



FY2014 1st Half Results

(from April 1, 2014 to September 30, 2014)

October 31, 2014

This is a translation of materials used for the analyst meeting held in Tokyo, Japan on October 31, 2014

This document contains forward-looking statements that are based on management's expectations, estimates, projection and assumptions that were available and reasonable at the time of release. Actual future results and trends may differ materially from those in the forecasts due to a variety of factors.

Summary of financial results for FY2014 1st Half

(Ended September 30, 2014)

Forecast for FY2014

(End in March 31, 2015)

Segment Information

Target ratio of new products to total sales

R&D / Capital Expenditure

Financial Condition



	(¥Bil.) 1 st half FY2013	1 st half FY2014	Growth ratio
Net Sales	141.8	160.0→165.0 168.0	+ 19%
Operating Income	19.7	22.0→27.5 28.8	+ 46%
Ordinary Income	19.6	21.0→26.5 26.9	+ 37%
Net Income	12.6	14.5→18.5 20.1	+ 59%

May announcement⇒July announcement

Higher sales and income compared with the same period last year

- Ceramics Demand for automotive-related products increased due to strong sales of trucks in the US and Japan, and diesel cars in the Europe.
- Electronics Demand increased atop brisk capital investment by semiconductor manufacturers.
- Power The first domestic order after the NAS batteries fire incident was shipped.

Forecasts for FY 2015

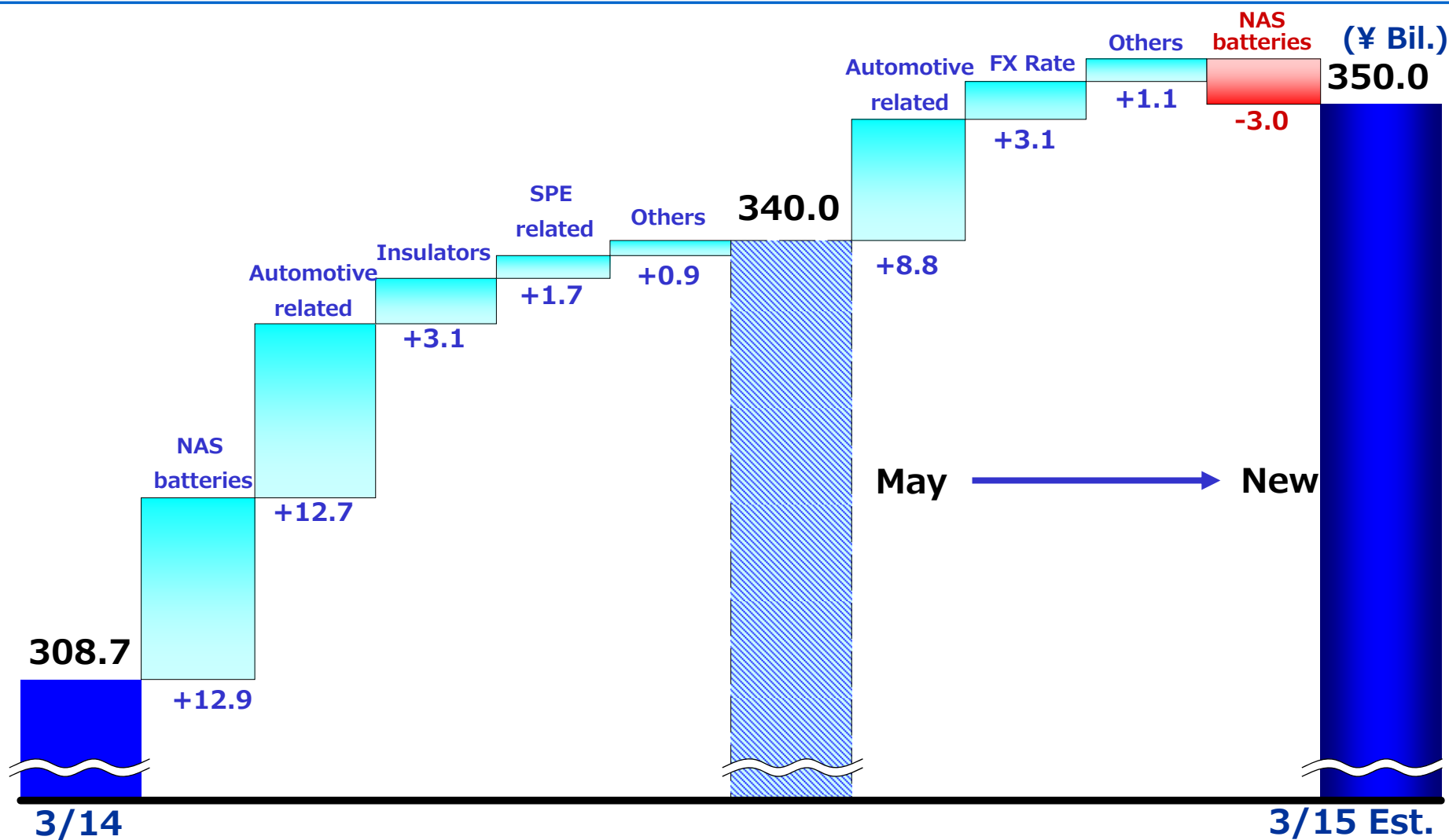
	(¥Bil.)	FY2013	FY2014	Growth ratio
Net Sales		308.7	340.0→350.0 350.0	+13%
Operating Income		44.3	48.0→56.0 56.0	+27%
Ordinary Income		45.8	50.0→58.0 58.0	+27%
Net Income		27.0	34.0→39.0 39.0	+44%

May announcement → July announcement

Higher sales and income forecast compared with the previous year

- Ceramics Demand for Automotive related products remains strong.
Tighter emission regulations in China make some contribution to demand.
- Power NAS batteries to be shipped for major customers abroad in 2nd half of the fiscal year. (Some shipments to be deferred to next fiscal year.)
- FX rate for the 2nd half is assumed to be ¥100/US\$1 and ¥135/€1.

