

Executive Summary

Crude oil prices

In the second quarter of 2016, crude oil prices have risen from the previous quarter as oversupply concerns eased from lower oil production in the United States of America (the US) and the wildfire in Canada, which affected the production of oil sands. The unrest situations in Nigeria and Libya have aided crude oil prices to their highest levels during the first half of 2016 in June. Downside pressure remains, however, as Iran continues to ramp up its crude oil production, the heightened uncertainty of the global economy and oil demand following the result of the Brexit referendum in the United Kingdom (the UK), and the inconclusive outcome of the leading oil producing countries to limit production. This caused oil prices to drop towards the end of the second quarter of 2016 with considerable volatility. Dubai crude oil price in the second quarter of 2016 averaged 43.18 USD/BBL, an increase from the previous quarter at 30.42 USD/BBL.

Thailand energy demand and exchange rate

In the first five months of 2016, Thailand energy demand stood at 2.16 million barrels of oil equivalent per day (BOED), an increase of 2.7% from the same period of the previous year (Source: The Ministry of Energy). The increase in energy consumption is a reflection of lower energy prices and the recovering Thai economy, stimulated by strong public sector investments and tourism. The Bank of Thailand has maintained the country's 2016 economic growth forecast at 3.1% as the impact from the Brexit event is expected to be minimal. Nevertheless, the result of the Brexit vote implicates negative consequences to the trades and investments by corporations in the UK and the European Union (the EU), as well as potentially stirs a breakup from the EU by other European countries, thus fueling uncertainty on the global economic outlook.

As for the Thai Baht to US Dollar exchange rate, which impact the financial performance of PTTEP in the form of tax expense as a result of the difference between PTTEP's tax filing currency (Thai Baht) and functional currency (US Dollar), the rate appreciated slightly to 35.18 Baht / US Dollar at the end of the second quarter of 2016, compared to 35.24 Baht / US Dollar at the end of the first quarter of 2016. This is primarily driven by the unchanged interest rate in the US in June 2016 as the Federal Open Market Committee (FOMC) looks to slow down the pace of the interest rate hike towards the second half of this year and to next year.

Summary of the financial results for the second quarter of 2016

In the second quarter of 2016, the financial performance of PTTEP is compromised by the downward adjustment in gas prices, referenced to the low oil price levels in the past 12 months, and resulted in low average selling price levels. Due to the continued efforts to maintain production level and cost optimization according to plan, however, the Company recorded recurring net profit of 154 MMUSD in the second quarter of 2016.

Total revenue amounted 1,110 MMUSD, a slight increase from the previous quarter mainly due to higher average selling price, from the previous quarter to 36.62 USD/BOE and in correlation to the movement in global crude oil prices. Sales volume for the second quarter of 2016 stood at 320,657 BOED. This represents a decrease from the previous quarter at 329,858 BOED, which remains largely on track with the business plan to maintain 2016 sales volume at a similar level to that of 2015.

To strive against the oil price crisis, PTTEP carried out a number of cost reduction and efficiency improvement activities under the SAVE to be SAFE program since late 2014. In the second quarter of 2016, the unit cost increased to 30.30 USD/BOE from 28.57 USD/BOE in the first quarter of 2016, primarily reflecting the increase in maintenance and operating activities that occurred during the period as planned. The unit cost for the first half of 2016 (at 29.42 USD/BOE) represents a reduction of 24% from the 2015 level and also exceeds the target cost reduction of 10%.

The reduction in expenses have resulted in a recurring net profit of 154 MMUSD and earnings before interest, tax, depreciation and amortization (EBITDA) margin of 72% for the second quarter of 2016. The Company, however, recorded a non-recurring loss of 79 MMUSD, mainly from unrealized oil price hedging losses, which had no impact to the cash flow. The oil price hedging gain or loss is realized when the contracts are settled with the actual oil prices of the settlement dates that will take place in the third and fourth quarters of 2016. As a result, PTTEP reported a net profit of 75 MMUSD for the second quarter of 2016.

The financial position of the Company remains very strong as of the second quarter of 2016 with total assets amounted 19,025 MMUSD, which includes cash and short-term investments of 3,205 MMUSD. Total interest-bearing debt amounted to 2,844 MMUSD whilst cash flow from operations remained positive 1,038 MMUSD in the period.

Executive Summary (continued)

Business outlook in 2016

Crude oil price, which is one of the key factors that drive the financial performance of PTTEP, is expected to be higher in the second half of 2016 than in the first half. The US shale oil production continues to decline towards the second half of the year, which according to the US Energy Information Administration (EIA) is expected to be 0.72 MMBOED lower than the first half. This is driven by the cessation from high-cost producing areas, which is a consequence of investment reduction or suspension since 2015. Other upside factors include the unrest situation in Nigeria and higher global oil demand in 2016, which is expected to grow by 1.4 million barrels per day from the 2015 level as the global economy gradually expands. Downside factors include the sustained high production level by the OPEC and the resumption of oil sands production in Canada as the wildfire situation eases up.

The overall outlook of global crude oil demand and supply mentioned above, combined with the uncertainties of production stability between the leading oil producing countries and the softened outlook of global economic growth, will limit the upside potential on oil price recovery for the rest of 2016. This, in turn, will impact the average selling price of the Company, which is referenced to the global oil prices, during the second half of 2016. PTTEP believes that Dubai crude oil price will move in the range of 40-50 USD/BBL for the remainder of the year.

