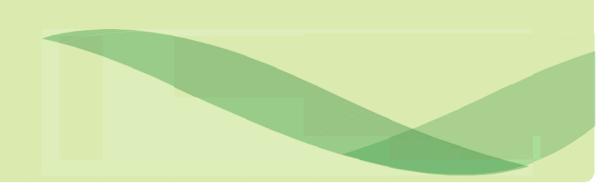


# The Bangchak Petroleum Public Company Limited.

**Management Discussion and Analysis of Business Operation** 

For the second quarter ended June 30, 2015



# Summary of the Company and its subsidiaries' operating result in 2<sup>nd</sup> guarter, ended 30<sup>th</sup> June 2015.

In Q2/2015, the consolidated financial statement recorded revenue from sale of goods and rendering of services of Baht 41,357 million and Net Profit of Baht 2,809 million which was the Net Profit attributable to owners of the Company of Baht 2,794 million, or earning per share of 2.03 Baht.

EBITDA Structure of the Company and its	subsidiaries	S.				Unit: M	lillion Baht
	Q2/2014	Q1/2015	Q2/2015	YoY	QoQ	6M2014	6M2015
Total Revenue	40,776	39,445	41,357	1%	5%	90,433	80,802
Total EBITDA	2,400	2,333	5,164	115%	121%	4,989	7,496
EBITDA Refinery	1,032	798	3,404	230%	326%	2,482	4,203
EBITDA Marketing <sup>1/</sup>	678	740	657	-3%	-11%	1,290	1,397
EBITDA Solar Power 2/	682	713	735	8%	3%	1,123	1,449
EBITDA Biofuel <sup>3/</sup>	41	81	99	144%	23%	151	179
EBITDA Exploration and Production 4/	-	28	314	-	-	-	342
EBITDA Others <sup>5/</sup>	(32)	(27)	(45)	41%	66%	(56)	(73)
Profit attributable to owners of the Company	1,258	1,037	2,794	122%	169%	2,820	3,831
Basic earnings per share (Baht)	0.91	0.75	2.03			2.05	2.78

<sup>1/</sup> EBITDA from Marketing Business and Bangchak Greenet Co.,Ltd

In 2Q/2015, compared to Q2/2014, revenue from sale of goods and rendering of services was increased by 1% (YoY), due to a 32% increase in the total sales volume following the higher refinery average crude run during the quarter, as domestic oil demand during the first half of the year has increased from the support of declining oil price and the recovering Thai economy, especially tourism sector, despite the slowing trend of export sector. Gross profit increased from the Market GRM which maintained its high level. However in the quarter, crude oil price has increased from 1Q/2015 (Average Dubai Price in Q1/2015: 51.76 \$/BBL, Q2/2015: 61.26 \$/BBL), from the support of the higher oil demand during summer and the higher demand due to the decline of crude oil price. Moreover, US oil stockpiles and oil rig counts have decreased. From the higher crude oil price, in Q2/2015, the Company and its subsidiaries recorded an inventory gain of Baht 448 million, resulting in a total EBITDA increase of Baht 2,764 million (+115%), including the gain from crude and product oil price hedging contract of Baht 47 million, while the loss from foreign currency forward contracts and loss on foreign exchange was recorded at Baht 34 million, due to the weaker Thai Baht. Therefore, Net Profit attributable to the owners of the company was increased by 122% (YoY).

<sup>2/</sup> EBITDA from Solar Power Plant Business, Bangchak Solar Energy Co.,Ltd. and its subsidiaries

<sup>3/</sup> EBITDA from Bangchak Biofuel Co., Ltd. and share of profit/ (loss) from Ubon Bio Ethanol Co, Ltd

<sup>4/</sup> EBITDA from Nido Petroleum Limited

<sup>5/</sup> EBITDA from BCP Energy International Pte, Ltd. and others

Comparing to Q1/2015, the Company and its subsidiaries' revenue from sale of goods and rendering of services was increased by 5% (QoQ), from the company's total sales volume which continuously expanded to support the higher crude run of the refinery, as the Market GRM was still at a high level. Nevertheless, due to the rise in crude oil price, the Company and its subsidiaries recorded an inventory gain of Baht 448 million, recovered from the previous quarter which recorded an inventory loss of Baht 1,790 million, resulting in an increase of EBITDA for the company and its subsidiaries by Baht 2,831 million (+121%), and an increase of Net Profit attributable to the owners of the company by 169% (QoQ).

The details of each business performance were as follow;

Refinery business steadily increased its average crude run, and had an average crude run for the quarter of 111.93 thousand barrel per day, which was the highest crude run ever recorded for Bangchak's refinery, due to the high level of Market GRM which increased from the previous quarter and was at 10.41 \$/BBL. The higher Market GRM was a result of the growth of some oil products demand in the region, after the global crude oil price dropped. Moreover, as crude oil price increased during the quarter, the company recorded an inventory gain of Baht 457 million. In consequence, the refinery's operating result in Q2/2015 was at a high level.

Marketing business had a total sales volume of 1,404 million litres, an increase of 16% (YoY) and 4% (QoQ), due to the recovering Thai economy, especially in the tourism sector, and the decline in global crude oil price influenced domestic oil products demand. Moreover, the company was able to expand its sales volume to support the higher crude run of the refinery. Retail market sales volume increased and continued to maintain its 2<sup>nd</sup> rank in market share position. The Company still maintained its priorities of selling the finished products through service stations, opening new and quality service stations, refurbishing its service stations to attract more customers. Total Marketing Margin in Q2/2015 decreased to 0.69 baht per litre, from the decline in retail oil product prices and the higher price competition in the Industrial Market.

Solar Power business was fully operated for all 3 phases (PPA of 118 MW). Total revenue was recorded at Baht 775 million, and electricity sales were increased to 67.78 million kWh, due to the higher than target irradiation hours.