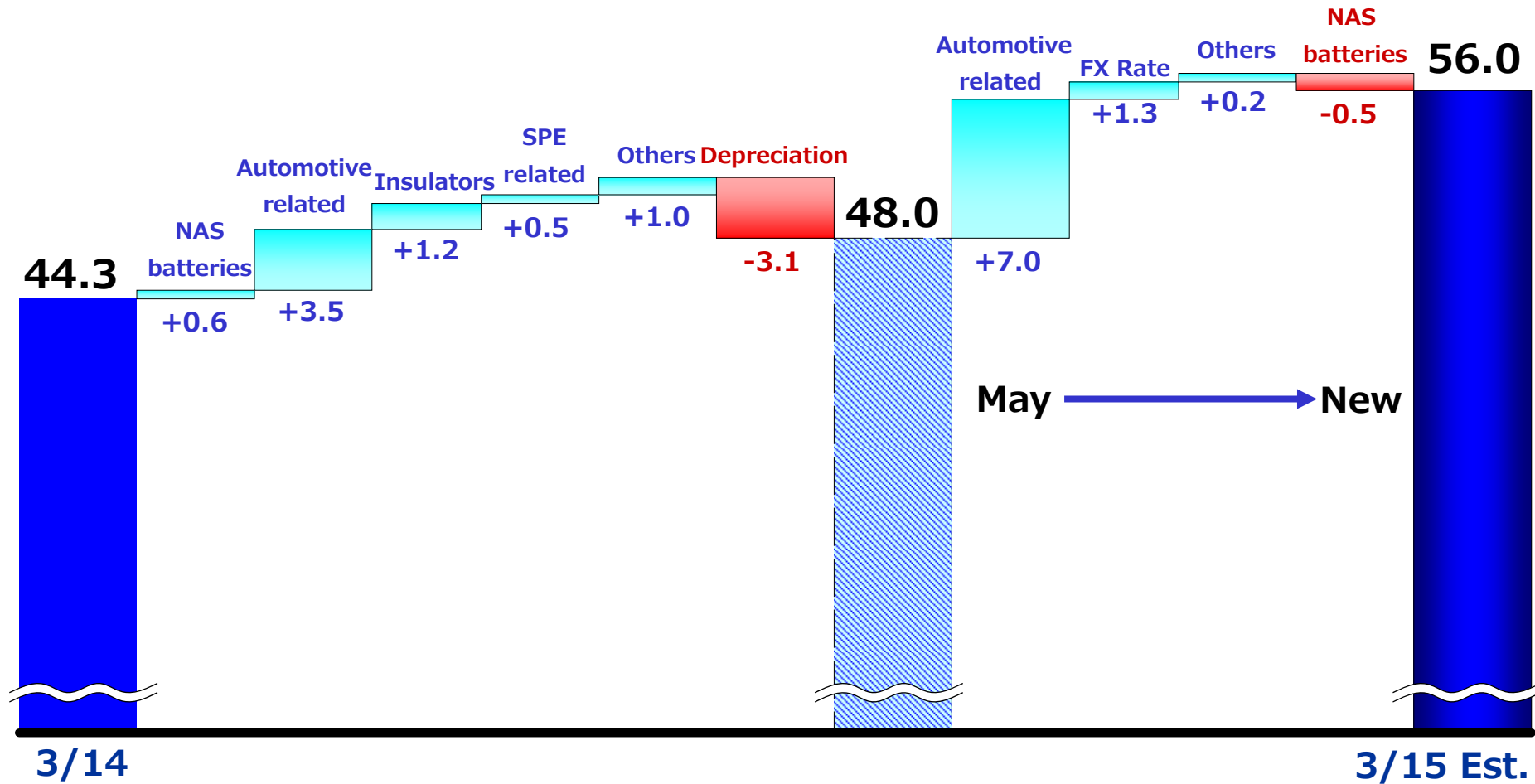
Change Analysis : Sales



	3/14	May (3/15 Est.)	New (3/15 Est.)
FX Rate	¥100 /US\$ ¥134 /ER €	¥100 /US\$ ¥135 /ER €	¥102 /US\$ ¥137 /ER €



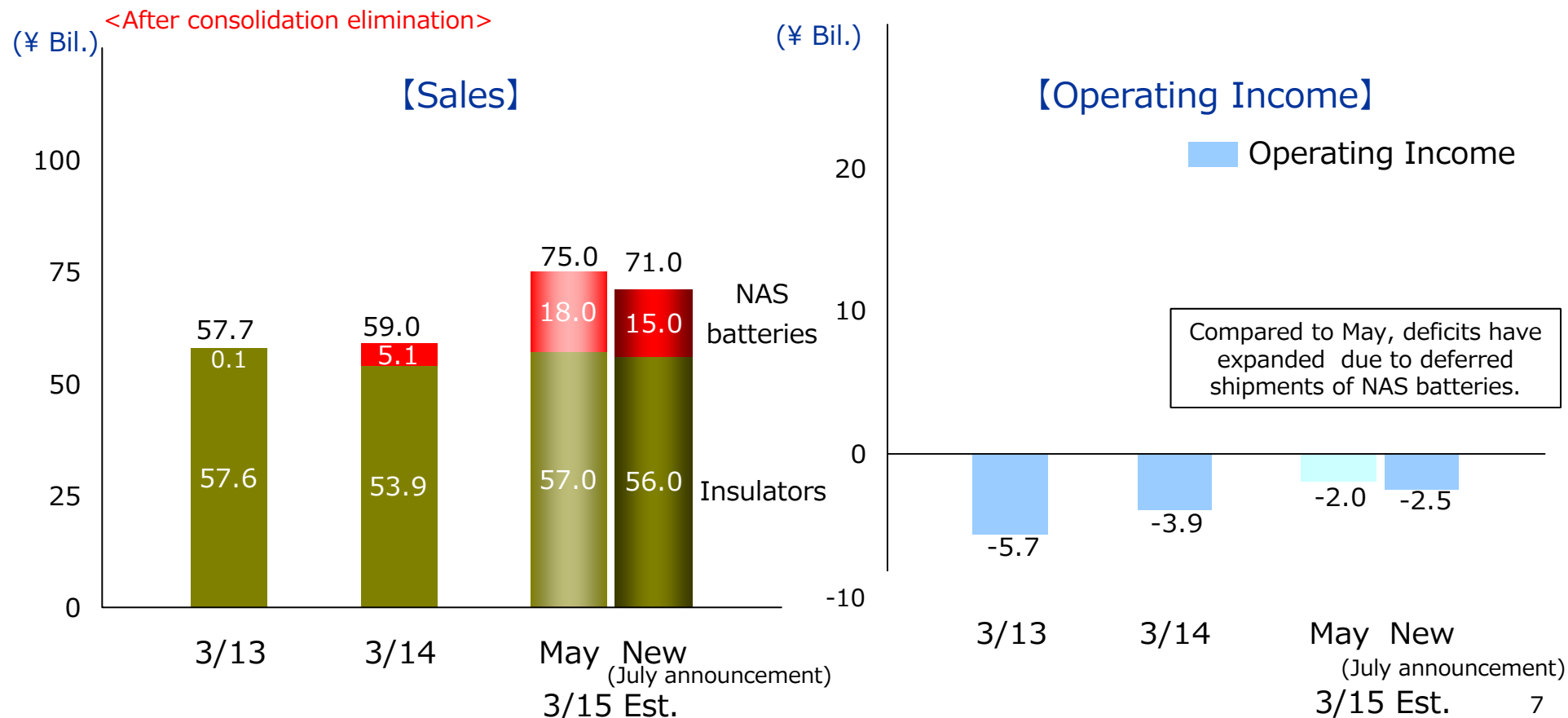
(¥ Bil.)



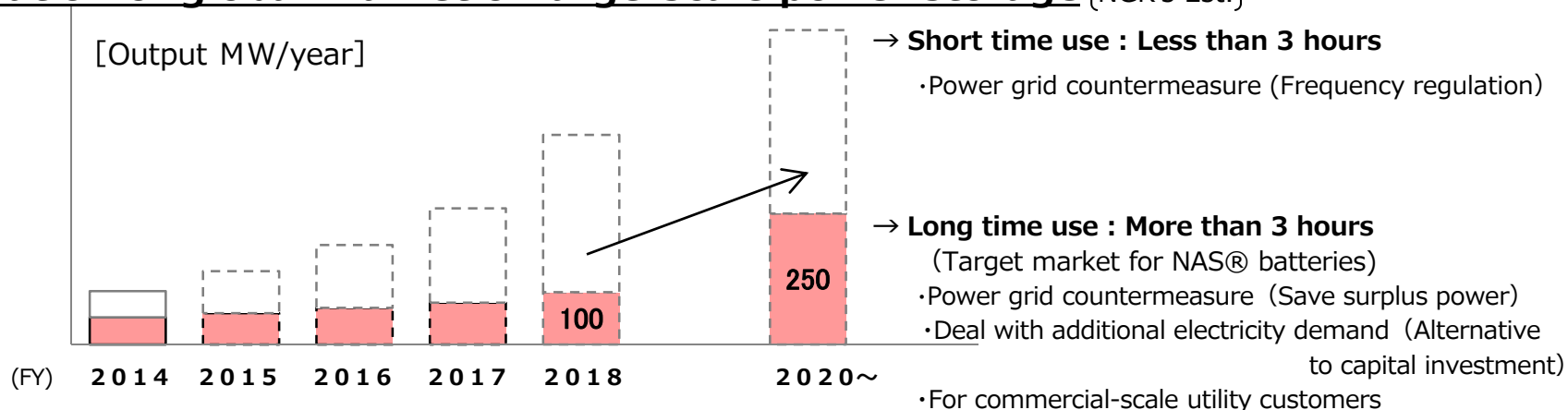
	3/14	May (3/15 Est.)	New (3/15 Est.)
FX Rate	¥100 /US\$	¥100 /US\$	¥102 /US\$
	¥134 /ER€	¥135 /ER €	¥137 /ER €

<Insulators> • Domestic power companies continue to control capital expenditure.
 • Improve earnings by capturing replacement demand and making further cost reduction.
 • Business in Southeast Asia and Middle East continues steadily.

