

# Cosmo Energy Holdings Co., Ltd. Presentation on Results for Third Quarter of Fiscal 2016

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February 9, 2017

Director, Senior Executive Officer

Kenichi Taki

## (Summary)

Effects of initiatives addressing profitability enhancement, including a two-year long run at the Chiba Refinery, emerging amid a recovery in business environments such as improvement of domestic margins and upturn of oil prices.

## (Petroleum business)

- ✓ In the second half, the operating rate at the Chiba Refinery has improved due to a two-year long run (the skipping of regular maintenance in autumn) under the circumstances that domestic margins have been firm. Ordinary income stood at ¥23.1 billion, up ¥66.7 billion from a year ago.

## (Petrochemical business)

- ✓ Maruzen Petrochemical has been operating at full capacity since July, after regular maintenance. HCP (\*) has achieved a recovery in profitability, by a recovery in production volume due to the absence of a negative impact following the regular maintenance last year. Ordinary income stood at ¥12.7 billion, up ¥12.5 billion year on year.

## (Oil exploration and production business)

- ✓ Continue Drilling in the development of Hail Oil Field.
- ✓ Although initiatives conducted to reduce operating costs, the average oil price (January to September) was low, 39 dollars. Ordinary income stood at ¥9.0 billion, down ¥5.4 billion year on year.

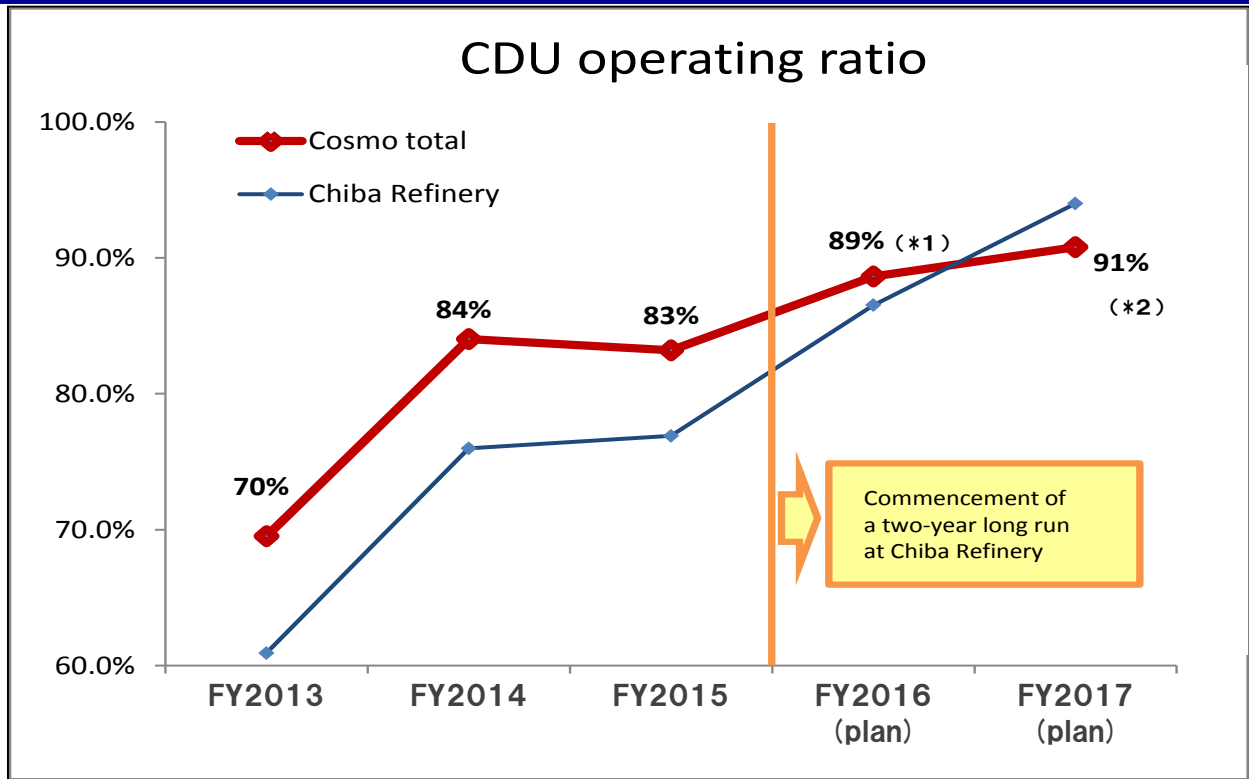
## (Key points of financial results)

- ✓ Consolidated ordinary income came to ¥50.1 billion, up ¥77.1 billion on a year-on-year basis, with net profit standing at ¥23.4 billion, up ¥72.0 billion year on year.

(\*) HCP : Hyundai Cosmo Petrochemical

# Enhancement of the Competitiveness of Refineries: Two-Year Long Run at Chiba, Alliance at Chiba and Yokkaichi

- ✓ In FY2016, the operating ratio improved due to the two-year long run (skipping of regular maintenance in autumn) at Chiba Refinery.
- ✓ From FY2017, a business alliance will commence at Yokkaichi Refinery (from April 2017). From FY2018, competitiveness will be enhanced further with the completion of the pipeline of Chiba JV.



Fiscal year	FY2013	FY2014	FY2015	FY2016	FY2017	From FY2018
	Decision on alliances			Enhancement of competitiveness		
Initiative to enhance competitiveness	An alliance between our Chiba Refinery and TonenGeneral Sekiyu determined	Chiba JV established	Agreement reached on a business alliance between Yokkaichi Refinery and Showa Shell Sekiyu	(i) Commencement of a two-year long run at Chiba Refinery --> 7 billion yen improvement in profit (ii) Completion of boring on the Chiba JV horizontal tunnel (January 2017)	Commencement of the business alliance at Yokkaichi Refinery --> Synergy effect of 1 billion yen per year at Cosmo	(i) Full-scale operations at Chiba JV --> Synergies of 10 billion yen per year at both companies (ii) Commencement of a four-year long run at Chiba (plan)

(\*1) Results from April to December + Plans from January to March (\*2) Revised medium-term management plan (announced in November 2015)

[ 3Q FY2016 Results] Consolidated Income Statements – Changes from 3Q FY2015 **3**

Unit: billion yen

No.	Item	FY2016 (Apr.-Dec.2016)	FY2015 (Apr.-Dec.2015)	Changes	(Ref) FY2016 Forecast
1	Net sales	1,625.6	1,731.5	-105.9	2,365.0
2	Cost of sales	1,472.0	1,662.7	-190.7	-
3	Selling, general and administrative expenses	97.1	88.3	8.8	-
4	Operating income	56.6	-19.6	76.2	61.0
5	Non-operating income/expenses, net	-6.5	-7.4	0.9	-
6	Ordinary income	50.1	-27.0	77.1	53.0
7	Extraordinary income/losses, net	-2.8	-6.4	3.6	-
8	Income taxes	16.6	12.3	4.3	-
9	Profit attributable to non-controlling interests	7.3	2.9	4.4	-
10	Profit attributable to owners of parent	23.4	-48.6	72.0	33.0
11	Impact of inventory valuation	22.4	-41.1	63.5	23.5
12	Ordinary income excluding impact of inventory valuation	27.7	14.1	13.6	29.5
13	Dubai crude oil price (USD/B) (Apr.-Dec.)	44.9	50.5	-5.6	46.6
14	JPY/USD exchange rate (yen/USD) (Apr.-Dec.)	106.6	121.7	-15.1	102.6
<b>【Reference】</b>					
15	Dubai crude oil price (USD/B) (Jan.-Sep.)	38.9	54.3	-15.4	
16	JPY/USD exchange rate (yen/USD) (Jan.-Sep.)	108.7	120.9	-12.2	

[3Q FY2016 Results] Outline of Consolidated Ordinary Income by business segment  
 – Changes from 3Q FY2015

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Unit : billion yen

No	FY2016 ( Apr.-Dec. ) (*1)		FY2015 ( Apr.-Dec. )		Changes			
	Ordinary income	Ordinary income exl. Impact of Inventory valuation	Ordinary income	Ordinary income exl. Impact of Inventory valuation	Ordinary income	Ordinary income exl. Impact of Inventory valuation		
1	Total		50.1	27.7	-27.0	14.1	77.1	13.6
2	( Each segment )	Petroleum business	23.1	1.3	-43.6	-2.1	66.7	3.4
3		Petrochemical business	12.7	12.1	0.2	-0.2	12.5	12.3
4		Oil E&P business (*2)	9.0		14.4		-5.4	
5		Other (*3)	5.3		2.0		3.3	

(\*1) Please refer to page 16 for quarterly results.

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

(\*3) Including consolidated adjustment

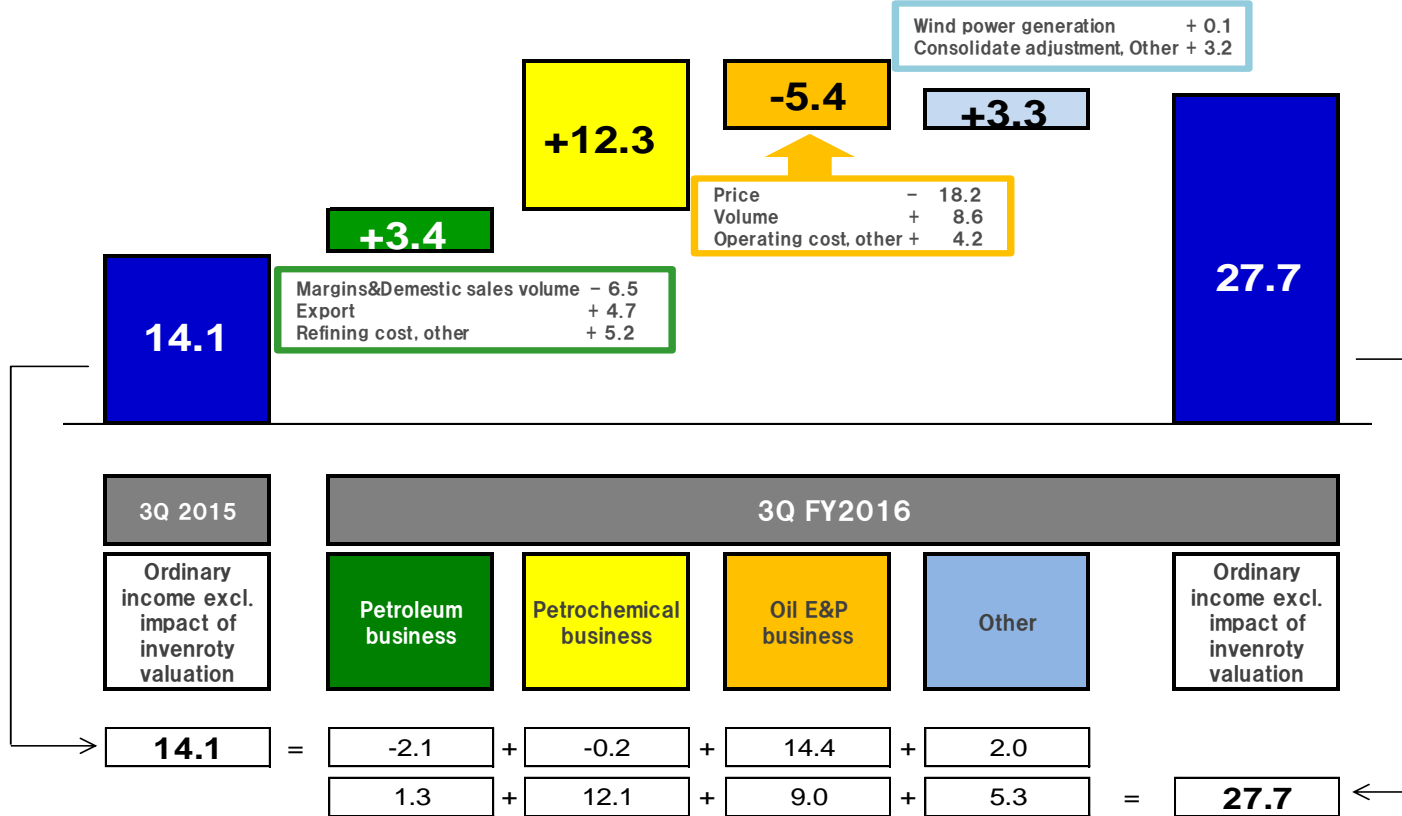
[3Q FY2016 Results] Consolidated Ordinary Income (Excluding impact of inventory valuation)  
 – Analysis of Changes from 3Q FY2015

