## **JX Group Strategy Presentation**

Become a world-leading integrated energy, resources and materials business group

Isao Matsushita

Representative Director, President

December, 2013



- This material contains certain forward-looking statements. A cautionary statement is contained in the endnote. -

## **Businesses Summary of JX Group**





### **Energy Business**

Market Share of domestic sales of petroleum products

36 % \*1

(No.1 in Japan)

Paraxylene production capacity

 $\begin{array}{c} 2,620 \quad \text{thousand}^{*2} \\ \text{tons/year} \\ \text{(No.1 supplier in Asia)} \end{array}$ 



## Oil & Natural Gas Exploration and Production Business

Crude oil and natural gas production (a project company basis)

Approx. 120 thousand \*3 barrels/day (B/D)

Worldwide business activities Malaysia, Vietnam, UK, Middle East and others



#### **Metals Business**

Equity entitled copper mine production

Approx.  $100 \frac{\text{thousand}}{\text{tons/year}} *4$ 

#### Refined copper production capacity

1,170 thousand tons/year \*5

## Electronic Materials; Products with world No.1 market shares



Listed subsidiaries

NIPPO Toho Titanium

Common function companies

Independent companies

\*1 FY 2012actual

- \*2 As of Mar. 2013
- \*3 Crude Oil Equivalent (Average daily production from Jan. to Dec. 2012)
- \*4 Production from Jan. to Dec 2012
- \*5 Pan Pacific Copper(66.0% equity stake); 610 thousand tons/year + LS-Nikko Copper(39.9% equity stake); 560 thousand tons/year (As of Mar. 2013)

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### 1. Summary of 1<sup>st</sup> Medium-Term Management Plan

# Policy 1: Dramatical Transformation in Petroleum Refining & Marketing Business



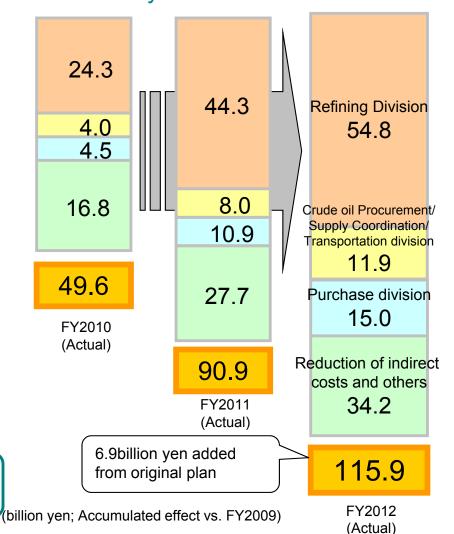
### ✓ Capacity Reduction Plan

(JX) 2008.Dec. 2014.Apr. 1,790 ⇒ 1,210 thousand BD (Ref. Japan Total)
2008.Dec. 2014.Apr.
4,830 ⇒ 3,720 thousand BD

of Energy Supply Structure Act

	Refinary	Due Date	Reduction Capacity	Completion
STEP1	Toyama	March, 2009	(60) thousand B/D	
	Kashima	May, 2010	(21)	
	Oita	May, 2010	(24)	
	Mizushima	June, 2010	(110)	
	Osaka	October, 2010	Convert to exportation refinery	
	Negishi	October, 2010	(70)	
Subtotal		tal	(400)	
STEP 2	Muroran	March, 2014	(180)	
Total			(580)	
			Corresponded	d to Sophistic

✓ Integration Synergies and Enhanced Efficiency of Refineries



### 1. Summary of 1<sup>st</sup> Medium-Term Management Plan

# Policy 2: Allocate Management Resources to Highly Profitable Operations on a Priority Basis



1st Mid-Term Mgt. Plan(2010-2012) CAPEX

Unit: billion yen

190

### Original Plan

#### Actual

960 958 Strategic
Others 40 Strategic
Investments Others 63 Investment
711

690 Metals Others 18 300 Metals 328 Metals Metals 220 278 E&P E&P 320 225 E&P E&P 225 320 Energy Energy 342 300 Energy

Energy

150

<Main contents of strategic investments>

#### Energy

- ➤ Establishing the most-competitive structure for petroleum refining and marketing in domestic market
  - Restructuring and strengthening network of service station
  - · LNG Terminal (Mizushima, Hachinohe, Kushiro)
- Strengthening overseas business operations, focusing on Asia
  - · Paraxylene and lubricant base oil projects in Korea
  - Expansion of lubricants business (Indonesia, Vietnam etc.)
  - · Acquisition of coking coal interests in Canada