The selling price of natural gas, which is the Company's primary product, is partly dependent on the movement of oil prices in the past 6-12 months. Gas prices are expected to decline during the second half of 2016 to reflect the low oil price levels during the aforementioned period. To protect against the impact of lower gas prices, the Company continues to carry out cost management programs to maintain EBITDA margin in the range of 65-70% whilst maintain its sales volume target in 2016 at approximately 322,000 BOED, similar to that of 2015.

The Thai Baht currency is expected to weaken as the US Federal Open Market Committee (FOMC) is expected to increase interest rates in 2016. The financial performance of PTTEP will be affected in the form of tax expense as a result of the difference between PTTEP's tax filing currency and functional currency, although the cash flow is not expected to be materially impacted. As for the expected increase in interest rates, the Company expects minimal impact on the cost of debt as approximately 80% of the debt structure are fixed interest rates.

Table of key financial results

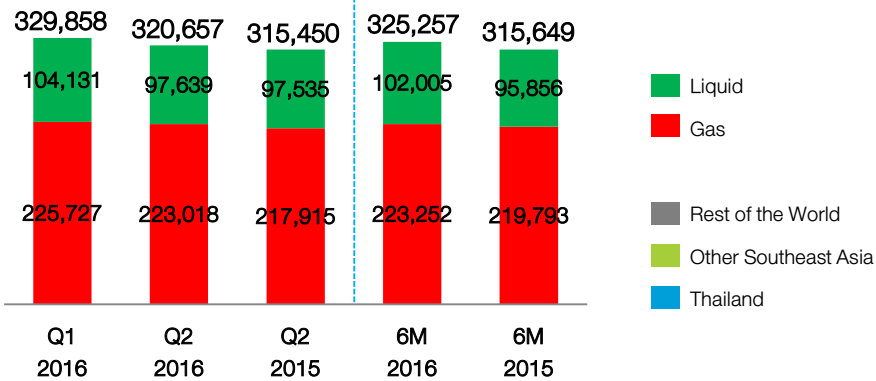
(Unit : Million USD)	Q1 2016	Q2 2016	Q2 2015 (Restated)	% Inc. (Dec.) YoY	% Inc. (Dec.) QoQ	6M 2016	6M 2015 (Restated)	% Inc. (Dec.) YTD
Total Revenue	1,093	1,110	1,448	(23)	2	2,203	2,895	(24)
Sales Revenue	1,053	1,069	1,398	(24)	2	2,122	2,790	(24)
EBITDA	789	778	1,022	(24)	(1)	1,567	2,106	(26)
Profit for the period	157	75	35	>100	(52)	232	299	(22)
Basic earnings per share (USD)	0.04	0.01	0.005	>100	(75)	0.05	0.07	(29)
Profit from normal operation	116	154	194	(21)	33	270	442	(39)
Gain (loss) from non-recurring items	41	(79)	(159)	50	>(100)	(38)	(143)	73

Financial Performance

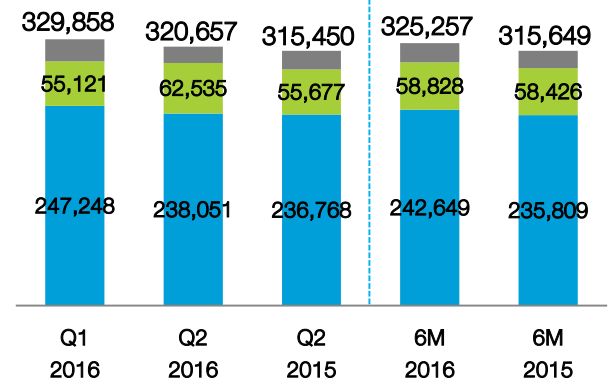
Average Sales Volume

Unit: Barrels of Oil Equivalent per Day

By Product Type



By Geographical Region



Average selling price and Dubai crude oil price (Unit : USD)	Q1 2016	Q2 2016	Q2 2015 (Restated)	% Inc. (Dec.) YoY	% Inc. (Dec.) QoQ	6M 2016	6M 2015 (Restated)	% Inc. (Dec.) YTD
Average selling price (/BOE)	35.08	36.62	48.71	(25)	4	35.84	48.83	(27)
Average Dubai crude (/BBL)	30.42	43.18	61.30	(30)	42	36.80	56.59	(35)

Summary of operating results segregated by segments

Net income (loss) (Unit : Million USD)	Q1 2016	Q2 2016	Q2 2015 (Restated)	% Inc. (Dec.) YoY	% Inc. (Dec.) QoQ	6M 2016	6M 2015 (Restated)	% Inc. (Dec.) YTD
Exploration and production	129	144	77	87	12	273	242	13
Thailand	190	163	142	15	(14)	353	303	17
Overseas	(61)	(19)	(65)	71	69	(80)	(61)	(31)
- Other Southeast Asia	(13)	10	(7)	>100	>100	(3)	63	>(100)
- Australia	(48)	(16)	(50)	68	67	(64)	(109)	41
- Americas	1	(7)	(4)	(75)	>(100)	(6)	(9)	33
- Africa	(3)	(7)	(4)	(75)	>(100)	(10)	(5)	(100)
- Middle East	2	1	0	>100	(50)	3	(1)	>100
Pipeline transportation	52	56	82	(32)	8	108	191	(43)
Head office and others	(24)	(125)	(124)	(1)	>(100)	(149)	(134)	(11)
Total	157	75	35	>100	(52)	232	299	(22)

Financial Performance (continued)

Operating Results for Second quarter of 2016 compared with Second quarter of 2015

Overall Operating Results

For the second quarter of 2016, PTTEP and its subsidiaries (“the Group”) had net profit of US Dollar 75 million, an increase of US Dollar 40 million or more than 100% when compared with the net profit for the second quarter of 2015 of US Dollar 35 million. The increase was primarily due to decreases in depreciation, depletion and amortization expenses of US Dollar 208 million as a result of an increase in the petroleum reserve. In addition, decreasing in income tax expenses effected by the foreign exchange fluctuation resulted from an appreciation in Thai Baht against US Dollar of US Dollar 125 million and decreasing in operating expenses of US Dollar 38 million from maintenance expenses. However, revenue from sales decreased of US Dollar 329 million in line with average selling price to US Dollar 36.62 per BOE (second quarter of 2015 : US Dollar 48.71 per BOE), even though sales volume increased to 320,657 BOED (second quarter of 2015 : 315,450 BOED).

