Security Code Tokyo 5020

# **JX Group Strategy Presentation**

June, 2010





\*1 Crude Oil Equivalent

\*2 Pan Pacific Copper 610 thousand tons/year (66.0% equity stake) + LS-Nikko Copper 560 thousand tons/year (39.9% equity stake)

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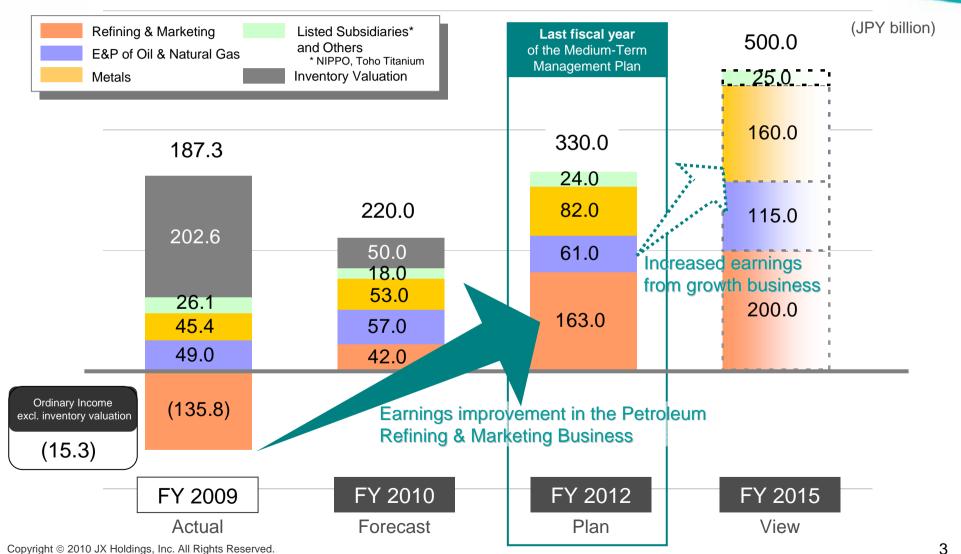
## Medium-Term Management Plan for FY 2010-2012 (Key Factors and Targets)

Exchange rate	90 ¥/\$
Crude oil FOB (Dubai spot)	80 \$/bbl
Copper price (LME)	280 ¢/lb
Ordinary Income	¥ 300.0 billion or more
ROE	10% or higher
Net Debt / Equity ratio	1.0 times
Capital expenditure and investments	¥ 960.0 billion (FY2010-2012 total)
Dividend policy	Redistribute profits by reflecting consolidated business results while striving to maintain stable dividends
	Crude oil FOB (Dubai spot) Copper price (LME) Ordinary Income ROE Net Debt / Equity ratio Capital expenditure and investments

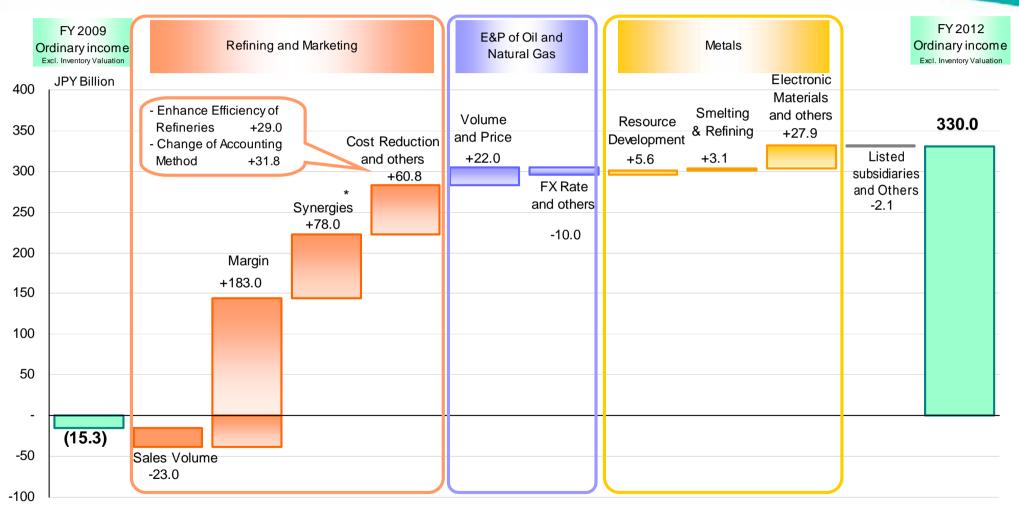
Note: Market values of assets and liabilities are currently being calculated in conjunction with the business integration. Although the assessed market values may affect various assumptions, the above numerical targets exclude these valuation effects.

## Earnings Plan (Ordinary Income)





# Changes in Ordinary Income by Segment FY 2009 Actual vs. FY 2012 Plan



\*Total of Synergies will be ¥80.0 billion including Metals business

# Refining & Marketing Business (JX Nippon Oil & Energy)



#### Basic Strategy

## Dramatically transform the business

- Realize integration synergies
- Develop the No.1 competitiveness of Refining & Marketing in Japan
- Enhance overseas business to meet increasing demand in Asia
- Develop new energy businesses

#### Major Tasks

- (1) Realize integration synergies of ¥80.0 billion and enhance efficiency of refineries
- (2) Reduce refining capacity by 400 thousand barrels/day
- (3) Formulate a growth strategy for the future

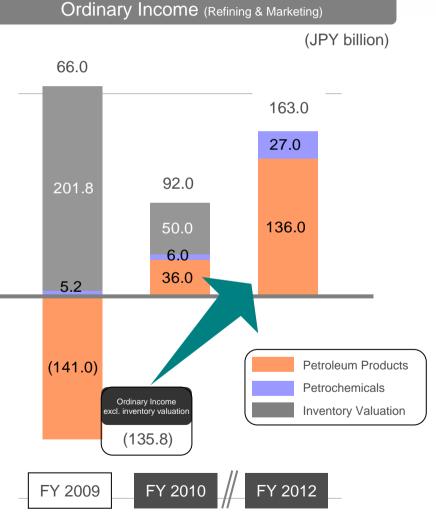


#### ¥300.0 billion improvement

in ordinary income (excl. inventory valuation) in FY 2012 (vs. FY 2009)

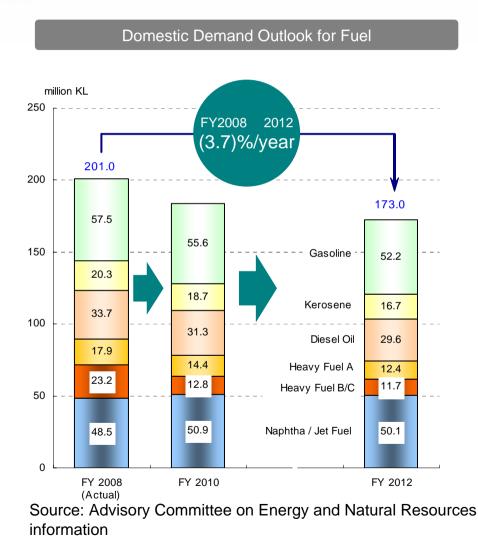
Three-year total:

Disciplined investments equivalent to around 80% of depreciation and amortization

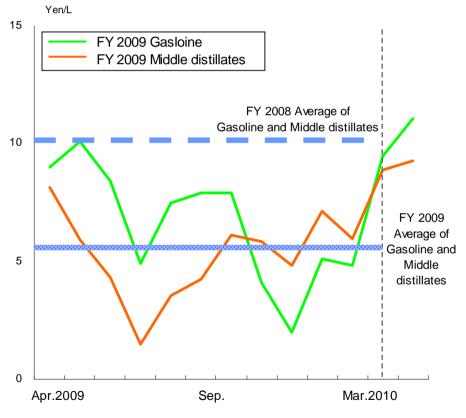


## Trends in the Domestic Petroleum Products Market





#### Price Spread \* for Petroleum Products



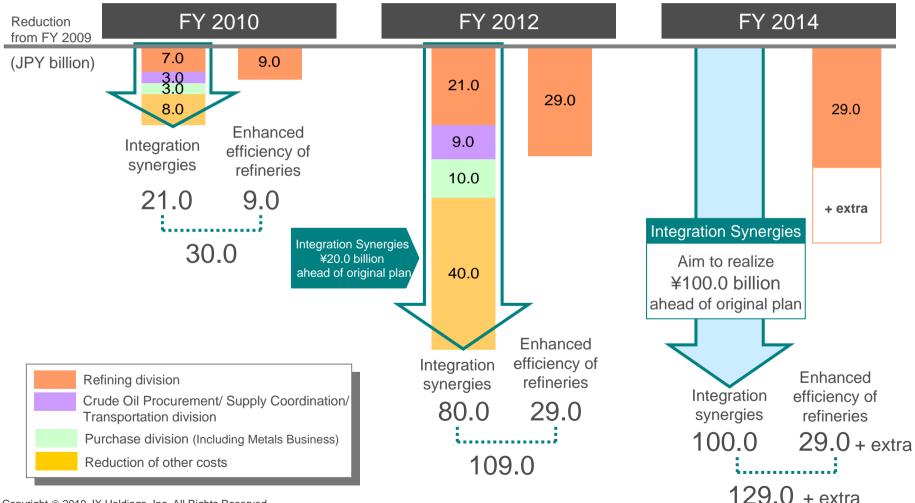
\* Spot price - Crude Oil CIF Japan (including petroleum tax and interest)

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(1) Realize integration synergies of ¥80.0 billion and enhance efficiency of refineries



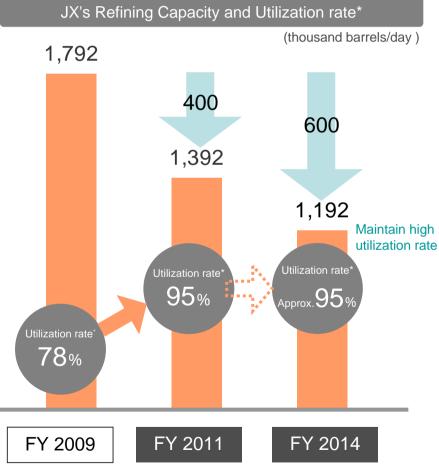
#### Synergy effects of ¥80.0 billion (¥20.0 billion ahead of schedule) + ¥29.0 billion from enhanced oil refinery efficiency



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## (2) Reduce refining capacity by 400 thousand barrels/day

## Streamline Japan's leading oil refinery operation ahead of a demand decline



<sup>\*1</sup> Utilization rate of Crude Distillation Unit

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## Refining Capacity Reduction Schedule - Capacity reduction -400 thousand barrels/day

#### <breakdown list>

Refinery	Refining Capacity (thousand barrels/day )	Time Schedule	Notes
Negishi	70	Oct. 2010	Expected to terminate operation of CDU No.2
Osaka	115	End of FY 2010	Expected to be redirected and operated by a joint venture with China National Petroleum Corporation
Mizushima	110	Jun. 2010	Expected to terminate operation of CDU No.2
Oita	24	May 2010	Expected to terminate operation of CDU No.1
Kashima	21	May 2010	Expected to reduce refining capacity of CDU No.1
Toyama	60	Mar. 2009	Already reduced
Total	400		

