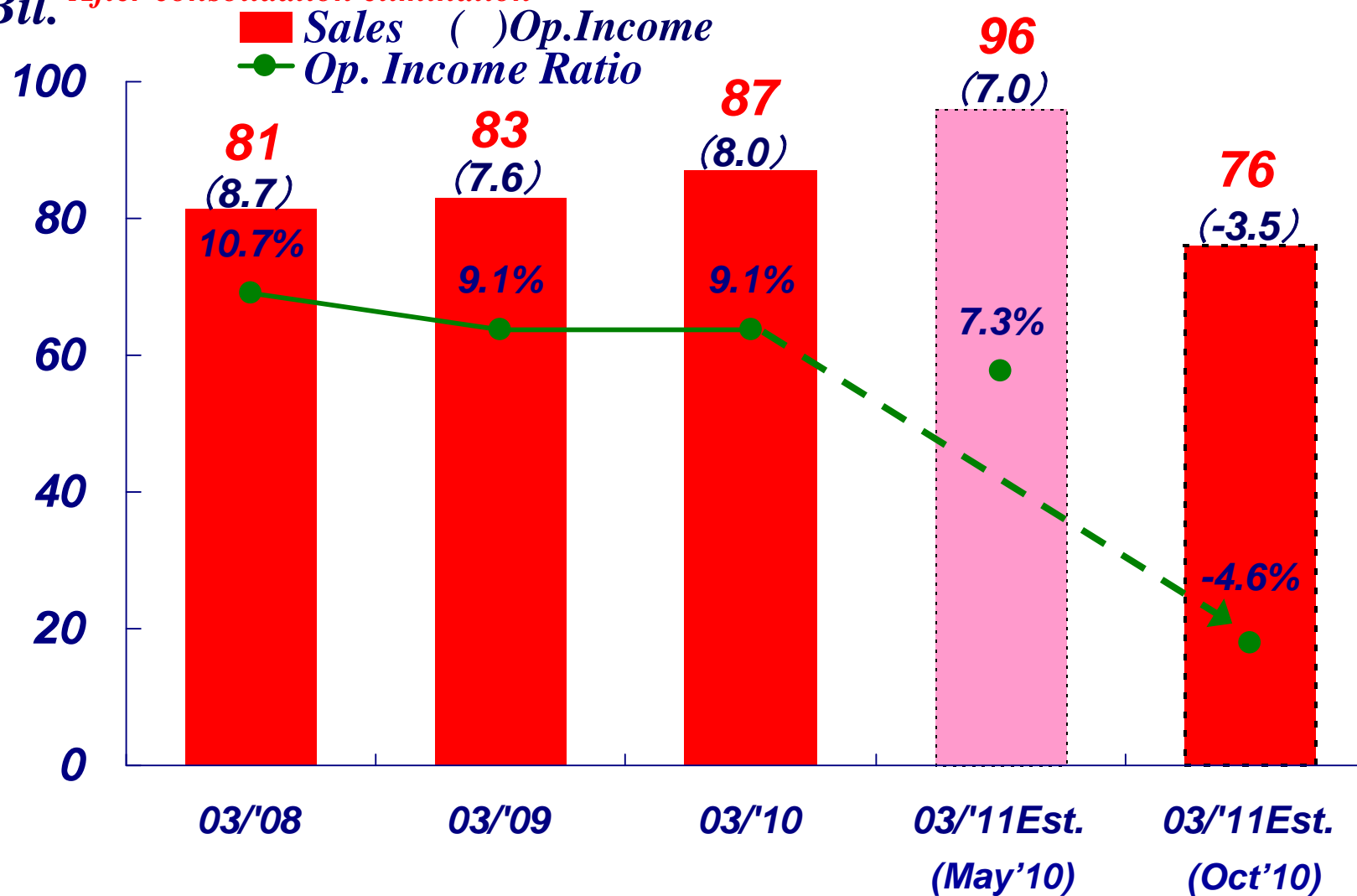
# Income of NGK / Half Term

¥ Bil.

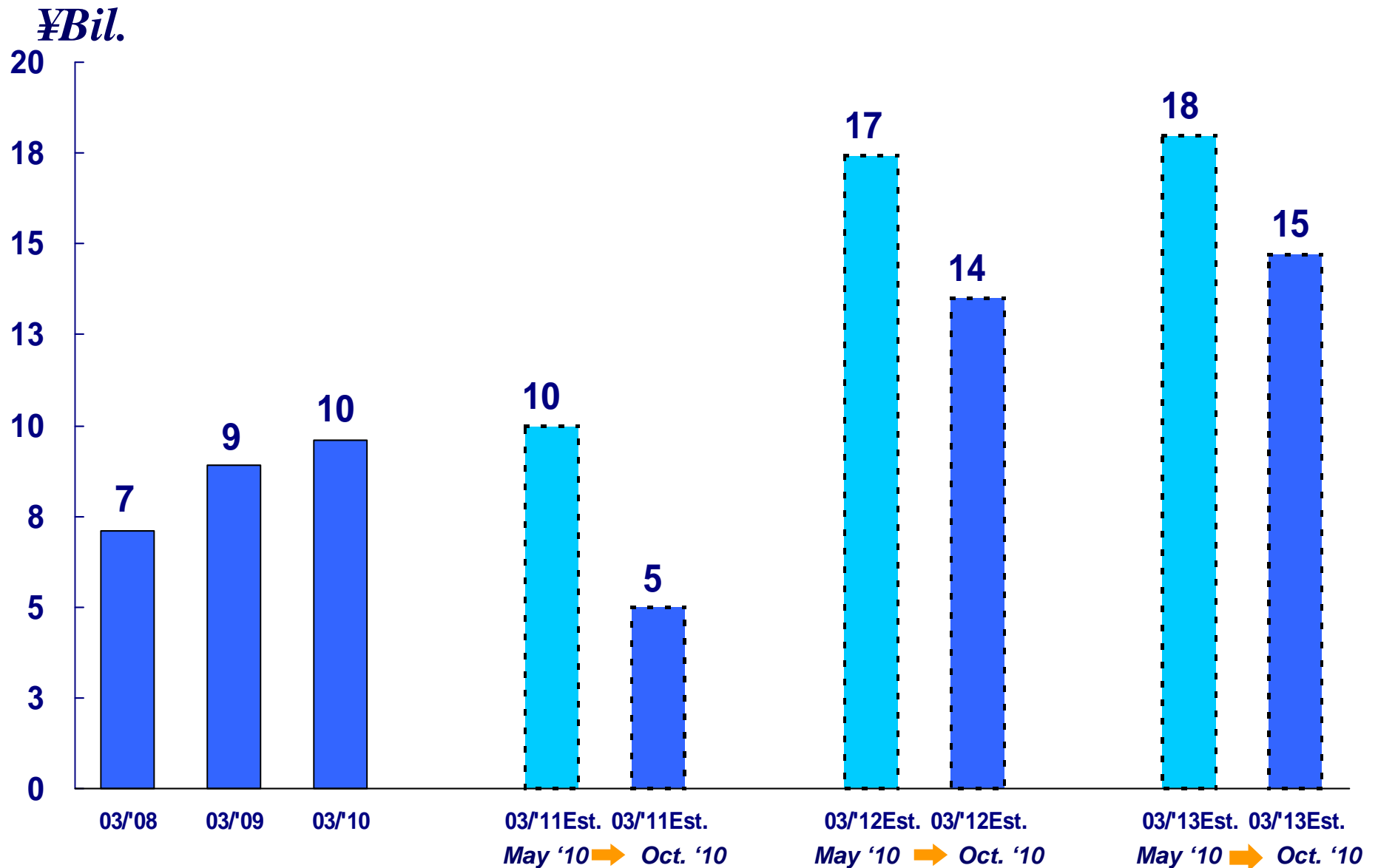


# Power Business Sales & Operating Income

¥Bil. *After consolidation elimination*



# Sales of Insulators in China Market



## *Overview*

*Domestic : Order of UHV transmission line project passed a peak.*

*China : Part of the shipments of demand for UHV transmission line project slows.*

*Middle East and North America : Markets are active.*

## *Changes of environment from the beginning of the term*

*China : Despite **no change in mid-term estimates**, the progress of UHV and DC Transmission Insulator project is **slower than initial estimates**.*

*Price goes down and competition increases due to the growth of **Chinese competitor and decreasing demand**.*

