

Security Code

Tokyo 5020

# Financial Results for FY 2015

- From April 1, 2015 to March 31, 2016 -

Representative Director, President

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May 11, 2016



The Future of Energy, Resources and Materials

**JX Holdings, Inc.**

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## Financial Results for FY2015

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# Summary of Financial Results for FY 2015

(vs Forecast announced in Feb.)

- Ordinary income excluding inventory valuation increased, due to cost reduction and improved petrochemical margins.

## Key Factors(Jan.-Mar., 2016)

	Previous Forecast (Announced in Feb.)	Actual
Crude Price (\$/Bbl)*	30	30
Copper Price (¢/lb)	200	212
Exchange Rate (yen/\$)	120	115

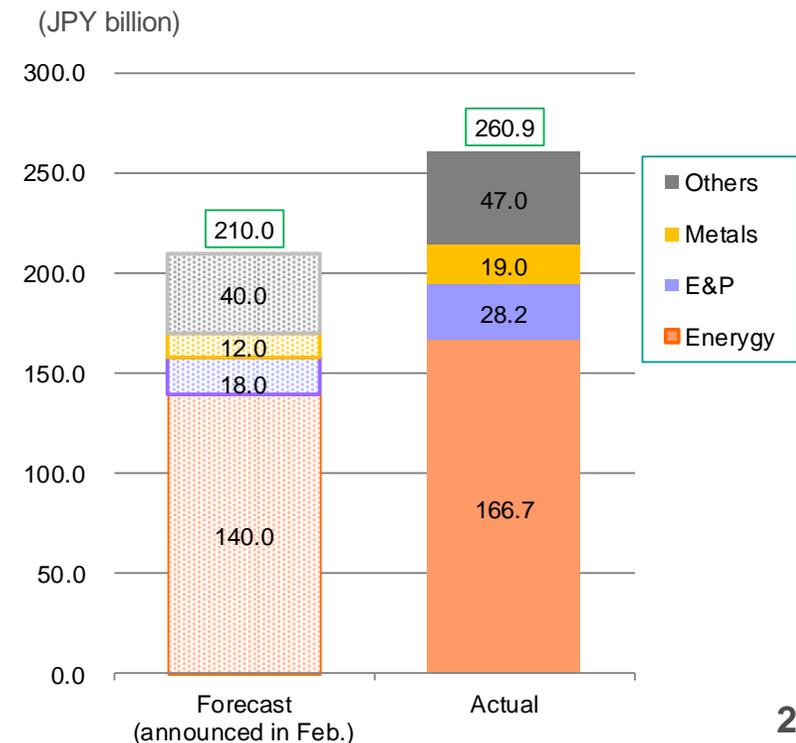
\*Average from March to February

## Ordinary Income(Loss) / Net Income(Loss)

	Previous Forecast (Announced in Feb.)	Actual
Ordinary Income(Loss)	(55.0)	(8.6)
- Inventory Valuation	(265.0)	(269.5)
Ordinary Income(Loss) excl. Inventory Valuation	210.0	260.9
Net Income(Loss)	(330.0)	(278.5)

(JPY billion)

## Ordinary Income excl. Inventory Valuation by Segments



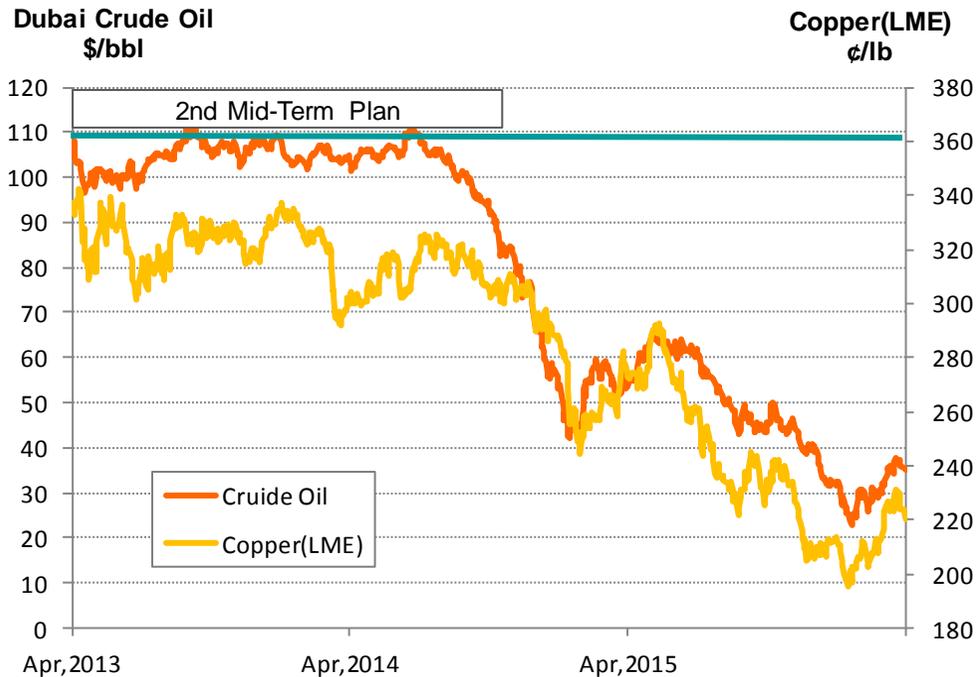


# Review of 2nd Medium-Term Management Plan (Business Environment – Resource Prices/Exchange Rate)

## Crude Oil Price/Copper Price

## Exchange Rate

Business environment surrounding JX group has radically changed.



# Review of 2nd Medium-Term Management Plan

Basic Policy	On the premise of establishment both of proper governance backed with thorough compliance and CSR implement structure.
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Review	
Profitability	FY2015 Ordinary Income excl. Inventory Valuation : (Target) 400.0bn yen or more -> (Actual) 260.9bn yen FY2015 ROE: (Target) 10% or higher -> (Actual) (16)%
-Securing stable profitability in existing business by realizing overwhelming competitiveness through continuous restructuring and stable operation -Realizing return from invested projects	-The target of upstream business was unachieved, due to decline of resource prices and delay of the stable operation of Caserones. -Mid/downstream businesses exceeded the target, due to cost reduction and efficiency by restructuring and yen depreciation, despite lower margin of petroleum products caused by time lags. -Inventory losses and impairment losses accrued, due to dropped resource prices.
Growth	FY2013-2015 total CAPEX: (Target) 1,300+α bn yen -> (Actual) 1,240bn yen
Allocating management resources to highly profitable and developing operations on priority basis	-Controlled CAPEX within the target, despite increment by yen depreciation. -It is necessary to more promptly and flexibly cut CAPEX and sell assets, when business environment changes.
Flexibility	End of FY2015 Net D/E Ratio: (Target) 0.9 times or lower -> (Actual) 1.4 times
Structuring stronger balance sheet corresponding to business environmental change	Balance sheet condition worsened compared to the target, due to inventory losses and impairment losses caused by dropped resource prices.

# Review of 2nd Medium-Term Management Plan (Energy Business)

## Basic Strategy ➤ Strengthening profitability

- Transformed Muroran Refinery into petrochemical plant.
- Installed a solvent de-asphalting (SDA) equipment in Kashima Refinery.
- Improved supply chain (saving energy, refining comparatively cheap crude oil, etc), and reduced fixed costs, etc.
- Petroleum margins declined. -A refinery trouble occurred.

## Basic Strategy ➤ Enhancing business as an energy conversion company

- Expanded projects in new fields (joining the electricity retail sales for homes, spreading hydrogen supply stations).
- Stopped technology development and production of fuel cell business.

## Basic Strategy ➤ Progressing the growth strategies

- Basic Chemical Products: Commenced commercial production of paraxylene at Ulsan Aromatics in South Korea.
- Lubricants: Strengthened abroad production and sales.



## Challenges

Strengthening earning capacity and developing some businesses which can be primary sources of revenue in the future, as domestic petroleum demand continues to decline.



# Review of 2nd Medium-Term Management Plan (Oil and Natural Gas E&P Business)

**Basic Strategy** ➤ Expanding reserves and production volume mainly through exploration

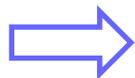
- Commenced commercial production of Papua New Guinea LNG project. (Apr., 2014)
- Commenced commercial production at Kinnoul oil field. (Dec., 2014)
- Extended the contract term in Rang Dong oilfield in Vietnam and block SK10 in Malaysia.
- The target of production volume was unachieved due to development delay of some projects and declines in production.

FY2015: (Plan) 136 thousand BD -> (Actual) 121 thousand BD

**Basic Strategy**

- Establishing superiority by focusing core business area and technology
- Restructuring business portfolio responding to business environmental change

- Decided to decrease the north sea assets in UK.
- Joined CO2-EOR project.
- Explored deepwater. (drilled well in Deepwater Block R in Malaysia, etc.)