#### 1 year ahead of original schedule By the end of March 2014

- Further Capacity reduction -

200 thousand barrels/day

Consider further accelerating capacity reduction depending on the supply/demand environment

E&P of Oil & Natural Gas

E&P of Oil & Natural Gas Business (JX Nippon Oil & Gas Exploration)



(JPY billion)

#### Basic Strategy

Maintain and expand production over the medium/long term

Major Tasks

- (1) Lay the groundwork for growth
- (2) Restructure the asset portfolio



Three-year total:

Investment of ¥320.0 billion

61.0 49.0 FY 2009

Ordinary Income (E&P of Oil & Natural Gas)

E&P of Oil & Natural Gas

# (1) Lay the groundwork for growth



#### Reserve replacement & expansion

Primarily through exploration Increase future production Asset acquisition with (comprehensive pre-investment) risk analysis

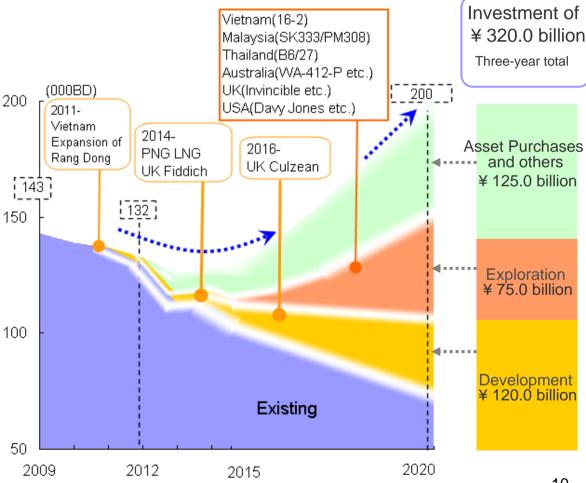
#### Pursuit of additional development projects

Pursuit of additional development mainly on core countries of operation

#### Involvement in new technologies

Apply the knowledge accumulated as an operator Involvement in new technologies for enhanced oil recovery etc.

## Production Schedule / Investment Plan

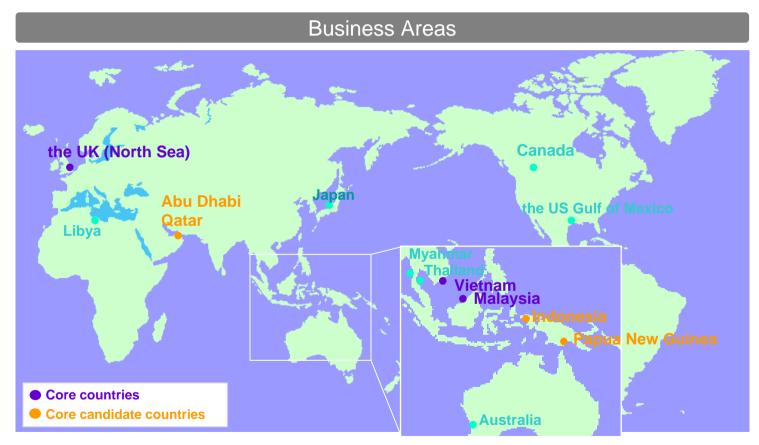


E&P of Oil & Natural Gas

# (2) Restructure the asset portfolio



Allocate resources with a focus on core countries of operation (Vietnam, Malaysia, the UK (North Sea))



We play a central role in production activities as an operator in Japan, Vietnam, Malaysia, the US Gulf of Mexico, and the Middle East. We are also active as an operator in exploration operations in the UK North Sea and Australia.

## Metals

## Metals Business (JX Nippon Mining & Metals)

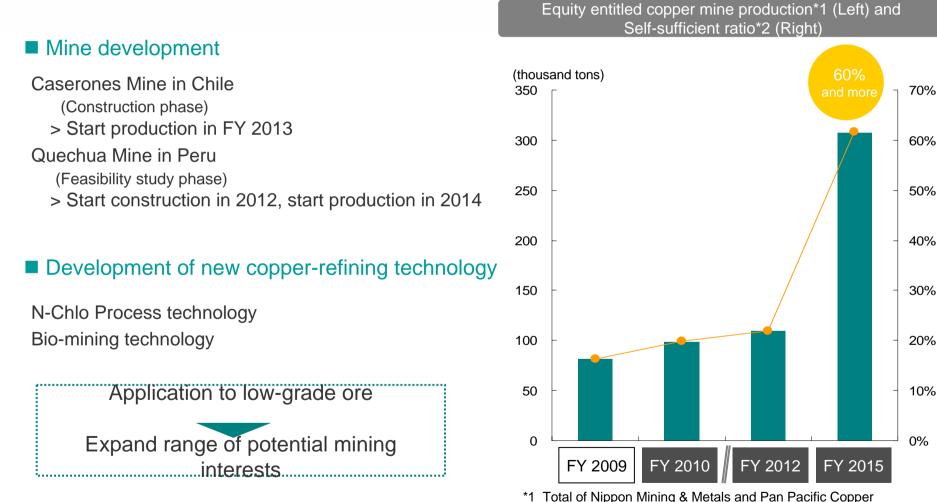


Basic Strategy	Ordinary Income (Metals)	
<ul> <li>(Resource Development / Smelting &amp; Refining)</li> <li>Development of a balanced, highly profitable business structure by increasing the equity entitled copper mine production</li> </ul>	<ul> <li>Resource Development</li> <li>Smelting &amp; Refining</li> <li>Recycling &amp; Environmental Services and Electronic Materials, etc.</li> <li>Inventory Valuation</li> </ul>	
<ul> <li>(Recycling &amp; Environmental Services and Electronic Materials, etc.)</li> <li>Profitability improvement from business development satisfying high-growth market needs</li> </ul>	33.0	
Major Tasks (Resource Development / Smelting & Refining) (1) Mine development / Development of new copper-refining technology	2.0 8.0 31.0 27.4	
<ul> <li>(Recycling &amp; Environmental services and Electronic Materials, etc.)</li> <li>(2) Product development and market creation targeting growth sectors</li> </ul>	4.9     5.5     41.0       13.1     16.5     16.5	
Three-year total: Investment of ¥300.0 billion (of which, ¥200.0 billion in Resource Develop	ment) FY 2009 FY 2010 // FY 2012	

(Resource Development / Smelting & Refining)

(1) Mine development / Development of new copper-refining technology





\*2 Equity entitled copper mine production / Necessary amount of concentrates (copper tons) for PPC, excluding scrap

(2) Product development and market creation targeting growth sectors



## Recycling & Environmental Services

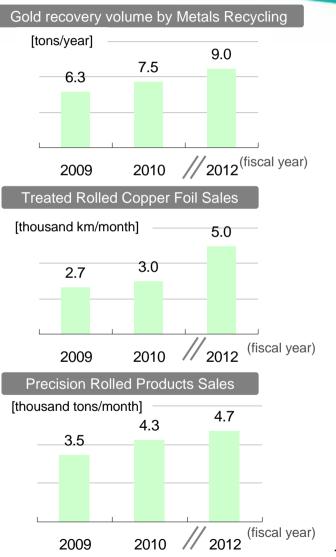
Put the Hitachi Metal Recycling Complex (HMC) plant into full operation Quickly bring overseas scrap collecting facility (Taiwan) up to full strength Develop and commercialize used-battery recycling technologies

#### Electronic Materials

- Increase HA foil sales; enhance rolled copper foil performance (bending durability, heat-cool durability, etc.)
- Increase market share of target material in leading-edge semiconductor lines
- Enhance copper sheet & strip business through the integrated "Rolling + Plating + Pressing" structure after integration of Nikko Fuji Electronics and acquisition of Sanyu Electronic
- Commercialize UBM plating, cathode materials for automotive lithiumion batteries, etc.

### Polysilicon for photovoltaic power generation

promote the Japan Solar Silicon (JSS) business Rapidly build 4,500 tons/year production capacity



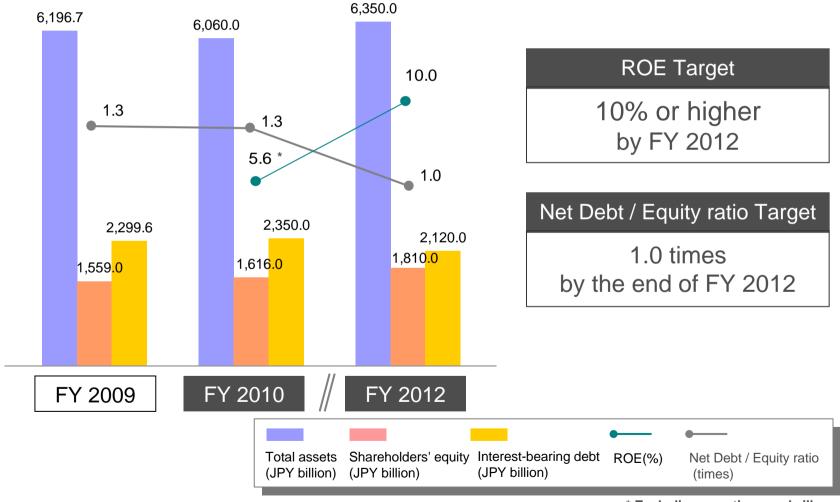
# Capital Expenditure & Investments

		(JPY billion)
Capital expenditure & investments		Depreciation & amortization
Refining & Marketing	300.0	375.0
Strategic investments	150.0	Investment great
Maintenance and others	150.0	Investment greatl exceeding
E&P of Oil & Natural Gas (Strategic investments)	320.0	148.0 depreciation and
Metals	300.0	82.0 amortization in E&P and Metal
Strategic investments	220.0	Businesses
Maintenance and others	80.0	Dusinesses
Listed Subsidiaries and Others (Maintenance and others)	40.0	51.0
Capital expenditure & investments (3 years total)	960.0	Three-year total 656.0 70%
Strategic investments total	690.0	into strategic investments

# **Financial Position**



## Balance growth investment with improvements in financial condition





Basic Dividend Policy

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

FY 2010 [	Dividends (Foreca	ast)		
Cash dividend per share (Forecast)		Payout ratio * (consolidated) (excluding special gain/loss)	Dividends on equity ratio (consolidated)	
End of 2nd quarter	nd of 2nd quarter Year-end Full year		(Forecast)	(Forecast)
¥7.5			30%	2.3%

\* Pro forma figures that exclude the impact of special gains and losses, net of ¥140.0 billion, which includes ¥180.0 billion in special gains due to one-time write-down of negative goodwill in the fiscal year ending March 31, 2011.