Biodiesel Business had an average daily production rate of 371 thousand litres per day, an increase of 5%(YoY) and 4% (QoQ), as a result of government's policy of increasing the portion of B100 mixing with diesel from 3.5% to 7%, started on 16 April 2015. Moreover, the B100 sales volume to Bangchak, the major customer, has increased from the company's higher sales volume. As a result, B100 sales volume rose to 53 million litre, and revenue of Biodiesel Business was recorded at Baht 1,430 million, increased 28% (YoY) and 16% (QoQ), despite the decrease of B100 average sales price which was resulted from the lower price of Crude Palm Oil (CPO).

Exploration and Production business recorded revenue of Baht 849 million, an increase of 69% from Q1/2015, as in Q2/2015, Nido Petroleum Limited (NIDO) has increased its working interest in Galoc oil field to 55.88%, resulted in a higher average production rate belongs to NIDO. In the quarter, there was crude oil sales revenue of 2 cargos, from Galoc oil field, and from Nido & Matinloc oil field.

#### Total Sales Volume in each market category of the Company Unit: Million Litre Q2/2014 Q1/2015 Q2/2015 QoQ 6M2014 6M2015 **Marketing Business** YoY Retail 780 782 849 9% 9% 1,493 1,631 Industrial 957 431 562 555 29% -1% 1,117 Total 1,210 1,344 1,404 16% 4% 2,450 2,748 Wholesale Business Petroleum traders in accordance with section 7 18 173 169 824% -2% 210 342 Export 130 245 219 69% -10% 344 464 Total 148 417 388 162% -7% 554 805 **Total Sales Volume** 1,358 1,761 1,792 32% 2% 3,005 3,553

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

### Analysis of the Consolidated Statement of Income

						Unit: N	lillion Litre
	Q2/2014	Q1/2015	Q2/2015	YoY	QoQ	6M2014	6M2015
Revenue from sale of goods and rendering of services	40,776	39,445	41,357	1%	5%	90,433	80,802
Cost of sale of goods and rendering of services	(38,791)	(37,082)	(36,390)	-6%	-2%	(85,930)	(73,471)
Gross Profit	1,985	2,363	4,967	150%	110%	4,503	7,330
Investment income and other income	623	104	139	-78%	34%	712	243
Selling and administrative expenses	(959)	(1,057)	(1,314)	37%	24%	(1,810)	(2,371)
Gain from crude and product oil price hedging contract	83	(136)	47	-43%	135%	174	(89)
Gain (loss) from foreign currency forward contracts	27	(5)	(8)	-130%	61%	81	(13)
Gain (loss) on foreign exchange	60	266	(26)	-143%	-110%	307	240
Reversal of allowance for loss/ (loss) from impairment of assets	0.14	11	(0.31)	-325%	-103%	1	10
Share of profit (loss) of associate	(6)	12	(1)	-83%	-109%	4	10
Profit before finance costs and income tax expense	1,813	1,558	3,804	110%	144%	3,973	5,362
Finance costs	(369)	(411)	(401)	9%	-2%	(632)	(812)
Profit/(loss) before income tax expense	1,444	1,147	3,403	136%	197%	3,341	4,550
Income tax (expense) credit	(178)	(91)	(594)	234%	555%	(488)	(684)
Profit for the period	1,267	1,056	2,809	122%	166%	2,853	3,865
Owners of the Company	1,258	1,037	2,794	122%	169%	2,820	3,831
Non-controlling interests	9	19	15	71%	-22%	33	34
Earnings per share (Baht per Share)	0.91	0.75	2.03	123%	171%	2.05	2.78

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

#### **Refinery and Marketing Business Performance**

,	Crude Oil Price									
									U	nit: \$/BBL
		Q2/2014	Q1/2015		Q2/2015		YoY	QoQ	6M2014	6M2015
		AVG	AVG	MAX	MIN	AVG	%	%	AVG	AVG
	Dubai (DB)	106.13	51.76	66.51	53.39	61.26	-42	18	105.29	56.55
	Dated Brent (DTD)	109.67	53.94	66.65	54.18	61.88	-44	15	108.93	57.84
	DTD/DB	3.53	2.17	3.38	-1.53	0.61	-83	-72	3.64	1.29

#### **Crude Oil Price Situation**

In the second quarter of 2015, an average Dubai crude oil price has increased by 9.50 \$/BBL from the previous quarter. The crude oil price had gradually recovered as demand picked up during the summer and lower price also helped spurring demand. US crude oil stockpiles which consecutively risen since the beginning of the year started to fell for the first time in April after US refineries gradually returned from turnarounds. Data also showed that number of US oil rigs count has continuously decreased which could mean a slowdown of US oil production in the future. Moreover, the oil price was also supported by the unrest in the Middle East. Market concern about the security of Middle East oil supplies also had risen again because of the Conflict in Yemen.

However, the oil price was pressured by concern over Greece debt crisis which may cause the instability of the euro zone. Moreover, investors also worried about Chinese economy after the manufacturing index continued to shrink in the second quarter, while gross domestic product (GDP) grew only 7.0% (QoQ) in the first quarter of this year. The appreciation of the US dollar compared to other major currencies, especially Euro and Yen, also pressured Oil price. US Dollar was boosted by speculation that the Federal Reserve will start to raise the interest rate by this year. In addition, oversupply in the market remains high as Non-OPEC producers continued to produce oil at high level while OPEC countries also continued to compete for the market share. Lastly, market has been under pressure from expectations that political framework on Iran nuclear program would set the stage for a landmark nuclear agreement. Western sanctions would be lifted allowing Iran to resume its oil exports in the future.