<NAS> • Some overseas shipments will be deferred to next fiscal year.



■ Estimation of global market of large-scale power storage (NGK's Est.)



Time required for rise of full-scale demand

■ Challenges

① Acquire continuous orders

- Enhance sales proposal capabilities, increase the number of sales engineer

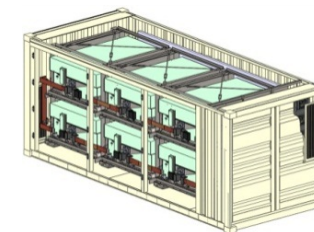
② Establish competitive advantage by radical cost reduction

- Labor saving by rationalized production(automation, process improvement)
- Standardize design and construction by launching container model package

<NAS® batteries: Existing model>



< NAS® batteries: Container model >



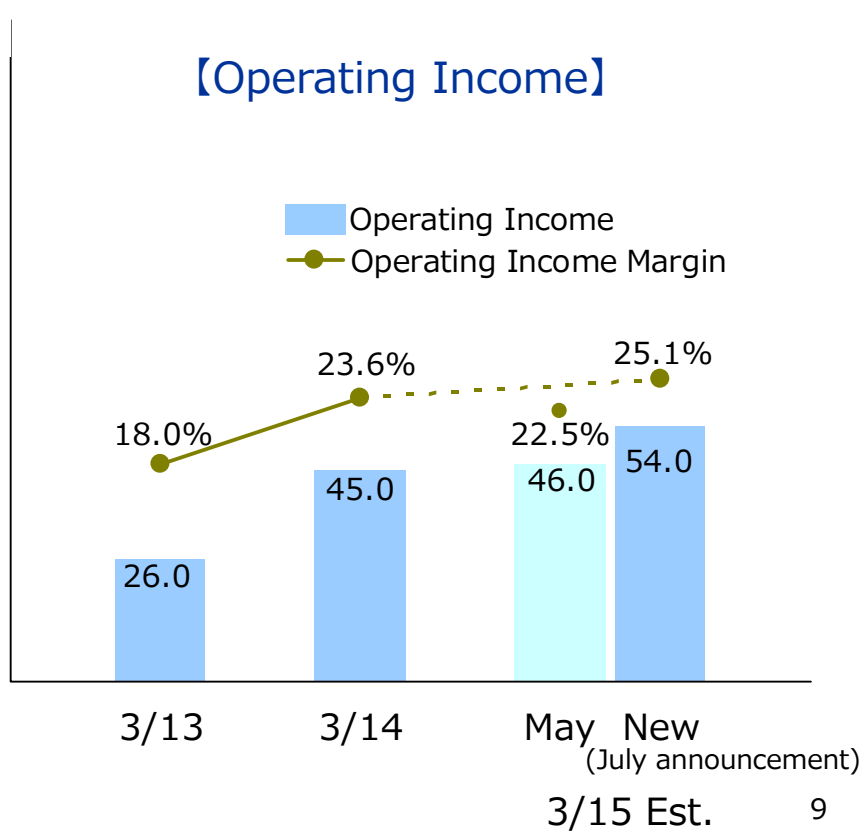
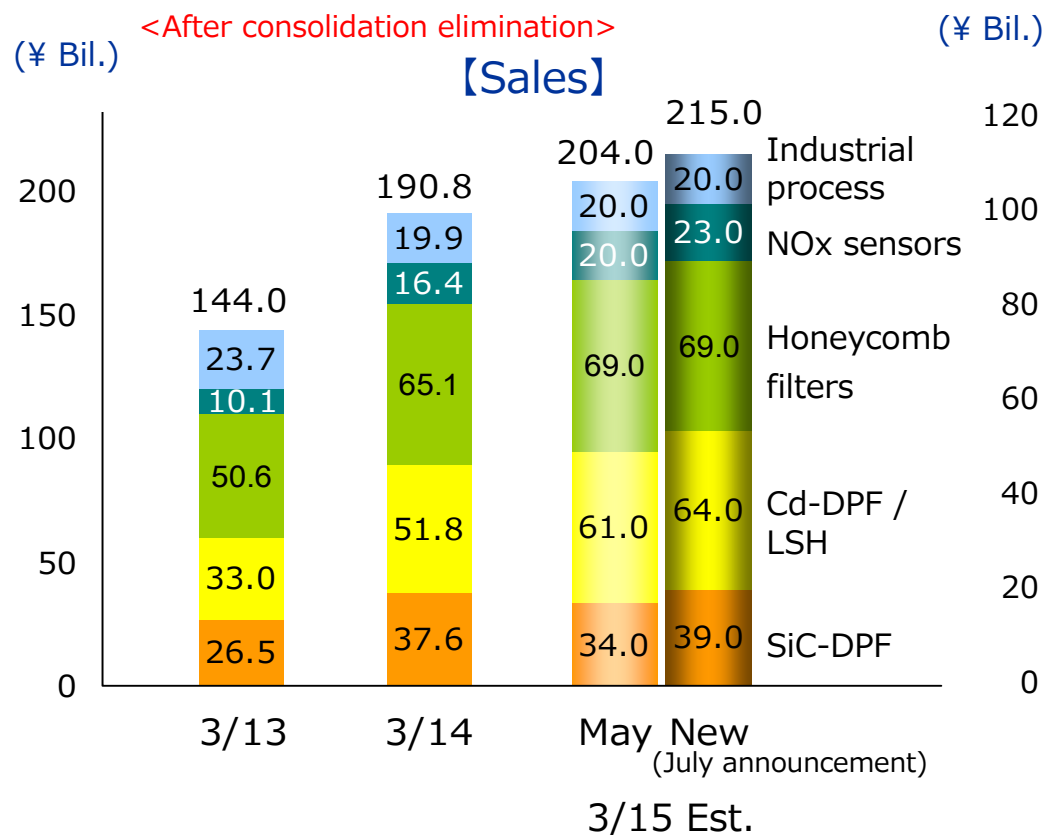
(Practical use in FY2015)

Achieve business structure with stable profit

<Automotive-related> • Demand for diesel-related products and NOx sensors has increased due to strong sales of trucks in the US and Japan, and diesel cars in Europe.

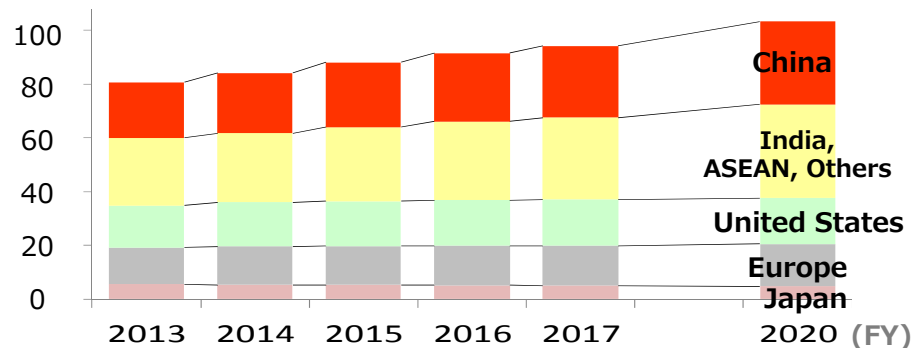
<Industrial process> • Although domestic capital investment shows sign of recovery, it remains low.