# Formulate a growth strategy for the future

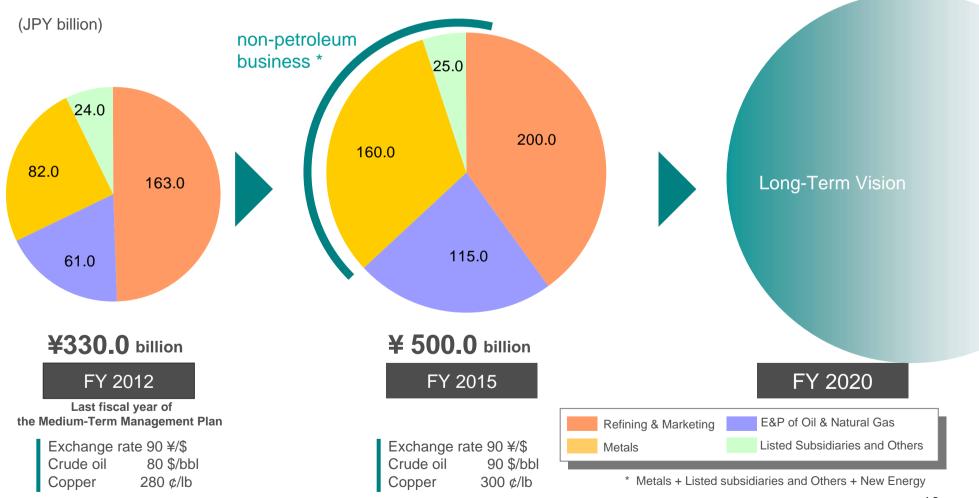


Develop the No.1 competitiveness of Refining & Marketing in Japan Dramatically transform the business Bolster refinery competitiveness Restructure the LPG business Execute LNG import facility project etc. Long-Term Vision Increasing petrochemicals production (paraxylene, specialty & performance chemicals, etc.) Forge ahead in new energy businesses (fuel cells, solar cells, storage cells) Expand the overseas lubricants business Acquire additional coal interests Enhance overseas business to meet increasing demand in Asia

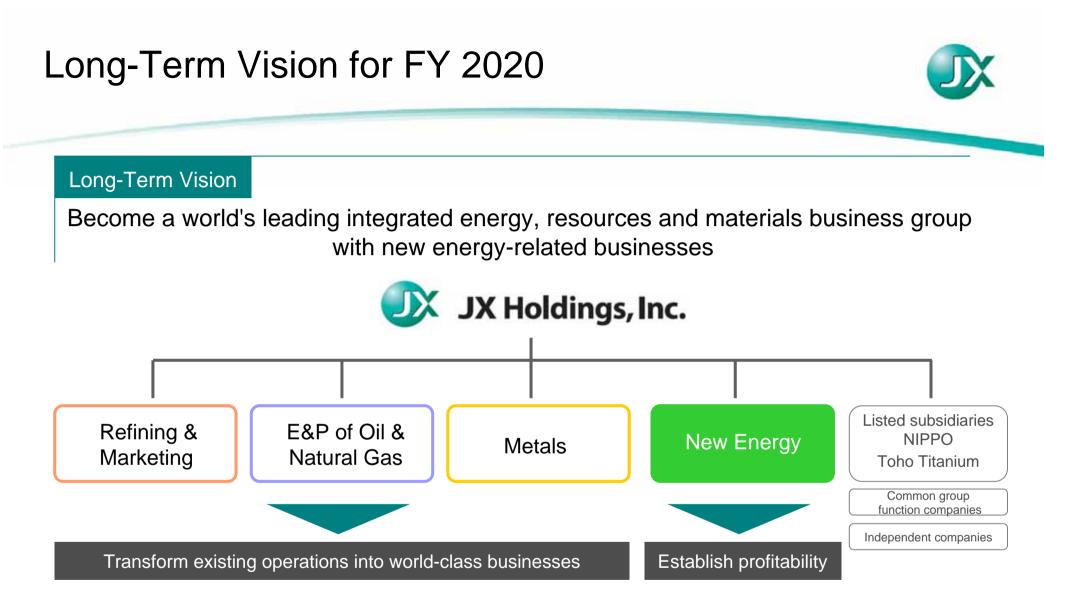
# Business Portfolio for FY 2015 (Ordinary Income)



Increase ordinary income from non-petroleum businesses\* to ¥200.0 billion (around 40% of total)



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## Build sustainable business structure against market fluctuation Continue strategic investment in growth areas

# JX Group's Vision for FY 2020



## **Refining & Marketing**

Slim, robust production operations aligned with demand (Goal: Refining capacity of 1,000 thousand barrels/day)

- Boost production of aromatic products through proprietary technologies Restructure of refineries (= transform into petrochemical plants)
- Bolster specialty & performance chemicals business
- Consider constructing new heavy oil cracking units

## Metals

Securement of resources and business development to meet societies' Eco needs

- Goal: Equity entitled copper mine production ratio of 80%
- Develop low-grade copper mines applicable new hydrometallurgy refining technologies
- Supply metallic materials for eco-friendly products
- Introduce a resource recycling system in collaboration with users

## E&P of Oil & Natural Gas

Become an oil and natural gas E&P company that achieves sustained growth on the basis of operatorship

- <u>Goal: Produce 200 thousand barrels/day of</u>
   <u>crude oil and natural gas (equity basis)</u>
- Efficient application of personnel and knowledge accumulated at existing business facilities worldwide
- Reserve replacement rate of 100% or higher

## New Energy

### Establish profitability

uture

- Goal: Fuel cell unit sales of 300 thousand units/year\*
- Forge ahead in the solar cell business
- Establish positive and negative electrode materials technologies for lithium-ion batteries

\*Including exports



## **Reference Materials**

## **Outlook of Business Performance**



JPY billion	FY 2009 <sup>* 2</sup> Actual	FY 2010 Forecast	FY 2012 Plan
Net Sales	9,008.0	9,160.0	9,360.0
Refining & Marketing	7,607.6	7,760.0	7,840.0
E&P of Oil & Natural Gas	145.9	160.0	180.0
Metals	780.7	810.0	940.0
Listed Subsidiaries*1 and Others	473.8	430.0	400.0
Operating Income	130.4	170.0	275.0
Refining & Marketing	56.5	91.0	161.0
E&P of Oil & Natural Gas	28.5	49.0	55.0
Metals	16.9	16.0	41.0
Listed Subsidiaries*1 and Others	28.5	14.0	18.0
Non-Operating Income (Expenses), Net	56.9	50.0	55.0
Refining & Marketing	9.5	1.0	2.0
E&P of Oil & Natural Gas	20.5	8.0	6.0
Metals	30.5	37.0	41.0
Listed Subsidiaries*1 and Others	(3.6)	4.0	6.0
Ordinary Income	187.3	220.0	330.0
Refining & Marketing	66.0	92.0	163.0
E&P of Oil & Natural Gas	49.0	57.0	61.0
Metals	47.4	53.0	82.0
Listed Subsidiaries*1 and Others	24.9	18.0	24.0
Net Income	73.1	270.0	175.0
Impact of Negative Goodwill	-	180.0	-
lote: "Listed Subsidiaries and Others" includes "Eliminati	ions or Corporate".	*1 NIPPO, Toho Titaniu	m

Subsidiaries and Others" includes "Eliminations or Corporate".

\*2 Unaudited pro forma combined financial results of Nippon Oil and Nippon Mining

# Ordinary Income by Segment



JPY billion	FY 2009 <sup>* 2</sup>	FY 2010	FY 2012
	Actual	Forecast	Plan
Ordinary Income (Loss)	187.3	220.0	330.0
Refining & Marketing	66.0	92.0	163.0
Petroleum Products	(141.0)	36.0	136.0
Petrochemicals	5.2	6.0	27.0
Inventory Valuation	201.8	50.0	-
E&P of Oil & Natural Gas	49.0	57.0	61.0
Metals	47.4	53.0	82.0
Resource Development	27.4	31.0	33.0
Smelting & Refining	4.9	5.5	8.0
Recycling & Environmental Services	4.9	5.0	10.0
Electronic Materials	5.4	11.5	30.0
Internal Adjustment and Others	2.8	-	1.0
Inventory Valuation	2.0	-	-
Listed Subsidiaries <sup>*1</sup> and Others	24.9	18.0	24.0

\*1 NIPPO, Toho Titanium

\*2 Unaudited pro forma combined financial results

of Nippon Oil and Nippon Mining

# **Key Factors**



		FY 2009 <sup>* 2</sup> Actual	FY 2010 Forecast	FY 2012 Plan
All segments	Exchange rate [¥/\$]	93	90	90
	Crude oil FOB [Dubai spot] *1 [\$/bbl]	67	80	80
Refining &	Sales volume excluding barter trade & others [million kl/period]	85.5	84.4	80.2
Marketing	- Sales volume of paraxylene [million tons/year]	2.1	2.3	2.3
	Paraxylene spread [ACP] (Paraxylene price - Dubai crude oil price) [\$/ton]	490	530	580
E&P of Oil &	Sales volume <crude equivalent="" oil=""> [1,000 bbl/day]</crude>	143	139	132
Natural Gas	Natural gas price <henryhub>*2 [\$/mmbtu]</henryhub>	3.9	4.8	6.0
	Copper price [LME] [¢/lb]	277	280	280
	Equity entitled copper mine production*3 [1,000 tons/year]	82	100	110
NA-1-I-	PPC copper cathode sales [1,000 tons/year]	605	610	640
Metals	Gold recovery volume by Metals Recycling [1,000 tons/year]	6.3	7.5	9.0
	TRCF*4 sales [1,000 km/month]	2.7	3.0	5.0
	Precision Rolled Products sales [1,000 tons/month]	3.5	4.3	4.7

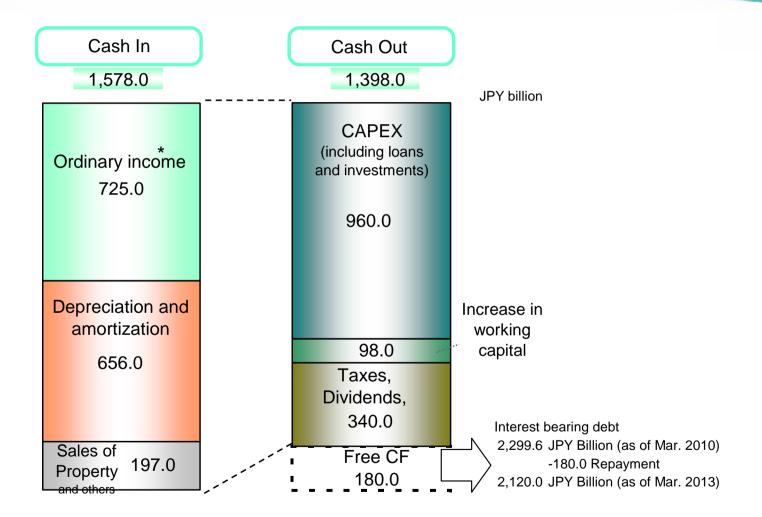
\*1 Average from March to February of the next year (nearly equal to arrived crude cost) \*3 Total of Nippon Mining & Metals and PPC \*2 Average on calendar year basis

\*4 Treated Rolled Copper Foil

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## Cash flows (FY 2010-2012 total)