## Challenges

Improving earning capacity in the situation of low crude oil price.

# Review of 2nd Medium-Term Management Plan (Metals Business)

**Basic Strategy**

- **Resource Development:**  
Establishing highly profitable structure by enhancing copper mine interest

-Stable Operation of Caserones became delayed and income declined due to dropped copper price.

**Basic Strategy**

- **Smelting & Refining:**  
Establishing business structure that has world top-class cost competitiveness

-Maintained the income by improving smelting margin and processes of the smelter.

**Basic Strategy**

- **Electronic Materials:** Securing world's top share in each product market

-Expanded the earning scale of existing products such as Sputtering Targets for LSIs and copper foil.  
-The profit target of new project (cathode materials) was unachieved. Carried out the restructuring of it and unprofitable electro-deposited copper foil business.

**Basic Strategy**

- **Recycling & Environmental Services:** Building international resource recycling business with environmental-friendly zero emission system

-Increased the overseas collecting rate of materials for recycling.

**Basic Strategy**

- **Titanium:** Carrying out restructuring

-Moved into the black as the result of restructuring.

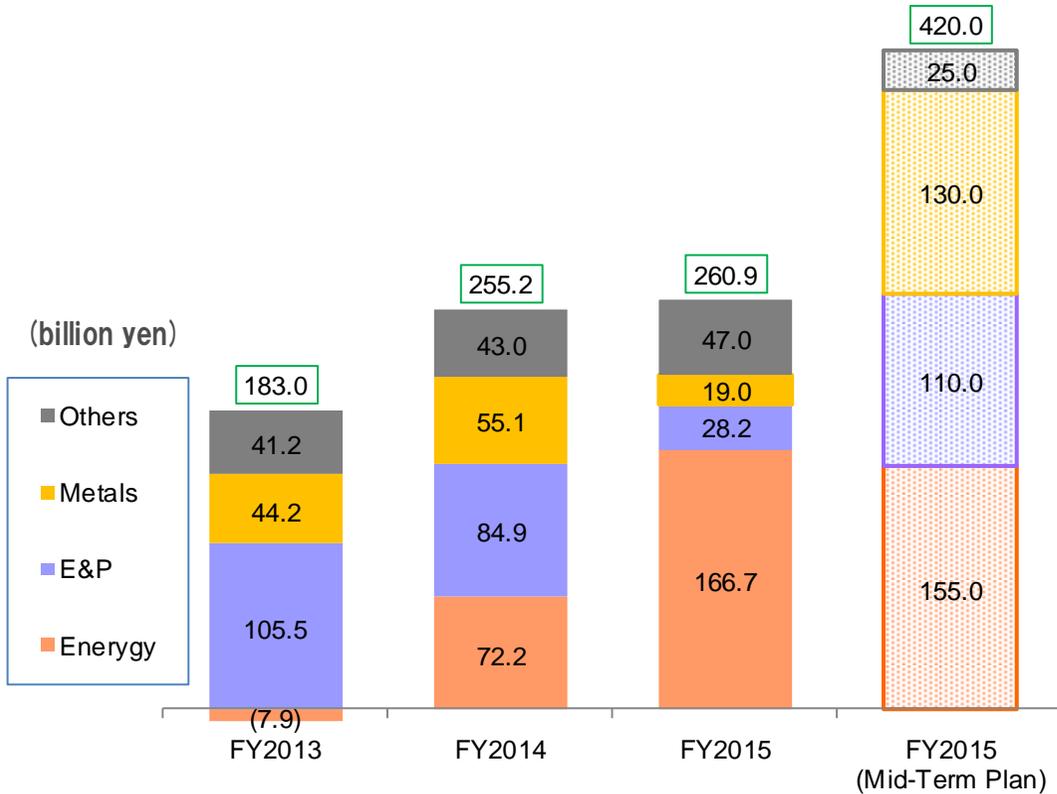


**Challenges**

Establishing stable operation of Caserones early, and strengthening earning capacity of mid/downstream businesses.

# Ordinary Income excl. Inventory Valuation

## Ordinary Income excl. Inventory Valuation (FY2013-2015)



<FY2015 (compared to 2nd Mid-Term Plan)>

-Upstream: The target was unachieved, due to dropped resources prices and the delay of Caserones stable operation.

-Mid/downstream: Exceeded the target due to cost reduction/efficiency through restructuring, and yen depreciation, despite refinery trouble and declined petroleum products margins mainly caused by time lags.

	FY2013	FY2014	FY2015	FY2015 (Mid-Term Plan)
upstream	128.0	103.0	4.0	177.0
mid/downstream	55.0	152.2	256.9	243.0
Total	183.0	255.2	260.9	420.0

# Impairment Losses

## Impairment Losses, etc. (FY2013-2015)

(JPY billion)

Items	Amount	Background of the impairment losses
Upstream Impairment Losses	(369.6)	
Oil & Natural Gas E&P	(177.5)	Resources price declined
Copper Mine Development in Chile	(153.3)	
Coal Exploration and Production	(38.8)	
Restructuring	(110.0)	
Oil & Natural Gas E&P	(79.5)	Decided to decrease the north sea assets in UK
Fuel Cell	(20.6)	Stopped technology development and production of fuel cell business
Electro-deposited Copper Foil	(9.9)	Unifying production from general-purpose into high-end products

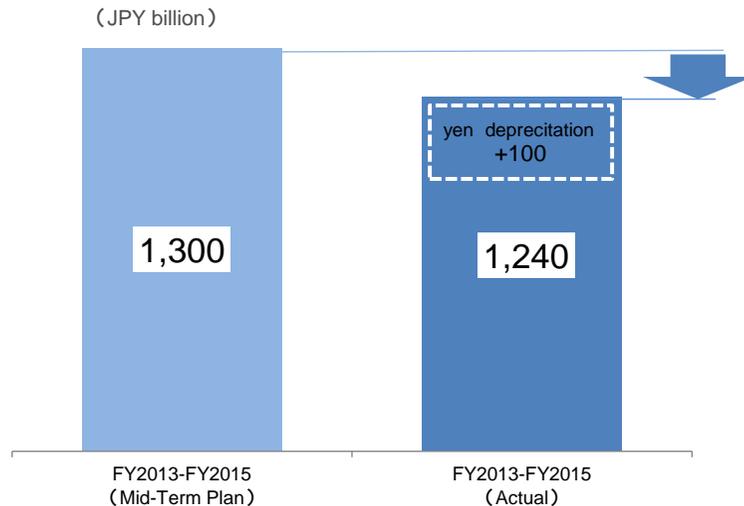
-Booked impairment losses due to dropped resources prices and the delay of Caserones stable operation.

-Booked restructuring costs of unprofitable businesses (UK north sea, fuel cell, electro-deposited copper foil).

# CAPEX, Cash Flow

## CAPEX

- Decreased 60 billion yen
- Decreased by 160 billion yen compared to the plan
- 100 billion yen increased due to yen depreciation



## Cash Flow

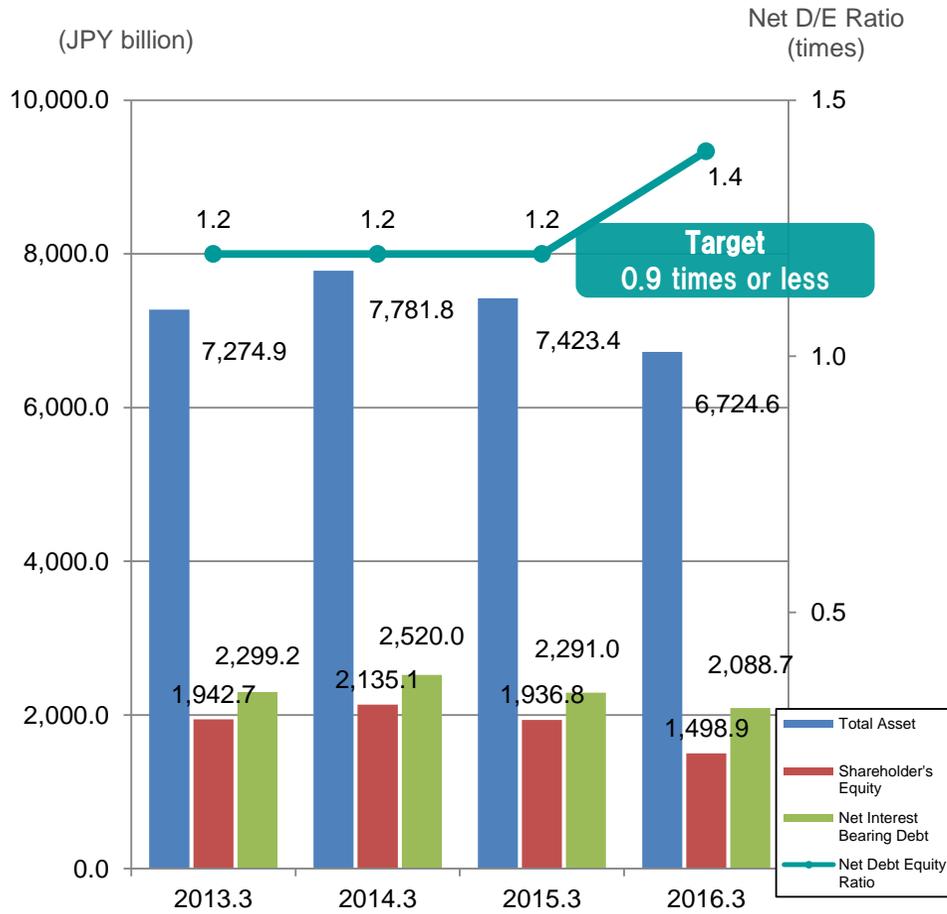
- Free cash flows improved compared to the plan, due to working capital reduction because of dropped crude oil price, asset sales, and CAPEX reduction, though ordinary income target was unachieved.

