



The Bangchak Petroleum Public Company Limited

Management Discussion and Analysis of Business Operation

For the first quarter ended March 31, 2016



Summary of the Company and its subsidiaries' operating result for the first quarter ended 31th March 2016

In Q1/2016, the consolidated financial statement recorded revenue from sale of goods and rendering of services of Baht 30,276 million and Net Loss of Baht 25 million which was the Net Profit attributable to owners of the Company of Baht 47 million, or earning per share of 0.03 Baht.

EBITDA Structure of the Company and its subsidiaries.				Unit: Million Baht	
	Q1/2015	Q4/2015	Q1/2016	YoY	QoQ
Total Revenue	39,445	35,136	30,276	-23%	-14%
Total EBITDA	2,333	1,401	1,193	-49%	-15%
<i>EBITDA Refinery</i>	798	130	(645)	-181%	-596%
<i>EBITDA Marketing ^{1/}</i>	740	549	1,041	41%	90%
<i>EBITDA Power Plant ^{2/}</i>	713	865	628	-12%	-27%
<i>EBITDA Biofuel ^{3/}</i>	81	113	146	82%	29%
<i>EBITDA Exploration and Production ^{4/}</i>	28	(26)	22	-22%	183%
<i>EBITDA Others ^{5/}</i>	(27)	(56)	0.29	101%	101%
Profit attributable to owners of the Company	1,037	(112)	47	-96%	141%
Basic earnings per share (Baht)	0.75	(0.08)	0.03		

Note: 1/ EBITDA from Marketing Business of The Company, Bangchak Greenet Co.,Ltd., and Bangchak Retail Co., Ltd.

2/ EBITDA from Power Plant Business of BCPG Plc. and its subsidiaries

3/ EBITDA from Bangchak Biofuel Co., Ltd. and Ubon Bio Ethanol Co, Ltd

4/ EBITDA from Nido Petroleum Limited

5/ EBITDA from BCP Energy International Pte, Ltd., BCP Innovation Pte. Ltd., and others

In Q1/2016, Bangchak refinery was undergone its annual turnaround maintenance as planned from 8th February until 23rd March 2016, totaling of 45 days, thus the level of crude run during the quarter was low. Nevertheless, marketing business sales volume continued to expand in both retail (service stations) and industrial markets. Whereby, marketing business sales volume increased by 9% YoY and 5% QoQ, as the company reserved the finished oil products to sell during refinery's maintenance period, to be in accordance with its strategy to emphasize the retail market sales volume as the main priority, as domestic oil products demand rise due to a decline in retail oil prices along with a continuously increasing oil usage in the tourism sector. These were possible because of the company's well-planned production process, refining logistics system management, and an effective marketing strategies to increase sales volume while maintain a highest return as a whole.

Marketing business sales volume continued to expand, and the overall marketing margin remained at a high level following the previous quarter. Market GRM, however, was decreased from the lower crude run and the lower crack spreads of the company's main products. Moreover, Dated Brent/Dubai spread (DTD/DB) was widen in the quarter, as light crude demand rose. As a result, the margin per unit of refined products was decreased.

When compared to the end of last year, crude oil price dropped more than 25% (Dubai Q4/2015: 40.68 \$/BBL, Q1/2016: 30.59 \$/BBL) due to the ongoing crude oil oversupply and the concerns over global economic growth.

Consequently, refinery business recorded an Inventory Loss of Baht 1,342 million (included a reversal of allowance for loss on decline in value of inventories (LCM) of Baht 99 million), when combined with its subsidiaries, the company recorded a total Inventory Loss of Baht 1,324 million (included a reversal of allowance for loss on decline in value of inventories (LCM) of Baht 99 million).

The company and its subsidiaries recorded a gain from crude and product oil price hedging contract of Baht 163 million, a gain from foreign currency forward contracts of Baht 56 million, and a gain on foreign exchange of Baht 84 million from the strengthen value of Thai Baht since the beginning of the year. In conclusion, the company and its subsidiaries recorded a total EBITDA of Baht 1,193 million. However, if the Inventory Loss was excluded, the total EBITDA would be Baht 2,517 million.

In Q1/2016, BCPG Plc., a subsidiary of the company, has successfully acquired the entire solar power business of SunEdison in Japan, which comprised of solar power plants with a total PPA of 164 Megawatts (198 Megawatts installed capacity), including Plants in operation with a total PPA of 11 Megawatts (13 Megawatts installed capacity), which the company has recognized its revenue in this quarter.

Furthermore, on 27th January 2016, the Bangchak Retail Company Limited was established, which incorporated in Thailand, to engage in businesses related to food, beverages, consumer products. The Company holds 100% shares in Bangchak Retail Company Limited, its initial registered capital was Baht 300 million, with paid-up capital of Baht 75 million.

The brief summary of each business performance for the quarter were as follows:

Refinery business recorded an average crude run of 64 KBD, a decline in an average crude run was due to the planned annual turnaround maintenance during the quarter. Market GRM was recorded at 5.35 \$/BBL as a result of a narrower Gasoil/Dubai (GO/DB), Jet (Kerosene)/Dubai (IK/DB), and Fuel Oil/Dubai (FO/DB) crack spreads. Dated Brent/Dubai spread (DTD/DB) was also widened during the quarter, hence, lower market GRM when compared to the previous quarter. Moreover, as the average crude oil price for the quarter was lower, refinery business recorded an Inventory Loss of Baht 1,342 million (included a reversal of allowance for loss on decline in value of inventories (LCM) of Baht 99 million). There was a gain from crude and product oil price hedging contract of Baht 172 million. As a result, refinery business performance was decreased, the refinery recorded an EBITDA loss of Baht 645 million. However, if the Inventory Loss was excluded, an EBITDA for the refinery business would be recorded at Baht 698 million.

Marketing business sales volume uninterruptedly expanded despite the annual turnaround maintenance of the refinery. Marketing business sales volume was 1,465 million litres, an increase of 9% YoY and 5% QoQ, as the company reserved the finished oil products to sell during refinery's maintenance period, to serve a rise in domestic oil products demand due to a decline in retail oil prices. The company maintained its 2nd rank of market share in retail market and kept it as the main priority for the channel of trade. The company continued to open new service stations with modernized appearance and high standard, along with improving the existing ones. The number of service stations at the end of the quarter was 1,074 stations. Total marketing margin was at 0.93 Baht per litre. Retail margin remained at a high level as the previous quarter, while industrial margin was higher from the tightened market supply, due to emergency shutdowns of domestic refineries. Consequently, marketing business's performance for the quarter was high, and recorded an increase in EBITDA of 41% YoY and 90% QoQ.

