

Security Code Tokyo 5020

Supplementary Information

May 9, 2013



Contents



Summaries of businesses and Financial Results

Summary of JX Group's Businesses	3
Financial Summary	4
Historical Crude Oil and Copper Prices and Exchange Rate	9

Strategy of Energy Business

Enhance Overseas Businesses	13
Action for Energy Conversion Company	15

Strategy of Oil and Natural Gas E&P Business

Business Area	20
Business Activities	21
Outline of Principal Oil and Natural Gas E&P Projects	22
Maintain and Expand Production Volume over the Medium/Long Term	23
Production Schedule of Principal E&P Projects	24
Major Asset Acquisition in the UK North Sea	25

Strategy of Metals Business

Copper Business	27
Overseas Copper Mine Development Projects	28
Electronic Materials Business	30
Electronic Materials Business (Kakegawa Works)	31
Recycling and Environmental Services Business	32

Business Environment and Data

Energy Business

Demand for Petroleum Products (Japan)	35
JX Group's Market Share and Demand in Japan, Historical CDU Utilization Rate	36
Number of Service Stations (Fixed type)	37
Sales Volume by Product	38
Margins of Petroleum Products	39
Margins and Prices of Petrochemical Products (vs. Crude Oil, vs. Naphtha)	44

Oil and Natural Gas E&P Business

Principal Individual E&P Project Overview	48
JX Group's Reserve Standards	67

Metals Business

Copper Production of JX Group's Mines	69
World's Copper Cathodes Supply & Demand	70
Earnings Structure of Copper Smelting and Refining Business	71
N-Chlo Process	72

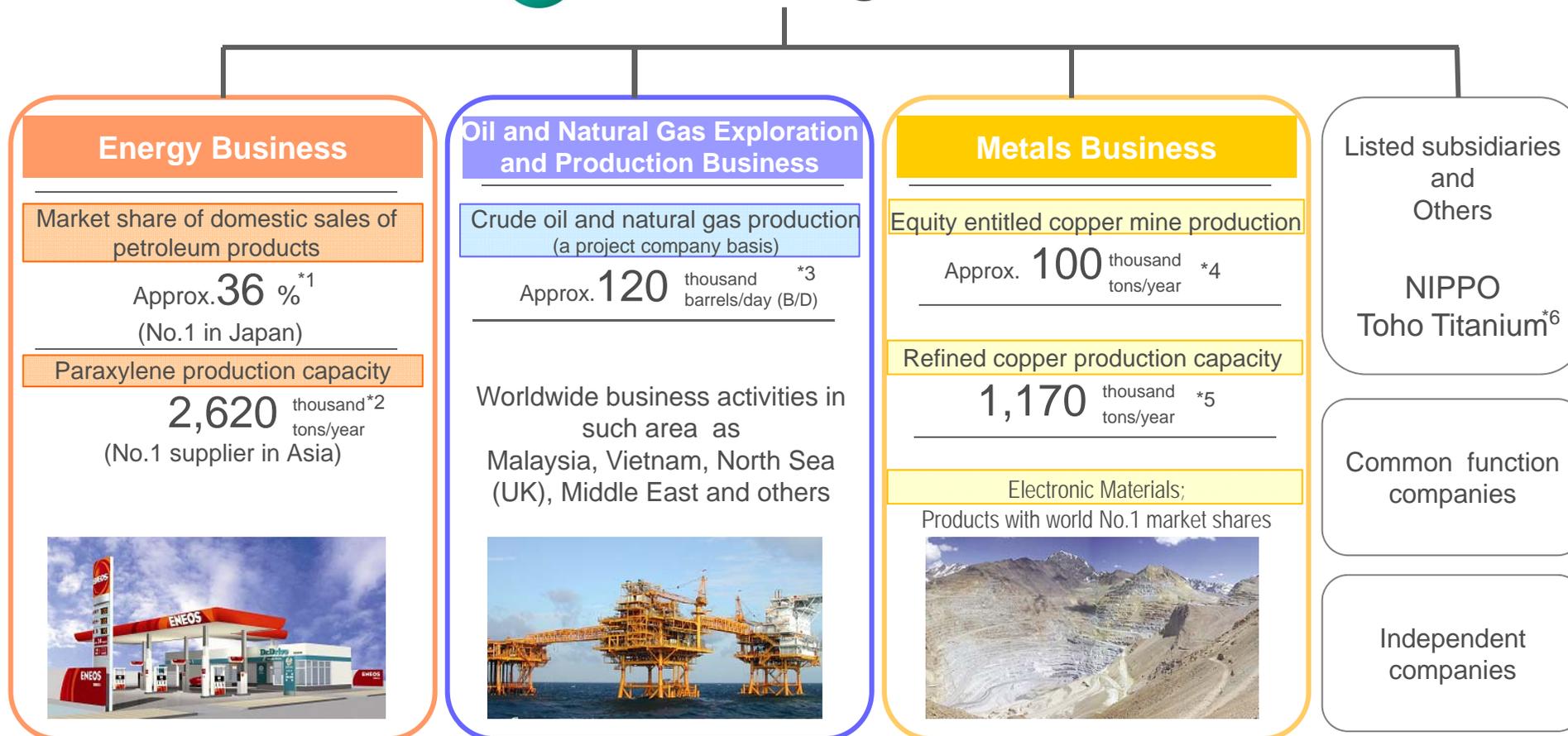


Summaries of businesses and Financial Results



Summary of JX Group's Businesses

JX JX Holdings, Inc.



*1 FY2012 actual

*2 As of Mar. 2013

*3 Crude Oil Equivalent (Estimated average daily production from Jan. to Dec. 2012)

*4 Equity entitled copper production contained in copper concentrate (Estimated 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)

*6 Profit and loss of Toho Titanium is included in the Metals Business.



Financial Summary

	FY2009	FY2010	FY2011	FY2012	FY2013
(JPY billion)	Actual	Actual	Actual	Actual	Forecast
Net Sales	9,008.0	9,634.4	10,723.9	11,219.5	12,250
Energy	7,607.6	8,131.9	9,147.5	9,699.6	10,610
Oil and Natural Gas E&P	145.9	148.8	187.8	173.1	200
Metals	780.7	940.6	997.2	927.5	1,050
Others	473.8	413.1	391.4	419.3	390
Operating Income (Loss)	130.4	334.4	327.9	251.5	255
Energy	56.5	239.1	208.2	138.9	142
Oil and Natural Gas E&P	28.5	51.9	90.5	80.5	74
Metals	16.9	20.7	14.5	6.9	19
Others	28.5	22.7	14.7	25.2	20
Ordinary Income (Loss)	187.3	413.7	407.8	328.3	335
Energy	66.0	253.7	232.5	161.6	170
Oil and Natural Gas E&P	49.0	59.5	97.5	93.6	85
Metals	47.4	70.7	60.0	45.0	55
Others	24.9	29.8	17.8	28.1	25
Net Income (Loss)	73.1	311.7	170.6	159.5	170
Energy			105.8	117.1	108
Oil and Natural Gas E&P			53.2	33.9	38
Metals			23.8	17.1	19
Others			(12.2)	(8.6)	5
Capex	300.0	200.0	286.0	472.0	560
Depreciation and Amortization	249.9	204.6	198.1	180.4	188



Ordinary Income by segment

	FY2009	FY2010	FY2011	FY2012	FY2013
(JPY billion)	Actual	Actual	Actual	Actual	Forecast
Ordinary Income (Loss)	187.3	413.7	407.8	328.3	335
Energy Business	66.0	253.7	232.5	161.6	170
Petroleum Products	(141.0)	169.2	74.6	56.1	57
Petrochemicals	5.2	27.3	38.2	46.7	78
Inventory Valuation	201.8	57.2	119.7	58.8	35
Oil and Natural Gas E&P Business	49.0	59.5	97.5	93.6	85
Metals Business	47.4	70.7	60.0	45.0	55
Resources Development	27.4	44.1	36.6	26.6	26
Smelting and Refining	4.9	12.8	15.5	11.1	16
Electronic Materials	5.4	9.4	5.4	6.3	12
Recycling and Environmental Services	4.9	4.0	5.7	2.5	5
Titanium ^{*2}	-	-	-	-	(4)
Inventory Valuation	4.8	0.4	(3.2)	(1.5)	-
Others ^{*2}	24.9	29.8	17.8	28.1	25

*1 Figures for FY2009 are a pro-forma basis

*2 Titanium business has been transferred to the "Metals Business" from "Others" as of FY2013.



Balance Sheets

	Apr. 2010	Mar. 2011	Mar. 2012	Mar. 2013
(JPY billion)	Actual	Actual	Actual	Actual
Total assets	6,299.1	6,260.0	6,690.4	7,274.9
Current assets	2,854.9	3,067.7	3,554.6	3,737.8
- Cash and deposits	267.9	233.5	242.0	250.1
Noncurrent assets	3,444.2	3,192.2	3,135.8	3,537.1
Property, plant and equipment	2,019.4	1,940.3	1,940.4	2,190.7
Intangible assets	174.3	166.1	137.2	134.8
Investments and other assets	1,250.5	1,085.8	1,058.2	1,211.6
Liabilities	4,479.1	4,373.7	4,645.7	4,947.5
Interest-bearing debt	2,309.0	2,264.6	2,282.6	2,549.3
Other liabilities	2,170.1	2,109.1	2,363.1	2,398.2
Net assets	1,820.0	1,886.2	2,044.8	2,327.4
Shareholders' equity	1,588.1	1,644.5	1,776.6	1,896.4
Accumulated other comprehensive income (loss)	29.7	(16.2)	(32.3)	46.3
Minority interests	202.2	257.9	300.5	384.7



Performance Indicators

	FY2009	FY2010	FY2011	FY2012
(JPY billion)	Actual	Actual	Actual	Actual
Cash flows from operating activities	-	211.4	246.6	265.6
(Working capital)	-	(343.7)	(192.2)	(164.5)
Cash flows from investing activities	-	(170.9)	(198.6)	(426.1)
Free cash flows	-	40.5	48.0	(160.5)
Dividend and others	-	(31.5)	(56.1)	(18.0)
Net cash flows	-	9.0	(8.1)	(178.5)

	Apr. 2010	Mar. 2011	Mar. 2012	Mar. 2013
	Actual	Actual	Actual	Actual
ROE (%)	-	5.2 *	10.1	8.7
Net D/E Ratio (times)	1.26	1.25	1.17	1.18
Shareholders' equity ratio (%)	25.7	26.0	26.1	26.7



Equity in earnings of unconsolidated subsidiaries and affiliates

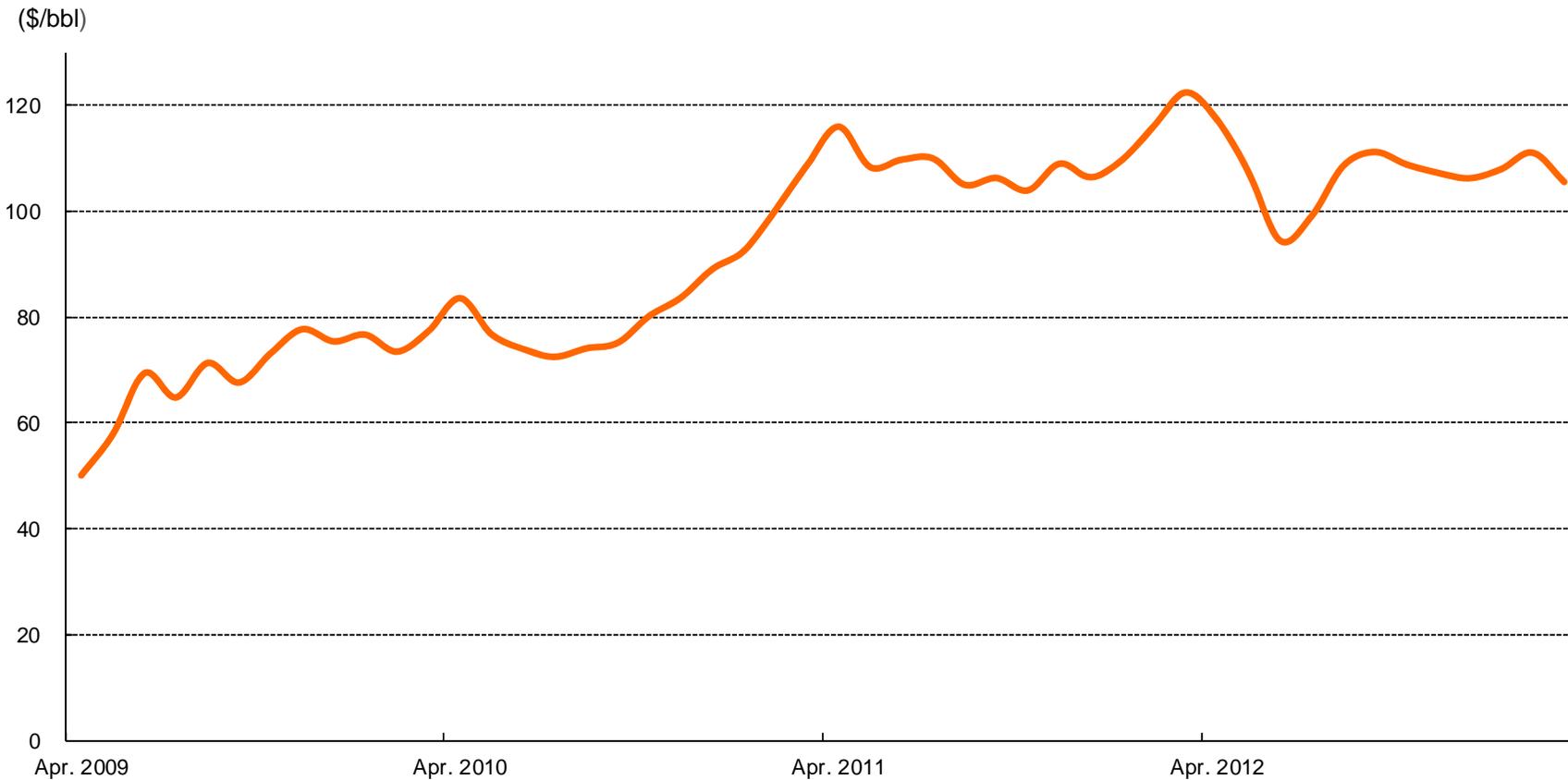
	FY2009*	FY2010	FY2011	FY2012	FY2013
(JPY billion)	Actual	Actual	Actual	Actual	Forecast
Energy	0.9	5.4	3.6	5.9	6.0
Oil and Natural Gas E&P	6.5	7.8	6.4	9.4	7.0
Metals	33.3	55.8	51.0	43.5	45.0
Resources Development	28.8	48.8	41.2	35.0	34.0
Smelting and Refining	4.5	7.0	9.8	8.5	11.0
Others	0.4	7.0	1.1	0.9	1.0

* Figures for FY2009 are a pro-forma basis.



Historical Dubai Crude Oil Price

Average Price	FY2009	FY2010	FY2011				FY2012			
			1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
Dubai Crude Oil	70	84	111	107	106	116	106	106	107	108

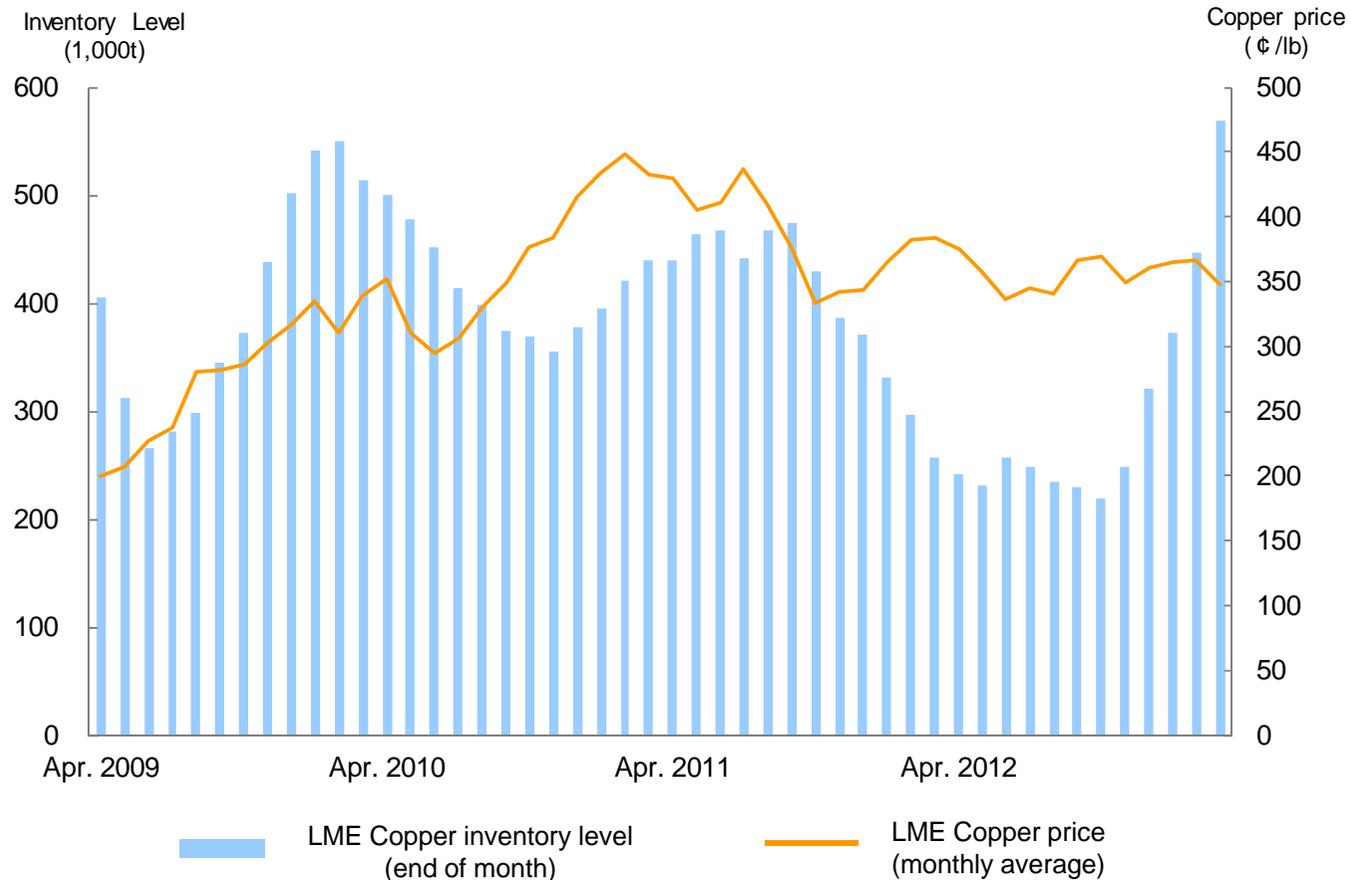




Historical Copper Price and Inventory Level

(¢/lb)

Average Price	FY2009	FY2010	FY2011				FY2012			
			1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
Copper	277	369	415	408	340	377	357	350	350	350

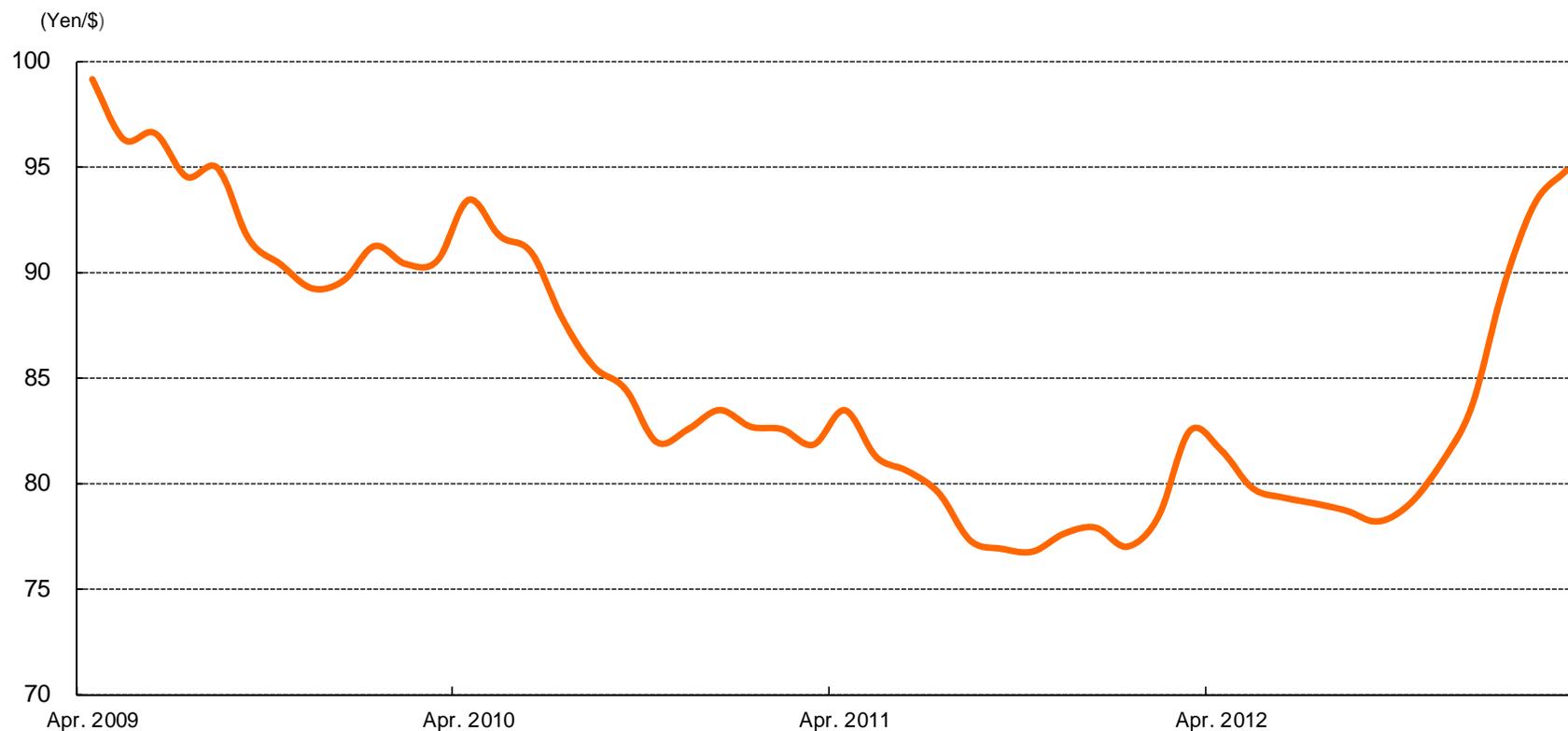




Historical Exchange Rate

(Yen/\$)