(JPY billion)

	FY2013-FY2015 (Plan)	FY2013-FY2015 (Actual)
Ordinary income	1,100.0	143.6
Depreciation and amortization	650.0	608.6
Working capital and others	(330.0)	845.2
<b>Cash flows from operating activities</b>	<b>1,420.0</b>	<b>1,597.4</b>
CAPEX	(1,300.0)	(1,240.0)
Asset Sales	60.0	74.7
<b>Cash flows from investing activities</b>	<b>(1,240.0)</b>	<b>(1,165.3)</b>
<b>Free cash flows</b>	<b>180.0</b>	<b>432.1</b>

# Net D/E Ratio

## Net D/E Ratio



- ◆ Net Interest Bearing Debt decreased, due to positive free cash flow, despite the increase of yen valuation of foreign-currency-denominated debt.
- ◆ Shareholder's equity decreased, due to losses caused mainly by dropped resources prices\*.

\* (FY2013-FY2015 total)

- Inventory valuation losses: (555.5) billion yen
- Impairment losses on upstream business: (369.6) billion yen
- Restructuring costs: (110.0) billion yen

-> Net D/E Ratio ended with 1.4 times: worse than the target

(Continuously, the goal of Net D/E Ratio is under 0.9 times, in the med- and long-term.)

# Basic Policies in FY2016

## Distribution of managerial resources, administration and generation of cash flows

### CAPEX

- Decreasing CAPEX
  - Controlling CAPEX (after deduction of asset sales) within the amount of depreciation and amortization.
- Shifting CAPEX field allocation to mid/downstream business
- Dispersing risks by equalizing cash-out in each financial year

### Improving balance sheet

- Improving and slimming balance sheet by controlling CAPEX and accelerating asset sales.

## Basic policies of each businesses

- Upstream: Decreasing CAPEX and restructuring, with selection and concentration.  
Securing the returns from already invested items (mainly Caserones).
- Mid/downstream : Strengthening earning capacity through efficiency and cost reduction.  
Developing businesses based on technology.

# Business Integration with TonenGeneral Sekiyu K.K.

## Purpose of business integration

Establish a strong company group that:

- Is among Asia's most prominent and internationally competitive total energy, natural resource and material companies
- Contributes to the development of a sustainable and vigorous economy and society

Dec. 2015

- Execution of MOU
- Establishment of Business Integration Preparation Committee

Aug. 2016  
(Plan)

- Determination of the integration ratio,
- Execution of business integration agreement

Dec. 2016  
(Plan)

- Shareholders' meetings, required for the approval of the business integration

Apr. 2017  
(Plan)

New company group starts

## Integration Effects

- Aim to achieve in excess of 100 billion yen in profit improvements per fiscal year within five years after the business integration
- ⇒ Discuss and determine the detailed actions and targets prior to the execution of the business integration agreement

\* Based on the premise of clearance from each of the authorities concerned

## Basic Policies in FY2016 (Energy Business)

### ■ Strengthening earning capacity of existing businesses

Petroleum refining and marketing

- Strengthening through efficiency and cost reduction of supply chain.
- Corresponding agilely to balance the demand and supply.

### ■ Developing businesses able to be primary sources of revenue in the future

Electricity business

- Strengthening a structure for sales, based on electricity retail sales for homes.

Southeast Asia business

- Incorporating Asia demand (investing in and cooperating with Petrolimex in Vietnam).

### ■ Engaging in developing businesses based on technology

Lubricants/  
Specialty  
Chemicals

- Developing high-value-added products.



### ■ Decreasing CAPEX and restructuring (selection and concentration)

Area	<ul style="list-style-type: none"><li>-Focusing managerial resources on the areas of competitive strength (Southeast and Middle East Asia).</li><li>-Decreasing the north sea projects in UK.</li></ul>
Technology development	<ul style="list-style-type: none"><li>-Focusing on CO<sub>2</sub>-EOR technology.</li><li>- Steady start-up of US project, accumulation of technology and knowledge</li></ul>
Profitability	<ul style="list-style-type: none"><li>-Strengthening earning capacity to endure the situation of low crude oil price.</li></ul>

## Basic Policies in FY2016 (Metals Business)

### ■ Securing returns from already invested items

Resource  
Development  
(Caserones)

- Early stable operation and improvement of profitability.
- Installing a consulting firm from outside.

### ■ Strengthening earning capacity of existing businesses

Smelting &  
Refining

- Establishing safe and stable operation and strengthening cost competitiveness by efficiency.

Electronic  
Materials

- Preserving and expanding the earning capacity with the advantage of technology in the existing field.

Recycling &  
Environmental  
Services

- Strengthening the domestic and overseas collecting network and securing the margins.

### ■ Engaging in developing businesses based on technology

Electronic  
Materials

- Developing market and technology, and strengthening sales for the coming IoT society.

# Outline of Forecast for FY2016

- Upstream: Ordinary income is expected to decrease due to dropped resources prices.
- Mid/downstream: Ordinary income is expected to increase due to improvement of supply chain, despite yen appreciation.

## Key Factors

	FY2015(Actual)	FY2016(Forecast)
Crude Price (\$/Bbl)*	47	40
Copper Price (¢/lb)	237	230
Exchange Rate (yen/\$)	120	110

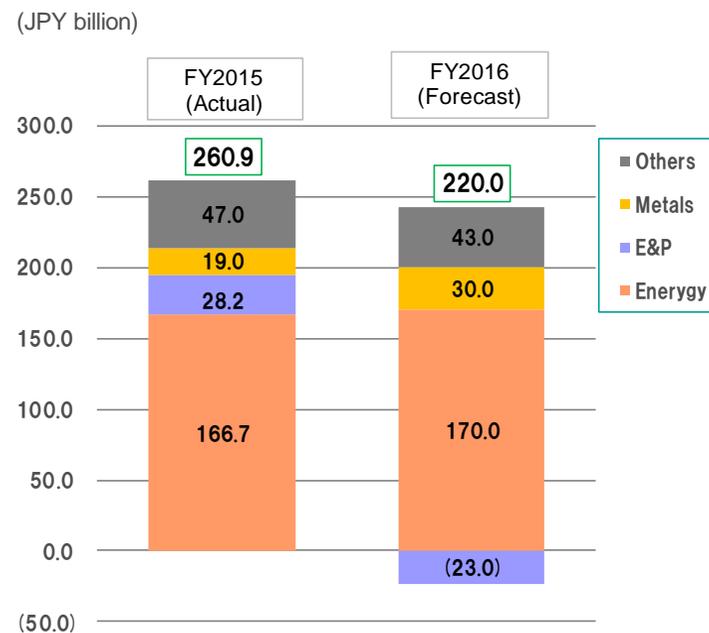
\*Average from March to February

## Index

(JPY billion)

	FY2015(Actual)	FY2016(Forecast)
Ordinary Income(Loss)	(8.6)	260.0
- Inventory Valuation	(269.5)	40.0
Ordinary Income(Loss) excl. Inventory Valuation	260.9	220.0
Net Income(Loss)	(278.5)	125.0
ROE	(16)%	8%
Net Debt Equity Ratio	1.4 times	1.4 times

## Ordinary Income excl. Inventory Valuation by Segments



	FY2015	FY2016
Upstream	4.0	(40.0)
Mid/downstream	256.9	260.0
<b>Total</b>	<b>260.9</b>	<b>220.0</b>