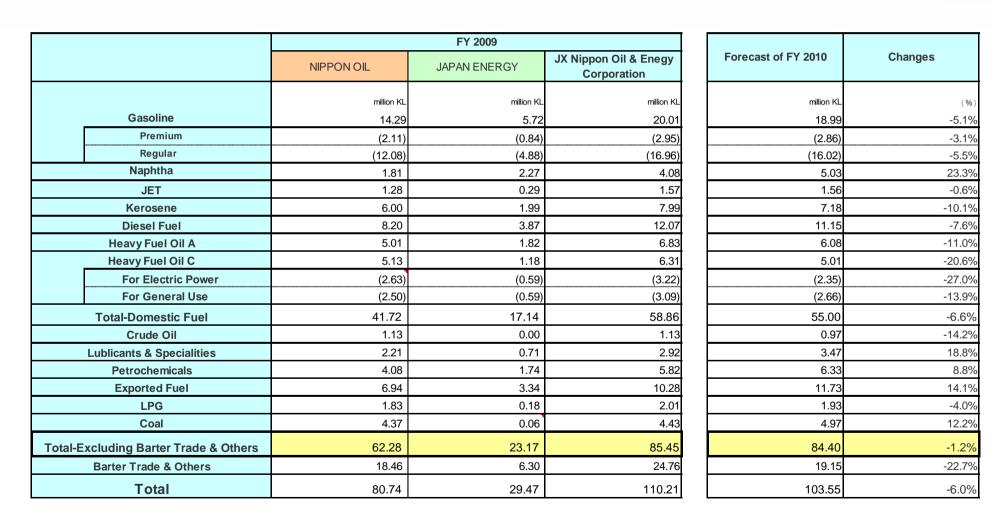
\* Excluding equity in income of affiliates and including dividends from affiliates accounted by equity method

# Sensitivity Analysis



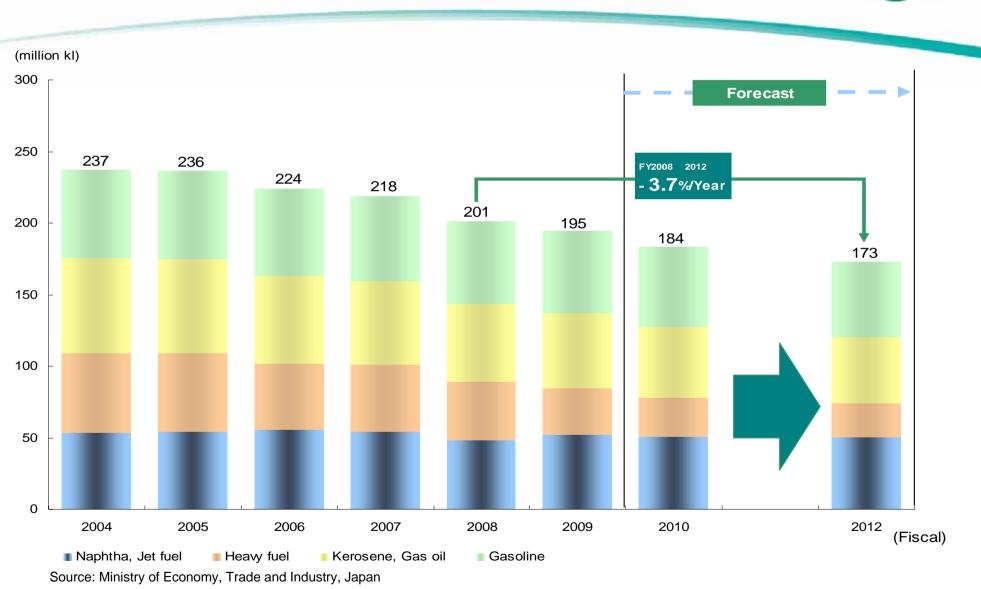
Impact on ordina	ary income by cl	hange in key factors	(JPY billion/year)
			FY 2012
Key Factors	Appreciation	Segment	Impact on Ordinary Income
		Refining & Marketing (energy costs, petrochemical margin, and etc.)	1.5
		E&P of Oil & Natural Gas	(1.2)
Foreign Exchange	¥1/\$	Metals (margin deterioration, foreign exchange gain/loss)	(1.3)
5 5	yen appreciation	Subtotal	(1.0)
		Inventory valuation gain/loss	(6.5)
		Total	(7.5)
		Refining & Marketing (energy costs etc.)	(4.0)
		E&P of Oil & Natural Gas	2.0
Crude Oil FOB (Dubai spot)	+1\$/bbl	Subtotal	(2.0)
		Inventory valuation gain/loss	7.5
		Total	5.5
		Metals (Resource Development)	2.0
Copper Price (LME)	+10¢/lb	Metals (Smelting & Refining)	0.5
		Total	2.5

## Sales Volume of FY 2009 & Forecast of FY 2010



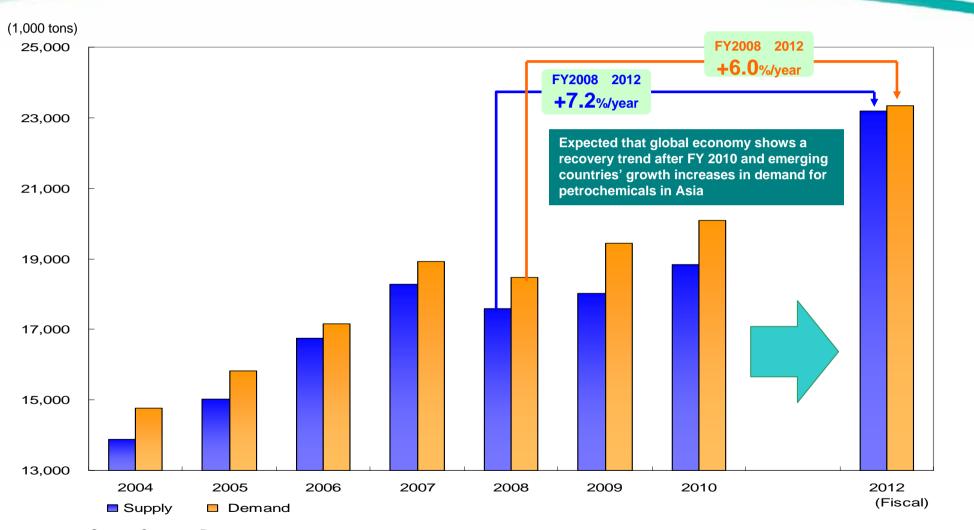


## Demand for Petroleum Products (Japan)



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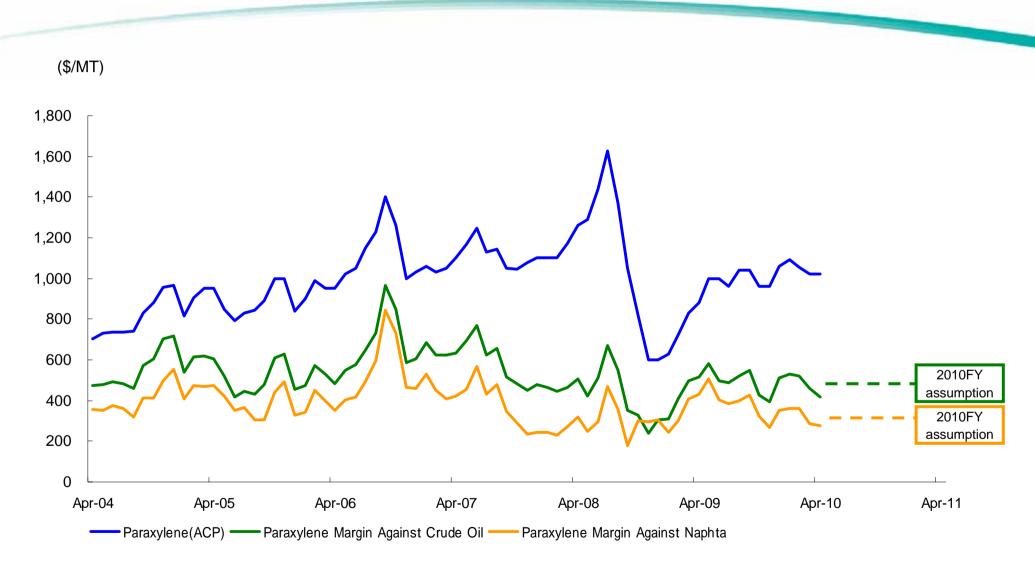
## Demand for Petrochemicals in Asia (Paraxylene)



Source: Company Data

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## Paraxylene Price and Margin ( Against Crude Oil, Against Naphtha)



# Historical CDU<sup>\*1</sup>Utilization Rate<sup>\*2</sup> and Refining Capacity<sup>\*3</sup>



Note\*1: Crude Distillation Unit

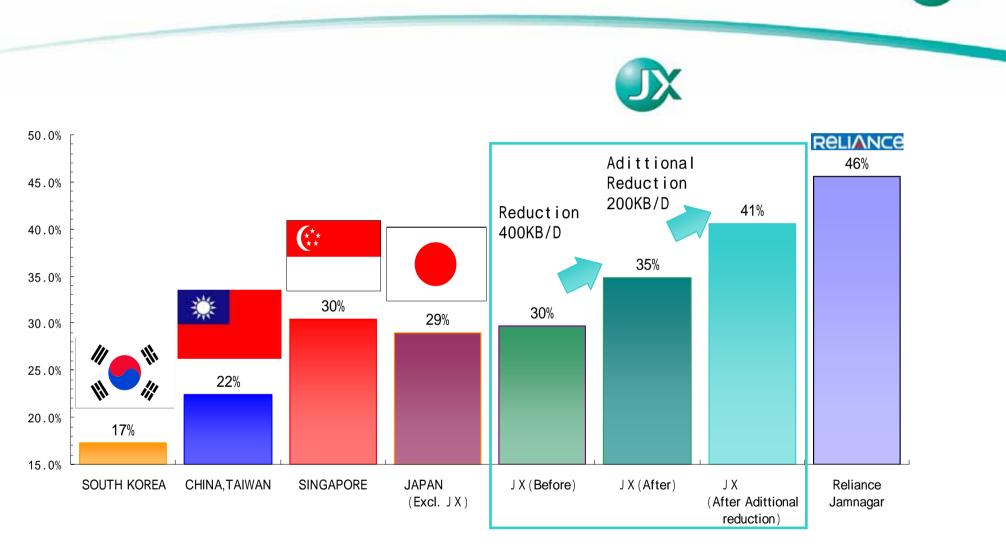
Note\*2: Utilization rate of CDU excluding the impact of periodic repar.

Note\*3: Refining Capacity (JX) excluding Condensate splitter of Mizushima and Kashima.

