

# Cosmo Energy Holdings Co., Ltd. Results For Fiscal 2016

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May 11, 2017

Progress made in the 5th Consolidated Med-Term Management Plan,  
Policy for FY2017,  
Outlook for the next Medium-Term Management Plan

P.2-6

Results for FY2016,  
Forecast for FY2017 Performance

P.7-17

✓ We have been Increasing profitability through the steady and prompt implementation of the medium-term management plan, focusing on alliances by region and business

### Major initiatives

#### FY2013

- ✓ Closed Sakaide Refinery and converted it to an oil terminal
- ✓ Agreed on a strategic comprehensive alliance with CEPSA

#### FY2014

- ✓ Established Keiyo Seisei JV G.K. with TonenGeneral Sekiyu (currently JXTG) in the Chiba area

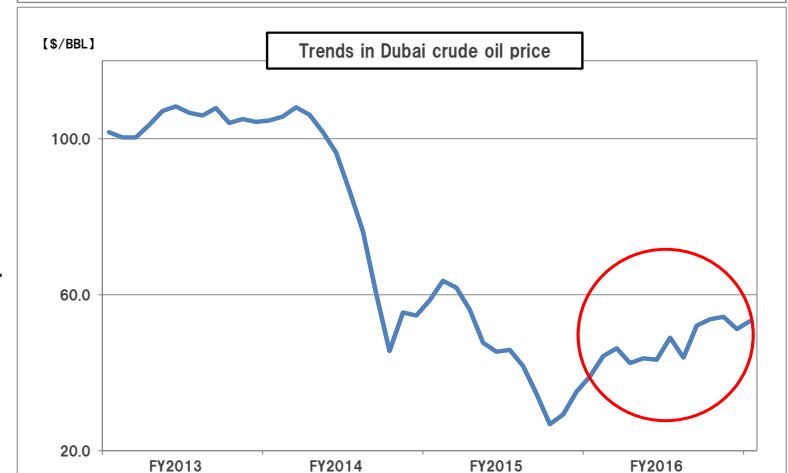
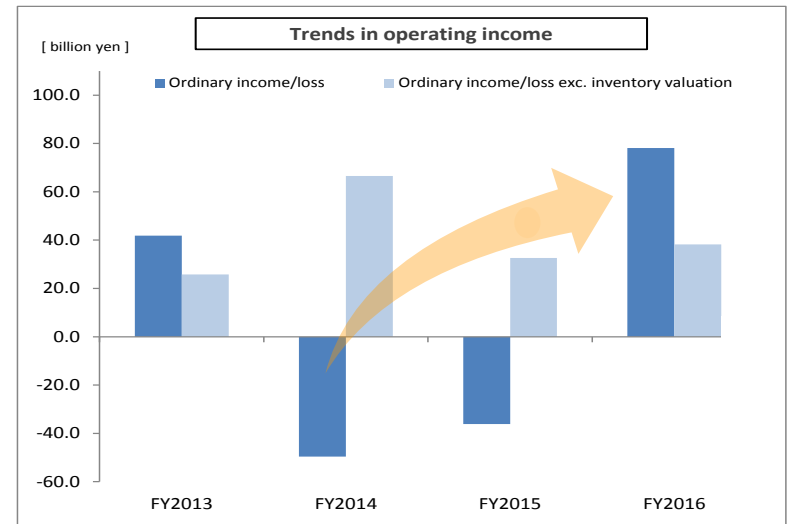
#### FY2015

- ✓ Established Gyxis Corporation(integration in the LPG business)
- ✓ Agreed on a business alliance with Showa Shell Sekiyu group in Yokkaichi area
- ✓ Changed to a holding company structure
- ✓ Made Maruzen Petrochemical a consolidated subsidiary

#### FY2016

- ✓ Chiba Refinery started a two-year long run
- ✓ The wind power generation of new facilities in Watarai commenced operation
- ✓ Formed a capital and business alliance with Kygnus Sekiyu K.K.

### Trends in operating income, Dubai crude oil price



Under the circumstances of improving business environment such as domestic supply-demand balance, we aim to increase earning power primarily by strengthening the competitiveness of the refineries and expanding oil production

(Petroleum business)

- ✓ Accelerate alliances in Yokkaichi and Chiba and increase the operating ratio at the refineries to strengthen their competitiveness.

(Petrochemical business)

- ✓ Maruzen Petrochemical will operate its highly competitive equipment for the production of ethylene at full capacity (non-shut down maintenance year).
- ✓ Aim to materialize synergy with oil refining business at an early stage.

(Oil exploration and production business)

- ✓ Increase production at both the existing oil fields and the commencement of production at the Hail Oil Field.

(Wind power generation business)

- ✓ Increase power generation capacity by around 8% by commencing operation at new sites (Sakata Port, Ishikari Bay Port).
- ✓ Promote the development of new sites (Watarai 2nd phase, Himekami) which commence the operation in the next medium-term management plan (please refer to p.44).

【Reference】Precondition

	FY2017
Crude oil (Dubai)	50.0
JPY/USD exchange rate	110.0

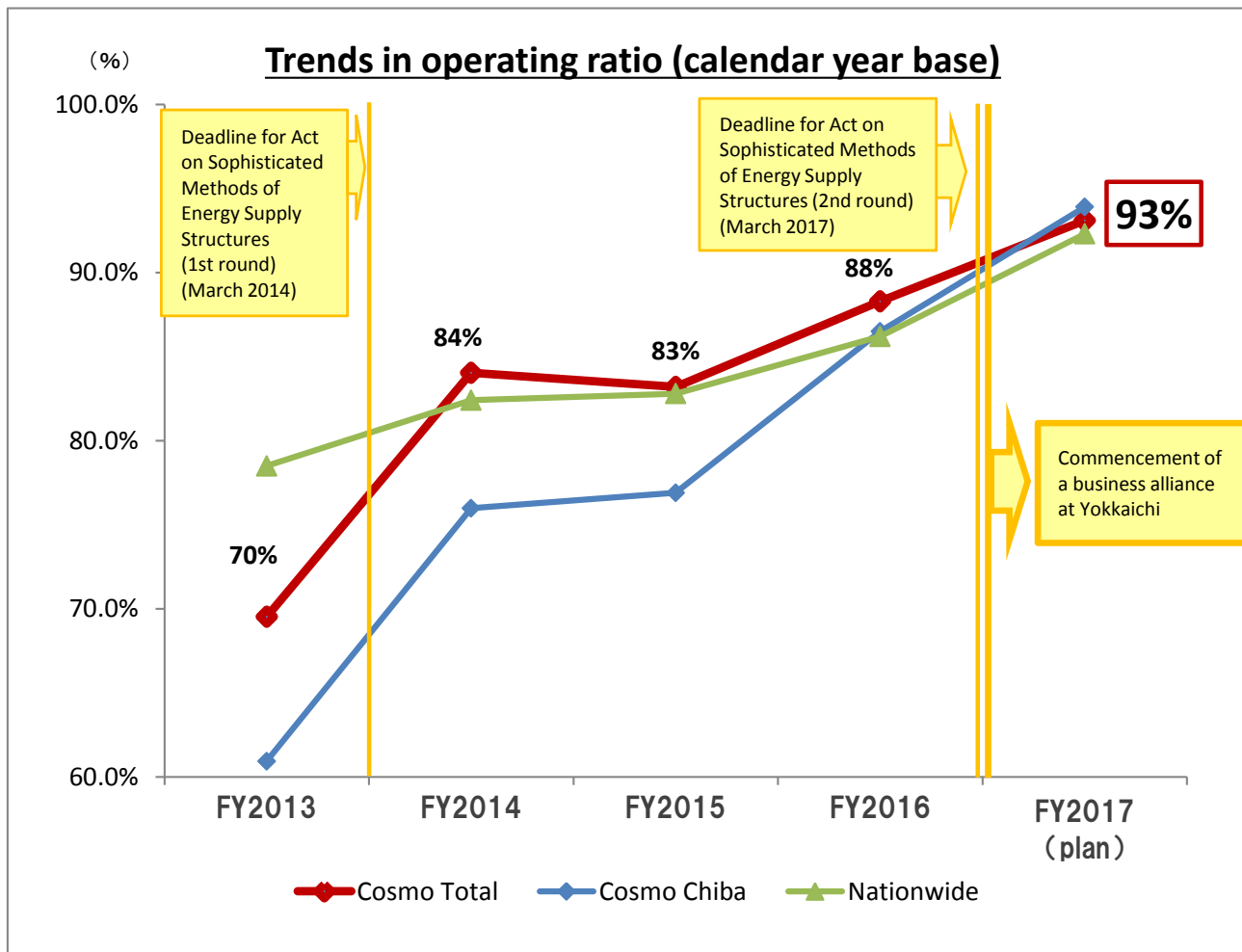
(Consolidated results forecast)

- ✓ Consolidated ordinary income: ¥54.0 billion (down ¥27.4 billion year on year)  
Profit attributable to owners of parent: ¥20.0 billion (down ¥33.2 billion)  
Consolidated ordinary income excluding the impact of inventory valuation: ¥64.0 billion (up ¥22.0 billion)

(Dividend policy)

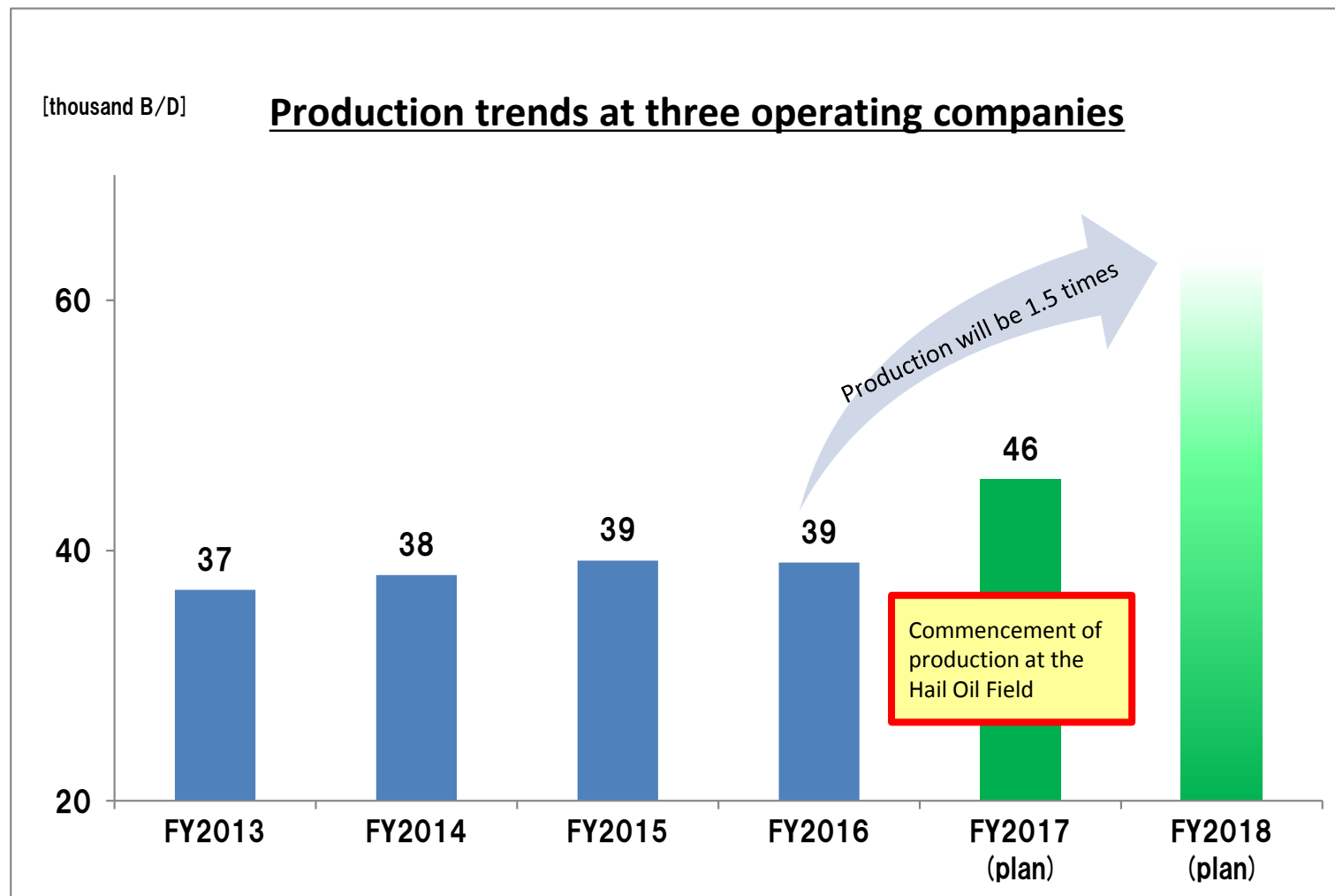
- ✓ We plan to pay a dividend of 50 yen per share in comprehensive consideration of the Group's profitability, financial position, and investment strategy.

- ✓ Promote alliances (commencement of a business alliance at Yokkaichi Refinery, continued Chiba JV pipeline construction work, etc)
- ✓ Improve the operating ratio (improvement in the ratio of unscheduled suspension through safety operation, shortening of maintenance periods)



\*The percentage for refineries nationwide for FY2017 is estimated by the Company based on METI data (performance in FY2016, outlook for demand for petroleum products)

- ✓ Production at the Hail Oil Field is expected to commence in the middle of FY2017 and reach full capacity within FY2017
- ✓ In FY2018, the Hail Oil Field will operate at full capacity from the beginning of the fiscal year. Total production at the three operating companies is expected to be around 1.5 times the FY2016 level



- ✓ FY2017: Increase profitability by implementing the initiatives in the medium-term management plan steadily and promptly.
- ✓ From the next med-term management plan : Strengthen the financial position and achieve profitability that will make reinvestment for sustainable growth possible.