Solar Power business which was currently under BCPG Plc., a subsidiary of the company, has acquired the entire solar power business of SunEdison in Japan. As a result, solar power business had an operating power plants with a total PPA of 129 Megawatts (comprised of 118 Megawatts PPA in Thailand, and 11 Megawatts PPA in Japan). Accordingly, the total electricity sales during the quarter was increased. Although solar power business in Japan had recorded a revenue from its operating plants, there were additional costs incurred from other projects in preparation. Therefore, the overall financial performance was weak. Additionally, BCPG Plc. has announced to SET that it had acquired total outstanding shares of Huang Ming Japan Company Limited, in order to expand its investment portfolio of solar power plant project in Japan.

Note: BCPG Plc. is in the process of filing for its initial public offering with the The Securities and Exchange Commission.

Biodiesel business recorded an average daily production rate of 385 thousand litres per day, a continued rise in production rate was due to an improvement in Biodiesel plant efficiency, to support a B100 sales volume growth of 76% YoY (In Q1/2015, the government reduced the portion of B100 mixing with diesel from 7% to 4%), and an increase of 13% QoQ, partly from the higher sales volume to Bangchak, the major customer, as the company's diesel sales volume increased, and partly from the expansion of its customer base to support its nearly-completed new 2nd Biodiesel plant. Gross Margin was higher from the superior average margin per unit of B100 product.

Exploration and Production Business was affected by the decline in oil price. However, Nido Petroleum Ltd. has implemented a cost saving plan, both related to production and its administrative expenses. The selling, general and administrative expense was lowered by 40% YoY and 34% QoQ, resulted in a lower cost of production. During the quarter, the total sales volume was 202,128 barrels (net to Nido) from the selling of 1 cargo of crude oil.

Consolidated Statement of Income				Unit: Million Baht	
	Q1/2015	Q4/2015	Q1/2016	YoY	QoQ
Revenue from sale of goods and rendering of services	39,445	35,136	30,276	-23%	-14%
Cost of sale of goods and rendering of services	(37,082)	(33,097)	(29,327)	-21%	-11%
Gross Profit	2,363	2,039	949	-60%	-53%
Investment income and other income	104	99	126	21%	27%
Selling and administrative expenses	(1,057)	(1,672)	(1,212)	15%	-28%
Gain (loss) from crude and product oil price hedging contract	(136)	(312)	163	220%	152%
Gain (loss) from foreign currency forward contracts	(5)	24	56	N/A	130%
Gain (loss) on foreign exchange	266	92	84	-68%	-8%
Reversal of allowance for loss/ (loss) from impairment of assets	11	(70)	2	-85%	102%
Share of profit (loss) of associate	12	4	13	9%	238%
Profit before finance costs and income tax expense	1,558	203	180	-88%	-11%
Finance costs	(411)	(412)	(373)	-9%	-9%
Profit/(loss) before income tax expense	1,147	(208)	(193)	-117%	7%
Income tax (expense) credit	(91)	17	167	-285%	-871%
Profit for the period	1,056	(191)	(25)	-102%	87%
Owners of the Company	1,037	(112)	47	-96%	141%
Non-controlling interests	19	(79)	(72)	-477%	8%
Earnings per share (Baht per Share)	0.75	(0.09)	0.03	-96%	135%

For Q1/2016 performance, the company and its subsidiaries recorded a Net Profit attributable to owners of the Company of Baht 47 million, a decrease of Baht 991 million (-96% YoY) when compared to Q1/2015, and an increase of Baht 159 million (+141% QoQ) when compared to Q4/2015, with details as follows:

- 1) Total revenue from sale of goods and rendering of services of Baht 30,276 million, a decrease of 23% YoY and 14% QoQ, mainly reduced from the oil-related business, as result of the sharp decline in global crude oil price, while the company's total sales volume slightly increased by 1% YoY, but decreased by 3% QoQ. However, other businesses recorded an increase in revenue.
- 2) Gross Profit was recorded at Baht 949 million, a decrease of 60% YoY and 53% QoQ, mostly due to the lower crude run, also Market GRM was declined to 5.35 \$/BBL (Q1/2015: 10.19 \$/BBL, Q4/2015: 7.98 \$/BBL), as a result of the narrower crack spreads, and a widened Dated Brent/Dubai spread. Moreover, due to the drop in crude oil price during the quarter, there was an Inventory Loss of Baht 1,324 million (Inventory Loss Q1/2015: Baht 1,790 million, Q4/2015: Baht 1,634 million)
- 3) Investment income and other income was recorded at Baht 126 million, an increase of 21% YoY and 27% QoQ, from the realized gain in selling the investment in ASEAN Potash Chaiyaphum Public Company Limited.

- 4) Selling and administrative expense was recorded at Baht 1,212 million, an increase of 15% YoY, mainly due to the increased expense in BCPG Plc., and a decrease of 27% QoQ, as Q4/2015 was the quarter which normally incurs in the higher cost associated with human resources and employee benefits.
- 5) Tax expense: There was a deferred tax expense recorded, resulted from the taxable loss. As this quarter recorded a Net Loss, there was no corporate income tax payment, hence the company recorded tax revenue.

Performance of each company details are as follows:

Statement of Income of the company and its subsidiaries		Unit: Baht Million
Q1/2016	Revenue from sale of goods and rendering of services	Net Profit
The Bangchak Petroleum Plc.	28,520	(357)
Bangchak Green Net Co., Ltd.	6,657	22
Bangchak Biofuel Co.,Ltd.	1,867	116
BCPG Plc. Group	783	390
Nido Petroleum Ltd.	233	(174)
Other ^{1/}	-	(18)

Note: 1/ BCP Energy International Pte. Ltd., BCP Innovation Pte. Ltd., and Bangchak Retail Co., Ltd.

Summary of the Company and its subsidiaries' performance by Business unit

1) Refinery Business

Crude Oil Price						Unit: \$/BBL	
	Q1/2015	Q4/2015	Q1/2016			YoY	QoQ
	AVG	AVG	MAX	MIN	AVG	%	%
Dubai (DB)	51.76	40.68	37.65	22.80	30.59	-41%	-25%
Dated Brent (DTD)	53.94	43.76	40.24	25.99	33.94	-37%	-22%
DTD/DB	2.17	3.09	6.49	0.09	3.35	54%	8%

Crude Oil Price Situation

The Dubai crude oil price dropped down 21.17 \$/BBL in Q1/2016 compared to Q1/2015. It was pressured by the crude oil oversupply situation, as OPEC producers ramped up their production level to compete for market share while supply from non-OPEC producers was slightly dropped, along with a crude oil stock in the U.S. continued to increase.