**Key variable factors**

- Petroleum business** : Income increased, mainly due to an improvement in profitability associated with the two-year long run at Chiba and lower refining costs, despite a reduction in margin caused by a time lag in a phase of upturn of oil prices.
- Petrochemical business** : Income increased due to Maruzen Petrochemical continued to operate at full capacity from July, after regular maintenance, and benefited from the favorable ethylene market situation, and due to increased production at HCP in the absence of the negative impact of regular maintenance.
- Oil E&P business** : Income declined, reflecting lower oil prices, despite an expansion in the production volume and a reduction in operational costs.

**Consolidate ordinary income excluding impact of inventory valuation**  
 : Up ¥13.6 billion yen from 3Q FY2015

Unit : billion yen



## Consolidated Balance Sheets

Unit: billion yen

No		FY2016 (As of Dec. 31, '16)	FY2015 (As of Mar. 31, '16)	Changes
1	Total Assets	1,572.6	1,409.6	163.0
2	Net assets	237.7	202.7	35.0
3	Net worth	129.0	108.0	21.0
4	Net worth ratio	8.2%	7.7%	UP 0.5 points
5	Net interest-bearing debt *1	774.0	666.2	107.8
6	Debt Equity Ratio (times) (based on the credit rating) *2	4.7	4.6	Down 0.1 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.		3Q FY2016 Results	Change from 3QFY2015
1	Capital expenditures	79.3	27.2
2	Depreciation expense amount, etc.	28.2	5.2

## Capital Expenditures by Business Segment

Unit: billion yen

No.		3QFY2016 Results	3QFY2015 Results	Change from 3Q FY2015	(ref.) Main fluctuation factor
1	Petroleum	15.7	16.4	-0.7	-
2	Petrochemical	9.7	0.6	9.1	Made Maruzen Petrochemical into consolidated subsidiary
3	Oil E&P	32.0	30.3	1.7	Development of the Hail Oil Field
4	Other	22.5	3.8	18.7	IPP upgrade construction Wind power generation
5	Adjustment	-0.6	1.0	-1.6	-
6	Total	79.3	52.1	27.2	-

\* Please refer to page 25 for the FY2016 full-year forecast.



# Supplementary Information

**P. 9–10 Progress Made in the 5th Consolidated Medium–Term Management Plan**

**P.11–20 [3Q FY2016 Results] Supplementary Information**

- Sales Volume (3Q FY2016 results/FY2016 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 3Q FY2015
- Results by Business Segment – Quarterly results
- Historical Changes in Operating Ratio of Refineries, SSs, Credit Cards in Force and Auto Lease
- Diesel Fuel Export Results and Margin Environment
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**P.21–25 [FY2016 Full–Year Forecast] (Announced in Nov, 2016)**

- Outlook (Year on Year)
- Analysis of Changes in Consolidated Ordinary Income (excl. impact of inventory valuation) from FY2015
- Outlook by business segment, Precondition of Crude Oil Price and Exchange Rate, and Business Sensitivity
- Outline of Consolidated Capital Expenditures – Changes from FY2015

**P.26–28 Holding Company Structure**

**P.29–40 Overview of the Cosmo Energy Group (Business Outline)**

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

**Progress made in the 5<sup>th</sup> Consolidated  
Medium-Term Management Plan**

- ✓ Undertake the consistent and prompt execution of the Medium-Term Management Plan, aiming to achieve successful results beyond FY2017.
- ✓ Growth investments such as Hail Oil Field will peak out in FY2016.

Fiscal Year	FY2016		FY2017	Beyond next Medium-Term Management Plan
	First half	Second half		
Oil E&P	☁	☁	☀	☀
	<ul style="list-style-type: none"> <li>• Lower oil prices</li> <li>• Launch of Hail Oil Field excavation</li> </ul>	<ul style="list-style-type: none"> <li>• Oil prices to rise</li> <li>• Hail Oil Field excavation still to be underway</li> </ul>	<ul style="list-style-type: none"> <li>• Commence production at Hail Oil Field</li> </ul>	<ul style="list-style-type: none"> <li>• Production volume of ADOC(*1) will be doubled at peak</li> </ul>
Oil refining & petroleum product sales	☔	☁	☀	☀
	<ul style="list-style-type: none"> <li>• Lower Margins</li> <li>• Regular maintenance at Chiba Refinery</li> <li>• Car lease business for individuals ⇒ Over 30,000 vehicles contracted on a cumulative basis</li> </ul>	<ul style="list-style-type: none"> <li>• Supply-demand balance to improve</li> <li>• Skip regular maintenance at Chiba Refinery in autumn ⇒ Profit to improve by around ¥7.0 billion</li> <li>• Suspend operation of No.5 CDU at Yokkaichi Refinery ⇒ Supply-demand balance optimized</li> <li>• Car lease business for individuals ⇒ Aim for 40,000 vehicles to be contracted on a cumulative basis</li> </ul>	<ul style="list-style-type: none"> <li>• Policies in place for complying with the Act on Sophisticated Methods of Energy Supply Structures (2nd round) ⇒ Aim for a significant improvement in the supply-demand situation</li> <li>• Business alliance to start at Yokkaichi Refinery ⇒ Synergy for Cosmo : ¥1.0 billion/year</li> <li>• Car lease business for individuals ⇒ Aim for 60,000 vehicles to be contracted on a cumulative basis</li> </ul>	<ul style="list-style-type: none"> <li>• Pipeline construction (*2) to be completed at Chiba Refinery ⇒ Synergy for two companies: ¥10 billion/year</li> <li>• Four-year long run at Chiba Refinery</li> <li>• Car lease business for individuals ⇒ Aim for further business expansion</li> </ul>
Petrochemical	☁	☀	☁	☁
	<ul style="list-style-type: none"> <li>• Strong ethylene market</li> <li>• Regular maintenance at Maruzen Petrochemical</li> </ul>	<ul style="list-style-type: none"> <li>• Strong ethylene market</li> <li>• Maruzen Petrochemical runs at full-capacity</li> </ul>	<ul style="list-style-type: none"> <li>• Synergies with Petroleum business</li> </ul>	<ul style="list-style-type: none"> <li>• Concerns over loosening supply-demand balance for ethylene</li> </ul>
Wind power generation	☀	☀	☀	☀
	<ul style="list-style-type: none"> <li>• Stable operations achieved for existing sites (Power generation capacity: approximately 180,000 kw)</li> </ul>	Application of the FIT scheme (Acquisition price to be fixed for 20 years)		<ul style="list-style-type: none"> <li>• Aiming for further business expansion</li> </ul>
		<ul style="list-style-type: none"> <li>• Operation to commence in Watarai, Mie (Power generation capacity: approximately 210,000 kw)</li> </ul>	<ul style="list-style-type: none"> <li>• Operations commence in Sakata Port, Yamagata, and Ishikari Bay Port, Hokkaido (Power generation capacity: approximately 230,000 kw) ⇒ Profit to increase by around ¥1.0 billion</li> </ul>	

(\*1) Abu Dhabi Oil Company

(\*2) Please refer to page 40 for "Joint Project with TonenGeneral Sekiyu K.K."

**Supplementary Information of  
3Q FY2016 Results**

Unit: thousand KL

No.		3QFY2016 Results	3QFY2015 Results	3QFY2016 Result Changes from 3QFY2015	FY2016 Forecast	FY2016 outlook changes from FY2015
1	Selling volume in Japan					
	Gasoline	4,203	4,297	97.8%	5,576	98.3%
2	Kerosene	1,003	963	104.1%	1,747	95.8%
3	Diesel fuel	3,122	3,105	100.6%	4,085	98.8%
4	Heavy fuel oil A	986	945	104.3%	1,387	97.7%
5	Sub-Total	9,315	9,310	100.1%	12,796	98.1%
6	Naphtha	4,394	4,754	92.4%	6,050	97.5%
7	Jet fuel	376	372	101.2%	490	94.4%
8	Heavy fuel oil C	1,064	1,127	94.4%	1,355	85.9%
9	inc. Heavy fuel oil C for electric	361	518	69.6%	485	65.0%
10	Total	15,149	15,563	97.3%	20,691	96.9%
11	Export volume (including bond sales)					
	Middle distillates (Jet, Kerosene/Disel fuel)	924	395	233.9%	1,456	194.1%
12	Other	2,626	2,382	110.3%	3,435	103.7%
13	Sub-Total	3,550	2,777	127.8%	4,891	120.4%
14	Barter deal, Others	7,827	7,262	107.8%	9,707	97.1%
15	Total selling volume	26,527	25,602	103.6%	35,289	99.6%

<b>[1] Dubai Crude oil price, processing volume and CDU operating ratios</b>						
No.		3QFY2016 Results	3QFY2015 Results	Changes from 3Q FY2015		
1	Dubai crude oil price (USD/B)	44.9	50.5	-5.6	—	
2	JPY/USD exchange rate (yen/USD)	106.6	121.7	-15.1	—	
3	Crude oil refining	Refined crude oil volume (thousand KL)	16,743	15,533	1,210	107.8%
4		CDU operating ratio (Calendar Day)	86.0%	78.6%	7.4%	—
5		CDU operating ratio (Streaming Day) *	94.9%	96.4%	-1.5%	—

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

<b>[2] Crude oil production volume</b>				
	3QFY2016 Results	3QFY2015 Results	Changes from 3Q FY2015	
Cosmo Energy Exploration & Production Co., Ltd. (B/D)	41,394	38,879	2,515	106.5%

- \*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-September, 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, 2015)