Fiscal Year	FY2016	FY2017	From the next medium-term plan
Ordinary income excluding inventory valuation (*)	42.0billion yen (up ¥9.4billion YoY)	64.0billion yen (up ¥22.0billion YoY)	Strengthening earning power
Large growth investment	Peak of growth investment (the Hail Oil Field development, etc.)		Reduction of investment
Net D/E ratio (based on credit rating)	3.6 times (up 1.0points YoY)	3.3 times (up 0.3points YoY)	Further improvement
Oil exploration and production	<ul style="list-style-type: none"> <li>Oil price: Moderately increased</li> <li>Hail Oil Field: Continued drilling</li> </ul>	<ul style="list-style-type: none"> <li>Oil price: Increases moderately</li> <li>Commence production at the Hail Oil Field</li> </ul>	The total production of the 3 operating companies will increase by approx. 1.5 times from FY2016
Oil refining and sale	<ul style="list-style-type: none"> <li>Deadline for Act on Sophisticated Methods of Energy Supply Structures (Mar. 31, 2017)</li> <li>Chiba Refinery: skipped regular maintenance in autumn ⇒ Improved approx. 7 billion yen</li> <li>Yokkaichi Refinery: suspended CDU No.5 ⇒Optimized supply-demand balance</li> <li>Car lease business for individuals ⇒Exceeded 37,000 units in total</li> <li>Signed capital and business alliance agreement with Kygnus Sekiyu</li> </ul>	<ul style="list-style-type: none"> <li>Supply-demand balance improves thanks to companies' responses to Act on Sophisticated Methods of Energy Supply Structures</li> <li>Yokkaichi Refinery: Commences business alliance ⇒ Synergy for Cosmo: 1 billion yen/year</li> <li>Increased operating ratio (from 88% in the previous year to 93%) ⇒Yokkaichi Refinery: skipped regular maintenance ⇒Reduce unplanned suspension and maintenance period</li> <li>Car lease business for individuals ⇒Aim for total of 48,000 units</li> <li>Acquisition of 20% shares of Kygnus Sekiyu</li> </ul>	<ul style="list-style-type: none"> <li>Chiba Refinery: Pipeline construction will be completed ⇒ JV synergy: 10 billion yen/year</li> <li>Car lease business for individuals ⇒ Aim for further business expansion</li> <li>Start supplying fuel oil to Kygnus Sekiyu</li> </ul>
Petrochemical	<ul style="list-style-type: none"> <li>Strong ethylene market</li> <li>Maruzen Petrochemical implemented a regular maintenance</li> </ul>	<ul style="list-style-type: none"> <li>Steady ethylene market</li> <li>Maruzen Petrochemical : full operation</li> <li>Synergy with oil refining: Aim to materialize at an early stage</li> </ul>	<ul style="list-style-type: none"> <li>Create synergy with oil refining business</li> <li>Create synergy with Arakawa Chemical</li> </ul>
Wind power generation	FIT program (fixed price purchase program for 20 years)		
	Watarai operation commenced (Feb. 2017) (approx. 210,000 kW)	<ul style="list-style-type: none"> <li>Operation commences at Sakata Port and Ishikari Bay Port (approx. 230,000 kW) ⇒Increased profit of approx. 1 billion yen</li> <li>Development of new sites (Watarai Phase 2 and Himekami) continues.</li> </ul>	Aiming for further business expansion

(\*) Includes consolidated figures

# Highlights of Result for FY2016



Effects of initiatives for profitability enhancement, such as a two-year long run at the Chiba Refinery and making Maruzen Petrochemical a consolidated subsidiary, emerged amid a recovery in business environments, including a rise in oil prices from April

(Petroleum business)

- ✓ The operating ratio at the Chiba Refinery improved due to a two-year long run (the skipping of regular maintenance in autumn), ordinary income stood at ¥41.2 billion (up ¥104.0 billion year on year)

(Petrochemical business)

- ✓ Maruzen Petrochemical continued to operate at full capacity except during regular maintenance, and enjoyed the benefits of favorable market conditions. HCP achieved a recovery in profitability mainly due to a rise in production volume resulting from the absence of the negative impact of regular maintenance in the previous fiscal year.  
Ordinary income stood at ¥22.2 billion (up ¥18.1 billion year on year).

(Oil exploration and production business)

- ✓ Promoted drilling in the development of the Hail Oil Field.
- ✓ Although initiatives to reduce operating costs were implemented, the sale price declined from the previous fiscal year. Ordinary income stood at ¥9.3 billion (down ¥9.3 billion year on year).

(Key points of financial results)

- ✓ Consolidated ordinary income was ¥81.4 billion (up ¥117.5 billion year on year), mainly due to an increase in profit in the petroleum business.  
Profit attributable to owners of parent was ¥53.2 billion (up ¥103.4 billion).  
Ordinary income excluding the impact of inventory valuation was ¥42.0 billion (up ¥9.4 billion).
- ✓ The net worth ratio stood at 10.8%, improving 3.1 points from the end of the previous fiscal year.
- ✓ The net debt-to-equity ratio (based on credit rating) was 3.6 times, improving 1.0 points from the end of the previous fiscal year.

Unit: billion yen

No.	Item	FY2016 (Apr.-Mar.2017)	FY2015 (Apr.-Mar.2016)	Changes
1	Net sales	2,292.3	2,244.3	48.0
2	Cost of sales	2,079.7	2,154.6	-74.9
3	Selling, general and administrative expenses	120.4	119.4	1.0
4	Operating income	92.2	-29.7	121.9
5	Non-operating income/expenses, net	-10.7	-6.4	-4.3
6	Ordinary income	81.4	-36.1	117.5
7	Extraordinary income/losses, net	-2.9	-7.7	4.8
8	Income taxes	18.9	0.6	18.3
9	Profit attributable to non-controlling interests	6.4	5.8	0.6
10	Profit attributable to owners of parent	53.2	-50.2	103.4
11	Impact of inventory valuation	39.4	-68.7	108.1
12	Ordinary income excluding impact of inventory valuation	42.0	32.6	9.4
13	Dubai crude oil price (USD/B) (Apr.-Mar.)	46.9	45.7	1.2
14	JPY/USD exchange rate (yen/USD) (Apr.-Mar.)	108.4	120.1	-11.7
<b>【Reference】</b>				
15	Dubai crude oil price (USD/B) (Jan.-Dec.)	41.3	50.9	-9.6
16	JPY/USD exchange rate (yen/USD) (Jan.-Dec.)	108.8	121.1	-12.3

Unit : billion yen

No	FY2016 (Apr.–Mar.2017) (*1)		FY2015 (Apr.–Mar.2016)		Changes			
	Ordinary income	Ordinary income exc. Impact of Inventory valuation	Ordinary income	Ordinary income exc. Impact of Inventory valuation	Ordinary income	Ordinary income exc. Impact of Inventory valuation		
1	Total		81.4	42.0	-36.1	32.6	117.5	9.4
2	(Each segment)	Petroleum business	41.2	1.8	-62.8	5.8	104.0	-4.0
3		Petrochemical business	22.2	22.2	4.1	4.2	18.1	18.0
4		Oil E&P business (*2)	9.3		18.6		-9.3	
5		Other (*3)	8.7		4.0		4.7	

(\*1) Please refer to page 24 for quarterly results.

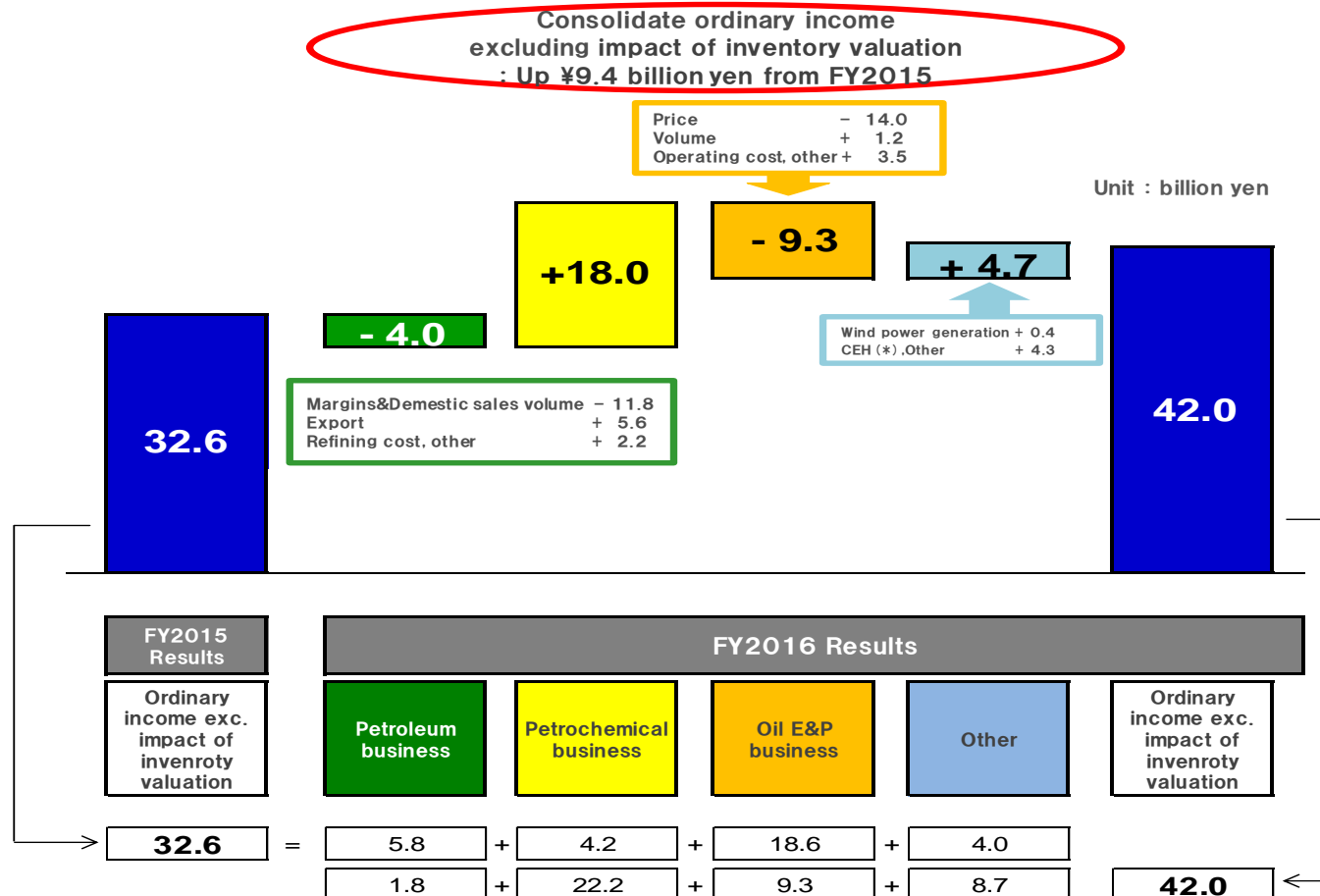
(\*2) The Accounting period of three operators( Abu Dhabi Oil Company, Qatar Petroleum Development and United Petroleum Development ) is December.

(\*3) Including consolidated adjustment

# [FY2016 Results] - Analysis of Changes in Consolidated Ordinary Income (excluding impact of inventory valuation) from FY2015

**Key variable factors**

- Petroleum business** : Income declined, mainly due to the extinguishment of a positive time lag in naphtha and jet fuel when the oil price fell in the previous fiscal year, despite an increase in exports and a reduction in refining costs resulting from a two-year long run at the Chiba Refinery.
- Petrochemical business** : Income increased due to Maruzen Petrochemical operated at full capacity from July after regular maintenance, and enjoyed the benefits of favorable ethylene market conditions. Production at HCP increased, mainly due to the absence of the negative impact of regular maintenance in the previous fiscal year.
- Oil E&P business** : Income declined due to a fall in the sales price despite a reduction in operational costs



(\*) CEH: Cosmo Energy Holdings

## Consolidated Cash Flows

Unit: billion yen

No		FY 2016 (Apr.-Mar.2017)	FY 2015 (Apr.-Mar.2016)
1	Cash flows from operating activities	47.6	18.4
2	Cash flows from investing activities	-112.0	-32.8
3	Cash flows from financing activities	9.6	32.5
4	Cash and cash equivalents at end of the period	36.1	89.4

## Consolidated Balance Sheet

Unit: billion yen

No		FY2016 (As of Mar. 31, '17)	FY2015 (As of Mar. 31, '16)	Changes
1	Total Assets	1,525.7	1,409.6	116.1
2	Net assets	272.8	202.7	70.1
3	Net worth	164.7	108.0	56.7
4	Net worth ratio	10.8%	7.7%	UP 3.1 points
5	Net interest-bearing debt *1	727.3	666.2	61.1
6	Debt Equity Ratio (times) (based on the credit rating) *2	3.6	4.6	Up 1.0 points

\*1 Total interest-bearing debts net of cash and deposits etc. as of the end of the period

\*2 50% of original amount of Hybrid Loan regarded as Equity is counted as Equity by the assessment of Japan Credit Agency, Ltd.