The average Dubai crude oil price in Q1/2016 decreased by 10.09 \$/BBL compared to Q4/2015. The price was pressured by a concerns over the possibility of oil demand growth deceleration, after the global stock markets had plunged followed a shrunk in Chinese stock market in January. The concerns over the demand deceleration in China as depicted by a slowdown in economic indicators like Purchasing Managers Index (PMI) for the industrial sector over the past year and the reported Gross Domestic Products (GDP) growth of 6.9% in 2015 compared to 7.3% seen in 2014. Such level of China GDP growth was the lowest since the last global financial crisis. On the supply side, crude oil production still outpaced crude oil consumption, therefore, crude oil stock, referred to U.S. crude oil stock, continued to build over the first quarter. The U.S. crude oil stock increased to a record high of more than 540 million barrels in March. Moreover, the sanction imposed by western countries to Iran had been lifted in January, resulted in more supply from Iran which could potentially flow into the market.

On the contrary, the oil price was supported by the snowstorm that hit the east coast of the U.S. in early 2016, which drove up the heating oil demand. There was also a sign of crude oil production decline as indicated by the U.S. active rig count declined continuously to the lowest level in 7 years as a result of low oil price situation. The oil price got further support from the possibility of cooperation between OPEC and Russia, which is a non-OPEC producers, to freeze the production level in January. Also, the weakening dollar after the comment from Federal Reserve concerning world economic growth, led to some investors' belief that there was a decreased a possibility of Federal Reserve's rate hike during the year.

The spread between average Dated Brent oil price and average Dubai oil price (DTD/DB) in Q1/2016 increased by 1.17 \$/BBL when compared to Q1/2015, as shale oil production in the U.S. started to decline resulted in the better situation in light crude oil oversupply. However, the heavy crude oil production from OPEC producers was increased.

When compared to Q4/2015, the spread between average Dated Brent oil price and average Dubai oil price (DTD/DB) in Q1/2016 increased by 0.26 \$/BBL. The spread was supported by an increase in demand from Europe as

its refineries ran at higher rate during winter. Furthermore, the demand for light crude oil had increased, especially from refineries in Asia, which favor the use of such crude to get a higher gasoline yield in order to serve a rise in gasoline demand.

Crack Spreads						Unit: \$/BBL	
	Q1/2015	Q4/2015	Q1/2016			YoY	QoQ
	AVG	AVG	MAX	MIN	AVG	%	%
UNL95/DB	15.43	18.72	25.64	12.67	18.84	22%	1%
IK/DB	17.02	14.04	12.86	9.46	11.70	-31%	-17%
GO/DB	16.32	13.71	11.74	6.61	9.66	-41%	-30%
FO/DB	-1.90	-6.56	-0.80	-8.51	-5.24	-176%	20%

Crack Spreads Situation

- An average Gasoline/Dubai crack spread (UNL95/DB) increased by 3.41 \$/BBL, compared to Q1/2015. The spread found a support from the higher demand at the beginning of the quarter from the driving demand increased as a result of warmer winter.

When compared to Q4/2015, the Gasoline/Dubai crack spread (UNL95/DB) increased by 0.12 \$/BBL. At the beginning of the quarter, the crack spread was strong from the gasoline demand in Asia from the warmer winter which led to more driving. Along with a decline in supply after an emergency shutdown of Residue Fluid Catalytic Cracker (RFCC) unit of the refinery in the United Arab Emirates. However, the crack spread started to normalize after the return of seasonal cold weather. This caused a gasoline consumptions in the U.S. to decrease, and gasoline stock rose to a record high level in the middle of February. Additionally, many refineries in Asia, particularly in Japan and China, increased gasoline exports due to high level of refinery crude run. Also, the refineries in Singapore planned to restart after shut down since August 2015. These were factors that pressured the crack spread.

- An average Jet (Kerosene)/Dubai crack spread (IK/DB) decreased by 5.32 \$/BBL, compared to Q1/2015. As the crack spread was pressured by slower demand due warmer weather, while the supply increased as a result of higher crude run of refineries.

When compared to Q4/2015, the Jet (Kerosene)/Dubai crack spread (IK/DB) decreased 2.34 \$/BBL as it was pressured by the supply glut at the beginning of the quarter, as a result of higher refinery crude run to meet the high gasoline demand; consequently, jet fuel supply increased. Additionally, China also exported more jet fuel to the market.

- An average Gas Oil/Dubai crack spread (GO/DB) dropped by 6.66 \$/BBL, compared to Q1/2015, from a warmer weather, a plenty of supply from high crude run of refineries, an increase in export volume from Chinese refineries, and demand slowdown.

When compared to Q4/2015, Gas Oil/Dubai crack spread (GO/DB) decreased by 4.06 \$/BBL from a slower demand pressured by the contracting China manufacturing index, and a warmer winter in January. Also,

Indonesian government announced the cancellation of the diesel retail price subsidy. Moreover, there was a pressure from a plenty of supply in the market followed the higher level of crude run from refineries, especially in China, after Chinese government granted a crude oil import quota to domestic private refineries. Moreover, Chinese refineries received additional gas oil export quotas, which increased china diesel export volume. In the contrary, India and Middle East had a hard time exported gas oil to Europe and had to export their product to Singapore instead. Consequently, gas oil stock in Singapore rose and further depressed the market. However, the crack spread was somewhat supported by a lower import duties in Vietnam, import tax on diesel was down to 0%. Moreover, the cold weather in China, South Korea, and Japan at the end of January helped increased the demand. Additionally, the supply disruption in Malaysia halted the gas oil export, help supported a rise in the spread.

- An average Fuel Oil/Dubai crack spread (FO/DB) decreased by 3.34 \$/BBL, compared to Q1/2015. The spread was pressure by a lower fuel oil demand, which continued to slowdown in China and Japan, after the Chinese government allowed private refineries to import and process crude oil. Moreover, the demand from Japan was also in decline as two nuclear power plants restarted in 2015.

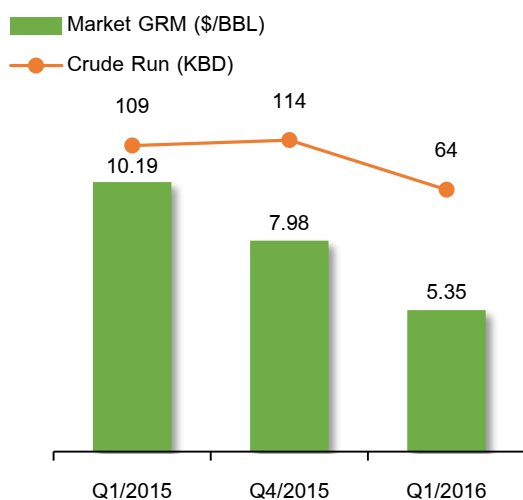
When compared to Q4/2015, Fuel Oil/Dubai crack spread (FO/DB) increased by 1.31 \$/BBL driven by a lower crude oil price as well as a strong bunker demand which continued from the previous quarter until Chinese New Year, and an extension of Korea demand for fuel oil to generate electricity during winter. Moreover, there was a possibility of a lower fuel oil export from Russia, as a result of rising oil export duty. Also, supply from Europe to Asia was delayed, due to the severe weather at the beginning of the quarter, caused the tight supply situation in some period. The crack spread had been pressured by the higher fuel oil export from Iran to Asia after the sanction was lifted, led to an increase in fuel oil stock level in Singapore to the highest level in history at more than 30 million barrels.