<b>Crude Reserves Estimate (working interest base) (*1)</b>		
	<b>mmbbls</b>	
<b>①Proved Reserves (*2)</b>	<b>80.2</b>	<b>Note: The reserves include reserves of new concession area, Hail field.</b>
<b>②Probable Reserves (*3)</b>	<b>81.2</b>	
<b>③Total Proved and Probable Reserves (①+②)</b>	<b>161.4</b>	
<b>(Ref.: Reserves to Production Ratio of Total Proved and Probable Reserves )</b>	<b>about 24 years</b>	<b>Note: The daily average crude production based on working interest reached 19 thousands bpd for FY2015.</b>

(\*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)

## 3Q FY2016 Results – Changes from 3Q FY2015

Unit: billion yen

No.		Net Sales		Operating Income		Ordinary Income		Ordinary Income (excluding impact of inventory valuation, cost or market method)	
			Changes from 3QFY2015		Changes from 3QFY2015		Changes from 3QFY2015		Changes from 3QFY2015
1	Petroleum business	1,493.4	-224.6	32.9	68.7	23.1	66.7	1.3	3.4
2	Petrochemical business	252.7	216.2	8.4	9.4	12.7	12.5	12.1	12.3
3	Oil E&P business	32.7	-6.4	8.7	-6.2	9.0	-5.4	9.0	-5.4
4	Other	44.4	-8.0	1.8	-0.1	1.5	-0.3	1.5	-0.3
5	adjustment	-197.6	-83.1	4.8	4.4	3.8	3.6	3.8	3.6
6	Total	1,625.6	-105.9	56.6	76.2	50.1	77.1	27.7	13.6

## 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						3QFY2016		
		1Q		2Q		3Q		Results		
		Ordinary income	Ordinary income exl. Impact of Inventory valuation	Ordinary income	Ordinary income exl. Impact of Inventory valuation	Ordinary income	Ordinary income exl. Impact of Inventory valuation	Ordinary income	Ordinary income exl. Impact of Inventory valuation	
1	Total	10.3	-4.5	4.2	5.9	35.6	26.3	50.1	27.7	
2	(Each segment)	Petroleum business	6.4	-8.0	-4.8	-3.2	21.5	12.5	23.1	1.3
3		Petrochemical business	1.7	1.3	2.9	3.0	8.1	7.8	12.7	12.1
4		Oil E&P business (*1)	1.5		4.8		2.7		9.0	
5		Other (*2)	0.7		1.3		3.3		5.3	

(\*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

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

**[1] Oil Refinery Operating Ratio**

	FY2011	FY2012	FY2013	FY2014	FY2015	3Q FY2016
CDU operating ratio	51.4%	55.6%	69.5%	84.0%	83.2%	86.0%

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

\* Calender Year base

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

	FY2011	FY2012	FY2013	FY2014	FY2015	3Q FY2016
Subsidiary	939	914	899	881	920	905
Dealers	2,559	2,411	2,329	2,252	2,134	2,082
Total	3,498	3,325	3,228	3,133	3,054	2,987

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

	FY2011	FY2012	FY2013	FY2014	FY2015	3Q FY2016
Subsidiary	550	550	550	552	581	583
Dealers	457	449	461	479	455	459
Total	1,007	999	1,011	1,031	1,036	1,042
Share of Self-Service SSs	28.8%	30.0%	31.3%	32.9%	33.9%	34.9%

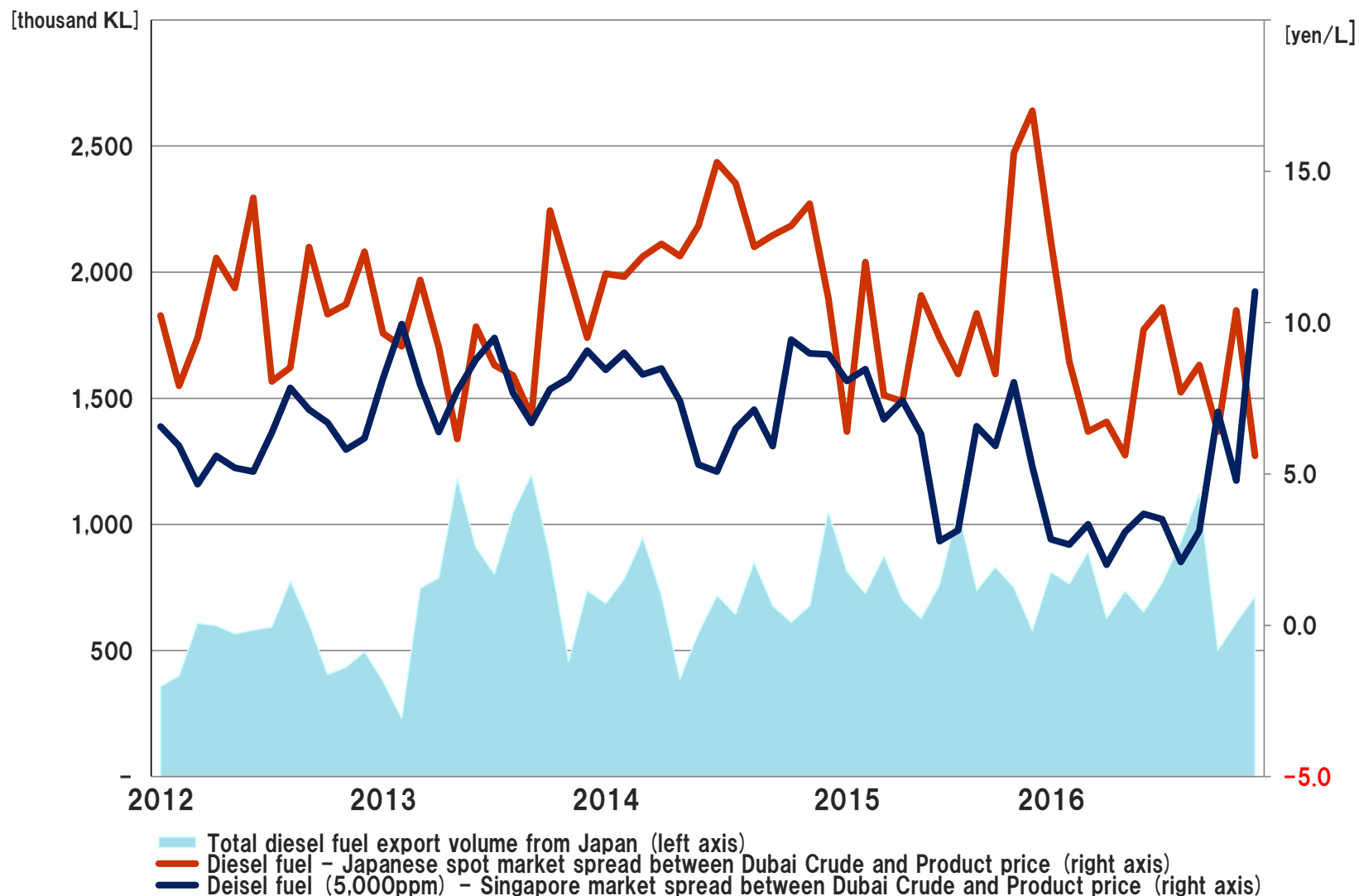
**[4] "Cosmo The Card" - Number of credit cards in force**

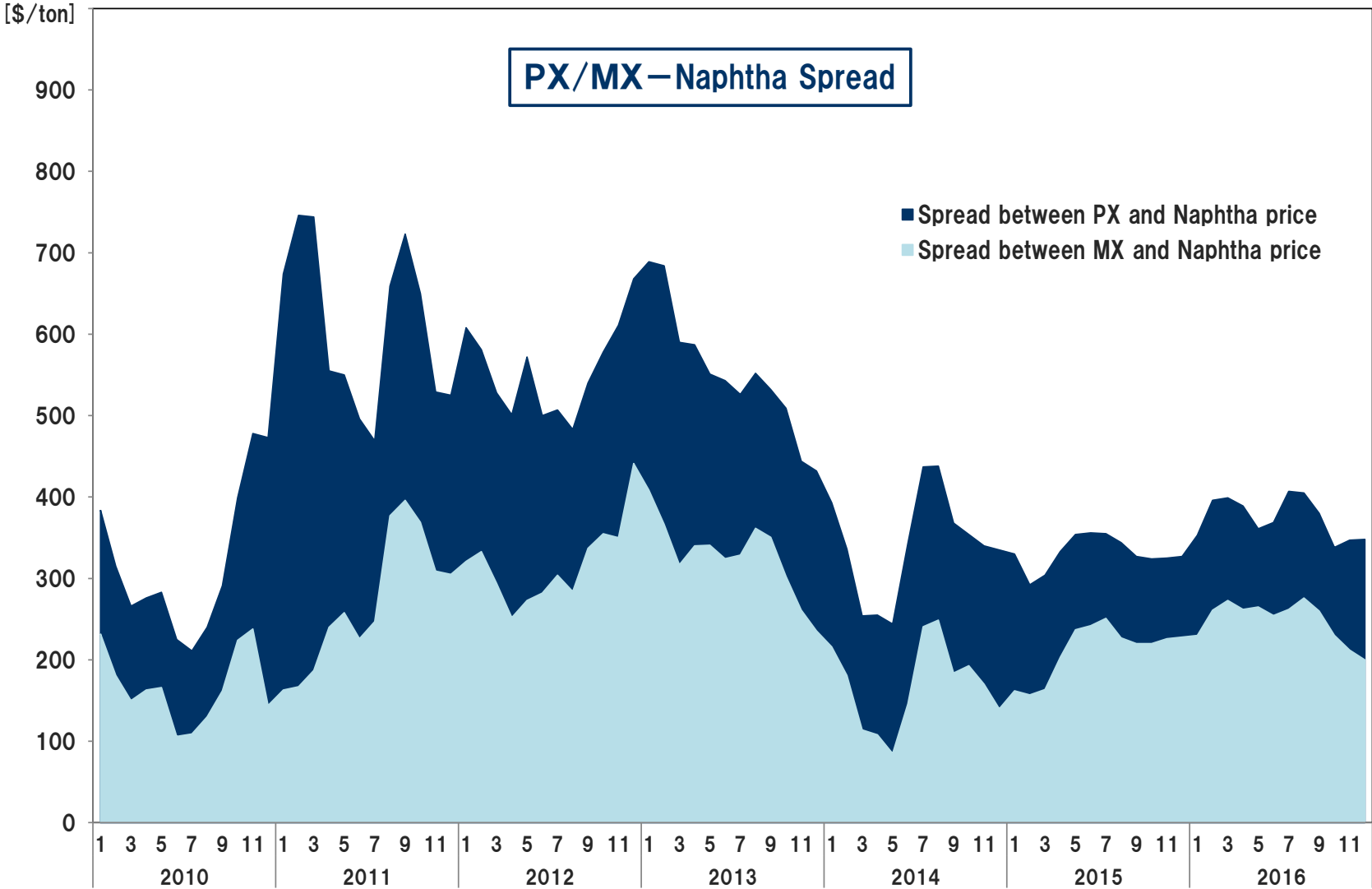
	FY2011	FY2012	FY2013	FY2014	FY2015	3Q FY2016
No. of cards in force (million cards)	3.93	4.10	4.20	4.31	4.39	4.43
No. of cards per SS	1,123	1,232	1,301	1,376	1,438	1,484