Average Price	FY2009	FY2010	FY2011				FY2012			
			1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
Exchange Rate	93	86	82	78	77	79	80	79	81	92





Strategies of Energy Business

Enhance Overseas Businesses (Paraxylene)

Main use of Paraxylene

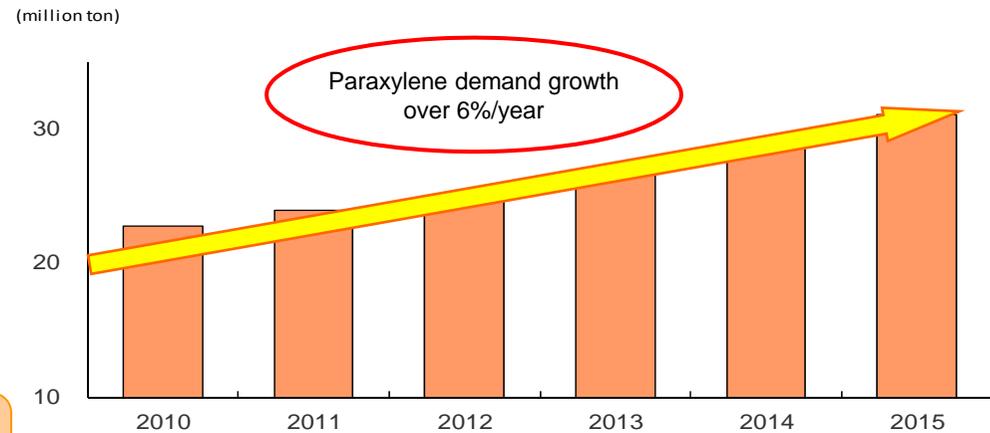


Polyester fiber

PET bottles

Outlook for Paraxylene Demand in Asia

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



Source: Company data

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

Location : Ulsan, Korea

Capacity : 1,000 thousand tons / year One of the world's largest capacity

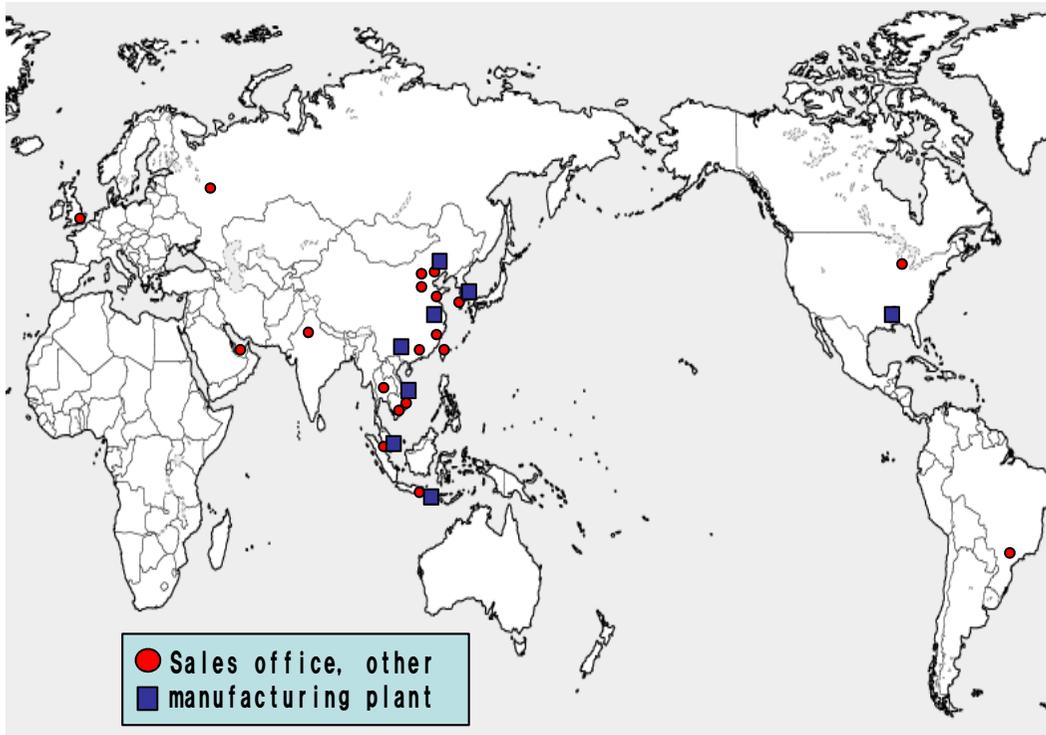
Production Start : 2014 (scheduled)

Investment : approx. 80 billion JPY

Ownership :
 JX Nippon Oil & Energy 50% -1 share
 SK Group 50% +1 share

Enhance Overseas Businesses (Lubricants)

✓ Location of Overseas Lubricants Business (as of Dec. 2012)



➤ Mainly Asia, a total of 23 offices/plants in 13 countries.

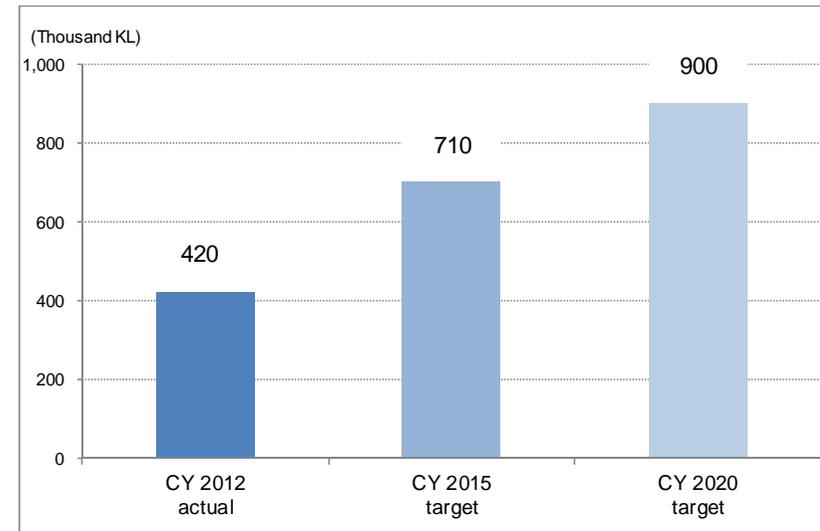
Sales office, other	15
Manufacturing plant	3
Sales / manufacturing base	5



✓ Expansion of Overseas Lubricants Business

- Established a lubricants marketing company in Dubai. (Jul. 2011)
- Lubricants manufacturing plant started its operation in Indonesia. (Apr. 2012)
- Determined the establishment of a lubricants manufacturing and marketing company in Vietnam. (scheduled to start production in 2014)
- Started joint venture business for lubricants base oil with SK Group of South Korea. (Oct. 2012)

✓ Medium-Term Target of Overseas Lubricants Sales



Action for Energy Conversion Company (LNG Business)

✓ Hachinohe LNG Terminal Project

- Promoting construction of Hachinohe LNG Import Terminal and Kushiro LNG Satellite Terminal.
 - Taking in the demand of city gas and industrial use in the region of northern Tohoku and eastern Hokkaido.
 - Supplying natural gas to general electric utility.
(For Hachinohe Thermal Power Plant of the Tohoku Electric Power Co., Inc.)

【LNG supply system of JX】

Hachinohe and Kushiro LNG terminals

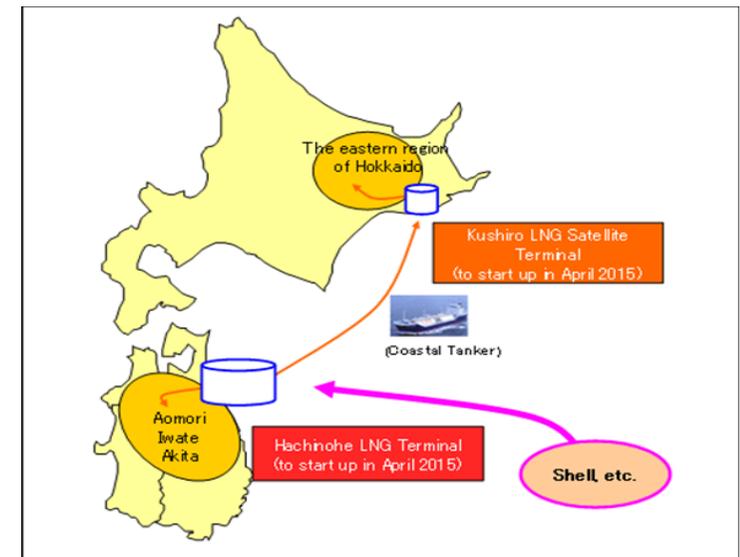
【Current】	Hachinohe (Satellite Terminal)
Operation start	Mar. 2007
Tank capacity (thousand KL)	4.5 x1 tank



【2015~】	Hachinohe (Import Terminal)	Kushiro (Satellite Terminal)
Operation start	Apr. 2015 (scheduled)	
Tank capacity (thousand KL)	140x2 tanks	10x1 tank

Mizushima LNG Import Terminal

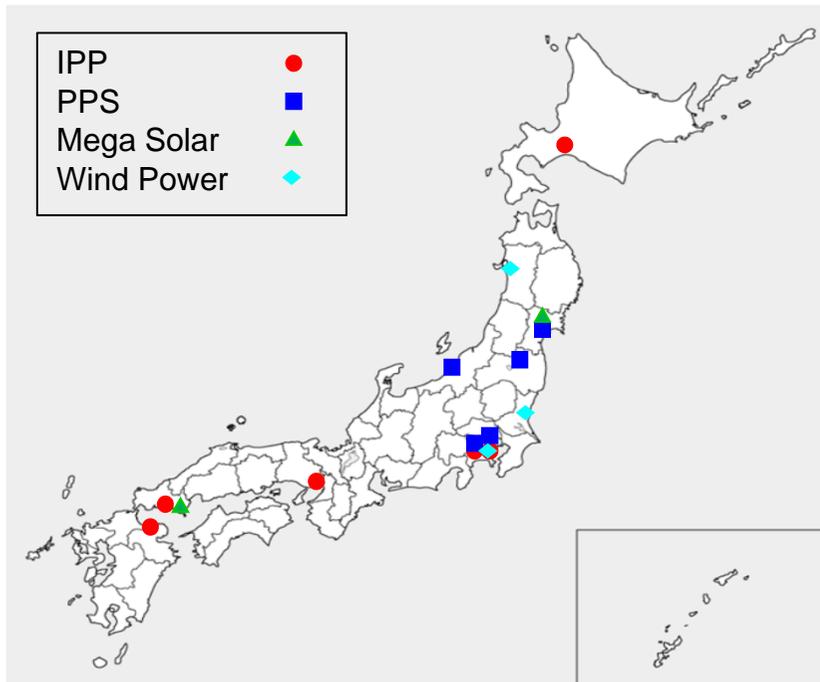
	Tank No.1	Tank No.2
Operation start	Apr. 2006	Apr. 2011
Tank capacity (thousand KL)	160	160
Ownership	JX Nippon Oil & Energy	50%
	The Chugoku Electric Power Co.,Inc.	50%



Action for Energy Conversion Company (Electricity Business, Fuel Cell)



✓ Location of Electricity Business (As of Feb. 2013)



✓ Power Generating Capacity of each Business

IPP	6 stations	840 thousand kW
PPS	5 stations	525 thousand kW
Mega Solar	2 stations	3 thousand kW
Wind Power	3 stations	5 thousand kW
Total (equity basis)		1,373 thousand kW

✓ Expansion of Electricity Business

- Started IPP Business in Osaka , Negishi, ,Marihu and other refineries. (1998~2004)
- Entered PPS Business.(2003)
- Started receiving electricity from Kawasaki Natural Gas Power Generation Co., Ltd, joint venture with Tokyo Gas Co., Ltd.(2008)
- Started operation of Mega Solar at the Sendai Refinery and the Kudamatsu Terminal.(Feb. 2013, Mar. 2013)
- Started operation of Wind Power at the Akita Oil Terminal and the Kashima Refinery.(2003, 2005)
- Ohgishima Wind Power Station started operation.(2010)



✓ Fuel Cell

- Launched Solid Oxide Fuel Cell(SOFC) system for residential use which is smaller and has higher electrical efficiency compared to conventional one. (Oct. 2011)
- Increasing sales volume by high attention to new energy after the earthquake.



Action for Energy Conversion Company (Coal Business)

✓ Our Coal business

1. Main Upstream Businesses

- Own the interest of Bulga mine in Australia, through an investment to Oakbridge joint venture.(Sep.1990)
- Started production and sales of Bulga coal. (Mar. 1991)
- Acquisition of the interest and dealership of Sukunka /Suska coal deposits, through an investment to Xstrata Coal British Columbia, and started metallurgical coal joint venture with Xstrata Coal. (Mar. 2012)

2. Sales

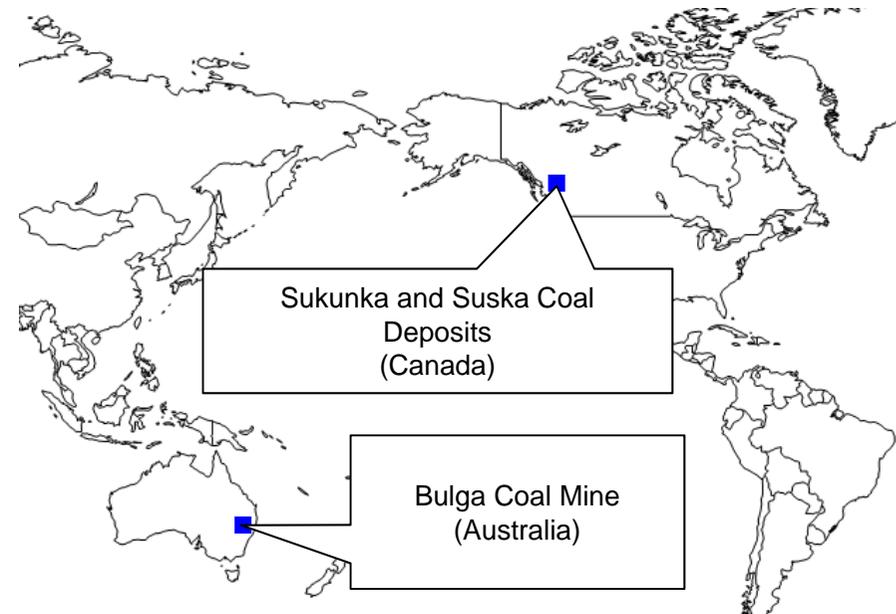
- Mainly supplying Bulga coal to customers. (Approx. 9 million tons/year)

3. Coal Transshipment Station

- Coal Transshipment Station was constructed on the site of former Kudamastu Refinery, and started its operation.(May 2001)

✓ Our Interest of Coal Mine/Deposits

	Bulga Coal Mine	Sukunka and Suska Coal Deposits
Location	New South Wales, Australia	British Columbia, Canada
Interest	13.3%	25.0%
Reserves/ Resouces	Recoverable reserves more than 300 million tons	Resouces Sukunka Deposit Approx. 240million tons Suska Deposit Approx. 240million tons
Production capacity	Approx. 11million tons/year	Apporox. 9.5 million tons/year (scheduled)



Action for Energy Conversion Company (Hydrogen Business)

✓ Demonstration Test at Service Station (SS) that has Gasoline and Hydrogen Filling Machine

Action for the future hydrogen supply infrastructure

- Carry out the hydrogen supply in SS sites by 13 private enterprises (the energy industry, automotive industry) and government office jointly.
- Examine hydrogen supply infrastructure maintenance and construction of the business model at ENEOS service station network in all over the country.



Copyright © 2013 JX Holdings, Inc.

✓ Outline of the Demonstration Test

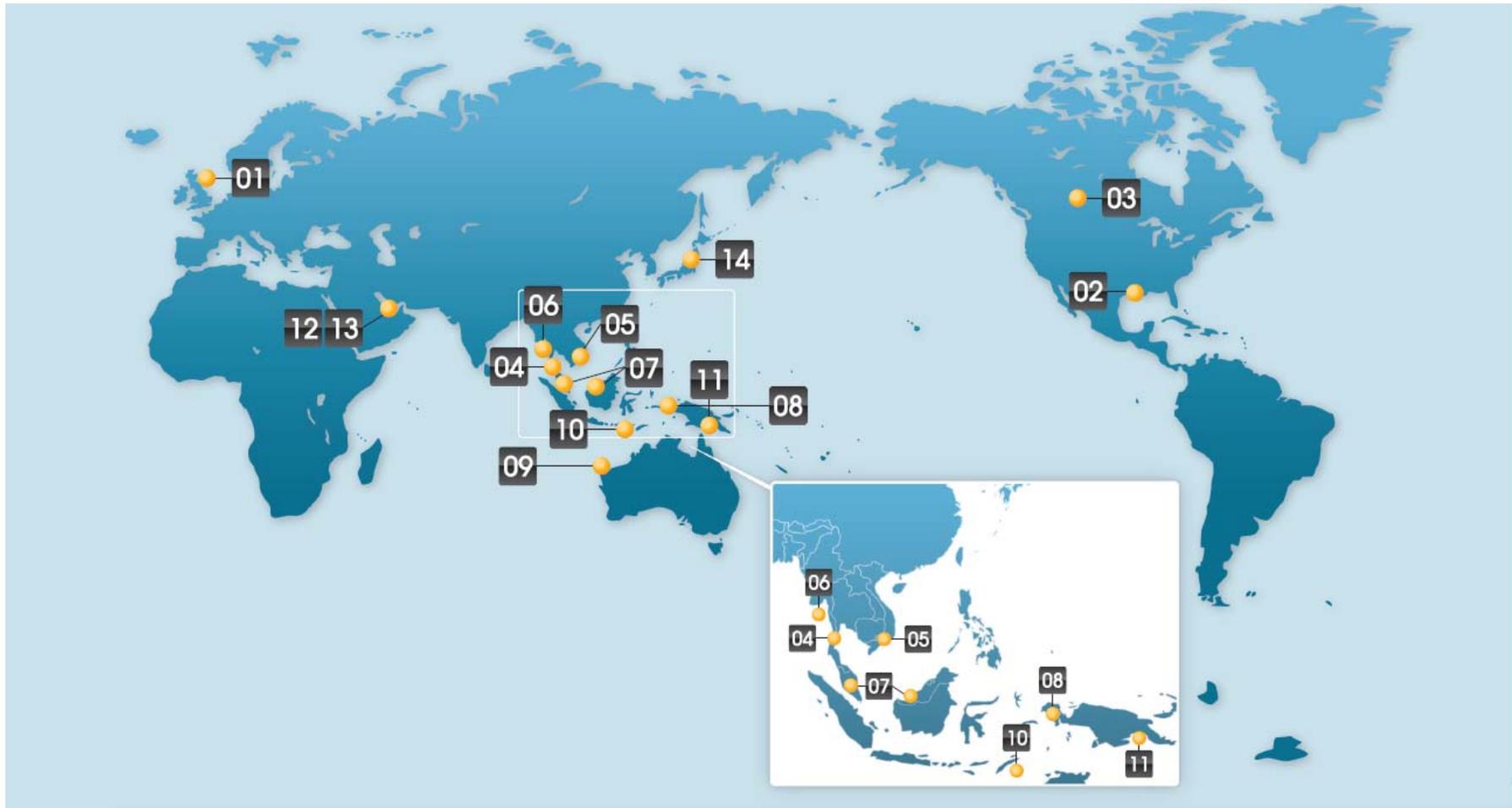
- ENEOS Service Station (Total 2 stations)
Placed in Kanagawa Pref. and Aichi Pref.
- Period (Scheduled)
Apr. 2013 ~ Mar. 2016
- Contents of the Demonstration Test
 - Short time filling of high pressure hydrogen
 - Operation of hydrogen filling duties in parallel with gasoline and diesel fuel sale