(50% of 60 billion yen Hybrid Loan started on 1st April 2015 is included into Equity)

## Capital Expenditures, Depreciation, etc.

Unit: billion yen

No.		FY2016 Results	Change from FY2015
1	Capital expenditures	120.3	37.5
2	Depreciation expense amount, etc.	37.8	7.1

## Capital Expenditures by Business Segment

Unit: billion yen

No.		FY2016 Results	FY2015 Results	Change from FY2015	(ref.) Main fluctuation factor
1	Petroleum	30.0	32.7	-2.7	-
2	Petrochemical	12.7	1.0	11.7	Made Maruzen Petrochemical into consolidated subsidiary
3	Oil E&P	53.1	45.8	7.3	Development of the Hail Oil Field
4	Other	24.9	6.4	18.5	IPP upgrade construction Wind power generation
5	Adjustment	-0.4	-3.1	2.7	-
6	Total	120.3	82.8	37.5	-

# Forecast for FY2017 Performance

Unit : billion yen

No		FY2017 Forecast		FY2016 Results		Changes		
		Ordinary income	Ordinary income exc. Impact of Inventory valuation	Ordinary income	Ordinary income exc. Impact of Inventory valuation	Ordinary income	Ordinary income exc. Impact of Inventory valuation	
1	Total	54.0	64.0	81.4	42.0	-27.4	22.0	
2	(Each segment)	Petroleum business	4.0	14.0	41.2	1.8	-37.2	12.2
3		Petrochemical business	14.0	14.0	22.2	22.2	-8.2	-8.2
4		Oil E&P business (*1)	26.0		9.3		16.7	
5		Other (*2)	10.0		8.7		1.3	

(\*1) The Accounting period of three operators( Abu Dhabi Oil Company, Qatar Petroleum Development and United Petroleum Development ) is December.

(\*2) Including consolidated adjustment

No.		FY2017 Forecast	FY2016 Results	Changes
6	Profit attributable to owners of parent	20.0	53.2	-33.2
7	Dividend per Share (Forecast) (yen)	¥50	¥50	-

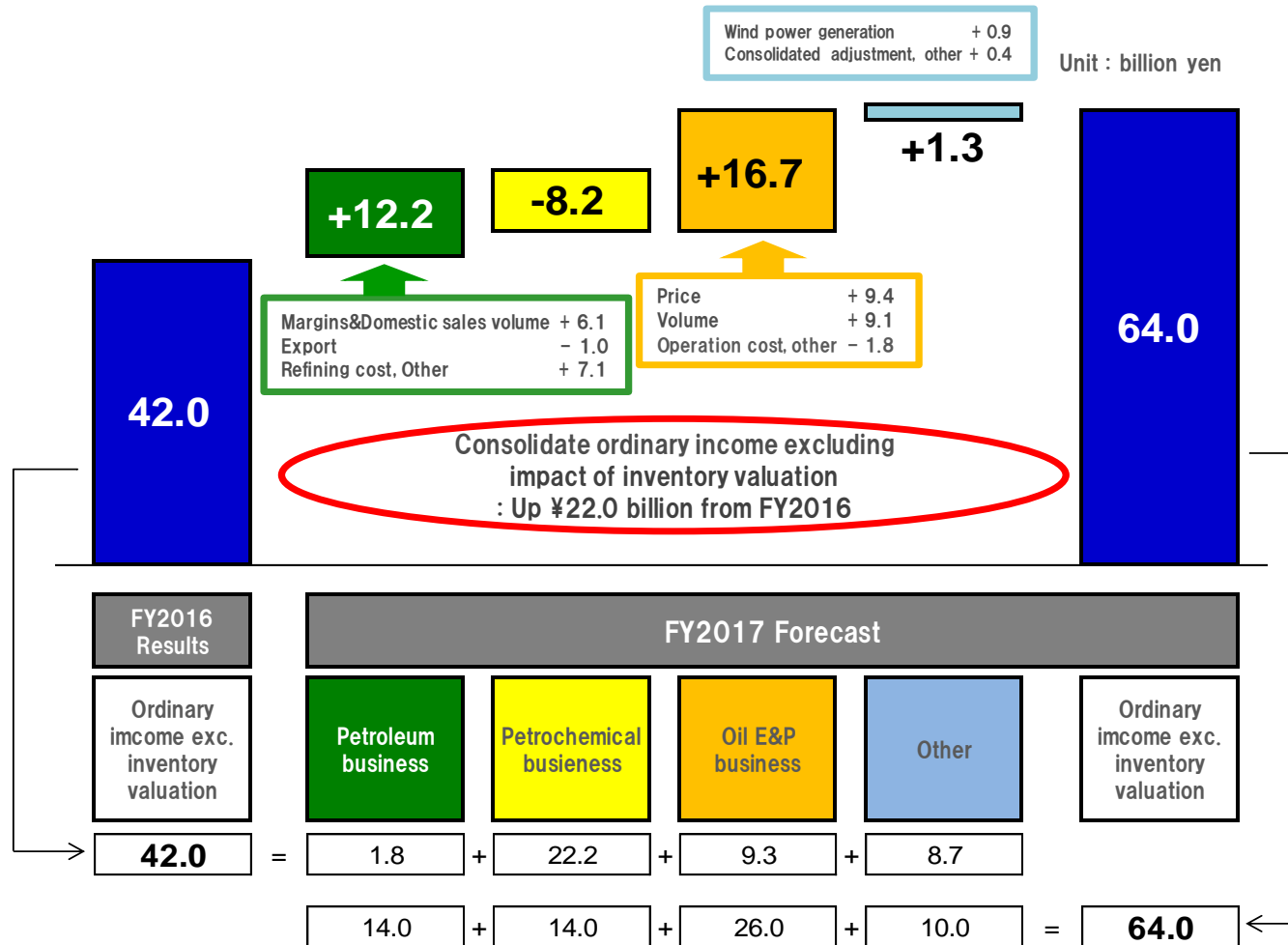
**【Reference】 Precondition**

No.		FY2017 Forecast	FY2016 Results	Changes
8	Crude oil (Dubai) (\$/B) (Apr.-Mar.)	50.0	46.9	3.1
9	JPY/USD exchange rate (Apr.-Mar.)	110.0	108.4	1.6
10	Spread between Ethylene-Naphtha (\$/ton) (Apr.-Mar.)	500	706	-206



Key variable factors

- Petroleum business** : Higher profit expected, mainly reflecting the commencement of the business alliance at Yokkaichi and an improvement in the operating ratio.
- Petrochemical business** : Lower profit expected, mainly due to the effect of regular maintenance at HCP and a reduction in the ethylene –Naphtha spread.
- Oil E&P business** : Higher profit expected, due to an increase in production at the existing oil fields and the commencement of production at Hail Oil Field, and a rise in oil prices.



- ✓ Continue to make investments in growth fields, primarily in the development of the Hail Oil Field, the forecast for FY2017 includes investments that were originally planned to be made in FY2016.
- ✓ Capital expenditure is expected to fall significantly from the next fiscal year due to the completion of investment in the Hail Oil Field development, Chiba JV pipeline, IPP, etc.

### Capital Expenditures, Depreciation, etc.

Unit: billion yen

No.		FY2017 Forecast	Changes
1	Capital expenditures	127.6	7.3
2	Depreciation expense amount, etc	45.9	8.1

### Capital Expenditures by Business Segment

Unit: billion yen

No.		FY2017 Forecast	FY2016 Results	Changes
1	Petroleum	40.4	30.0	10.4
2	Petrochemical	12.9	12.7	0.2
3	Oil E&P	52.6	53.1	-0.5
4	Other	22.9	24.9	-2.0
5	Adjustment	-1.2	-0.4	-0.8
6	Total	127.6	120.3	7.3

# Supplementary Information

## **P.19–29 FY2016 Results – Supplementary Information**

- Sales Volume (FY2016 results/FY2017 forecast)
- Crude Oil Price and Processing Volume, CDU Operating Ratios and Crude Oil Production Volume
- Crude Reserves Estimate (Proved and Probable)
- Results by Business Segment – Changes from FY2015
- Results by Business Segment – Quarterly results
- Historical Changes in Operating Ratio of Refineries, SSs, Credit Cards in Force and Auto Lease
- Historical Changes in Dubai Crude Oil price
- Diesel Fuel Export Results and Margin Environment
- Market Condition of Aromatic Products and Ethylene Products

## **P.30–31 FY2017 Forecast – Supplementary Information**

- Outlook by business segment, Precondition of Crude Oil Price and Exchange Rate, and Business Sensitivity

## **P.32–44 Overview of the Cosmo Energy Group (Business Outline)**

- Oil E&P Business
- Petroleum Business
- Petrochemical Business
- Wind Power Generation Business

## **Supplementary Information of FY2016 Results**

Unit: thousand KL

No.			FY2016 Results	FY2015 Results	FY2016 Result Changes from FY2015	FY2017 Forecast	FY2017 forecast changes from FY2016
1	Selling volume in Japan	Gasoline	5,544	5,673	97.7%	5,602	101.0%
2		Kerosene	1,820	1,823	99.8%	1,757	96.5%
3		Diesel fuel	4,120	4,133	99.7%	4,071	98.8%
4		Heavy fuel oil A	1,420	1,420	100.0%	1,381	97.3%
5		Sub-Total	12,904	13,049	98.9%	12,810	99.3%
6		Naphtha	6,027	6,204	97.1%	6,560	108.8%
7		Jet fuel	520	519	100.2%	500	96.2%
8		Heavy fuel oil C	1,370	1,578	86.8%	1,055	77.0%
9		inc. Heavy fuel oil C for electric	441	747	59.1%	257	58.2%
10		Total	20,821	21,350	97.5%	20,925	100.5%
11	Export volume (including bond sales)	Middle distillates (Jet, Kerosene/Disel fuel)	1,322	750	176.3%	1,075	81.3%
12		Other	3,623	3,314	109.3%	3,270	90.3%
13		Sub-Total	4,945	4,064	121.7%	4,345	87.9%
14	Barter deal, Others		10,566	10,000	105.7%	9,401	89.0%
15	Total selling volume		36,332	35,414	102.6%	34,671	95.4%

**[1] Dubai Crude oil price, processing volume and CDU operating ratios**

No.		FY2016 Results	FY2015 Results	Changes from FY2015		
1	Dubai crude oil price (USD/B)	46.9	45.7	1.2	—	
2	JPY/USD exchange rate (yen/USD)	108.4	120.1	-11.7	—	
3	Crude oil refining	Refined crude oil volume (thousand KL)	22,611	21,877	734	103.4%
4		CDU operating ratio (Calendar Day)	88.3%	83.2%	5.1%	—
5		CDU operating ratio (Streaming Day) *	96.0%	97.1%	-1.1%	—

\*Streaming day indicates operating ratio excluding the impact of suspended operations due to regular repairs and maintenance, etc.

**[2] Crude oil production volume**

	FY2016 Results	FY2015 Results	Changes from FY2015	
Cosmo Energy Exploration & Production Co., Ltd. (B/D)	39,032	39,201	-169	99.6%

- \*1) The production volume represents the total production volumes of the three major developers: Abu Dhabi Oil Co., Ltd., Qatar Petroleum Development Co., Ltd., and United Petroleum Development Co., Ltd.
- \*2) The production period has calculated in the January-December, because that the three major developers of the accounting period is December.
- \*3) The Cosmo Energy Group has a 51.5% stake in Abu Dhabi Oil Co., Ltd., a 75.0% stake in Qatar Petroleum Development Co., Ltd. and a 45.0% stake in United Petroleum Development Co., Ltd.

(As of Dec 31, 2016)

Crude Reserves Estimate (working interest base) (*1)		
	mmbbls	
Total Proved (*2) and Probable Reserves (*3)	154.0	Note: The reserves include reserves of new concession area, Hail field.
(Ref.: Reserves to Production Ratio of Total Proved and Probable Reserves )	about 23 years	Note: The daily average crude production based on working interest reached 19 thousands bpd for FY2016 (Jan-Dec).

## (\*1) About results of reserves estimate

The assessment of ADOC reserves which deemed to have significant impact on Cosmo's future profitability was carried out in an independent assessment by Gaffney, Cline & Associate (hereinafter, "GCA"), a leading global independent reserve auditor. Their assessment confirmed Cosmo affiliates' internal assessment of remaining reserves. The assessment was carried out in accordance with the 2007 "Petroleum Resources Management System (PRMS)" prepared by the Oil and Gas Reserves Committee of the "Society of Petroleum Engineers" (SPE), and reviewed and jointly sponsored by the "World Petroleum Congress" (WPC), the "American Association of Petroleum Geologists" (AAPG) and the Society of Petroleum Evaluation Engineers (SPEE). The assessment of QPD and UPD reserves were carried out in these companies respectively. These assessments of the reserves do not guarantee the reserves and production from them.

## (\*2) Proved Reserves

Proved Reserves are those quantities of petroleum, which by analysis of geoscience and engineering data, can be estimated with reasonable certainty to be commercially recoverable, from a given date forward, from known reservoirs and under defined economic conditions, operating methods, and government regulations. When probabilistic methods are used, there should be at least a 90% probability that the actual quantities recovered will equal or exceed the 1P estimate. (Definition of SPE PRMS 2007 March)

## (\*3) Probable Reserves

Probable Reserves are those additional Reserves which analysis of geoscience and engineering data indicate are less likely to be recovered than Proved Reserves but more certain to be recovered than Possible Reserves. When probabilistic methods are used, there should be at least a 50% probability that the actual quantities recovered will equal or exceed the 2P estimate. (Definition of SPE PRMS 2007 March)

## FY2016 Results – Changes from FY2015

Unit: billion yen

No.		Net Sales		Operating Income		Ordinary Income		Ordinary Income (excluding impact of inventory valuation, cost or market method)	
			Changes from FY2015		Changes from FY2015		Changes from FY2015		Changes from FY2015
1	Petroleum business	2,099.9	-120.8	53.7	104.6	41.2	104.0	1.8	-4.0
2	Petrochemical business	378.4	330.3	16.1	17.8	22.2	18.1	22.2	18.0
3	Oil E&P business	44.5	-11.3	12.2	-6.1	9.3	-9.3	9.3	-9.3
4	Other	60.6	-10.9	4.3	0.6	3.8	0.3	3.8	0.3
5	adjustment	-291.1	-139.3	5.9	5.0	4.9	4.4	4.9	4.4
6	Total	2,292.3	48.0	92.2	121.9	81.4	117.5	42.0	9.4

## Cosmo Group of Companies (by Segment)

Petroleum business	Cosmo Oil Co.,Ltd., Cosmo Oil Marketing Co., Ltd., Cosmo Oil Sales Corp, Cosmo Oil Lubricants Co., Ltd.,Sogo Energy Co., Ltd., Gyxis Corporation (owned by the Cosmo Energy Group on the equity method) etc.
Petrochemical business	Cosmo Matsuyama Oil Co., Ltd., CM Aromatics Co., Ltd., Maruzen Petrochemical Co., Ltd., Hyundai Cosmo Petrochemical Co., Ltd. (owned by the Cosmo Energy Group on the equity method) , etc.
Oil E & P business	Cosmo Energy Exploration & Production Co., Ltd.,Abu Dhabi Oil Co., Ltd., Qatar Petroleum Development Co., Ltd., United Petroleum Development Co., Ltd. (owned by the Cosmo Energy Group on the equity method) , etc.
Other	Cosmo Engineering Co.,Ltd., Cosmo Trade & Services Co., Ltd., EcoPower Co.,Ltd, etc.