Refinery Business Performance

Refinery Business Performance					
	Q1/2015	Q4/2015	Q1/2016	YoY	QoQ
Average Crude Run (KBD)	108.63	114.37	64.18	-41%	-44%
Utilization Rate (%)	91%	95%	53%	-41%	-44%
Average FX (THB/USD)	32.80	36.00	35.83	9%	-0.5%
(Unit: Million Baht)					
Market GRM	3,267	3,023	1,120	-66%	-63%
GRM Hedging	(136)	(339)	172	226%	151%
Inventory Gain/ (Loss) ^{1/}	(1,766)	(1,631)	(1,342)	24%	18%
Total GRM	1,365	1,053	(51)	-104%	-105%
EBITDA (Million Baht)	798	130	(645)	-181%	-595%

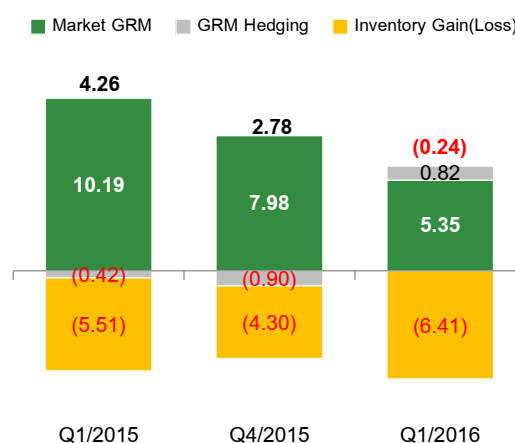
Note: 1/ Inventory Gain/ (Loss) in Q1/2016 was included a reversal of LCM.

Market GRM and Crude Run



Total GRM

Unit: \$/BBL



Total Sales Volume in each market category of the Company

Unit: Million Litre

Marketing Business	Q1/2015	Q4/2015	Q1/2016	YoY	QoQ
Retail	782	851	887	13%	4%
Industrial	562	538	578	3%	7%
Total	1,344	1,390	1,465	9%	5%
Wholesale Business					
Petroleum traders in accordance with section 7	173	154	103	-40%	-33%
Export	245	278	206	-16%	-26%
Total	417	432	309	-26%	-28%
Total Sales Volume	1,761	1,822	1,774	1%	-3%

Note: Total sales volume figures excluding the swap amount between petroleum traders in accordance with section 7 and the sales volume of crude

The performance in Q1/2016 compared to Q1/2015, Bangchak refinery's average crude run declined to 64 KBD, a decrease of 41%, as a result of planned annual turnaround maintenance (TAM) from 8th February until 23rd March 2016, totaling of 45 days (1 day ahead schedule). The average crude run after TAM was consistent around 110 KBD or approximately 92% of the total refining capacity, which was a result of well-planned production process, refining logistics system management, together with an implementation of YES-R projects which enabled a consistent and smooth production process.

Market GRM decreased Baht 2,148 Million (-66%) when compared to the same period last year, from a decline in production volume and a contracted in major products crack spreads, in which Gasoil/Dubai spread (GO/DB) was narrower from the warmer-than-usual weather, supply glut as a result of higher global refining crude run, and an increased in export volume from China. As well as a compressed in Fuel Oil/Dubai spread (FO/DB) which was affected by the weak demand from both China and Japan. Furthermore, Dated Brent/Dubai spread (DTD/DB) was also widened during the quarter at an average of 3.35 \$/BBL, compared to 2.17 \$/BBL in the same period last year, which decreased the margin per unit of refined products. The Market GRM in Q1/2015 was abnormally high due to a steep drop in crude oil price over the supply glut issue while there was a seasonal demand. As a result, the overall crack spreads were high and crude cost for the period was low.

When compared to Q4/2015, an average crude run decreased by 44% from TAM. Market GRM decreased Baht 1,903 million (-63%) from a lower production volume and a narrowed major product crack spreads. To illustrate, Gasoil/Dubai spread (GO/DB) was contracted as a result of slow demand pressured and increased export from China. Jet (Kerosene)/Dubai spread (IK/DB) shrunk from the oversupply as a result of the increased global refining crude run. In addition, Gasoline/Dubai spread (UNL95/DB) which seen a consecutive widening spread for the past quarters, had started to slow down. Moreover, Dated Brent/Dubai spread (DTD/DB) was slightly widened as a result of a higher light crude demand from refineries in Asia, which favored highest gasoline yield, all in all contributed to a decline in Market GRM.

Crude oil price was still pressured by the concern over the prospect of economic growth and over supply issue from last year. Consequently, refinery business recorded an Inventory Loss of Baht 1,342 million (included a reversal of allowance for loss on decline in value of inventories (LCM) of Baht 99 million). Yet, there was a gain from crude and product oil price hedging contract of Baht 172 million. As a result, total GRM was recorded at Baht -51 million. EBITDA is recorded at a loss of Baht 645 million. However, if the Inventory loss was excluded, the total EBITDA would be recorded at Baht 698 million.

2) Marketing Business

Marketing Business Performance					
Sales Volume (Million Litre)	Q1/2015	Q4/2015	Q1/2016	YoY	QoQ
Retail (Service Stations)	782	851	887	13%	4%
Industrial	562	538	578	3%	7%
Total	1,344	1,390	1,465	9%	5%
Sales volume in each product category (Million Litre)					
LPG	10	30	26	160%	-13%
Gasoline	15	6	9	-39%	54%
Gasohol	364	398	399	10%	0%
Jet Fuel	160	181	200	25%	10%
Diesel	741	727	782	6%	8%
Fuel Oil and Others	54	48	49	-10%	2%
Total	1,344	1,390	1,465	9%	5%
Total Marketing Margin (Baht / Litre)	0.75	0.90	0.93	24%	3%
EBITDA (Million Baht)	740	549	1,041	41%	90%

Note: Marketing Margin figure was the attributable to the Company only.

In Q1/2016, when compared to Q1/2015, marketing business sales volume uninterruptedly expanded despite the annual turnaround maintenance of the refinery. Total sales volume was increased by 121 million litres (+9%), as a result of a rise in domestic oil demand in both retail and industrial markets, supported by a decline in retail oil prices encouraging demand, and a growth in tourism sector from the incremental numbers of Chinese and European tourists.