Strategies of Oil and Natural Gas E&P Business



Business Area



Business Activities



	▼ Project Company	In Production ●	Under Development ●	Under Exploration ●
01	The North Sea	JX Nippon Exploration and Production (U.K.) Ltd.	●	● ●
02	The U.S. Gulf of Mexico	JX Nippon Oil Exploration (U.S.A.) Ltd. JX Nippon Oil Exploration (Gulf) Ltd.	●	●
03	Canada	Japan Canada Oil Company / Mocal Energy	●	
04	Thailand	JX Nippon Oil & Gas Exploration Corp.		●
05	Vietnam	Japan Vietnam Petroleum Company Nippon Oil Exploration (Cuu Long) Ltd. / JX Nippon Oil & Gas Exploration Corp.	● ●	● ●
06	Myanmar	Nippon Oil Exploration (Myanmar) Ltd. JX Nippon Oil & Gas Exploration (Myanmar) Ltd.	● ●	● ●
07	Malaysia	JX Nippon Oil & Gas Exploration (Malaysia) Ltd. JX Nippon Oil & Gas Exploration (Sarawak) Ltd. JX Nippon Oil & Gas Exploration (Peninsular Malaysia) Ltd. JX Nippon Oil & Gas Exploration (Onshore Sarawak) Ltd. JX Nippon Oil & Gas Exploration (Deepwater Sabah) Ltd.	● ●	● ● ● ● ●
08	Indonesia	Nippon Oil Exploration (Berau) Ltd.	● ●	●
09	Australia	JX Nippon Oil & Gas Exploration (Australia) Pty Ltd.	● ●	●
10	East Timor	Japan Energy E&P JPDA Pty Ltd.		●
11	Papua New Guinea	Merlin Petroleum Company / Southern Highlands Petroleum Co., Ltd. Nippon Oil Exploration (Niugini) Ltd. / Murray Petroleum Co., Ltd. Nippon Papua New Guinea LNG LLC	● ●	● ● ●
12 13	U.A.E · Qatar	Abu Dhabi Oil Co., Ltd. United Petroleum Development Co., Ltd. JX Nippon Oil & Gas Exploration (Qatar) Ltd.	● ●	● ● ●
14	Japan	JX Nippon Oil & Gas Exploration Corp.	●	●



Outline of Oil and Natural Gas E&P Projects

	Area/Company	Sales Volume (Jan.-Dec. 2012) (1,000BOED)*1			Reserves (million BOE) *1, *2			Reference pages
			Oil	Gas	As of the end of 2012	As of the end of 2011	As of the end of 2010	
1	[North Sea, U.K.] JX Nippon Exploration and Production (U.K). Limited	6	5	1	126	47	20	48~49
2	[Gulf of Mexico(U.S.A.)] JX Nippon Oil Exploration U.S.A. Limited	4	3	1	23	25	27	50~51
3	[Canada] Japan Canada Oil Company Limited	14	14	0	253	251	253	52
5	[Vietnam] Japan Vietnam Petroleum Company, Limited	8	6	2				54~55
6	[Myanmar] Nippon Oil Exploration (Myanmar) Limited	9	1	8				56~57
7	[Malaysia] JX Nippon Oil & Gas Exploration (Malaysia) Limited JX Nippon Oil & Gas Exploration (Sarawak) Limited	21 19	4 2	17 17				58~59
8	[Indonesia] Nippon Oil Exploration (Berau) Limited	17	1	16	<Sub Total> 233	<Sub Total> 259	<Sub Total> 319	60
9	[Australia] JX Nippon Oil & Gas Exploration (Australia) Pty Ltd.	1	1	0				61
11	[Papua New Guinea] Merlin-Southern Highlands Petroleum Co., Ltd.	5	5	0	<Sub Total> 99	<Sub Total> 99	<Sub Total> 87	62~63
12,13,14	[United Arab Emirates, Qatar and others] Abudhabi Oil Co., Ltd., United Petroleum Development Co., Ltd. and others*3	13	13	0	66	69	69	64~65
Total		117	53	64	800	749	775	

*1 Project company basis.

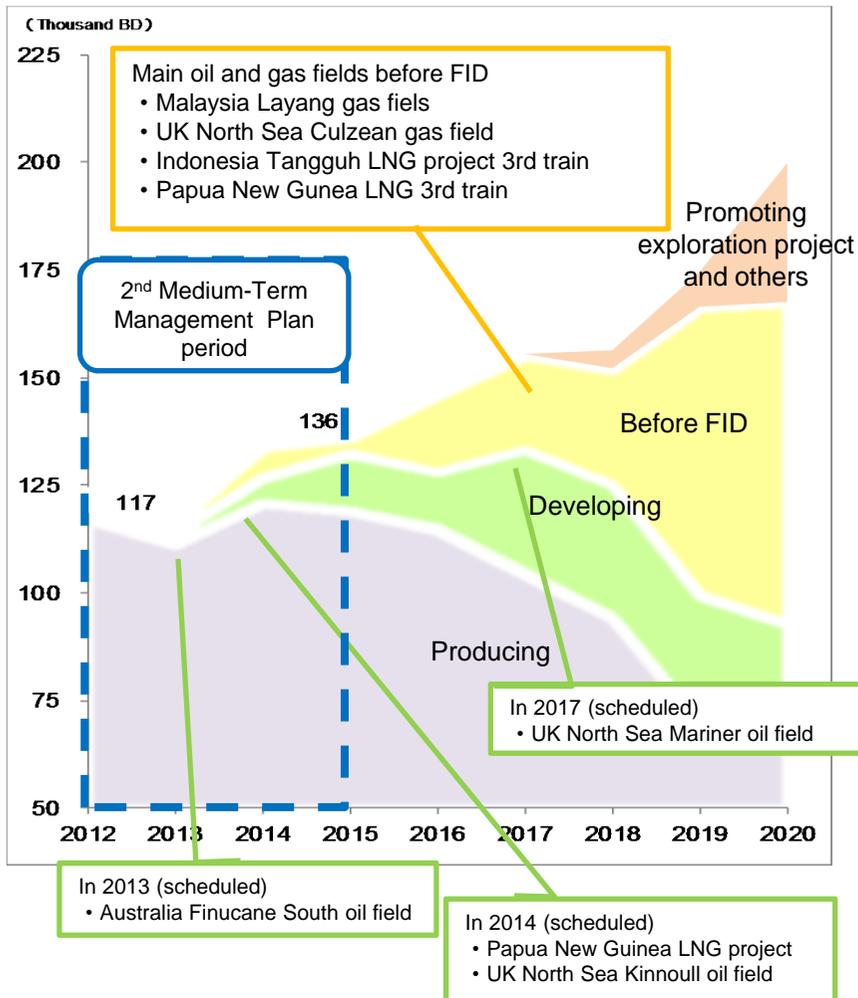
*2 Proved reserves and probable reserves, including reserves from projects currently under development.

*3 JX Group's equity basis.

Maintain and Expand Production Volume over the Medium/Long Term



Production Plan



Latest Results

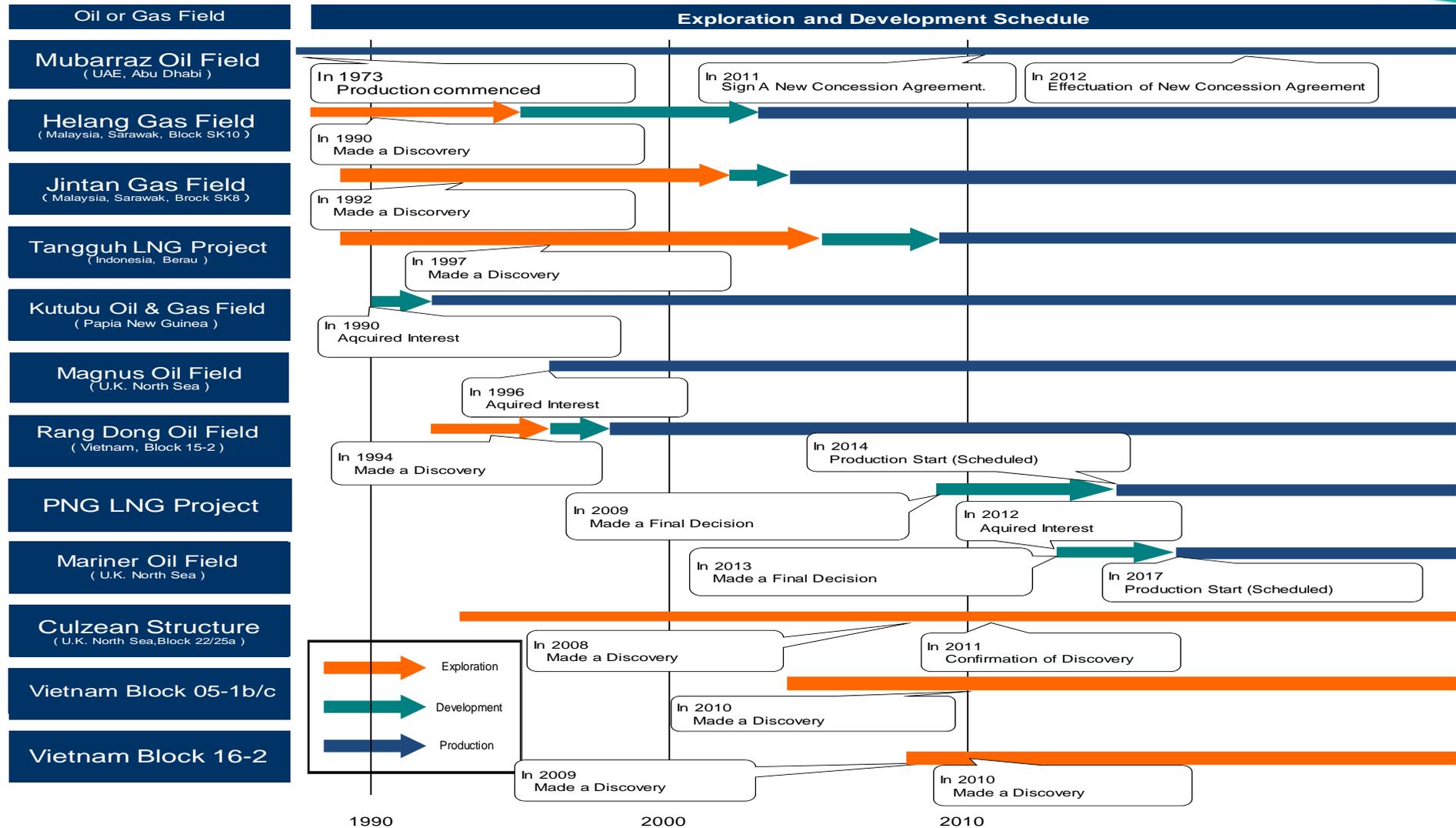
	Country (Block)	Type	Acquisition of rights	Discovery of oil and gas strata	Extent of strata confirmed	Renewed rights to oil fields in production
Jan. 2011	Vietnam (16-2)	Natural Gas		●		
Feb. 2011	UAE	Crude oil	●			●
	Vietnam (05-1b/c)	Crude oil/ Natural gas		●		
Mar. 2011	U.K. (Culzean)	Natural gas			●	
Apr. 2011	Australia (WA-290-P)	Natural gas		●		
	Papua New Guinea (PPL219)	Crude oil		●		
May 2011	Qatar (Block A)	Natural gas	●			
	Australia (WA-191-P)	Crude oil		●		
Jan. 2012	Malaysia (Deepwater Block R)	Crude oil	●			
Sep. 2012	Myanmar (M-11)	Natural gas	●			
Oct. 2012	Australia (WA435-P, WA437-P)	Natural gas	●			
Oct. 2012	U.K.	Crude oil/ Natural gas	●			
Dec. 2012	U.K. (Mariner)	Crude oil/ Natural gas	●			

Jan. 2012 Decision of development made

Feb. 2013 Decision of development made



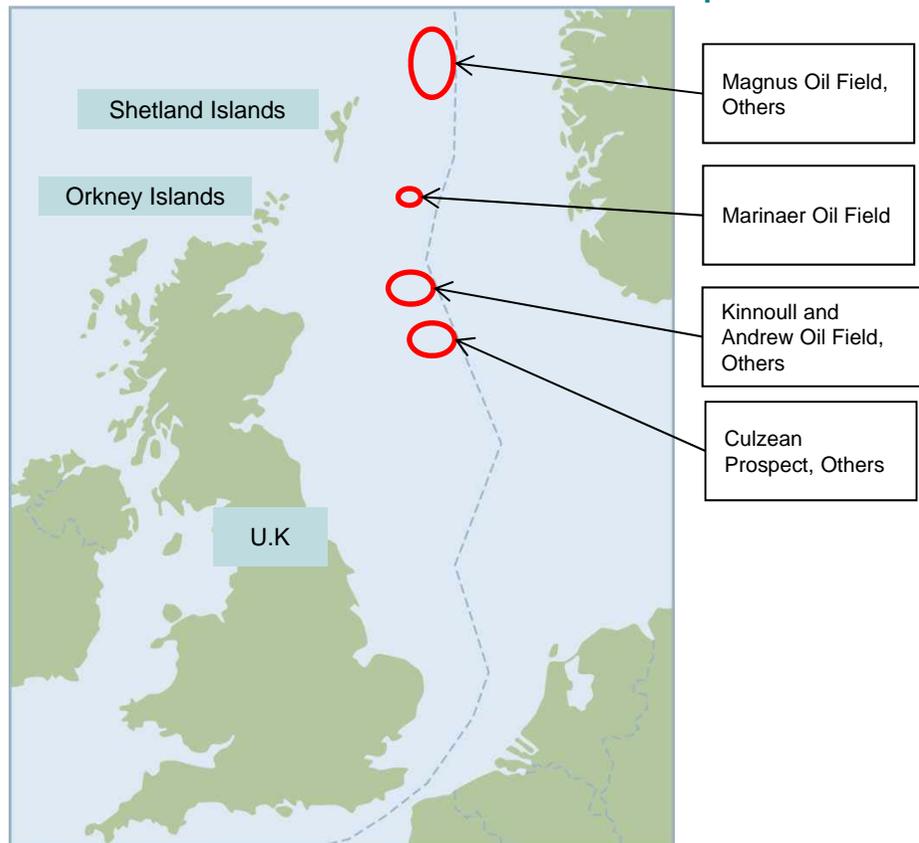
Production Schedule of Principal E&P Projects





Major Asset Acquisition in the UK North Sea

✓ The main features of this acquisition



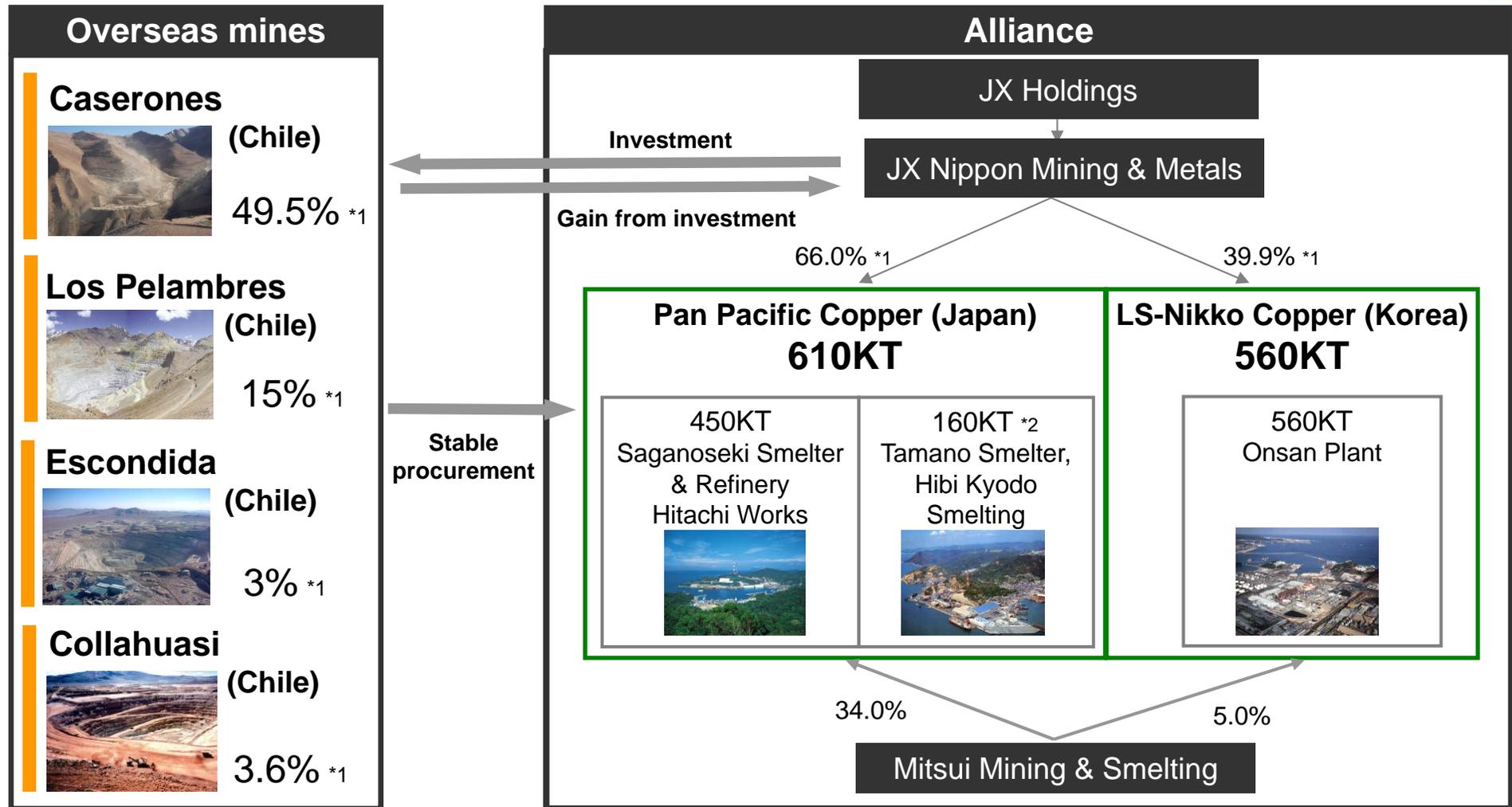
	Kinnoull Oil Field	Culzean Prospect	Mariner Oil Field
Blocks	16/23a, 16/24a	22/25e	9/11a
Partners (Interest)	BP 77.06% (Operator)	Maersk 49.99% (Operator)	Statoil 65.11% (Operator)
	JXNEPUK (*) 22.94% Existing 6.27% Additional 16.67%	JXNEPUK (*) 34.01% Existing 17.06% Additional 16.95%	JXNEPUK (*) 28.89% Existing — Additional 28.89%
		BP 16.00%	Cairn 6.00%
Project Status	Under Development (Production to be commenced in 2014)	Under Exploration	Under Development (Field Development Plan approved in Feb 2013)

* JX Nippon Exploration and Production (U.K.) Limited



Strategies of Metals Business

Copper Business



*1. Shares held by JX Nippon Mining & Metals

*2. Total Capacity is 260KT. PPC has 63.51% equity.

Overseas Copper Mine Development ①

Caserones Copper Mine (Chile)



Acquisition date May 2006

Acquisition price \$137 million

Initial investment \$ 3.00 billion

In July 2011, project finance(\$1.1billion) and long-term loan(\$0.3billion) are concluded.

Ownership

Pan Pacific Copper (PPC)* 75%

* Jointly established by JX Nippon Mining & Metals (66%) and Mitsui Mining & Smelting (34%)
Mitsui & Co., Ltd. 25%

Mine life

From 2013 to 2040 (28 years)

SX-EW Copper Cathode From 1Q. CY2013

Copper Concentrate From 4Q. CY2013

Total production (28years)

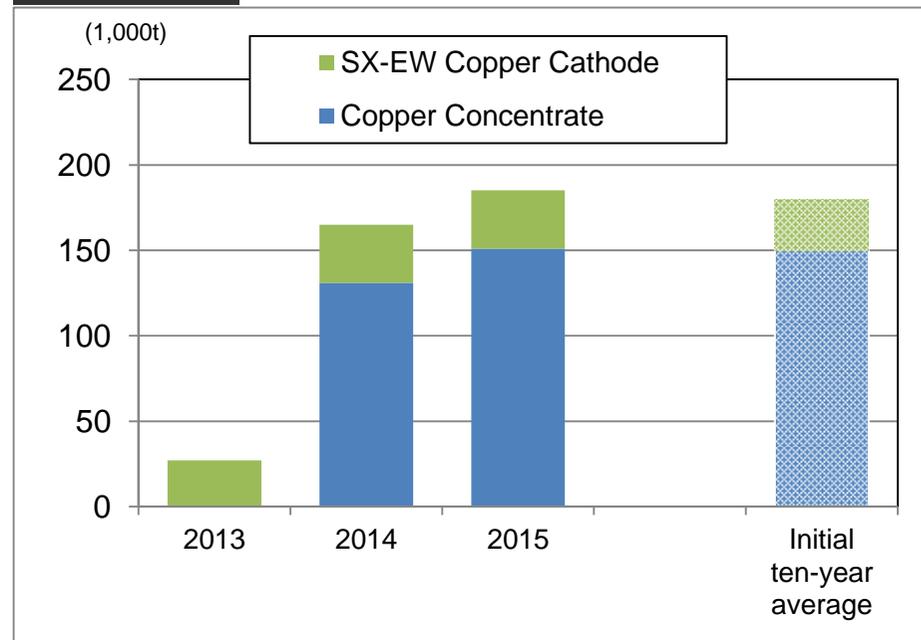
Copper : 3,550kt From Copper Concentrate 3,140kt

From SX-EW Process 410kt

Molybdenum : 87kt (3kt / year)



Production plan





Ownership

NGEx Resources Inc. (Canada) : 60%

Pan Pacific Copper (PPC) : 40%

*PPC is Jointly established by JX Nippon Mining(66%) and Mistui Mining & Smelting(34%)

PPC acquired the exploration rights in Sep. 2012 from JOGMEC (Japan Oil, Gas and Metals National Corporation)

Exploration results

Drilled exploring holes at Los Helados between 2004 and PPC's acquisition and confirmed existence of copper-gold deposit.