# Forecast of CAPEX, Cash Flow from FY2016 onward

CAPEX		
JPY billion	FY2016 (Forecast)	FY2016-FY2018
Energy	210.0	390.0
E&P	120.0	250.0
Metals	80.0	190.0
Others	30.0	110.0
<b>CAPEX total</b>	<b>440.0</b>	<b>940.0</b>
Asset Sales	(100.0)	(160.0)
<b>CAPEX (after deduction of asset sales)</b>	<b>340.0</b>	<b>780.0</b>

\* Plan of only JX

Cash Flow	
	FY2016 (Forecast)
Ordinary income	260.0
Depreciation and amortization	240.0
Decrease in working capital	(230.0)
-(included) the effect of non-business day	(90.0)
<b>Cash flows from operating activities</b>	<b>270.0</b>
<b>Cash flows from investing activities</b>	<b>(290.0)</b>
<b>Free cash flows</b>	<b>(20.0)</b>
↓	
<b>Free cash flows without the effect of non-business day</b>	<b>70.0</b>

- ◆ Decreasing CAPEX
  - generating cash flows by controlling capex (after deduction of asset sales) within the amount of depreciation and amortization in three years  
 CAPEX: 780bn yen < D&A 800bn yen
- ◆ Shifting CAPEX field allocation
  - decreasing capex on upstream, and focusing on mid/downstream such as electricity, Southeast Asia business and businesses based on technology.
- ◆ Dispersing risks
  - equalizing cash-out of investing cash flows in each financial year

# Shareholder Return Policy

## Basic Shareholder Return Policy

Redistribute profits by reflecting consolidated business results while striving to maintain stable dividends

### Reference) Dividend from FY2010-2016

	2010	2011	2012	2013	2014	2015	2016 (Forecast)
Dividend (yen/share)	15.5	16.0	16.0	16.0	16.0	16.0	16.0
EPS (yen/share)	125	69	64	43	-111	-112	50



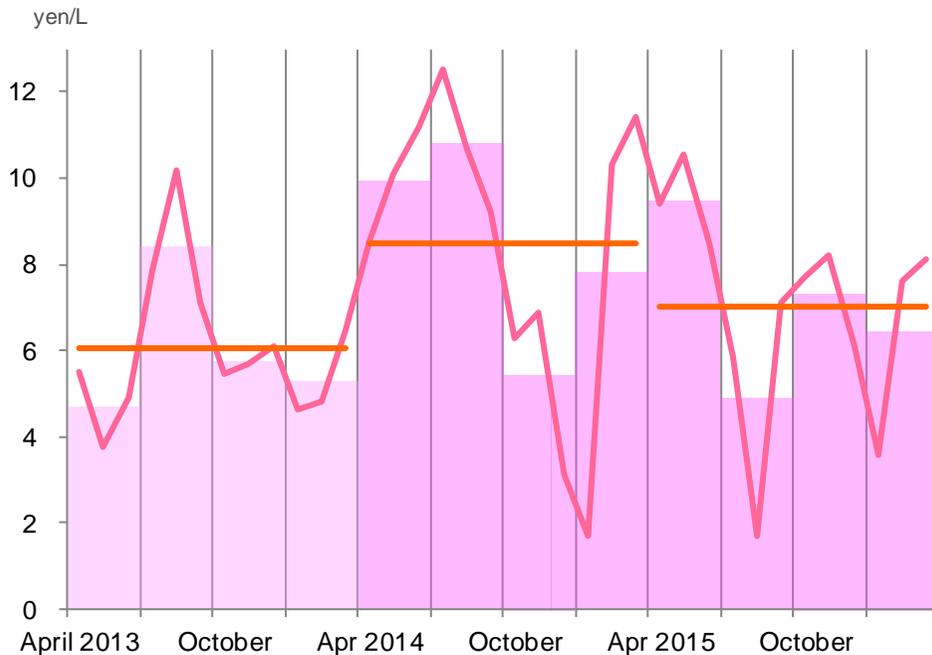
## Financial Results for FY2015 (April 1, 2015 – Mar. 31, 2016)



# Business Environment Margin of Petroleum Products and Paraxylene

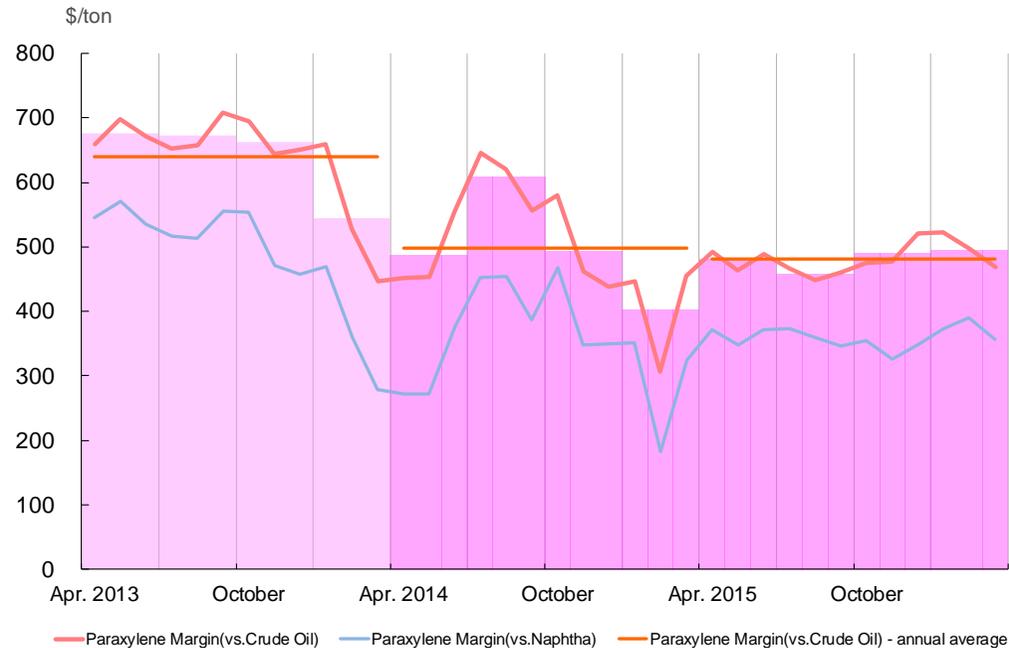
- Petroleum Products margin was below the plan due to time lag generated by crude oil rapid decline.
- Margin of Paraxylene (Jan.- Mar.) shifted steadily.

Margins of Gasoline, Kerosene, Diesel Fuel and Fuel Oil A



Margin = Spot Price – All Japan Crude CIF (including petroleum tax and interest)

Margin of Paraxylene



\* In case of ACP undecided, average price of spot market is adopted.



# Outline of FY2015

\* Average from March to February  
(nearly equal to arrived crude cost)

	FY2014 (Actual)		FY2015 (Actual)		Changes					
Crude Oil (Dubai)* (\$/bbl)		88		47		-41	-47%			
	Jan.-Dec.2014	<311>	297	Jan.-Dec.2015	<250>	237	<-61>	-60	<-20%>	-20%
Copper (¢/lb)										
Exchange Rate (Yen/\$)	Jan.-Dec.2014	< 106>	110	Jan.-Dec.2015	<121>	120	<+15>	+10	<+14%>	+9%
			JPY Billion			JPY Billion				
Net Sales		10,882.5		8,737.8		-2,144.7		-20%		
Operating Income		(218.9)		(62.2)		+156.7		-		
Non-operating Income (Expenses), Net		68.8		53.6		-15.2		-22%		
Ordinary Income		(150.1)		(8.6)		+141.5		-		
-Inventory Valuation		(405.3)		(269.5)		+135.8		-		
Ordinary Income Excl. Inventory Valuation		255.2		260.9		+5.7		+2%		
Special Gain (Loss), Net		(104.9)		(321.4)		-216.5		-		
Profit attributable to owners of parent		(277.2)		(278.5)		-1.3		-		

FY2014 Actual vs. FY2015 Actual  
 Changes in Ordinary Income (Loss) by Segment

	FY2014 (Actual)	FY2015 (Actual)	Changes	
	JPY Billion	JPY Billion	JPY Billion	
Energy	(334.6)	(97.1)	+237.5	-
- Inventory Valuation	(406.8)	(263.8)	+143.0	-
Excl. Inventory Valuation	72.2	166.7	+94.5	+131%
- Petroleum Products	57.1	89.1	+32.0	+56%
- Petrochemicals	15.1	77.6	+62.5	+414%
Oil and Natural Gas E&P	84.9	28.2	-56.7	-67%
Metals	56.6	13.3	-43.3	-77%
- Inventory Valuation	1.5	(5.7)	-7.2	-
Excl. Inventory Valuation	55.1	19.0	-36.1	-66%
Others	43.0	47.0	+4.0	+9%
Total	(150.1)	(8.6)	+141.5	-
Excl. Inventory Valuation	255.2	260.9	+5.7	+2%

