



Executive Summary

PTTEP has launched a new vision and a new strategy, “EXPAND” and “EXECUTE”, in order to enhance the Company’s competitive advantages and maintain sustainable growth amid the challenging industry landscape. “EXPAND” is the strategy to focus growth in strategic investment areas where the Company has full range of expertise including Thailand and South East Asia, “Coming-Home Strategy” and to expand investments to other prolific areas in the Middle East with strategic partners, “Strategic Alliance”, e.g. the United Arab Emirates (UAE) and Oman, due to high potential of petroleum reserves with low operating cost. For long term growth, PTTEP plans to accelerate exploration activities to increase petroleum reserves. In addition, PTTEP also looks to expand new business opportunities such as pursuing Gas Value Chain business in Myanmar. To demonstrate on this strategy, PTTEP had acquired Murphy Oil Corporation’s assets in Malaysia which will increase the company’s sales volume and provide immediate cash flow, and also won the bidding of 2 exploration blocks in Peninsular Malaysia in March. Both transactions, together with the existing assets in Malaysia, have placed PTTEP to be the third largest petroleum reserves holder in Malaysia and considered as a major milestone in operating in Malaysia. Moreover, in January, PTTEP together with the new strategic partners, The ABU DHABI NATIONAL OIL COMPANY (ADNOC) and ENI, were awarded 2 offshore exploration blocks from the first-ever open bidding round in United Arab Emirates (UAE), another transaction to reflect the achievement in Company’s strategy.

“EXECUTE” is the strategy to achieve competitive performance through efficiency and adoption of new technology and to maintain the production plateau, especially transition of operations after the signing of Production Sharing Contracts (PSCs) for Block G1/61 (Erawan field) and Block G2/61 (Bongkot field). PTTEP has continued to accelerate the Final Investment Decision (FID) of the Pre-Development projects. In March 2019, the Algeria Hassi Bir Rekaiz Project started the development activities and is expected to start production in early 2021 with the capacity of 10,000-13,000 barrels per day along with phase 2 to ramp up production to 50,000-60,000 barrel per day in 2025. The Mozambique Rovuma Offshore Area 1 Project progressively stepped forwards by signing of long term LNG Sale and Purchase Agreements (SPAs) with buyers and expected FID in Q2 2019. Apart from these, PTTEP considers ourselves as the good corporate citizenship through stakeholder value creation.

For Q1/2019, PTTEP reported net income of 394 MMUSD with more than 46% higher comparing to the previous year at 269 MMUSD, mainly driven by the lower unit cost from 32.7 USD per Barrel of Oil Equivalent (BOE) to 29.3 USD per BOE due to lower operating expenses and higher tax savings owing to the appreciated Thai Baht in relative to the US Dollar during the quarter. Additionally, PTTEP’s financial structure remains strong reflected by positive operating cash flow of 943 MMUSD with healthy EBITDA margin at 76%. As of the first quarter 2019, the Company maintained its robust financial position, with total assets amounting to 20,150 MMUSD, of which 4,357 MMUSD was cash and short-term investments; while total liabilities were reported at 8,155 MMUSD in which interest-bearing debt accounted for 1,961 MMUSD; and total shareholders’ equity ended at 11,995 MMUSD with debt-to-equity ratio of 0.16, reflecting the strong financial position.

Table of key financial results

	Q4 2018	Q1 2019	Q1 2018	% Inc. (Dec.) QoQ	% Inc. (Dec.) YoY
(Unit: Million US Dollar)					
Total Revenue	1,557	1,428	1,240	(8)	15
Sales Revenue	1,411	1,328	1,161	(6)	14
EBITDA	1,024	1,025	879	0.1	17
Profit(loss) for the period	269	394	423	46	(7)
Basic earnings(loss) per share (Unit: US Dollar)	0.07	0.10	0.10	43	0
Profit(loss) from normal operation	283	374	304	32	23
Profit(loss) from non-recurring items	(14)	20	119	243	(83)



Economic Overview in the first quarter of 2019

Crude Oil Prices

In Q1/2019, Dubai crude had continuously rose from 2018 year-end price to an average of \$63.4 per barrel. (Source: Platts). Global oil supply has become tighter as OPEC and Russia, cooperatively cut production with target of 1.2 million barrels per day. Geopolitics also substantially contributed to tight supply as the US decided to impose sanctions on Venezuela, and may consider not to extend Iran sanctions waiver. Meanwhile, US oil production, although continuously grew and kept hitting new records, has shown some signs of possible slowdown in growth as US drilling activities has recently turned into decreasing trends due to the tighter financial situations of small and medium-sized oil companies. On the demand side, although global economic figures in Q1/2019 were still weak, especially of US, China and Europe, there were some positive signs from US-China trade dispute negotiations which have shown some positive progresses, and new China's stimulus and easy monetary policies from The Federal Reserve System (Fed) and European Central Bank (ECB) may help stimulate global economy back to positive.