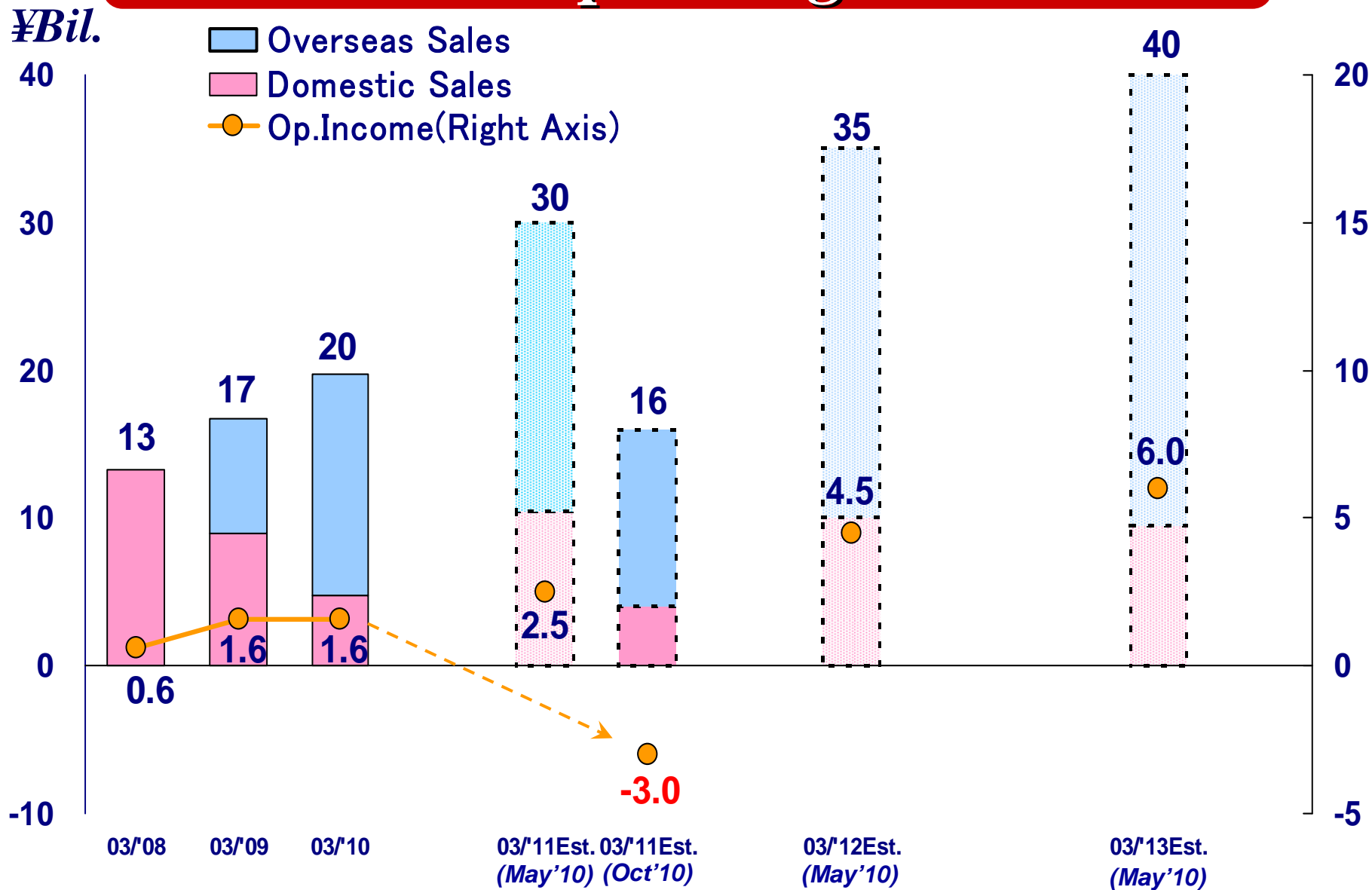
*Other market : No change in particular.*

## *Tasks*

*Domestic : Promotion of replacing product delivered during periods of high economic growth.*

*China : Recovery and keeping the competitive edge by producing differentiated product.*

# NaS Battery Business Sales & Operating Income





## *Overview*

- *Backlog of big orders from overseas over next several years.*
- *Demand for stabilization of the power distribution system is increasing to meet the spreading use of renewal energy.*

## *Changes of environment*

*Domestic : No subsidies for wind energy provider in 2010 and 2011.*

*New order relating to wind power will come up around 2012 due to New Buyback Program.*

*Overseas : Several projects in Europe delayed due to economic situation and exchange rate fluctuation.*

*Operation of new equipments whose production capacity is 150MW tops got slightly behind the initial schedule due to the drastic change of markets.*

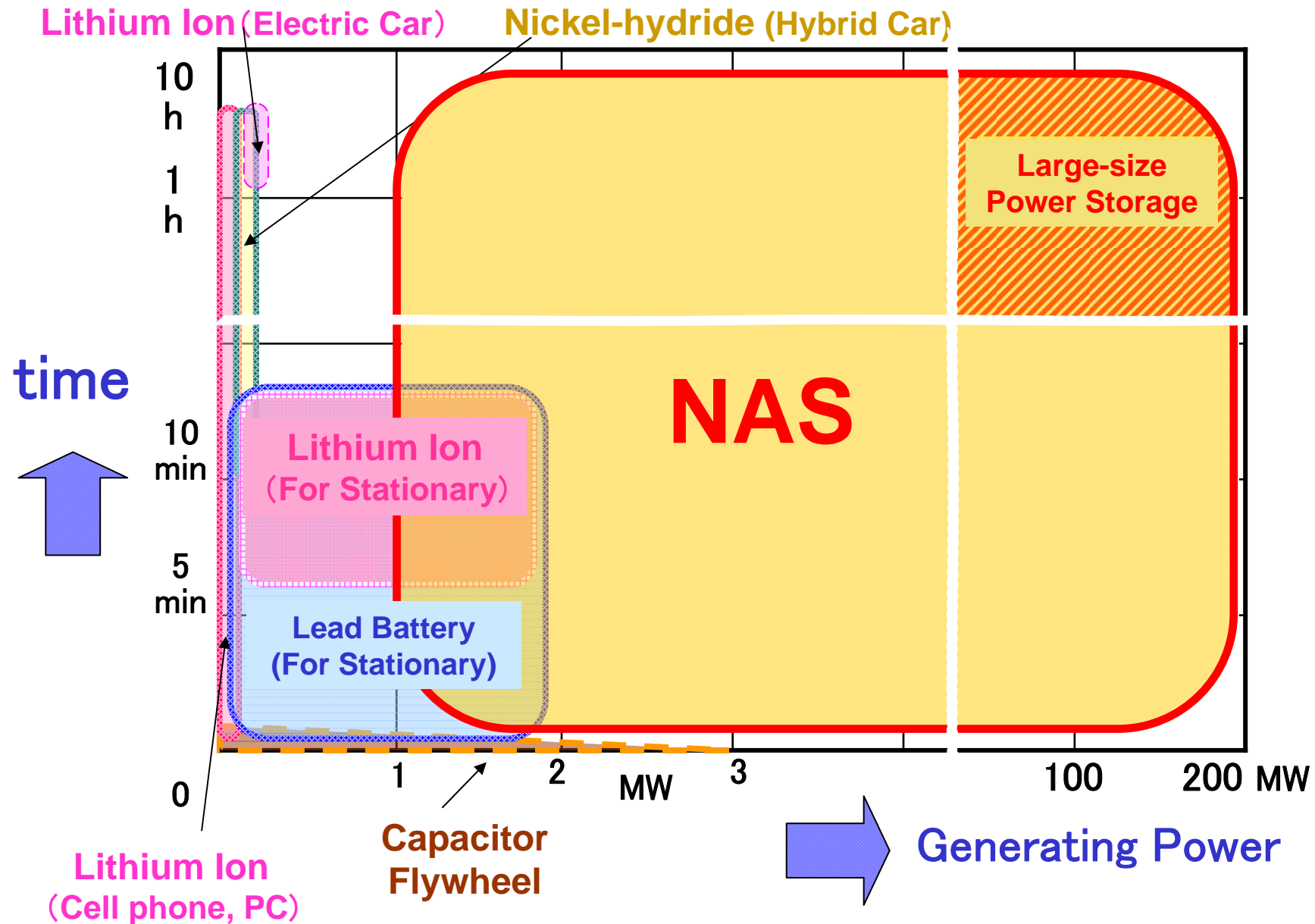
*Deficit due to the decrease of shipments in hand and a worse-case of mix of orders.*