- Streamline operation and reduce costs through business restructuring.

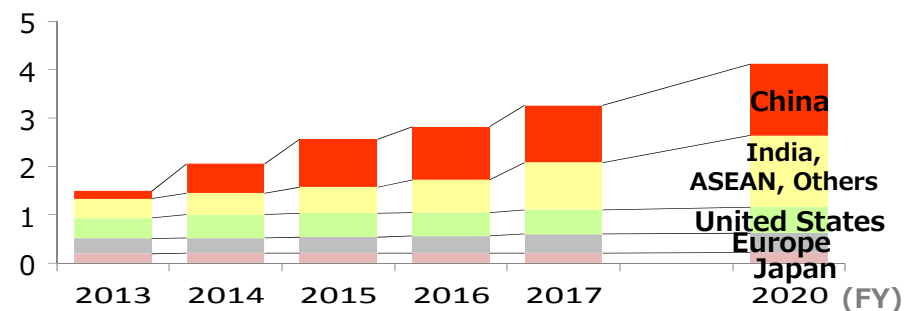




■ Sales of passenger cars(mil. cars)

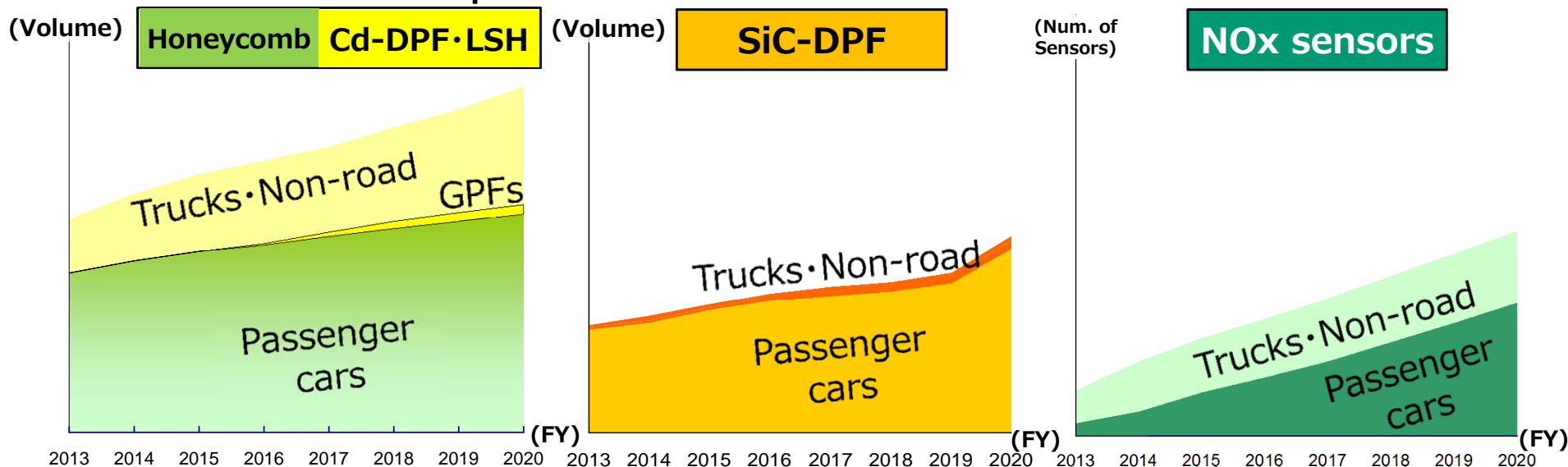


■ Trucks requiring aftertreatment (mil. trucks)



Developing countries : Sales of passenger cars and trucks requiring aftertreatment are increasing
Developed countries : Tighter emission standards for non-road vehicles

■ Total demand forecast for products



• Demand for diesel-related products (Cd-DPF, LSH, SiC-DPF), and NOx sensors to increase in the medium-to-long term

• GPFs for passenger cars with gasoline direct injection in Europe (full scale from 2017 onward)

<Semiconductor Production Equipment-Related Ceramic (SPE-related products)>

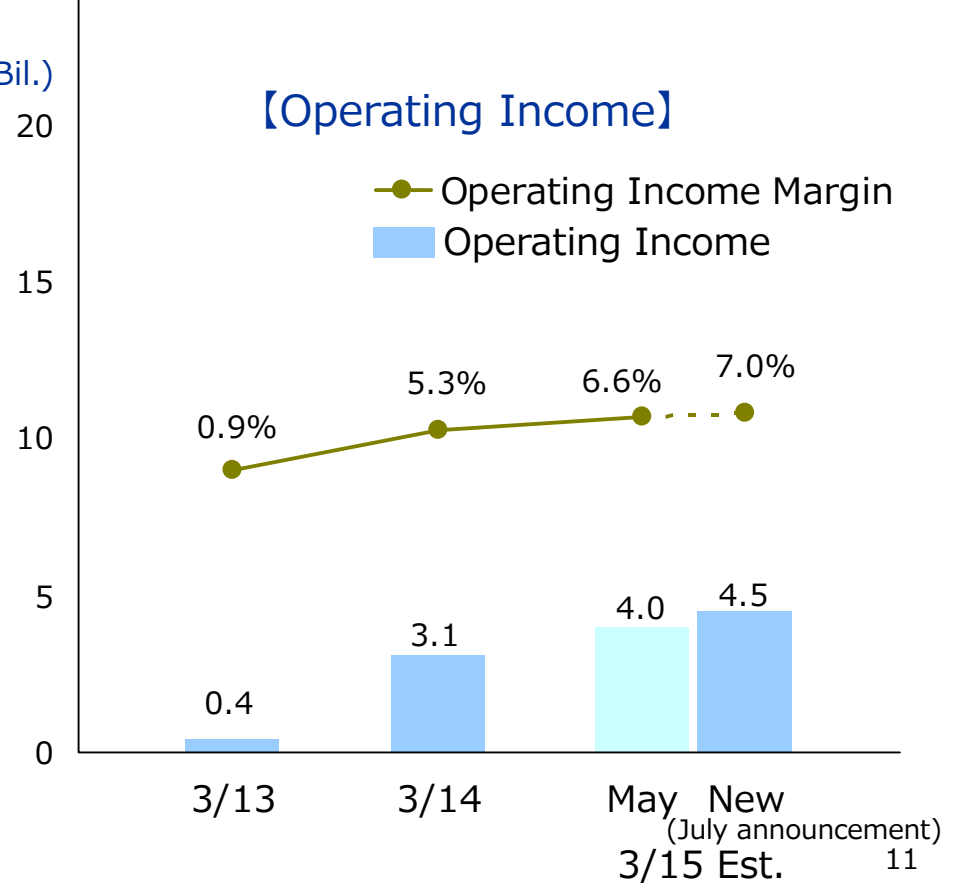
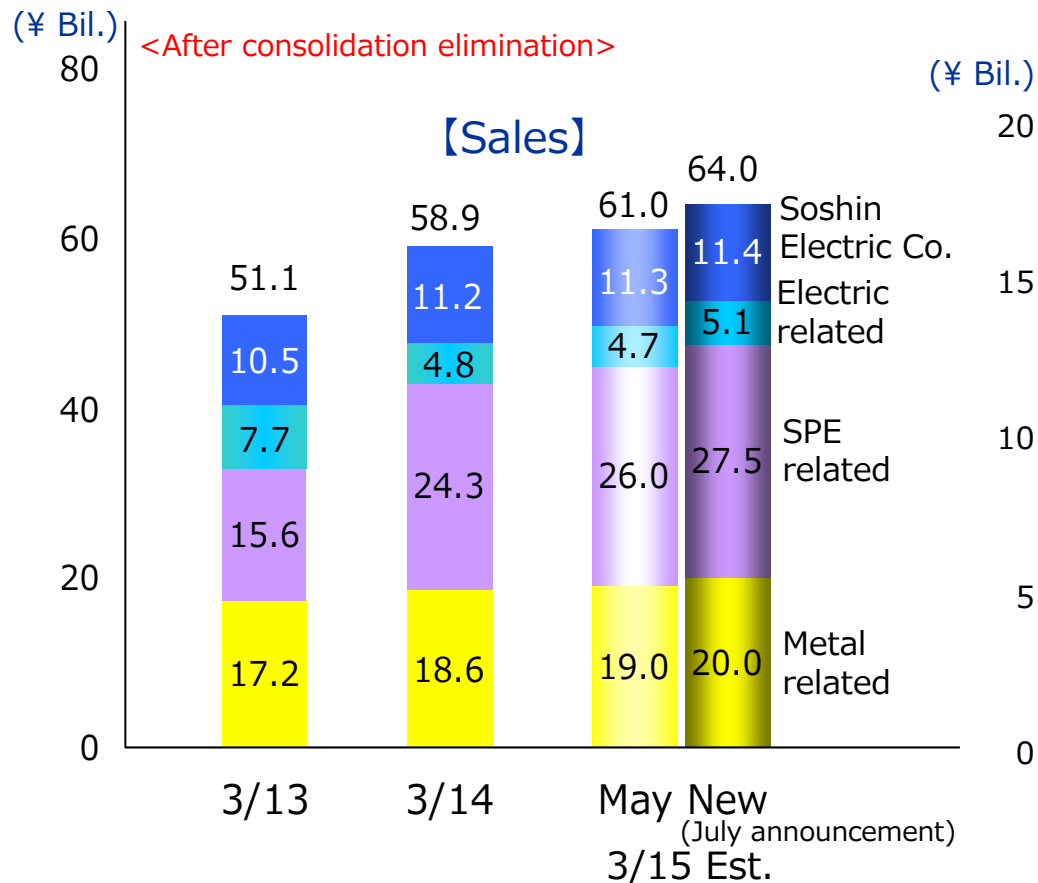
- Semiconductor companies are continuing capital expenditure due to expanding market for mobile products.
- Focus on cost reduction and technical advancement of products.