In comparison to the second quarter of 2014, Dubai crude oil price in the second quarter of 2015 decreased by 44.87 \$/BBL, because of the persisting oversupply in the market and the increase of OPEC oil production to gain market share and suppress the growth of non-OPEC supply. While in the second quarter of 2014, oil prices have been driven by the unrest in the Middle East and concerns of the conflict between Russia and Ukraine.

An average Dated Brent/Dubai spread in the second quarter fell 1.56 \$/BBL from the previous quarter. The spread was pressured by oversupplied of light sweet crude in the market especially supply from the U.S. shale oil production. Therefore, the U.S. cut its light crude oil import from Africa which has similar properties to U.S. shale oil. Refinery turnarounds in Asia also reduced demand for crude oil during the second quarter.

When compared to the same quarter last year. The average Dated Brent/Dubai spread dropped 2.92 \$/BBL as crude oil supply surplus remained high especially West Africa crude. In contrast to the second quarter of 2014, the spread was driven by supply disruption following the unrest in Libya.

#### **Crack Spreads Analysis**

Unit: \$/BBL

	Q2/2014	Q1/2015		Q2/2015		YoY	QoQ	6M2014	6M2015
	AVG	AVG	MAX	MIN	AVG	%	%	AVG	AVG
UNL95/DB	16.06	15.43	24.95	13.59	19.78	23	28	15.31	17.62
IK/DB	14.29	17.02	15.04	11.85	13.46	-6	-21	15.64	15.23
GO/DB	16.02	16.32	15.49	11.69	13.73	-14	-16	16.91	15.01
FO/DB	-10.6	-1.9	-0.81	-7.05	-3.54	67	-87	-9.53	-2.73

#### **Crack Spreads Analysis**

For the petroleum products market, an average Mogas/Dubai crack spread in the second quarter was 19.78 \$/BBL, compared to the average of 15.43 \$/BBL in the previous quarter. The spread has been driven by increased demand for gasoline as the driving season in US began in May and the Muslim fasting month during June-July. Gasoline supply had been tighter as many refineries in Asia undergoing maintenance and unplanned shutdown of gasoline production unit in the newly refinery in United Arab Emirates.

When compare the gasoline crack spread in Q2/2015 and Q2/2014, the spread also increased by 3.72 \$/BBL driven by an increased demand in the region spurred by lower oil prices. India has increased its gasoline import during the quarter because of the exceptional high demand and lower supply during refinery maintenance.

• An average of Jet (Kerosene)/Dubai crack spread was 13.46 \$/BBL, compared to the average of 17.02 \$/BBL in the previous guarter. The spread had come off after slower heating demand in Japan and the U.S., The U.S. heating oil inventories increased from the lowest level in five years in the first quarter after the US refinery return from turnarounds and increase utilization rate.

When compare the Jet (Kerosene) crack spread in Q2/2015 and Q2/2014, the spread decreased by 0.83 \$/BBL. This was due to the startup of new large refinery in Saudi Arabia and the United Arab Emirates.

• An average of Gas oil/Dubai crack spread was 13.73 \$/BBL, compared to the average of 16.32 \$/BBL in the previous quarter. The spread has been under pressure from the slower middle distillates demand during spring season despite of refinery turnarounds in Asia. Chinese gas oil demand growth has been slowed especially in the construction and transport sector following economic slowdown. The Chinese demand has dropped during the fishing banned period (May - August). Moreover, China also increased its refinery run rate in order to meet increasing demand in gasoline which resulted in excess gas oil forcing them to export.

When compare the gas oil crack spread in Q2/2015 and Q2/2014, the spread decreased by 2.29 \$/BBL. The decrease of oil import demand from the Middle East was larger in this quarter after the commissioning of large new refinery in Saudi Arabia and the United Arab Emirates.

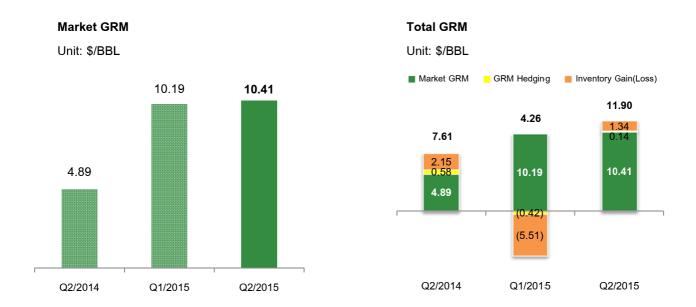
• The average of Fuel Oil/Dubai crack spread was -3.54 \$/BBL, compared to the average of -1.90 \$/BBL in the previous quarter. The spread had been pressured by higher fuel oil supply in the region after arbitrage from Europe increased following higher refinery run rate in Europe during the first quarter of this year. China's fuel oil imports was also decline after the private refinery (Teapot) had been allowed to import crude oil itself. The demand for fuel oil and electricity sector in Japan and South Korea also fell after winter season end.

When compare the fuel oil crack spread in Q2/2015 and Q2/2014, the spread increased by 7.06 \$/BBL. This was because oil price had dropped by more than half from the mid of 2014. While Q2/2014 fuel oil demand for bunker in the Asia region was slower than this year due to economic slowdown.

#### 1) Refinery Business

Refinery Business Performance							
	Q2/2014	Q1/2015	Q2/2015	YoY	QoQ	6M2014	6M2015
Average Crude Run (KBD)	48.45	108.63	111.93	131%	3%	73.00	110.29
Utilization Rate (%)	40%	91%	93%			61%	92%
Average FX (THB/USD)	32.60	32.80	33.41			32.70	33.11
(Unit: Million Baht)							
Market GRM	703	3,267	3,544	404%	8‰	2,553	6,811
GRM Hedging	83	(136)	47	-43%	135%	174	(89)
Inventory Gain/ (Loss) 1/	309	(1,766)	457	48%	126%	354	(1,309)
Total GRM	1,094	1,365	4,048	270%	197%	3,081	5,413
EBITDA	1,032	798	3,404	230%	326%	2,482	4,203

Note: 1/ Inventory Gain/ (Loss) in 6M/2015 was included a reversal of LCM of Baht 992 million.