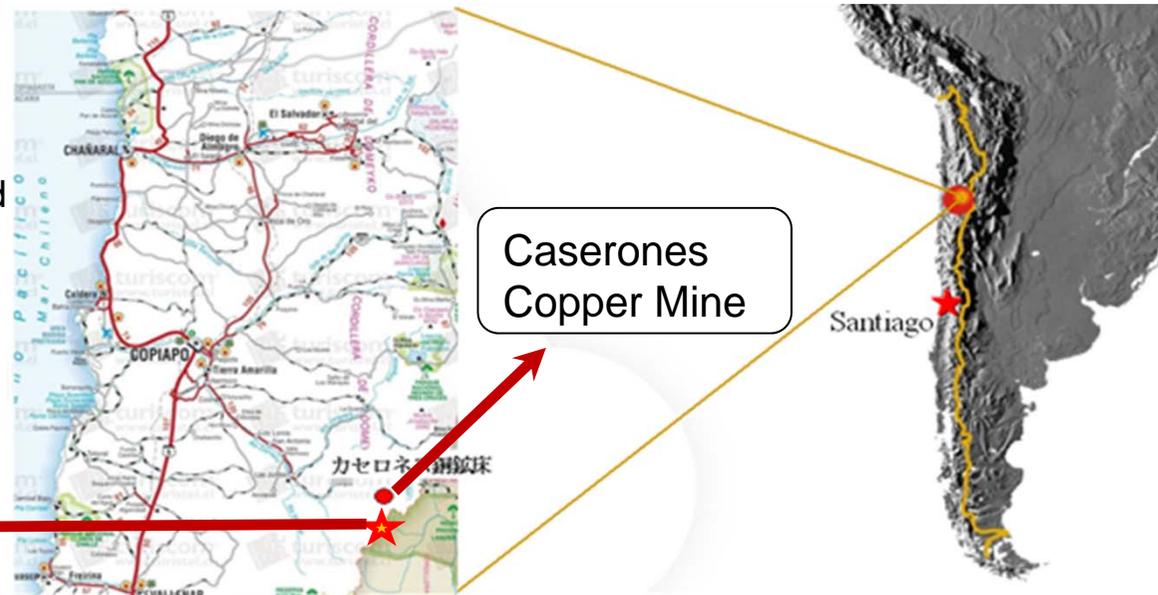
Frontera Area

Dimension : 24,000ha
Altitude : 4,400-4,900m

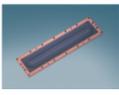
Main exploring areas

Los Helados (Chile, 20km south of the Caserones Copper Mine)

Filo del Sol (Argentina)



Electronic Materials

Main IT-related products	Global market share	Primary applications	End-use applications				
			PCs	Mobile phones / Smart phones	Digital, Avs	Telecom infra	Auto mobiles
 Treated rolled copper foil	 75% No. 1	Flexible printed circuit boards	○	◎	◎		
 Semiconductor targets	 60% No. 1	CPUs, memory chips, etc.	◎	○	◎	○	○
 ITO targets for FPDs *1	 30% No. 1	Transparent electrodes	◎	○	◎		
 HD media targets	 30% No. 2	HDD (Hard disk drives), etc.	◎	○			
 Phosphor bronze	 20% No. 1	Connectors	◎	○	○		○
 Corson alloy (C7025)	 45% No. 1	Lead frames, Connectors	◎	○	○		○
 Titanium copper alloy	 70% No. 1	High-class connectors, etc.	○	◎	○		
 In-P compound semiconductors	 50% No. 1	Optical communication devices High-speed IC			○	◎	○

*1 Flat Panel Display

Electronic Materials (Kakegawa Works)

✓ Expansion of Automotive Related Business

➤ Eco-friendly Car market which is applying full of environmental technology has a high potential of growth in near future.



➤ Demand for connectors used in electric components of eco- friendly car is expected to expand further.

✓ Construction of Integrated Plant of Connector (Kakegawa Works)

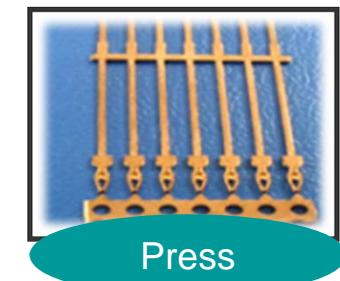
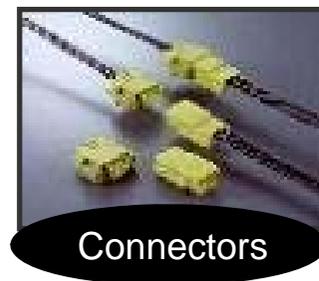
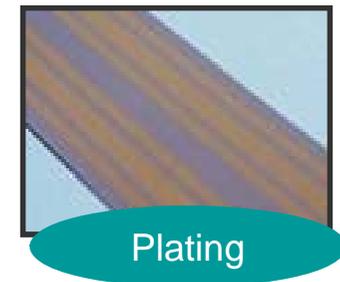
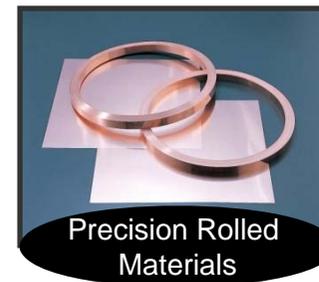
➤ Decided to construct a new plant in Kakegawa with integrated production system (press, plating and assembly) for connector (Feb. 2011).

➤ Started operation (Apr. 2013) .



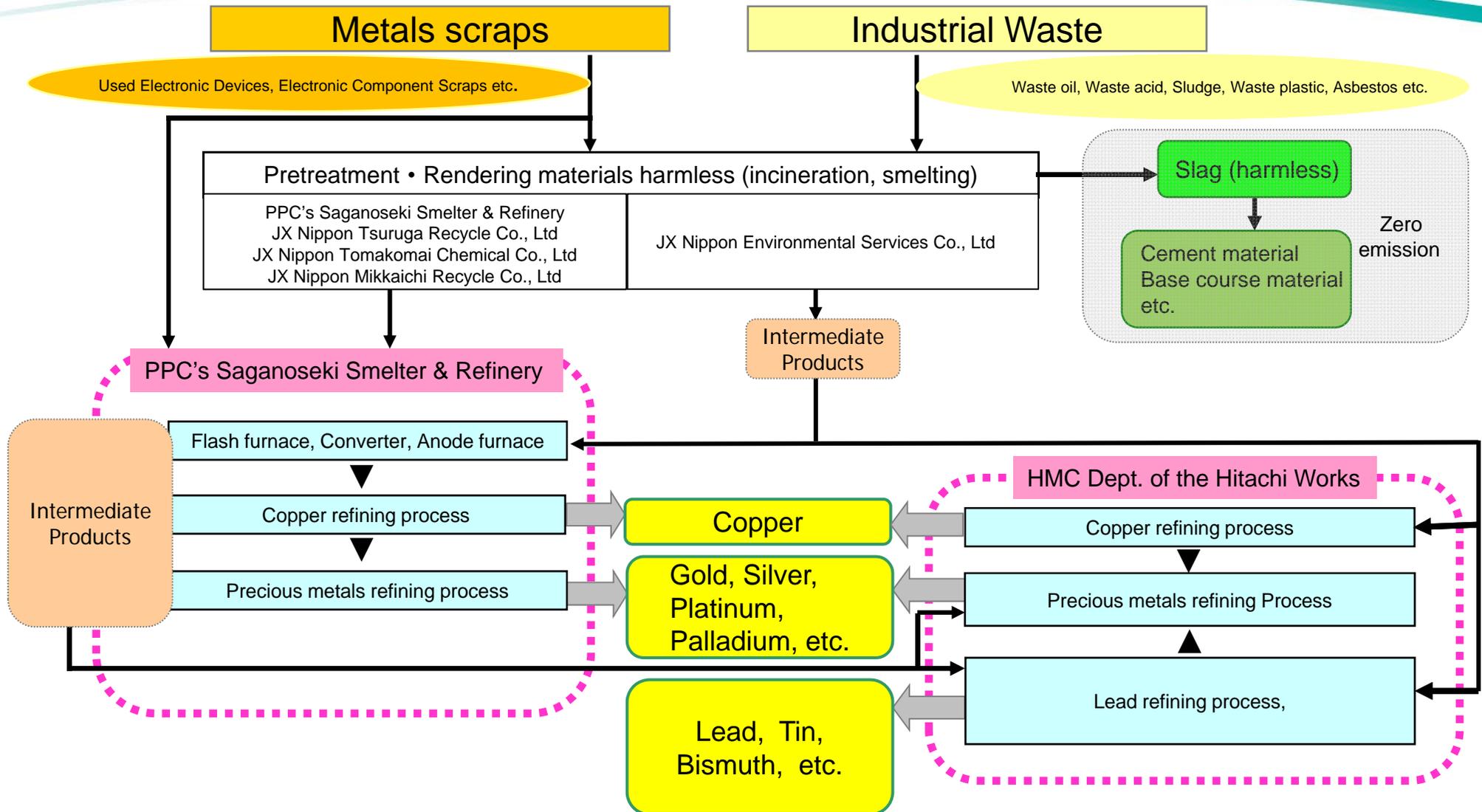
✓ Integrated Production System of Connector and Precision Materials

Process \ Use•Product	Press	Plating	Assembly
Connector for Automobile etc.	Kakegawa Works		
Connector for IT etc.	Nasu Works	Esashi Works Tatebayashi Works	Nasu Works





Recycling and Environmental Services Business





Next Page

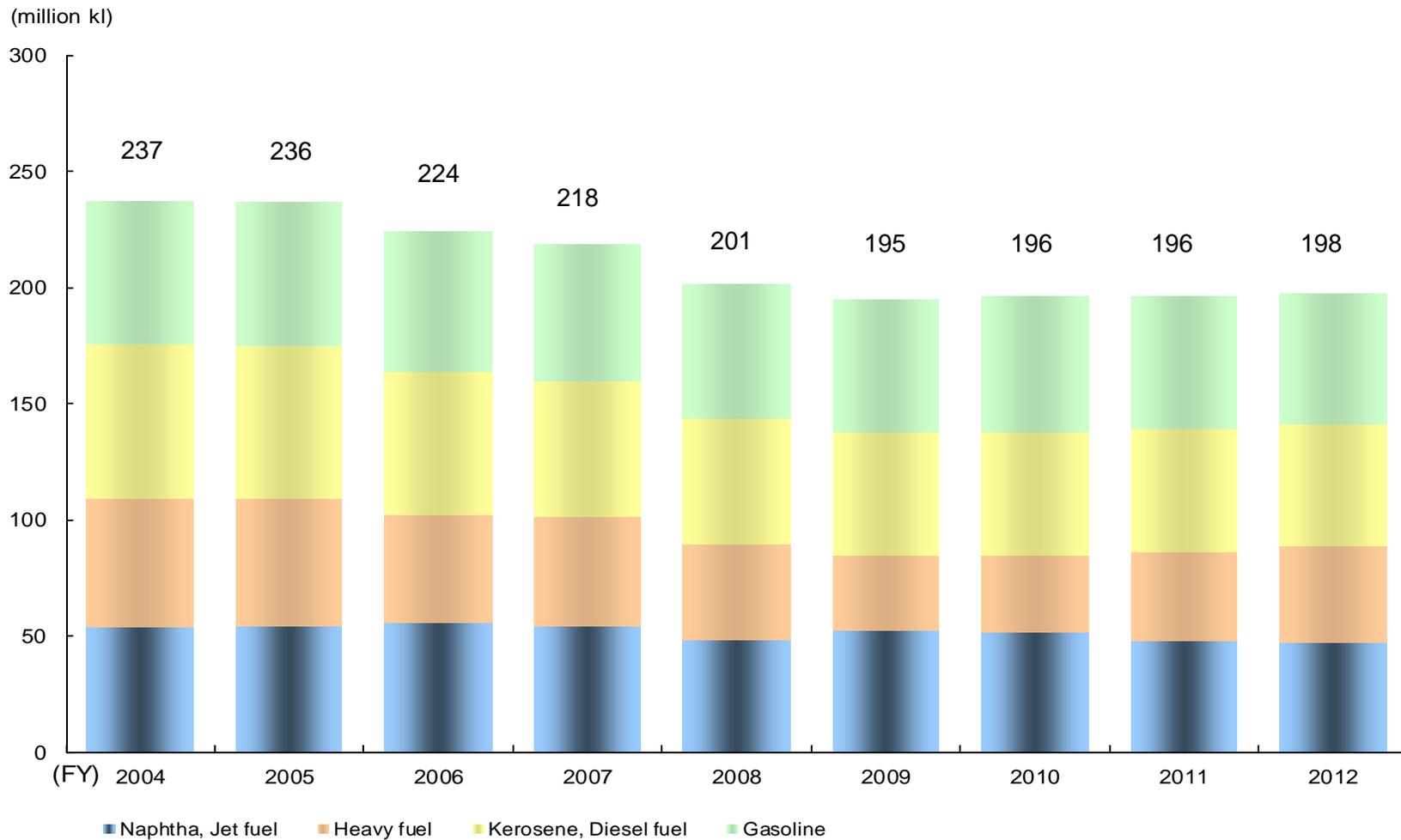
Business Environment and Data (Energy Business)



Business Environment and Data - Energy Business -



Demand for Petroleum Products (Japan)



Note: Excluding Crude Oil for electric power plants.

Source: Petroleum Association of Japan and Company data

JX Group's Market Share and Historical CDU^{*1} Utilization Rate, and Demand in Japan



Domestic Market Share

	FY2009 (%)	FY2010 (%)	FY2011 (%)	FY2012 (%)
a) Gasoline	34.8	34.2	33.5	33.7
b) Kerosene	41.9	39.2	40.3	39.8
c) Diesel Fuel	37.6	36.7	37.1	37.8
d) Fuel Oil A	42.5	41.6	43.6	44.7
a+b+c+d	37.7	36.6	36.7	37.0
Total Domestic Fuel ^{*2}	33.9	32.7	35.9	36.5

Domestic Demand

	FY2009 (1,000KL)	FY2010 (1,000KL)	FY2011 (1,000KL)	FY2012 (1,000KL)	Changes vs. FY2011 (1,000KL)
a) Gasoline	57,464	58,158	57,214	56,456	98.7
b) Kerosene	20,056	20,347	19,619	18,973	96.7
c) Diesel Fuel	32,388	32,892	32,866	33,449	101.8
d) Fuel Oil A	16,043	15,424	14,680	13,749	93.7
a+b+c+d	125,951	126,820	124,379	122,626	98.6
Total Domestic Fuel ^{*2}	194,988	196,019	196,055	197,562	100.8

CDU Utilization Rate^{*1} (Excluding the impact of periodic repair and earthquake)

	FY2009	FY2010	FY2011	FY2012
JX Group ^{*3}	78%	86%	88%	87%

*1 Crude Distillation Unit

*2 Excluding crude oil for electric plants

*3 Excluding condensate splitters of Mizushima and Kashima



Number of Service Stations (Fixed-Type)

(As of the end of fiscal years)

	FY2009	FY2010	FY2011	FY2012
JX Group	12,687	12,149	11,730	11,283
EMG ^{*1}	4,199	3,979	3,773	3,475
Idemitsu Kosan	4,338	4,148	3,997	3,861
Showa Shell Sekiyu	4,102	3,922	3,760	3,555
Cosmo Oil	3,768	3,609	3,498	3,325
Others ^{*2}	1,245	1,194	1,160	1,130
Oil Companies	30,339 (76.8%)	29,001 (76.5%)	27,918 (75.7%)	26,629 (75.7%)
Private Brands and Others ^{*3}	9,161 (23.2%)	8,899 (23.5%)	8,982 (24.3%)	8,571 (24.3%)
Total ^{*3}	39,500	37,900	36,900	35,200

Notes: ^{*1}. Figures are total of Esso, Mobil and Tonen General Sekiyu.

^{*2}. Figures are total of Taiyo Petroleum, Mitsui Oil & Gas and Kygnus Sekiyu.

^{*3}. Estimated by JX Holdings.

^{*4}. Figures include only self-service retail outlets that are affiliated to oil companies.

<Number of Company-Owned Service Stations>

(As of the end of fiscal years)

	FY2009	FY2010	FY2011	FY2012
JX Group	2,893	2,701	2,573	2,487

<Number of Self-Service Stations>

(As of the end of fiscal years)

	FY2009	FY2010	FY2011	FY2012
JX Group	2,378	2,385	2,423	2,535
Total for Japan ^{*4}	6,906	6,935	7,001	7,172

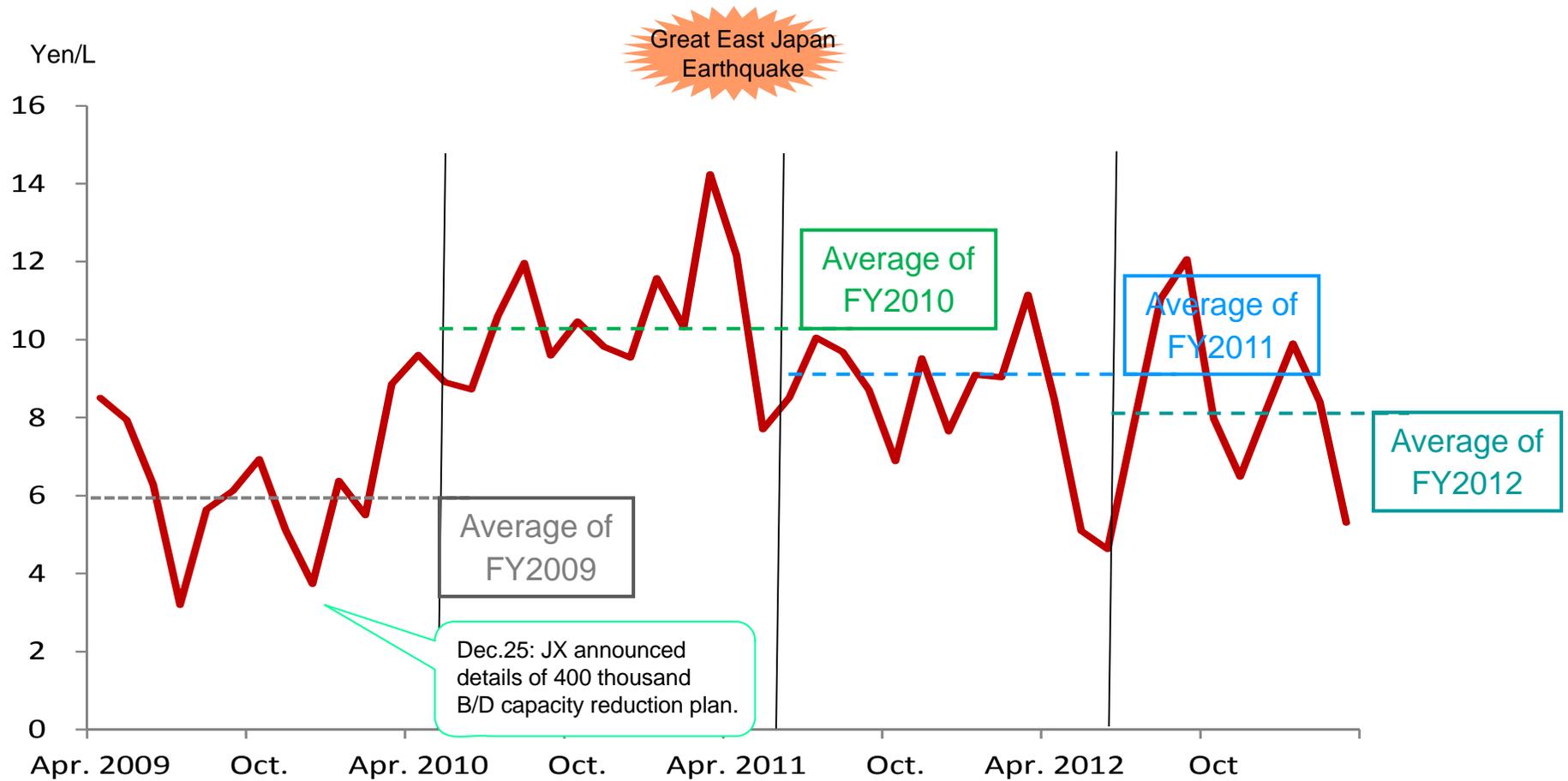


Sales Volume by Product

	FY2009	FY2010	FY2011	FY2012	Changes vs. FY 2011
	million KL	million KL	million KL	million KL	
Gasoline	2,002	1,990	1,919	1,904	-0.8%
Premium	295	279	253	239	-5.5%
Regular	1,696	1,700	1,654	1,654	0.0%
Naphtha	427	376	366	393	7.4%
JET	156	145	144	157	9.0%
Kerosene	799	755	748	711	-4.9%
Diesel Fuel	1,206	1,198	1,216	1,264	3.9%
Fuel Oil A	682	641	640	614	-4.1%
Heavy Fuel Oil C	631	645	912	1,039	13.9%
For Electric Power	325	366	617	777	25.9%
For General Use	306	279	295	262	-11.2%
Total Domestic Fuel	5,903	5,750	5,945	6,082	2.3%
Crude Oil	114	149	430	509	18.4%
Lubricants & Specialities	332	358	334	317	-5.1%
Petrochemicals (million ton)	5.82	5.63	5.52	5.58	1.1%
Exported Fuel	1,030	1,020	880	1,019	15.8%
LPG (million ton)	2.01	1.88	0.32	0.28	-12.5%
Coal (million ton)	4.44	5.66	5.33	5.64	5.8%
Total Excluding Barter Trade & Others	8,606	8,594	8,706	9,076	4.2%
Barter Trade & Others	2,705	2,348	2,081	1,932	-7.2%
Total	11,311	10,942	10,787	11,008	2.0%