<Beryllium Copper (Metal related products)>

Demand for use in home appliances and industrial equipment is increasing steadily in China.

<Electronics Components>

Achieve business growth by expanding wafer business, and by adding ceramic package products.

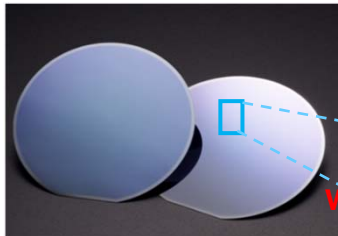




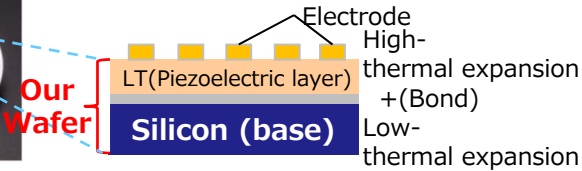
Commercialize

Expand wafer business

Bonded wafers for SAW filters



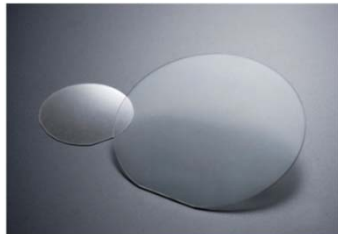
Remarkably improve the thermal characteristics of SAW filters by bonding low-thermal expansion silicon to high-thermal expansion piezoelectric layer.



Order & production increasing steadily

Upcoming commercialized products

Translucent alumina wafer (HICERAM™ wafer)



Gallium Nitride (GaN) Wafer



[Advantage vs. existing product]

- Compatible with larger scale
- Higher workability
- Lower defects
- High transparency

Targeting use as an alternative for sapphire and alumina substrates

[Example of final products]

- High-frequency device
- Ultra bright LED
- Power device

M&A

Acquire "NIPPON STEEL & SUMIKIN Electronics Devices Inc."



Capital: ¥3.45 bil.

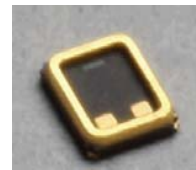
Manufacturing base: Head office (Yamaguchi, Japan), Malaysia, China

Earnings: Consolidated net sales ¥24.5 bil. (FY2013)

Date of share transfer: Jan. 5, 2015 (scheduled)

Package for quartz crystal device

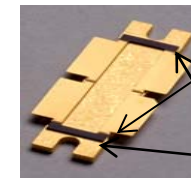
Ceramic Package (Protects quartz crystal device)



Main Products

RF package

High-frequency power amplifier package for mobile communication base station



CPC Materials (High heat releasing metal)
Ceramic

NIPPON STEEL & SUMIKIN Technologies in high-mix production & mass-production

NGK Technologies in materials & high-precision production

"Synergy"

Aim to expand profitability in growth areas

Ultra micro quartz crystal package

Package for CMOS image sensor

Package for optical communication device

Further promote strong business from a medium- to long-term perspective

- Construct global production system to respond to demand expansion
- Accelerate company-wide “New Structural Innovation of Manufacturing”

Establish the future “ideal self” for each business
Study manufacturing approaches for achieving the “ideal self”
Work on the ideas that break conventional molds

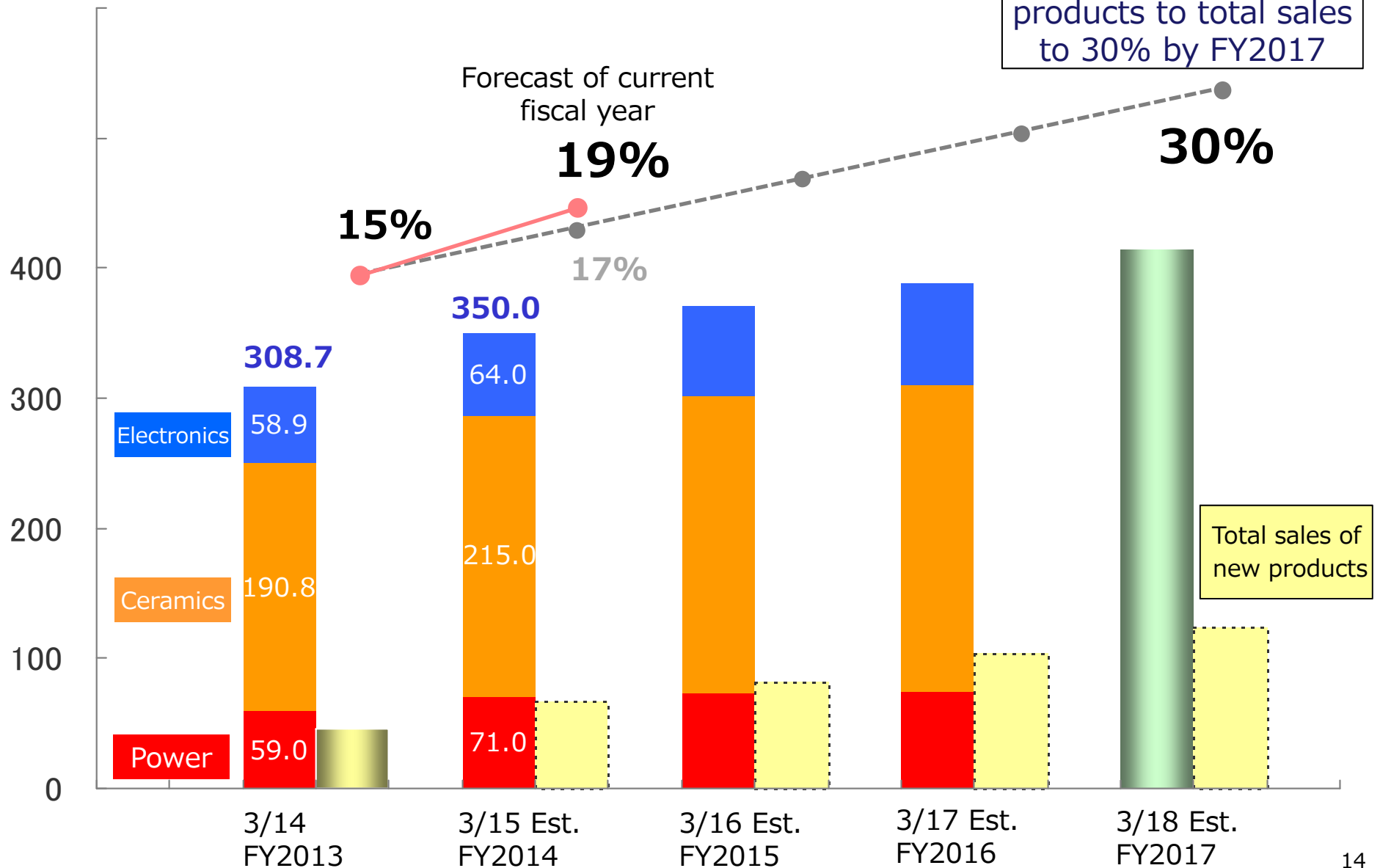
Aim to build the “New Structural Innovation of Manufacturing” to achieve high competitiveness