#### Comparison of Q2/2015 and Q2/2014 operating results

In Q2/2015, refinery had an average crude run of 111.93 thousand barrels per day, an increase of 131% from the same period of last year (In Q2/2014, the refinery had its Annual Turnaround Maintenance, resulting in the lower crude run at 48.45 thousand barrels per day). The average crude run for the quarter was the highest crude run ever recorded for Bangchak's refinery, influenced by Market GRM which continued to stay at a high level from Q1/2015, as the fluctuation of oil price situation resulted in the decline in crude oil price; while global oil product prices were at a high level due to the strong regional demand in some oil products after the global oil price dropped.

Furthermore, in Q2/2015, Bangchak's refinery was able to increase its crude run to higher than 120 thousand barrels per day for a certain period, signifying the refinery's capability to raise its crude run during the propel market environment. Moreover, Bangchak's marketing business had also expanded its sales volume in order to support the refinery's higher crude run.

The company's market GRM was recorded at Baht 3,544 million, an increase of 404%, as a result of the higher crude run, and an increase in Fuel Oil/Dubai crack spread (FO/DB) which was supported by the downturn in global crude oil price. Gasoline/Dubai crack spread (UNL95/DB) was also benefited by the rise in regional demand especially in India and China, as the global crude oil price declined. Additionally, electricity cost of the refinery was decreased from of the purchase of the Cogeneration Power Plant with a capacity of 25 MW from PTT Public Company Limited (PTT) at the end of May 2015. The purchase of power plant helped reducing the cost of generating electricity and steam to be used as the refinery's fuel.

Crude oil price began to recover from the previous quarter as oil demand increased during summer and oil demand increased following the fall in crude oil price. Moreover, the oil price was also supported by the unrest in the Middle East and North Africa, which created concerns on the oil production and transportation in the Middle East. Accordingly, Refinery business recorded an Inventory gain of Baht 457 million, resulting in a total GRM of Baht 4,048 million (+270% YoY), and an EBITDA of Baht 3,404 million (+230% YoY).

### Comparison of Q2/2015 and Q1/2015 operating results

Compared to Q1/2015, average crude run of the refinery increased by 3% as the oil products crack spreads continued to stay at a high level from the previous quarter, despite the improvement of the crude oil price from the recovery of oil demand in summer and the unrest in the Middle East and North Africa. Market GRM maintained at high level throughout the quarter, inducing the refineries to increase its crude run level.

The company recorded an increase in its Market GRM by Baht 277 million (+8%), due to an increase in Gasoline/Dubai crack spread (UNL95/DB) from the driving season in the US and the Muslim fasting month at the end of the quarter, which driven the gasoline demand for travelling. While the crude cost decreased from the narrower spread between Dated Brent and Dubai which was on the average of 0.61 \$/BBL in the quarter (Q1/2015: 2.17 \$/BBL) due to the crude oil oversupply, especially in the US as its shale oil production continued to expand which reduced its light crude import from Africa, of which quality is similar to shale oil. Refinery turnarounds in Asia also reduced demand for crude oil during the second quarter. Moreover, electricity cost of the refinery was decreased, as a result of the purchase of Cogeneration Power Plant with a capacity of 25 MW from PTT Public Company Limited (PTT) at the end of May 2015.

Crude oil price situation improved from the previous quarter, by cause of the higher oil demand in summer and higher oil demand from the low level of crude oil price. Also, the oil price was supported by the unrest in the Middle East and North Africa, which created concerns on the oil production and transportation in the Middle East. As such, the company recorded an Inventory gain of Baht 457 million, resulting in an increase in total GRM by Baht 2,683 million (+197%), and an increase in EBITDA by Baht 2,606 million (+326%) from the previous quarter.

## 2) Marketing Business and Bangchak Green Net Co., Ltd.

Sales volume of Marketing Business						Unit: I	Million Litre
Marketing Business	Q2/2014	Q1/2015	Q2/2015	YoY	QoQ	6M2014	6M2015
Retail (Service Stations)	780	782	849	9%	9%	1,493	1,631
Industrial	431	562	555	29%	-1%	957	1,117
Total	1,210	1,344	1,404	16%	4%	2,450	2,748
Sales volume in each product category of Mark	ceting Busines	ss					
LPG	16	10	13	-21%	29%	32	23
Gasoline	12	15	11	-12%	-28%	24	26
Gasohol	344	364	373	9%	3%	668	737
Gasohol 91	133	149	154	16%	3%	260	304
Gasohol 95	87	97	97	11%	0%	170	194
Gasohol E20	84	77	79	-5%	3%	164	156
Gasohol <i>E85</i>	40	40	42	5%	5%	74	83
Jet Fuel	147	160	175	19%	9%	328	335
Diesel	639	741	785	23%	6%	1,288	1,526
Fuel Oil	39	43	35	-9%	-17%	82	78
Lubricant	13	11	11	-15%	4%	27	22
Others	0	0	0	-26%	-56%	1	1
Total	1,210	1,344	1,404	16%	4%	2,450	2,748

С	etails of Marketing Margin						Unit: Ba	aht per Litre
	Marketing Margin	Q2/2014	Q1/2015	Q2/2015	YoY	QoQ	6M2014	6M2015
	Retail Margin (Service Stations)	1.04	0.95	0.87	-17%	-8%	1.00	0.90
	Industrial Margin	0.35	0.48	0.43	23%	-11%	0.32	0.46
	Total Marketing Margin	0.80	0.75	0.69	-13%	-8%	0.73	0.72

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

#### Comparison of Q2/2015 and Q2/2014 operating results

In Q2/2015, marketing business had a total sales volume of 1,404 million litres, an increase of 194 million litres (+16%) from Q2/2014, from the higher sales volume both in the retail market and the industrial market, as the recovering Thai economy and the lowering retail oil product prices from the decline in global oil price has boosted domestic oil demand. Moreover, marketing business has increased its sales volume in order to support the higher crude run of the refinery. Diesel product sales volume was increased by 23% and gasohol products sales volume was increased by 9% from Q2/2014.