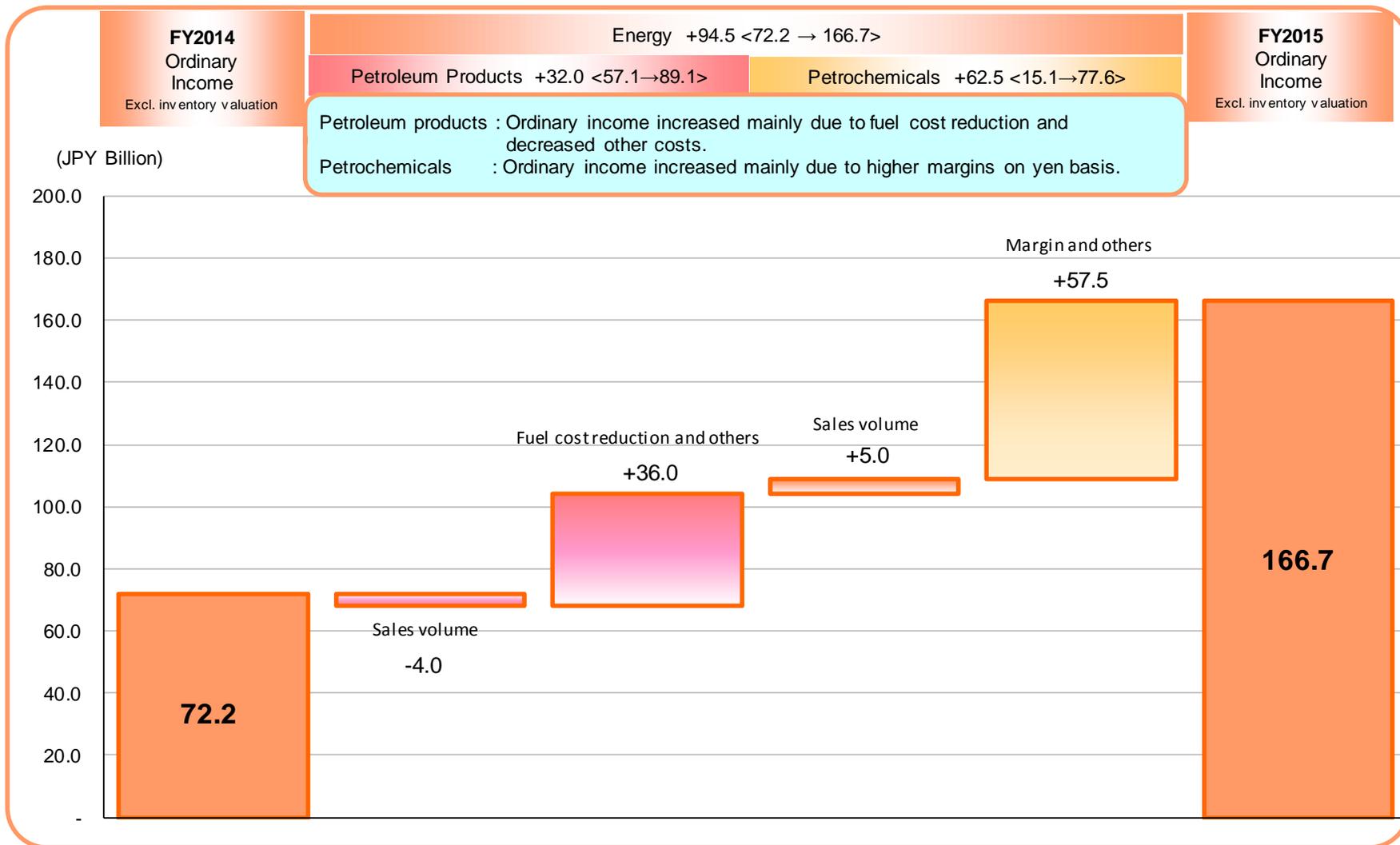
## Breakdown of special gain and loss

		FY2014 (Actual)	FY2015 (Actual)	FY2015 (Forecast Announced in Feb.)
Capital Gain		54.8	41.3	30.0
Impairment Loss and Loss on valuation of shares		(86.2)	(248.6)	(235.0)
Energy	Coal E&P Business	(24.4)	(14.4)	(15.0)
E&P	(Details)	(23.3)	(154.2)	(140.0)
	-UK North Sea	(16.1)	(105.8)	(100.0)
	-USA	—	(38.5)	(30.0)
	-Southeast Asia, Oceania	(7.2)	(9.9)	(10.0)
Metals	Chile Caserones	(38.5)	(80.0)	(80.0)
Restructuring Costs (upstream business)		—	(79.5)	(80.0)
Other Special Gain and Loss		(73.5)	(34.6)	(35.0)
Special Gain and Loss (Net)		(104.9)	(321.4)	(320.0)

(JPY billion)



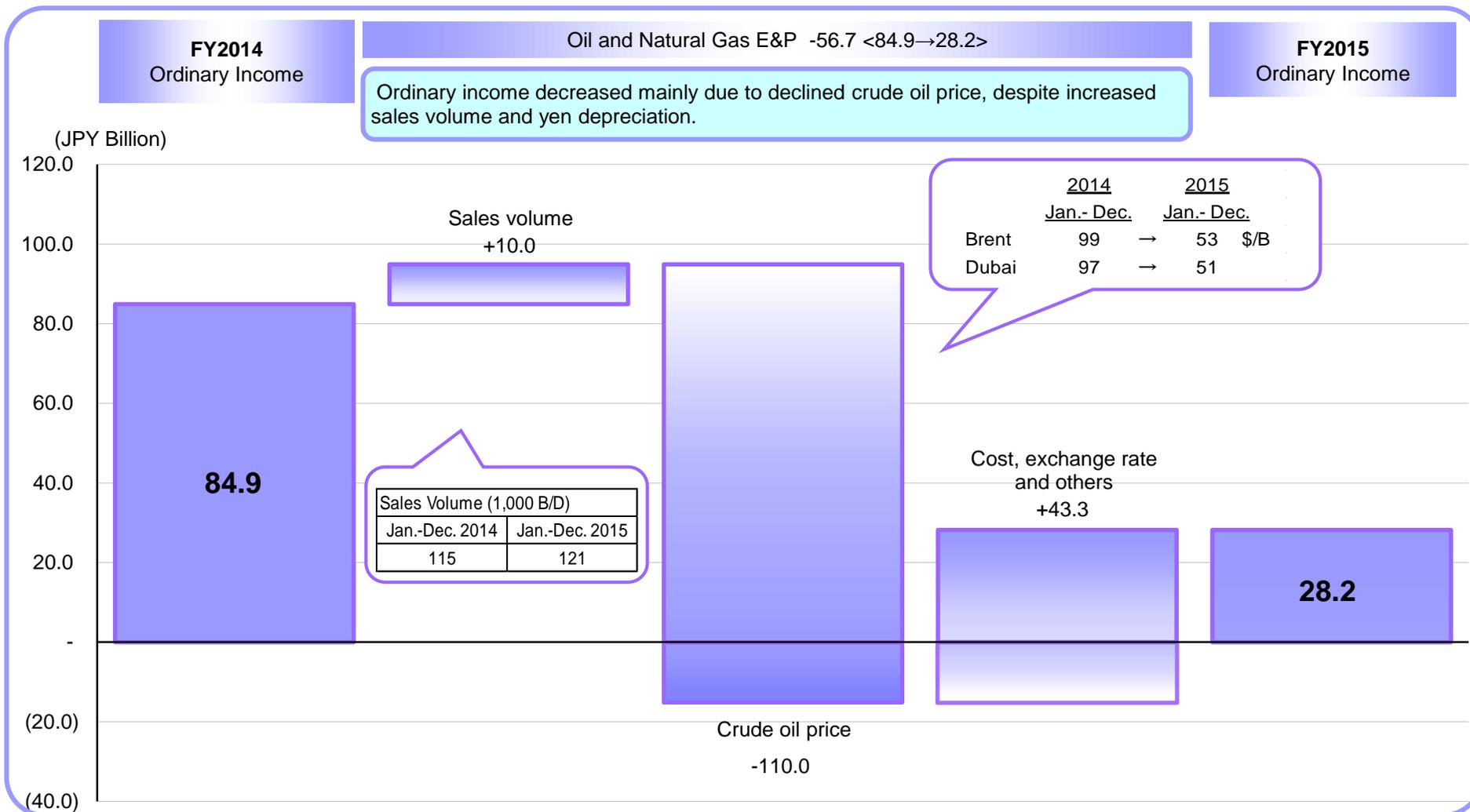
# FY2014 Actual vs. FY2015 Actual Changes in Ordinary Income - Energy Business -