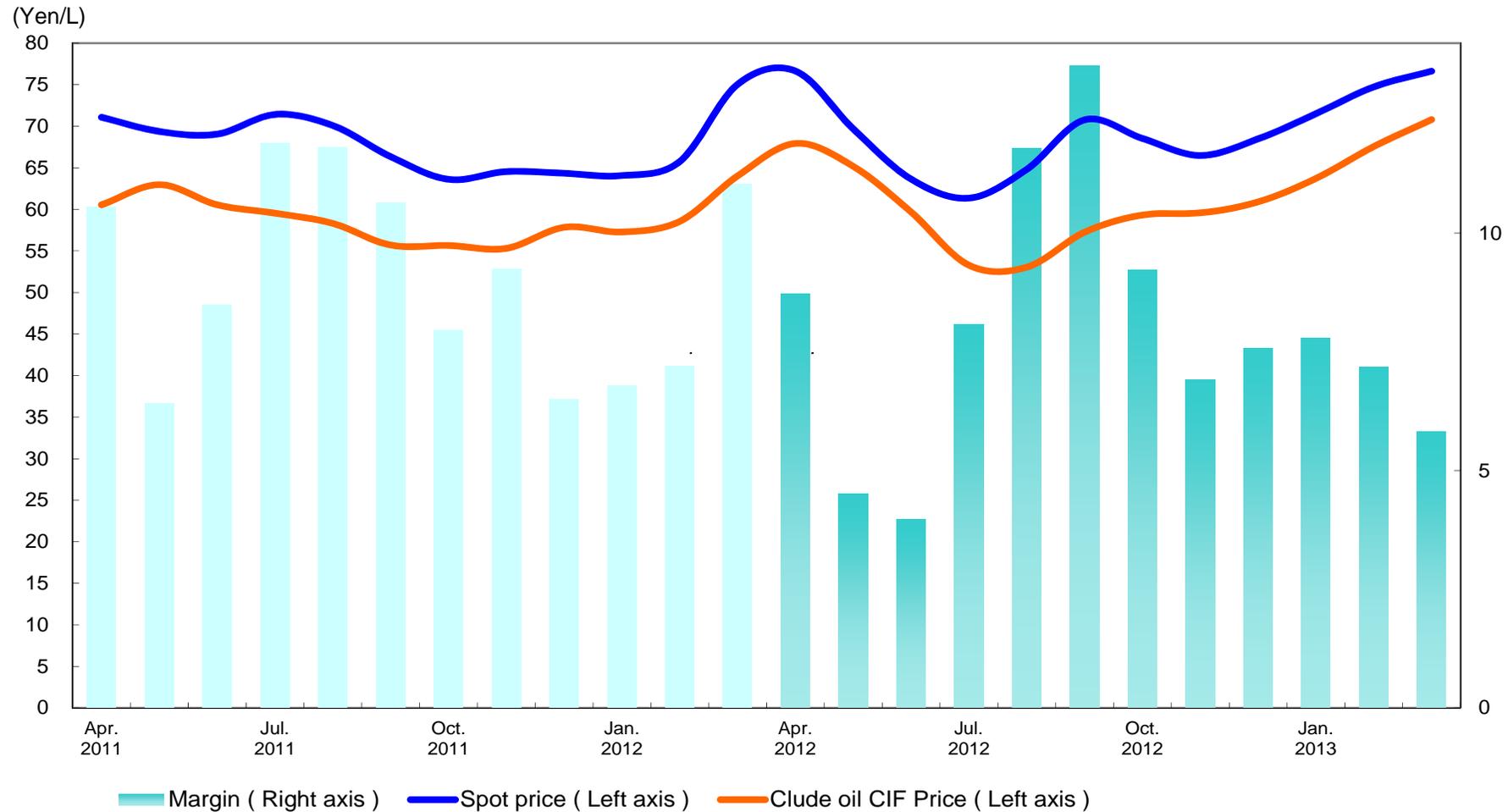


Margins of Gasoline, Kerosene, Diesel Fuel and Fuel Oil A





Domestic Market Margin* (Gasoline)

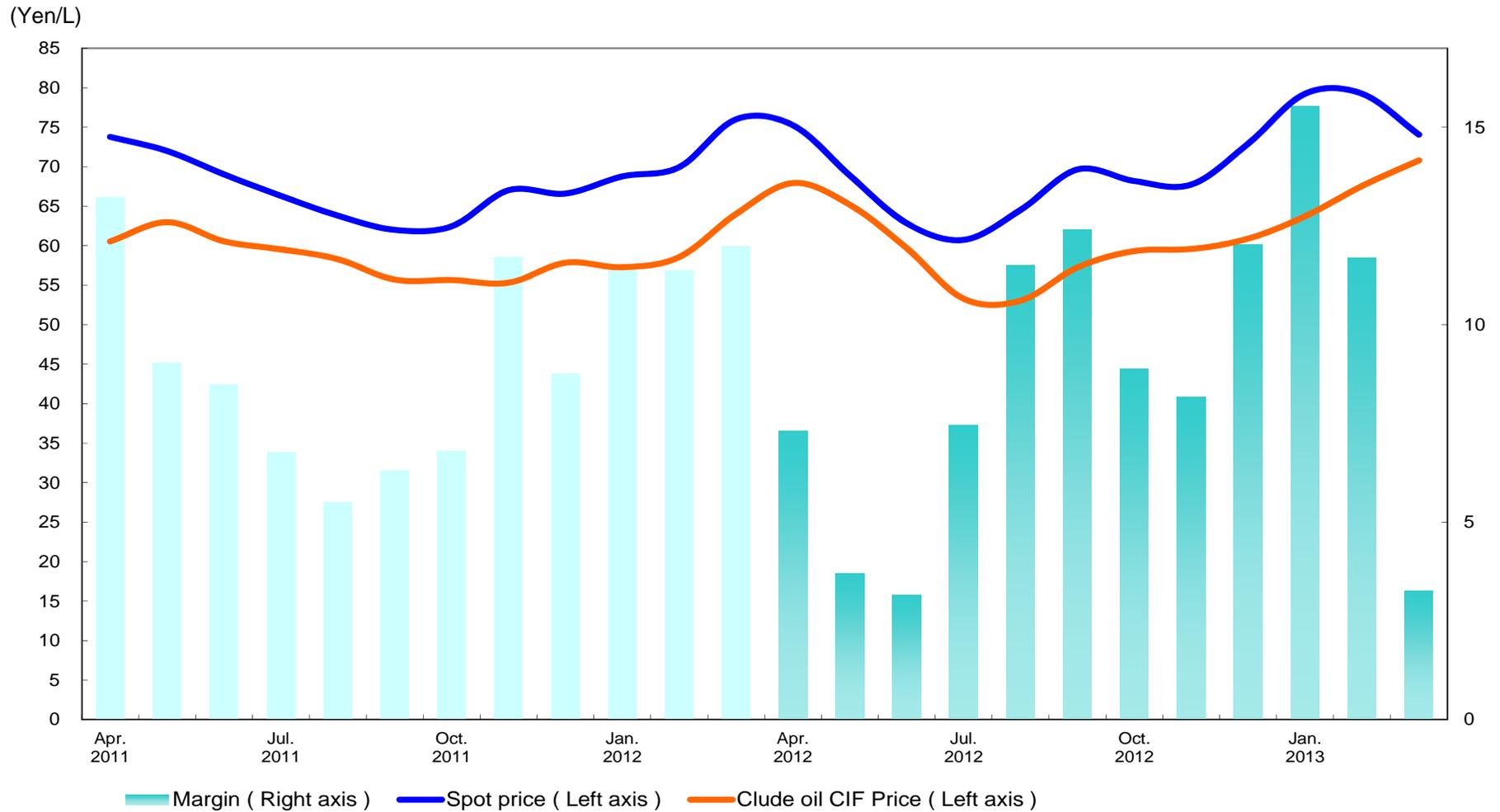


* Margin = Spot Price – All Japan Crude Oil CIF (including petroleum tax and interest)

Source : Trade statistics (Ministry of Finance, Japan)



Domestic Market Margin (Kerosene)



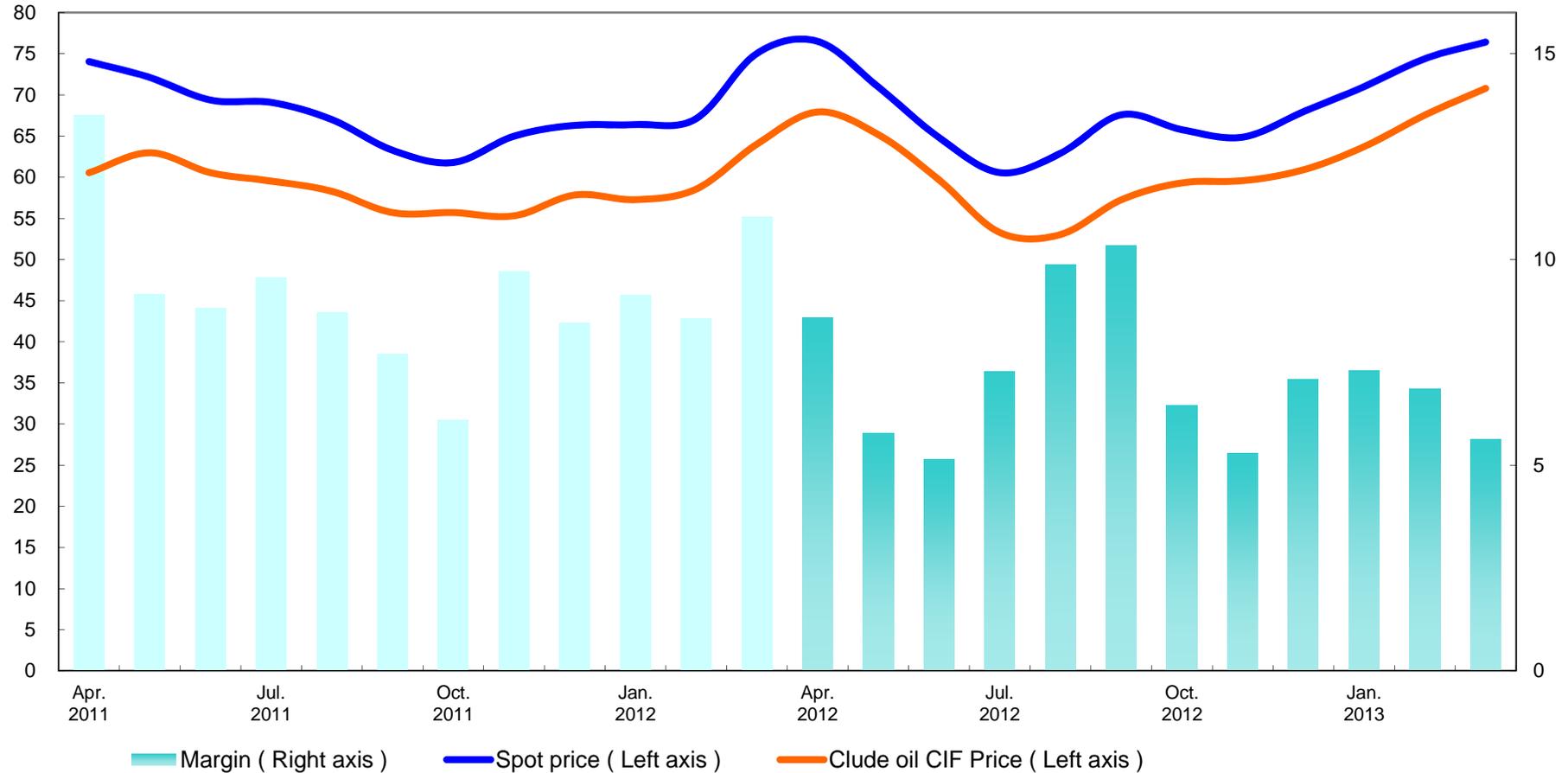
* Margin = Spot Price – All Japan Crude Oil CIF (including petroleum tax and interest)

Source : Trade statistics (Ministry of Finance, Japan)



Domestic Market Margin (Diesel Fuel)

(Yen/L)

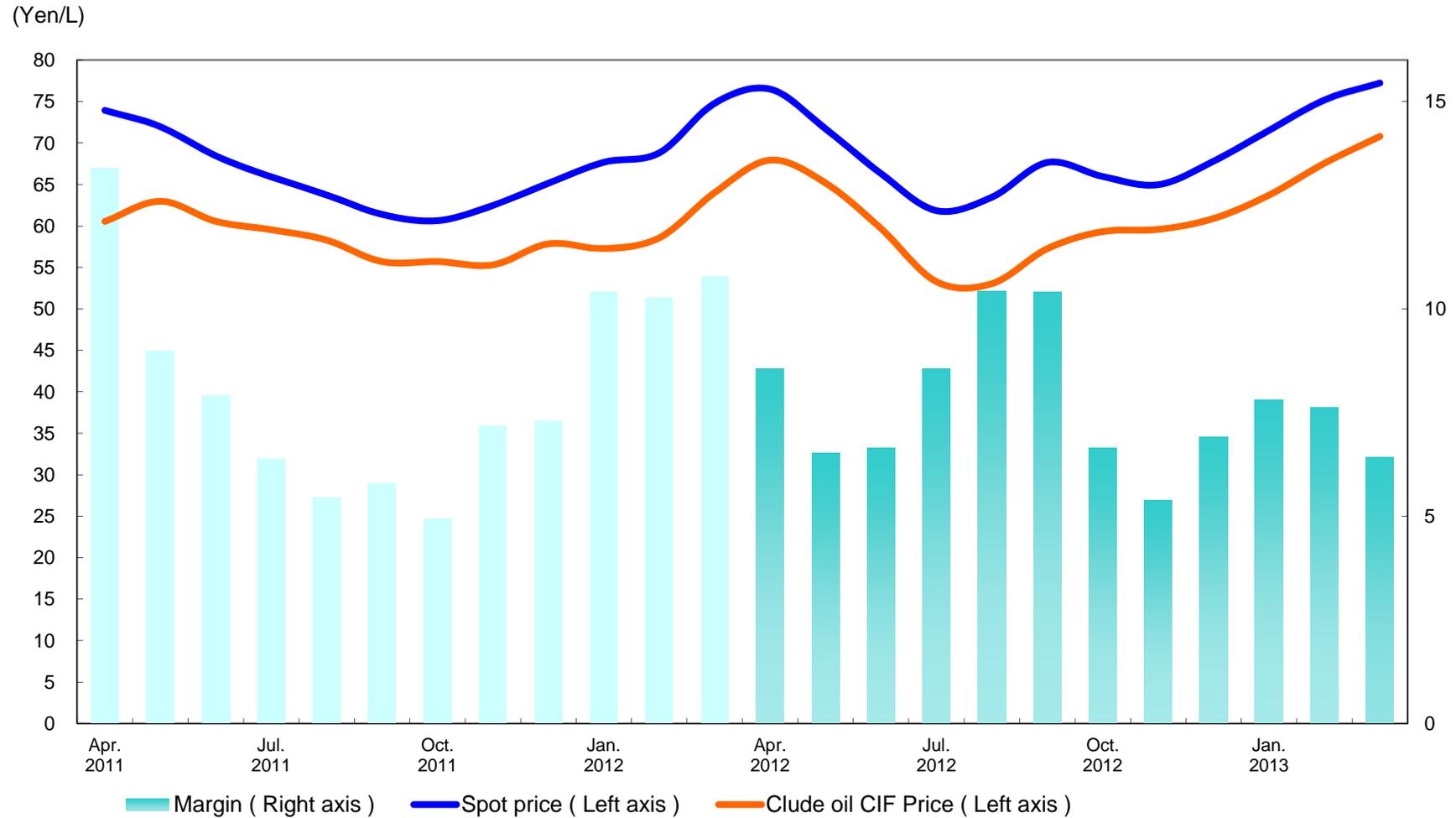


* Margin = Spot Price – All Japan Crude Oil CIF (including petroleum tax and interest)

Source : Trade statistics (Ministry of Finance, Japan)



Domestic Market Margin (Fuel Oil A)



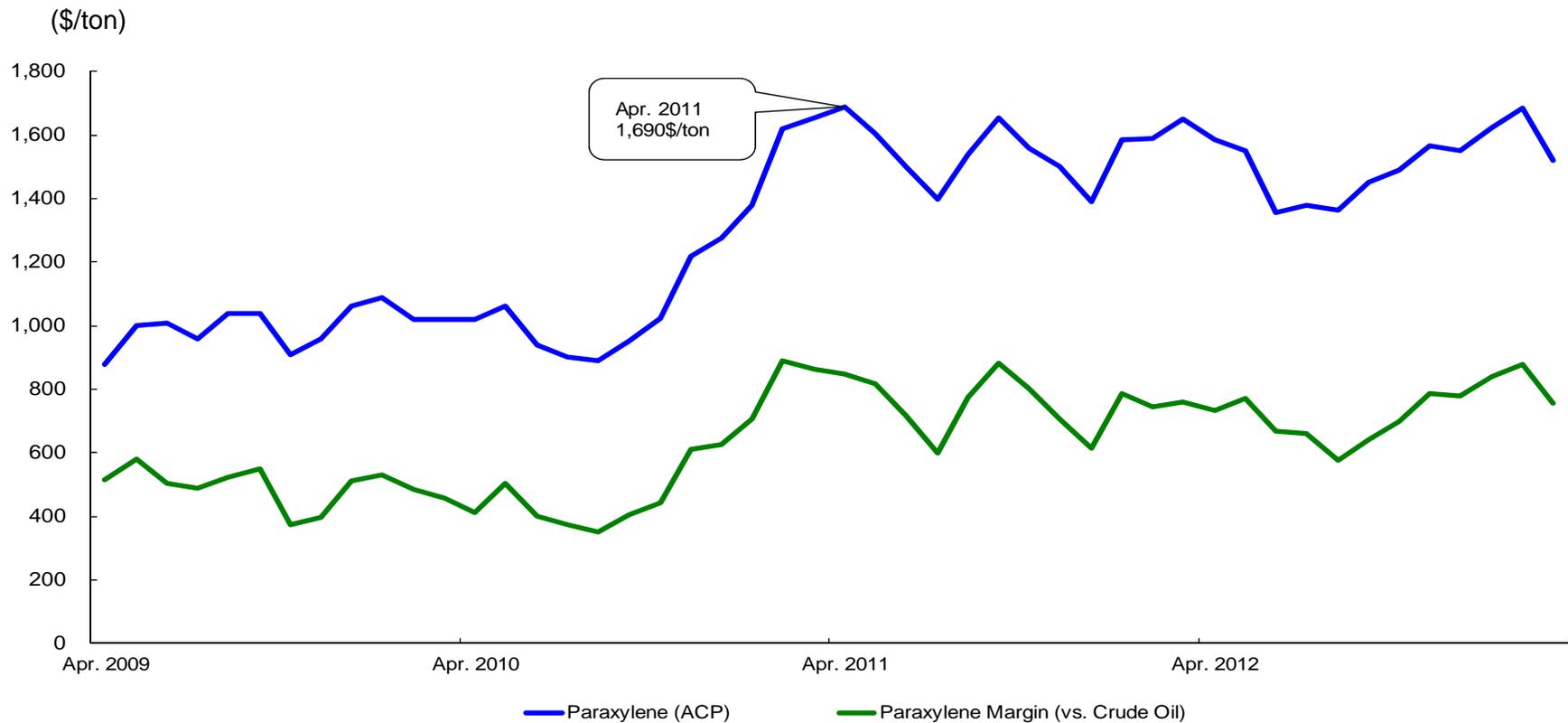
* Margin = Spot Price – All Japan Crude Oil CIF (including petroleum tax and interest)

Source : Trade statistics (Ministry of Finance, Japan)



Paraxylene Price and Margin (vs. Crude Oil)

Average Price	FY2009	FY2010	FY2011				FY2012			
			1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
Asian Contract Price	999	1,162	1,598	1,532	1,483	1,608	1,497	1,398	1,536	1,611
Margin (vs. Crude Oil)	493	550	793	753	708	764	723	625	754	824

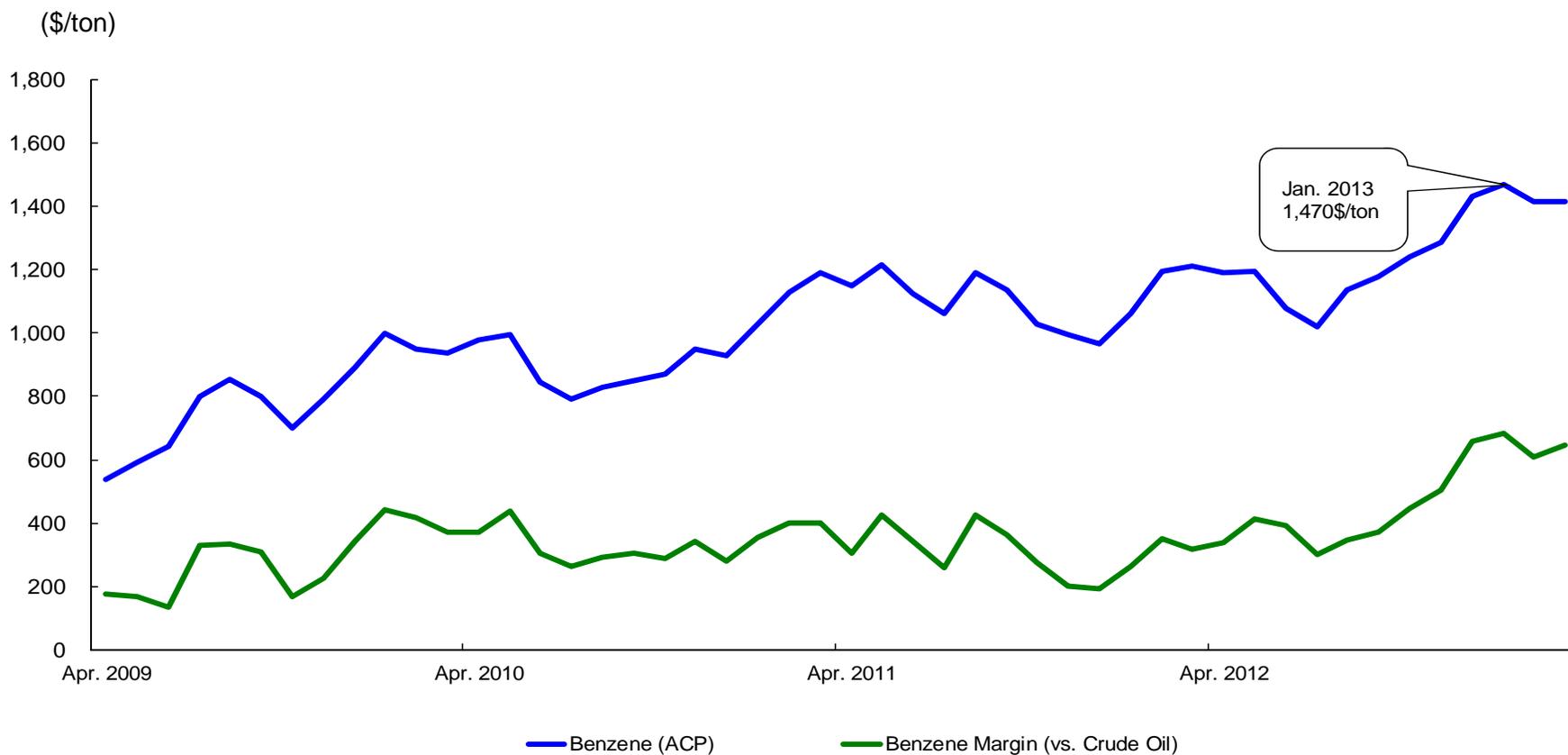


Note: In case of ACP undecided, average price of spot market is adopted.