*NAS Battery Business still has the position as leading business.*

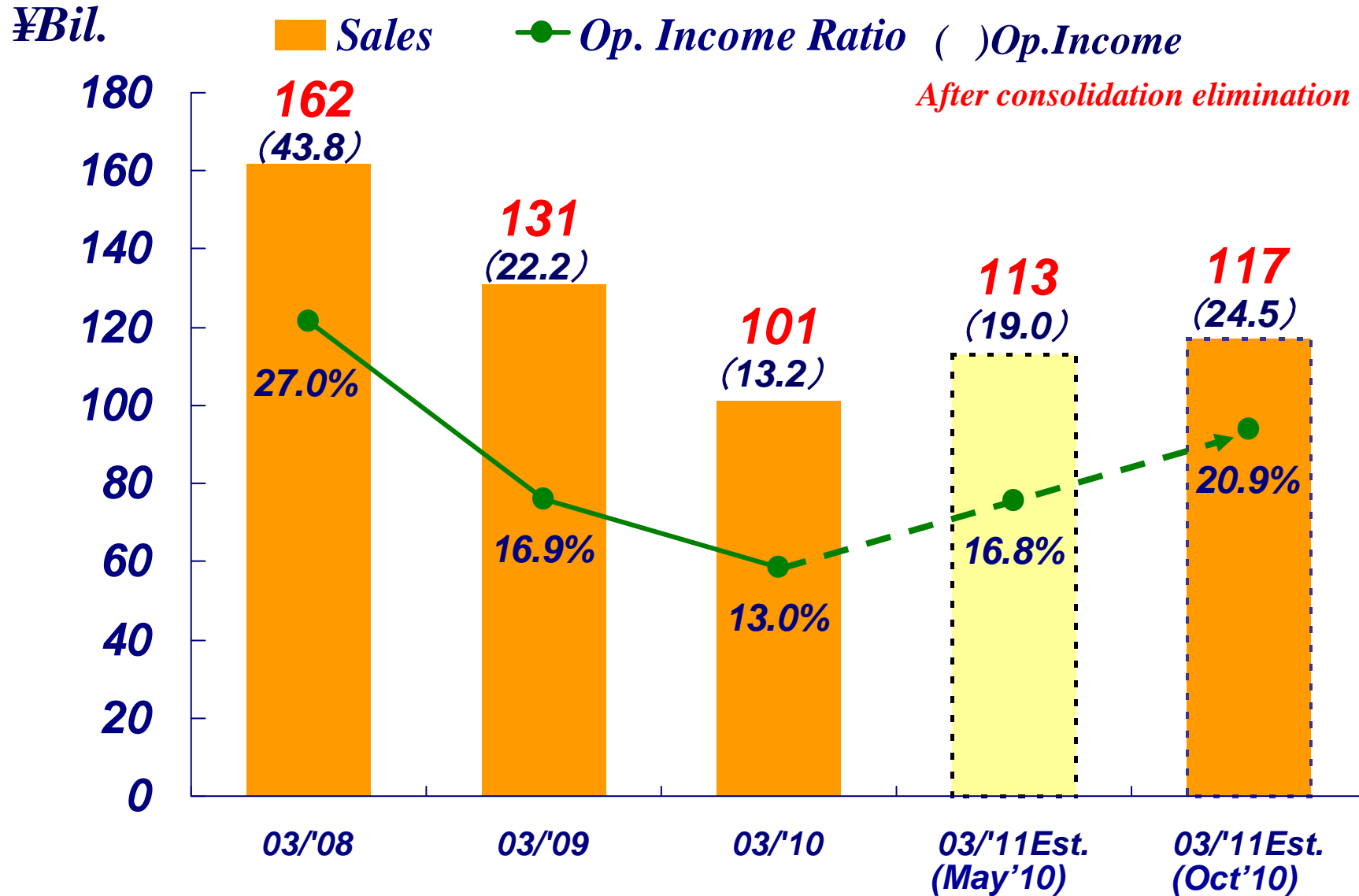
## *Tasks*

- *Promotion to reduce costs radically.*
- *To review to build oversea base.*

# Comparison to Other Secondary Batteries



# Ceramic Products Business Sales & Operating Income



## Overview

- ◆ *Increasing car sales especially in emerging countries .*
- ◆ *Demand will increase in mid to long term due to CO2 and emission regulations being tightened worldwide.*

*Automotive catalytic converters (“HoneyCeram”), Expansion of the coverage area of regulations.  
Cd-DPF& Large-size honeycombs: Tighter regulations for truck and construction equipment.*

*SiC-DPF : Tighter emission regulations in EU.  
Stiff competition with other materials.*

## Changes of environment

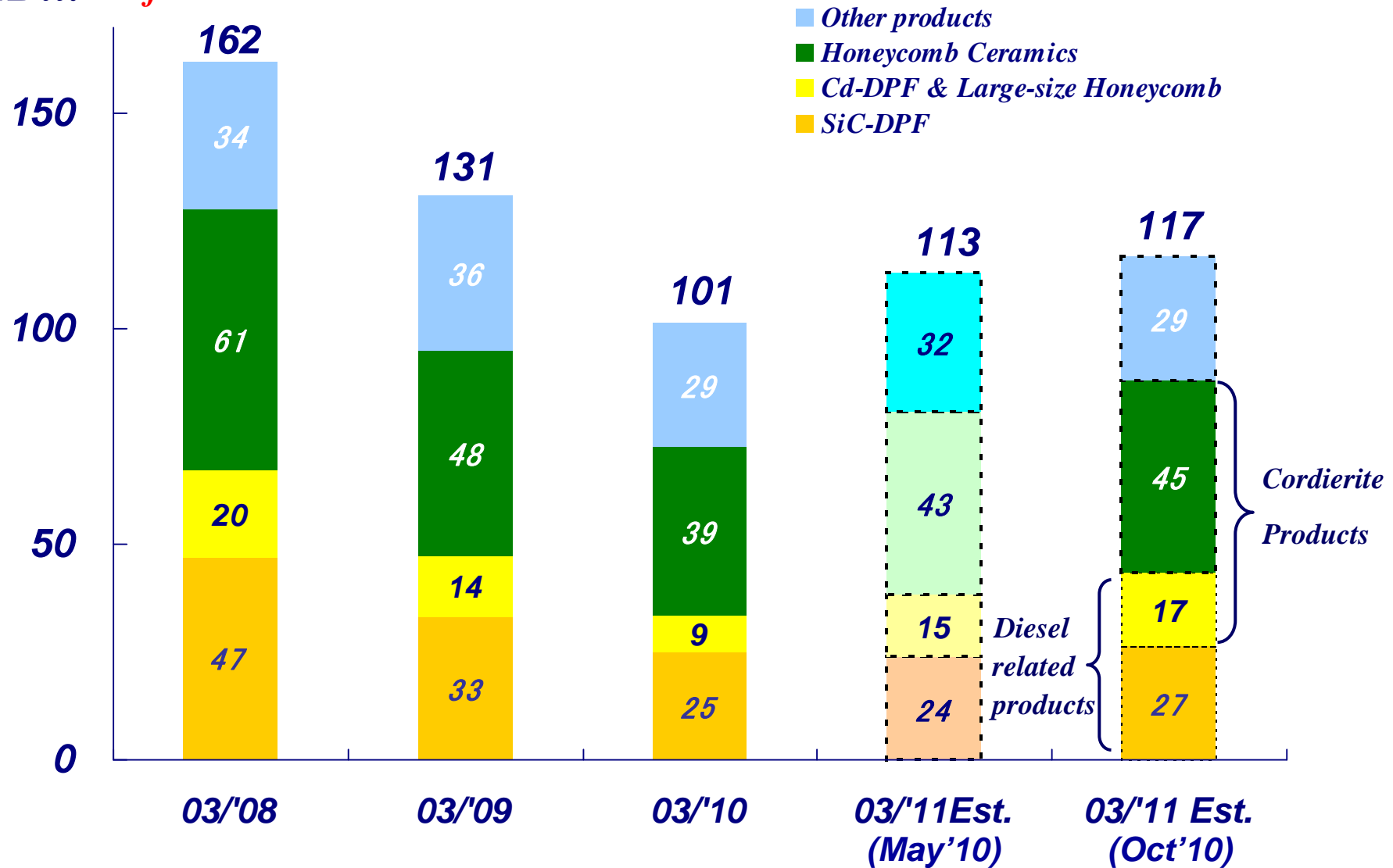
- ◆ *HoneyCeram gained share. Demand for SiC-DPF is beyond the estimation of the beginning.*
- ◆ *Increasing demand for Large Size HoneyCeram and Cd-DPF due to recovery of bus and truck market.*
- ◆ *Rapid growth of Chinese market slowed after the last April.*
- ◆ *Concern about the decreasing demand after the end of incentive.*

## Tasks

- ◆ *Further promotion of profit performance by cost reduction.*
- ◆ *Promotion of global strategy responding to increasing demand.*