For the second quarter of 2016, the Group reported the loss from non-recurring items in the amount of US Dollar 79 million, a decrease of US Dollar 80 million from the loss from non-recurring items for the second quarter of 2015 of US Dollar 159 million. The decrease was primarily due to a decrease in income tax expenses effected by the foreign exchange fluctuation resulted from an appreciation in Thai Baht against US Dollar. However, the Group recognized an increase in loss on oil price hedging derivative contracts during the second quarter of 2016.

Operating Results by Segments

For the second quarter of 2016, the Group reported net profit of US Dollar 75 million, an increase of US Dollar 40 million or more than 100% when compared with the net profit for the second quarter of 2015 of US Dollar 35 million. The increase in operating results was primarily due to the improvement in the exploration and production segment of US Dollar 67 million or 87%. However, the pipeline transportation segment had a reduction in operating results of US Dollar 26 million or 32%.

Exploration and production segment

- **Thailand**

For the second quarter of 2016, the Thailand segment reported net profit of US Dollar 163 million, an increase of US Dollar 21 million or 15% when compared with the net profit for the second quarter of 2015 of US Dollar 142 million. The increase was primarily due to a decrease in depreciation, depletion and amortization expenses mainly from Contract 4 Project as a result of an increase in the petroleum reserve. However, sales revenue decreased in line with average selling price, even though the average sales volume increased mainly from Arthit Project.

- **Overseas**

For the second quarter of 2016, the Overseas segment reported net loss of US Dollar 19 million, a decrease of US Dollar 46 million or 71% when compared with the net loss for the second quarter of 2015 of US Dollar 65 million. The decrease was primarily due to an increase in the operating results of the Australia segment and the Other Southeast Asia segment.

The Australia segment reported net loss of US Dollar 16 million, a decrease in net loss of US Dollar 34 million or 68% when compared with the net loss for the second quarter of 2015 of US Dollar 50 million. The decrease was primarily due to a decrease in depreciation, depletion and amortization expenses from PTTEP Australasia Project as a result of the recognition of impairment loss of assets in the third quarter of 2015. However, sales revenue decreased in line with average selling price and average sales volume.

The Other Southeast Asia segment reported net profit of US Dollar 10 million, an increase in operation of US Dollar 17 million or more than 100% when compared with the net loss for the second quarter of 2015 of US Dollar 7 million. The increase was primarily due to a decrease in well write-off expenses because there was no any well write-off during the second quarter of 2016 while in the second quarter of 2015, there were well write-off expenses in Myanmar PSG-G and EP2 Project. However, sales revenue decreased in line with average selling price, even though the average sales volume increased mainly from Zawtika and Yadana Projects.

Pipeline transportation segment

For the second quarter of 2016, the pipeline transportation segment reported net profit of US Dollar 56 million, a decrease of US Dollar 26 million or 32% when compared with the net profit for the second quarter of 2015 of US Dollar 82 million. The decrease was primarily due to a decrease in revenue from pipeline transportation projects in Republic of the Union of Myanmar which was in line with gas selling price.

Operating Results for Second quarter of 2016 compared with First quarter of 2016

Overall Operating Results

For the second quarter of 2016, PTTEP and its subsidiaries had net profit of US Dollar 75 million, a decrease of US Dollar 82 million or 52% when compared with the net profit for the first quarter of 2016 of US Dollar 157 million. The decrease was primarily from an increase in the income tax expenses effected by the foreign exchange fluctuation in the amount of US Dollar 74 million which resulted from the fact that exchange rate between Thai Baht and US Dollar in the second quarter appreciated less it did in the first quarter of 2016. In addition, the Group also recognized a increase in loss from financial derivative contracts of US Dollar 48 million, mainly from oil price hedging contracts. However, sales revenue increased of US Dollar 16 million in line with average selling price to US Dollar 36.62 per BOE (first quarter of 2016 : US Dollar 35.08 per BOE), even though average sales volume decreased to 320,657 BOED (first quarter of 2016 : 329,858 BOED).

For the second quarter of 2016, the Group reported the loss from non-recurring items in the amount of US Dollar 79 million, a variation of US Dollar 120 million when compared with the profit from non-recurring items of US Dollar 41 million in the first quarter of 2016. The decrease in loss from non-recurring items were primarily due to an increase in the income tax expenses affected by the foreign exchange fluctuation which resulted from the fact that exchange rate between Thai Baht and US Dollar in the second quarter appreciated less it did in the first quarter of 2016. In addition, the Group also recognized an increase in loss on oil price hedging derivative contracts during the second quarter of 2016.

Operating Results by Segments

For the second quarter of 2016, the Group reported net profit of US Dollar 75 million, a decrease of US Dollar 82 million or 52% when compared with the net profit for the first quarter of 2016 of US Dollar 157 million. The decrease in operating results was primarily due to the reduction in the head office and others segment reported of US Dollar 101 million or more than 100%. However, the exploration and production segment reported an improvement in operating results of US Dollar 15 million or 12%.