# FY2014 Actual vs. FY2015 Actual

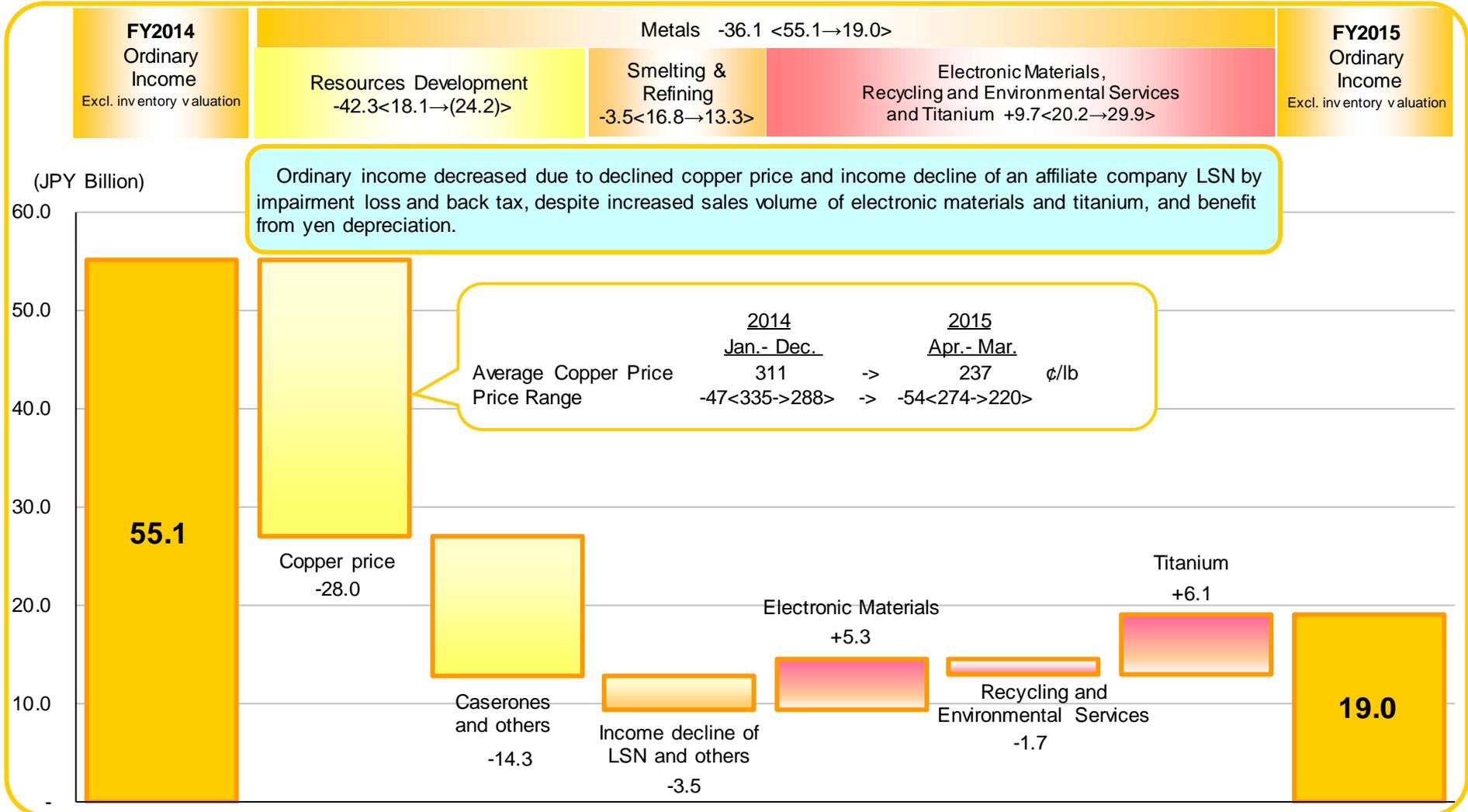
## Changes in Ordinary Income - Oil and Natural Gas E&P Business -





# FY2014 Actual vs. FY2015 Actual

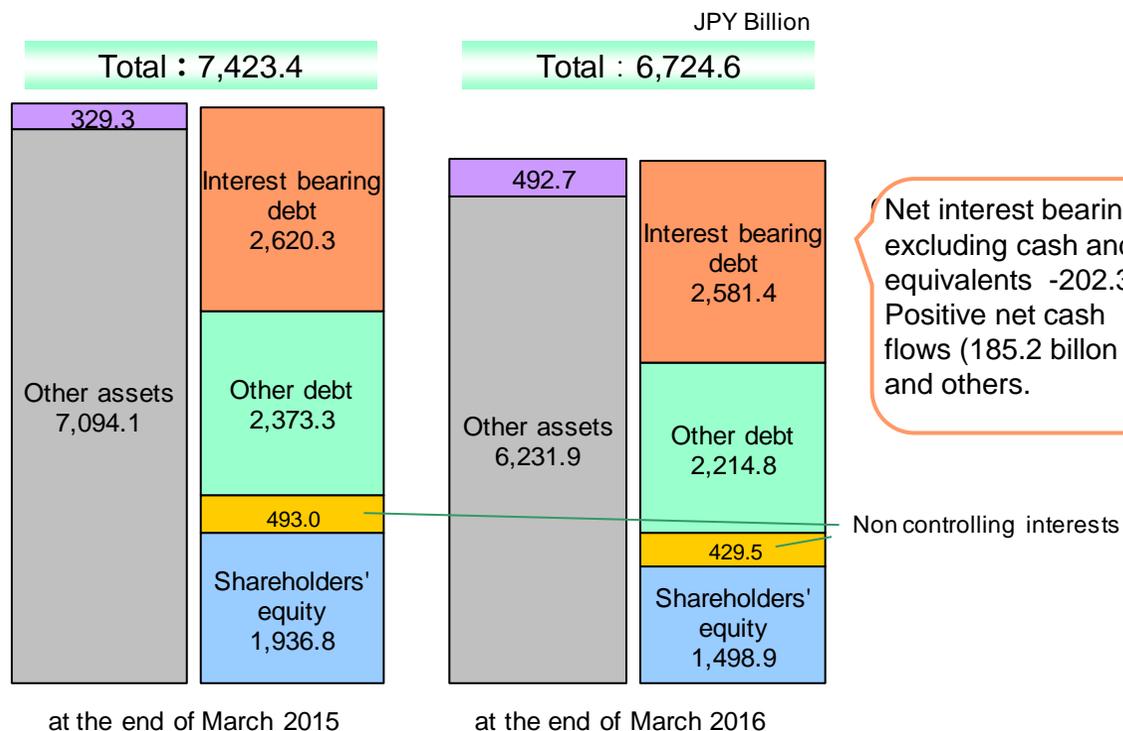
## Changes in Ordinary Income - Metals Business-





Consolidated Balance Sheets  
Consolidated Statement of Cash Flows

Consolidated Balance Sheets



Consolidated Cash Flows

(JPY Billion)

FY2015	
Ordinary income	(8.6)
Depreciation and amortization	227.7
Working capital and others	335.9
<b>Cash flows from operating activities</b>	<b>555.0</b>
<b>Cash flows from investing activities</b>	<b>(307.7)</b>
<b>Free cash flows</b>	<b>247.3</b>
Dividends and others	(62.1)
<b>Net cash flows</b>	<b>185.2</b>

	At the end of March 2015 (Actual)	At the end of March 2016 (Actual)
Shareholders' equity ratio	26.1%	22.3%
Net D/E ratio	1.18	1.39

## Forecast for FY2016

- From April 1, 2016 to March 31, 2017 -

✓ Key Factors (April 2016 - March 2017)

Crude Oil(\$/Bbl)	40
Copper Price(¢/lb)	230
Exchange Rate(Yen/\$)	110

## Outline of FY2016 Forecast

\* Average from March to February  
(nearly equal to arrived crude cost)

Crude Oil (Dubai)* (\$/bbl)
Copper (¢/lb)
Exchange Rate (Yen/\$)
Net Sales
Operating Income
Non-operating Income (Expenses), Net
Ordinary Income
-Inventory Valuation
Ordinary Income Excl. Inventory Valuation
Special Gain (Loss), Net
Profit attributable to owners of parent

FY2015 (Actual)	
	47
Jan.-Dec. 2015	<250> 237
Jan.-Dec. 2015	<121> 120
JPY Billion	8,737.8
	(62.2)
	53.6
	(8.6)
	(269.5)
	260.9
	(321.4)
	(278.5)

FY2016 (Forecast)	
	40
Jan.-Dec. 2016	<225> 230
Jan.-Dec. 2016	<111> 110
JPY Billion	8,800.0
	230.0
	30.0
	260.0
	40.0
	220.0
	(16.0)
	125.0