Unit : billion yen

No		FY2016								FY2016 Results	
		1Q		2Q		3Q		4Q		Ordinary income	Ordinary income exc. Impact of Inventory valuation
		Ordinary income	Ordinary income exc. Impact of Inventory valuation	Ordinary income	Ordinary income exc. Impact of Inventory valuation	Ordinary income	Ordinary income exc. Impact of Inventory valuation	Ordinary income	Ordinary income exc. Impact of Inventory valuation		
1	Total	10.3	-4.5	4.2	5.9	35.6	26.3	31.3	14.3	81.4	42.0
2	Petroleum business	6.4	-8.0	-4.8	-3.2	21.5	12.5	18.1	0.5	41.2	1.8
3	Petrochemical business	1.7	1.3	2.9	3.0	8.1	7.8	9.5	10.1	22.2	22.2
4	Oil E&P business (*1)	1.5		4.8		2.7		0.3		9.3	
5	Other (*2)	0.7		1.3		3.3		3.4		8.7	

(\*1) The Accounting period of three operators( Abu Dhabi Oil Company, United Petroleum Development and Qatar Petroleum Development ) is December.

(\*2) Including consolidated adjustment

[ Reference ] Precondition

		2016				2017
		Jan.-Mar.	Apr.-Jun.	Jul.-Sep.	Oct.-Dec.	Jan.-Mar.
1	Crude oil (Dubai) \$/B	30.4	43.2	43.2	48.3	53.1
2	JPY/USD exchange rate ¥/\$	115.5	108.1	102.4	109.3	113.6

**[1] Oil Refinery Operating Ratio**

	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016
CDU operating ratio	51.4%	55.6%	69.5%	84.0%	83.2%	88.3%

\* Data as of the end of March of each fiscal year.

\* Calendar Year base

**[2] Number of SSs by Operator Type**

	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016
Subsidiary	939	914	899	881	920	895
Dealers	2,559	2,411	2,329	2,252	2,134	2,062
Total	3,498	3,325	3,228	3,133	3,054	2,957

**[3] Number of Self-Service SSs out of the Total Number of SSs Mentioned [2] above.**

	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016
Subsidiary	550	550	550	552	581	581
Dealers	457	449	461	479	455	457
Total	1,007	999	1,011	1,031	1,036	1,038
Share of Self-Service SSs	28.8%	30.0%	31.3%	32.9%	33.9%	35.1%

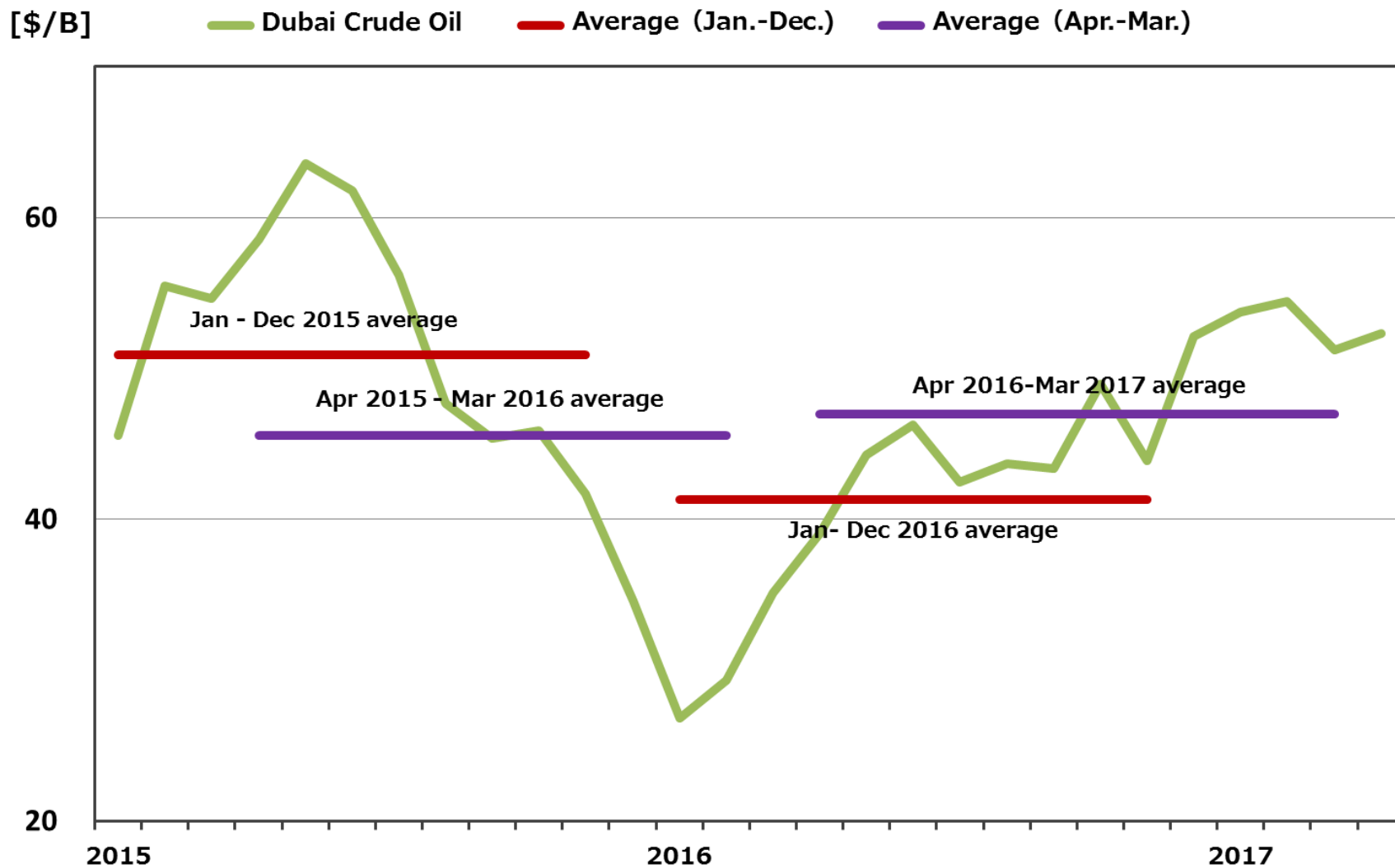
**[4] "Cosmo The Card" – Number of credit cards in force**

	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016
No. of cards in force (million cards)	3.93	4.10	4.20	4.31	4.39	4.44
No. of cards per SS	1,123	1,232	1,301	1,376	1,438	1,503

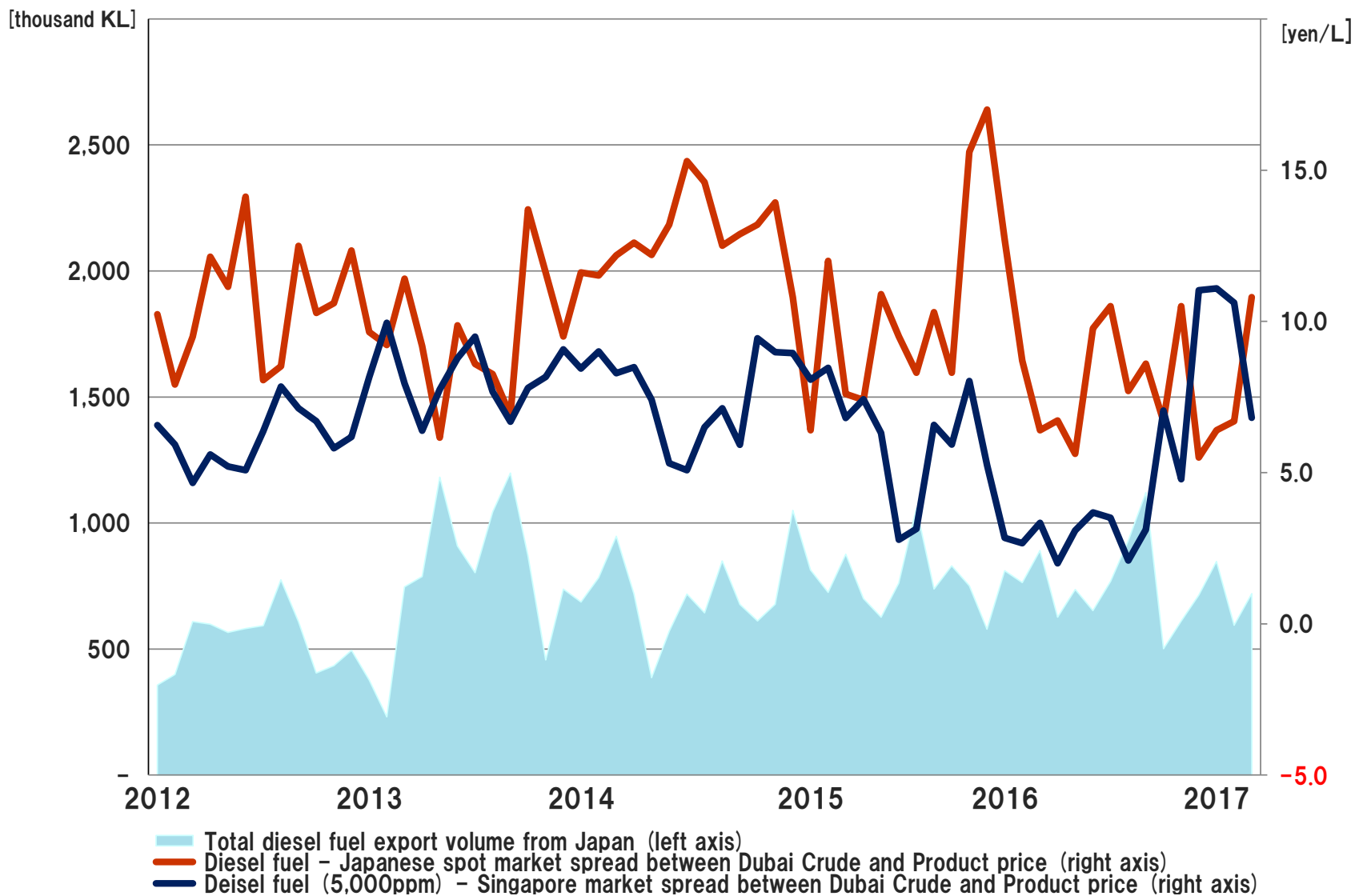
\*Including the number of the card, Opus, Triple

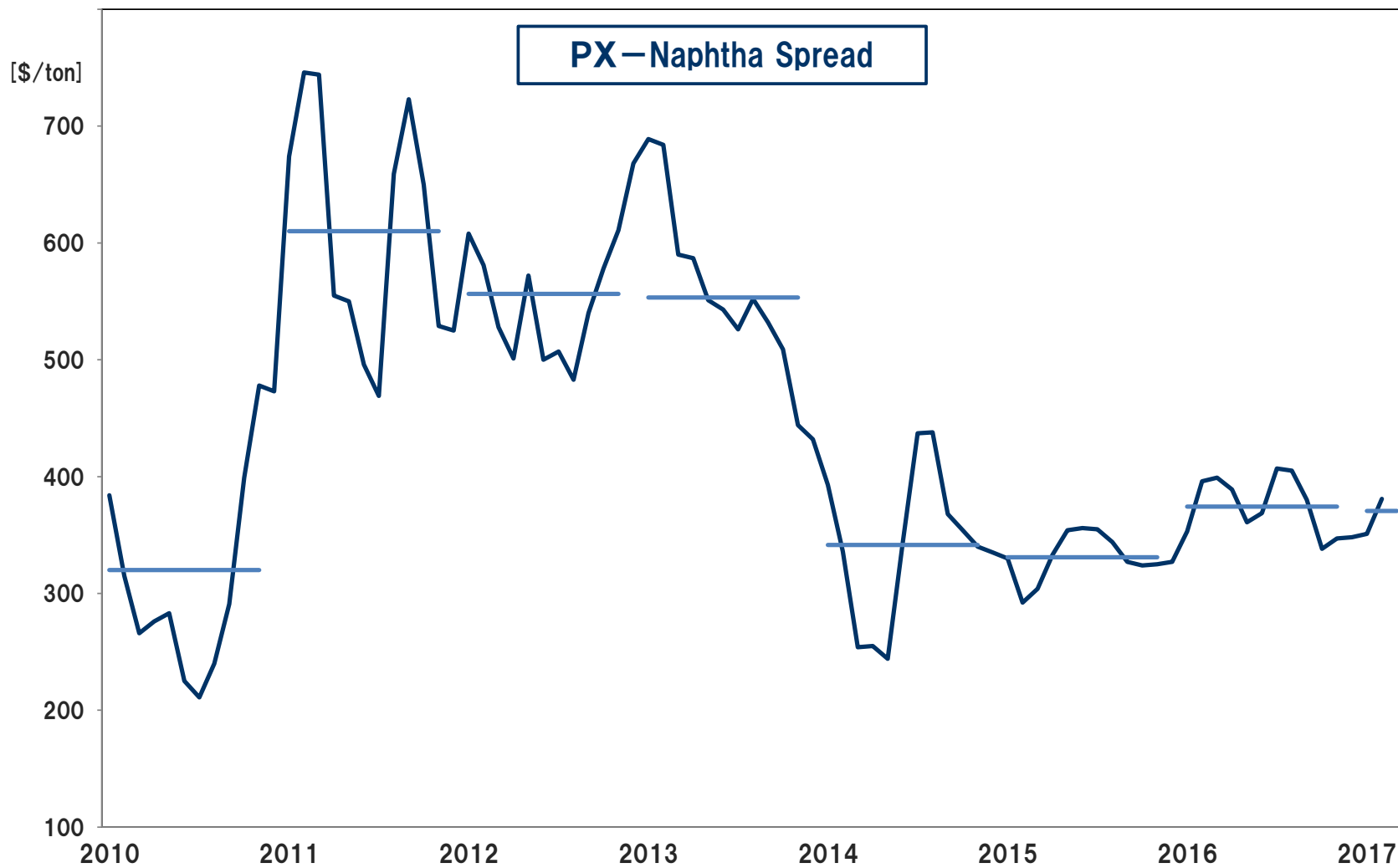
**[5] Accumulative number of contracted auto lease**