Head office and others segment

For the second quarter of 2016, the head office and others segment reported net loss of US Dollar 125 million, an increase of US Dollar 101 million or more than 100% when compared with the net loss for the first quarter of 2016 of US Dollar 24 million. The increase was primarily due to the segment recognized an increase in loss on oil price hedging derivative contracts as well as an increase in administrative expenses.

Exploration and production segment

- **Thailand**

For the second quarter of 2016, the Thailand segment reported net profit of US Dollar 163 million, a decrease of US Dollar 27 million or 14% when compared with the net profit for the first quarter of 2016 of US Dollar 190 million. The decrease was primarily due to an increase in depreciation, depletion and amortization expenses as a result of an increase in completed assets.

- **Overseas**

For the second quarter of 2016, the Overseas segment reported net loss of US Dollar 19 million, a decrease of US Dollar 42 million or 69% when compared with the net loss for the first quarter of 2016 of US Dollar 61 million. The decrease was primarily due to an increase in operating results of the Australia and the Other Southeast Asia segments.

The Australia segment reported a net loss of US Dollar 16 million, a decrease in net loss of US Dollar 32 million or 67% when compared with the net loss for first quarter of 2016 of US Dollar 48 million. The decrease was primarily due to decreases in depreciation, depletion and amortization expenses because of a decrease in production volume.

The Other Southeast Asia segment reported net profit of US Dollar 10 million, an increase in operating results of US Dollar 23 million or more than 100% when compared with the net loss for the first quarter of 2016 of US Dollar 13 million. The increase was primarily due to the recognition of income tax expenses of Yadana Project and Yetagun Project in the first quarter of 2016

Financial Performance (continued)

Operating Results for six months ended June 2016 compared with 2015

Overall Operating Results

For the six months period ended June 2016, PTTEP and its subsidiaries had net profit of US Dollar 232 million, a decrease of US Dollar 67 million or 22% when compared with the net profit for the six months period ended June 2015 of US Dollar 299 million. The decrease was primarily due to sales revenue decreased of US Dollar 668 million in line with average selling price to US Dollar 35.84 per BOE (for the six months of 2015 : US Dollar 48.83 per BOE), even though average sales volume increased to 325,257 BOED (for the six months of 2015 : 315,649 BOED). However, the depreciation, depletion and amortization expenses was decreased of US Dollar 418 million due to an increase the petroleum reserve and a recognition of loss on impairment of assets in the third quarter of 2015 as well as a decrease in income tax expense of US Dollar 167 million effected by the foreign exchange fluctuation resulted from an appreciation in Thai Baht against US Dollars

For the six months period ended June 2016, the Group reported the loss from non-recurring items in the amount of US Dollar 38 million, a decrease of US Dollar 105 million from the loss from non-recurring items for the six months period of 2015 of US Dollar 143 million. The decrease was primarily due to a decrease in income tax expense of US Dollar 167 million effected by the foreign exchange fluctuation resulted from an appreciation in Thai Baht against US Dollars. However, the Group recognized an increase in loss on oil price hedging derivative contracts and forward foreign exchange derivative contracts in the amount of US Dollar 108 million during the six months period ended 2016.

Operating Results by Segments

For the six months period ended June 2016, the Group reported net profit of US Dollar 232 million, a decrease of US Dollar 67 million or 22% when compared with the net profit for the six months period ended June 2015 of US Dollar 299 million. The decrease in operating results was primarily due to the reduction in pipeline transportation segment of US Dollar 83 million or 43%. However, the exploration and production segment reported an increase in operating results of US Dollar 31 million or 13%.

Pipeline transportation segment

For the six months period ended June 2016, the pipeline transportation segment reported net profit of US Dollar 108 million, a decrease of US Dollar 83 million or 43% when compared with the net profit of the six months period ended June 2015 of US Dollar 191 million. The decrease was primarily due to a decrease in revenue from pipeline transportation projects in Republic of the Union of Myanmar which was in line with gas selling price.

Exploration and production segment

- **Thailand**

For the six months period ended June 2016, the Thailand segment reported net profit of US Dollar 353 million, an increase of US Dollar 50 million or 17% when compared with the net profit for the six months period ended June 2015 of US Dollar 303 million. The increase was primarily due to a decrease in depreciation, depletion and amortization of Contract 4 Project as a result of an increase in the petroleum reserve. However, sales revenue decreased in line with average selling price, even though the average selling volume increased mainly from Arthit and Contract 4 Projects.

- **Overseas**

For the six months period ended June 2016, the Overseas segment reported net loss of US Dollar 80 million, an increase of US Dollar 19 million or 31% when compared with the net loss for the six months period ended June 2015 of US Dollar 61 million. The increase was primarily due to a reduction in operating results of the Other Southeast Asia segment, while the Australia segment had an improvement in operating results.