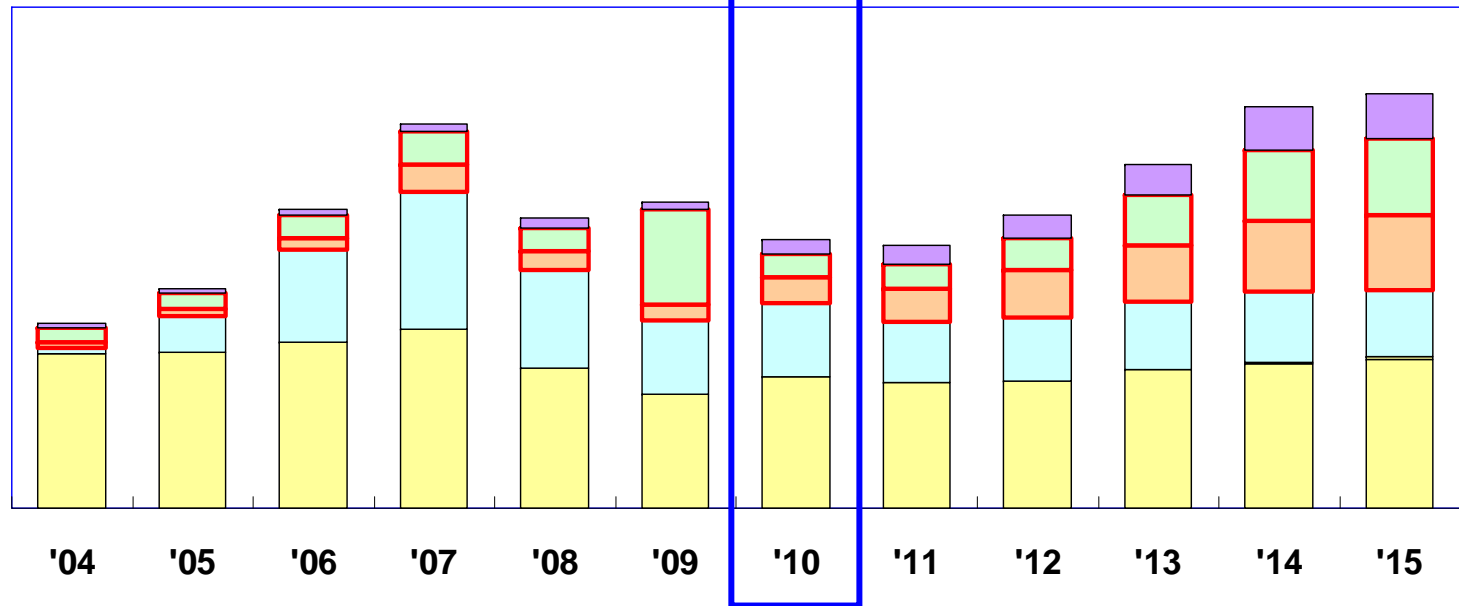
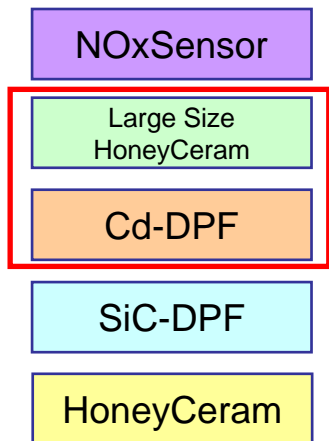
# Sales of Ceramic Products Business

¥Bil. *After consolidation elimination*

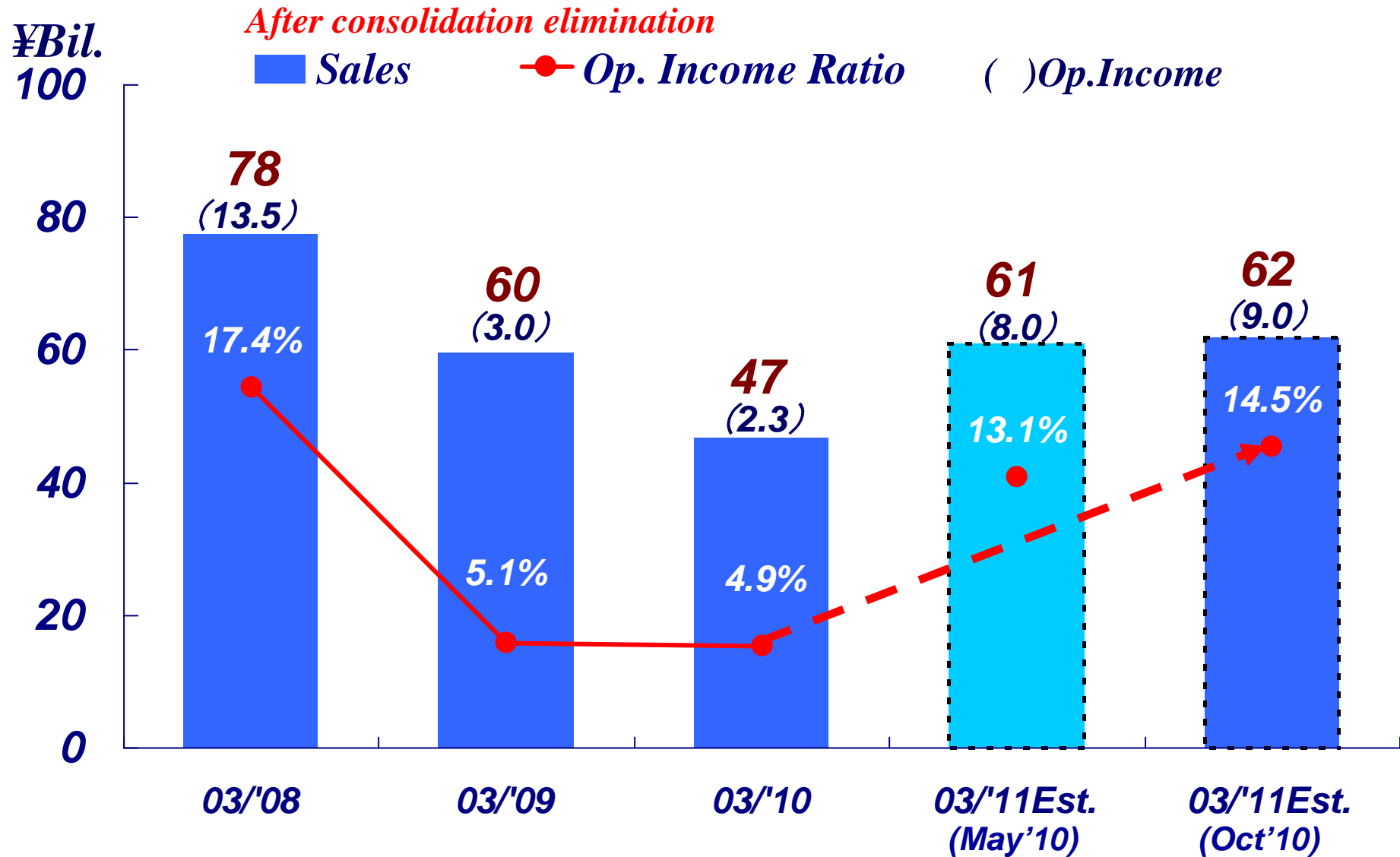


# Long Term Picture of Automotive related product

		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Passenger Car	Japan	New Short-Term	New Long-Term						Post New Long-Term				
	US	Tier2/Bin#8							Tier2/Bin#5				
	EU	EuroIII	EuroIV						EuroV		EuroVI		
Truck	Japan	New Short-Term	New Long-Term						Post New Long-Term				
	US	US'04			US'07				US'10				
	EU	EuroIII	EuroIV			EuroV			EuroVI				
Off-Road	Japan								same as Tier4a		same as Tier4b		
	US								Tier4a		Tier4b		
	EU								Step-3		Step-4		



# Electronics Business Sales & Operating Income



## *Overview*

- ✦ *“Beryllium Copper”*: Demand increases due to economic recovery.
- ✦ *“Ceramic Components for Semi-conductor Production Equipment”*: Demand increases due to recovery of investments of semi-conductor makers.
- ✦ *“Ceramic Actuators for Color Printer Heads”*: Demand increases due to increasing demand for printers in emerging market.
- ✦ *“Soshin Electric Products”*: Demand for Railway, car electronics and EMC related products tends to increase.