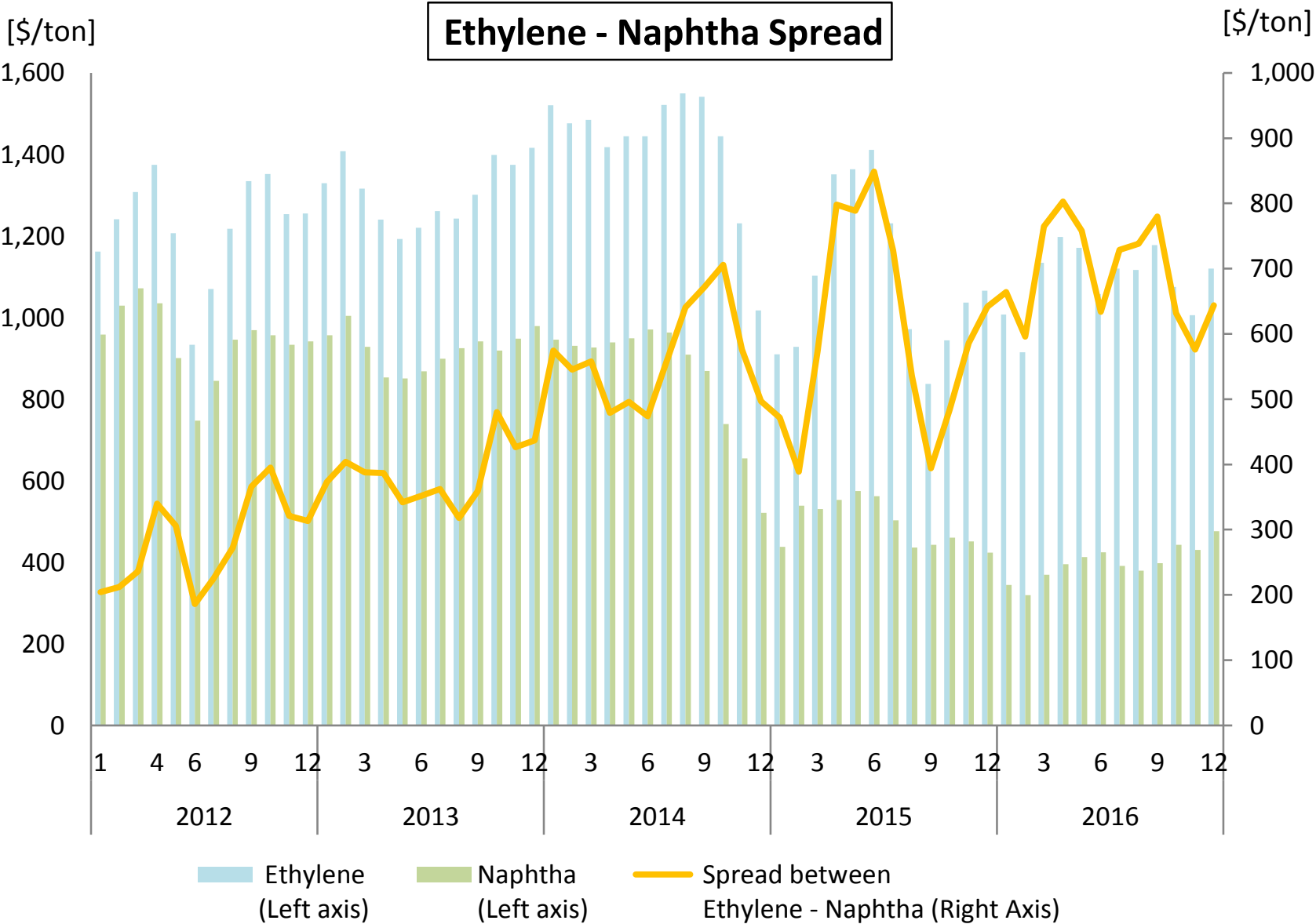
\*Including the number of the card, Opus, Triple

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

	FY2011	FY2012	FY2013	FY2014	FY2015	3Q FY2016
Accumulative number of contracted auto lease	1,287	5,001	11,734	19,040	27,401	33,831







**Forecast for FY2016 Performance  
(Announced in November, 2016)**

Unit : billion yen

No	FY2016 Forecast		FY2015 Results		Changes			
	Ordinary income	Ordinary income exl. Impact of Inventory valuation	Ordinary income	Ordinary income exl. Impact of Inventory valuation	Ordinary income	Ordinary income exl. Impact of Inventory valuation		
1	Total		53.0	29.5	-36.1	32.6	89.1	-3.1
2	(Each segment)	Petroleum business	28.0	5.0	-62.8	5.8	90.8	-0.8
3		Petrochemical business	9.0	8.5	4.1	4.2	4.9	4.3
4		Oil E&P business (*1)	10.5		18.6		-8.1	
5		Other (*2)	5.5		4.0		1.5	

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

(\*2) Including consolidated adjustment

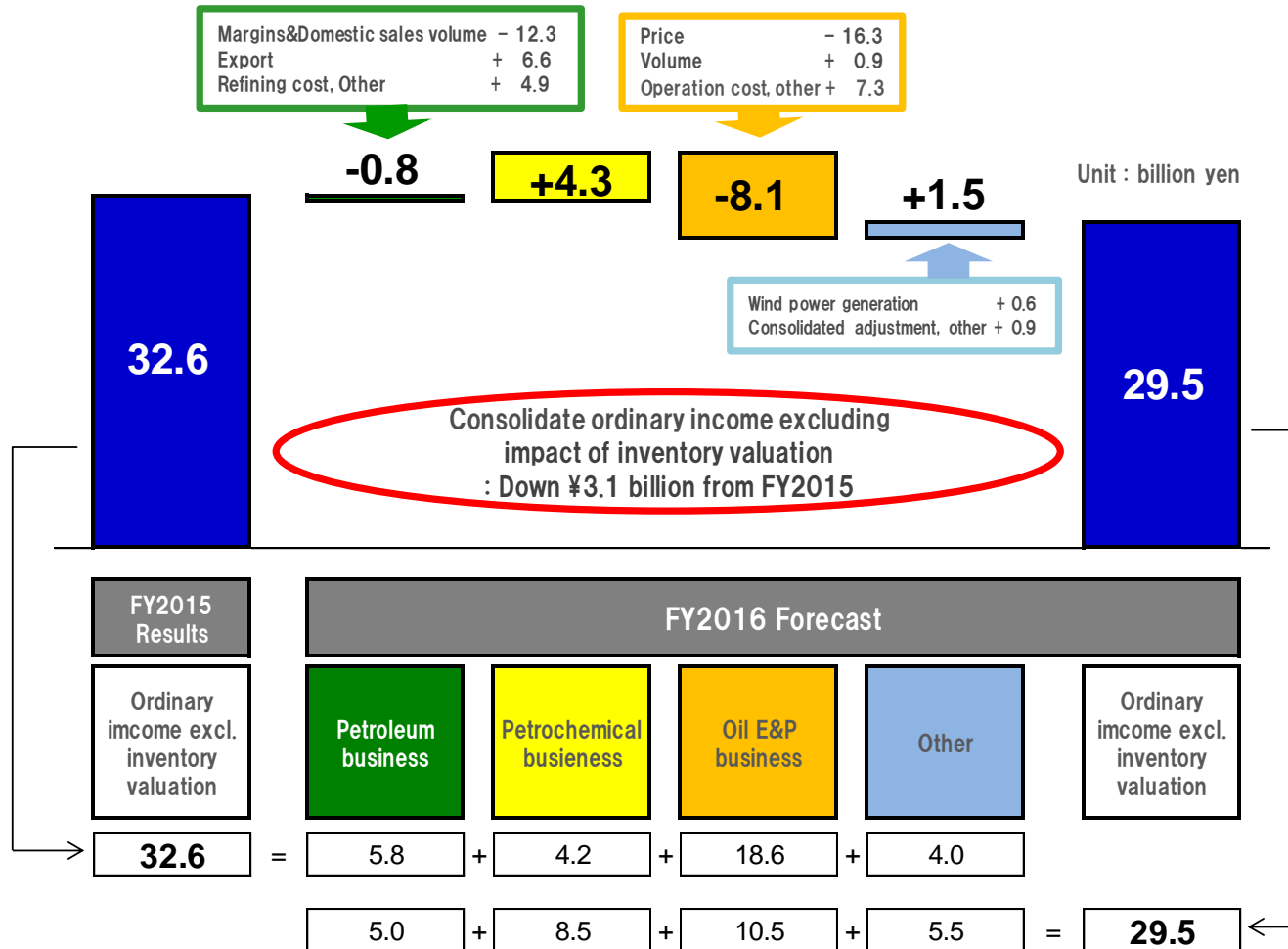
**【Reference】Precondition**

No.		FY2016 Forecast	FY2015 Results	Changes
1	Crude oil (Dubai) (Apr.-Mar.)	46.6	45.7	0.9
2	JPY/USD exchange rate (Apr.-Mar.)	102.6	120.1	-17.5
3	Crude oil (Dubai) (Jan.-Dec.)	41.7	50.9	-9.2
4	JPY/USD exchange rate (Jan.-Dec.)	106.5	121.1	-14.6

**Key variable factors**

**Petrochemical business :** Higher profit expected, reflecting an expansion in production volume associated with the absence of the negative impact of regular maintenance, and reflecting with reduction in in-house fuel costs at HCP, and Maruzen Petrochemical being included in the consolidated accounts.

**Oil E&P business :** Lower profit expected due to the lower oil price and the stronger yen offsetting a reduction in operational costs.





## FY2016 Outlook – 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	2,073.0	-147.7	38.0	88.9	28.0	90.8	5.0	-0.8
2	Petrochemical business	367.0	318.9	6.0	7.7	9.0	4.9	8.5	4.3
3	Oil E&P business	43.0	-12.8	9.0	-9.3	10.5	-8.1	10.5	-8.1
4	Other business	65.0	-6.4	3.0	-0.7	2.5	-1.0	2.5	-1.0
5	Adjustment	-183.0	-31.3	5.0	4.1	3.0	2.5	3.0	2.5
6	Total	2,365.0	120.7	61.0	90.7	53.0	89.1	29.5	-3.1

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

### ■ Precondition

No.		FY2016 (Apr.-Mar.)	The second half (Oct.-Mar.)
1	Crude oil (Dubai)	46.6 \$/B	50.0 \$/B
2	JPY/USD exchange rate	102.6 ¥/\$	100.0 ¥/\$

### ■ Sensitivity

No.		Item	Crude oil (Dubai)	JPY/USD exchange rate
1	Petroleum Business	Inventory Impact	2.3 billion yen	1.1 billion yen
2		Refinery fuel cost etc.	-0.3 billion yen	-0.1 billion yen
3		Total	2.0 billion yen	1.0 billion yen
4	Oil E & P Business		0.2 billion yen	0.1 billion yen

\* Figures above refer to impacts by crude oil price (US\$1/bbl) and yen-dollar exchange rate (¥1/US\$) fluctuations from October 2016.