Retail market (service stations) sales volume increased by 105 million litres (+13%) and continued to grow as a result of the strategy focusing on retail market as the main priority. Majority of the volume increase were from gasohol products, especially gasohol 95 and gasohol E20. Diesel sales volume also increased. The number of service stations at the end of the quarter was 1,074 stations. There were 10 newly opened service stations during the quarter, most of which were standard stations with modern image and include other non-oil businesses such as Inthanin coffee shops, minimarts, etc., in order to meet with customers' need. The company also improves quality and appearance of existing service stations and closes down some stations with less than target sales volume. The company continued to maintain its 2nd rank position in retail market share.

Industrial market sales volume increased by 16 million litres (+3%) despite an annual turnaround maintenance of the refinery during the quarter, as the company had reserved the finished oil products to sell during such period. An increased in industrial market sales volume was due to an emergency shutdowns of domestic refineries since the beginning of the quarter, resulted in a tighten supply of refined products in the market. Jet fuel sales volume increased from airways customers demand growth, the company's major customer for Jet Fuel, as the number of tourists increased, and from the company's marketing strategy to expand its market share in the jet fuel product.

When compared to Q4/2015, total sales volume increased by 75 million litres (+5%) from the higher sales volume in both retail and industrial markets, due to the seasonal demand in which people tend to extended their travelling period (high season), supported by a continued to decline of retail oil product prices. As a result of the company's

strategy to focus on retail market, the sales volume through retail market (service stations) increased by 35 million litres (+4%). Moreover, the sales volume through industrial market increased by 40 million litres (+7%), partly from the reserve of finished oil products for sales during refinery's maintenance period, and from an emergency shutdowns of domestic refineries at the beginning of the quarter, and the growth of jet fuel sales volume.

Total marketing margin was at 0.93 Baht per litre, increased by 24% YoY and 3% QoQ, as the lower crude oil price affected refined products cost, while retail oil prices adjusted slower than its cost, hence, higher marketing margin in some period. As a result, in Q1/2016, marketing business recorded an EBITDA of Baht 1,041 million, an increase of Baht 301 million (+41%) YoY, and an increase of Baht 492 million (+90%) QoQ.

3) Solar Power Business

In Q1/2016, BCPG Investment Holding Private Limited and BSE Energy Holding Private Limited, subsidiaries of BCPG Plc. Group, acquired the entire solar power business of SunEdison in Japan, within the budget of JPY 9,626 million (approximately Baht 2,915 million). By acquiring all the outstanding shares of SunEdison Japan Corporation, SunEdison Japan Debt Financing Pte. Ltd. and SunEdison TK Investor 1 Pte. Ltd. from SunEdison International, LLC. and SunEdison Energy Holding (Singapore) Pte. Ltd., according to the Purchase and Sale Agreement with condition precedent) dated 29th January, 2016. The payment of JPY 4,256 million (approximately Baht 1,275 million) has already been made according to the agreement condition. The rest of the payment will be paid with respect to the success condition of the projects under development within less than 18 months. The acquired business was comprised of solar power plants with total Power Purchase Agreement (PPA) of 164 Megawatts (MW) (installed capacity of 198 MW) including:

- Plants in operation with a total PPA of 11 MW (installed capacity of 13 MW)
- Plants Under Construction with total a total PPA of 19 MW (installed capacity of 27 MW)
- Projects Under Development with a total PPA of up to 134 MW (installed capacity of 158 MW)

Moreover, Bangchak Solar Energy (Buriram) Co., Ltd., a subsidiary of BCPG Plc., has informed the Stock Exchange of Thailand on its acquisition of the total outstanding shares of Huang Ming Japan Company Limited, in order to expand its investment in solar power plant project in Japan. The share transferred date was on 30th March, 2016.

Note: BCPG Plc. is in the process of filing for its initial public offering with the The Securities and Exchange Commission.

In addition, the annual general shareholders meeting of BCPG Plc. approved a capital increase from the existing of Baht 3,700 million (740 million shares, par value of Baht 5 per share) to Baht 10,000 million (2,000 million shares, par value of Baht 5 per share). The increased capital was partly allotted to The Bangchak Petroleum Plc. by 660 million shares, with par value of Baht 5 per share, resulting in a total value of Baht 3,300 million paid up capital. BCPG Plc. has used the proceeds to repay its outstanding debt owed to the Company. Another 600 million shares of the increased capital with par value of Baht 5 was to be sold in an initial public offering (IPO).

Solar Power Business Performance

	Q1/2015	Q4/2015	Q1/2016	YoY	QoQ
Revenue (Million Baht)	752	752	783	4%	4%
Electricity Sales (Million kWh)					
Solar Power Business – Thailand (PPA of 118 MW)	65.17	66.40	65.34	0.3%	-1.6%
Solar Power Business – Japan (PPA of 11 MW)	N/A	N/A	3.14	N/A	N/A
Total Electricity Sales	65.17	66.40	68.48	5%	3%
EBITDA (Million Baht)	713	865	628	-12%	-27%

In Q1/2016 when compared to Q1/2015, Solar Power business recorded an increase in total revenue of Baht 31 million (+4%), as in the quarter, there was additional revenue recognized from the acquisition of Solar Power business in Japan, which has an operation plant with a PPA of 11 MW.

Solar Power business in Thailand (PPA of 118 MW) recorded a slightly higher total electricity sales by 0.17 MW (+0.3%). In the quarter, the electricity sales of Solar Power Plant phase 2 and 3 were higher, from the higher solar irradiation hours in both phases, as in the same period last year there were several rainstorms in many areas. However, Solar Power Plant phase 1 recorded a decrease in electricity sales from the lower solar irradiation hours, as a result of the changing climate in the area. For Solar Power business in Japan, total electricity sales from the operating projects was 3.14 million kWh during the quarter.

When compared to Q4/2015, total revenue from Solar Power business was increased by Baht 31 million (+4%). The incremental of revenue was due to the additional revenue recognized from the acquisition of Solar Power business in Japan, which has a total operation plants with a PPA of 11 MW, and a total electricity sales of 3.14 million kWh. For Solar Power business in Thailand, the electricity sales was declined by 1.06 million kWh (-1.6%), as a notably hot weather from February onwards resulted in the lower production efficiency of all phases, even though the solar irradiation hours for Solar Power Plant phase 2 and 3 were slightly higher when compared to the previous quarter.

Nevertheless, Solar Power business in Japan still has additional costs incurred from the preparation of other projects under construction and development, therefore, Solar Power business EBITDA was recorded as Baht 628 million, a decrease of Baht 86 million (-12%) YoY, and a decrease of Baht 237 million (-27%) QoQ. As in the previous quarter, there was an additional investment income and other income from selling the investment in subsidiaries, which led to an abnormally high EBITDA in the mentioned period.