## *change of environment*

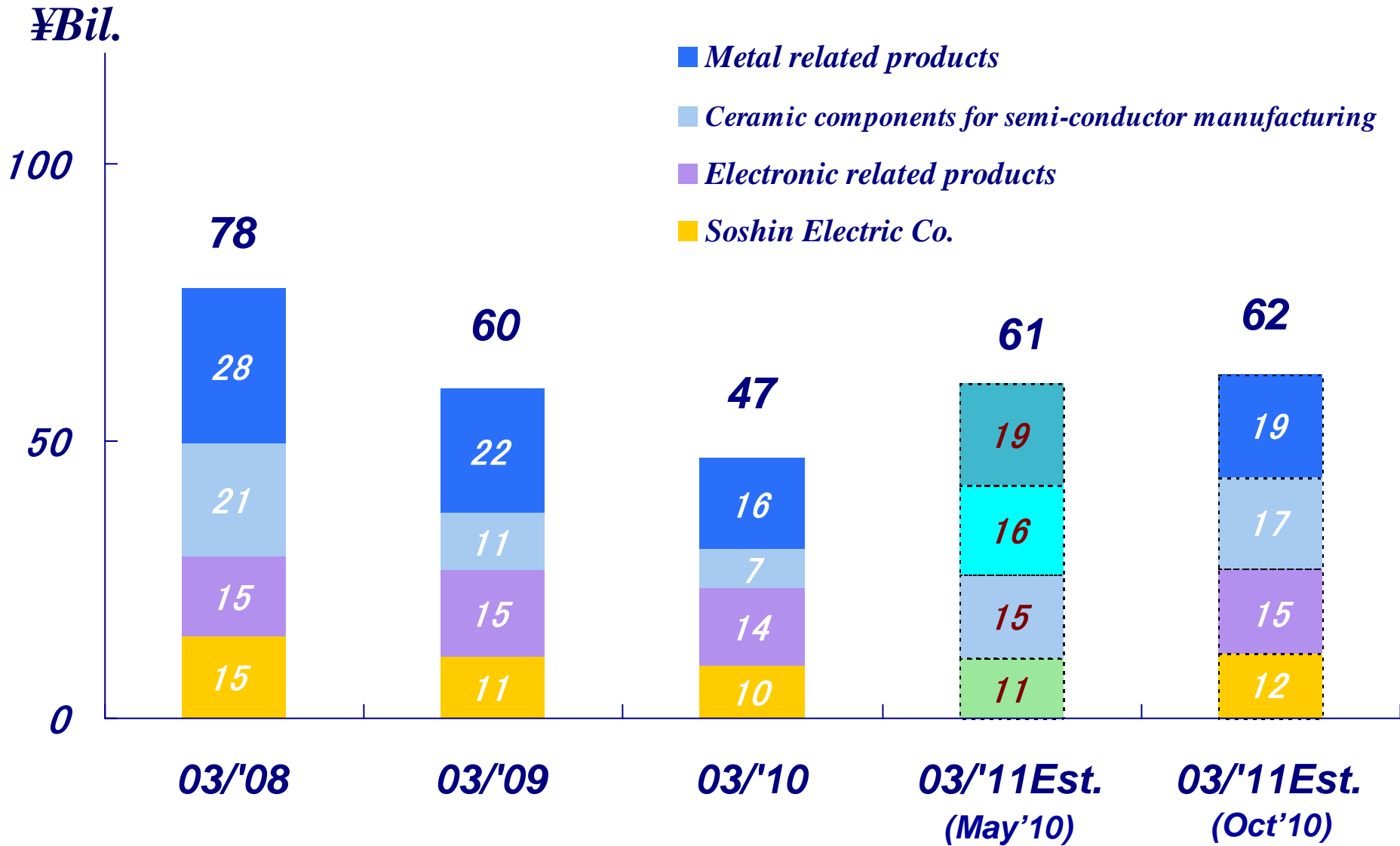
- ✦ *Ever-increasing recovery may swing over to a correction phase.*

## *Tasks*

- ✦ *Building up revenue base and further promotion of development for new product.*



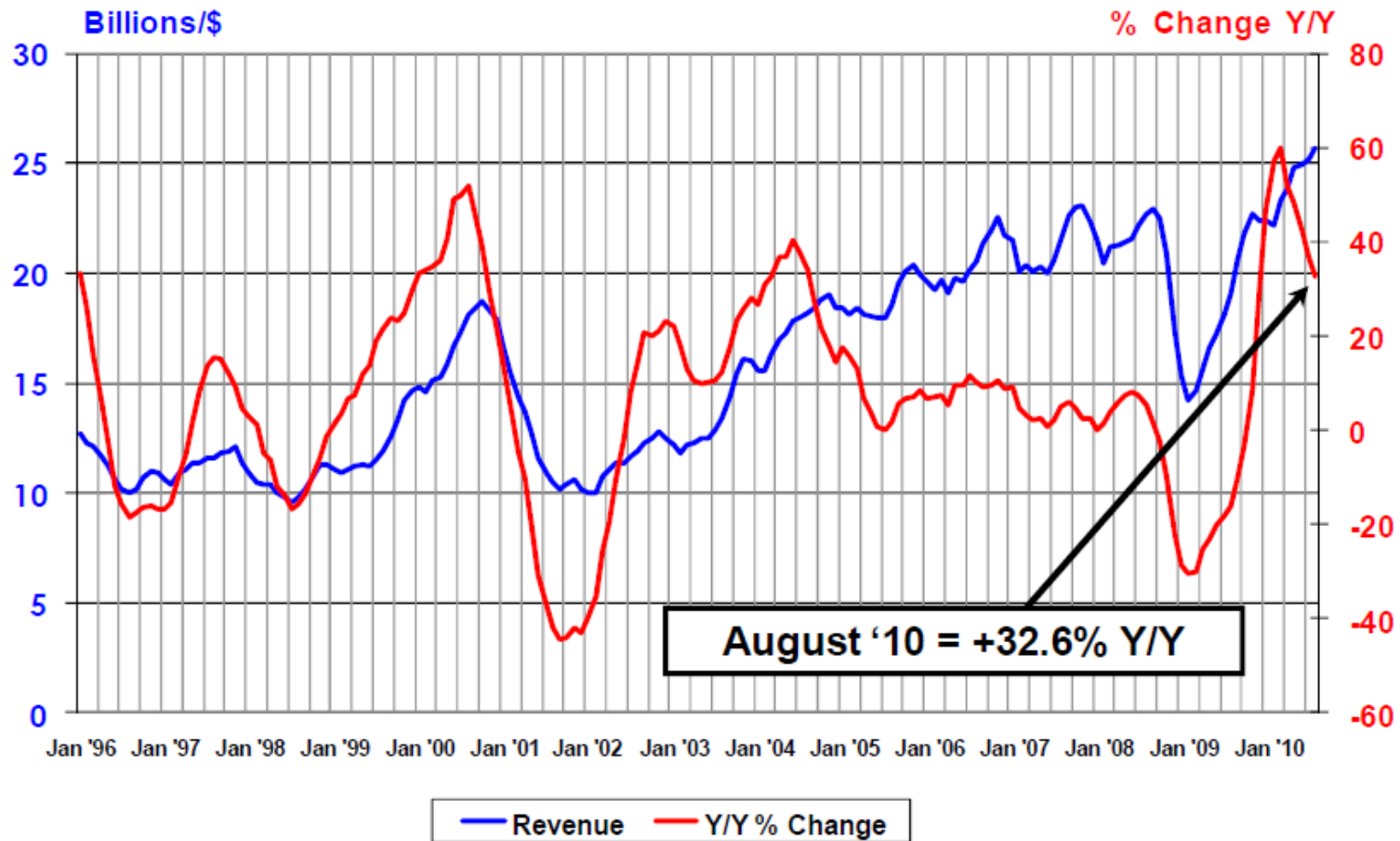
# Sales of Electronics Products Business