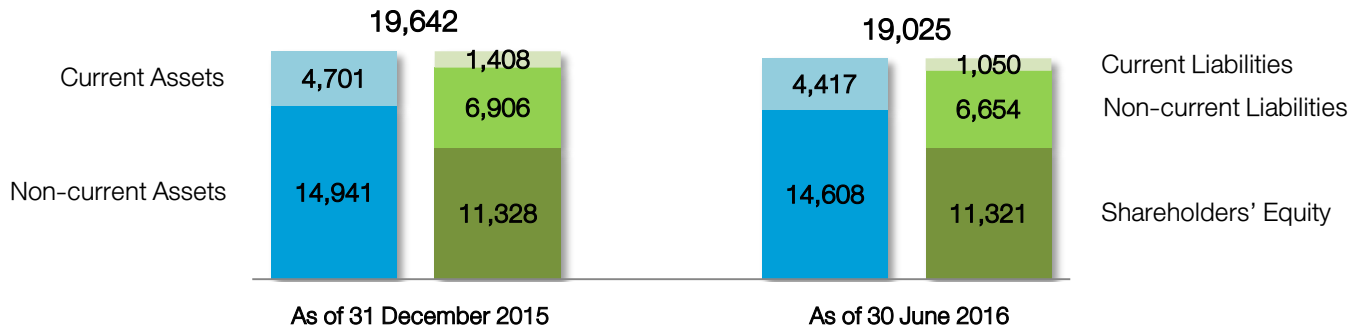
The Other Southeast Asia segment reported net loss of US Dollar 3 million, a reduction in operating results of US Dollar 66 million or more than 100% when compared with the net profit for the six months period ended June 2015 of US Dollar 63 million. The reduction was primarily due to a decrease in sales revenue in line with average selling price, even though the average sales volume increased. However, the operating expenses were decreased primarily from a decrease in pipeline transportation expenses and a decrease in depreciation, depletion and amortization expenses mainly from Vietnam 16-1 Project due to an increase in the petroleum reserve and a decrease in production volume.

The Australia segment reported a net loss of US Dollar 64 million, a decrease in net loss of US Dollar 45 million or 41% when compared with the net loss for the six months period ended June 2015 of 109 million. The decrease was primarily due to a decrease in depreciation, depletion and amortization expenses as a result of the recognition of impairment of assets during the third quarter of 2015 of PTTEP Australasia Project.

Financial Performance (continued)

Financial Position

Unit : Million USD



Assets

As at June 30, 2016, PTTEP and its subsidiaries had total assets in the amount of US Dollar 19,025 million (equivalent to Baht 669,306 million), a decrease of US Dollar 617 million when compared with the total assets as of December 31, 2015 of US Dollar 19,642 million (equivalent to Baht 708,864 million), primarily due to;

- (1) Current assets were primarily comprised of cash and cash equivalents, account receivable – parent company and materials and supplies, decreased of US Dollar 284 million mainly from a decreases in account receivable – parent company, cash and cash equivalent offset with short-term investments and other current assets of US Dollar 100 million, US Dollar 55 million and US Dollar 54 million, respectively.
- (2) Non-current assets were primarily comprised of exploration and production assets in joint venture projects that are recognized as part of the property, plant and equipment – net, intangible assets – net and goodwill, decreased of US Dollar 333 million mainly due to a recognition of depreciation, depletion and amortization expenses even though the Group had additional investment in exploration and production assets during the period.

Liabilities

As at June 30, 2016, PTTEP and its subsidiaries had total liabilities of US Dollar 7,704 million (equivalent to Baht 271,025 million) which include interest bearing debt of US Dollar 2,844 million, a decrease of US Dollar 610 million when compared with total liabilities as at December 31, 2015 of US Dollar 8,314 million (equivalent to Baht 300,053 million), primarily due to;

- (1) Current liabilities were primarily comprised of accrued expenses, income tax payable and financial derivative liabilities decreased of US Dollar 358 million mainly due to the decreases in income tax payable for the year 2015 and accrued expenses, while the financial derivative liabilities were increased.
- (2) Non-current liabilities were primarily comprised of debentures, loans from financial institution, deferred tax liabilities, and provision for decommissioning costs, decreased of US Dollar 252 million mainly due to the repurchase of debentures and a decrease in deferred tax liabilities of US Dollar 177 million and US Dollar 125 million, respectively.

Capital Structure

As at June 30, 2016, the capital structure of the Group comprised of shareholders' equity in the amount of US Dollar 11,321 million and total liabilities of US Dollar 7,704 million, comprising of interest bearing debts of US Dollar 2,844 million with a weighted average cost of debt of 4.40% and the average maturity of 8.65 years. All of these interest bearing debts were in US Dollar. The proportion of the fixed interest rates to the floating interest rates is 80:20.

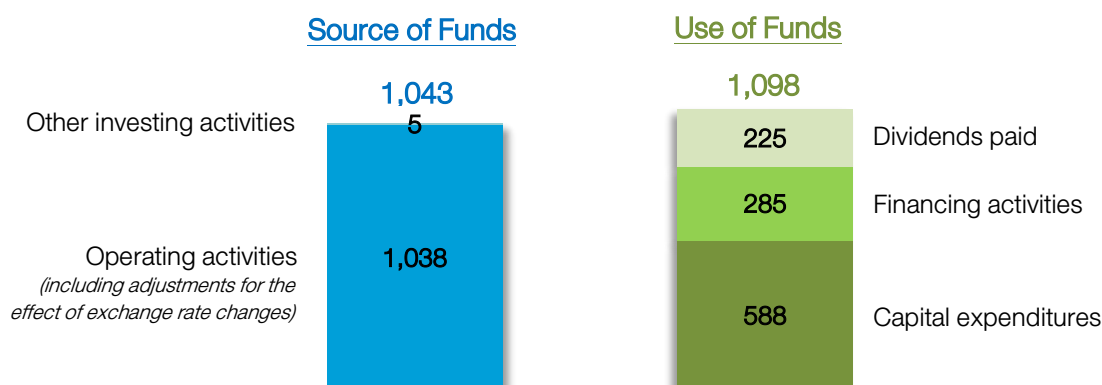
On June 22, 2016, PTTEP had repurchased some portion of the US Dollar 500 million five-year unsecured and unsubordinated debentures with a fixed interest rate of 3.707% which was issued and sold in September 2013 in the amount of US Dollar 176.55 million. As a result, the principal of this debentures were decreased from US Dollar 500 million to US Dollar 323.45 million.