	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016
Accumulative number of contracted auto lease	1,287	5,001	11,734	19,040	27,401	37,077

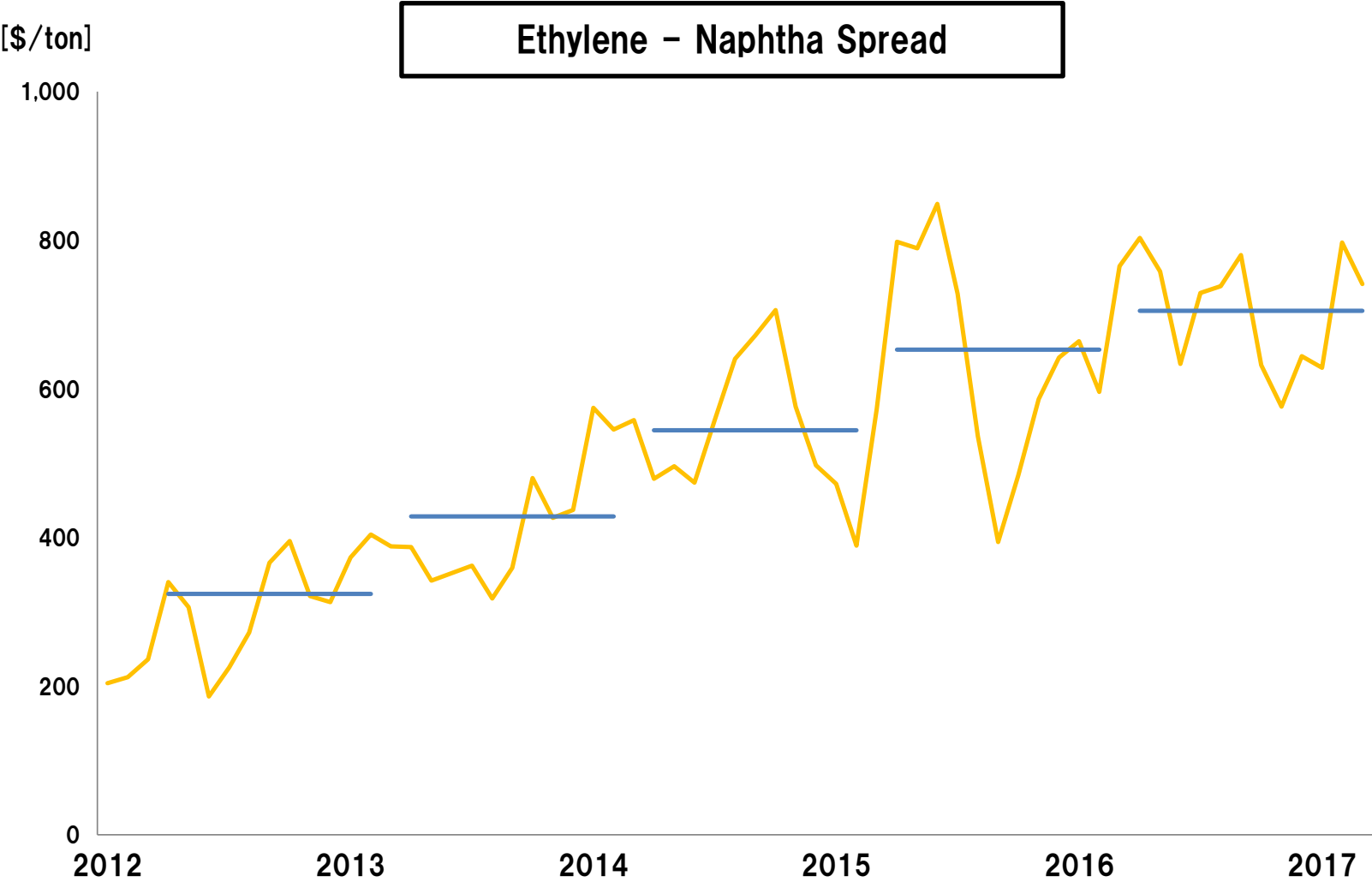


\*Trend of crude oil price from January 2015 to April 2017





(\*) Horizontal line indicates the average of each calendar year(Jan-Dec)



(\*) Horizontal line indicates the average of each fiscal year(Apr-Mar)

**Supplementary Information of  
Forecast for FY2017 Performance**

**FY2017 Forecast – Changes from FY2016**

Unit: billion yen

No.		Net Sales		Operating Income		Ordinary Income		Ordinary Income (excluding impact of inventory valuation, cost or market method)	
			Changes from FY2016		Changes from FY2016		Changes from FY2016		Changes from FY2016
1	Petroleum business	2,236.0	136.1	11.5	-42.2	4.0	-37.2	14.0	12.2
2	Petrochemical business	383.0	4.6	9.5	-6.6	14.0	-8.2	14.0	-8.2
3	Oil E&P business	66.0	21.5	26.0	13.8	26.0	16.7	26.0	16.7
4	Other business	62.0	1.4	5.5	1.2	5.0	1.2	5.0	1.2
5	Adjustment	-291.0	0.1	5.0	-0.9	5.0	0.1	5.0	0.1
6	Total	2,456.0	163.7	57.5	-34.7	54.0	-27.4	64.0	22.0

**Precondition of crude oil Price and Exchange rate, and Business Sensitivity**

■ Precondition

No.		FY2017 (Apr.–Mar.)
1	Crude oil (Dubai)	\$50.0/B
2	JPY/USD exchange rate	¥110.0/\$

■ Sensitivity

No.		Item	Crude oil (Dubai)	JPY/USD exchange rate
1	Petroleum Business	Inventory Impact	2.1 billion yen	0.9 billion yen
2		Refinery fuel cost etc.	-0.5 billion yen	-0.2 billion yen
3		Total	1.6 billion yen	0.7 billion yen
4	Oil E & P Business		0.9 billion yen	0.4 billion yen

\* Figures above refer to impacts by crude oil price (US\$1/bbl) and yen-dollar exchange rate (¥1/US\$) fluctuations.

\* A twelve-month period of Apr.2017 to Mar.2018 adopted for sensitivity figure estimation for the petroleum business and a nine-month period of Apr.2017-Dec.2017 for the oil E&P business



# Business Outline

## Oil Exploration & Production

[Independent exploration and production]

\*( )Contract start

UAE Abu Dhabi (1967~)

Qatar (1997~)



[Production volume](result of FY2016)

Approx. 40,000 BD(compared to crude oil processing : Approx. 10%)

[Reserves (2P)](as of Dec.31,2016)

Approx. 154,000,000 BBL

## Oil Sales

[Domestic sales] (result of FY2016)

Gasoline : 5,544 thousand KL

Diesel fuel : 4,120 thousand KL

Kerosene/JET : 2,340 thousand KL

Heavy fuel oil A : 1,420 thousand KL

Total : 20,821 thousand KL



[Product export] (result of FY2016)

4,945 thousand KL

[Domestic sales destination]

Dealers affiliated with the Company, large users,

Service station : 2,957(As of Mar.31,2017)

Accumulative number of contracted auto lease : 37,077 (As of Mar 31, 2017)



## Petrochemical

[Aromatic production capacity]

Para-xylene : 1.18mil tons/year

Benzene : 0.94 mil tons/year

Mixed-xylene : 0.60 mil tons/year

[Olefinic production capacity]

Ethylene : 1.29 mil tons/year

(As of Mar 31,2017)

## Crude oil import/ Oil refining

33

[Major crude oil suppliers]\*() Import ratio in FY2016

UAE(38.3%), Saudi Arabia(25.2%)

Qatar (10.4%), Kuwait and others(26.1%)



[Refining capacity]

Chiba Refinery 177,000 BD

Yokkaichi Refinery 86,000 BD

Deemed crude

processing 37,000 BD (\*)

Sakai Refinery 100,000 BD

400,000 BD

(\*) Crude oil refining is outsourced to Showa Yokkaichi Sekiyu Refining capacity : As of Mar 31,2017

## Renewable energy

[Wind power generation]

EcoPower Co., Ltd. (domestic share approx. 6%)

Power generation capacity : 211,300 kW

Number of power generators : 157 (23areas) (As of Mar 31, 2017)



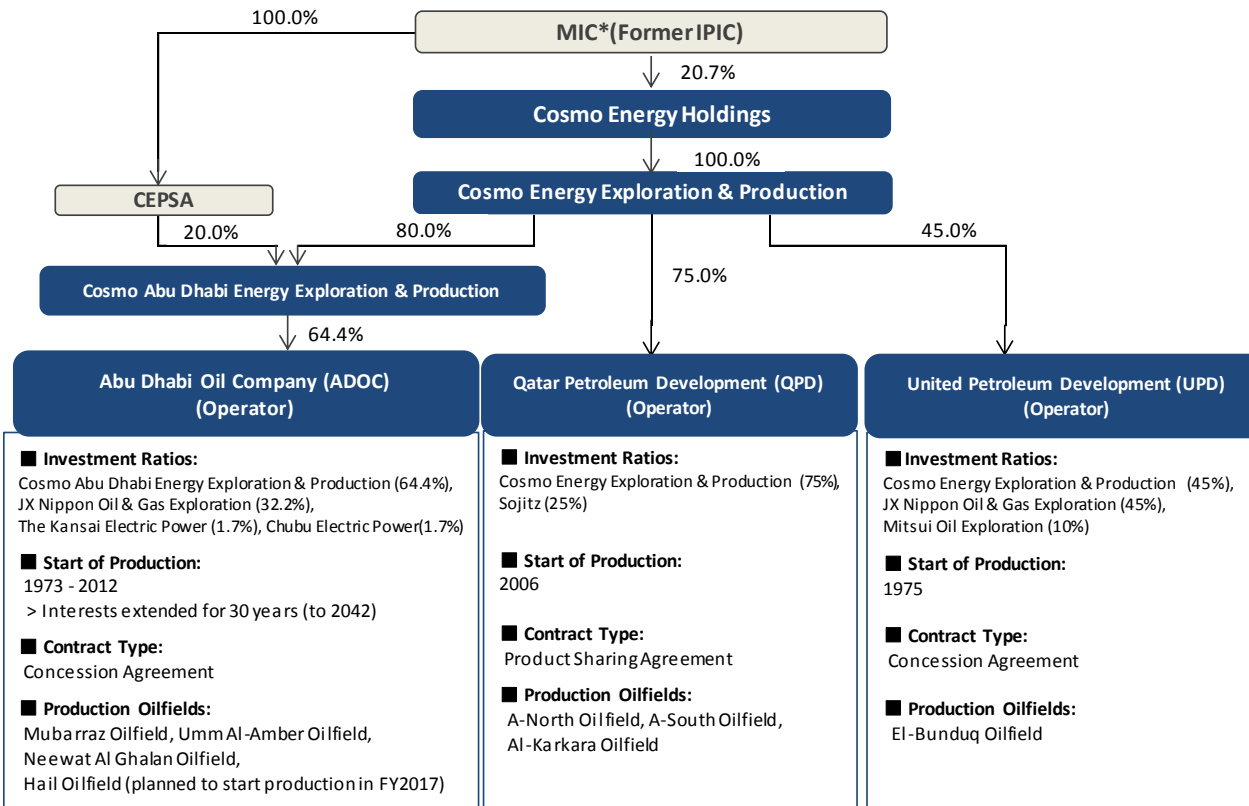
[Solar power generation]

CSD Solar(Joint Venture Company)

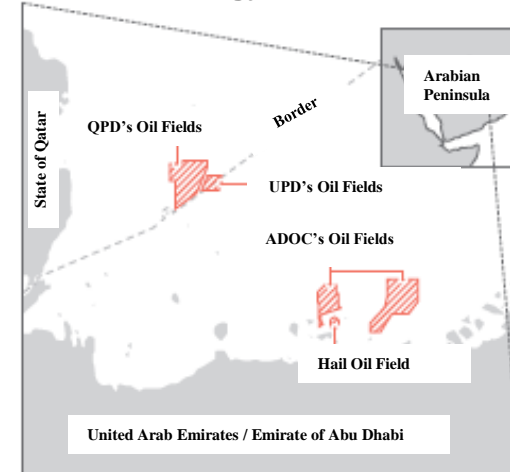
Generation capacity: 24,000 kw

- ✓ Based on a strong relationship of trust with Emirate of Abu Dhabi in the Middle East developed almost five decades, we have achieved low-risk, low-cost development.
- ✓ Abu Dhabi Oil Company extended concessions (30 years) in 2012 and obtained new concessions area, the Hail Oil Field is projected to the same production volume as its three existing oilfields.
- ✓ The Hail Oil Field is expected to commence production in FY2017.