# Worldwide Semiconductor Revenues

## Worldwide Semiconductor Revenues

Year-to-Year Percent Change

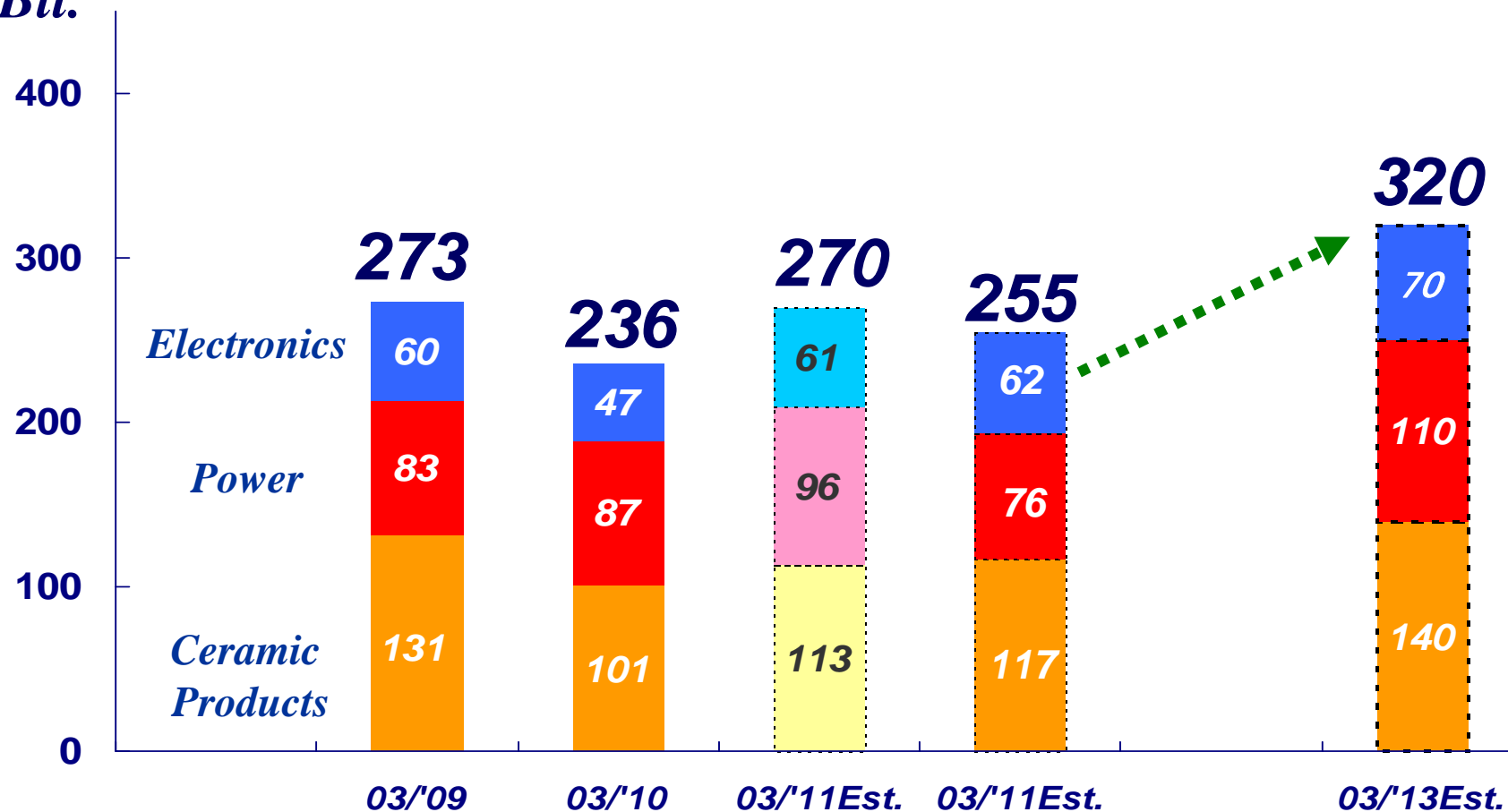


Source: WSTS

# Medium Term Estimates / Sales

After consolidation elimination

¥ Bil.



Exchange Rate

104¥/\$

94¥/\$

90¥/\$

87¥/\$

90¥/\$

153¥/ER

130¥/ER

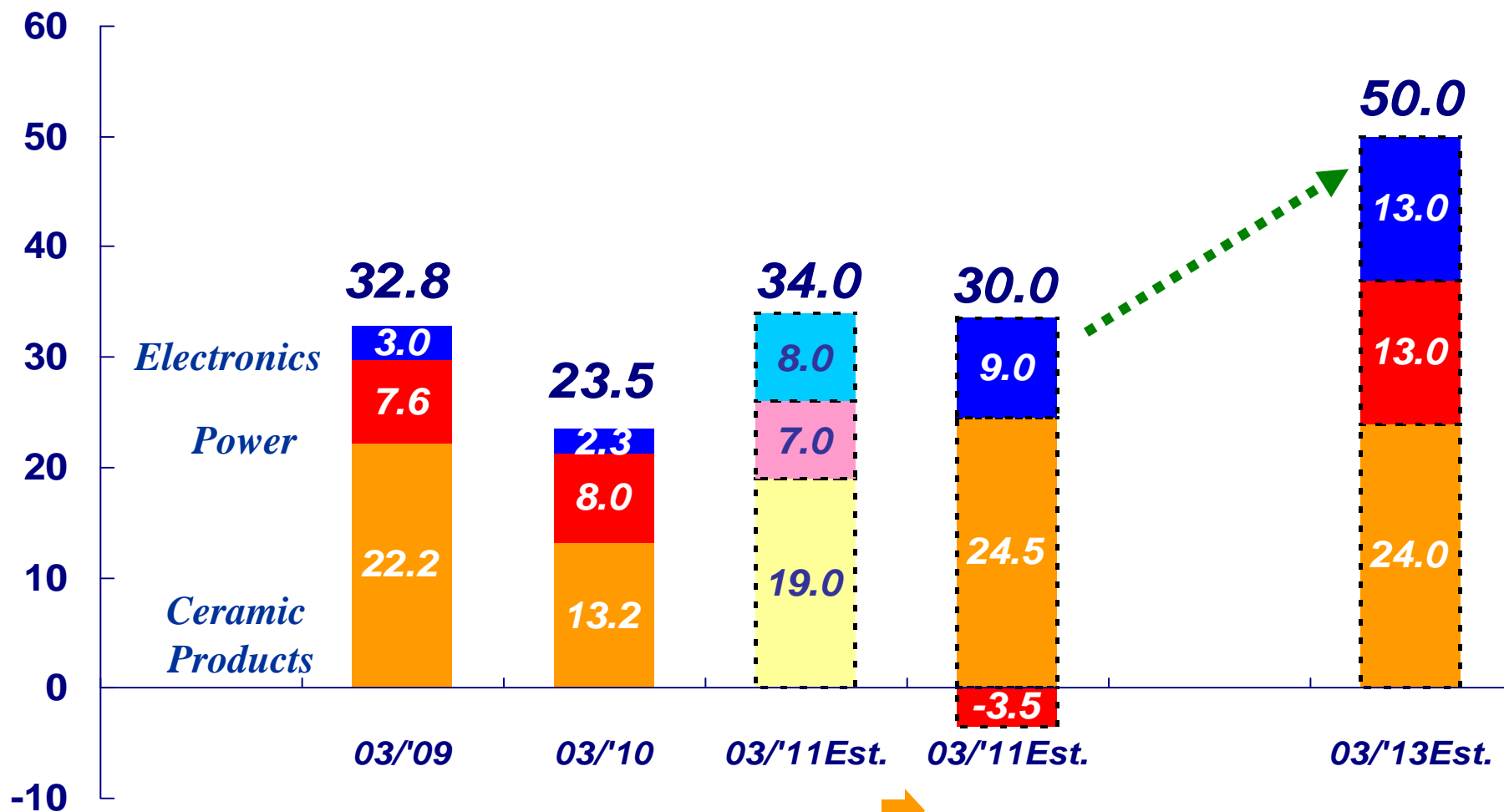
120¥/ER

116¥/ER

120¥/ER

# Medium Term Estimates / Operating Income

¥ Bil.



<i>Op/Income Ratio</i>	12.0%	10.0%	12.6 %	11.8 %	15.6%
<i>ROE</i>	8.1%	6.1%	8.0%	7.7 %	10.0%