Premium from repurchase of this debenture of US Dollar 7 million was recognized as part of administrative expenses in the statement of income for the six months period ended June 30, 2016.

Financial Performance (continued)

Cash Flows

Unit : Million USD



For six months in 2016

As at June 30, 2016, PTTEP and its subsidiaries had cash and cash equivalents, including short-term investment in the form of bank fixed deposit with a maturity of more than three months, but within twelve months of US Dollar 3,205 million, a decrease of US Dollar 55 million when compared to cash and cash equivalents as at December 31, 2015 of US Dollar 3,260 million.

Sources of funds in the amount of US Dollar 1,043 million primarily came from **Net cash received from operating activities** as a result of net positive cash flows from sales revenues, which offset with cash payments for expenditures and income tax expenses and **Net cash received from other investment activities**, primarily from the dividend received from related parties and cash received from interest from loans to related parties.

Uses of funds in the amount of US Dollar 1,098 million were primarily for **Cash used for additional investment activities** for exploration and production assets and intangible assets, primarily in Zawtika, Arthit and S1 Projects and **Cash used for financing activities** which mainly for the repurchase of debentures and payment of interests, while there was a net cash received from financial derivative contracts and **Dividend payment** for the result of operation for the second half of 2015.

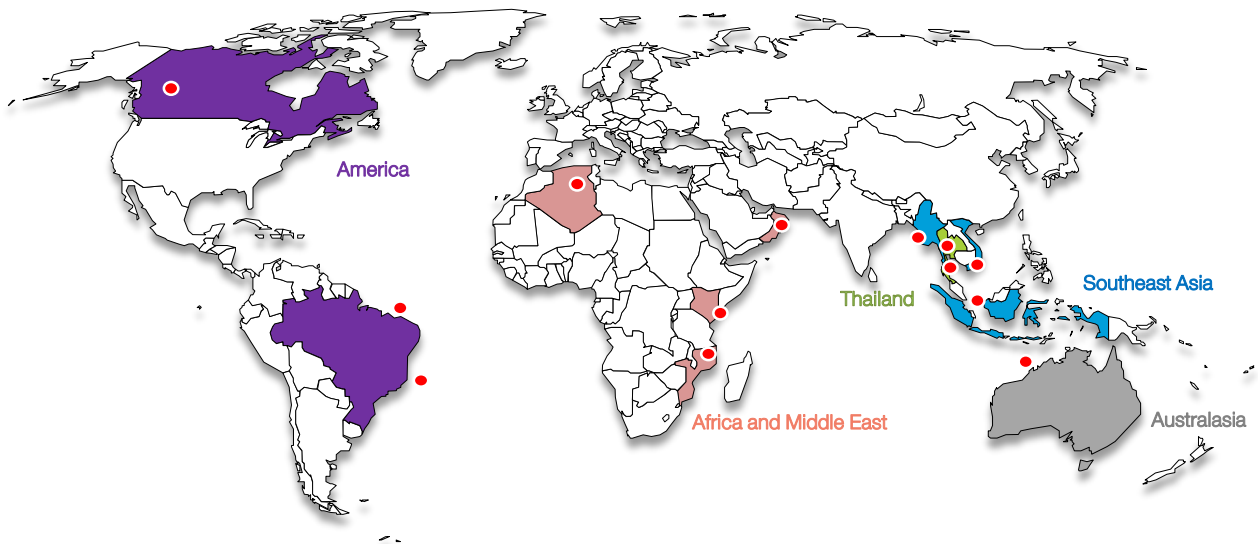
Key Financial Ratios

	Q1 2016	Q2 2016	Q2 2015 (Restated)	6M 2016	6M 2015 (Restated)
Profitability Ratios (%)					
EBITDA to revenue from sales	73.73	71.68	71.52	72.70	73.74
Return on equity	(8.04)	(7.68)	0.28	(7.68)	0.28
Net profits margin	(17.96)	(18.37)	0.52	(18.37)	0.52
Leverage Ratios (times)					
Debt to equity	0.27	0.25	0.33	0.25	0.33
Debt to EBITDA	0.85	0.86	0.89	0.86	0.89

Remark:

EBITDA to revenue from sales	=	Profit before deduction of interest, tax, and depreciation to revenue from sales including revenue from pipeline transportation
Return on equity	=	Last 12 months net profits to weighted average shareholders' equity
Net profits margin	=	Last 12 months net profits to total revenue
Debt to equity	=	Interest Bearing Debt to total shareholders' equity
Debt to EBITDA	=	Interest Bearing Debt to last 12 months profit before deduction of interest, tax, and depreciation

Operational Highlights



As of the second quarter of 2016, PTTEP's domestic and international operations altogether sum to 38 projects in 11 countries. The following are key project highlights.

Projects in Thailand

PTTEP has 16 projects in Thailand, and the majority of projects are in the *producing phase*, located both in the Gulf of Thailand and onshore; including the Bongkot Project, the Arthit Project, and S1 Project and the Contract 4 Project. During the second quarter of 2016, production operations were carried out continuously to maintain the production plateau. Sales volume from the projects in Thailand amounted to 238,051 BOED during the period, which accounted for 74% of PTTEP's total sales volume.