The sales volume through retail market (service stations) was increased by 70 million litres (+9%). As it is the company's strategy to serve the retail market as its main priority, the company was able to increase its sales volume through service stations, both in Standard Service Stations and in Co-operative Service Stations. The average retail oil products price which has been declining since the end of 2014 was also a supporting factor for the higher oil demand. In Q2/2015, diesel and gasohol product sales volume was increased by 9%, especially in gasohol 91 and gasohol 95 products which were increased by 25% and 11% respectively, as the price of gasohol products decreased more than other product prices. Sales volume of E85 product increased by 5%, while sales volume of E20 product decreased by 5%. The number of service station at the end of Q2/2015 was 1,053 stations, deceased from Q2/2014 by 9 stations, as the Company had closed inefficient or low thruput per service stations and continuously opened a new one which appealed more to customer together with improving quality and appearance of existing service stations to create thruput per service station growth.

Sales volume through industrial market was increased by 124 million litres (+29%), which was mainly from diesel and Jet Fuel product, as domestic economy continues to recover, especially in the tourism sector. Furthermore, the company also increased its sales volume to support the higher crude run of the refinery. While in Q2/2014, the refinery had its Annual Turnaround Maintenance, resulting in a lower sales volume through industrial market.

Total Marketing margin in Q2/2015 was 0.69 Baht per litre, decreased by 13% compared to Q2/2014. Retail margin was 0.87 Baht per litre, decreased by 17%, resulted from the decline in retail oil price. Industrial margin was 0.43 Baht per liter, an increase of 23%, from the higher margin in Lubricant, due to the lower cost following the decline in global oil price. As a result, marketing business recorded an EBITDA of Baht 657 million, a decrease of Baht 21 million (-3%).

#### Comparison of Q2/2015 and Q1/2015 operating results

Compared to Q1/2015, sales volume of retail market increased by 60 million litres (+4%). The increase in sales volume was to support the higher crude run of the refinery in Q2/2015, and was mainly from the higher sales of Diesel and Gasohol products, after a slight decline in the previous quarter.

The sales volume through retail market (service stations) continued to increase by 68 million litres (+9%) from the previous quarter, as sales volume of Diesel and Gasohol products were higher which the company sells mainly through its service stations, and has a marketing plan and campaigns to stimulate the sales to support the refinery's higher crude run.

The sales volume through industrial market was slightly decreased, from the lower sales volume of Diesel and Gasohol products, due to higher competitiveness of the industrial market, as the petroleum products supply has increased after domestic refineries have resumed its production from the maintenance in the previous quarter.

Moreover, industrial sales volume was affected by the drought which reduced agricultural products, and in turn reduced oil demand from the industrial customers who were related to agricultural sector. Moreover, as the sugar cane harvest season has ended, the Diesel demand was reduced. (Sugarcane harvest season is between November and March.)

Total marketing margin decreased by 0.06 Baht per litre (-8%), Retail margin decreased by 0.08 Baht per litre (-8%), as the increasing crude oil prices in the quarter impacted an adjustment of retail prices mechanism which are not consistent with its cost. The industrial margin was also decreased by 0.05 Baht per litre (-11%), from the increase in price competition of the industrial market. In conclusion, EBITDA of marketing business has decreased by Baht 83 million (-11%) from Q1/2015.

#### Renewable Business Performance

### 3) Solar Power Business

R	Revenue and Electricity Sales of Solar Bus	siness					Unit: I	Million kWh
		Q2/2014	Q1/2015	Q2/2015	YoY	QoQ	6M2014	6M2015
	Revenue (Million Baht)	712	752	775	9%	3%	1,169	1,527
	Electricity Sales							
	Phase 1 (PPA of 38 MW)	17.67	16.93	18.11	2%	7%	35.81	35.04
	Phase 2 (PPA of 32 MW)	20.09	18.99	20.24	1%	7%	40.41	39.23
	Phase 3 (PPA of 48 MW)	23.83	29.04	29.44	24%	1%	24.50	58.48
	Total	61.60	64.96	67.78	10%	4%	100.73	132.74

### Comparison of Q2/2015 and Q2/2014 operating results

In Q2/2015, Solar Power Business recorded an increase in total revenue of Baht 63 million (+9%) from the same period of last year. Total electricity sales increased by 6.18 million kWh (+10%), from the higher irradiation of all 3 phases in the quarter, as there were rainstorms in April 2014 resulting in the lower electricity sales in Q2/2014. Moreover, in Q2/2015, Solar Power Plant phase 3 (PPA of 48 MW) was commercially operated for the whole quarter; while in Q2/2014, it was partly operated (Solar Power Plant phase 3 had fully commercialized its operation of its all 5 sites in 24 April 2014). As a result, Solar Power Business has recorded EBITDA of Baht 735 million, an increase of Baht 53 million (+8%) from the same quarter of last year.

#### Comparison of Q2/2015 and Q1/2015 operating results

In Q2/2015, total revenue from Solar Power Business was increased by Baht 23 million (+3%) from the total electricity sales which was higher by 2.83 million kWh (+4%), as in the previous quarter there were higher rainstorms in many regions; while in Q2/2015, the rainfall has decreased due to the El Niño phenomenon, resulting in the higher irradiation of all 3 phases. Therefore, EBITDA of Solar Power Business was increase by Baht 23 million (+3%).