Benzene Price and Margin (vs. Crude Oil)

Average Price	FY2009	FY2010	FY2011				FY2012			
			1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
Asian Contract Price	791	948	1,163	1,128	997	1,155	1,155	1,112	1,318	1,433
Margin (vs. Crude Oil)	285	336	358	349	222	310	382	338	537	646

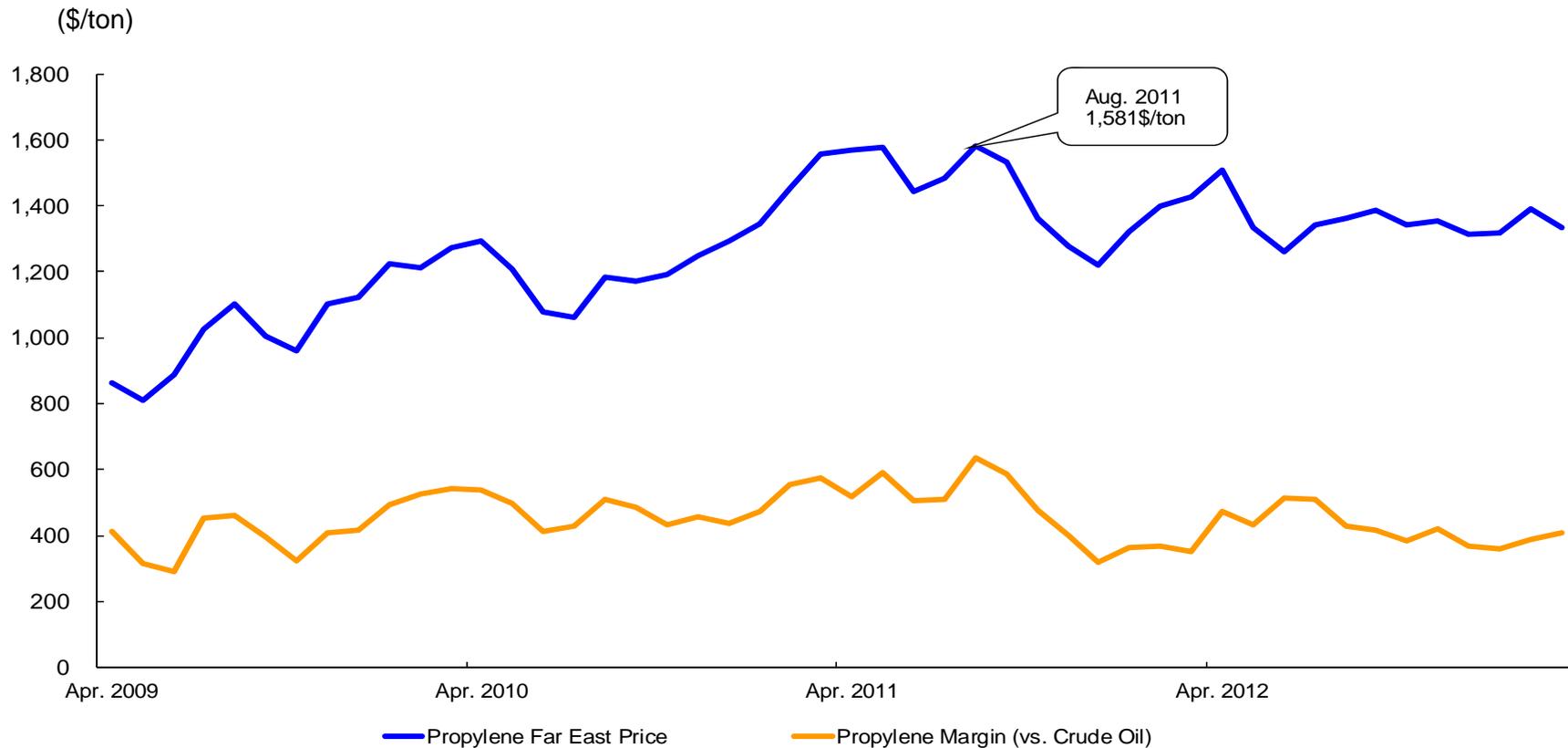




Propylene Price and Margin (vs. Naphtha)

(\$/ton)

Average Price	FY2009	FY2010	FY2011				FY2012			
			1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
Far East Spot Price	1,050	1,258	1,531	1,533	1,287	1,383	1,367	1,364	1,336	1,347
Margin (vs. Naphtha)	420	484	538	577	399	362	474	452	392	385





Business Environment
- Oil and Natural Gas E&P Business -



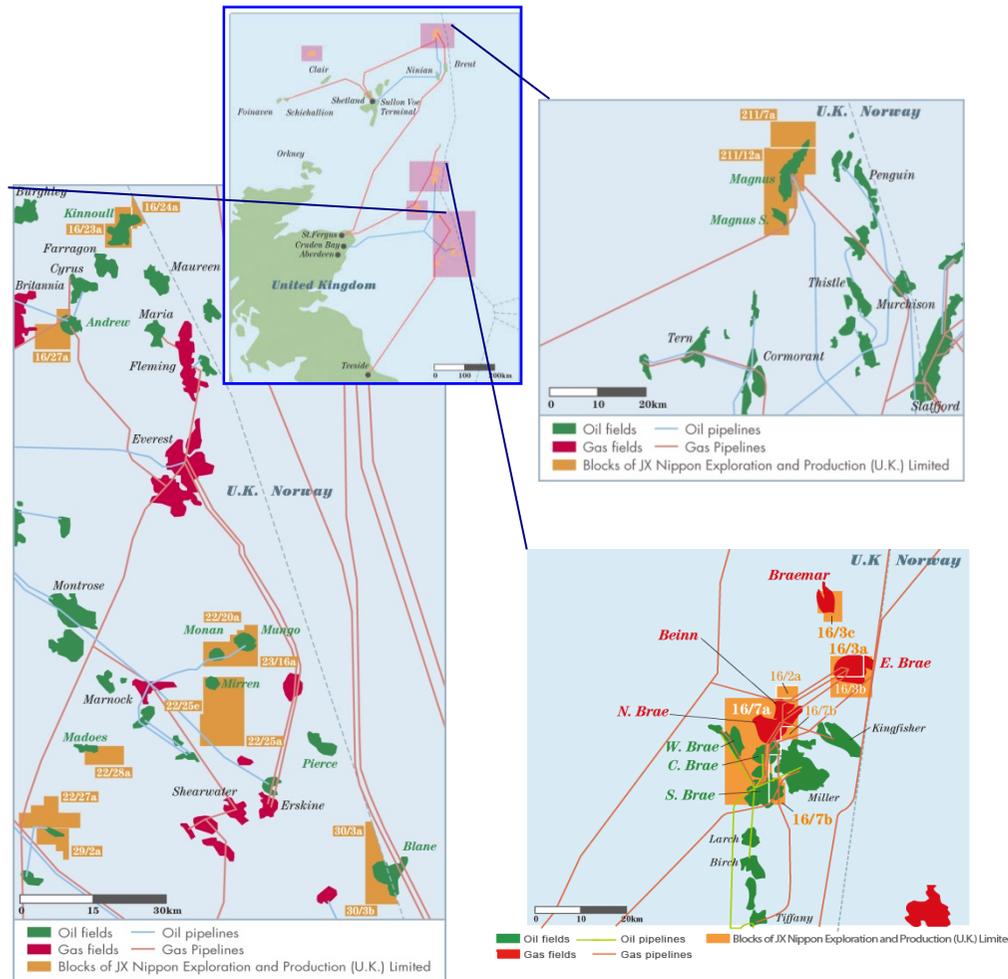
Principal Individual E&P Project Overview (U.K. ①)

U.K. North Sea ①

Production

Development

Exploration



	Magnus, Brae, Andrew, Blane and other fields
Company Holding the Acreages	JX Nippon Exploration and Production (U.K.) Ltd.
Shareholders(Holding Percentages)	JX Nippon Oil & Gas Exploration (100%)
Project Status	Exploration / Development / Production
Interest	2.1%~85.0%
Partners	BP, Shell, Marathon, Others
Sales Volume (Jan.-Dec. 2012)	6,000boed (oil 4,600b/d, gas 8.4mmcf/d)

UK (North Sea) is one of core countries with many opportunities to acquire exploration, development and production assets and the infrastructure related to them. We have over 10 fields currently producing oil and gas as well as several projects underway where development is envisaged to commence within the next few years. We are striving to acquire new acreages through open bid rounds as well as pursuing farm in and other opportunities.

Production

Mining Area during the production

Andrew, Mungo / Monan, Mirren / Madoes, Blane
Magnus Oil Fields , Brae Gas Field etc

- From 1994 to 2002, acquired a working interest in individual blocks.

Development

Mining Area during Development : Kinnoull Oil Field

- In August 2012, Acquired interest in Kinnoull Field which is under development, by exchanging interest in Pierce Field.

Exploration

Mining Area during Exploration

22/25a (Culzean Prospect) etc

- In March 2011, confirmed the presence of a significant hydrocarbon accumulation.

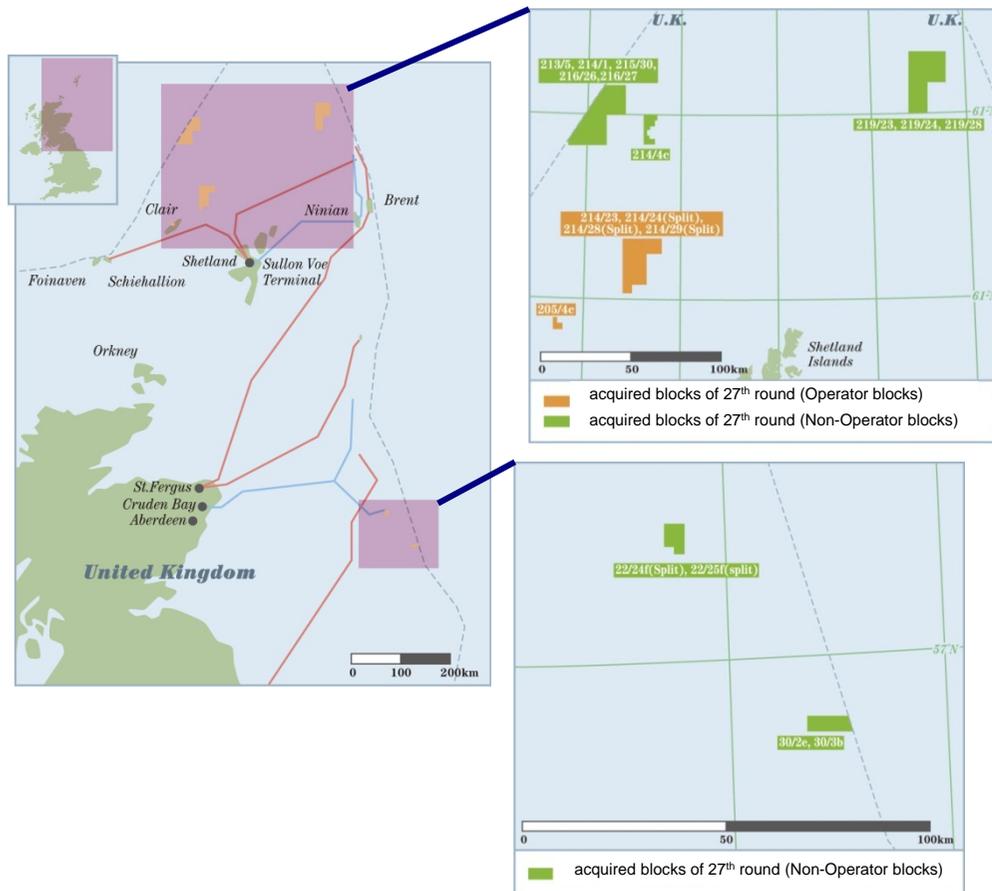


Principal Individual E&P Project Overview (U.K. ②)

U.K. North Sea ②

Exploration

New blocks are acquired in 2012 by 27th round of governmental open tender .



Project Company

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

Operator blocks

West of Shetlands Area

205/4c

214/23, 214/24, 214/28, 214/29

Non-Operator blocks

North Sea Northern Area

219/23, 219/24, 219/28

North Sea Central Area

22/24f, 22/25f

30/2e, 30/3b

West of Shetlands Area

213/5, 214/1, 214/4c, 215/30, 216/26, 216/27

Operators

GDF Suez, OMV, Maersk



Principal Individual E&P Project Overview (Gulf of Mexico ①)

Gulf of Mexico Production Exploration



	Orchard North, K2 and other fields	Davy Jones
Company Holding the Acreages	JX Nippon Oil Exploration (U.S.A.) Ltd.	JX Nippon Oil Exploration (Gulf) Ltd.
Shareholders (Holding Percentages)	JX Nippon Oil & Gas Exploration (100%)	JX Nippon Oil Exploration (U.S.A.) Ltd.
Project Status	Production	Exploration
Interest	11.6%~62.5%	12.00%
Partners	Anadarko Apache McMoRan Others	McMoRan Oil & Gas LLC(63.36%) Enrgy XXI GOM, LLC(15.84%) Moncrief Offshore LLC(8.80%)
Operator	Anadarko, Hilcorp Energy, Others	McMoRan
Sales Volume (Jan.-Dec. 2012)	3,700boed (oil 2,400 b/d, gas 7.8mmcf/d)	-



Principal Individual E&P Project Overview (Gulf of Mexico ②)

Orchard North, K2 and other fields

Production

Mining Area during the production K2, Orchard North, MP140, ST179, WC265/266

We hold assets in the Gulf of Mexico in the United States, which range from the continental shelf (less than 200meters in depth) to deep water area (more than 200 meter in depth).

- In 1990, 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, purchased interests in certain producing assets in the Gulf of Mexico from Devon in 2005 and from Anadarko in 2007.
- In September 2010, sold some assets of shallow water and deep water areas.

Davy Jones

Exploration

- In August 2009, commenced Exploration.
- In January 2010, discovered natural gas.
- In February 2011, confirmed the spread of hydrocarbon on [Davy Jones Prospect](#).
- In March 2012, confirmed natural gas flow.



Principal Individual E&P Project Overview (Canada)



	Syncrude Project
Company Holding the Acreages	Japan Canada Oil/Mocal Energy
Shareholders(Holding Percentages)	JX Nippon Oil & Gas Exploration (100%)
Project Status	Development / Production
Interest	5.0%
Partners	Canadian Oil Sands (36.7%) Imperial Oil Resources (25.0%) Suncor Energy (12.0%) Sinopec (9.0%) Nexen (7.2%) Murphy Oil Company (5.0%)
Operator	Syncrude Canada
Sales Volume (Jan.-Dec. 2012)	14,300boed (oil 14,300b/d)

We are a partner in the Syncrude Project that produces synthetic crude oil from oil sand, the sand containing bitumen, huge deposits of which are found in Canada.

Production

- In 1978, Started Shipment of Synthetic Crude Oil.
- In 1992, acquired a working interest from PetroCanada.



Next Page

Oil and Natural Gas E&P Business

Principal Individual E&P Project Overview (Vietnam ①)



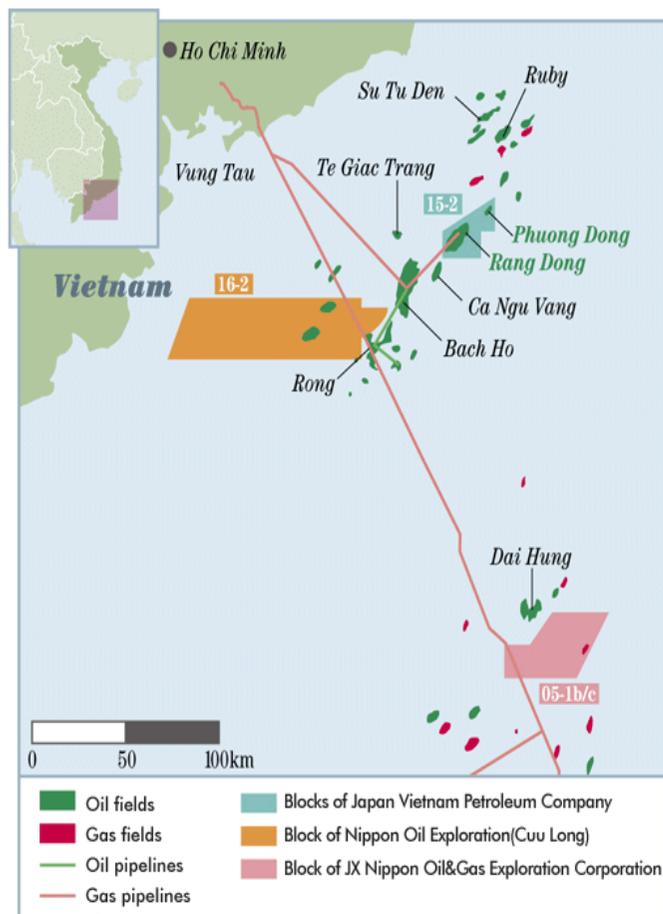
Principal Individual E&P Project Overview (Vietnam ①)

Vietnam

Production

Development

Exploration



	Block 15-2		Block 16-2	Block 05-1b/c
	Rang Dong Oil Field	Phuong Dong Oil Field		
Company Holding the Acreages	Japan Vietnam Petroleum Company		Nippon Oil Exploration (Cuu Long)	JX Nippon Oil & Gas Exploration (100%)
Shareholders(Holding Percentages)	JX Nippon Oil & Gas Exploration (97.1%) Mitsubishi Corporation (2.9%)		JX Nippon Oil & Gas Exploration (29.5%) JOGMEC (70.5%)	-
Project Status	Exploration/Development/Production		Exploration	Exploration
Interest	46.5%	64.5%	40.0%	35.0%
Partners	PVEP (17.5%) Conoco Phillips (36.0%)	PVEP (35.5%)	PVEP (45.0%) VSP (15.0%)	Idemitsu Oil & Gas (35.0%) INPEX (30.0%)
Operator	Japan Vietnam Petroleum Company		PVEP	Idemitsu Oil & Gas
Sales Volume (Jan.-Dec. 2012)	7,500 boed (oil 5,900b/d, gas 9.6mmcf/d)		-	-



Principal Individual E&P Project Overview (Vietnam ②)

Block 15-2 (Rang Dong, Phuong Dong Oil Fields)

Production

Development

Exploration

Since the acquisition in 1992, the project has been one of our key operations. JVPC, our subsidiary, act as operator in the block.