4) Biofuel Business

In Q1/2016, Biofuel business recorded an EBITDA of Baht 146 million, which comprised of an EBITDA from Bangchak Biofuel Co, Ltd. of Baht 134 million and a share of profit from Ubon Bio Ethanol Co, Ltd of Baht 12 million.

Biodiesel business performance by Bangchak Biofuel. Co., Ltd					
	Q1/2015	Q4/2015	Q1/2016	YoY	QoQ
Revenue (Million Baht)	1,235	1,423	1,867	51%	31%
Utilization Rate (%)	99%	102%	107%	8%	5%
Average Daily Production Rate (Thousands of litres per day)	355	367	385	8%	5%
B100 Sales Volume (Million litre)	36	57	64	76%	13%
EBITDA (Million Baht)	69	109	134	95%	22%

Average Sales Price (Source: Department of Energy Business, Ministry of Energy)					
B100 (Baht / Litre)	37.00	28.26	32.61	-12%	15%
Crude Palm Oil (CPO) (Baht / Kg.)	33.36	24.97	29.56	-11%	18%

In Q1/2016, when compared to Q1/2015, Biodiesel business recorded a revenue increase of Baht 632 million (+51%) from a growth in B100 sales volume of 28 million litres (+76%), although the B100 average price declined from the same period of last year. As in Q1/2015, there was a palm oil shortage which led to higher Crude Palm Oil (CPO) price, and also resulted in the government's announcement to reduce the portion of B100 mixing with diesel from 7% to 4%, hence the higher B100 demand in this quarter compared to the same period of last year. The higher B100 sales volume in this quarter was as well due to the increment of domestic diesel demand, and the expansion of sales volume in preparation for the new 2nd Biodiesel Plant (an average production capacity of 450 thousands litres per day), which is currently under construction and expected to be commercially operate within the 2nd half of this year. Moreover, in Q1/2016, Biodiesel business has also improved its Biodiesel plant efficiency, which enabled it to raise the average daily production rate to 385 thousand litres per day (107% utilization rate) an increase of +8% YoY.

When compared to Q4/2015, Biodiesel business recorded an increase in revenue of Baht 444 million (+31%), partly caused by the higher B100 sales volume by 7 million litres (+13%) from the surge in domestic diesel demand, and the expansion of sales volume in preparation for the new 2nd Biodiesel Plant, together with an incremental of B100 average price, as a result of the lessened crude palm oil supply in the market, and a support from an increase in crude palm oil benchmark in Malaysian market when compared to the previous quarter. In Q1/2016, Biodiesel business has also improved its Biodiesel plant efficiency, enable it to raise the average daily production rate by 5% from the previous quarter.

In Q1/2016, Biodiesel business recorded an increase of Gross Margin, from the greater B100 sales volume, and from the higher average margin per unit of B100 product, as a result of the reduced costs, the efficient inventory management, the increased production rate, and the smooth operation of the plant. In the quarter, there was an Inventory Gain of Baht 28 million. All in all, Biofuel business recorded an EBITDA of Baht 134 million, an increase of Baht 65 million (+95%) YoY, and an increase of Baht 24 million (+22%) QoQ.

5) Exploration and Production Business

Exploration and Production Business Performance					
	Q1/2015	Q4/2015	Q1/2016	YoY	QoQ
Production Volume ^{1/} (barrels per day net to Nido)	2,498	3,189	3,112	25%	-2%
Sales Volume (barrels net to Nido)	277,165	411,008	202,128	-27%	-51%
Revenue (Million Baht)	501	620	233	-53%	-62%
EBITDA (Million Baht)	28	(26)	22	-22%	183%

Note: 1/ A production volume of Galoc oil field only

In Q1/2016, Galoc oil field recorded an Uptime of 99.93%, and a production volume of 5,569 barrels (3,112 barrels net to Nido). The details of crude oil selling during the quarter, as disclosed by the Nido Petroleum Limited (NIDO) in the Australian Securities Exchange (ASX) were as follows:

- Galoc oil field sold 1 cargo in February totaling 354,340 barrels (198,003 barrels net to Nido) with FOB price of 31.27 \$/BBL.
- Nido & Matinloc oil field totaling 15,726 barrels (4,125 barrels net to Nido).

Compared Q1/2016 to Q1/2015, Exploration and Production business recorded a revenue of Baht 233 million, a decrease of Baht 268 million, from the lessened amount of cargo sold (corresponding to the selling cycle of Nido which ordinarily sells its crude oil every other month), and a result of the decline in selling price following the drop in global crude oil price. The production volume slightly decreased according to the Natural-Divide Production Curve.

The production volume net to Nido was higher when compared to the same period of last year, due to the fact that Nido had signed Purchase and Sale Agreement with Otto Energy Limited (Otto), and completed its acquisition of Galoc Production Company WLL (GPC) for its additional 33% working interest in the Galoc oil field in the Philippines. The transaction was completed on 17th February 2015, as such, Nido's interest in the Galoc oil field was increased from 22.88% to 55.88% and owned an entitlement of operatorship for the Galoc oil field.

When compared to Q4/2015, Exploration and Production business recorded a revenue decrease of Baht 387 million, as a result of a decline in crude oil price which caused lower selling price per cargo. The reduction in sales volume was due to the fact that there was 1 cargo sold during the quarter, while in the previous quarter, there were 2 cargoes sold (correspond to its selling cycle of Nido).

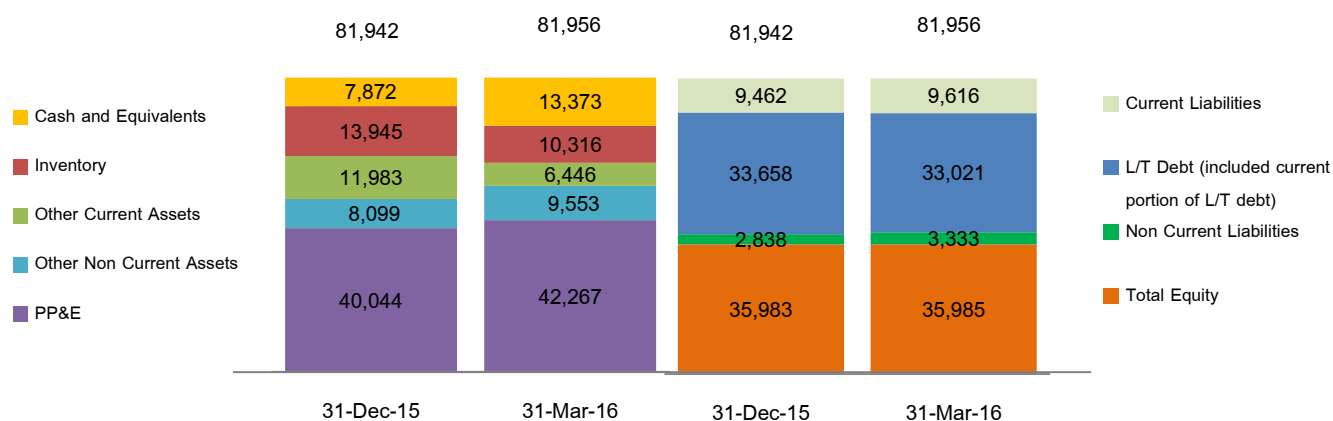
Since the end of 2015 continued to 2016, Nido has implemented a cost saving program by which it negotiated its FPSO cost (Floating Production, Storage, and Offloading) of Galoc oil field to be variable with crude oil price, FPSO is a production and transferring vessel. Nido also reduced its Selling, General and Administrative Expenses to response to the lower crude oil price environment. As a result, the Selling, General and Administrative Expenses decreased 40% YoY and 34% QoQ. Moreover, Nido entered into hedging transaction to diversify the crude oil price volatility. As a result, Exploration and Production Business recorded an EBITDA of Baht 22 million, a decrease of Baht 6 million (-22%) YoY, and an increase of Baht 48 million (+183%) QoQ.