Projects in Southeast Asia

PTTEP has 13 projects in this region which are located in the Republic of the Union of Myanmar (Myanmar), the Socialist Republic of Vietnam (Vietnam) and the Republic of Indonesia (Indonesia). Sales volume from the projects in the Southeast Asia region amounted to 62,535 BOED in the second quarter of 2016, which accounted for 20% of PTTEP's total sales volume.

Highlights of projects in the *producing phase* within this region include activities at the Zawtika Project and the Vietnam 16-1 Project. **The Zawtika Project**, located offshore in the Gulf of Moattama, Myanmar, carried out production operations as planned. During the second quarter of 2016, sales volume from the Zawtika project averaged 330 MMSCFD (approximately 50,580 BOED) during the period on higher demand from both Thailand and Myanmar. Production has ramped up from the fourth wellhead platform and the project is currently in the process of drilling production wells for the seventh wellhead platform for Phase 1B to maintain production. As for the **Vietnam 16-1 Project**, located offshore in the southeast of Vietnam, crude oil sales volume averaged 26,949 BPD and natural gas averaged approximately at 11 MMSCFD (approximately 2,683 BOED).

For projects in the *exploration phase*, important highlights include the drilling campaign in the **Myanmar M3 Project**, located offshore in the Gulf of Moattama, Myanmar, which is currently assessing the prospects for commerciality and the resource potential in the remaining area. The **Myanmar M11 Project**, located offshore in the Gulf of Moattama, Myanmar, the project completed 3D seismic in March 2016 and is currently evaluating the result to further assess the petroleum potential. The **Myanmar MD-7 Project**, located in the deepwater area in the Gulf of Moattama, Myanmar, completed the 3D seismic survey and is in the process of assessing the field's resource potential. As for the **Myanmar MOGE-3**, located onshore in the Central Myanmar Basin, is in the preparation process for 2D and 3D seismic survey which is scheduled to begin in the fourth quarter of 2016.

Operational Highlights (continued)

Projects in the American Continent

PTTEP has three projects in this region located in Canada and the Federal Republic of Brazil (Brazil).

The **Mariana Oil Sands Project**, located in Alberta, Canada, submitted the development proposal for Thornbury Phase 1 to the government of Alberta in May 2015. The project is re-assessing the investment strategy going forward to reduce costs and mitigate development risks in response to the low oil price environment.

PTTEP has two projects in Brazil. The **Barreirinhas AP1 Project** is located in the Barreirinhas Basin, offshore to the northeast of Brazil. The project is in the process of conducting 3D seismic survey, which is expected to be complete by the third quarter of 2016. The **BM-ES-23 Project**, located in the Espirito Santo basin, offshore, east of Brazil, is currently under petroleum potential study for further activities.

Projects in Australasia

PTTEP has one project in this region which is located in the Commonwealth of Australia (Australia) and comprises 12 concession permits.

Fields in the *producing phase* include the **Montara Field**, which produced at an average rate of 14,135 BPD in the second quarter of 2016 and according to the production plan.

Projects in Africa and the Middle East

PTTEP has 5 projects in this region, located in the Sultanate of Oman (Oman), the People's Democratic Republic of Algeria (Algeria), the Republic of Mozambique (Mozambique) and the Republic of Kenya (Kenya).

The **Algeria 433a and 416b Project**, which is in the *producing phase* and located onshore in the eastern part of Algeria, successfully marked its first sales of crude oil in late 2015. Production for the second quarter of 2016 averaged 15,016 BPD.

The **Algeria Hassi Bir Rekaiz Project**, which is in the *exploration phase* located onshore in the eastern part of Algeria, completed the drilling of the final well during the exploration phase and is in the process of evaluating the result for possible development. The **Mozambique Rovuma Offshore Area 1 Project**, which is also in the exploration phase, is a large gas project located offshore Mozambique. The project is currently in the process of negotiation for project finance, including working closely with financial institutions to provide additional information.

Portfolio and Cost Management

Portfolio Management

PTTEP continues to undertake portfolio management activities to achieve an optimal balance between project value-added and risk management, as well as to ensure that the Company's long term strategic objectives can be achieved. PTTEP consistently studies and analyses pertinent investment factors to keep abreast of the constant changes in the social, economic, and political landscape, and to incorporate these variables into investment considerations and decisions. The Company also reviews its list of target countries for expanding its investments (Focused Countries) by grouping the countries according to petroleum potential and suitability with the Company's strategic directions and goals. The analysis covers factors such as geography, petroleum fiscal policy, operational and political risks, as well as PTTEP's competitive advantage.

During the second quarter of 2016, key portfolio management activities include the relinquishment of the MD-8 exploration block in Myanmar and 2 exploration blocks under the PTTEP Australasia Project, both of which have been approved by the respective country's authorities.

Moreover, PTTEP has plans to selectively develop projects with discovered petroleum in place, as well as to actively seek out opportunities to acquire additional projects, with a particular focus on producing assets or those which are in the final stage of development and close to production.

Cost Management

PTTEP has adopted the RESET strategy to reduce cost, streamline the organization structure, instill a cost-conscious culture and maintain competitiveness in the industry under **the SAVE to be SAFE program**.

In 2016, PTTEP plans to reduce capital and operating expenditures (CAPEX and OPEX) by no less than 10% compared to those of 2015. The reduction, however, will not impact the ability to meet the energy demand of the country and will continue to uphold the safety, security, health and environment standards, an area that PTTEP places utmost importance upon. The Company actively pursues a number of cost reduction initiatives, such as the reduction in number of drilling days and cost, optimization of wellhead platform design, contract renegotiations on current and future equipment rental and services, and logistical optimization through reducing number of supply boats as well as better inventory. In the first half of 2016, PTTEP successfully lowered the unit cost to 29.42 USD/BOE, a decrease of 24% compared to that of 2015. PTTEP continues to seek for further cost optimization initiatives to sustain the long-term competitive advantage.