Creation of new products and businesses - 2017 Challenge 30

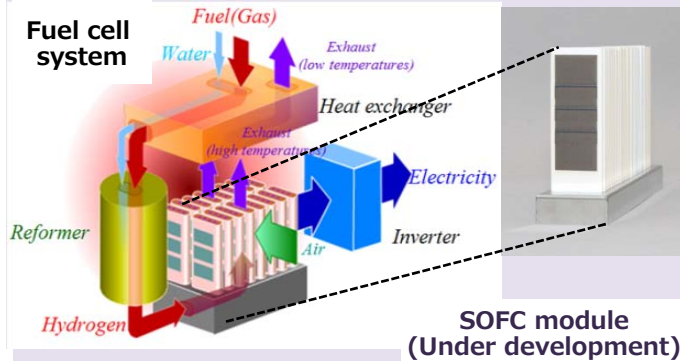
- Launch full-fledged expansion of wafer business
- Quickly commercialize prospective products
- Focus on priority research fields and expand development themes



(¥ Bil.)



Ceramic fuel cell module SOFC (Solid-Oxide Fuel Cell)



- Proprietary configuration
- Split electrode, flat-tubular SOFC
- Highly efficient and durable power generation component made of ceramic

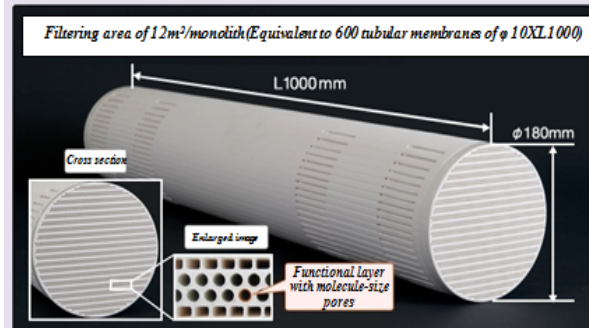
This component creates a chemical reaction using gas to generate electricity and heat, which is then used to heat water and contribute to energy conservation. Expect to be used in condominium, residence and commercial building.

Smart houses (fuel cell for residential use)



Under evaluation at large fuel cell system companies for commercialization

Ceramic membrane filter (DDR membrane)



- Proprietary large sized ceramic membrane that has molecule-size pores

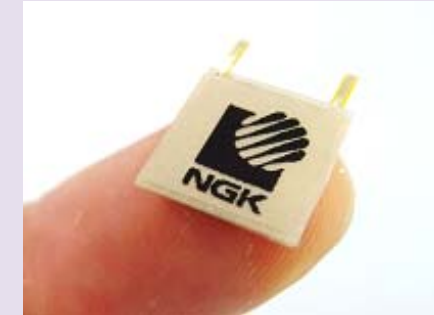
This filter enables removal and recovery of specific constituents by separating mixed gases and liquids.

Chemical plants (dehydration)



Started several field tests

All-solid-state battery



- All-solid-state battery which are ultra-slim, high energy dense and operable under high temperatures

The battery enables adjacent mounting with semiconductor components on the circuit board and contributes to reduce the size of electronic devices.

Wearable devices



Smart cards

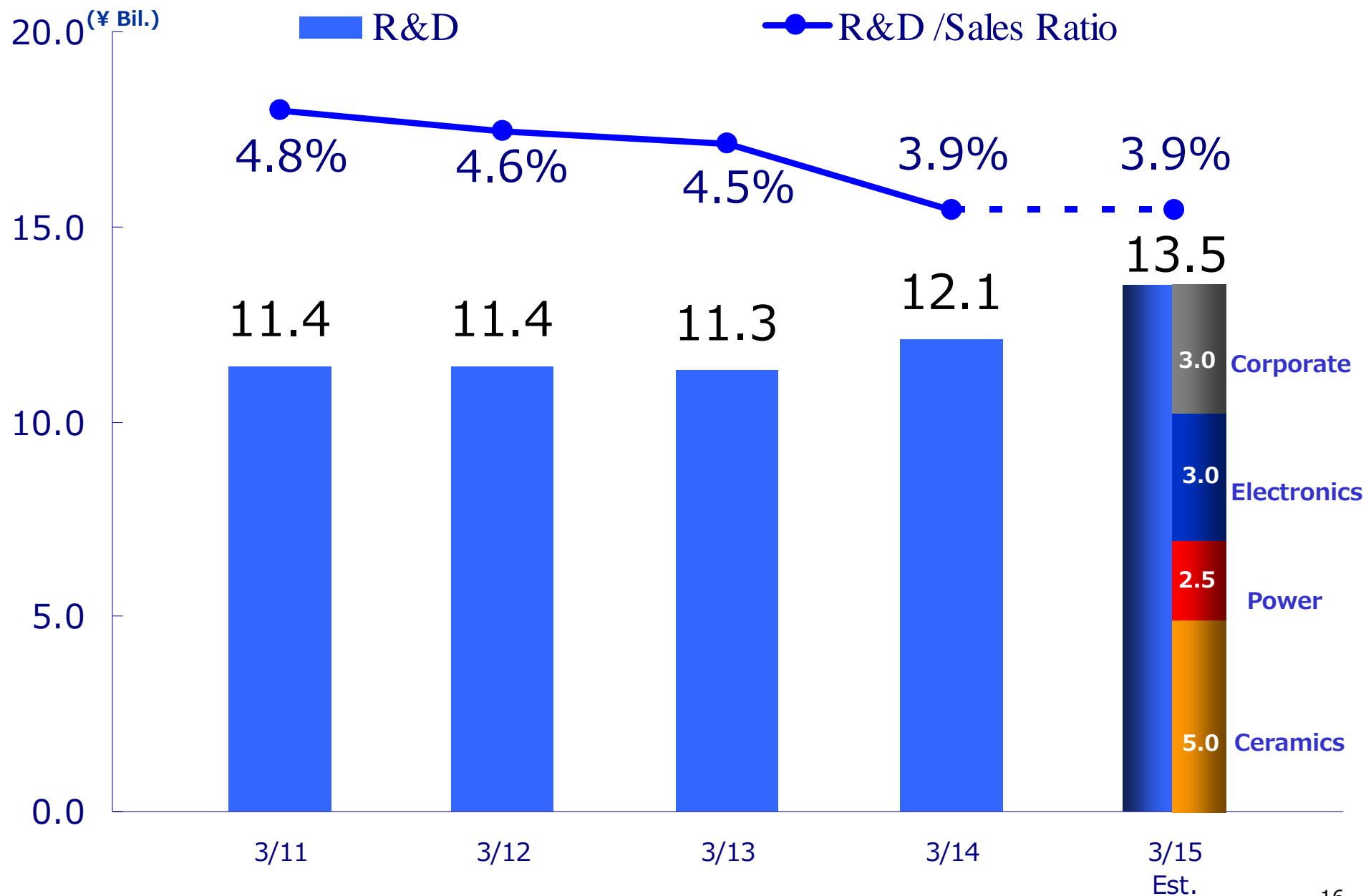


Batteries for memory backup



Start providing a sample in this fiscal year

R&D Input



Europe
Consider additional investment

(Year: Fiscal year of operation start)