#### 4) Biofuel Business

In Q2/2015, Biofuel business recorded an EBITDA of Baht 99 million, which comprised of an EBITDA from Bangchak Biofuel Co, Ltd. of Baht 100 million and share of loss from Ubon Bio Ethanol Co, Ltd of Baht 1 million.

Table of biodiesel	performance by	y Bangchak Biofuel	Coltd

	Q2/2014	Q1/2015	Q2/2015	YoY	QoQ	6M2014	6M2015
Revenue (Million Baht)	1,116	1,235	1,430	28%	16%	2,539	2,665
Utilization Rate (%)	98%	99%	103%	5%	4%	99%	101%
Average Daily Production Rate (Thousand litre per day)	352	355	371	5%	4%	356	363
B100 Sales Volume (Million litre)	39	36	53	35%	45%	79	89
EBITDA (Million Baht)	46	69	100	119%	44%		
Average Sales Price							
B100	31.45	37.00	30.24	-4%	-18%		
Crude Palm Oil (CPO)	27.39	33.36	26.63	-3%	-20%		

<sup>\*</sup>Source: Department of Energy Business, Ministry of Energy.

#### Comparison of Q2/2015 and Q2/2014 operating results

In Q2/2015, Biodiesel business recorded a revenue increase of Baht 314 million (+28%), due to an increase in B100 sales volume by 14 million litres (+35%), partly from the higher B100 demand which resulted from the government's policy of increasing the portion of B100 mixing with diesel back to 7% in 16<sup>th</sup> April. In Q2/2015, the numbers of days which B100 mixing portion with diesel was decreased was less than in the same quarter of last year (Q2/2015: 15 days, Q2/2014: 44 days). Moreover, the B100 sales volume to Bangchak, the major customer, was increased from the same period of last year, as the company had its Annual Turnaround Maintenance in Q2/2014, and the company's diesel sales volume was higher in Q2/2015. Therefore, the average daily production rate was higher at 371 thousand litres per day from 352 thousand litres per day in the same quarter of last year (+5%).

In Q2/2015, Gross Margin of Biofuel business was increased, mainly due to the B100 sales volume which was 35% higher, and from the increased average margin per unit of B100, although B100 average price was lower from the seasonal palm oil oversupply. There was an inventory loss of Baht 12 million, and a reversal of allowance for loss on decline in value of inventories (LCM) of Baht 23 million. There was a gain of Baht 17 million from foreign currency forward contracts for the construction of the 2nd Biodiesel plant. As a result, Biofuel business recorded an EBITDA of Baht 100 million, an increase of Baht 53 million (+119%).

#### Comparison of Q2/2015 and Q1/2015 operating results

When compared to Q1/2015, Biodiesel business recorded an increase in revenue of Baht 195 million (+16%) from the higher B100 sales volume by 17 million litres (+45%), as the government increase the portion of B100 mixing with diesel back to 7% in 16<sup>th</sup> April 2015. This resulted in the numbers of days which B100 mixing portion with diesel was decreased to be less in Q2/2015 (Q2/2015: 15 days, Q1/2015: 69 days) Thus a higher B100 demand in Q2/2015 (Department of Energy Business reduced the portion of B100 mixing with diesel from 7% to 3.5% between 22<sup>nd</sup>

January 2015 - 15<sup>th</sup> April 2015). Further, B100 demand from Bangchak, the major customer, was increased. As a result, the average daily production rate was 4% higher than the previous quarter.

In Q2/2015, Biodiesel business recorded an increase of Gross Margin, as the B100 sales volume was increased by 45%, and an increase in average margin per unit of Glycerin (a byproduct of biodiesel production), regardless of the weaker average margin per unit of B100 due to the lower B100 average sales price, from the seasonal palm oil oversupply. There was an inventory loss of Baht 12 million, and a reversal of allowance for loss on decline in value of inventories (LCM) of Baht 23 million. There was a gain of Baht 17 million from foreign currency forward contracts for the construction of the 2nd Biodiesel plant, compare to the loss of Baht 10 million in Q1/2015. Biofuel business recorded an increase in EBITDA by Baht 31 million (+44%) from the previous quarter.

#### 5) Exploration and Production Business

In Q2/2015, Nido Petroleum Limited (NIDO) recorded an EBITDA of Baht 314 million, an increase of Baht 286 million compared to the previous quarter, from the recovering oil price. The important operating details are as follows:

In Q2/2015, Galoc oil field production was 582,125 barrels (325,289 barrels net to Nido), which was an average daily production of 6,397 barrels (average daily production of 3,575 barrels net to Nido). Nido & Matinloc oil field production was a total of 38,705 barrels (9,904 barrels net to Nido).

Exploration and Production Business recorded revenue of Baht 849 million, total of 396,793 barrels. The sales volume was increased by 43.17% when compared to Q1/2015. the details of crude oil selling are as follows:

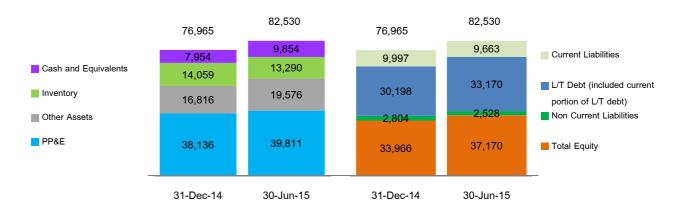
- Cargo of April totaling 347,684 barrels (194,284 barrels net to Nido) with FOB price of 60.62 \$/bbl.
- Cargo of June totaling 345,313 barrels (192,959 barrels net to Nido) with FOB price of 62.98 \$/bbl.
- Nido & Matinloc oil field totaling 37,452 barrels (9,550 barrels net to Nido).