The Rang Dong Oil Field and The Phuong Dong Oil Field feature an unconventional fractured granite basement rock reservoir that is unique in the world. Our fracture evaluation technology is highly valued and receiving worldwide recognition.

As part of our corporate activities, we have been promoting social welfare activities in Vietnam to improve the lives of the people of Vietnam, furthermore, we have been implementing a CDM project aimed at reducing greenhouse gas emissions.

- In 1992, JVPC acquired a working interest in block 15-2
- In 1994, JVPC discovered the [Rang Dong Oil Field](#) within block 15-2, and it began production in that field from 1998.
- In February 2008 and April 2011, 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 Oil Field](#).

Block 16-2

Exploration

- In November 2007, acquired a working interest in [block 16-2](#) offshore Vietnam.
- In November 2009, excavated test well No.1, and discovered gas and condensate.
- In August 2010, excavated test well No.2, and discovered gas and condensate.
- In April 2011, excavated appraisal well No1.

Block 05-1b/c

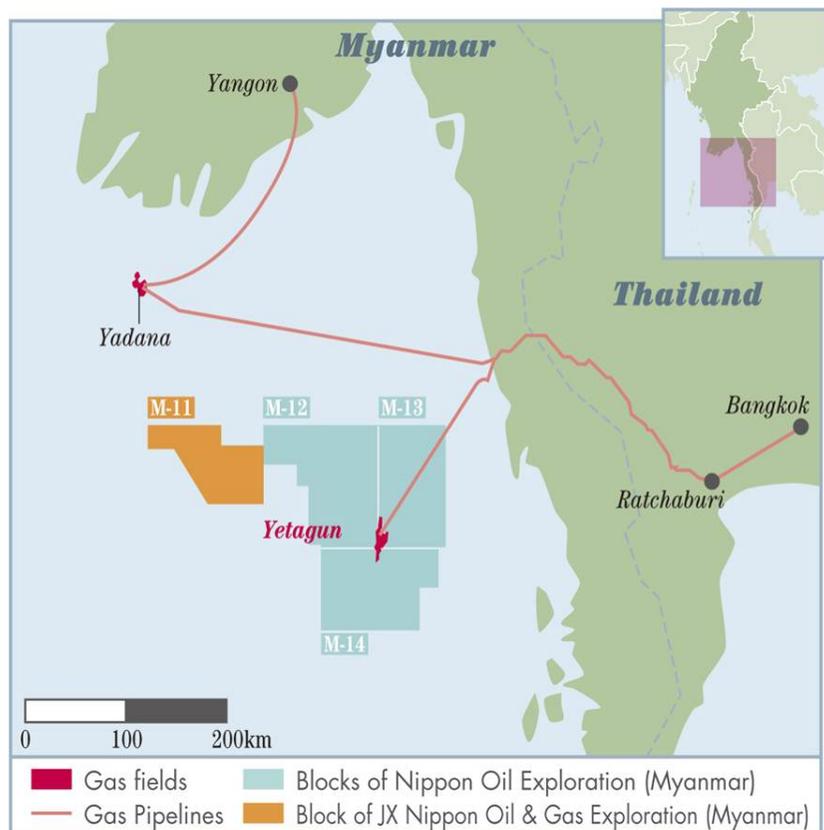
Exploration

- In October 2004, acquired a working interest in [block 05-1b/c](#) offshore Vietnam.
- In February 2007, excavated test well No.1.
- In August 2010, excavated test well No.2, and discovered gas and oil.
- In August 2012, excavated appraisal well No.1.



Principal Individual E&P Project Overview (Myanmar ①)

Myanmar Production Development Exploration



	M-12, 13, 14	M-11
Company Holding the Acreages	Nippon Oil Exploration (Myanmar)	JX Nippon Oil & Gas Exploration (Myanmar)
Shareholders(Holding Percentages)	JX Nippon Oil & Gas Exploration (50%) Government of Japan (50%)	JX Nippon Oil & Gas Exploration (100%)
Project Status	Exploration / Development / Production	Exploration
Interest	19.3%	15.0%
Partners	Petronas Carigali (40.9%) MOGE(20.5%) PTTEP International (19.3%)	PTTEP International (45.0%) TOTAL (40.0%)
Operator	Petronas Carigali	PTTEP International
Sales Volume (Jan.-Dec. 2012)	8,900boed (oil 800b/d, gas 48.6mmcf/d)	-



Principal Individual E&P Project Overview (Myanmar ②)

Block M-12,13,14

Production

Development

Exploration

We have been participating in the Yatagun project in Myanmar since exploration stage. After the appraisal activities and the construction of the production and shipping facilities, the project is now at a stable production stage.

- In 1991, NOEX Myanmar acquired a working interest in [blocks M-13/14](#) offshore Myanmar.
- The following year, 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.
- In 2012, Made the Final Investment Decision on the Yetagun North Gas Field.
Development of the gas field are underway to commence of production in August 2014.

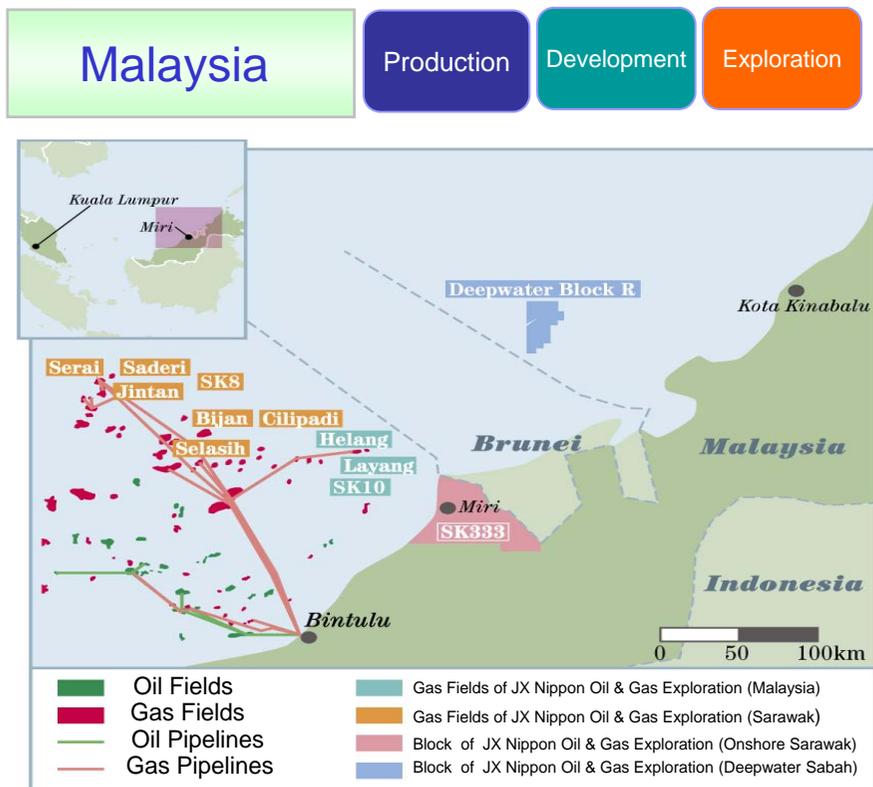
Block M-11

Exploration

- In September 2012, acquired a working interest in [blocks M-11](#), offshore Myanmar.
(Waiting for the approval of the Myanmar government)
- In January 2013, acquired the approval of the Myanmar government.
- In 2013, Scheduled to excavate test well.



Principal Individual E&P Project Overview (Malaysia ①)



	SK10 (Helang Gas Field, Others)	SK8 (Serai, Jintan Gas Field, Others)
Company Holding the Acreages	JX Nippon Oil & Gas Exploration (Malaysia)	JX Nippon Oil & Gas Exploration (Sarawak)
Shareholders (Holding Percentages)	JX Nippon Oil & Gas Exploration (78.7%) INPEX (15.0%) Mitsubishi Corporation (6.3%)	JX Nippon Oil & Gas Exploration (76.5%) INPEX (15.0%) Mitsubishi Corporation (8.5%)
Project Status	Exploration / Development / Production	Exploration / Development / Production
Interest	75.0%	37.5%
Partners	Petronas Carigali (25.0%)	Shell Oil and Gas Malaysia (37.5%) Petronas Carigali (25.0%)
Operator	JX Nippon Oil & Gas Exploration (Malaysia)	Shell Oil and Gas Malaysia
Sales Volume (Jan.-Dec. 2012)	21,200boed (oil 3,800b/d, gas 104.4mmcf/d)	19,000boed (oil 1,800b/d, gas 103.2mmcf/d)

	PM308A	SK333	Deepwater Block R
Company Holding the Acreages	JX Nippon Oil & Gas Exploration (Peninsular Malaysia)	JX Nippon Oil & Gas Exploration (Onshore Sarawak)	JX Nippon Oil & Gas Exploration (Deepwater Sabah)
Shareholders (Holding Percentages)	JX Nippon Oil & Gas Exploration (45.3%) JOGMEC (54.7%)	JX Nippon Oil & Gas Exploration (55.6%) JOGMEC (44.4%)	JX Nippon Oil & Gas Exploration (100%)
Project Status	Exploration	Exploration	Exploration
Interest	40.0%	75.0%	37.5%
Partners	Lundin Malaysia (35.0%) Petronas Carigali (25.0%)	Petronas Carigali (25.0%)	INPEX Offshore South West Sabah, Ltd. (37.5%) Petronas Carigali (25.0%)
Operator	Lundin Malaysia	JX Nippon Oil & Gas Exploration (Onshore Sarawak)	JX Nippon Oil & Gas Exploration (Deepwater Sabah)



Principal Individual E&P Project Overview (Malaysia ②)

Block SK10 (Helang Gas Field and others)

Since the acquisition of Block SK10 in 1987, the project has been one of our key operations. We act as the operator in the block. The natural gas from the block is exported in the form of liquefied natural gas (LNG) to various countries including Japan.

Production

Mining Area during the production SK10 (Helang Gas Field)

- In 1987, acquired a working interest in Block SK10 offshore Sarawak, Malaysia.
- In 1990, discovered the Helang Gas Field, where production commenced in 2003.
- In 1991, discovered the Layang Gas Field.

Block SK8 (Serai, Jintan Gas Fields and others)

Production

Mining Area during the production SK8 (Serai, Jintan, Saderi Gas Fields)

- In 1991, acquired a working interest in Block SK8 .
- From 1992 through 1994, the Jintan and other 6 gas fields were discovered in that block, and production of Jintan and Serai were commenced in 2004.
- In 2008, the Saderi Gas Field commenced production.
- In 2011, the Cilipadi Gas Field commenced production.

Copyright © 2013 JX Holdings, Inc.

Block SK333

Exploration

- In December 2007, acquired a working interest in [Block SK333](#) onshore Sarawak, Malaysia.

Block PM308A

Exploration

- In April 2008, acquired a working interest in [Block PM308A](#) offshore peninsular Malaysia.

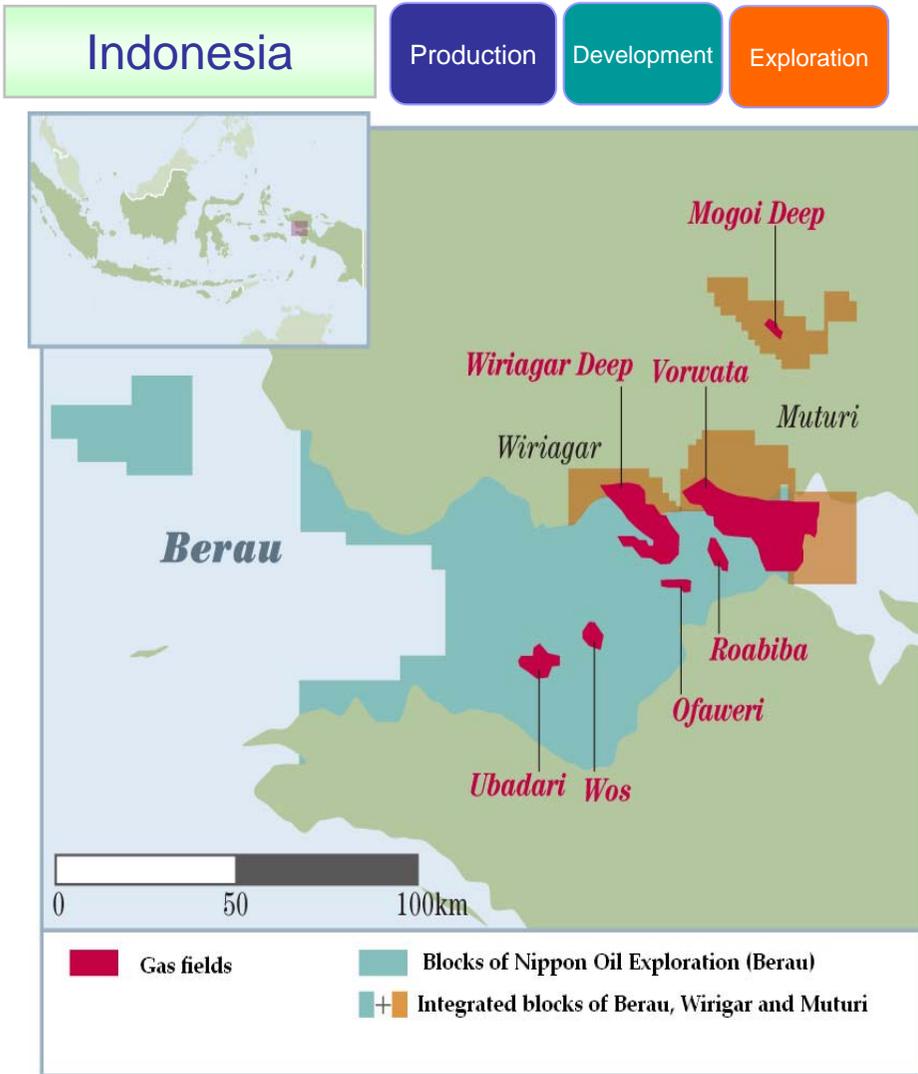
Deepwater Block R

Exploration

- In January 2012, acquired a working interest in [Deepwater Block R](#) deep sea, offshore Sabah, Malaysia.



Principal Individual E&P Project Overview (Indonesia)



	Tangguh LNG Project	
Company Holding the Acreages	Nippon Oil Exploration (Berau)	KG Berau
Shareholders(Holding Percentages)	JX Nippon Oil & Gas Exploration (51.0%) JOGMEC (49.0%)	JX Nippon Oil & Gas Exploration(14.2%) JOGMEC (49.2%) Others
Project Status	Exploration/Development/Production	
Interest	7.45% (Nippon Oil Exploration(Berau) 6.24%, KG Berau 1.22%)	
Partners	BP(37.2%) CNOOC(13.9%) LNG Japan (7.3%)	MI Berau(16.3%) KG Berau / KG Wiriagar (10.0%) Talisman (3.1%)
Operator	BP	
Sales Volume (Jan.-Dec. 2012)	17,000boed (oil 500b/d, gas 99.0mmcf/d)	

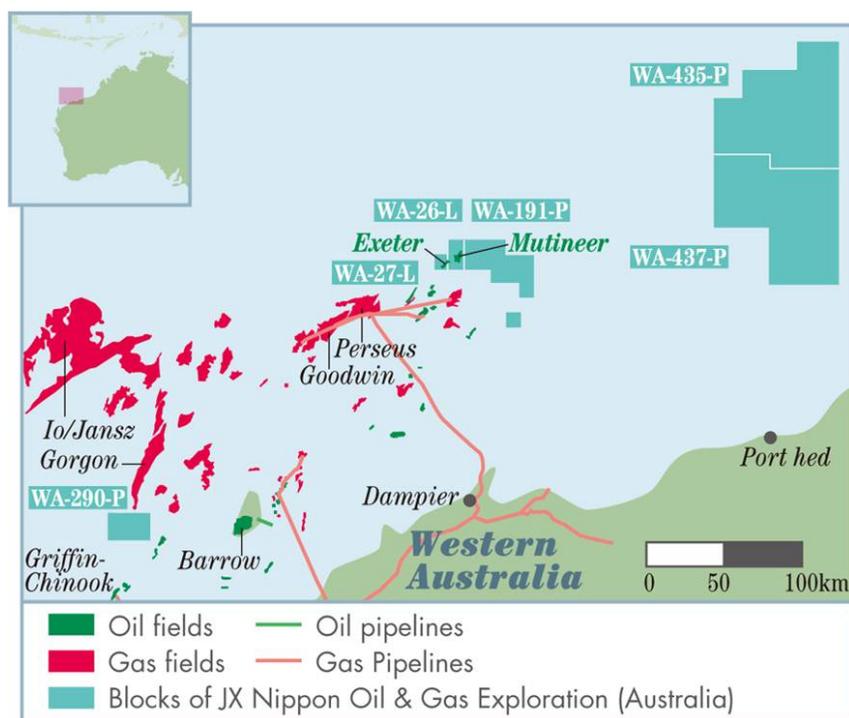
This is the second LNG project we have participated in, following the LNG Tiga project in Malaysia, and we are working to attain long-term and stable LNG production and revenue.

Production Project during the production :
Tangguh LNG Project

- From 1990, excavated three test wells, natural gas was discovered in the area. Subsequently, discovered natural gas in the Vorwata Gas Field, Wiriagar Deep structure, and other gas field.
- From December 2002, those with interests in the Berau, Wiriagar, and Muturi blocks agreed to become partners in unitizing the blocks and undertake development work cooperatively.
- LNG production commenced in June 2009, and the first cargo was shipped in July 2009.



Principal Individual E&P Project Overview (Australia)



	Mutineer/Exeter Oil Field	Finucane South Oil Field	Block WA-290-P Block WA-49-R	Block WA-435-P Block WA-437-P
Company Holding the Acreages	JX Nippon Oil & Gas Exploration (Australia) Pty Ltd			
Shareholders(Holding Percentages)	JX Nippon Oil & Gas Exploration (100%)			
Project Status	Production	Development	Exploration	Exploration
Interest	25.0%	25.0%	15.0%	20.0%
Partners	Santos (33.4%) Kufpec (33.4%) Woodside (8.2%)	Santos (41.6%) Kufpec (33.4%)	Apache (30.25%) Santos (24.75%) OMV (20.00%) Tap (10.00%)	Apache (40.0%) Finder (20.0%) Carnarvon (20.0%)
Operator	Santos	Santos	Apache	Apache
Sales Volume (Jan.-Dec. 2012)	1,200boed (oil 1,200b/d)	-	-	-

We are producing high-quality low-sulfur crude oil from Mutineer / Exeter oil fields. Revenue from the sales of the crude oil is used for new exploration activities within Australia.

Production

- In 1997, acquired a working interest in [Block WA-191-P](#), and discovered Mutineer and Exeter Oil Fields. Production of Mutineer and Exeter Oil Fields are commenced in 2005.

Development

- In May 2011, discovered oil in the Finucane South prospect in [Block WA-191-P](#).
- In Jan 2012, Made the Final Investment Decision on the [Finucane South Field](#).

Exploration

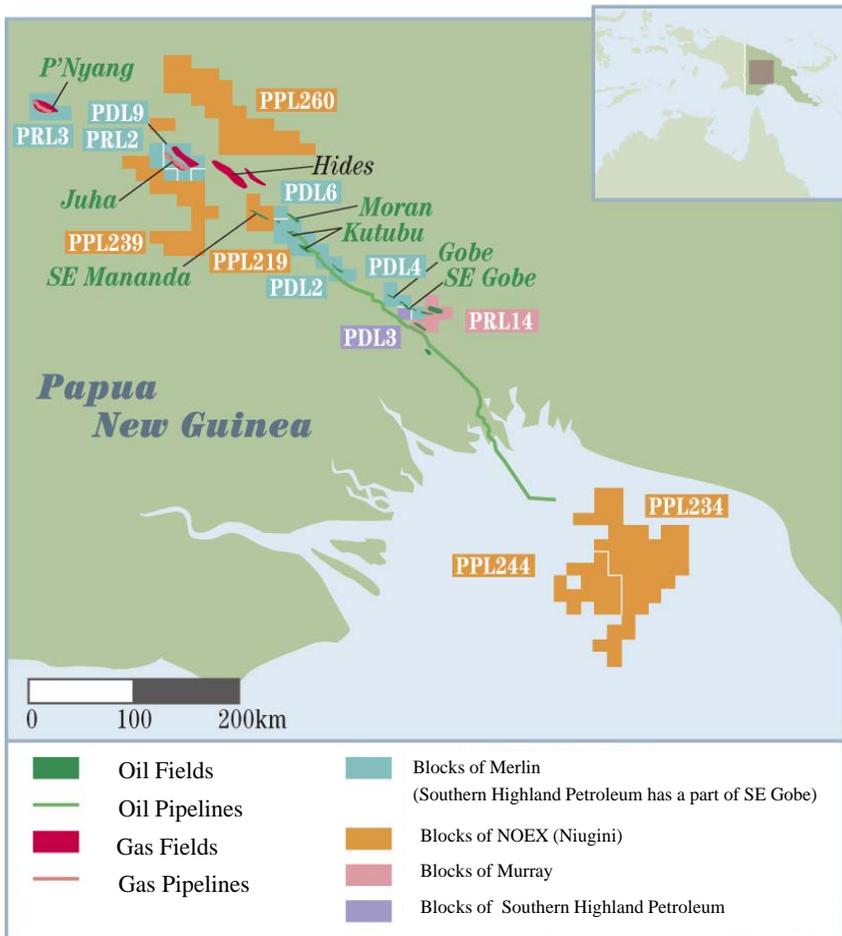
- In April 2011, excavated test well "Zola-1", and discovered Gas in [Block WA-290-P](#)
- In October 2012, acquired working interests in [Block WA-435-P](#) and [Block WA-437-P](#).
In 2013, Scheduled to excavate test well .