Liquefied Natural Gas (LNG)

For LNG Market in Q1/19, the average Asian spot price decreased to 6.69 USD per MMBTU (Source: Platts) mainly driven by higher demand from China and India. However, the LNG market remained oversupply due to incremental volumes from new projects, mainly from LNG projects in Australia, Russia and US with total capacity of 324 million ton per annum (MTPA), while LNG's demand stayed at 297 MTPA .

Thailand's Energy Demand

Thailand's energy demand for the first month of 2019 was reported at 2.08 million BOED, a decrease of 4% relative to the same period of the previous year (Source: EPPO, The Ministry of Energy) due to lower investment in the construction sector and decrease in exports. This resulted in lowering energy usage from coal, natural gas and hydro/imported electricity.

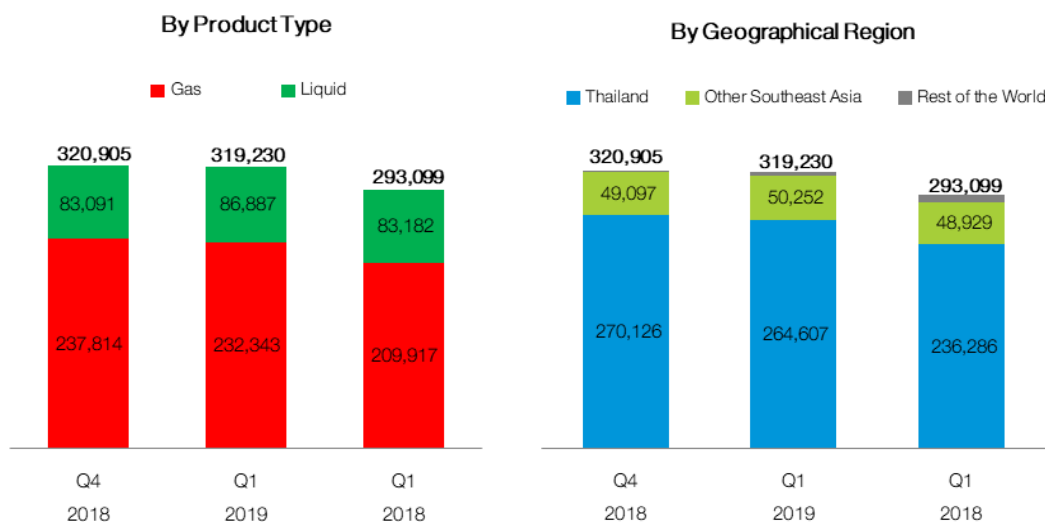
Exchange Rates (Thai Baht against US Dollar)

PTTEP's functional currency is US Dollar (USD) whereas the tax filing currency is Thai Baht (THB), thus the movement in USDTHB exchange rate has impact on Company's financial performance. During Q1/19, THB moved in narrow band strengthening in the beginning period from the Fed dovish policy on the interest hike, political tension within the US and the susceptible on the U.S.-China trade war. Approaching the end of Q1/19, THB slightly underperformed reflecting uncertainty on the Fed interest rate outlook, coupled with better-than-expected U.S. economic data. At the end of quarter, the USDTHB exchange rate closed at 31.81 THB/USD, which is stronger than 2018-ending rate of 32.45 THB/USD, resulting in foreign exchange-related tax saving for PTTEP.

Financial Performance

Average Sales Volume and Selling Price

Unit: Barrels of Oil Equivalent per Day



Average selling price and Dubai crude oil price (Unit : US Dollar)	Q4 2018	Q1 2019	Q1 2018	% Inc. (Dec.) QoQ	% Inc. (Dec.) YoY
Average selling price (/BOE)	47.79	46.21	44.01	(3)	5
Liquid price (/BOE)	66.01	58.82	63.12	(11)	(7)
Gas price (MMBTU)	6.90	6.92	6.07	0.3	14
Average Dubai crude oil price (/BBL)	68.30	63.41	63.96	(7)	(1)

For the First quarter of 2019 compared with the Fourth quarter of 2018

In Q1/2019, average sales volume of PTTEP and its subsidiaries (the “Group”) decreased to 319,230 barrels of oil equivalent per day (BOED) when compared with Q4/2018 of 320,905 BOED. The decrease was primarily from the Bongkot Project, due to shutdown from maintenance activities and Tropical Storm ‘PABUK’ incident in Q1/2019. The average selling price in Q1/2019 decreased to 46.21 USD/BOE (In Q4/2018: 47.79 USD/BOE).