\* A six-month period of Oct.2016 to Mar.2017 adopted for sensitivity figure estimation for the petroleum business segment and a three-month period of Oct.2016-Dec.2016 for the oil E&P business

**Capital Expenditures. Depreciation, etc.**

Unit: billion yen

No.		FY2016 Forecast	Changes
1	Capital expenditures	136.1	53.3
2	Depreciation expense amount, etc	39.6	8.9

**Capital Expenditures by Business Segment**

Unit: billion yen

No.		FY2016 Forecast	FY2015 Results	Changes
1	Petroleum	38.4	32.7	5.7
2	Petrochemical	16.8	1.0	15.8
3	Oil E&P	53.4	45.8	7.6
4	Other	29.1	6.4	22.7
5	adjustment	-1.6	-3.1	1.5
6	Total	136.1	82.8	53.3

# Holding Company Structure

- ✓ Achieving sustainable growth and maximizing corporate value by responding to changes in the business environment and transforming the business portfolio with a clear vision of future growth business.
- ✓ Aim for “vertically integrated global energy company”, in a timely manner taking an opportunity for restructuring of organizations.

## Changes in business environment

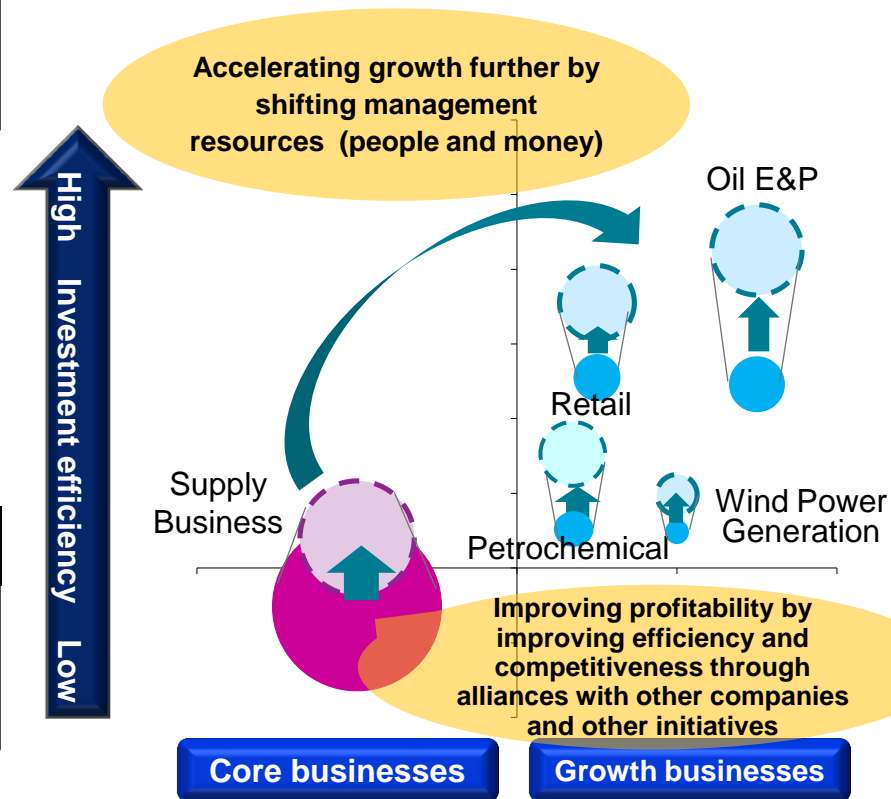
- ✓ Volatile fluctuation of crude oil prices
- ✓ Gradual decrease in domestic demand for oil products
- ✓ Expanded introduction of renewable energy and others

## Sustainable growth and improvement of corporate value through the transformation of the business portfolio

Maximizing corporate value through transformation to a holding company

## Objectives and anticipated effects

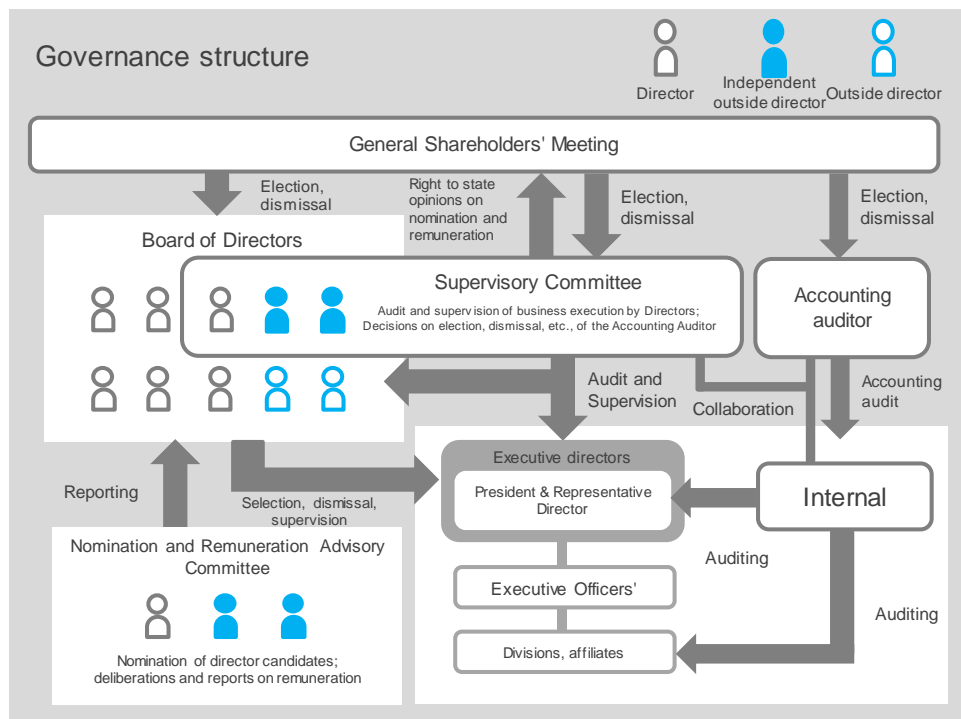
- (1) Stable dividends
- (2) Quick decision-making
- (3) Promotion of alliances in each business



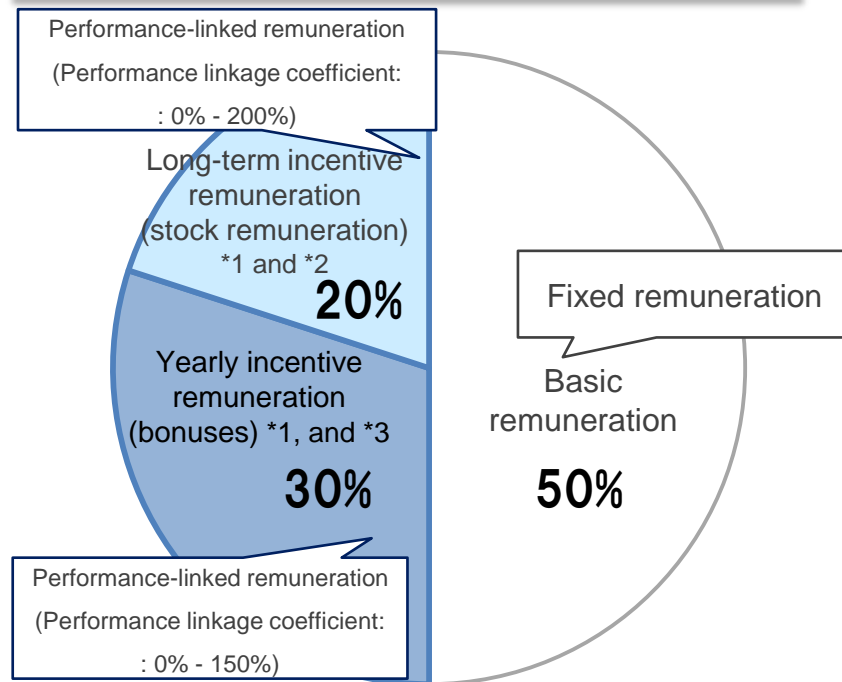
\* The size of the circle indicates the size of the assets of each business.

- ✓ Four of the 10 directors appointed shall be outside directors.
- ✓ Establish a Nomination and Remuneration Advisory Committee, with the majority of the members being independent outside directors.
- ✓ Establish an officer remuneration system, where 50% of remuneration is performance-linked, to share profits with shareholders.

## Governance system



## Executives' Remuneration



\*1 Incentives are not applied to outside directors and directors who are Supervisory Committee members.  
 \*2 Linked to achievement level of the 5th Consolidated Medium-Term Management Plan (for the period up to the fiscal year ending March 31, 2018).  
 \*3 Linked to consolidated results for each fiscal year

# Business Outline

## Oil Exploration & Production

[Independent exploration and production]

\* ( ) Contract start

UAE Abu Dhabi (1967~)

Qatar (1997~)



[Production volume](result of FY2015)

Approx. 40,000 BD (compared to crude oil processing : Approx. 9%)

[Reserves (2P)](as of Dec.31,2015)

Approx. 161,400,000 BBL

## Oil Sales

[Domestic sales]\*(Domestic share in FY2015)

Gasoline	:	5,673 thousand KL (10.7%)
Diesel fuel	:	4,133 thousand KL (12.3%)
Kerosene/JET	:	2,342 thousand KL (10.9%)
Heavy fuel oil A	:	1,420 thousand KL (12.0%)
<b>Total</b>	:	<b>21,350 thousand KL (11.8%)</b>



[Product export] (result of FY2015)

4,064 thousand KL

[Domestic sales destination]

Dealers affiliated with the Company, large users,  
Service station : 3,054 (As of Mar.31,2016)



## Petrochemical

[Domestic production capacity]

Yokkaichi Refinery: MX 300,000 tons

CM Aromatics : MX 270,000 tons

Cosmo Matsuyama Oil

: MX 30,000 tons

Bz 90,000 tons

Maruzen Petrochemical :

(production capacity)

(Ethylene 1,290,000 tons)

(Bz 600,000 tons)

[Overseas production capacity]

HCP(South Korea)

:PX 1,180,000 tons

:Bz 250,000 tons

Production capacity : As of Apr.1,2016

## Crude oil import/ Oil refining

30

[Major crude oil suppliers]\* ( ) Import ratio in FY2015

UAE(40.2%), Saudi Arabia(22.7%)

Qatar (11.0%), Kuwait and others(26.1%)

[Refining capacity] \* ( ) Domestic share

Chiba Refinery 240,000 BD

Yokkaichi Refinery 85,000 BD

Sakai Refinery 100,000 BD

**Total** 425,000 BD

(Approx. 11.8%)