Source: Petroleum Association of Japan and Company data

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## Equipment Ratio of Secondary Unit\*Against CDU



Note\*: Catalytic cracking unit, Catalytic hydrocracking unit, Thermal operation unit, Solvent De-asphalting unit, Independent power producer unit Source: Oil & Gas journal, Petroleum Association of Japan and Company data

## JX Group's Share of Sales in Japan



Share of Sales: Four Light Oil Products\* FY 2009 Basis Approx. 38% **Domestic Demand 126 million K L** JX 47 million K L JX 38%

Note\*: Total of Gasoline, Kerosene, Diesel Fuel, Heavy Fuel Oil A

Share of Sales: Total-Domestic Fuel FY 2009 Basis Approx. 34% Domestic Demand 195 million K L J X 66 million K L

Source: Petroleum Association of Japan and Company data

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## Number of Service Stations (Fixed-Type)



	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	
										JX Gro	aud
Nippon Oil	12,669	11,987	11,694	11,333	11,059	10,807	10,368	9,919	9,974		
										12,687	
Japan Energy	4,646	4,476	4,296	4,150	4,023	3,833	3,708	3,555	3,344		
<b>ENO</b> K *4	7 000	7 507	7 070	0.004	0 704	0.404	0.044	5 005	5 004	4 704	
EMGK *1	7,898	7,597	7,278	6,904	6,701	6,464	6,044	5,635	5,064	4,761	
Idemitsu Kosan	6,114	5,896	5,624	5,508	5,358	5,249	5,059	4,913	4,598	4,338	
	·				, , , , , , , , , , , , , , , , , , ,				·		
Showa Shell Sekiyu	5,642	5,402	5,153	4,968	4,808	4,689	4,560	4,481	4,256	4,102	
-											
Cosmo Oil	5,600	5,373	5,152	4,926	4,709	4,552	4,359	4,188	3,913	3,768	
Others *2	1,916	1,733	1,642	1,593	1,500	1,439	1,388	1,383	687	683	
010	44,485	42,464	40,839	39,382	38,158	37,033	35,486	34,074	31,836	30,339	1
Oil Companies	(85.6%)	(83.4%)	(82.3%)	(80.4%)	(79.5%)	(78.8%)	(78.9%)	(79.2%)	(77.1%)	(77.1%)	
	7,472	<b>8,436</b> <sup>* 3</sup>	<b>8,761</b> <sup>* 3</sup>	<b>9,618</b> <sup>* 3</sup>	<b>9,842</b> <sup>* 3</sup>	<b>9,967</b> <sup>* 3</sup>	<b>9,514</b> <sup>* 3</sup>	<b>8,926</b> <sup>* 3</sup>	<b>9,464</b> <sup>* 3</sup>	<b>9,020</b> <sup>* 3</sup>	
Private Brands and Others	(14.4%)	(16.6%)	(17.7%)	(19.6%)	(20.5%)	(21.2%)	(21.1%)	(20.8%)	(22.9%)	(22.9%)	
Total	51,957	<b>50,900</b> <sup>* 3</sup>	<b>49,600</b> <sup>* 3</sup>	<b>49,000</b> <sup>* 3</sup>	<b>48,000</b> <sup>* 3</sup>	<b>47,000</b> <sup>* 3</sup>	<b>45,000</b> <sup>* 3</sup>	<b>43,000</b> <sup>* 3</sup>	<b>41,300</b> <sup>* 3</sup>	<b>39,359</b>	

Notes: \*1. Figures are total of Esso, Mobil, Tonen General Sekiyu, and Kygnus Sekiyu.

\*2. Figures are total of Kyushu Oil, Taiyo Petroleum, and Mitsui Oil & Gas. (until FY07)

\*3. Estimated by JX Holdings.

Refining & Marketing

Number of Company-Owned Service Stations,

Number of Self-Service Facilities, Number of Doctor Drive Service Stations

#### <Number of Company-Owned Service Stations>

	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09
Nippon Oil	2,945	2,857	2,746	2,607	2,518	2,436	2,309	2,175	2,081	2 902
Japan Energy	1,328	1,284	1,229	1,207	1,172	1,154	1,143	1,106	1,059	2,893

#### <Number of Self-Service Stations>

	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09
Nippon Oil	54	142	342	520	651	794	1,055	1,230	1,517	2 279
Japan Energy	19	164	322	385	440	534	606	667	729	2,378
Total for Japan *1	422	1,353	2,522	3,423	3,493	4,257	5,203	6,009	6,565	6,906

Note\*1: This figure includes only self-service retail outlets that are affiliated to oil wholesale companies.

Source: Oil information center, The Daily Nenryo yushi

#### <Number of Doctor Drive Stations>

	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09
Nippon Oil	390	1,283	1,610	1,871	1,963	2,505	2,403	2,287	2,130	2,081

### JX Group Refineries



#### Refining Capacity in Japan (As of April, 2010)

Corporate Group	Number of Refineries	Refining Capacity	
JX Group	8	thousand BD <b>1,732</b> <sup>*1</sup>	
Exxon Mobil Group	4	836	
ldemitsu Kosan	4	640	
Cosmo Oil	4	555	
Showa Shell Sekiyu	4	<b>655</b> *2	
Others	3	224	
Total	27	4,642	

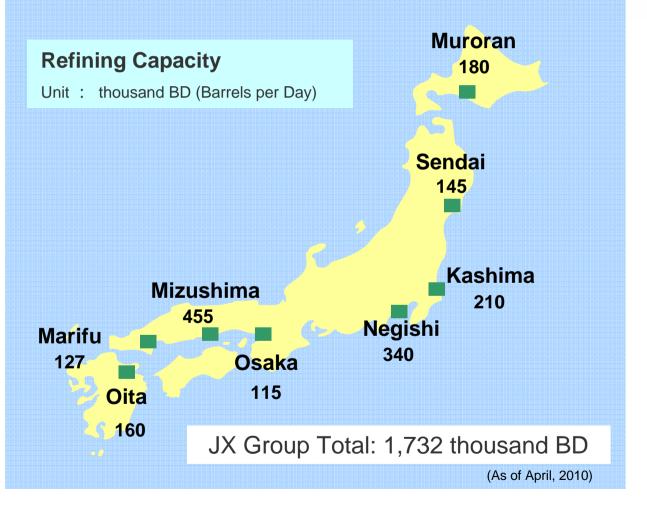
Note\*1:Condensate splitter of Mizushima and Kashima are excepted. Toyama of 60,000BD was already reduced. Note\*2:Showa Shell Sekiyu's refining capacity and number of refineries includes Fuji Sekiyu.



After 400,000BD Reduction

Corporate Group	Number of Refineries	Refining Capacity
		thousand BD
JX Group	7	1,392

Source: Petroleum Association of Japan and Company data

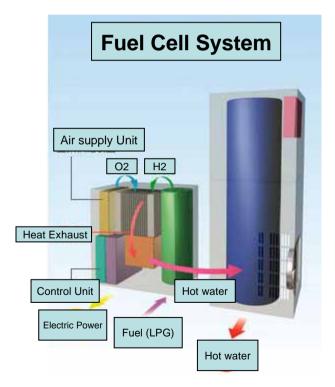


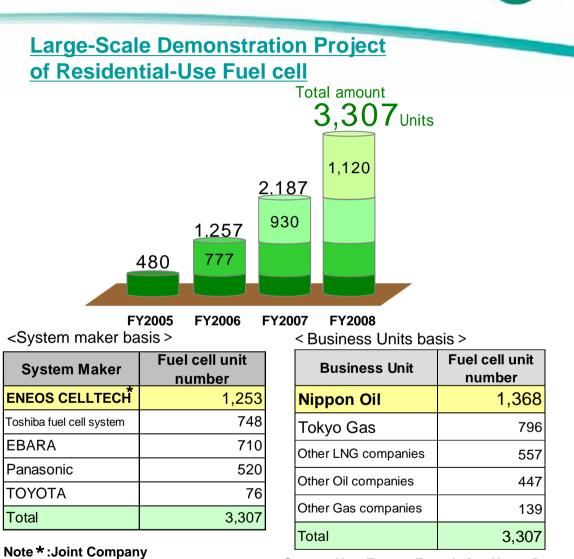
**Refining & Marketing** 

### New Energy (Residential-Use Fuel Cell)



### (Residential-Use Fuel Cell System : ENE FARM)





by Nippon Oil and SANYO Electric.

EBARA

ΤΟΥΟΤΑ

Total

## JX Group's Reserve Standards



JX Group's criteria for evaluating reserves conforms to the SPE Standards, drafted by the SPE (Society of Petroleum Engineers), WPC (World Petroleum Congress), AAPG (American Association of Petroleum Geologists), and SPEE (Society of Petroleum Evaluation Engineers) and announced in March 2007.

SPE Standards is aiming to become global standards that embody current technological innovation and economic realities, SPE Standards reflect the opinions of a large number of companies. They incorporate surveys on defining and categorizing reserves from every oil firm and country worldwide, as well as input solicited from outside sources.

JX Group's reported reserves are in line with reserves as defined by the SPE Standards. The degree of certainty of the reserve values is categorized, in order, as either Proved, Probable, or Possible. Following trends common at other industry firms, JX Group's has used Proven and Probable reserves to arrive at its total reserves.

#### **Definition of Proved Reserves:**

Reserves judged to have a high level of certainty from analysis of geoscience and production/petroleum engineering data, based on economic conditions, operational methods and laws and regulations assumed by JX Group in light of discovered reservoirs—there is at least a 90% probability that actual recovered volume will equal or exceed estimates of oil and natural gas deposits reasonably evaluated as commercially recoverable.

#### **Definition of Probable Reserves:**

There is at least a 50% probability that additional oil and natural gas reserves will equal or exceed actual recovered volume of the total of estimated proved and probable reserves. While these additional reserves are evaluated in the same manner as proved reserves, the probability of recoverability of probable reserves is lower than proved reserves, but higher than possible reserves.

## Outline of Principal E&P of Oil and Natural Gas Projects

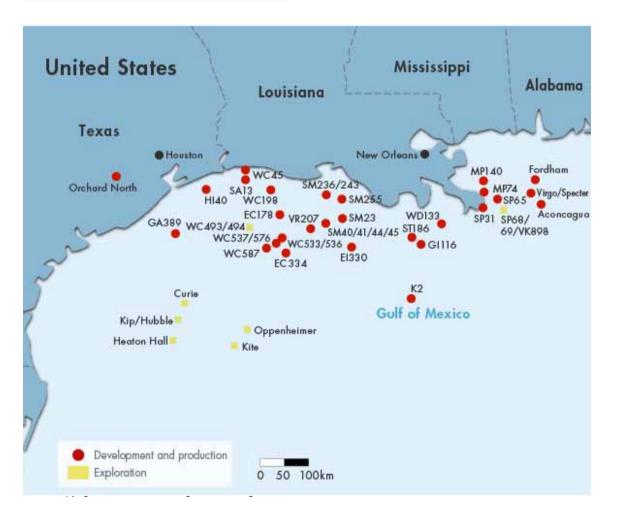


Project Name/Company	2009CY Sales Volume (1,000BOED)	Reserves *1 (1 million BOE)
(U.S.A.)	(1,000BOED)	(T MINON BOE)
Gulf Of Mexico(U.S.A.)		
Nippon Oil Exploration U.S.A. Limited	11	48
(Canada)		
Canada		
Japan Canada Oil Company Limited	14	268
(U.K.)		
North Sea, U.K.		
Nippon Oil Exploration and Production U.K. Limited	13	27
(South East Asia.)		
Vietnam		
Japan Vietnam Petroleum Co. Ltd.	14	
Myanmar		
Nippon Oil Exploration (Myanmar) Ltd.	9	
Malaysia		
Nippon Oil Exploration (Malaysia) Ltd.	24	
Nippon Oil Exploration (Sarawak) Ltd.	37	
Indonesia		<south asia="" east="" total=""></south>
Nippon Oil Exploration (Berau) Ltd.	-	309
(Oceania)		
Papua New Guinea		
Japan Papua New Guinea Petroleum Company Ltd.	7	
Southern Highlands Petroleum Co., Ltd.	1	
Australia		<oceania total=""></oceania>
Nippon Oil Exploration (Australia) Pty Ltd.	2	17
(The middle east and others)		
United Arab Emirates, Qatal and Others	*2	
Abudhabi Oil Co., Ltd., United Petroleum Development Co., Ltd. And Others	13	25
合計	143	694