## Summary of Cash Flow (¥ Bil.)

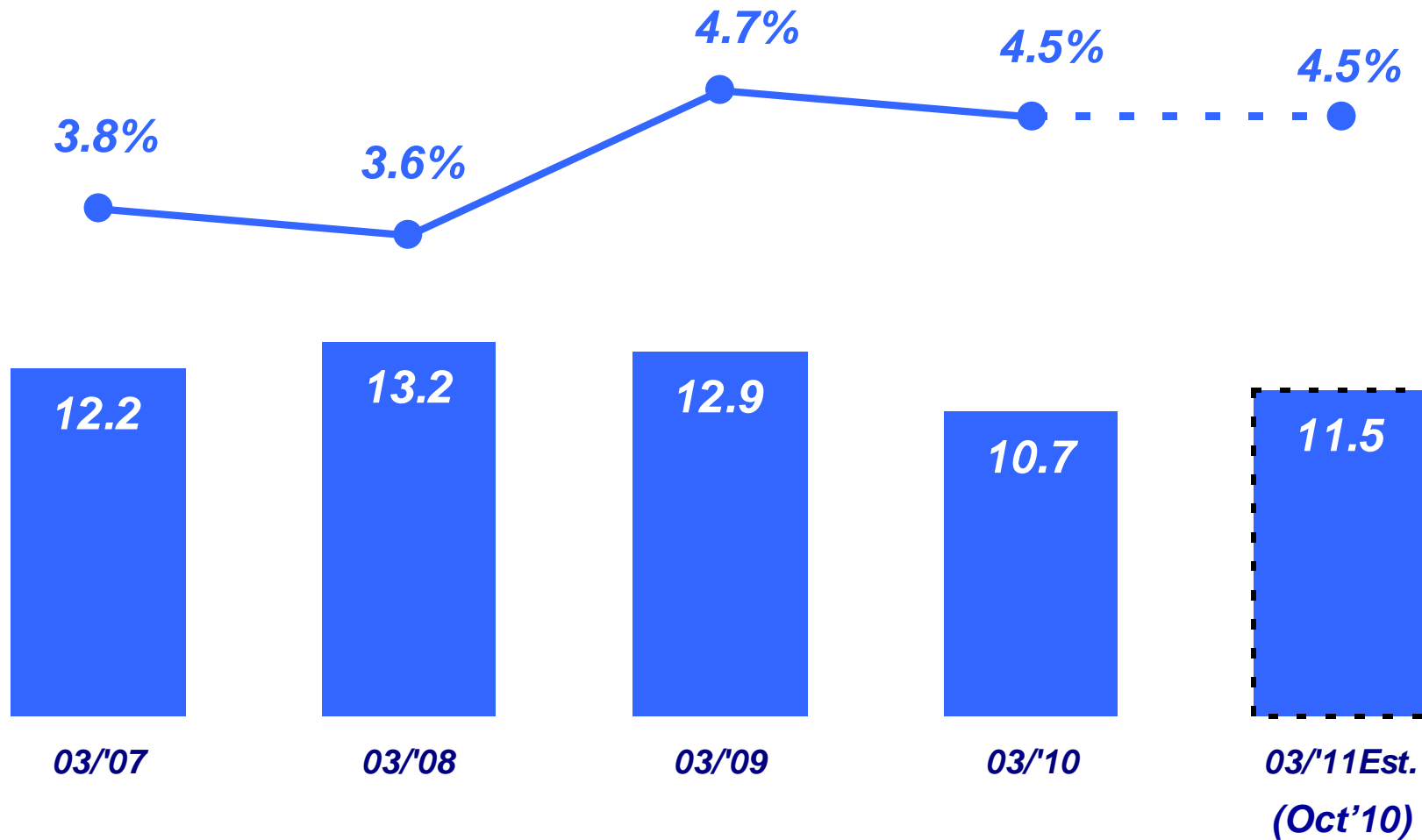
	<i>03/'09</i>	<i>03/'10</i>	<i>03/'11Est.</i>
<i>Income before taxes</i>	<i>21.0</i>	<i>23.0</i>	<i>29.5</i>
<i>Income taxes paid</i>	<i>-23.0</i>	<i>-0.5</i>	<i>-7.4</i>
<i>Depreciation</i>	<i>26.2</i>	<i>18.9</i>	<i>19.0</i>
<i>Decrease in Acct. Rec.</i>	<i>12.4</i>	<i>-15.5</i>	<i>2.0</i>
<i>Decrease in inventories</i>	<i>-21.3</i>	<i>15.5</i>	<i>-1.1</i>
<i>Other changes</i>	<i>17.4</i>	<i>3.0</i>	<i>-4.0</i>
<hr/> <i>Operating Activities</i>	<hr/> <i>32.7</i>	<hr/> <i>44.4</i>	<hr/> <i>38.0</i>
<i>Property, plant &amp; equip.</i>	<i>-30.0</i>	<i>-20.5</i>	<i>-31.5</i>
<i>Proceed, investment securities</i>	<i>1.4</i>	<i>1.9</i>	<i>-14.1</i>
<i>Other investments</i>	<i>7.0</i>	<i>-52.6</i>	<i>+27.6</i>
<hr/> <i>Investing Activities</i>	<hr/> <i>-21.6</i>	<hr/> <i>-71.2</i>	<hr/> <i>-18.0</i>

	<i>03/'09</i>	<i>03/'10</i>	<i>03/'11Est.</i>
<i>Acquisition of treasury stock</i>	<i>-13.7</i>	<i>-</i>	<i>-</i>
<i>Cash dividends</i>	<i>-7.4</i>	<i>-6.2</i>	<i>-5.9</i>
<i>Repayment and redemption</i>	<i>-15.2</i>	<i>-31.6</i>	<i>-4.1</i>
<i>Bond issues, etc.</i>	<i>-</i>	<i>40.0</i>	<i>-</i>
<i>Other</i>	<i>0.2</i>	<i>-0.5</i>	<i>-</i>
<hr/>			
<i>Financing Activities</i>	<i>-36.1</i>	<i>1.7</i>	<i>-10.0</i>
<i>Effect of exchange rate change</i>	<i>-14.1</i>	<i>2.0</i>	<i>-</i>
<i>Net Changes in Cash &amp; eq.</i>	<i>-31.9</i>	<i>-23.1</i>	<i>10.0</i>
<i>Change in consolidation subsidiaries</i>	<i>-4.2</i>	<i>-</i>	<i>-</i>
<i>Cash &amp; eq. at End of Year</i>	<i>76.5</i>	<i>53.4</i>	<i>63.4</i>