Principal Individual E&P Project Overview (Papua New Guinea ①)

Papua New Guinea

Production Development Exploration



	Kutubu, Moran, Gobe oil fields, Others	PNG LNG Project
Company Holding the Acreages	Merlin Petroleum Company (79%) Nippon Oil Exploration (Niugini) Pty LTD (30.4%) Southern Highland Petroleum (80%) Murray Petroleum (29.4%)	Nippon Papua New Guinea LNG LLC (79%)
Project Status	Exploration / Development / Production	Development
Interest	8.6%~73.5%	4.68%
Partners	Oil Search ExxonMobil Santos Talisman Others	ExxonMobil (33.20%) Oil Search (29.00%) Santos(13.53%) PNG Government, Landowners (19.58%)
Operator	Oil Search, ExxonMobil, Others	ExxonMobil
Sales Volume (Jan.-Dec. 2012)	5,400boed (oil 5,400b/d)	-



Principal Individual E&P Project Overview (Papua New Guinea ②)

Kutubu, Moran, Gobe oil fields and others

Production

- In 1990, Japan Papua New Guinea Petroleum acquired Merlin and acquired original exploration rights of Merlin in Papua New Guinea. Subsequently, development, and production activities have been undertaken in the [Kutubu, Moran, Gobe, SE Gobe, and SE Mananda oil fields](#).
- In 2008, acquired additional equity of oil field from AGL Energy.

Exploration

- In April 2011, excavated test well "Mananda-5" in [Block PPL219](#), and discovered oil.

PNG LNG Project

Development

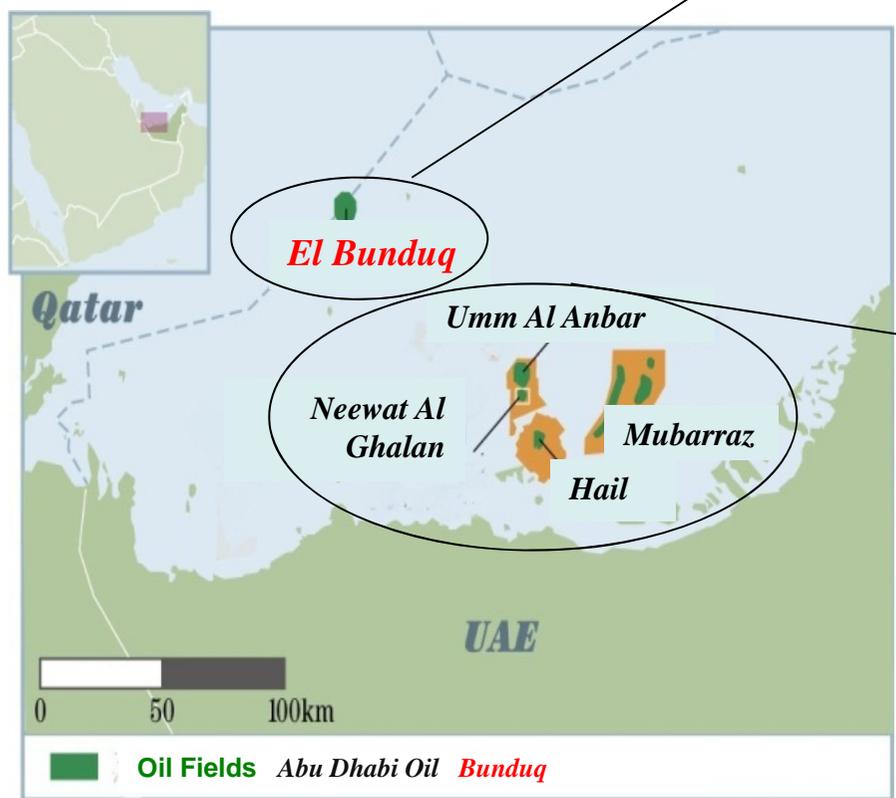
Project during the development PNG LNG Project

We have been involved in PNG LNG Project since the beginning of the project. In December 2009, we made a Final Investment Decision on the Project, and the development work is in progress with the goal of starting shipments in 2014. PNG LNG Project has the full support of the PNG government, and we expect it to contribute to our revenues in the future.

- In December 2008, acquired the PNG LNG Project equity that AGL Energy owned.
- In December 2009, PNG LNG Project was made a final investment decision to proceed with the development. Development of the project are underway to commence of production in 2014.



Principal Individual E&P Project Overview (UAE, Qatar ①)



Company Holding the Acreages	United Petroleum Development (Bunduq Company Limited)
Partners	JX Nippon Oil & Gas Exploration (45.0%) Cosmo Oil Co., Ltd. (45.0%) Mitsui Oil Exploration Co., Ltd (10.0%)
Project Status	Exploration / Development / Production
Interest	97.0%
Partners	BP (3%)
Operator	Bunduq Company Limited
<ul style="list-style-type: none"> ● In 1970, United petroleum Development acquired a working interest of El Bunduque Oil Field. ● In 1975, oil production commenced in El Bunduq oil field. ● In 1983, oil production was resumed by a secondary recovery scheme using water injection. ● In 2006, El Bunduque achieved a cumulative production volume of 200 million barrels. 	

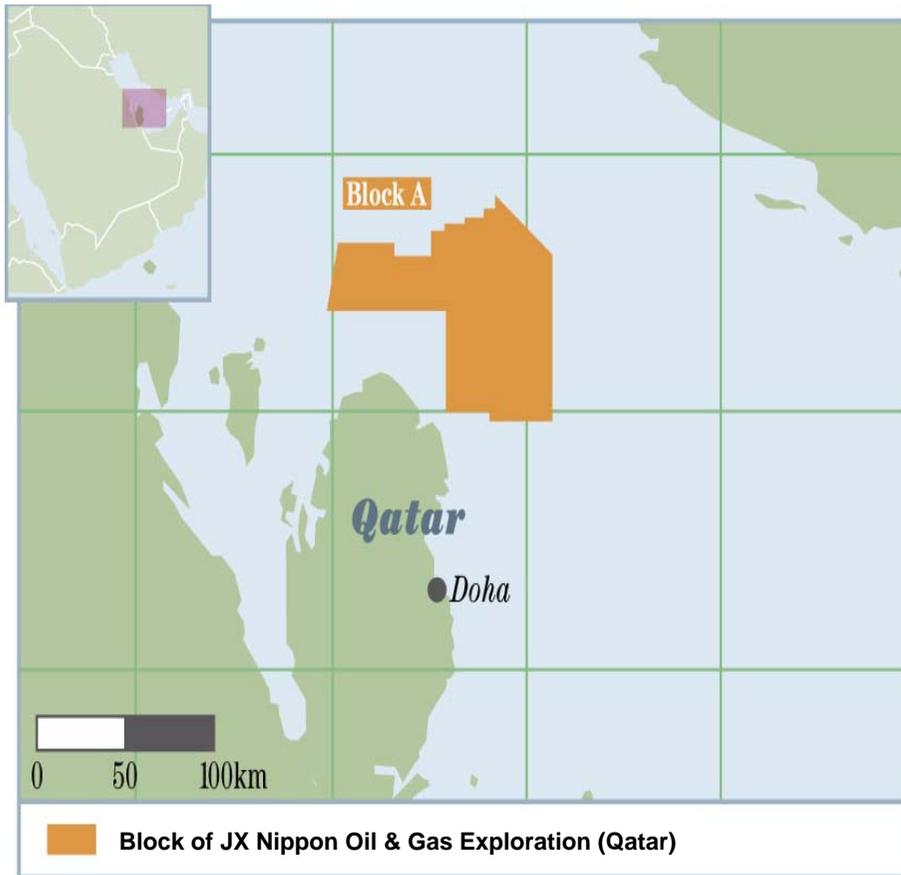
Company Holding the Acreages	Abu Dhabi Oil
Partners	JX Nippon Oil & Gas Exploration (31.5%) Cosmo Oil Co., Ltd.(63.0%) Tokyo Electric Power Co., Inc.(1.8%) Chubu Electric Power Co., Inc.(1.8%) Kansai Electric Power Co., Inc.(1.8%)
Project Status	Exploration / Development / Production
Interest	100.0%
Operator	Abu Dhabi Oil
<ul style="list-style-type: none"> ● In 1967, acquired a working interest in block of Mubarraz. ● In 1973, oil production commenced in Mubarraz Oil Field. ● In 1989, oil production commenced in Umm Al Anbar Oil Field. ● In 1995, oil production commenced in Neewat Al Ghalan Oil Field. ● In 2009, 3 fields achieved cumulative production volume of 300 million barrels. ● In 2011, Sign a New Concession Agreement. ● In 2012, Effectuation of New Concession Agreement. 	

Principal Individual E&P Project Overview (UAE, Qatar ②)



Qatar

Exploration



Project Company

JX Nippon Oil & Gas Exploration (Qatar) Limited (100%)
(%) = JX Group Shareholding

Interest in Individual Fields

100%

Operator

JX Nippon Oil & Gas Exploration (Qatar) Limited

Exploration

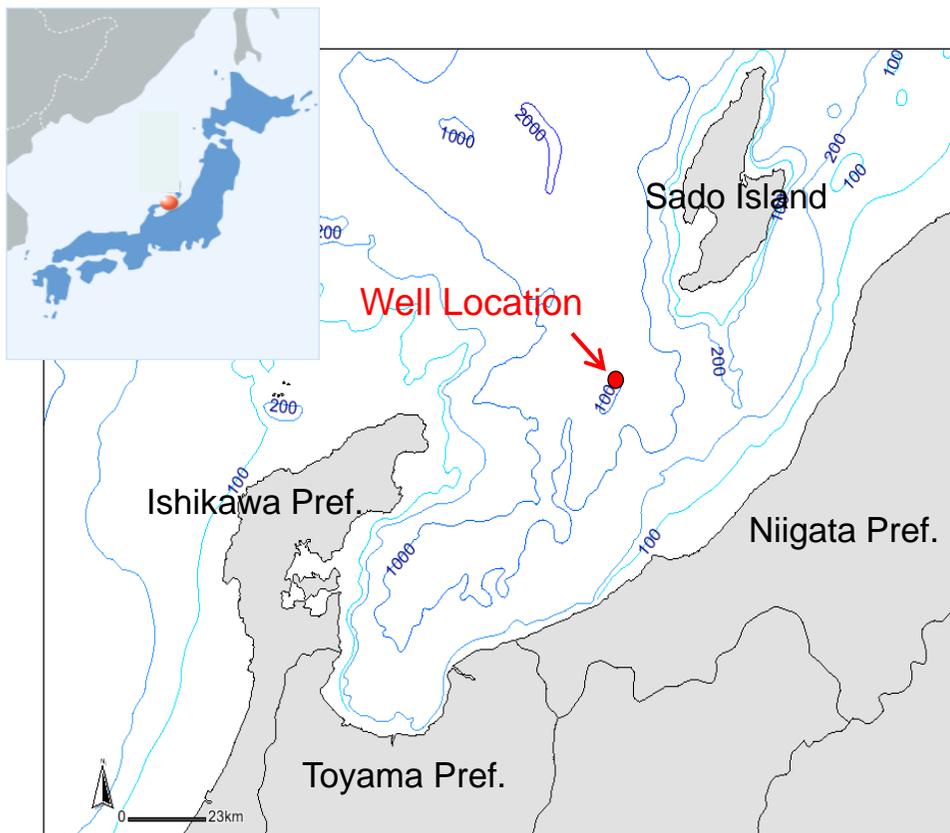
- In May 2011, acquired a working interest in [Block A](#) (Pre-Khuff), offshore Qatar .
- In March 2012, established interest in Block A (Pre-Khuff), offshore Qatar officially came into effect.

Principal Individual E&P Project Overview (Japan)



Japan (Offshore Niigata Pref.)

Exploration



Project Company

JX Nippon Oil & Gas Exploration (100%)
(%) = JX Group Shareholding

Interest in Individual Fields

100%

Operator

JX Nippon Oil & Gas Exploration

Exploration

- In December 2011
Signed contract with METI's Agency for Natural Resources and Energy, for oil and gas research.
- In April 2013
Scheduled to drill "METI Kisoshisui" well



JX Group's Reserve Standards

JX Group's criteria for evaluating reserves conforms to the PRMS (Petroleum Resources Management System) 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).

JX Group's reported reserves are in line with reserves as defined by the PRMS 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.



Business Environment and Data - Metals Business -



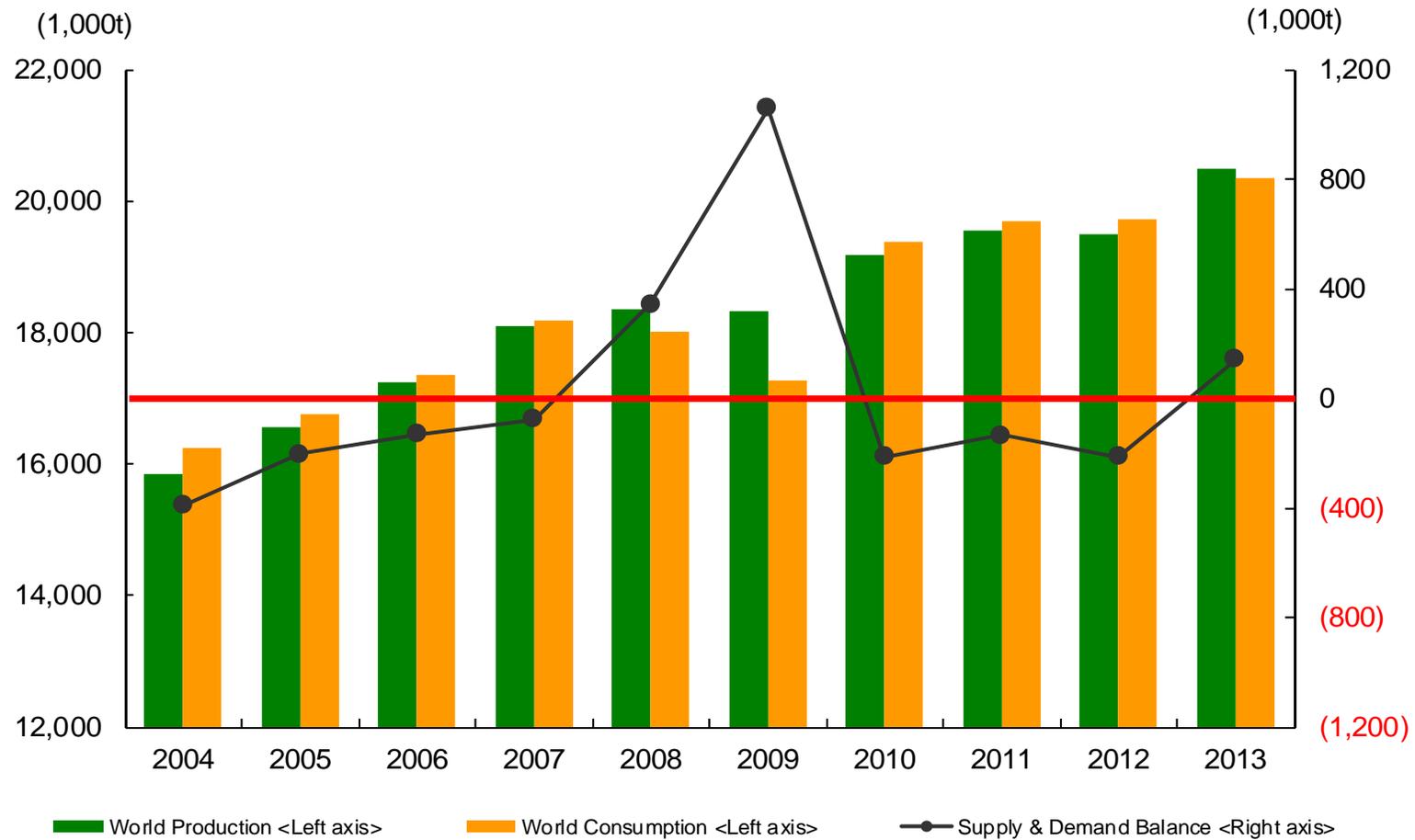
Copper Production of the JX Group's Mines

		CY2009	CY2010	CY2011	CY2012
(Thousand ton)		Actual	Actual	Actual	Actual
Los Pelambres	Copper concentrate*	312	385	412	404
	Copper concentrate*	493	465	417	245
Collahuasi	SX-EW copper cathode	43	39	36	37
	Total	536	504	453	282
Escondida	Copper concentrate*	750	762	517	740
	SX-EW copper cathode	327	300	283	310
	Total	1,078	1,062	801	1,050

* Payable copper contained in concentrate



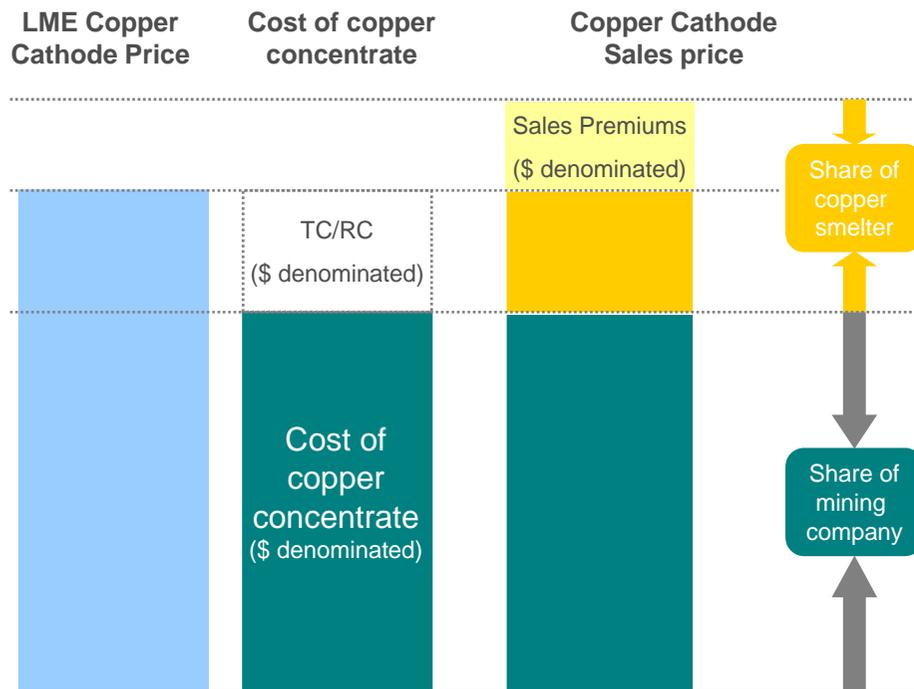
World's Copper Cathodes Supply & Demand



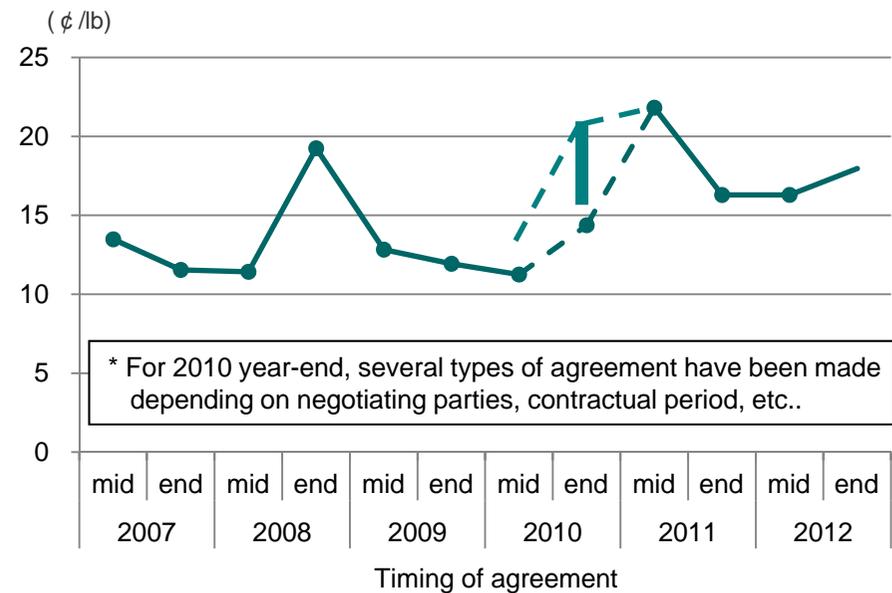


Earnings Structure of Copper Smelting and Refining Business

Earnings Structure of Copper Smelter & Refinery



Trends of Base TC/RC



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 and refining margins. TC/RC under long-term contracts is normally determined through annual negotiation between copper smelters and mining companies.

Copper cathode sales price :

Actual sales price of copper cathode produced by copper smelters is LME price plus sales premium, which is established by reference to various factors including importation costs, qualities and others.

N-Chlo Process

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 .

We constructed a pilot plant in Australia and have been conducting demonstration test since latter half of FY2009, and we got a good result about copper and gold recovery.

We advance an effort to commercialize the process while searching the mines to apply the process.

Pilot plant in Perth, Australia (About 100t/year Cu recovery)



Structure of N-Chlo Process