\*1 Proved reserves and probable reserves as of Dec.'08. Including reserves from projects currently under development \*2 JX Group Equity Basis



### Gulf Of Mexico



### '09 Jan-Dec Sales Volume

10,900 boed (oil: 3,700 b/d, gas: 43mmcf/d)

### **Project Company**

Nippon Oil Exploration U.S.A. Ltd. (NOEX USA) (100%) (%) = JX Group Shareholding

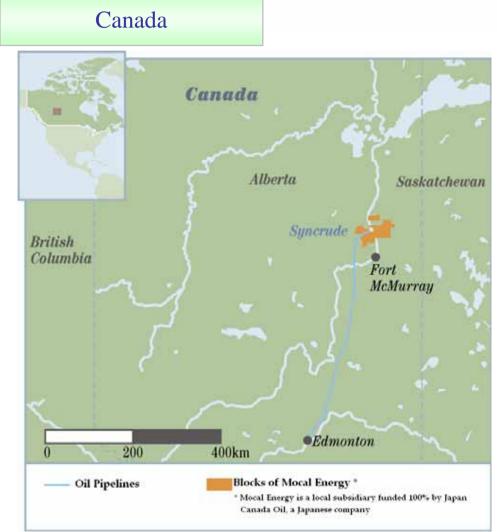
# Range Of Interests in Individual Fields 6.1%-100%

### **Operators**

NOEX USA, Anadarko, ConocoPhillips, others

In 1990, NOEX USA began exploration, development, and production operations at an onshore field in Texas and offshore blocks in both deep as well as shallow waters in the Gulf of Mexico. In addition to continuing such existing operations as those in the Orchard North Gas Field, Aconcagua Gas Field, and Virgo Gas Field, NOEX USA purchased interests in certain producing assets in the Gulf of Mexico from Devon in 2005 and from Anadarko in 2007.





'09 Jan - Dec Sales Volume 14,000b/d

#### **Project Company**

Japan Canada Oil Co., Ltd. (100%) (%) = JX Group Shareholding

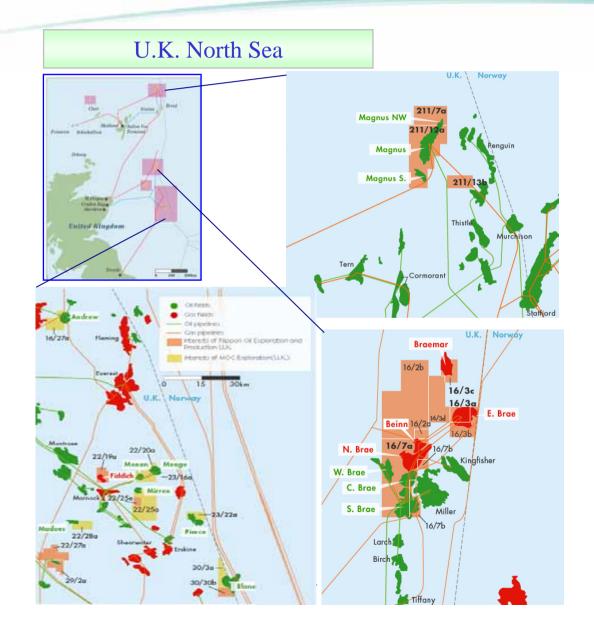
Interest in Individual Fields 5%

Operator Syncrude Canada

In 1992, NOEX acquired a 5% stake in the Syncrude project from PetroCanada. Subsequently, this stake was transferred to Mocal Energy Limited (a wholly owned subsidiary of NOEX).

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#### **'09 Jan - Dec Sales Volume** 12,600BOED (oil: 8,500b/d, gas: 25mmcf/d)

#### **Project Company**

Nippon Oil Exploration and Production U.K. Ltd. (NOEP UK) (100%) (%) = JX Group Shareholding

**Range of Interests in Individual Fields** 2.1% to 45%

#### **Operators**

NOEP UK, BP, Shell, Marathon, others

### MOEX

In 1994, MOEX acquired a working interest in blocks, including those in the Andrew Oil Field, the Mungo/Monan Oil Fields, the Pierce Oil Field, the Mirren/Madoes Oil Fields, and the Blane Oil Field. It is currently expanding its exploration, development, and production operations.

#### NOEP UK

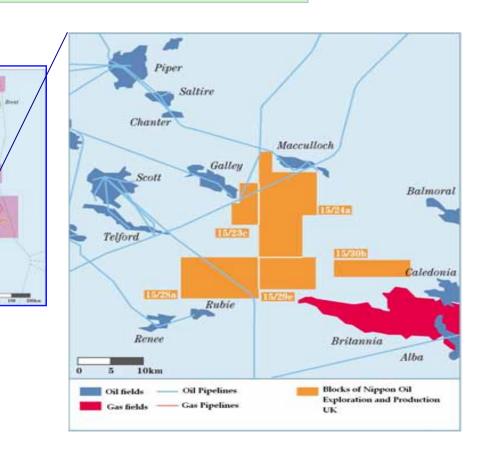
In 1996, NOEP UK acquired an interest in the Magnus Oil Field, in 2002, it acquired interests in the Brae Gas Fields and the Fiddich Oil Field, and in 2004, it acquired an interest in the West Don oil field.

Exploration, development and production activities are progressing.

<NOEX Operator Area >

UK North Sea

**United Kingdom** 

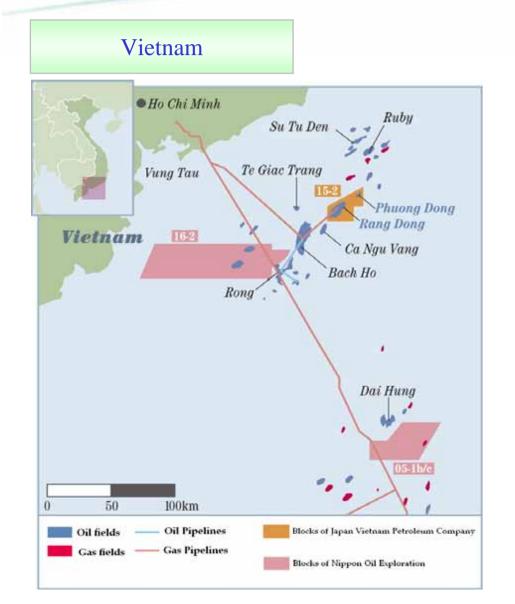


Nippon Oil Exploration and Production U.K. Ltd acquired 4 exploration blocks in 2007 and 1 exploration block in 2009 as an operator through a competitive tender process were held by the British Government.

**Range of Interests in Individual Fields** 33.3% to 45%

acquired blocks in 2007-15/23c,15/24a,15/28a,15/29e acquired blocks in 2009-15/30b





### '09Jan - Dec Sales Volume

13,800BOED (oil: 9,900b/d, gas: 23mmcf/d) Project Company Japan Vietnam Petroleum Co., Ltd. (JVPC) (97.1%) (%) = JX Group Shareholding Interest in Individual Fields Rang Dong : 46.5% Phuong Dong : 64.5% Operator JVPC

In 1992, JVPC acquired a working interest in block 15-2 offshore Vietnam.

In 1994, JVPC discovered the Rang Dong Oil Field within block 15-2, and it began production in that field from 1998.

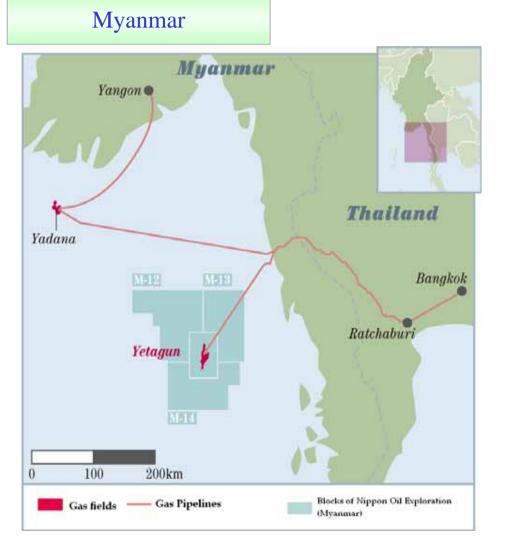
In 2006, the Rang Dong Oil Field associated gas recovery and utilization project was approved as a Clean Development Mechanism (CDM) system under the Kyoto Protocol. Production Sharing Contract for 16-2 exploration block off the southern coast of Vietnam signed with PetroVietnam in November 2007.

In February 2008, Rang Dong CDM Project received CER (Certified Emission Reductions) issuance approval under the Kyoto Protocol.

In July 2008, Rang Dong Oil Field achieved a cumulative production volume of 150 million barrels.

In August 2008, JVPC began production in the Phuong Dong Field.





'09 Jan - Dec Sales Volume 8,800BOED (oil: 800b/d, gas: 48mmcf/d)

#### **Project Company**

Nippon Oil Exploration (Myanmar), Limited (NOEX Myanmar) (50%) (%) = JX Group Shareholding

Interest in Individual Fields 19.3%

#### **Operator**

**PETRONAS** Carigali

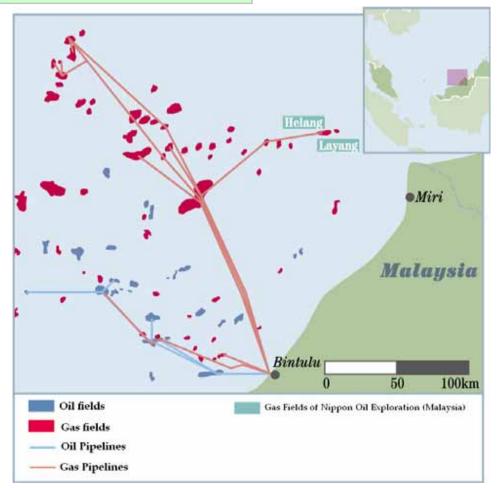
In 1991, NOEX Myanmar acquired a working interest in blocks M-13/14 offshore Myanmar.

The following year, it acquired a working interest in block M-12 and discovered the Yetagun Gas Field in that block.

In 2000, production at the Yetagun Gas Field commenced, with the produced gas supplied to the Ratchaburi power plants in Thailand.



### Malaysia



'09 Jan - Dec Sales Volume 23,700BOED (oil: 3,900b/d, gas: 119mmcf/d)

#### **Project Company**

Nippon Oil Exploration (Malaysia), Limited (NOMA) (78.7%) (%) = JX Group Shareholding

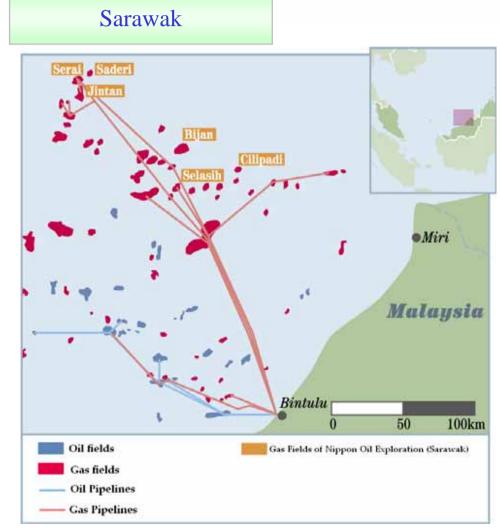
Range of Interest in Individual Fields 75%

#### Operator NOMA

In 1987, NOMA acquired a working interest in Block SK-10 offshore Sarawak, Malaysia. In 1990, NOMA discovered the Helang Gas Field, where production commenced in 2003. In 1991, NOMA discovered the Layang Gas Field.