#### E&P

- Exploration: Acquisition of large operator projects (Malaysia deepwater block R offshore Sabah, Qatar block A)
- Development : Papua New Guinea LNG project
- Resource acquisitions: Assets purchase in UK

#### Metals

- ➤ Establishing highly profitable and well-balanced business structure between resources development and smelting and refining business
  - Expansion of Caserones Copper Mine.
  - Acquisition of Frontera exploration interests (Chile and Argentina)
- Improving profitability of electric materials satisfying high-growth automobile components market needs
  - · Expansion of Cathode materials capacity for litium-ion batteries
  - Construction of Kakegawa Works, integrated manufacturing process of connectors.

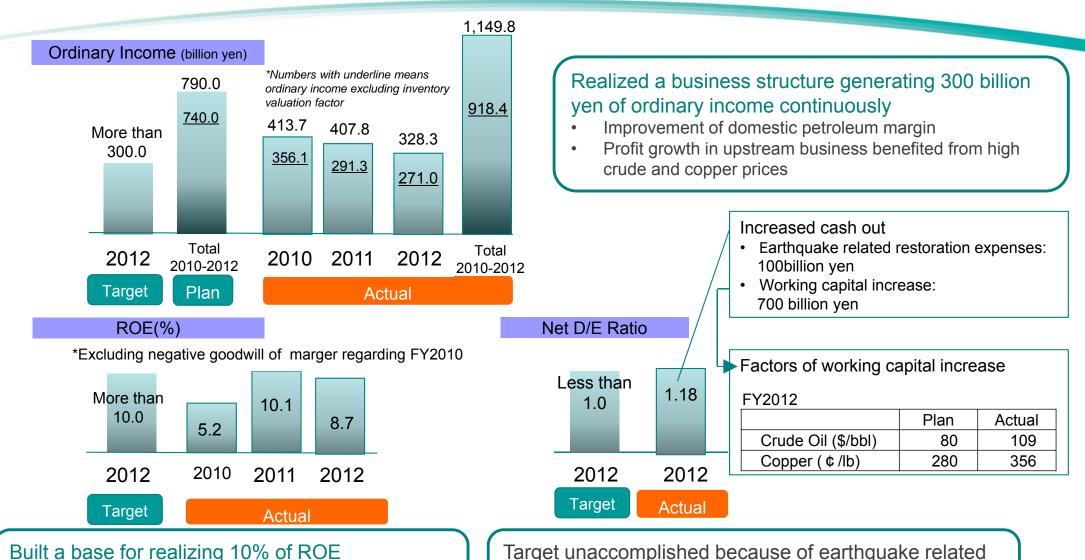
### 1. Summary of 1st Medium-Term Management Plan

continuously despite effect of positive inventory

valuation

## **Review of Target**





Target unaccomplished because of earthquake related restoration expenses and working capital increase due to crude and copper price rise

## **Business Environment**



## ★Domestic Environment

- Population decrease and deindustrialization hold economic growth low
- Structural decline of petroleum products demand continues
- Reformulation of energy policy by Japanese government progresses

### **★**Worldwide Environment

- Emerging countries lead growth, globalization and Information Technology proceeds
- Demand of energy, resources, materials expands mainly in Asia
- Resources and energy prices stay high, but volatile.
- Shale gas and oil revolution makes progress.
- Concerns over global environmental problems increase, and movement to low-carbon and recycling-oriented society progresses

Uncertainty of business environment increases around energy, resources and materials business.

## **Basic Policy**



On the premise of establishment both of proper governance backed with thorough compliance and CSR implement structure

## **Profitability**

- Securing stable profitability in existing business by realizing overwhelming competitiveness through continuous restructuring and stable operation
- Realizing return from invested projects

⇒P9

Realizing
high profit
and
high ROE
continuously

#### Growth

➤ Allocating management resources to highly profitable and developing operations on priority basis

### **Flexibility**

➤ Structuring stronger balance sheet corresponding to business environmental change

Strengthening risk tolerance

## Maximize group corporate value

Become a world's leading integrated energy, resources and materials business group

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## Key Factors and Targets

Key	Facto	rs
(F)	Y2015)	