Refining capacity : As of 31<sup>st</sup> Oct,2016



## 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 Feb 1st, 2017)



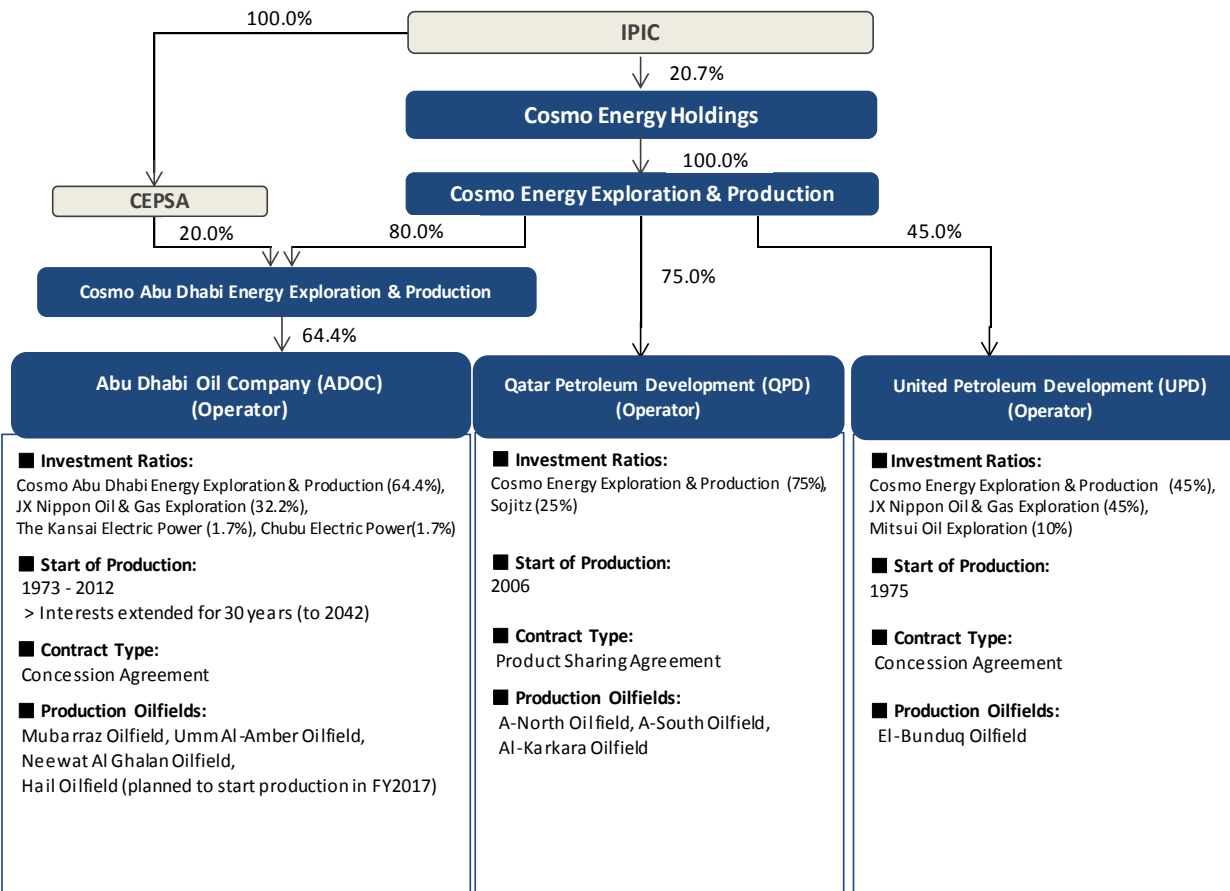
[Solar power generation]

CSD Solar(Joint Venture Company)

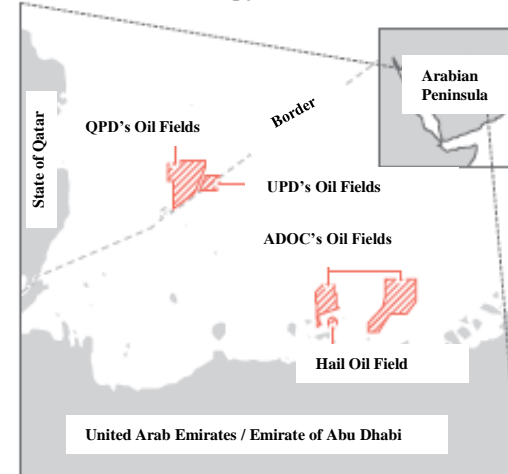
Generation capacity: 24,000 kw

- ✓ Based on a strong relationship of trust with Emirate of Abu Dhabi in the Middle East developed over 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





✓ 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 33)
- 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 33)
- Strategic comprehensive alliance with IPIC-owned Cepsa, deliberating new oilfield development with Abu Dhabi National Oil Company and CEPESA (see page 34)

■ 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

# [Oil E&P Business] Growth Strategy – Production volume at three Operating Companies will be 1.5 times as much when production volume at Hail Oil Field peaks

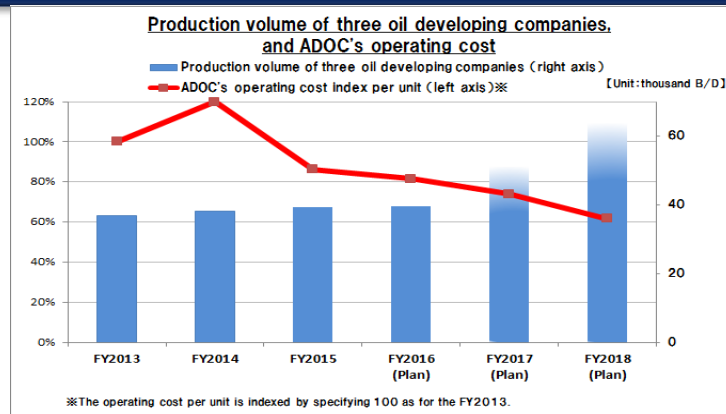
- ✓ Artificial island completed, drilling of delineation well and preparation for construction of surface facilities is underway.
- ✓ Hail Oil Filed investment will be curbed with the shared use of existing oil processing, storage and shipping facilities. (Estimated savings of 300-400 million dollars), 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	-		→

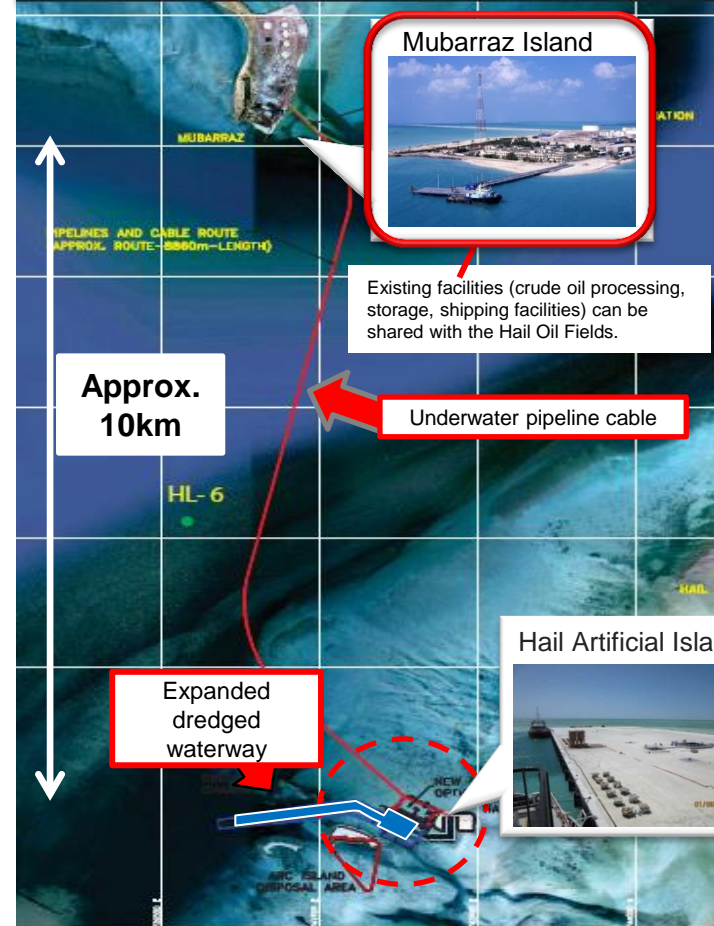
(\*) Disposal Wells: Wells for the disposal of mud and water generated in the drilling process  
 (\*) EPC: Engineering, Procurement and Construction

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

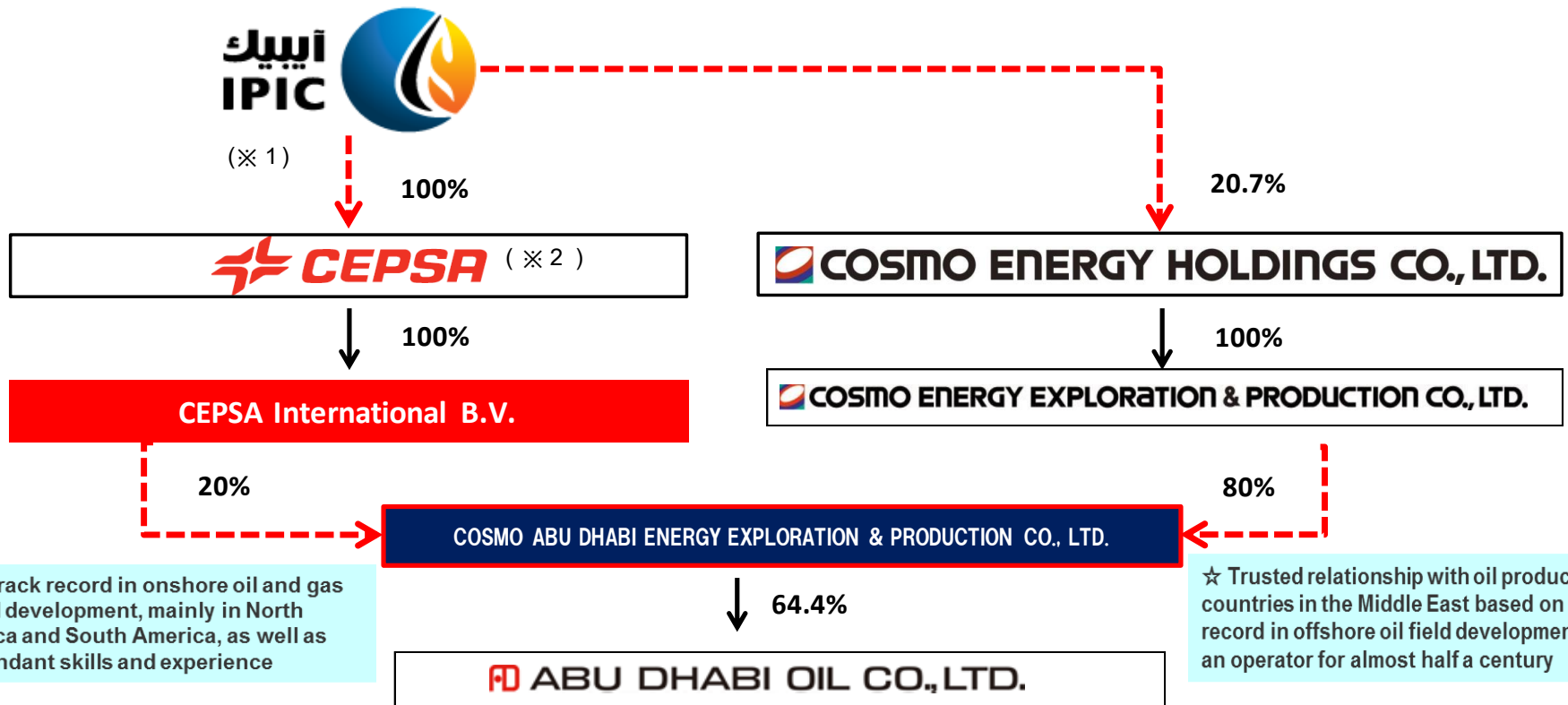


(\*) Operating Costs: Oil well repair costs, equipment utilities, repair costs, personnel costs related to operation, etc.