Red: PROJECTED

Poland



Assembly facilities for NOx sensors (2015)
Production Capacity: 7 mil.⇒10mil. sensors(Total for Japan and Poland)
Increase capacity of LSH, Cd-DPF, GPF (2016)
Production Capacity: 8 mil.⇒15mil.(In HONEYCERAM equivalent)

United States



Increase capacity of HONEYCERAM (2014)

Japan



“Cutting-edge” production system for HONEYCERAM(2015)
Production Capacity: 8mil.⇒13mil. HONEYCERAM
Increase capacity of NOx sensors(2015)
Production capacity:7 mil.⇒10mil. sensors (Total for Japan and Poland)

China



Increase capacity of HONEYCERAM, LSH, Cd-DPF (2012)

Mexico



Increase capacity of LSH and Cd-DPF (2013)

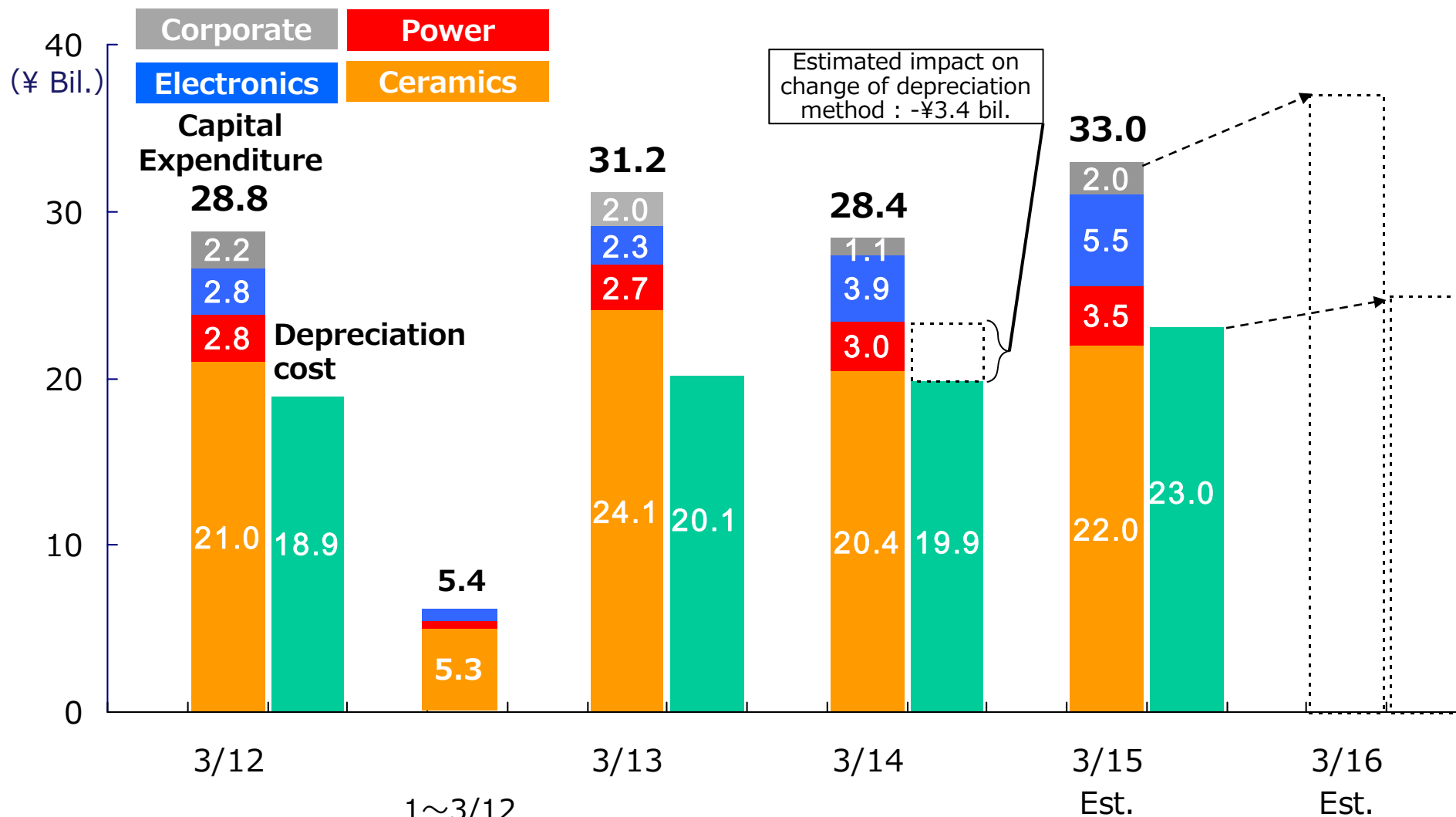
Indonesia



Increase capacity of HONEYCERAM and LSH (2013)

Southeast Asia
Look at establishing new plant

Enhance the global production system, mainly for automotive-related products
Develop cutting-edge production lines in Japan & expand them abroad