Sustainable Development

In the second quarter of 2016, PTTEP continues its participation in the United Nations Global Compact (UNGC) for the sixth year and adherence to the ten principles in the areas of human rights, labor standards, environment, and anti-corruption. Having demonstrated utmost compliance to the compact, PTTEP received an Advanced Level certification from the UNGC, which is testimonial to the vision to become a leading Asian exploration and production company through technology and green practices and drive the organization towards its goal of sustainable growth. In order to continuously enhance PTTEP's sustainable development practices, the Company has outlined a sustainable development plan, both short-term and long-term, around the three areas of business, social and environment. Key activities during the second quarter of 2016 are as follow.

Business

PTTEP provides support in research and development of subsurface and well engineering technologies and their applications in E&P, as well as in the development of human capabilities, knowledge and fundamental scientific and technological framework to enhance the organization's competitiveness and sustainable development. To support the business sustainability in three key objectives, the Company carried out the following activities : 1) Increase exploration success rate by establishing a dedicated processing center (DPC) to enhance seismic imaging quality for more accurate subsurface data interpretation and evaluation. 2) Increase production from existing fields through prototype testing, with the aid of electromagnetic technique, to monitor the fluid flows in the petroleum reservoirs, enhance the performance of water-flood processes, and study on the use of chemical enhanced oil recovery (EOR). 3) Environmentally-friendly business conduct through the development of mercury removal prototype for the gas and condensate pipelines in the Gulf of Thailand to support future decommissioning, as well as develop a procedure to remove wastes from drilling activities to reduce cost and preserve the environment.

Key activities during the second quarter of 2016 are the establishment of the long-term technology development plan to support the Company's business and the signing of the Memorandum of Understanding (MOU) on the research and development with the Vidyasirimedhi Institute of Science and Technology (VISTEC) for the benefit of the business.

Social

PTTEP is dedicated to carry out its business operations with responsibility to society with emphasis in four development areas: fundamental needs, education, environment, and culture and sports. The Company organized many activities with local communities to ensure that their essential needs are met. Results of the activities were reviewed, evaluated and incorporated with improvement plan for the long-term benefits to the stakeholders in areas in which PTTEP operates as well as to the society as a whole. Key activities during the second quarter of 2016 include :

- The Free Healthcare Center Project Commenced in 2014 in Indonesia, PTTEP together with non-profit organization dedicated to social responsibility supported the establishment of healthcare center, free of charge. The project also introduced mobile clinics to facilitate elder patients in remote areas. In recognition of its contribution, the program received the Platinum Award in the Best Community Program category at The 8th Annual Global CSR Summit and Awards 2016 in Indonesia.
- Parasite-free School Program Conducted since 2009 in Myanmar, the program was designed to reduce the rate of parasitic infection among students. With over 6,000 students joined, the program was presented with a Bronze Award for Innovation in Community Relations at the 2016 Asia Pacific Stevie Awards in Australia.

Safety, Security, Health and Environment

PTTEP has an environmental management system which encompasses a project's entire life cycle, and is a subset of PTTEP's Safety, Security, Health and Environment Management System (SSHE MS). During the second quarter of 2016, PTTEP had a Lost Time Injury Frequency (LTIF) score of 0.07 and a Total Recordable Incident Rates (TRIR) score of 0.85. The Company's performance on both safety indicators is better than the average of the members in the International Association of Oil and Gas Producers (IOGP).

Moreover, PTTEP aims to become a Low Carbon Footprint organization, and has set a goal to reduce its greenhouse gas (GHG) emissions by not less the 20% in the year 2020 versus its 2012 base year figure. As of May 2016, PTTEP reduced its greenhouse gas (GHG) emissions by 17% below its 2012 levels.

Company Strategy Under Current Oil Price Environment

PTTEP has revised its 2016 strategic plan in order to enhance its competitive advantage and sustainable growth under the current oil price environment using the concept of “RESET REFOCUS RENEW”.

RESET the cost structure to maintain competitiveness in the industry

- Build and instill a cost-conscious DNA in every employee
- Optimize work processes for efficient cost management to become competitive with the leading companies in the industry
- Prioritize investments in projects with competitive cost structure under the low oil price environment

REFOCUS investment plan towards areas of high expertise

- Increase investments in Thailand and Southeast Asia, especially in Myanmar, the areas which PTTEP has extensive experience in and has low cost structure and low risks
- Synergize with PTT in LNG business to meet the country’s growing energy demand in the future
- Consider investment opportunities in new areas with low cost structure, such as the US shale plays and the Middle East oil fields

RENEW long-term strategy for sustainable growth

- Focus on research and development to lower costs and improve efficiencies in the E&P business
- Expand investment horizons related to the E&P business to diversify sources of revenues and return on investments
- Explore and evaluate new business opportunities with growth prospects based on the existing experiences and capabilities of human resources in the Company

PTTEP also focuses on ensuring the effectiveness of financial management through maintaining a robust capital structure, an optimal level of debt-to-equity ratio for the nature of business, and the liquidity necessary to cushion the uncertainty around oil prices and the global economy as well as prepare for new investment opportunities. The Company also stimulates various oil price and exchange rate scenarios to assess risk factors and prepare mitigation plans.