Exchange Rate 90 yen/\$

Crude Price(Dubai spot) 110 \$/bbl

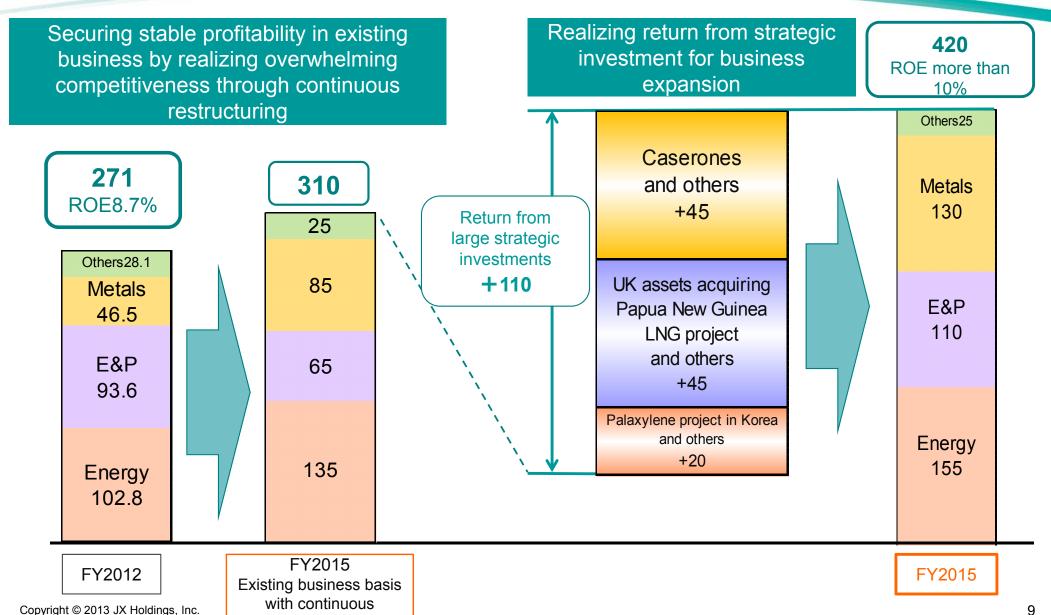
Copper Price(LME) 360  $\phi$ /lb

	2 <sup>nd</sup>	(Reference) 1 <sup>st</sup> Midi-Term Mgt. Plan	
	Ordinary Income	400 billion yen or more (FY2015)	300 billion yen or more (FY2012)
Target	ROE	DE 10% or higher (FY2015)	
rangot	Net D/E Ratio	0.9 times or lower (FY2015)	1.0 times or lower (FY2012)
	CAPEX (plan)  *Utilizing "α" for addition environmental change	1,300+α billion yen (FY2013-2015 total) nal strategic investment project corresponding to business	960 billion yen (FY2010-2012 total)

restructuring



Earnings Plan(Ordinary Income Excluding Inventory Valuation Factor) (Unit: billion yen)

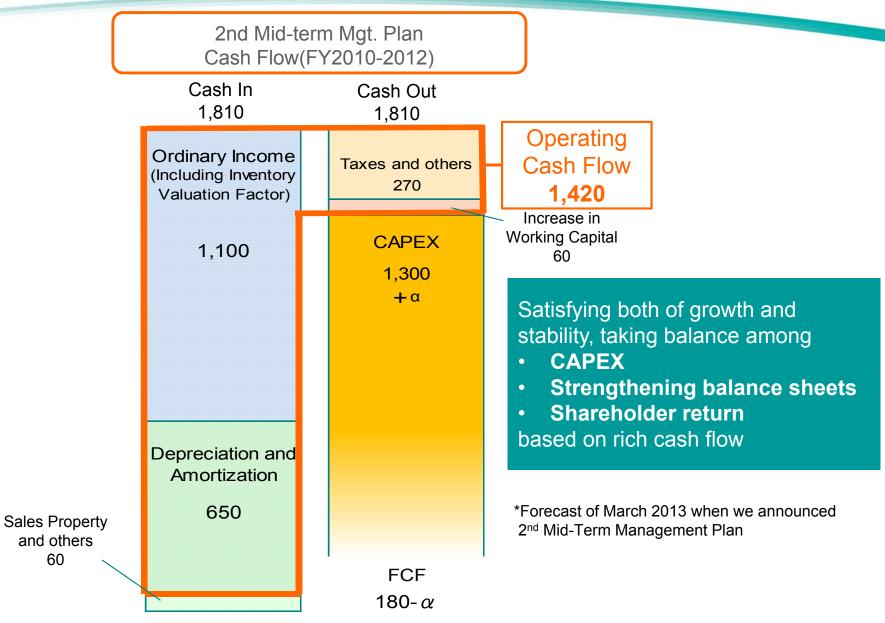


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## Cash Flow Plan (FY2013-2015 total)