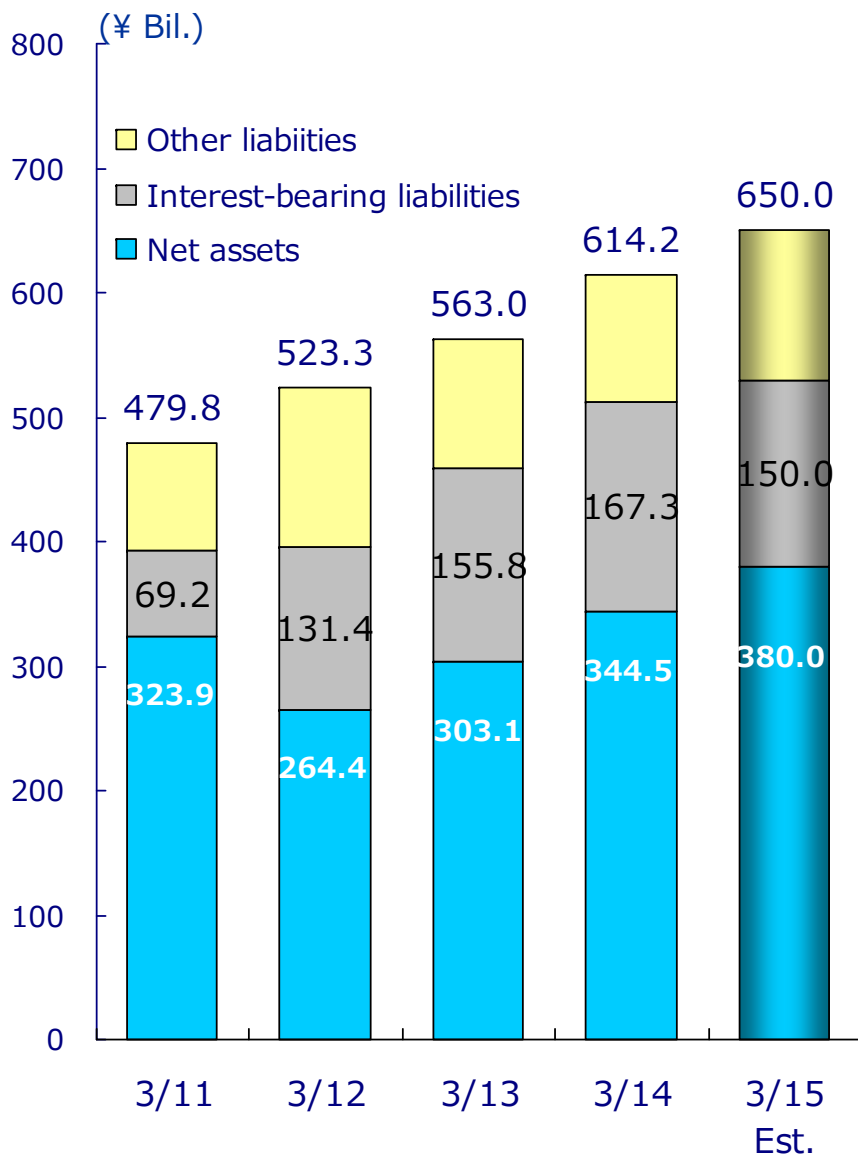


Capex overseas during the difference of fiscal year

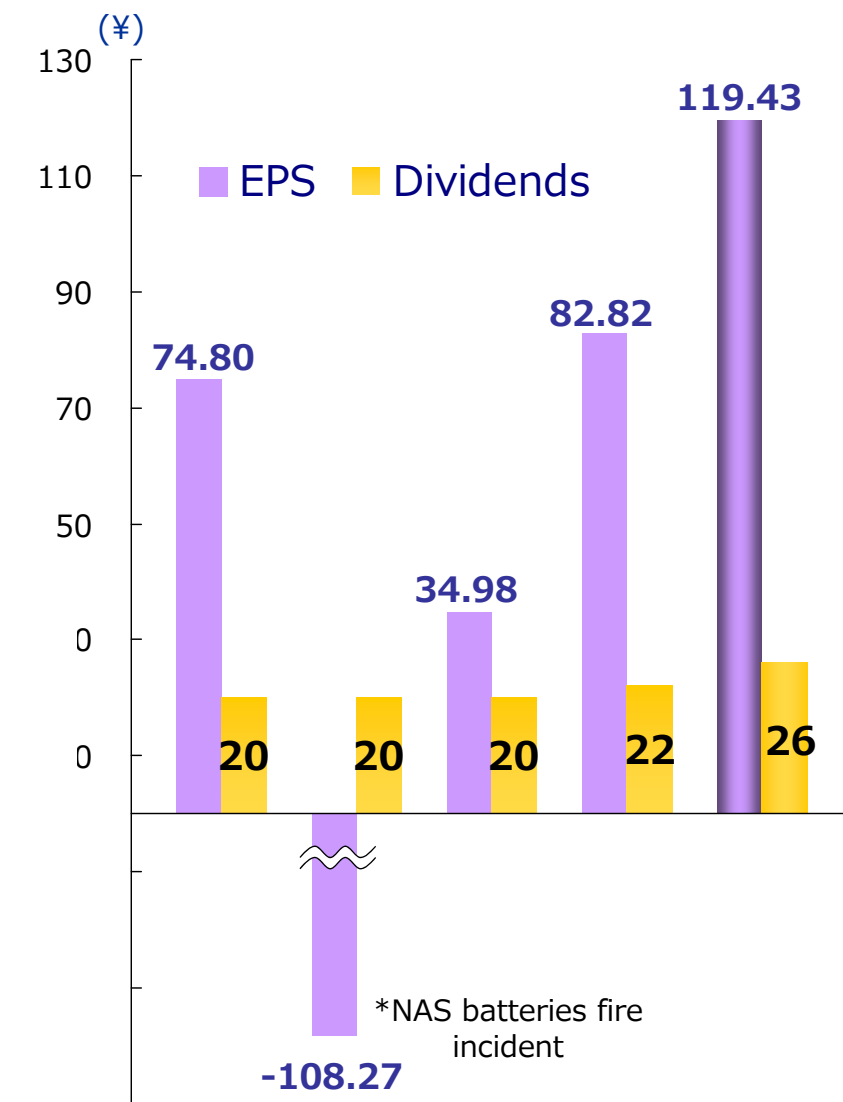
Capital expenditure is expected to continue over ¥30 Billion in the following years.

Summary of Cash Flow

	(¥ Bil.)		
	3/13	3/14	3/15 Est.
Operating Activities	3.7	32.7	62.0
Investing Activities	-0.6	-21.2	-40.0
Financing Activities	12.4	2.0	-25.0
Effect of exchange rate change	2.9	3.4	-
Net Change in Cash &Eq-	18.4	16.9	-3.0
Effect of changing the FY period (1~3/'12)	-0.7	-	-
Cash & Eq- at the End of Year	102.8	119.8	116.8



ROE 8.0% -12.6% 4.2% 8.6% 11.1%



Payout Ratio 3/11 26.7% 3/12 - 3/13 57.2% 3/14 26.6% 3/15 Est. 21.8%

Sales by Product (annual)

 FY2014 1st half

Presentation

<After Consolidation Elimination>

(¥ Bil.)

	3/12	3/13	3/14	3/15 Est.
Insulators	54.9	57.6	53.9	56.0
NAS	0.9	0.1	5.1	15.0
Power Business	55.8	57.7	59.0	71.0
Honeycomb filters	46.3	50.6	65.1	69.0
SiC-DPF	30.2	26.5	37.6	39.0
Cd-DPF / LSH	24.8	33.0	51.8	64.0
Sensors	8.2	10.1	16.4	23.0
Industrial Process	24.2	23.7	19.9	20.0
Ceramics Business	133.8	144.0	190.8	215.0
Metal related	18.4	17.2	18.6	20.0
SPE related	16.5	15.6	24.3	27.5
Electric Related	12.1	7.7	4.8	5.1
Soshin Electric CO.	11.2	10.5	11.2	11.4
Electronics Business	58.2	51.1	58.9	64.0
Total	247.8	252.8	308.7	350.0

Sales by Product (semi annual)

 FY2014 1st half

Presentation

<After Consolidation Elimination>

(¥ Bil.)

	3/14		3/15 Est.	
	1 st . Half	2 nd . Half	1 st . Half	2 nd . Half
Insulators	26.8	27.1	26.7	29.3
NAS	0	5.1	1.5	13.5
Power Business	26.8	32.2	28.2	42.8
Honeycomb filters	31.5	33.6	35.1	33.9
SiC-DPF	16.9	20.7	20.4	18.6
Cd-DPF / LSH	23.7	28.1	32.0	32.0
Sensors	7.2	9.2	11.4	11.6
Industrial Process	7.9	11.9	7.7	12.3
Ceramics Business	87.3	103.5	106.6	108.4
Metal related	9.1	9.5	10.7	9.3
SPE related	10.4	13.9	14.4	13.1
Electric Related	2.8	2.0	2.4	2.7
Soshin Electric CO.	5.5	5.7	5.8	5.6
Electronics Business	27.7	31.2	33.3	30.7
Total	141.8	166.9	168.0	182.0

The purpose of this brief is information disclosure for better understanding of NGK Group's policies, projections and financial condition. This brief does not solicit buying and selling of NGK's shares.

The figures included in this 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.



NGK INSULATORS, LTD.

2-56, Suda-cho, Mizuho-ku, Nagoya

467-8530, Japan

Finance & Accounting Department

Tel. : + 81-52-872-7212 Fax. : + 81-52-872-7160

E-mail : ir-office@ngk.co.jp

NGK Website (English Version) :

<http://www.ngk.co.jp/english/index.html>