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'09 Jan - Dec Sales Volume 36,800BOED (oil: 3,500b/d, gas: 200mmcf/d)

#### **Project Company**

Nippon Oil Exploration (Sarawak), Limited (NOSA) (76.5%) (%) = JX Group Shareholding

Interest in Individual Fields 37.5%

#### Operator

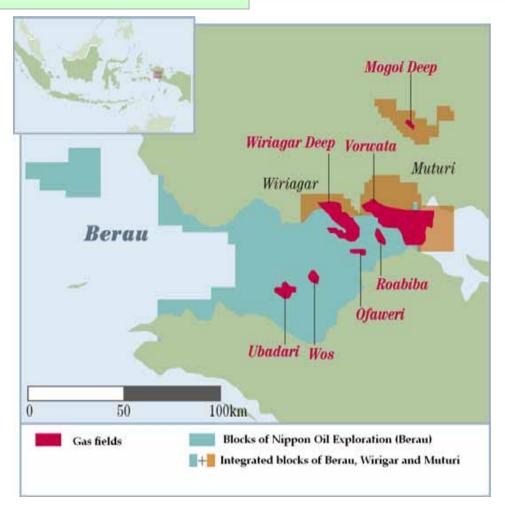
Shell

In 1991, NOSA acquired a working interest in Block SK-8 offshore Sarawak, Malaysia. From 1992 through 1994, the Jintan and Serai Gas Fields were discovered in that block, and production there commenced in 2004. In 2008, the Saderi Gas field commenced production.

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JX

### Indonesia



#### **Project Company**

Nippon Oil Exploration (Berau), Limited (NOEX(Berau)) (51%) (%) = JX Group Shareholding

Interest in Individual Fields 12.2% (after unitization)

### Operator

#### BP

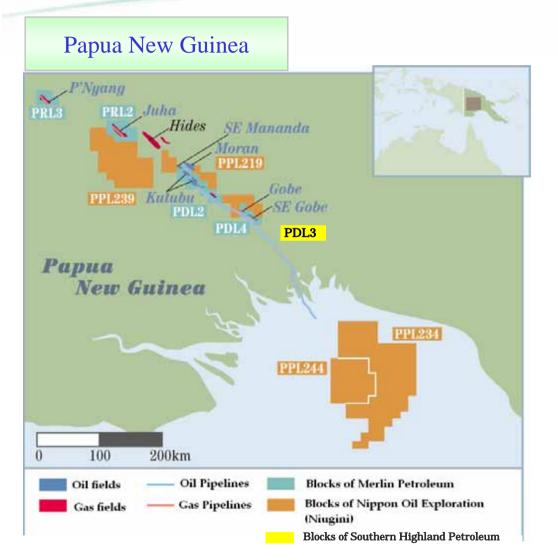
From 1990, using three test wells natural gas was discovered in the area. Subsequently, the Vorwata Gas Field, Wiriagar Deep Gas Field, and other gas structures were discovered.

From 2003, those with interests in the Berau, Wiriagar, and Muturi blocks agreed to become partners in unitizing the blocks and undertake development work cooperatively.

Production commenced in June 2009, and the first cargo of LNG has lifted in July 2009.

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'09 Jan - Dec Sales Volume 8,000b/d

#### **Project Company**

Japan Papua New Guinea Petroleum Co., Ltd. (36.4%) Nippon Oil Exploration (PNG) Pty. Ltd. (100%) Nippon Oil Exploration (Niugini) Pty. Ltd. (100%) Southern Highland Petroleum Co. Ltd.(80%) (%) = JX Group Shareholding

Range of Interests in Individual Fields 8.3 to 73.5%

#### Operator Oil Search, Exxon Mobil

In 1990, Japan Papua New Guinea Petroleum acquired exploration rights in Papua New Guinea from Merlin. And, acquired original exploration rights. Subsequently, exploration, development, and production activities have been undertaken in the Kutubu, Moran, Gobe, and SE Gobe oil fields.

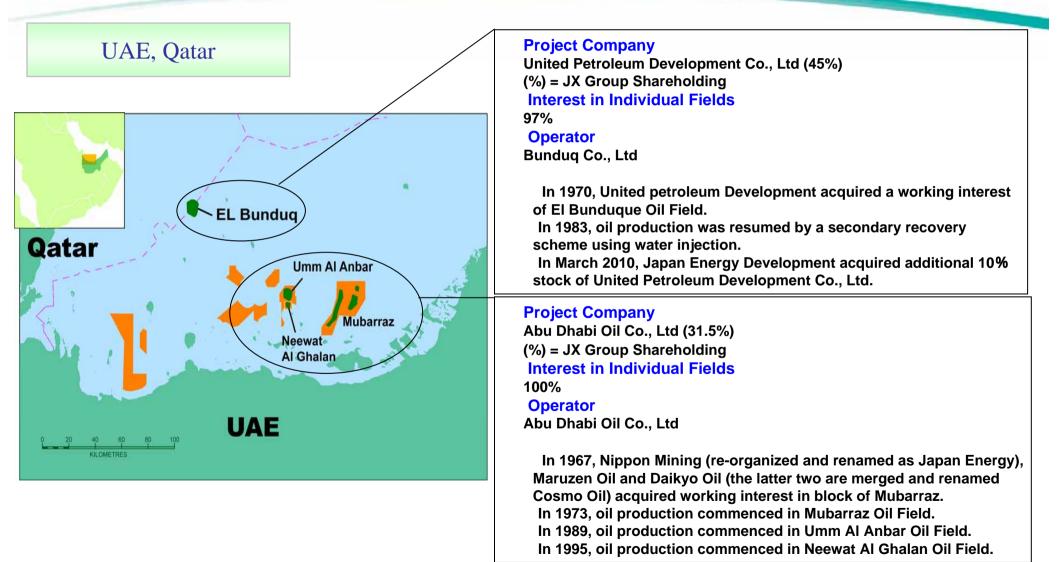
In December 2008, Merlin, Japan Papua New Guinea Petroleum's 100% subsidiary, acquired the PNG LNG Project equity and oil field equity that AGL Energy owned.

In January 2009, Nippon Oil Exploration (Niugini) acquired the four exploration licenses (both onshore and offshore) from Oil Search Limited.

In December 2009, PNG LNG Project was made a final decision to proceed with the development.

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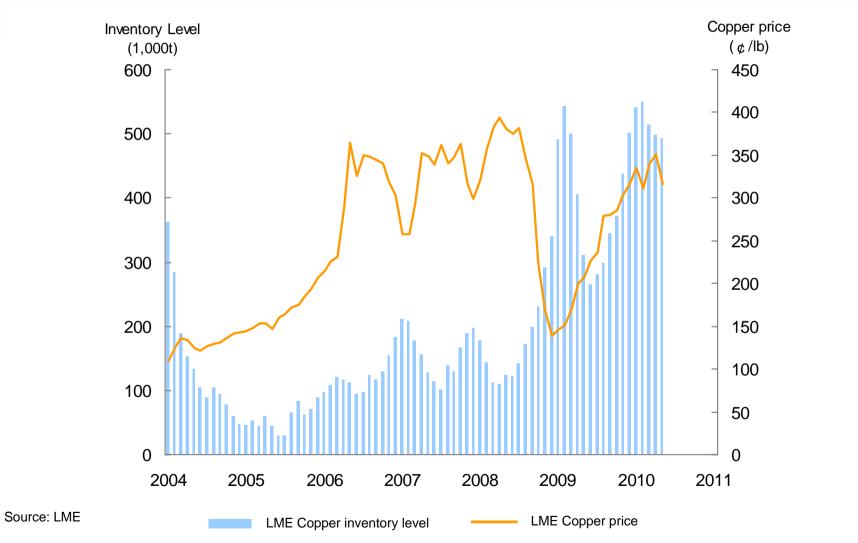




**Metals** 

### **Copper Price and Inventory Level**

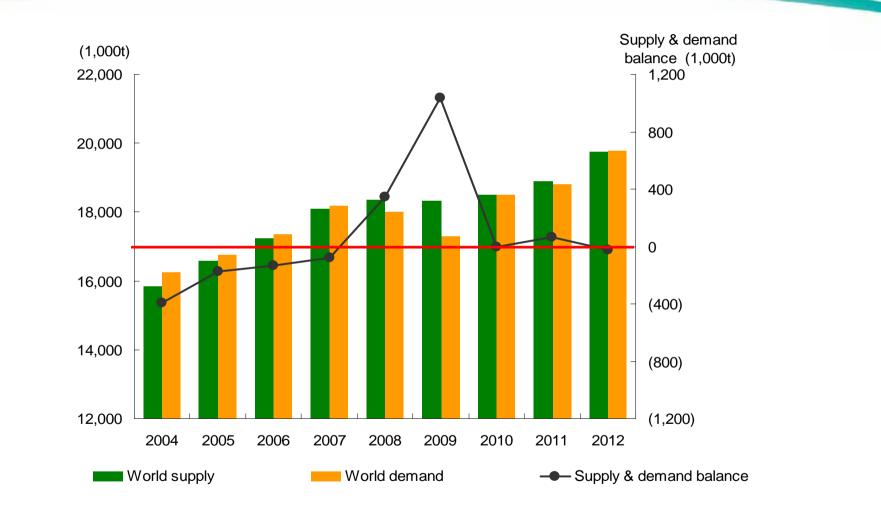




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/letals

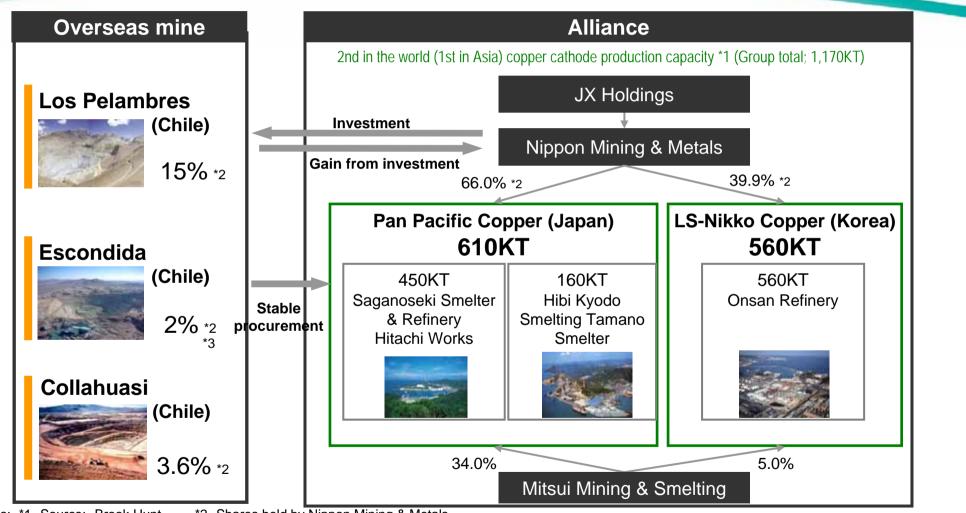
## World Copper Cathodes Supply & Demand



Source: Company Data Copyright © 2010 JX Holdings, Inc. All Rights Reserved.