(Unit: billion yen)



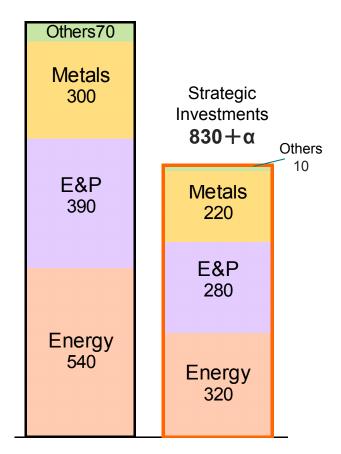
## CAPEX Plan (FY2013-2015)



(Unit: billion yen)

2<sup>nd</sup> Mid-Term Mgt. Plan (2013-2015) CAPEX

 $1,300 + \alpha$ 



<Main contents of strategic investments>

#### Energy

- > Petroleum Refining and Marketing :
  - · Energy saving in refineries
  - Utilization of bottom oil (Install of SDA)
  - Muroran refinery(Convert to chemical factory)
  - · Building strong sales network
- > Electricity: Investment on Electric power facility (Using SDA pitch)
- > Gas: Construction of LNG terminal (Hachinohe, Kushiro)
- > Coal : Development of coking coal in Canada
- > Basic Chemical Products : Paraxylene project in Korea
- > Lubricants : Base oil project in Korea
- > Specialty & Performance Chemical Products : Functional Chemicals

#### E&P

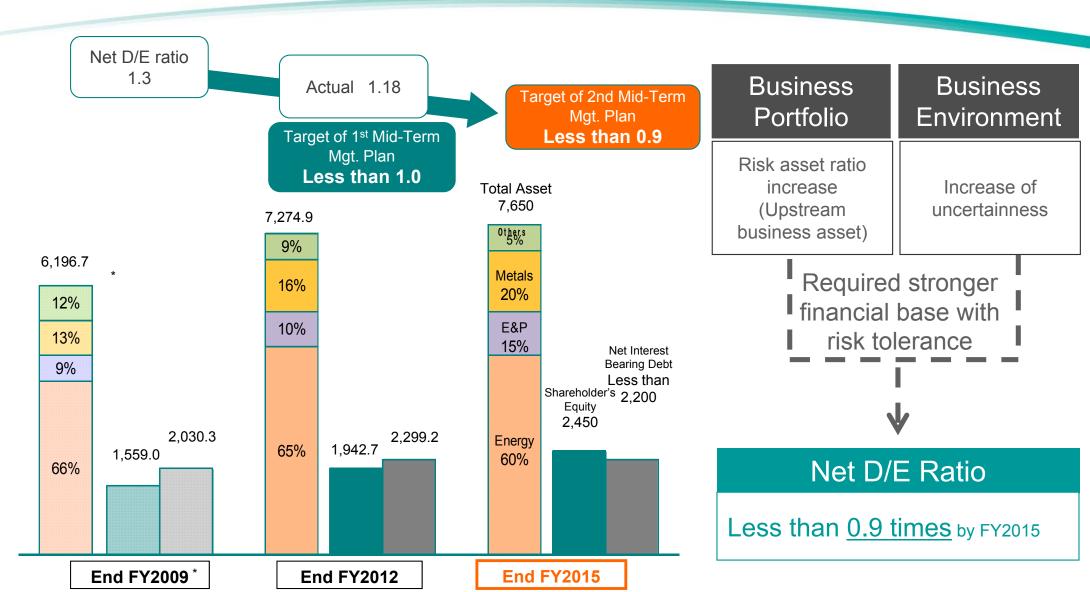
- > Exploration:
  - Qatar block A
- > Development :
  - UK Mariner
  - · Papua New Guinea LNG
- > Resource acquisition : Severely select and execute

#### E&P

- > Resource Development :
  - Development of Caserones
  - Proceeding exploration and FS of Quechua, Frontera, and others
- ➤ Electronic Materials, Recycling & Environmental Services :
  - Enhancing overseas business