Additionally, Nido has informed Australian Securities Exchange (ASX) about the Annual Reserve Statement on its Annual Report, which is reserves and resources as of year-end 2015, as follows:

Reserves (MMBBL)			
Galoc oil field (SC 14C1)	Year 2014	Year 2015	Δ
Proved (1P)	4.14	2.65	(1.49)
Proved plus Probable (2P)	5.26	4.14	(1.12)
Proved plus Probable plus Possible (3P)	7.14	5.91	(1.23)
Contingent Resources			
Galoc oil field (SC 14C1)			
1C	-	3.90	3.90
2C	-	6.50	6.50
3C	-	9.60	9.60
West Linapacan oil field (SC 14C2)			
1C	2.24	2.60	0.36
2C	4.20	4.20	-
3C	7.23	7.10	(0.13)

Financial Position of the Company and its subsidiaries (Consolidated)

Unit: Million Baht



Assets

As of March 31, 2016, Total Assets of the Company and its subsidiaries were Baht 81,956 million, an increase of Baht 14 million when compared to the end of 2015. The changes in assets were mainly from:

- Cash and cash equivalents was increased by Baht 5,501 million. Details are stated under Analysis of the Cash Flow Statement.
- Current Investment was decreased by Baht 4,500 million from the maturity of the company's short term fixed deposits in financial institutions.
- Trade Accounts Receivable was decreased by Baht 1,860 million, due to a decrease in selling price per unit, and a decrease in total sales volume in March 2016, compared to December 2015.
- Other Accounts Receivable was increased by Baht 685 million, mainly from the insurance compensation receivable of Baht 207 million, and prepaid expense of Baht 442 million.
- Inventory was decreased by Baht 3,629 million, mainly from the lower value of crude oil and finished oil products, following the lower unit price. Also, the amount of inventory was decreased from 6.4 million barrels to 5.5 million barrels, as in the end of 2015, the company accumulated its inventory to support its annual turnaround maintenance in Q1/2016.
- Property, plant and equipment was increased by Baht 2,223 million, from an investment in refinery machinery and equipment of Baht 1,377 million, Marketing and office equipment of Baht 205 million. For BCPG Plc., the increment was from an acquisition of solar power business and construction work in progress of Baht 1,865 million. Depreciation was recorded at Baht 1,042 million.
- Other non-current assets: main item was from the goodwill of Baht 1,058 million, from the acquisition of the solar power business in Japan. Deferred tax expense was increased by Baht 133 million.

Liabilities

As of March 31, 2016, Total Liabilities of the Company and its subsidiaries was Baht 45,970 million, an increase of Baht 11 million when compared to the end of 2015. The change in liabilities was mainly from:

- Trade Accounts Payable was increased by Baht 738 million, as the refinery's annual turnaround maintenance, resulted in the higher value of finished oil products in March 2016 than in December 2015, while the value of crude oil was decreased from the lower crude run.
- Other payables was decreased by Baht 320 million, from a decrease in accrued expenses last year by Baht 446 million, a decreased liabilities from hedging contracts by Baht 30 million. Other increase payables from the company's subsidiaries was increased by Baht 155 million.
- Long-term loans from financial institutions (including current portion of long-term loans) was decreased by Baht 638 million, primarily due to the company's long-term loans repayment. However, there was an increment from the long term loans of Bangchak Biofuel Co., Ltd., and the acquisition of solar power business in Japan by BCPG Plc.
- Other non-current liabilities was increased by Baht 495 million, mostly from the Contingent Liability of BCPG Plc., which is expected to be paid with respect to the success condition of the projects under developmet, according to the Purchase and Sale Agreement for the acquisition of the entire solar power business of SunEdison in Japan.

Equities

As of March 31, 2016, Total Equity attributable to owners of the Company was Baht 35,555 million, an increase of Baht 74 million, from Net Profit attributable to owners of the Company of Baht 47 million, and other component of equity (foreign currency translation differences for foreign operations) of Baht 27 million. The Consolidated book value was Baht 25.82 per share.

Cash Flows Statement of the Company and its subsidiaries (Consolidated)

In Q1/2016, the Company and its subsidiaries had net cash received from operating activities of Baht 6,037 million, net cash received from investing activities of Baht 1,761 million, net cash used in financing activities of Baht 2,227 million. As a result, the Company and its subsidiaries had an increase in Cash and cash equivalents of Baht 5,571 million, as there was Cash and cash equivalents of Baht 7,872 million on January 1, 2016 and an effect of exchange rate changes on balances held in foreign currencies of Baht -70 million, resulting in Cash and cash equivalents as of March 31, 2016 at Baht 13,373 million.

Details of cash received and used are as follows:

Cash Flows		Unit: Million Baht	
Cash Flows	31-Mar-15	31-Mar-16	
Net cash received (used in) operating activities	6,578	6,037	
Net cash received (used in) investing activities	(2,965)	1,761	
Net cash received (used in) financing activities	2,290	(2,227)	
Net increase (decrease) in cash and cash equivalents	5,903	5,571	
Cash and cash equivalents as at 1 January	7,954	7,872	
Effect of exchange rate changes on balances held in foreign currencies	(28)	(70)	
Cash and cash equivalents as at 31 March	13,830	13,373	

Cash received and used details are as follows:

- 1) The Company and its subsidiaries had net cash received from operating activities of Baht 6,037 million, mainly from
 - Net cash received from operating activities of Baht 1,073 million which was from Net Loss of Baht 25 million added back Non-Cash Expenses of Baht 892 million, Finance Costs and Income Tax credit of Baht 206 million.
 - Cash used in the operating assets decreased by Baht 5,131 million, mainly from a decrease in Inventory of Baht 3,722 million, a decrease in Trade Accounts Receivable of Baht 1,881 million, an increase in Other Receivables of Baht 161 million, and an increase in Other Assets of Baht 311 million.
 - Cash used in operating liabilities decreased by Baht 149 million, mainly from an increase in Trade Accounts Payable of Baht 720 million, a decrease in Other Payables of Baht 592 million and a decrease in Other liabilities of Baht 277 million.
 - Income Tax Paid of Baht 18 million.