Changes			
	-7		-15%
<-25>	-7	<-10%>	-3%
<-10>	-10	<-8%>	-8%
JPY Billion	+62.2		+1%
	+292.2		-
	-23.6		-44%
	+268.6		-
	+309.5		-
	-40.9		-16%
	+305.4		-
	+403.5		-

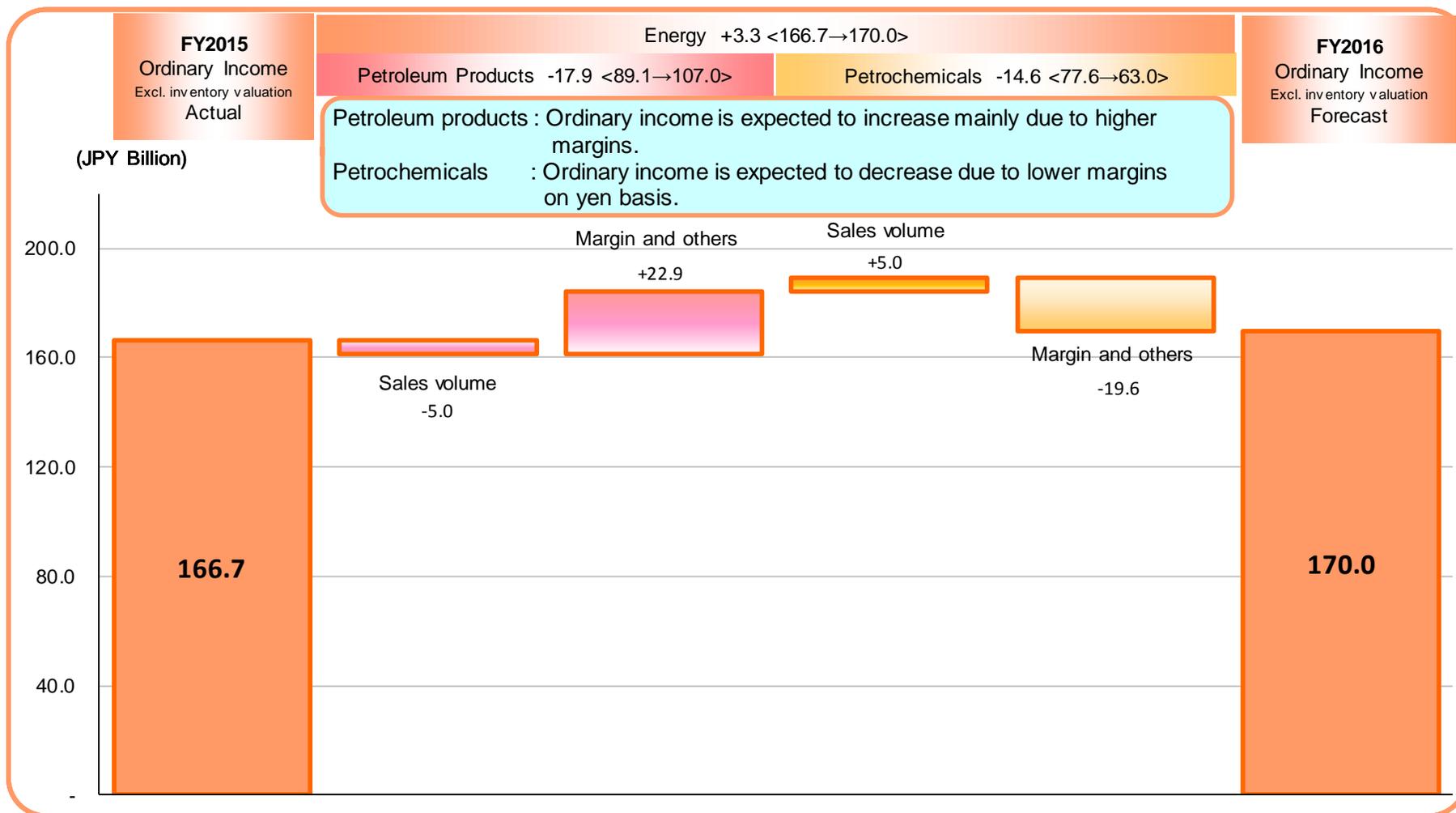
## FY2015 Actual vs. FY2016 Forecast

### Changes in Ordinary Income (Loss) by Segment

	FY2015 (Actual)	FY2016 (Forecast)	Changes	
	JPY Billion	JPY Billion	JPY Billion	
Energy	(97.1)	200.0	+297.1	-
- Inventory Valuation	(263.8)	30.0	+293.8	-
Excl. Inventory Valuation	166.7	170.0	+3.3	+2%
- Petroleum Products	89.1	107.0	+17.9	+20%
- Petrochemicals	77.6	63.0	-14.6	-19%
Oil and Natural Gas E&P	28.2	(23.0)	-51.2	-
Metals	13.3	40.0	+26.7	+201%
- Inventory Valuation	(5.7)	10.0	+15.7	-
Excl. Inventory Valuation	19.0	30.0	+11.0	+58%
Others	47.0	43.0	-4.0	-9%
Total	(8.6)	260.0	+268.6	-
Excl. Inventory Valuation	260.9	220.0	-40.9	-16%



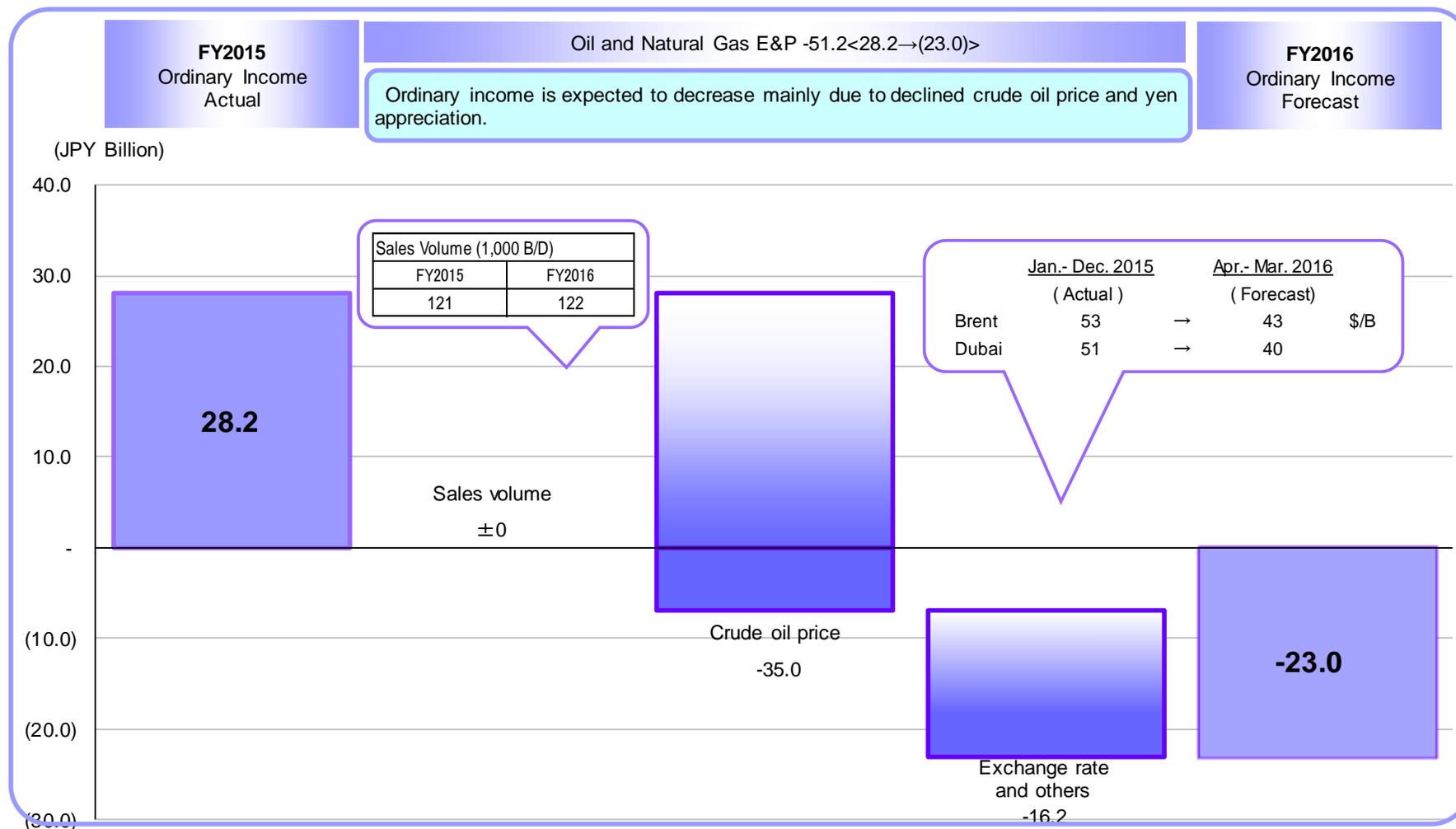
# FY2015 Actual vs. FY2016 Forecast Changes in Ordinary Income - Energy Business -