■ Cosmo Energy Group Oil E&P Division



■ Cosmo Energy Group's oil fields



(\*) MIC (Mubadala Investment Company) in which The Emirate of Abu Dhabi has a 100% stake ,has been established as a holding company in association with the business combination of IPIC (International Petroleum Investment Company), and MDC (Mubadala Development Company).

✓ Risk Tolerance	: Low oil price risk, exploration risk, funding risk
✓ Growth Strategy (Production Increase)	: The Hail Oil Field development, Consideration of joint development with Cepsa
✓ Long-term Stable Production	: Solid trust relationships with oil producing countries, High quality oil fields and oil recovery technologies

■ Risk Tolerance ■

- Earning power under low oil prices → For FY2016 Q1 (January to March), we maintained profitability under conditions where Dubai crude was priced at \$30 per barrel.
- Achieving low-cost development through discovered and undeveloped oilfields (including the Hail oilfield) (see page 36)
- Loans provided by Japanese public institutions (JBIC) with credit of the operator (ADOC)

■ Growth Strategy ■

- At peak production, the Hail Oil Field is expected to reach production capacity equivalent to the three existing oilfields of ADOC (see page 36)
- Strategic comprehensive alliance with MIC(former IPIC)-owned Cepsa, deliberating new oilfield development with Abu Dhabi National Oil Company and CEPESA (see page 37)

■ Long-term Stable Production ■

- Obtained interests before founding of UAE, with safe operation and stable production for almost five decades
- Long-term, stable purchase of crude oil from UAE (Abu Dhabi) and Qatar
- Contributions to both countries in terms of culture(Japanese language education, etc.) and the environment (zero flaring, etc.)

Business Environment in the Middle East Region (UAE / QATAR)

- The Arabian Gulf has many reserves and a lot of exploratory data has been accumulated (which translates into low oil exploration costs)
- Shallow water depth (relatively lower exploration, development and operating costs)
- Countries are politically stable, representing minimal country risks

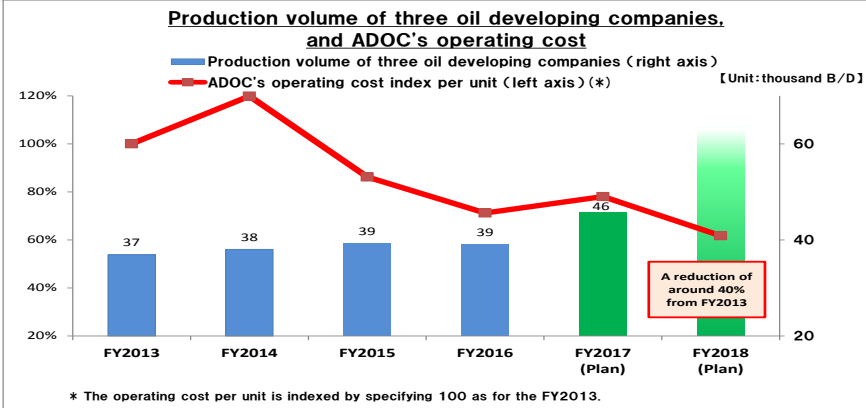
- ✓ Artificial island completed, drilling of delineation well and preparation for construction of surface facilities is underway.
- ✓ Hail Oil Filed investment will be curbed with the shared use of existing oil processing, storage and shipping facilities. (Estimated savings of 300-400 million dollars), and after the start of production, per unit operating costs are expected to decline for the increment of production volume.

### Development Schedule for Hail Oil Field

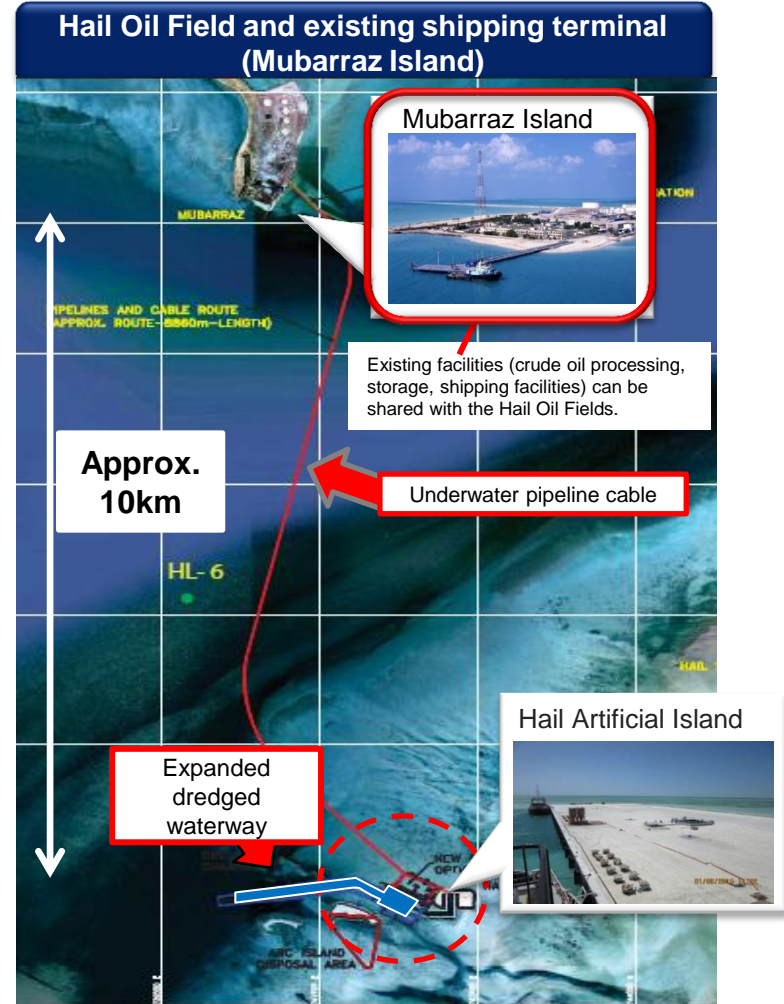
Main Items		FY2016	FY2017
Water Channel Dredging Artificial Island Construction	-	→	
		→	
Well Drilling	Disposal Wells (2 in total)	→	
	Delineation Wells (2 in total)	→	→ Conversion to Production Wells
	Production Wells (8 in total)		→
Surface Facilities EPC (*) Work	Hail Site	→	→
	Mubarraz Island	→	→
Start of Production	-		→

(\*) Disposal Wells: Wells for the disposal of mud and water generated in the drilling process  
 (\*) EPC: Engineering, Procurement and Construction

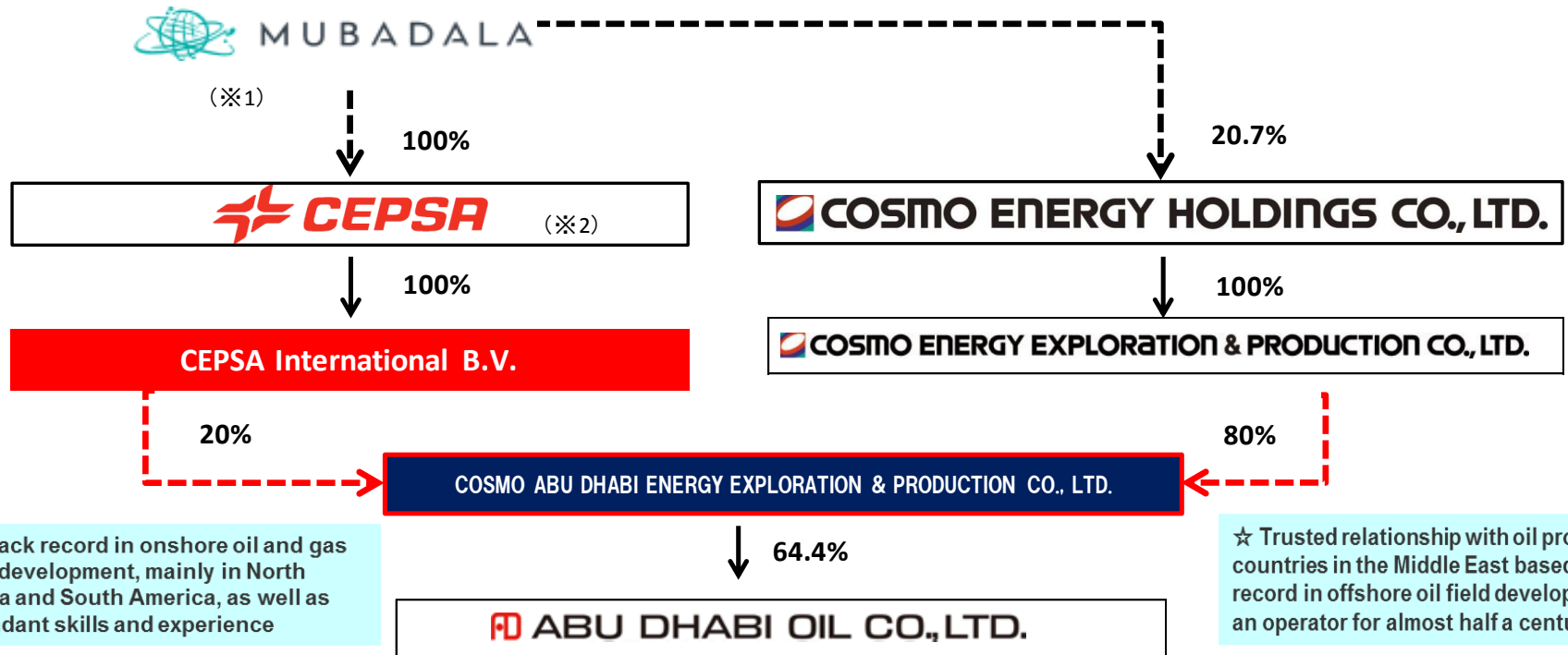
### Changes in operating cost of ADOC(\*)



(\*) Operating Costs: Oil well repair costs, equipment utilities, repair costs, personnel costs related to operation, etc.



- ✓ Cosmo aims to reinforce and expand the strategic partnership with CEPSA by transferring part of shares of newly established upstream subsidiary “Cosmo Abu Dhabi Energy Exploration& Production” to CEPSA, which is in line with the “Further strengthen alliances with IPIC(currently MIC)” policy stipulated as part of the 5th Consolidated Medium-Term Management Plan.
- ✓ Cosmo and CEPSA, as Abu Dhabi family companies, is deliberating to obtain new interests, provide sales support of crude oil and product marketing and retail, and will consider joint ventures with Maruzen Petrochemical.



☆ Track record in onshore oil and gas field development, mainly in North Africa and South America, as well as abundant skills and experience

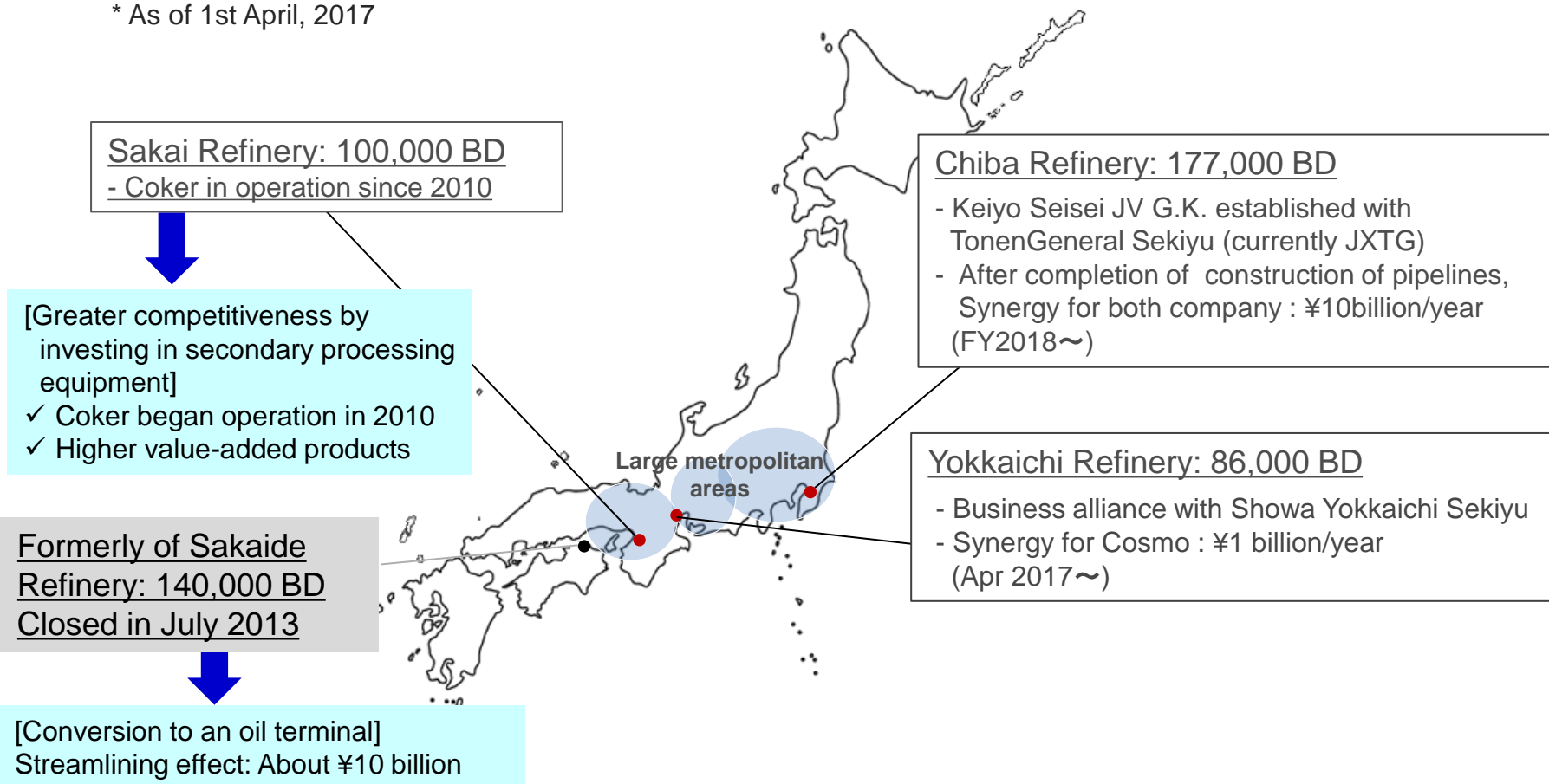
☆ Trusted relationship with oil producing countries in the Middle East based on track record in offshore oil field development as an operator for almost half a century

(\*1) MIC (Mubadala Investment Company) in which The Emirate of Abu Dhabi has a 100% stake ,has been established as a holding company in association with the business combination of IPIC (International Petroleum Investment Company), and MDC (Mubadala Development Company).  
 (\*2) Major comprehensive oil company of Spain.