In the guarter, there was a decrease in the cost of FPSO (Floating Production, Storage, and Offloading) of Galoc oil field. FPSO is a production and transferring vessel. The cost was changed to be variable with oil price, which will reduce the vessel cost when crude oil price fall.

Moreover, Nido has informed Australian Securities Exchange (ASX) that it has completed its Independent Reserves and Resources assessment on the mid-Galoc area of the Galoc oil field, undertaken by Gaffney Cline and Associates ('GCA'). The 2C Contingent Resource estimates as of 30 June 2015 are 9.5 million barrels (5.3 million barrels net to Nido), which NIDO and other stakes of Galoc field will use for further development of the field.

#### Analysis of Financial Position of the Company and its subsidiaries (Consolidated)

Unit: Million Baht



#### **Assets**

As of June 30, 2015, Total Assets of the Company and its subsidiaries were Baht 82,530 million, an increase of Baht 5,565 million when compared to the end of 2014. The changes in assets were mainly from:

- Cash and cash equivalents was increased by Baht 1,900 million. Details are stated under Analysis of the Cash Flow Statement.
- Current Investment was increased by Baht 4,191 million from the increase in the company's short term fixed deposits in financial institutions by Baht 4,500 million, and a decrease from Bangchak Solar Energy Co., Ltd. By Baht 310 million.
- Trade Accounts Receivable was decreased by Baht 204 million from lower sales value in June 2015, compared to December 2014 due to a decrease in both total sales volume and a price per unit.
- Other Accounts Receivable was decreased by Baht 712 million from the Prepayment of utilities (due to the termination of electricity and steam purchasing agreement between the company and PTT Public Company Limited) of Baht 416 million, and the insurance compensation receivable of Baht 243 million in 2014, which was received in 2015.
- Inventory was decreased by Baht 769 million as the company's inventory of crude oil value and finished oil products unit price at the end of Q2/2015 was lower when compared to the end of last year. Although the amount of inventory was increased, in Q2/2015 the inventory amount was recorded at 5.2 million barrels, compared to 4.9 million barrels at the end of December 2014.
- Oil fuel fund subsidies receivable was decreased by Baht 619 million, as the LPG subsidies was terminated since February 2015, the Company collected its LPG subsidies receivable from 2014 of Baht 472 million. Moreover, this year, the oil fuel fund subsidies receivable outstanding date was improved, when compared to 2014.
- Property, plant and equipment was increased by Baht 1,675 million, from an acquisition of an exploration and production of petroleum assets in Galoc Production Company WLL (GPC) of Baht 2,254 million, an investment in refinery machinery and equipment of Baht 870 million, Marketing and office equipment of Baht 268 million, recognize an asset increase regarding the purchase of Cogeneration Power Plant from PTT

Public Company Limited (earlier was recorded as financial lease) of Baht 236 million, Others of Baht 223 million, and depreciation of Baht 2,176 million.

- Intangible assets were increased by Baht 960 million, mainly from exploration and evaluation expenditure, as Nido Petroleum Limited acquired additional shares in Galoc Production Company WLL (GPC).
- Other non-current assets was decreased by Baht 277 million, mainly from a decrease in deferred tax expense by Baht 166 million as the company had a benefit from deferred tax liabilities, a decrease in deposit paid for investment of NIDO by Baht 351 million, and recognize an increase in other assets from GPC share acquisition of Baht 225 million.

#### Liabilities

As of June 30, 2015, Total Liabilities of the Company and its subsidiaries was Baht 45,360 million, an increase of Baht 2,361 million when compared to the end of 2014. The change in liabilities was mainly from:

- Trade Accounts Payable was increased by Baht 960 million, as some part of the amount due in December 2014 had been paid within the month, but the amount in June 2015 was due in the next month. Although the value of crude oil and finished oil products in June 2015 were lower than in December 2014.
- Other liabilities was decreased by Baht 1,292 million, mainly from the termination of electricity and steam purchasing agreement between the company and PTT Public Company Limited), resulting in the termination of the associated liabilities of Baht 440 million, and the reduction in utility liabilities (electricity and steam) by Baht 157 million. Accrued expenses from last year was decreased as it was paid during 2015.
- Long-term loans from financial institutions (including current portion of long-term loans) was decreased by Baht 26 million, a proceed from long-term loans of Baht 629 Million, and a repayment of long-term loans of Baht 831 million, an increase in foreign currency loan of Baht 163 million from the effect of Baht depreciation, and loan expense amortization of Baht 14 million.
- Debenture was increased by Baht 2,997 million, from a Debenture Issuance of Baht 3,000 million, and debenture expense amortization of Baht 3 million.
- Financial lease was decreased by the total amount of Baht 919 million, from the termination of electricity and steam purchasing agreement between the company and PTT Public Company Limited) due to the purchase of the Cogeneration Power Plant.
- Other non-current liabilities was increased by Baht 644 million, mainly due to an increase in the Provision for the decommissioning cost of Baht 350 million from GPC acquisition by NIDO, an increase in deferred tax expense by Baht 213 million, and an increase in employee benefit obligations by Baht 58 million.

#### **Equities**

As of June 30, 2015, Total Equity attributable to owners of the Company was Baht 36,527 million, an increase of Baht 3,218 million, from Net Profit for the first half of the year of Baht 3,831 million, Dividend Payment of Baht 551 million, Other component of equity (foreign currency translation differences for foreign operations) of Baht -62 million. The Consolidated book value was Baht 26.53 per share.