## Reinforcement of Financial Base

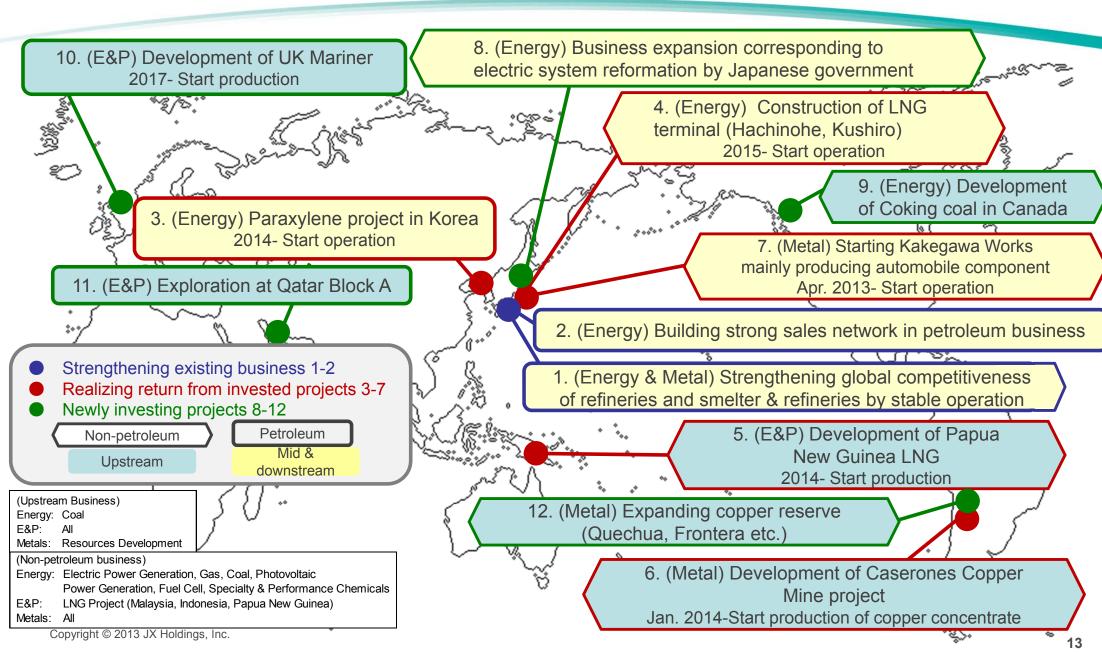




<sup>\*</sup>Asset segment ratio, as of Sep.2010

# **JX**

## Highlight of Major Projects



#### 3. Progress of 2<sup>nd</sup> Medium-Term Management Plan

## Enhance Overseas Businesses (Paraxylene)



### Main use of Paraxylene



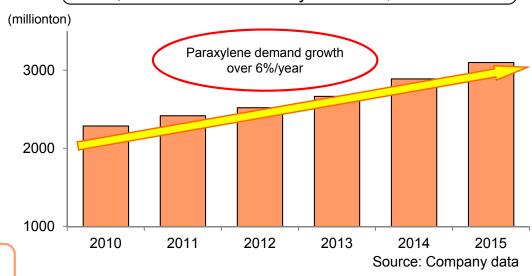


Polyester fiber

PET bottles

#### Outlook for Paraxylene Demand in Asia

Group's current supply capacity of Paraxylen 2,620 thousand tons /year = No,1 in Asia



Outline of a paraxylene joint venture project with SK Group of South Korea

Location: Ulsan, Korea

thousand tons / year

One of the world's largest capacity

Capacity: 1,000

Production Start: 2014 (scheduled)

Investment: approx. 80 billion JPY

Ownership:

JX Nippon Oil & Energy 50% -1 share

SK Group 50% +1 share

### 3. Progress of 2<sup>nd</sup> Medium-Term Management Plan

## Major Project (Oil and Natural Gas E&P Business)

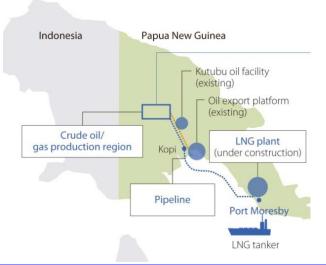


#### Latest Results

- <May> Commenced production at Finucane South Field in Australia.
- <Jun.> Acquired a participating interest in two exploration permits in Australia.
- <Jun.> Confirmed gas and condensate in Vietnam.
- <Jul.> Made a gas discovery in the Carnarvon Basin in Australia.
- <Sep.> Entered into a production sharing contract for Deepwater exploration Block 2F in Malaysia .

#### Progress of LNG Project in PNG

- > Sales contracts of 6.5 million tones of LNG have been concluded.
- Development toward the first shipment in 2014 is advancing smoothly.