- ✓ FY2016 : Commencement of a two-year long run at the Chiba Refinery  
→ Improvement in earnings: ¥7 billion
- ✓ FY2017 : Business alliance with Showa Yokkaichi Sekiyu → Synergy for Cosmo: ¥1 billion per year
- ✓ FY2018 : Integration of Chiba refineries of the Company and JXTG → JV synergy: ¥10 billion per year

[CDU capacity: 400,000 BD]

- \* Including deemed crude processing to Showa Yokkaichi Sekiyu (37,000 BD)
- \* As of 1st April, 2017





- ✓ Assume that synergies between both companies will be 10 billion yen/year (1 billion yen/year before the completion of pipelines).
- ✓ Establish a refinery with top-class competitiveness in Asia.

■ Establishment of Keiyo Seisei JV G.K. (January 2015)

- Investment ratio: each company to take a 50% stake
- Business: development of a production plan for both refineries

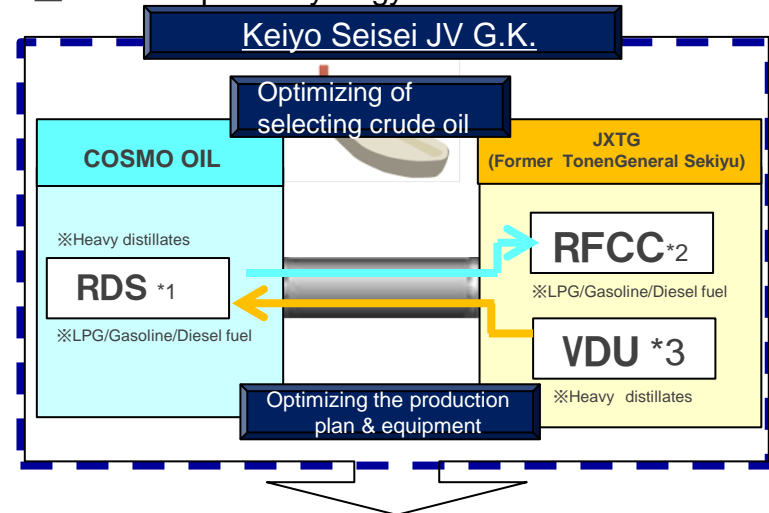
■ Formal agreement on the construction of pipelines

- Construction work to started in June 2015
  - ⇒ The horizontal tunnel passed through in March 2017 (see the chart in the bottom right corner).
- Nine pipelines to be laid
- Each of the two companies to provide half of the construction costs (each assumed to pay ¥15 billion)
- The project has been chosen as a project to be subsidized by the Ministry of Economy, Trade and Industry. (annual one-year application)

■ Integration of the two refineries

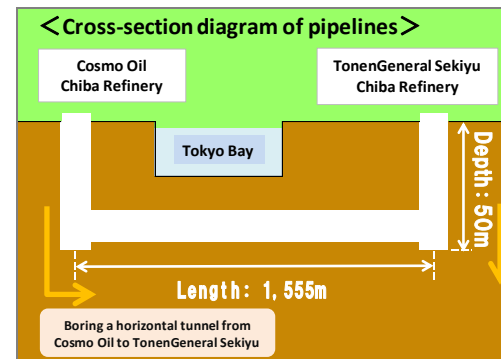
- Upon the completion of the pipelines and after integration of refining equipment, the No.1 CDU that Cosmo Oil currently holds will be disposed of for the optimization of the refinery equipment after the integration of the equipment with JV.

■ An example of Synergy



Producing synergy = Increasing competitiveness of refineries

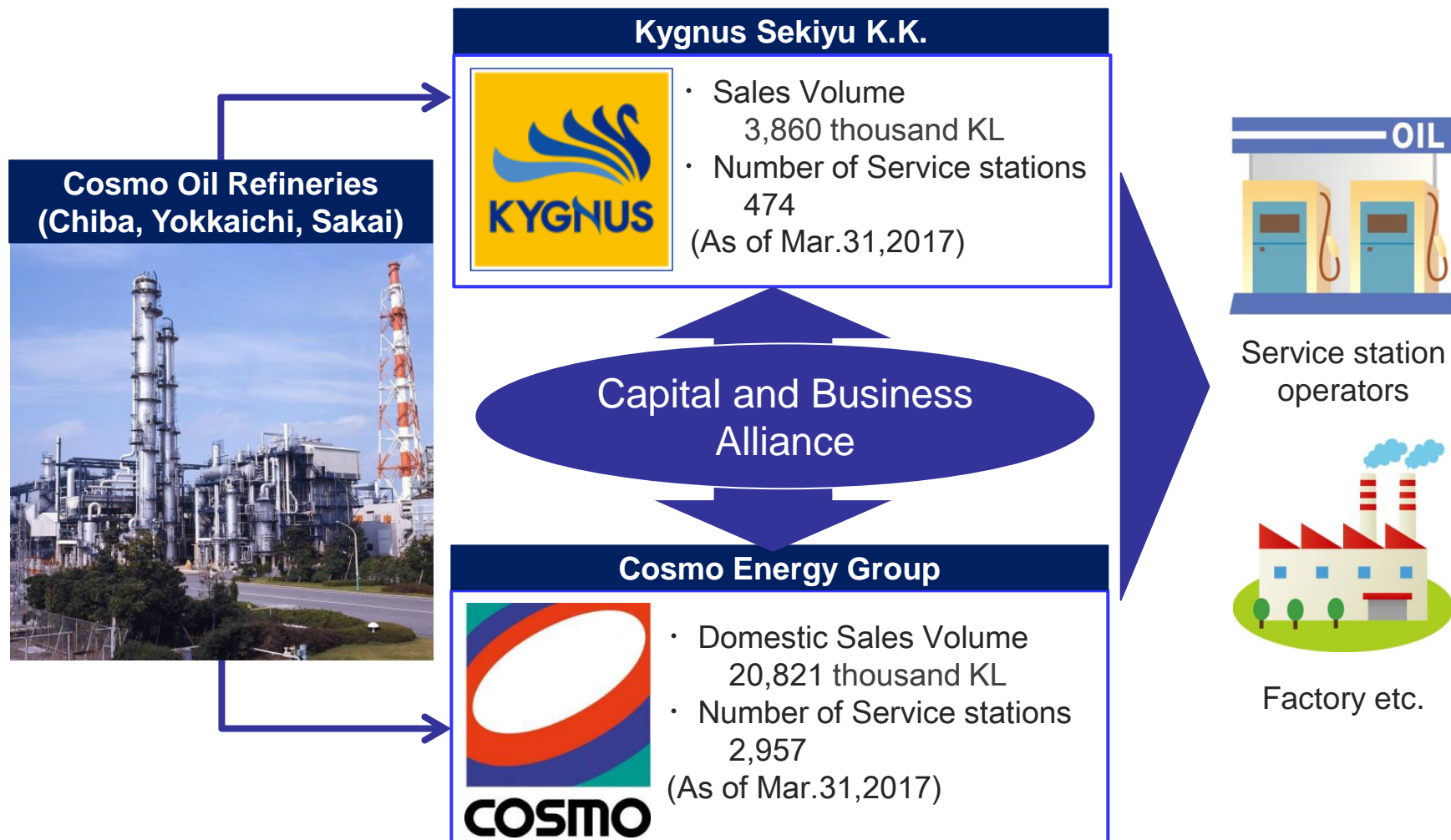
\* 1)RDS=Residue Hydro desulfurization unit  
 \* 2)RFCC=Residue Fluid Catalytic Cracker  
 \* 3)VDU= Vacuum Distillation Unit



※Shield machine :A side-cut excavator

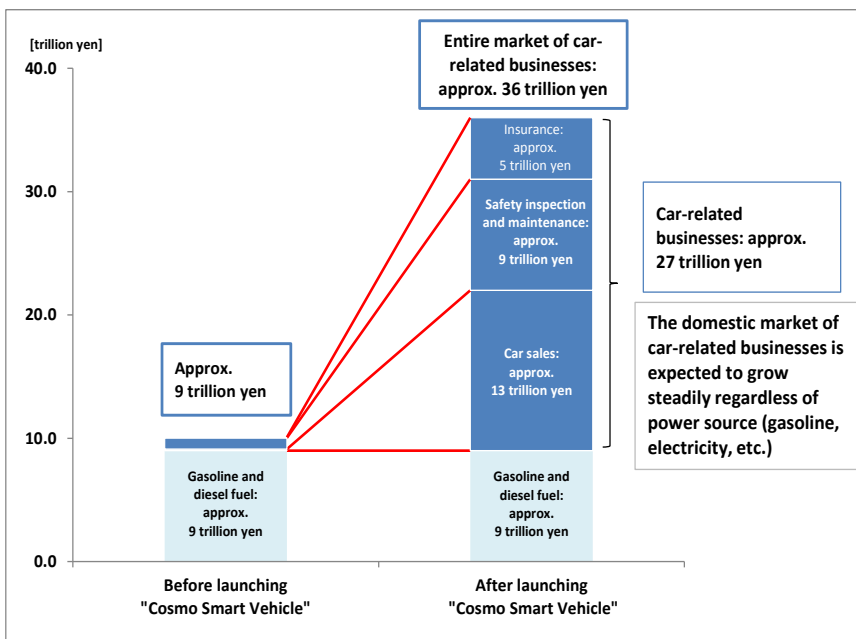


- ✓ Conclude a capital and business alliance with Kygnus Sekiyu K.K. and acquire 20% of common shares (scheduled in the first quarter of FY2017).
- ✓ Begin supplying petroleum products to Kygnus Sekiyu K.K. in about three years.
- ✓ Advance discussion and consideration with a view to a business alliance, in addition to the supply of petroleum products.

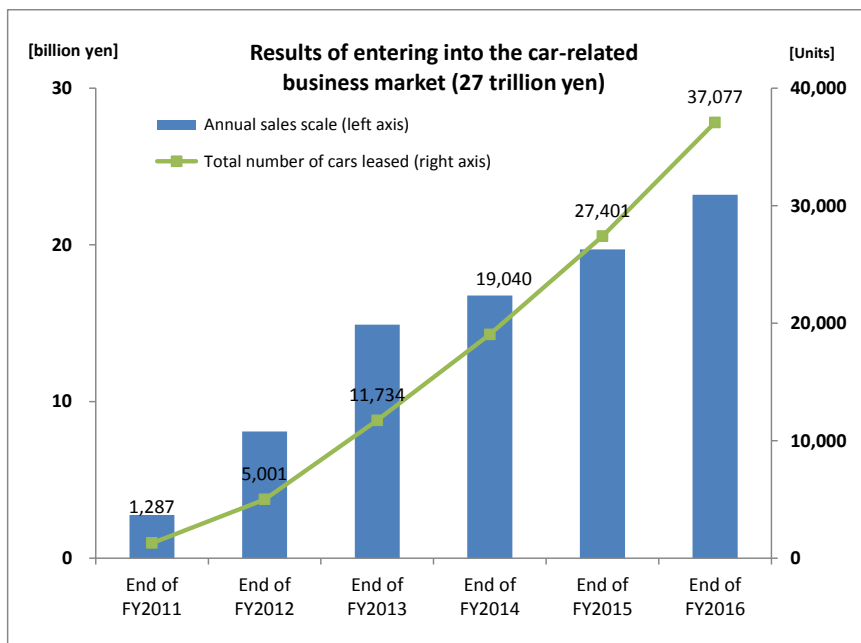


- ✓ Aim at strengthening SS profitability by converting to “car life value proposition” by positioning the individual leasing business at the core.
- ✓ Aim to enter into the entire market of car-related business (approx. 36 trillion yen) based on gasoline and diesel fuel (approx. 9 trillion yen)
- ✓ Total number of cars leased is 37,077, and annual sales scale exceeded 23 billion yen (as of the end of FY2016)

### Size of target market



### Results of “Cosmo Smart Vehicle” (\*)

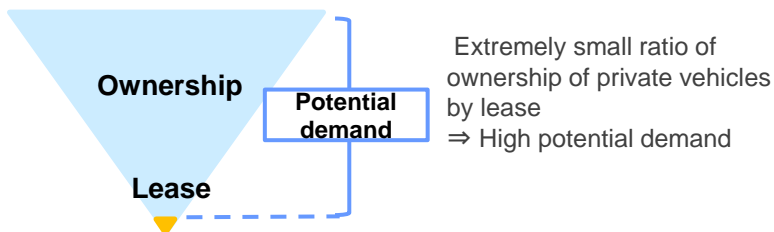


(\*) “Cosmo Smart Vehicle”: car sale business based on auto-lease

- ✓ Market : Enter the niche market of auto-leases for individuals that leasing companies could not serve
- ✓ Strategy : Acquire customers using the strengths of SS (frequent contacts of individual customers, etc.)
- ✓ Risk : Low risk due to the absence of car inventory and credit risk
- ✓ Business model: All parties, including customers, leasing companies, Cosmo, and dealerships, win.