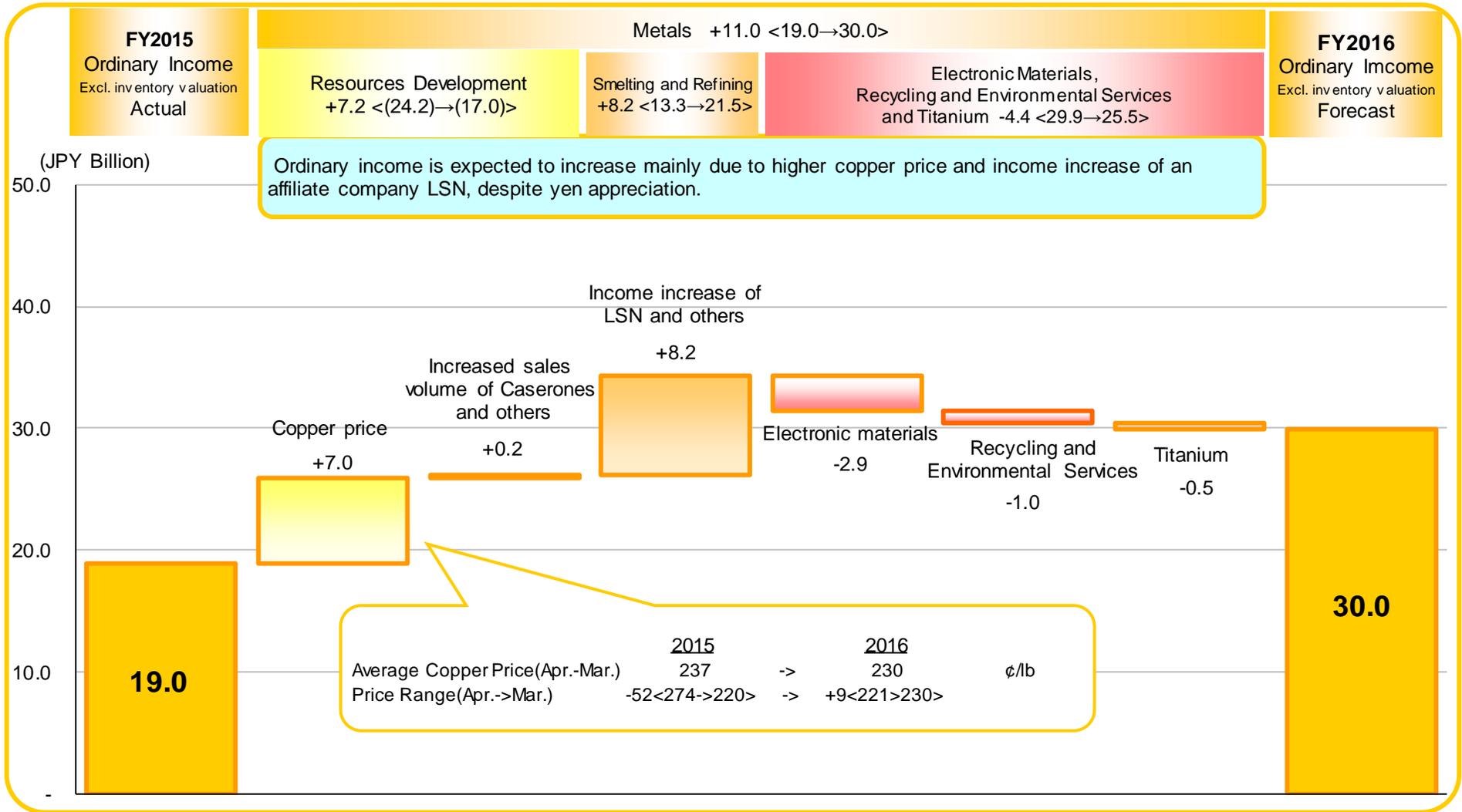
# FY2015 Actual vs. FY2016 Forecast

## Changes in Ordinary Income - Oil and Natural Gas E&P Business-





# FY2015 Actual vs. FY2016 Forecast Changes in Ordinary Income - Metals Business -



# Major Topics (from April 2015 to March 2016)

## JX Holdings

Nov. Constituted a “basic policy regarding corporate governance of JX group”.

Dec. Executed a Memorandum of Understanding regarding business integration with TonenGeneral Sekiyu K.K.

## JX Nippon Oil & Energy

Apr. Started commercial operation at Hachinohe and Kushiro LNG terminal.

Jun. Kawasaki Natural Gas Power Generation Co., Ltd. started full consideration on expansion of the generator.

Sep. Started trial operation of a solvent de-asphalting (SDA) equipment and a power generation facility at the Kashima Refinery.

Nov. Opened the first shop of movable commercial hydrogen station.

Dec. Opened a commercial hydrogen station in Fukuoka.

Jan. Concluded a business cooperation contract with KDDI centering on electricity business.

## JX Nippon Oil & Gas Exploration

Apr. Made an oil discovery at Deepwater Block R offshore Malaysia.

Aug. Acquired a Participating Interest in the Foz do Amazonas Basin of the Brazilian Amazon region.

Aug. Field Development Plan approved for Culzean in UK North Sea .

## JX Nippon Mining & Metals

May. Developed new plating technology, hyperTin®.

May. Reorganized, aiming at more enforcement of the risk management system.

# Key Factors

		FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016
		Actual	Actual	Actual	Actual	Actual	Actual	Forecast
All segments	Exchange rate [Yen/\$]	86	79	83	100	110	120	110
Energy	Crude oil price [Dubai] [Apr.-Mar.] [\$/barrel] <sup>*1</sup>	82	109	109	105	88	47	40
Oil and Natural Gas E&P	Sales volume <Crude oil equivalent> [1,000 barrels/day]	140	128	117	115	115	121	122
	Crude oil price [Brent] [\$/barrel] <sup>*2</sup>	80	111	109	109	99	53	43
Metals	Copper price [LME] [¢/pound] <sup>*3</sup>	342	400	361	332	311	237	230
	Equity entitled copper mine production [1,000 tons/year] <sup>*4</sup>	111	105	105	127	148	172	229
	PPC refined copper sales [1,000 tons/year]	588	566	551	588	623	595	634
	Treated rolled copper foil sales [1,000 km/month]	3.3	2.6	2.7	3.0	4.1	4.9	5.5
	Precision rolled products sales [1,000 tons/month]	3.8	3.5	3.3	3.4	3.8	3.7	4.0
	Gold recovery volume by Recycling & Environmental Services [tons/year]	6.5	7.0	5.8	6.1	5.9	6.4	7.0

\*1 Crude oil arrival basis

\*2 Due to a change of fiscal term, referring terms are different. Until 2015: Jan.-Dec.; Since 2016: Apr.-Mar.

\*3 Due to a change of fiscal term, referring terms are different. Until 2014: Jan.-Dec.; Since 2015: Apr.-Mar.

\*4 Production of companies closing in Dec.: Jan.-Dec.; closing in Mar.: Apr.-Mar.

# Sensitivity Analysis (FY2016 basis)

## ■ Key factors (From April 2016 to March 2017)

Exchange Rate: 110Yen/\$

Crude Oil : 40\$/bbl  
(Dubai spot)

Copper Price (LME) : 230 ¢/lb

## ■ Sensitivity analysis

Key Factors	Change	Segment	(JPY Billion) Impact
Exchange Rate	5 Yen/\$ yen appreciation	Energy (In-house fuel costs drop, margin reduction in petrochemicals)	-6.0
		Oil and Natural Gas E&P	+2.0
		Metals (Margin reduction, exchange loss)	-4.0
		Subtotal	-8.0
		Inventory valuation loss	-13.0
		Total	-21.0
Crude Oil (Dubai spot)	+5\$/bbl	Energy (In-house fuel costs rise)	-8.0
		Oil and Natural Gas E&P	+12.0
		Subtotal	+4.0
		Inventory valuation loss	+34.0
		Total	+38.0
Copper Price (LME)	+10¢/lb	Metals	+7.0
		Total	+7.0

# Cautionary Statement Regarding Forward-Looking Statements



This notice contains certain forward-looking statements, however, actual results may differ materially from those reflected in any forward-looking statement, due to various factors, including but not limited to, the following:

- (1) macroeconomic conditions and changes in the competitive environment in the energy, resources and materials industries;
- (2) changes in laws and regulations; and
- (3) risks related to litigation and other legal proceedings.