#### Production Plan (Thousand BD) 225 Main oil and gas fields before FID Malaysia Layang gas fiels UK North Sea Culzean gas field Indonesia Tangguh LNG project 3rd train 200 Papua New Gunea LNG 3rd train Promoting exploration project 175 and others 2<sup>nd</sup> Medium-Term Management Plan period 150 Before FID 136 125 117 Developing 100 Producing 75 In 2017 (scheduled) · UK North Sea Mariner oil field 2012 2013 2014 2015 2016 2017 2018 2019 2020 Started production in May 2013 · Australia Finucane South oil field In 2014 (scheduled) Papua New Guinea LNG project · UK North Sea Kinnoull oil field

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## Major Project (Metals Business)



#### Progress of Caserones project

- Initial Investment \$ 4.2 billion
- Ownership Pan Pacific Copper(PPC) \* 75% Mitsui & Co., Ltd. 25%
  - \* Jointly established by JX Nippon Mining & Metals(66%) and Mitsui Mining & Smelting(34%)
- Start of copper concentrate production Jan. 2014
- Total Production(28 years)

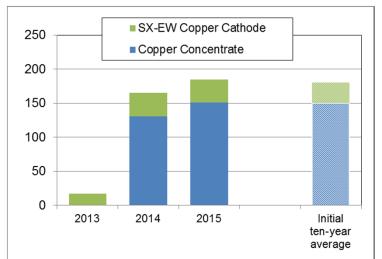
Copper: 3,550kt

Copper Concentrate: 3,140kt

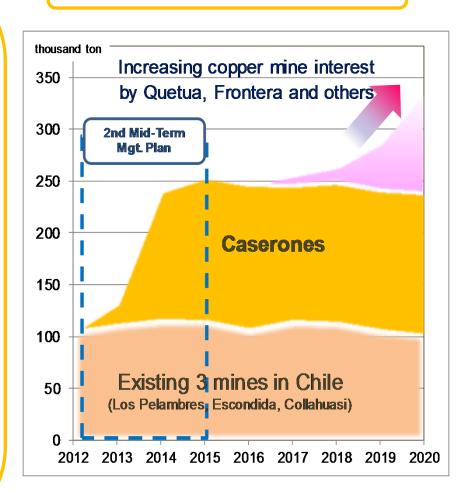
Copper Cathode by SX-EW Process: 410kt

Molybdenum: 87kt (3kt/year)

Production Plan



#### Copper mine interest



### 3. Progress of 2<sup>nd</sup> Medium-Term Management Plan

## Shareholder Return Policy



## Basic Shareholder Return Policy

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

## Indication of Shareholder Return for 2nd Medium-Term Management Plan Period

Based on the basic policy, during the 2nd medium-term management plan period (FY2013-2015), we will strive to maintain dividends of 16 yen per share per annum. When we secure stable profitability in existing business and foresee realization of return from strategic investments, we will expand shareholder return centering on increase of dividend.

## Reference) Dividend from FY2010-2013

	2010	2011	2012	2013 (Forecast)
Dividend (yen/share)	15.5 *	16.0	16.0	16.0
EPS (yen/share)	34	69	64	60

<sup>\*</sup>Excluding impact of negative goodwill

#### 4. Long-Term Vision

# Become a World's Leading Integrated Energy, Resources and Materials Business Group



#### Group mission statement

JX Group will contribute to the development of a sustainable economy and society through innovation in the areas of energy, resources and materials

# Target of JX Group (2020)

### Become a world's leading integrated energy, resources and materials business group

- 1. Corporate group holding competitive businesses evaluated by global standards
- 2. Well-balanced businesses portfolio petroleum and non-petroleum, upstream and mid & downstream businesses

JX Group Values

Our actions will respect the EARTH

E thics

A dvanced ideas

R elationship with society

T rustworthy products/services

H armony with the environment

## Target of JX Group (2020)



## 1. Corporate group holding competitive business evaluated by global standards

## Energy

Become a "Energy Conversion Company" providing energy stably and efficiently

- Generating stable profitability in refining & marketing
  - Establishing competitive supply chain (Refining, logistics, marketing)
- Establishing integrated energy supply structure
  - Electricity, Gas, Coal, Solar, Fuel Cell, Hydrogen
- Enhancing business in growing market
  - Basic Chemicals, Lubricants, Specialty & Performance Chemicals

## Oil and Natural Gas E&P

Become a sustainably growing E&P company mainly through operatorship

- > Toward production volume of 200 thousand B/D
- Utilize worldwide human resources and knowledge efficiently
- More than 100% of reserve replacement ratio