## Hail Oil Field and existing shipping terminal (Mubarraz Island)



- ✓ 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” 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) Energy-related investment firm wholly owned by Abu Dhabi  
 (\*2) Major comprehensive oil company of Spain

# [Petroleum business] Enhancement of Competitiveness of Refineries Through Alliances

- Synergy from JV at Chiba: ¥10 billion/year ; Synergy from Alliance at Yokkaichi: ¥1 billion/year **35**

- ✓ Promoted rationalization and efficiency, including alliances in each region.
- ✓ Two-year long run at Chiba Refinery
  - ⇒ Income is expected to increase 7 billion yen/year due to an improvement in operation and optimization of maintenance cost.
- ✓ Measures taken in response to the Act on Sophisticated Methods of Energy Supply Structures (by the end of March 2017) have been determined (Some of our measures has been taken advanced).
- ✓ Due to suspension of the No.5 CDU at the Yokkaichi Refinery and changes to nominal capacity of the CDU at the Chiba and Yokkaichi refineries, the demand and supply balance has been optimized.

[CDU capacity: 425,000BD]

\* As of the end of Oct 2016

**Sakai Refinery: 100,000 BD**

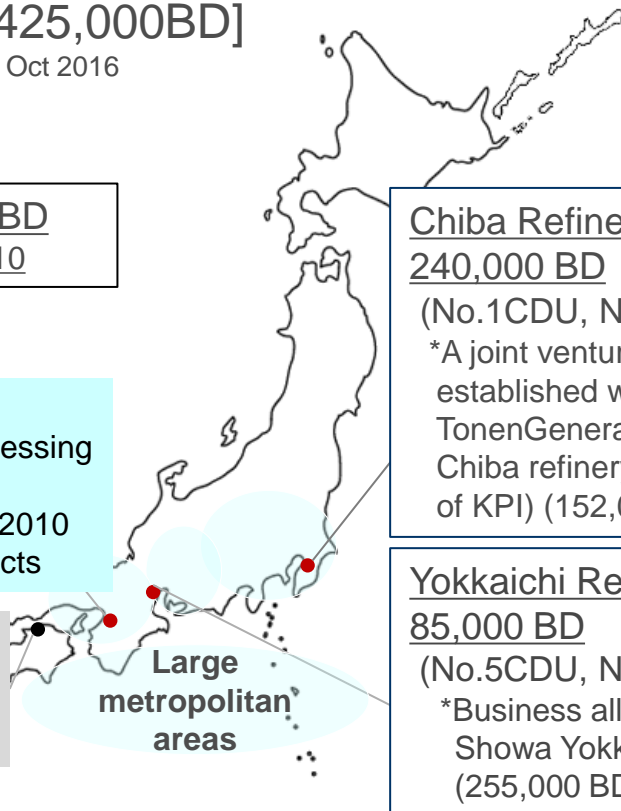
\*Coker in operation since 2010

[Greater competitiveness by investing in secondary processing equipment]

- ✓ Coker began operation in 2010
- ✓ Higher value-added products

**Formerly of Sakaide Refinery: 140,000 BD**  
**Closed in July 2013**

[Conversion to an oil terminal]  
 Streamlining effect: About ¥10 billion



**Chiba Refinery: 240,000 BD**

(No.1CDU, No.2CDU)

\*A joint venture company established with TonenGeneral Sekiyu's Chiba refinery (formerly of KPI) (152,000BD)

**Yokkaichi Refinery: 85,000 BD**

(No.5CDU, No.6CDU)

\*Business alliance with Showa Yokkaichi Sekiyu (255,000 BD)

[More competitive through JV]

- ✓ Joint business started
- ✓ Construction of a pipeline started
- ✓ Refinery equipment to be integrated with JV after the pipelines are constructed
  - ⇒ One CDU will be disposed of through JV (plan)

[Synergy for two companies: ¥10 billion/year]

- ◆ Higher value-added products
- ◆ Streamlined equipment

[More competitive through business alliances]

- ✓ No.5 CDU halted its operation at the end of October
- ✓ Consignment of crude oil refining

[Synergy for Cosmo: ¥1 billion/year]

- ◆ Higher value-added products
- ◆ Streamlined equipment

- ✓ 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

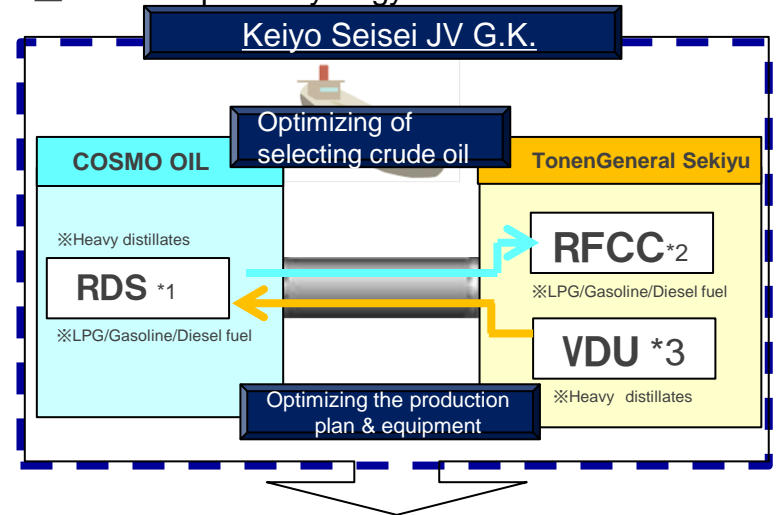
■ Formal agreement on the construction of pipelines

- Construction work to started in June 2015
  - ⇒ Boring on a horizontal tunnel completed in January 2017 (see the chart on 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)

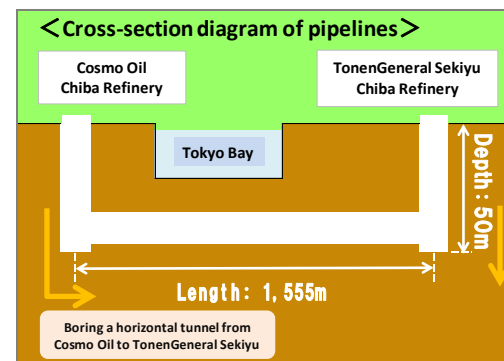
■ Integration of the two refineries

- 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

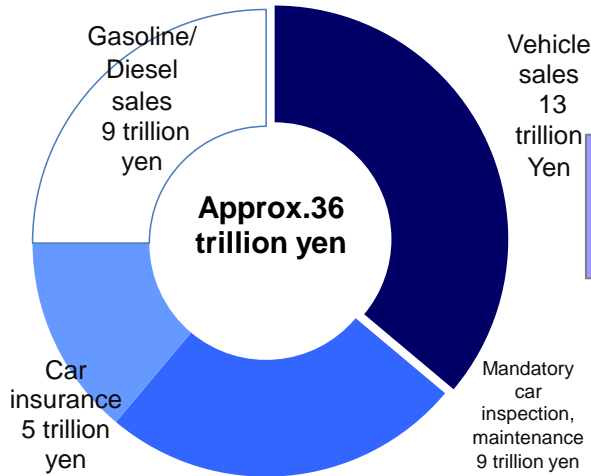
※Shield machine : A side-cut excavator

# [Petroleum business] Strengthening the Retail Business (Individual Car Leasing Business)

## - Aiming at Tapping into the ¥36 tn Car-Related Business

- ✓ Utilize the infrastructure for retaining existing customers and gaining new customers as a platform.
- ✓ Aim at strengthening SS profitability by converting to “car life value proposition” by positioning the individual leasing business at the core.

Market size of car-related business



Source: SEIBIKOHOSYA

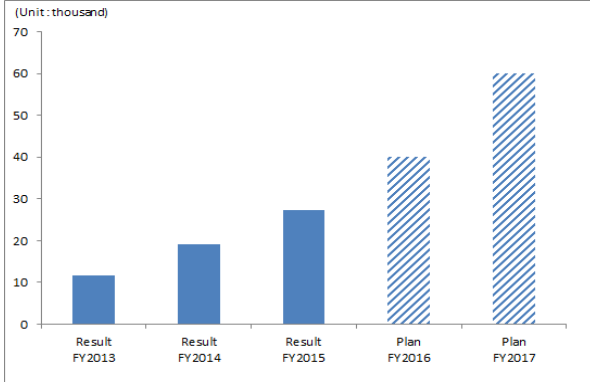
[Cosmo Energy Group measures to strengthen its retail operations]

<Strategy>  
 Capitalize on the higher frequency at which SSs serve customers (500,000 vehicles a day\*) over competitors engaged in car related business. Place a focus on the car life market with a scale of 27 trillion yen in addition to gasoline and diesel oil sales

<Tactics>  
 Capturing and retaining customers in the individual vehicle leasing business  
 Contract type: Centered on five-year contracts with monthly fixed-rate payments  
 Contract coverage: Vehicle lease, vehicle inspection and maintenance, insurance and tax  
 Privilege: A reduced price for fuel oil at Cosmo Energy Group SSs only

**Business model patent acquired**

Target for cumulative vehicles in contract



\* The number of vehicles visiting Cosmo Oil SSs estimated by the company

### Retaining existing customers

- Cosmo the Card (credit card)
  - Number of active card holders: 4.43 million (as of the end of Dec. 2016)
- Internet affiliate system (two-way communication)
  - Guiding customers from online to SSs

### Gaining new customers

- Mutually introducing customers with large shopping malls (e.g. AEON) and other operators running different types of business
- Launching electronic money payment services at SSs
- Launching SSs at large shopping malls

# [Petroleum business] Strengthening the Retail Business (Individual Car Leasing Business)

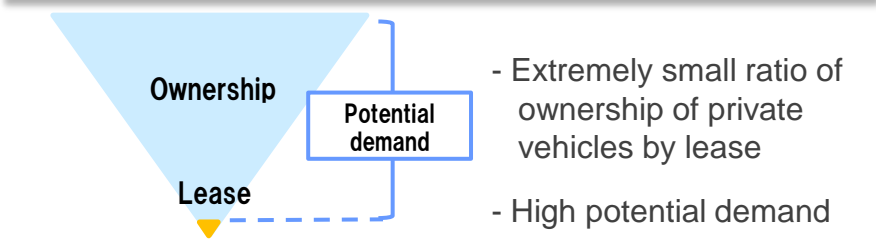
## - Developing Low-Risk Business Model, Taking Advantage of Strengths of SS 38