### Characteristics

#### ■ Entry to the market with high potential demand



#### ■ Using the strengths of SS

- Frequent contact with individual Customers  
 (500,000 units/day) (\*1)  
(\*1) The number of cars of customers visiting Cosmo SS (estimated by Cosmo)
- Acquire customers using membership cards  
 ("Cosmo The Card": effective number of members  
 4.44 mil cards) (\*2) (\*2) As of March 31, 2017
- Fuel oil discount system (patented business model)

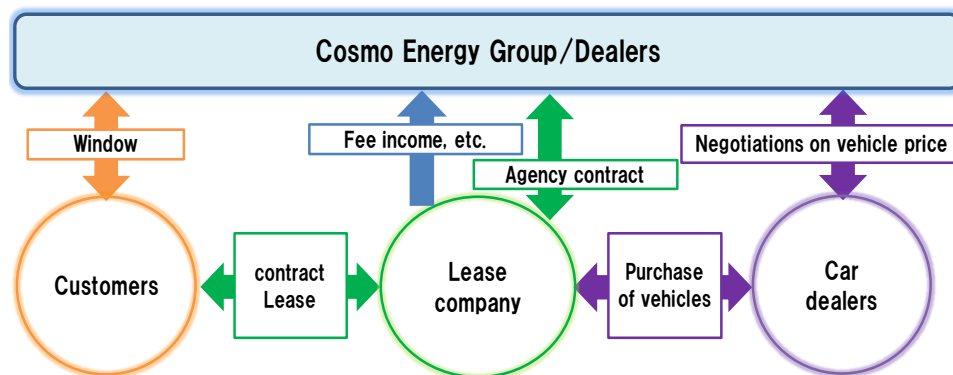
#### ■ Low risk

- Because the SS play the role of dealerships, there is no credit risk or risk of keeping vehicle inventory.

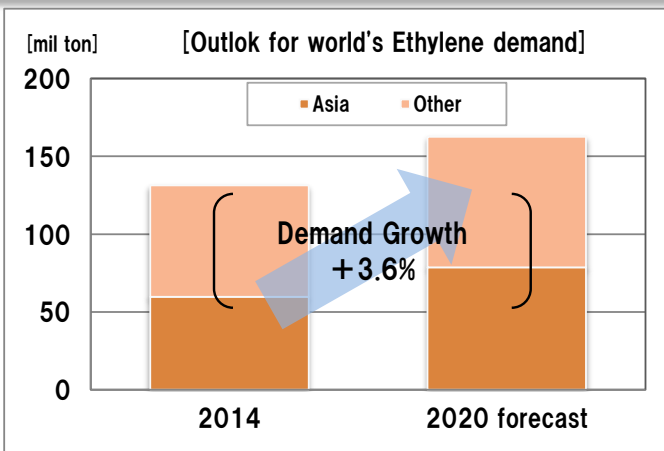
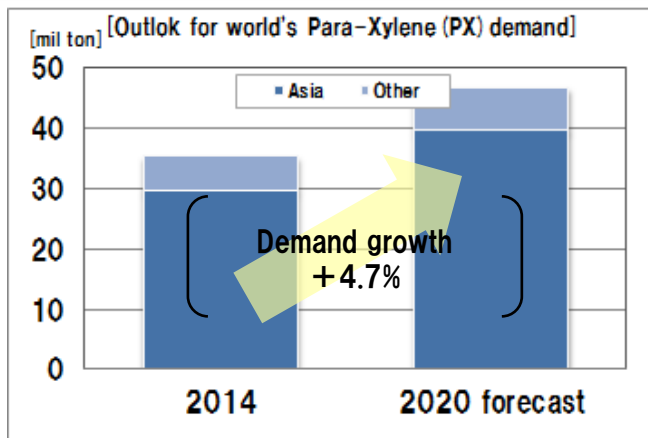
### Win-win business model

Customers : - Being able to own new cars of any maker and model for a price lower than purchasing  
 - No complicated procedures  
 e.g. Simplified expenses for owning a car (monthly flat rate that includes safety inspections, taxes, insurance, etc.)

Lease companies : Capture new customers  
 Cosmo, dealerships : Secure revenue sources that are not solely dependent on fuel oil

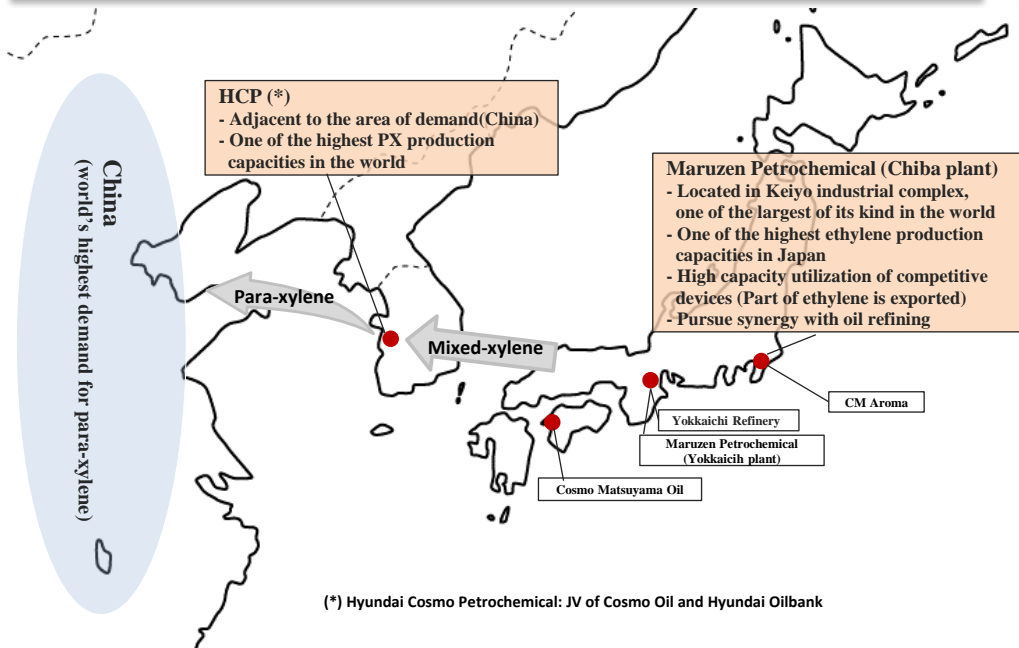


## Expected global demand for petrochemical products



Source: Global Demand Trends for Petrochemical Products of the Ministry of Economy, Trade and Industry (2014-2020)

## Strengths of Cosmo Energy Group



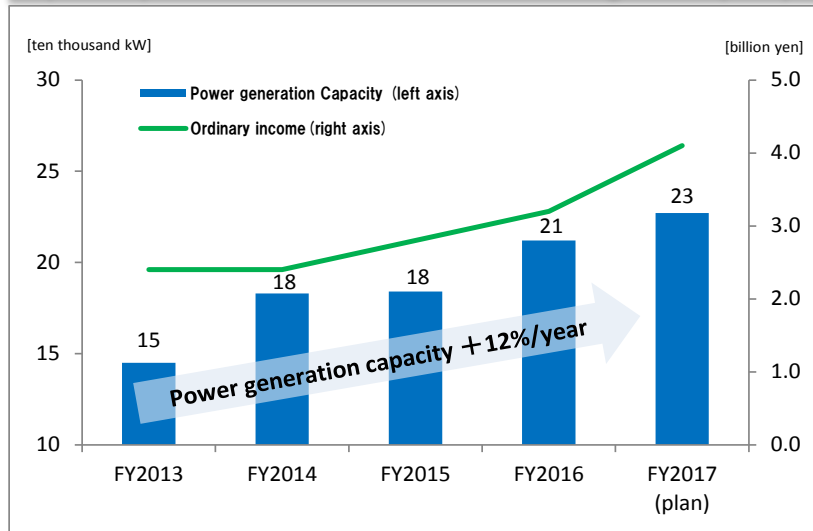
(\*) Hyundai Cosmo Petrochemical: JV of Cosmo Oil and Hyundai Oilbank

## Production capacity

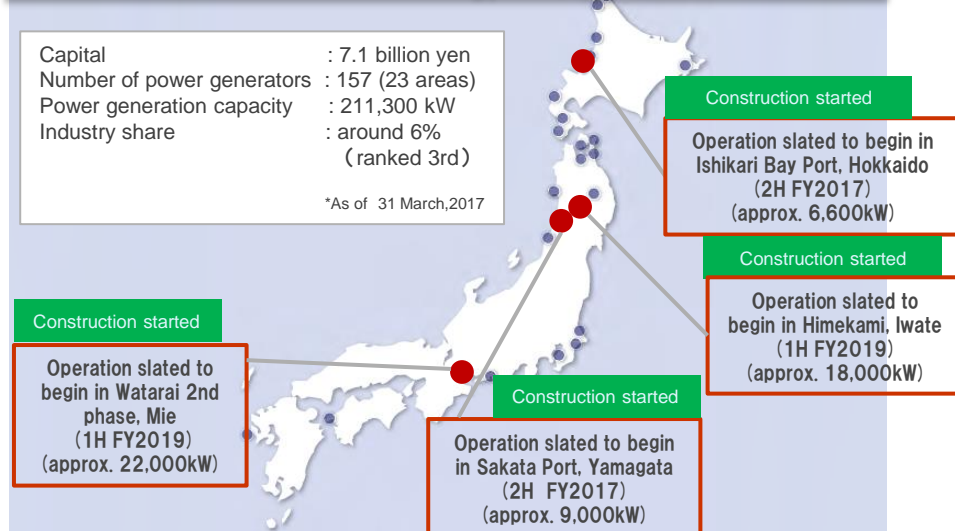
Product		Manufacture	Production capacity
Olefin-based	Ethylene	Maruzen Petrochemical	* 1.29 mil t/year
	Para-xylene	Hyundai Cosmo PetroChemical	1.18 mil t/year
Aroma-based	Benzene	Maruzen Petrochemical	0.60 mil t/year
		Hyundai Cosmo PetroChemical	0.25 mil t/year
		Cosmo Matsuyama Oil	0.09 mil t/year
	Total		
Mixed-xylene	Cosmo Oil (Yokkaichi Refinery)	CM Aroma	0.30 mil t/year
			0.27 mil t/year
		Cosmo Matsuyama Oil	0.03 mil t/year
Total			0.60 mil t/year
Aroma-based, total			2.72 mil t/year

\* Includes production capacity of Keiyo Ethylene (55% owned, consolidated subsidiary of Maruzen Petrochemical)

### Changes in wind power generation capacity (in the period of the medium-term management plan)



### Overview of Eco Power Co., Ltd. of Cosmo Energy Group



### Characteristics (strengths) of the Group

- ✓ Making Eco Power Co., Ltd., a pioneer in the wind power generation business (founded in 1997), a Group company in 2010.
  - ✓ Achieving high on-wind availability (90% or more) through development, construction, operation, and maintenance within the Group.
  - ✓ Aiming to expand the business in the long term by expanding sites on land and participating in an offshore wind farm project (\*1).
- (\*1) The offshore wind power generation in Akita is a large-scale offshore wind power generation project led by the private sector.

### Business environment in Japan

- ✓ The ratio of wind power generation to total power generation in Japan in 2030 is expected to be around three times greater (10 million kW) than the 2015 level (\*2).
- ✓ The FIT scheme was introduced in 2012, and the acquisition price is fixed for 20 years.
- ✓ Entry into the market is not easy because advanced expertise is required in the identification of suitable sites and environmental assessment. (\*3)

(\*2) Source: "On institutional reform for promoting the introduction of renewable energy" of the Agency for Natural Resources and Energy in November 2015

(\*3) Identification of suitable sites (2 to 3 years) → Environmental assessment (4 to 5 years) → Construction work (1 to 2 years) → Start of operation

## Disclaimer

### FORWARD-LOOKING STATEMENTS

Certain statements made and information contained herein constitute "forward-looking information" (within the meaning of applicable Japanese securities legislation). Such statements and information (together, "forward looking statements") relate to future events or the Company's future performance, business prospects or opportunities. Forward-looking statements include, but are not limited to, statements with respect to estimates of reserves and or resources, future production levels, future capital expenditures and their allocation to exploration and development activities, future drilling and other exploration and development activities, ultimate recovery of reserves or resources and dates by which certain areas will be explored, developed or reach expected operating capacity, that are based on forecasts of future results, estimates of amounts not yet determinable and assumptions of management.

All statements other than statements of historical fact may be forward-looking statements. Statements concerning proven and probable reserves and resource estimates may also be deemed to constitute forward-looking statements and reflect conclusions that are based on certain assumptions that the reserves and resources can be economically exploited. Any statements that express or involve discussions with respect to predictions, expectations, beliefs, plans, projections, objectives, assumptions or future events or performance (often, but not always, using words or phrases such as "seek", "anticipate", "plan", "continue", "estimate", "expect", "may", "will", "project", "predict", "potential", "targeting", "intend", "could", "might", "should", "believe" and similar expressions) are not statements of historical fact and may be "forward-looking statements". Forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause actual results or events to differ materially from those anticipated in such forward-looking statements. The Company believes that the expectations reflected in those forward-looking statements are reasonable, but no assurance can be given that these expectations will prove to be correct and such forward-looking statements should not be unduly relied upon. The Company does not intend, and does not assume any obligation, to update these forward looking statements, except as required by applicable laws. These forward-looking statements involve risks and uncertainties relating to, among other things, changes in oil prices, results of exploration and development activities, uninsured risks, regulatory changes, defects in title, availability of materials and equipment, timeliness of government or other regulatory approvals, actual performance of facilities, availability of financing on reasonable terms, availability of third party service providers, equipment and processes relative to specifications and expectations and unanticipated environmental impacts on operations. Actual results may differ materially from those expressed or implied by such forward-looking statements.