### Metals

Become a global resources and materials company centered on copper

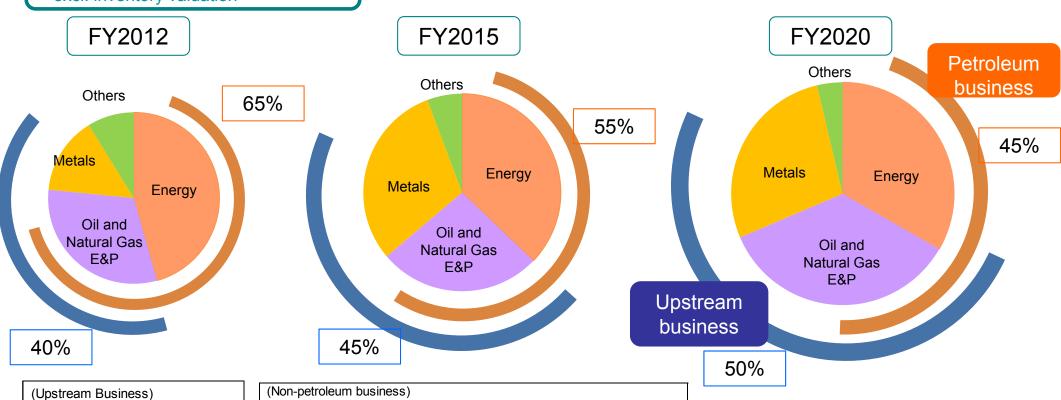
- Aiming 350 thousand ton per year of copper mine interest
- Establish smelting & refining business structure that has world top-class cost competitiveness
- Securing world's top share in each electronic material market
- Building domestic resource recycling system and developing overseas business

## Target of JX Group (2020)



2. Well-balanced business portfolio petroleum and non-petroleum, upstream and mid & downstream business





Energy: Coal E&P: ΑII

Metals: Resources Development

Energy: Electric Power Generation, Gas, Coal, Photovoltaic

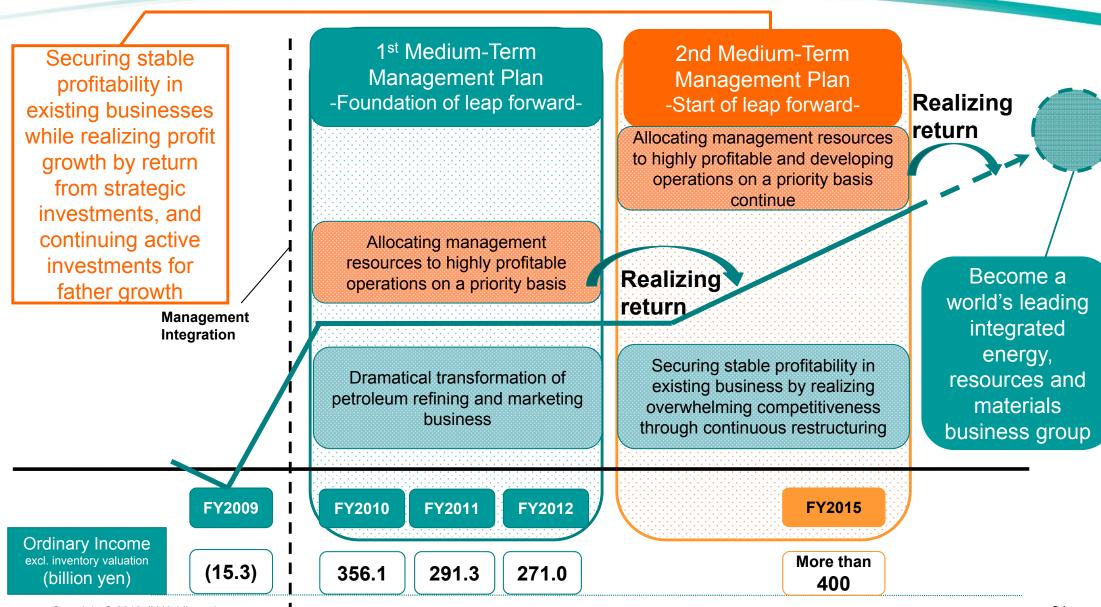
Power Generation, Fuel Cell, Specialty & Performance Chemicals

E&P: LNG Project (Malaysia, Indonesia, Papua New Guinea)