- ✓ Entry into the car lease market for individuals, which is expected to continue to grow in the future
- ✓ Low-risk business model with the lease company taking charge of credit administration, and of inventory vehicles
- ✓ Ultimate merchandise for total car life support for customers

### What is "Cosmo Smart B-cle"?

- ◆Characteristics◆
- Convenient : Monthly fixed payment
  - Handy : All-inclusive maintenance (mandatory vehicle inspection, tax, insurance, etc.)
  - Economy : Fuel oil discount service

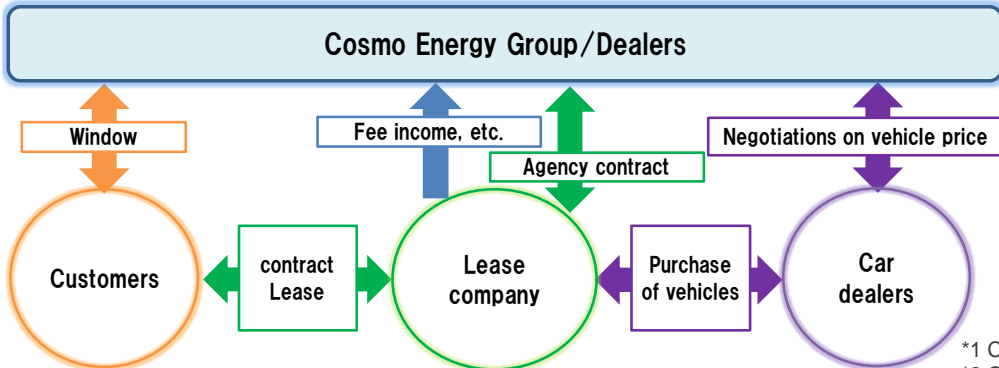
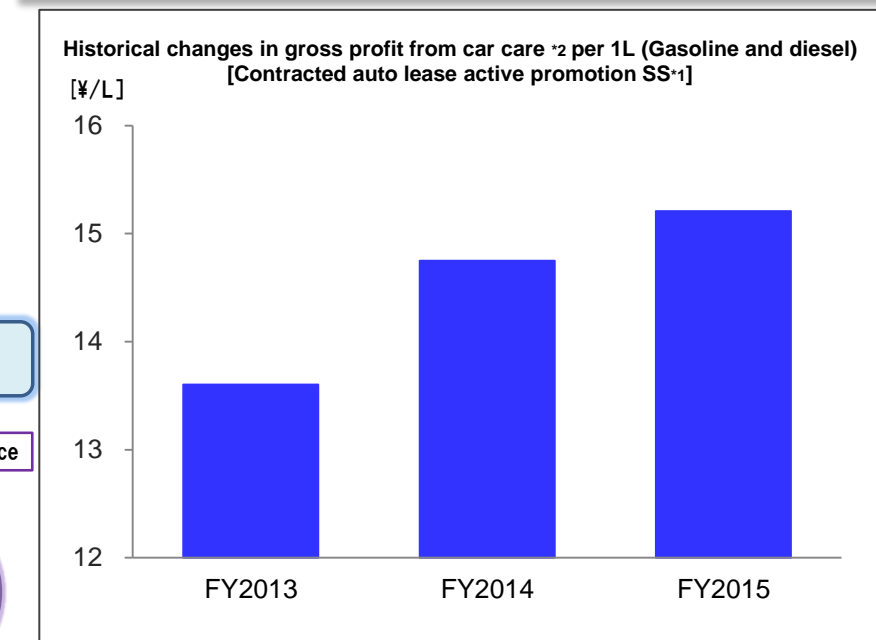
### Domestic car lease market for individuals



### Features of contracted auto lease

- ◆Strengths
- The Company group : Possible to make a proposal utilizing the contacts of SS with customers
  - Existing lease companies: Fewer contacts with individual customers
- ◆Low risk
- Low risk without inventory and credit risk owing to agency contract with lease companies

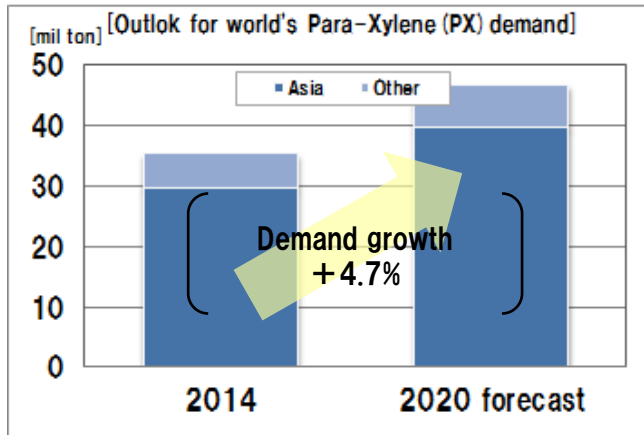
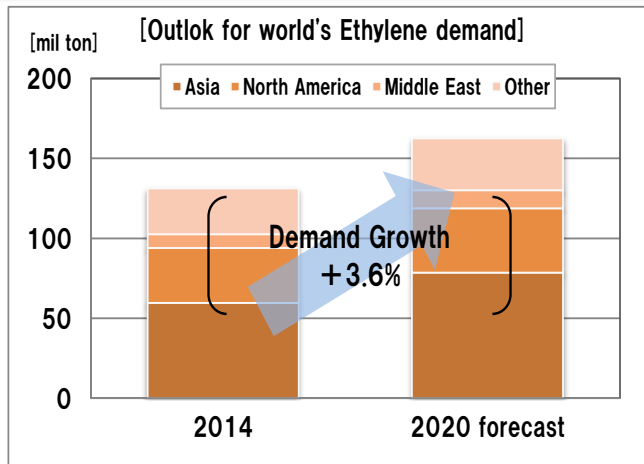
### Attractiveness of contracted auto lease



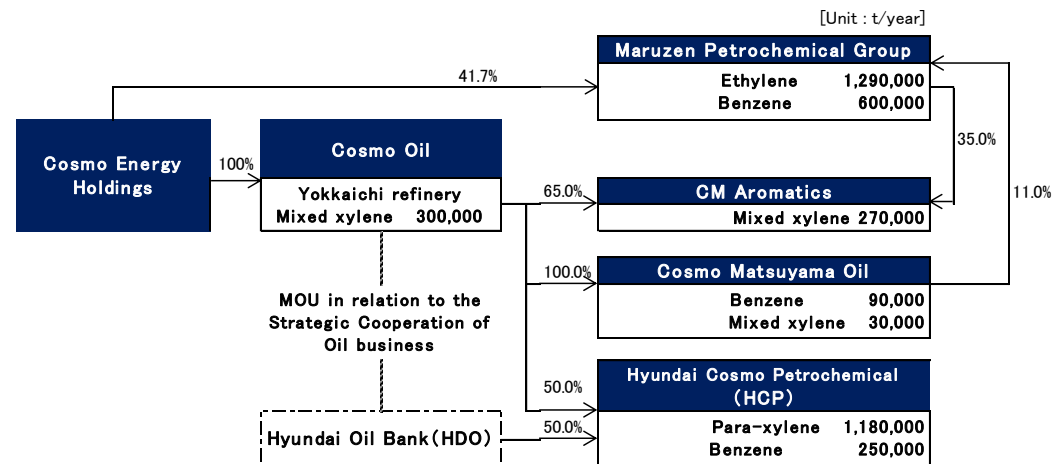
\*1 Contracted auto lease active promotion SS: SS promoting private car leasing and vehicle sales  
 \*2 Car care: income other than fuel oil (mandatory car inspection, maintenance, insurance, etc.)

- ✓ Established integrated production systems in the ethylene and para-xylene markets, where demand is expected to increase.
- ✓ Pursue synergies with the oil refining business to boost competitiveness.

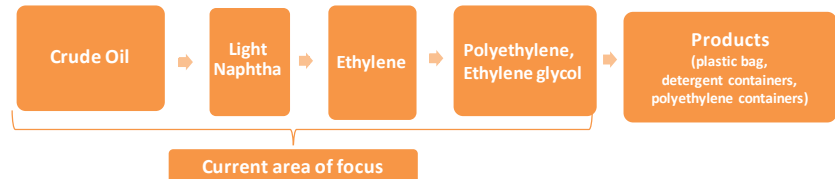
Expected global demand for petrochemical products



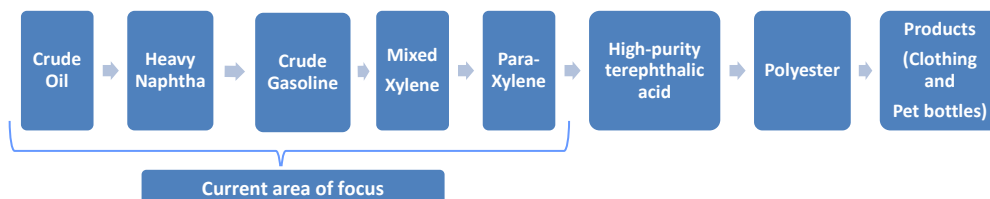
Production system of Cosmo Energy Group



Production process of Ethylene

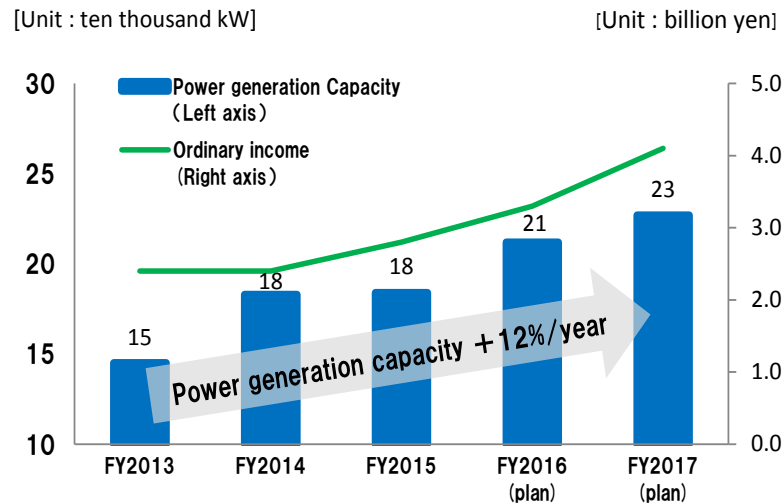


Production process of Para-xylene





### 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

Capital : 7.1 billion yen  
 Number of power generators : 157 (23 areas)  
 Power generation capacity : 211,300 kW  
 Industry share : around 6%  
 (ranked 3rd)

\*As of 1st February, 2017



### 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 (\*4).
- (\*4) 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 (\*1).
- ✓ The FIT scheme was introduced in 2012, and the acquisition price is fixed for 20 years (22 yen per kWh excluding tax).(\*2)
- ✓ Entry into the market is not easy because advanced expertise is required in the identification of suitable sites and environmental assessment. (\*3)

(\*1) Source: "On institutional reform for promoting the introduction of renewable energy" of the Agency for Natural Resources and Energy in November 2015

(\*2) Determined until FY2016

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

**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.