- 2) Net Cash used in investing activities of Baht 1,761 million, mainly from
 - Received cash from interest received of Baht 149 million, and from the disposal of other investment in ASEAN Potash Chaiyaphum Public Company Limited of Baht 203 million.
 - Current investment decreased by Baht 4,499 million.

- Investment in property, plant and equipment of Baht 1,956 million, which were from an investment in refinery machinery and equipment of Baht 1,028 million, an investment in Biodiesel plant machinery and equipment of Baht 349 million, construction work in progress in solar power plant of BCPG Plc. of Baht 397 million, and others of Baht 182 million.
- Net cash outflow on acquisition of subsidiary of Baht 963 million, from the acquisition of solar power business of SunEdison in Japan.
- Leasehold right increased by Baht 59 million, and purchase of intangible assets increased by Baht 112 million.

3) Net cash used in financing activities of Baht 2,227 million, mainly from

- Received cash from long-term loan from financial institutional of the company's subsidiaries of Baht 585 million.
- Repayment of long-term loans from financial institutional of Baht 2,474 million.
- Financial costs of Baht 338 million.

Financial Ratios (Consolidated)

Profitability Ratios (%)			
	Q1/2015	Q4/2015	Q1/2016
EBITDA Margin	5.91%	3.99%	3.94%
Profit Margin	2.68%	-0.54%	-0.08%
Return on Equity (ROE) ^{1/}	0.53%	12.07%	9.07%
Return on Assets (ROA)	1.39%	8.04%	6.11%

1/ Profit and Total equity attributable to owners of the Company

Liquidity and Financial Policy Ratios (times)			
	31-Mar-15	31-Dec-15	31-Mar-16
Liquidity Ratios			
Current Ratio	2.88	3.22	2.84
Quick Ratio	1.86	1.89	1.87
Financial Policy Ratios			
Interest bearing Debt to Equity	0.97	0.94	0.92
Net Interest bearing Debt to Equity	0.55	0.59	0.55
	Q1/2015	Q4/2015	Q1/2016
DSCR	1.59	3.73	2.03

Financial Ratios Calculation

- EBITDA Margin (%) = $\text{EBITDA} / \text{Revenue from sale of goods and rendering of services}$
- Profit Margin (%) = $\text{Net Profit (Loss)} / \text{Revenue from sale of goods and rendering of services}$
- Return on Equity (%) = $\text{Net Profit (Loss) attributable to the owners of the company (Yearly)} / \text{Total Equity attributable to owners of the Company (Average)}$
- Return on Assets (%) = $\text{EBIT (Yearly)} / \text{Total Asset (Average)}$
- Current Ratio (times) = $\text{Current Asset} / \text{Current Liabilities}$
- Quick Ratio (times) = $(\text{Current Asset} - \text{Inventory}) / \text{Current Liabilities}$
- DSCR = $\text{EBITDA (Yearly)} / (\text{Paid for long-term debt} + \text{Finance cost})$
- Interest bearing Debt to Equity (times) = $\text{Interest bearing Debt} / \text{Total equity}$
- Net Interest bearing Debt to Equity = $(\text{Interest bearing Debt} - \text{Cash and cash equivalents} - \text{Current investments}) / \text{Total equity}$

Note:

1/ Average Total Equity attributable to owners of the Company

- Yearly = $(\text{Total Equity attributable to owners of the Company of the year before} + \text{Total Equity attributable to owners of the Company of this year}) / 2$
- Quarterly = $(\text{Total Equity attributable to owners of the Company of the quarter of the year before} + \text{Total Equity attributable to owners of the Company the quarter this year}) / 2$

2/ Average Total Assets

- Yearly = $(\text{Total Assets of the year before} + \text{Total Assets of the Company of this year}) / 2$
- Quarterly = $(\text{Total Assets of the Company of the quarter of the year before} + \text{Total Assets of the Company the quarter this year}) / 2$

3/ The numerator of ROE is defined as the Profit attributable to owners of the Company and have to be annualized.

4/ The numerator of ROA is defined as EBIT and have to be annualized.

5/ Interest Bearing Debt defined as Short-term loans + Long-term loans (including Current portion of long-term loans) + Debentures + Finance lease liabilities (including current portion of finance lease liabilities)

Environment Management Accounting (EMA)

Having the environmental concerns and social responsibilities, the Company has prepared the environmental management accounting report since 2005, aiming to enable the benefit of its usage for other organizations as well as for the company. The environmental cost accounting helps the Company to keep track with the information which is useful for enhancing the environmental management effectiveness, and resource utilization. The Environmental Cost Accounting report covers refinery business unit, Bangchak and Bang Pa-in Oil distribution Centre.

Environment Management Accounting: EMA		Unit: Million Baht		
	Q1/2015	Q1/2016	Δ	
Material Costs of Product Outputs : Consist of crude oil, ethanol, biodiesel, chemical, energy and utilities in production	22,803	11,226	(11,577)	
Material Costs of Non-Product Outputs : Consist of slop and sludge oil, waste water, chemical surplus	10	21	12	
Waste and Emission Control Costs : Consist of maintenance cost of environmental control equipment and depreciation and other fees	97	80	(17)	
Prevention and Other Environmental Management Costs : Consist of monitoring and measurement cost, environmental management system expenses	1	4	3	
Total Expenses	22,911	11,332	(11,579)	
Benefit from by-product and waste recycling	(5.45)	(5.11)	0.34	

In Q1/2016, total expenses related to environment decreased by Baht 11,579 million (-51%) compared to same period of last year. The main reason was due to the large decline in oil price, and the refinery's turn around annual maintenance, led to the lower crude run from 108.63 KBD in Q1/2015 to 64.18 KBD in this quarter. This is consistent with the higher Material Costs of Non-Product Outputs by Baht 12 million, due to the slop and sludge oil which was increased by Baht 11 million. Waste and Emission Control Costs and Prevention and Other Environmental Management Costs was reduced by Baht 14 million (-14%), mainly due to the Baht 18 million lower depreciation of environmental control equipment.

Benefit from by-product and waste recycling reduced by Baht 0.34 million (-6%), as liquid sulfur and glycerin value decreased by Baht 1.04 million, even though sellable residue metal scrap were higher by Baht 0.7 million in the quarter.