Metals: All

## Position of 2<sup>nd</sup> Medium-Term Management Plan in Long-Term Vision







Supplementary Data

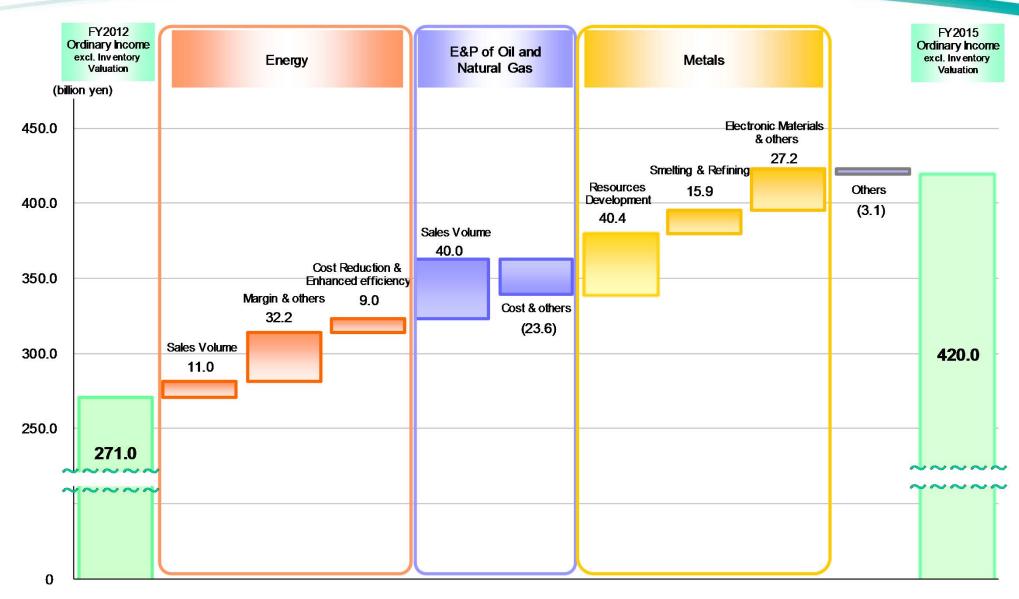




(JPY billion)	FY2012	FY2015
Ordinary Income excl. Inventory Valuation	271.0	420.0
Energy	102.8	155.0
Petroleum Products	56.1	100.0
Petrochemicals	46.7	55.0
Oil and Natural Gas E&P	93.6	110.0
Metals	46.5	130.0
Resources Development	26.6	67.0
Smelting & Refining	11.1	27.0
Electronic Materials	6.3	21.0
Recycling & Environmental Services	2.5	11.0
Titanium (Shifted to Metals from 2013)		4.0
Others	28.1	25.0

## FY2015(Forecast)vsFY2012(Forecast) Changes in Ordinary Income





## **Key Factors**



		FY2012	FY2015
All segments	Exchange rate [Yen/\$]	83	90
Energy	Crude oil price [Dubai] [\$/B]  Paraxylene spread [ACP] (vs. Dubai crude oil price of previous month) [\$/ton]	109 715	110 680
Oil and Natural Gas E&P	Sales volume <crude equivalent="" oil=""> [1,000 bbl/day]  Crude oil price [Brent] [JanDec.] [\$/B]</crude>	117 109	136 110
	Copper price [LME] [JanDec.] [¢/lb]  Equity entitled copper mine production [1,000 tons/period, year]	361 105	360 250
Metals	PPC refined copper sales [1,000 tons/period, year]  TRCF*1 sales [1,000 km/month]	551 2.7	610 3.7
	Precision rolled products sales [1,000 tons/month]  Gold recovery volume by Recycling & Environmental Services [tons/period, year]	3.3 5.8	4.0 7.4

<sup>\*1</sup> Treated Rolled Copper Foil

## Sensitivity Analysis(FY2015 Basis)



## ■ Key Factors (FY2015)

Exchange Rate:90Yen/\$

Crude Oil FOB:110\$/bbl

Copper Price:360¢/lb

(Dubai Spot)

## ■ Sensitivity analysis for FY2015 ordinary income

Key factors	Appreciation	Segment	(JPY Billion) Impact
Exchange Rate	+1 Yen/\$ yen depreciation	Energy (In-house Fuel costs rise, margin improvement in petrochemicals) Oil and Natural Gas E&P Metals (Margin improvement, FX rate) Subtotal Inventory valuation gain Total	0.0 2.0 1.5 3.5 7.5 11.0
Crude Oil FOB (Dubai spot)	+1\$/bbl	Energy (In-house Fuel costs rise) Oil and Natural Gas E&P Subtotal Inventory valuation gain Total	(1.5) 2.0 0.5 5.5 6.0
Copper Price (LME)	+10¢/lb	Metals Total	4.5 4.5





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.