# *R&D Input* (¥ Bil.)

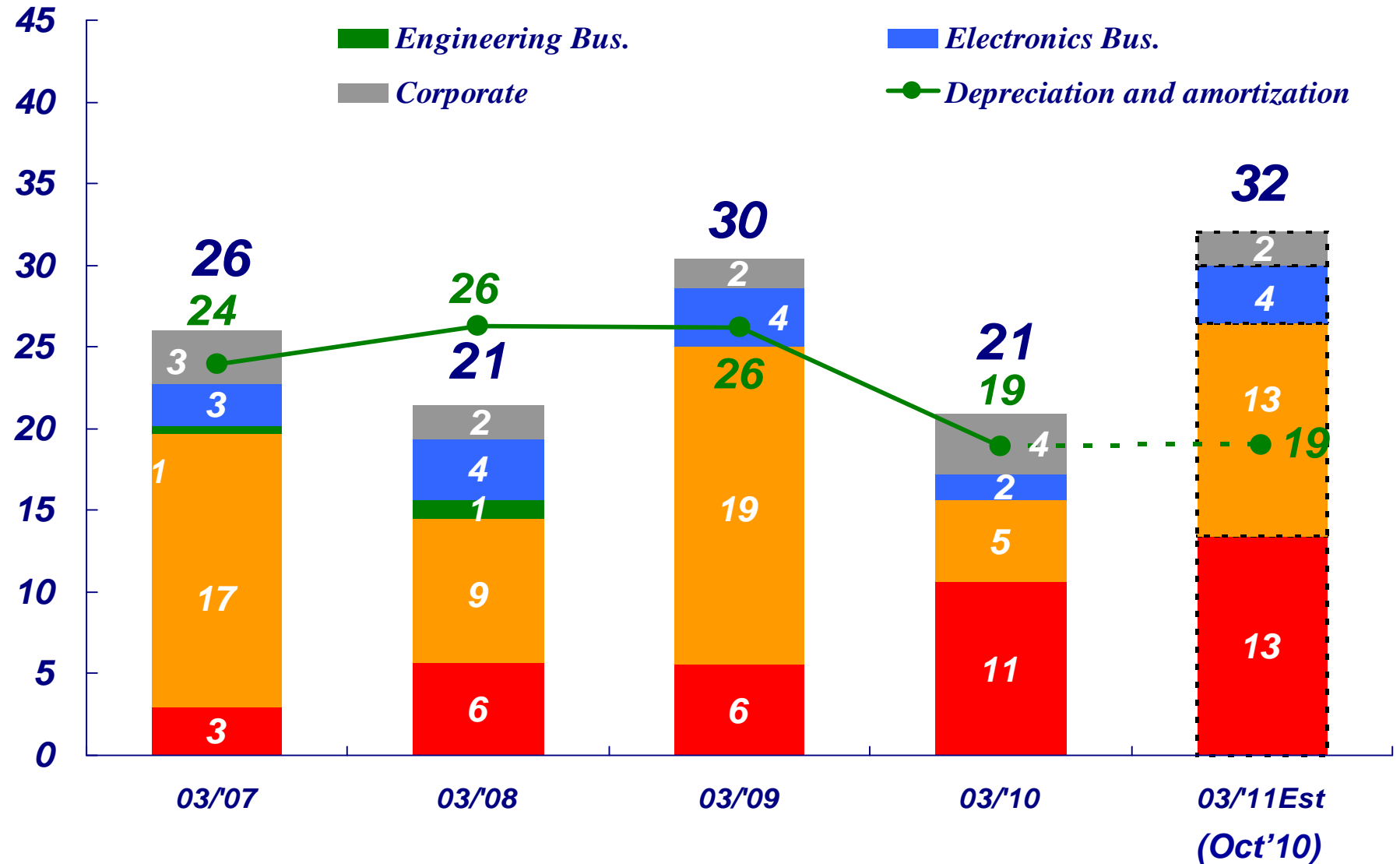
■ Consolidated R&D

● Consolidated R&D/Sales Ratio



# Capital Expenditures

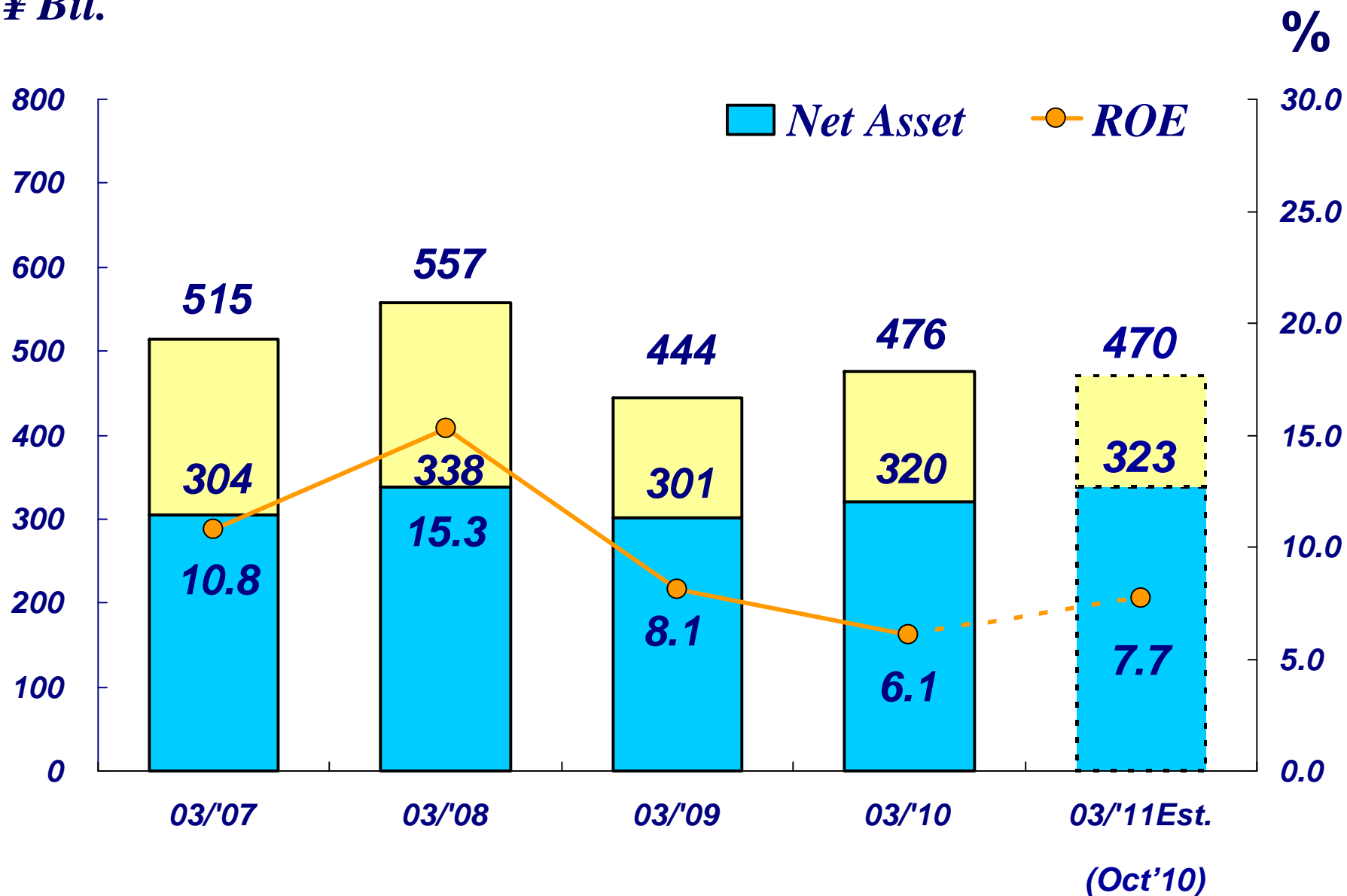
¥ Bil.





# Total Asset & ROE

¥ Bil.



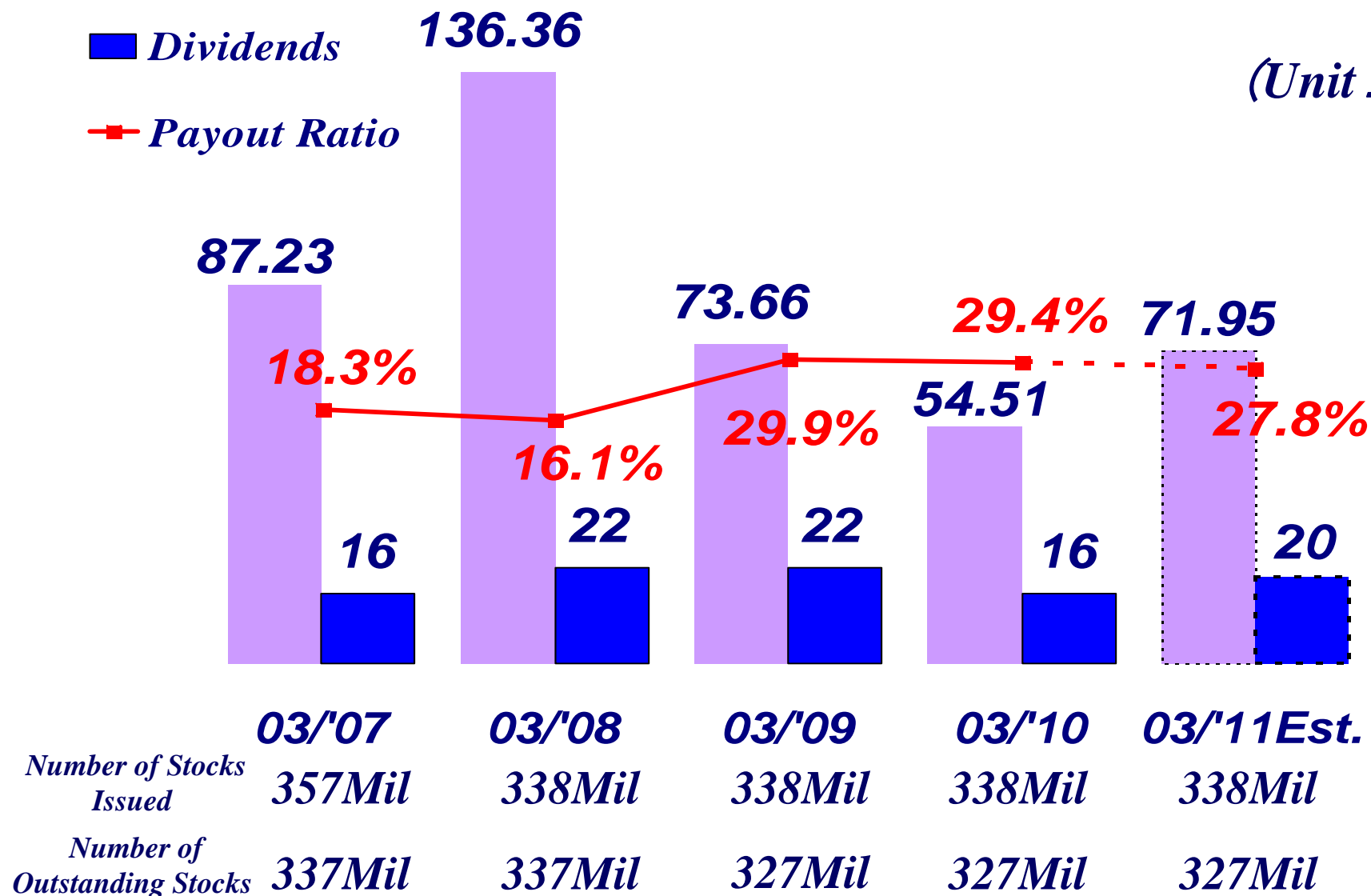
# EPS & Payout Ratio

■ EPS

■ Dividends

■ Payout Ratio

(Unit : ¥)



*The figures included in the following brief, including the business performance targets and figures are all projected data based on the information currently available to the NGK Group, and are subject to variable factors such as economic conditions, competitive environments and future demands. Accordingly, please be advised that the actual results of business performance may differ substantially from the projections described here.*

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