For the First quarter of 2019 compared with the First quarter of 2018

When compared the average sales volume for Q1/2019 to Q1/2018 of 293,099 BOED, the average sales volume increased primarily from the acquisition of additional participating interests in the Bongkot Project, although there was a shutdown from maintenance activities and the Tropical Storm ‘PABUK’ incident in Q1/2019. The average selling price increased to 46.21 USD/BOE (Q1/2018: 44.01 USD/BOE).

Overall Operating Results

For the First quarter of 2019 compared with the Fourth quarter of 2018

In Q1/2019, the Group had a net profit of 394 MMUSD, an increase of 125 MMUSD or 47% from a net profit in Q4/2018 of 269 MMUSD. The increased net profit consists of profit from normal operation of 374 MMUSD and profit from non-recurring items of 20 MMUSD.

The profit from normal operation in Q1/2019 was 374 MMUSD, an increase of 91 MMUSD when compared with a profit in Q4/2018 of 283 MMUSD. The reason was primarily due to a decrease in income tax expense of 60 MMUSD, mainly from the 1st recognition of deferred tax expense from the Zawtika Gas Pipeline Investment Project in Q4/2018. Besides, there was a decrease in operating expense mainly from lower maintenance cost including decreases in administrative expense, as well as depreciation, depletion and amortization expenses, while sales revenue decreased due to a decrease in average selling price.

With the consideration of the profit from non-recurring items of Q1/2019, the Group reported a profit of 20 MMUSD, an increase of 34 MMUSD when compared with Q4/2018 which reported a loss of 14 MMUSD. The reason was primarily due to an appreciation of Thai Baht against US Dollar at 0.64 Baht per USD in Q1/2019, while it was depreciated at 0.04 Baht per USD in Q4/2018, resulting in a decrease of income tax expenses amounting to 72 MMUSD in Q1/2019 and a recognition of gain on foreign exchange rate amounting to 33 MMUSD in Q1/2019, while in Q4/2018, the Group recognised loss on the same transaction of 8 MMUSD. In addition, there was no recognition of loss on the Montara field divestment of 21 MMUSD and derecognition of deferred tax assets in Australia amounting to 54 MMUSD in Q1/2019, while there was a recognition of such transactions in Q4/2018. However, the Group recognized loss on financial derivatives of 82 MMUSD in Q1/2019 while recognized gain of 72 MMUSD in Q4/2018, primarily due to an oil price hedging.

For the First quarter of 2019 compared with the First quarter of 2018

When compared a net profit with the same period last year which reported a net profit of 423 MMUSD, the Group had a decrease in net profit by 29 MMUSD or 7%.

The profit from normal operation for Q1/2019 was 374 MMUSD, an increase of 70 MMUSD when compared with the profit for Q1/2018 of 304 MMUSD. The reason was primarily due to an increase in sales revenue of 167 MMUSD mainly from an increase in sales volume, while the depreciation, depletion and amortization expenses increased 51 MMUSD mainly due to the acquisition of additional participating interests in the Bongkot Project, as well as, income tax expenses increased 34 MMUSD and petroleum royalties and remuneration expenses increased 18 MMUSD as a result of an increase in domestic sales.

With the consideration of the profit from non-recurring items for Q1/2019, the Group reported a profit of 20 MMUSD, a decrease of 99 MMUSD when compared with Q1/2018 which reported a profit of 119 MMUSD. The reason was primarily from an increase in income tax expense relating to changes in foreign exchange rate of 69 MMUSD due to the appreciation of Thai Baht against US Dollar at only 0.64 Baht per USD in Q1/2019, which was lower than that of 1.45 Baht per USD in Q1/2018, as well as, an increase in loss on financial derivatives of 39 MMUSD primarily due to the oil price hedging.

Operating Results by Segments

Net Profit (loss)	Q4 2018	Q1 2019	Q1 2018	% Inc. (Dec.) QoQ	% Inc. (Dec.) YoY
(Unit: Million US Dollar)					
Exploration and production	229	343	301	50	14
Thailand	303	309	296	2	4
Overseas	(74)	34	5	>100	>100
- Other Southeast Asia	18	36	4	100	>100
- Australia	(89)	(4)	(0.3)	96	>(100)
- America	(5)	(3)	(1)	40	>(100)
- Africa	2	5	2	>100	>100
Pipeline transportation	7	78	64	>100	22
Head office and others	33	(27)	58	>(100)	>(100)
Total	269	394	423	47	(7)

For the First quarter of 2019 compared with the Fourth quarter of 2018

For Q1/2019, the Group reported a net profit of 394 MMUSD, an increase of 125 MMUSD or 47% when compared with a net profit of 269 MMUSD in Q4/2018, primarily due to an increase of Exploration and Production segment in Australia of 85 MMUSD, Other Southeast Asia of 18 MMUSD, and Pipeline Transportation segment of 71 MMUSD, while there was a decrease of Head Office and Others segment of 60 MMUSD.