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

In Q2/2015, the Company and its subsidiaries had net cash received from operating activities of Baht 9,664 million, net cash used in investing activities of Baht 9,223 million, net cash received from financing activities of Baht 1,417 million. As a result, the Company and its subsidiaries had an increase in Cash and cash equivalents of Baht 1,858 million, as there was Cash and cash equivalents of Baht 7,954 million on January 1, 2015 and an effect of exchange rate changes on balances held in foreign currencies of Baht 42 million, resulting in Cash and cash equivalents as of June 31, 2015 at Baht 9,854 million.

Details of cash received and used are as follows:

		Unit: Million Baht
 Cash Flows		
Cash Flows	30 June 2014	30 June 2015
Net cash received (used) from operating activities	432	9,664
Net cash received (used) in investing activities	(6,075)	(9,223)
Net cash received (used) in financing activities	7,728	1,417
Net increase (decrease) in cash and cash equivalents	2,086	1,858
Cash and cash equivalents at 1 January	6,527	7,954
Effect of exchange rate changes on balances held in foreign currencies	-	42
Cash and cash equivalents at 31 June	8,613	9,854

Cash received and used details are as follows:

- 1) The Company and its subsidiaries had net cash received from operating activities of Baht 9,664 million, mainly from
  - Net cash received from operating activities of Baht 6,616 million which was from Net Profit of Baht 3,865 million added back Non-Cash Expenses of Baht 1,254 million, Finance Costs and Income Tax paid of Baht 1.497 million.
  - 🌣 Cash used in the operating assets decreased by Baht 4,490 million, mainly from a decrease in Inventory of Baht 2,002 million, a decrease in Trade Accounts Receivable and Other Receivables of Baht 1,119 million, and a decrease in Other Assets of Baht 1,369 million.
  - 🌣 Cash used in operating liabilities decreased by Baht 1,340 million, mainly from an increase in Trade Accounts Payable of Baht 755 million, a decrease in Other Payables of Baht 1,316 million and a decrease in Other liabilities of Baht 779 million.
  - Income Tax Paid of Baht 103 million.
- 2) Net Cash used in investing activities of Baht 9,223 million, mainly from
  - Received cash from interest received of Baht 85 million, and from dividend received of Baht 2 million.
  - Investment in property, plant and equipment of Baht 2,505 million which were from a purchasing of Cogeneration Power Plant of Baht 1,329 million, an investment in biodiesel plant machinery and

- equipment of Baht 640 million, refinery machinery and equipment of Baht 230 million, marketing and office equipment of Baht 268 million, and Other of Baht 37 million.
- Current investment increased by Baht 4,191 million, from the short term fixed deposit in financial institution
- Net cash outflow on acquisition of subsidiary of Baht 2,407 million (Nido Petroleum Limited acquired the shares in Galoc Production Company WLL)
- Leasehold right increased by Baht 150 million.
- Purchase of intangible assets increased by Baht 57 million.
- 3) Net cash received from financing activities of Baht 1,417 million, mainly from
  - Received cash from debenture Issuance of Baht 2,996 million.
  - Received cash from long-term loan from financial institutional of company's subsidiaries of Baht 629 million.
  - Financial costs of Baht 775 million.
  - Repayment of long-term loans from financial institutional of Baht 831 million.
  - Dividend Payment of Baht 603 million.

## Financial Ratios (Consolidated)

## Profitability Ratios (%)

	Q2/2014	Q1/2015	Q2/2015	6M2014	6M2015
EBITDA Margin	5.88%	5.91%	12.49%	5.52%	9.28%
Profit Margin	3.11%	2.68%	6.79%	3.15%	4.78%
Return on Equity (ROE) 1/	13.91%	0.53%	4.72%		
Return on Assets (ROA)	8.87%	1.39%	3.72%		

## Liquidity and Financial Policy Ratios (times)

	30-Jun-14	31-Dec-14	30-Jun-15	
Liquidity Ratios (times)				
Current Ratio	2.62	2.86	3.32	
Quick Ratio	1.14	1.61	2.08	
Financial Policy Ratios (times)				
Interest bearing Debt to Equity	0.85	0.92	0.89	
Net Interest bearing Debt to Equity	0.59	0.67	0.50	
	Q2/2014	Q1/2015	Q2/2015	
DSCR	4.38	1.59	2.42	

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

#### **Financial Ratios Calculation**

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

1/ Average Total Equity attributable to owners of the Company

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

#### 2/ Average Total Assets

- Yearly = (Total Assets of the year before + Total Assets of the Company of this year)/ 2
- Quarterly = (Total Assets of the Company of the quarter of the year before + 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. 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

	Q2/2014	Q2/2015	Δ
Material Costs of Product Outputs  : Consist of crude oil, ethanol, bio-diesel, chemical, energy and utilities in production	19,004	24,976	5,972
Material Costs of Non-Product Outputs  : Consist of slop and sludge oil, waste water, chemical surplus	88	11	-77
Waste and Emission Control Costs  : Consist of maintenance cost of environmental control equipment and depreciation and other fees	46	97	51
Prevention and Other Environmental Management Costs  : Consist of monitoring and measurement cost, environmental management system expenses	4	4	0
Total Expenses	19,142	25,088	5,947
Benefit from by-product and waste recycling  : The revenue realization from liquid sulfur, glycerin, waste paper	(7)	(1)	(6)

In Q2/2015, total Expenses related to environment increased by Baht 5,947 million compared to the same period of last year. As the refinery's crude run was lower in Q2/2014 due to a Turnaround Annual Maintenance, the higher crude run of 111.93 KBD in Q2/2015 resulted in an increase in Material Costs of Product Outputs in the quarter. Material Costs of Non-Product Output decreased as there was lower slop and sludge oil. Revenue from the selling of metal scraps from the maintenance was as well decreased. Waste and Emission Control Costs were increased by Baht 51 million due to an increase in depreciation of equipment. Prevention and Other Environmental Management Costs remained in the same level as the same period of last year.