### **Copper Smelting & Refining**





\*2 Shares held by Nippon Mining & Metals Notes: \*1 Source: Brook Hunt.

\*3 It will be 3% after acquiring the ownership interest from International Financial Corporation

\*4 Total Capacity is 260KT. PPC has 63.51% equity. Copyright © 2010 JX Holdings, Inc. All Rights Reserved.

Metals

## **Overseas Copper Mine Development**



Са	serones Copper	Mine (Chile	<b>e)</b>	ged Development ward 2013	Quechua Copper Deposit (Peru)
-	nisition May. 2006		- 30	out all provession	Acquisition date Mar. 2008
	isition \$137 million		2	Contra de la	Acquisition price \$40 million
М	ine life From 201	3 to 2040 (28 y	rears)	and the i	Mine life
	SX-EW Copper (	From Jan.20 Concentrate F	)13 From Sep.2013		From 2013 to 2030 (17 years)
Prod	uction life				Production plan
	1	Initial 5 years	28 years average	28 years total	Copper content in copper concentrate 76kt/y
	Copper content in copper concentrate	150kt/y	110kt/y	3,140kt/y	
Copper	Refined copper produced thorough SXEW process	30kt/y	10kt/y	410kt/y	Total production through mine life : 1.3 million tons
	Total	180kt/y	120kt/y	3,550kt/y	Initial investment \$ 0.85 billion (Estimated)
Molybder	num	3kt/y	3kt/y	87kt/y	
In		00 billion (Estim Pacific Copper	,		Ownership       Pan Pacific Copper (PPC)*1 100%         *1 Jointly established by Nippon Mining & Metals (66%)

**Jetals** 

### Nikko-Chloride Process (N-Chlo Process)

### **N-Chlo Process**

### **Structure of N-Chlo Process**

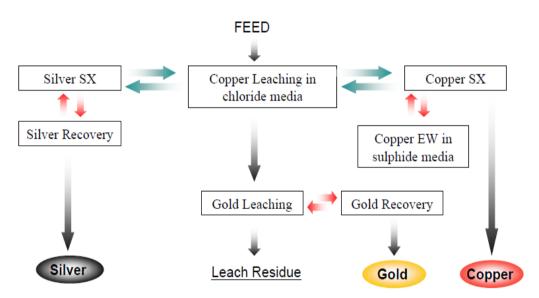
The N-Chlo Process is a new hydro-metallurgical process that we have uniquely developed.

The process enables the effective recovery of not only copper from low-grade copper concentrate, but also such precious metals as gold and silver .

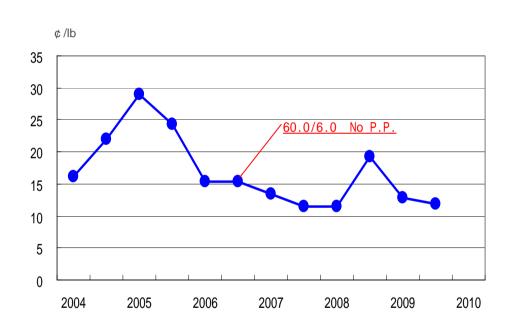
This process does not generate sulfur oxides (SOX), and it is possible to substantially reduce energy consumption and Co2 emissions, compared with pyro-metallurgical smelting which is the most commonly used method in the copper smelting industry.

We constructed a pilot plant in Australia and have been conducting demonstration test since latter half of 2009.

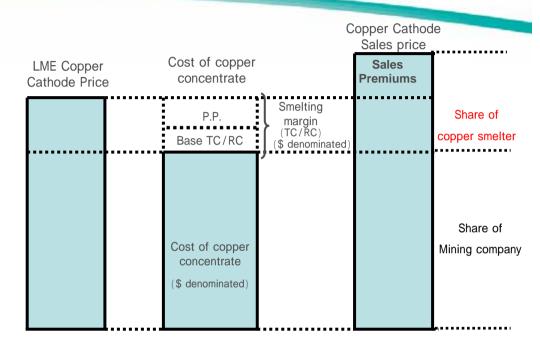




### Trends of TC/RC & Earnings Structure of Copper Smelter



\* Source : Company data



· Cost of copper concentrate:

The price of copper concentrate, which custom smelters pay to mining companies, is LME copper cathode price less TC/RC, which is smelting margin.

TC (Treatment charge) + RC (Refining charge):

Consisting of "Base TC/RC" and "P.P."

·P.P.(Price participation):

The system under which mines and smelters share margins when LME copper price exceeds benchmark price

·Sales price:

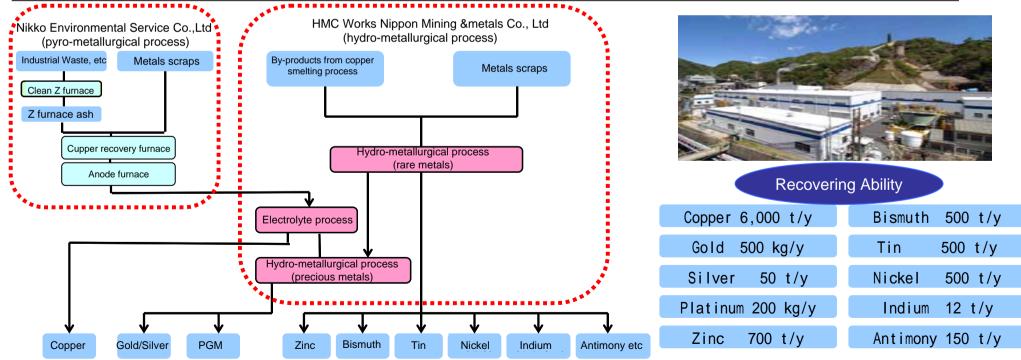
LME price plus sales premiums, which is established by reference to various factors including importation costs, import tariffs, and others 57

### Metal's Recycling



### Metal's Recycling Complex in Hitachi

- Recovering 16 kinds of metals efficiently by hydrometallurgical process
- An original zero emission process that combines with pyrometallurgical process of Nikko Environmental Services Co., Ltd at adjacent site.
- · Favorable location adjacent to the metropolitan area the biggest urban mine in Japan
- Processing by-products from Saganoseki smelter.
- The role as a raw material (indium, nickel, etc) supplier to Electronic material business

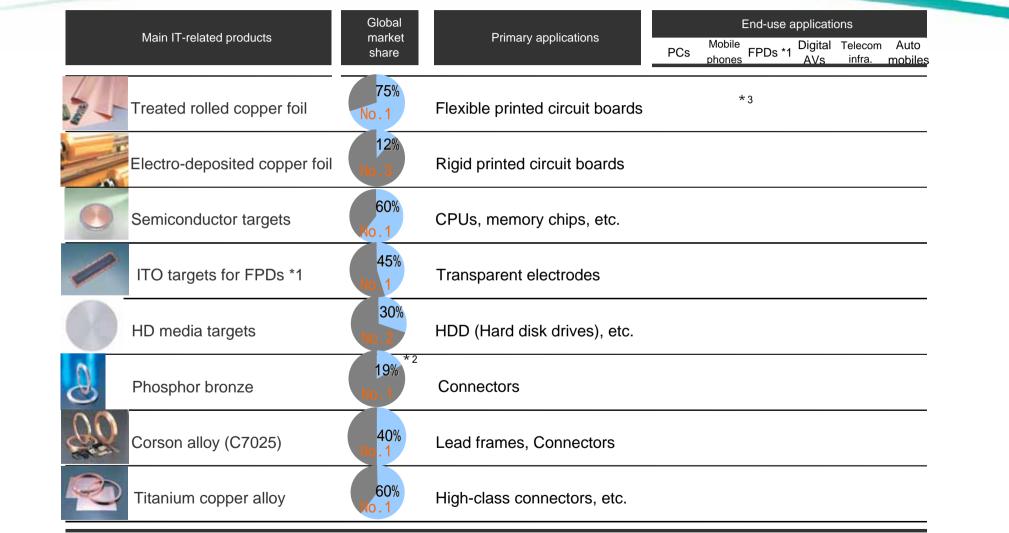


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Metals

### **Electronic Materials**





Notes: \*1 Flat panel displays \*2 Share in Asia market \*3 means main end-use applications

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## Polysilicon for Photovoltaic Power Generation



Metallic silicon

(raw material)

Polysilicon for

photovoltaic power generation

Siemens Method

Chisso

Electrolysis

Toho Titanium

8-9N

¥ 7-10 bn/

SiCI,

Chlorination

reaction

CI,

Characteristics of the zinc-reduction process Increasing global demand for photovoltaic power generation as an action against global warming (JSS method) Supply high-quality, low-cost polysilicon for photovoltaic power Zn generation Polysilicon Reductive (product) reaction Overview of the joint venture SiCI, Nippon Mining Company name: & Metals Japan Solar Silicon Co., Ltd. (JSS) Accurate analyzing tec. ZnCl<sub>2</sub> Polycrystal growth tec. **Ownership:** Chisso Corp. 50% Zn Nippon Mining Holdings Group 50% -Nippon Mining & Metals Co., Ltd. 30% -Toho Titanium Co., Ltd. 20% ·Concentration of technology that Nikko Mining Co, Toho Titanium Co **Investments:** ¥30 bn (4,500 ton/year basis) and Chisso Co. Capacity expansion schedule : ·High response efficiency and low cost 10,000<sup>(ton/year)</sup> 10,000 **JSS** Method 8,000 Purity 6,000 Capex 4,500 3,000 (1,000t-Si/y) 4,000 Electric power 1.500 2,000 consumption 660 40KWh/kg-Si for unit production

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Fiscal 2010

Fiscal 2011

Fiscal 2012

Fiscal 2013

Future

0

11N

¥ 13-16 bn/

110KWh/kg-Si



### **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.



### The Future of Energy, Resources and Materials

"JX" is a name which represents the basic philosophy of the Integrated Group. "J" represents a Japanese and world leading "integrated energy, resources and materials business group," and "X" represents challenges of the unknown, growth and development for the future, and creativity and innovation, among others.



# Our actions will respect the EARTH.

E thics

A dvanced ideas

R elationship with society

T rustworthy products/services

H armony with the environment



This notice contains certain forward-looking statements. These forward-looking statements may be identified by words such as "believes", "expects", "anticipates", "projects", "intends", "should", "seeks", "estimates", "future" or similar expressions or by discussion of, among other things, strategy, goals, plans or intentions. Actual results may differ materially in the future from those reflected in forward-looking statements contained in this notice, due to various factors including but not limited to: (1) macroeconomic condition and general industry conditions such as the competitive environment for companies in energy, resources and materials industries; (2) regulatory and litigation matters and risks; (3) legislative developments; and (4) changes in tax and other laws and the effect of changes in general economic conditions.