Exploration and Production segment

- Australia

In Q1/2019, Australia segment reported a net loss of 4 MMUSD, a decrease in loss of 85 MMUSD or 96% when compared with a net loss of 89 MMUSD in Q4/2018, primarily due to no recognition of loss on the Montara field divestment and derecognition of deferred tax assets in Australia in Q1/2019, while such transactions were recognized in Q4/2018.

- Other Southeast Asia

In Q1/2019, Other Southeast Asia segment reported a net profit of 36 MMUSD, an increase of 18 MMUSD or 100% when compared with a net profit of 18 MMUSD in Q4/2018, primarily from a decrease of depreciation, depletion and amortization expenses due to an increase in petroleum reserves in December 2018 as a result of higher development wells drilled.

Pipeline Transportation segment

In Q1/2019, Pipeline Transportation segment reported a net profit of 78 MMUSD, an increase of 71 MMUSD or more than 100% when compared with a net profit of 7 MMUSD in Q4/2018, primary from the 1st recognition of deferred tax expense from the Zawtika Gas Pipeline Investment Project in Q4/2018.

Head Office and Others segment

In Q1/2019, Head Office and Others segment reported a net loss of 27 MMUSD, a decrease of 60 MMUSD or more than 100% when compared with a net profit of 33 MMUSD in Q4/2018, primarily from a decrease in financial derivatives (as it recognized loss in Q1/2019, while recognized gain in Q4/2018) mainly due to the oil price hedging, while income tax expense decreased and the segment recognized gain on foreign exchange rate due to the appreciation of Thai Baht against US Dollar in Q1/2019, while it was depreciated in Q4/2018.

For the First quarter of 2019 compared with the First quarter of 2018

For Q1/2019, the Group reported a net profit of 394 MMUSD, a decrease of 29 MMUSD or 7% when compared with a net profit in Q1/2018 of 423 MMUSD, primarily due to a decrease of Head Office and Others segment of 85 MMUSD, while there was an increase of the Exploration and Production segment in Other Southeast Asia of 32 MMUSD, Thailand of 13 MMUSD and Pipeline Transportation segment of 14 MMUSD.

Head Office and Others segment

In Q1/2019, Head Office and Others segment reported a net loss of 27 MMUSD, a decrease of 85 MMUSD or more than 100% when compared with a net profit of 58 MMUSD in Q1/2018, primarily due to an increase in income tax expense from the appreciation of Thai Baht against US Dollar at 0.64 in Q1/2019, while it was appreciated at 1.45 Baht per USD in Q4/2018, as well as, an increase of loss on financial derivatives mainly due to the oil price hedging.

Exploration and Production segment

- Other Southeast Asia

In Q1/2019, Other Southeast Asia segment reported a net profit of 36 MMUSD, an increase of 32 MMUSD or more than 100% when compared with a net profit of 4 MMUSD in Q1/2018. The increase was primarily from an increase of sales revenue mainly due to an increase in average selling price.

- Thailand

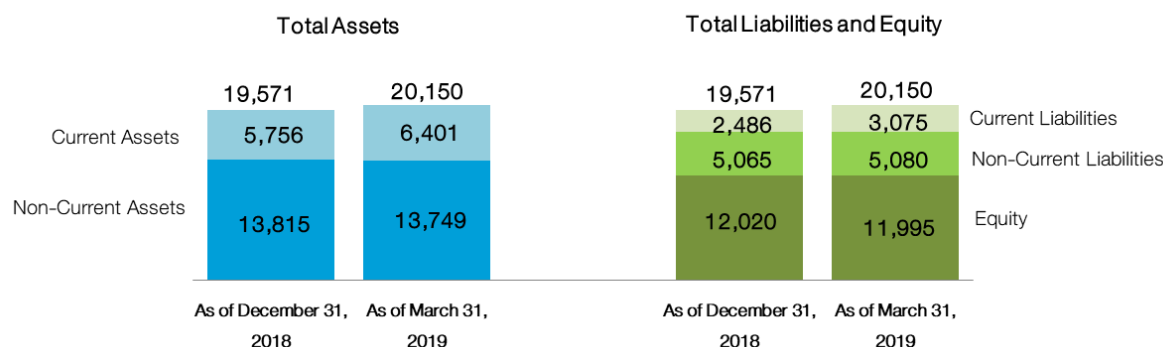
In Q1/2019, Thailand segment reported a net profit of 309 MMUSD, an increase of 13 MMUSD or 4% when compared with a net profit of 296 MMUSD in Q1/2018, primarily due to an increase in sales revenue mainly from an increase in average sales volume, while depreciation, depletion and amortization expenses increased mainly from the acquisition of the additional participating interests in the Bongkot Project.

Pipeline Transportation segment

In Q1/2019, Pipeline Transportation segment reported a net profit of 78 MMUSD, an increase of 14 MMUSD or 22% when compared with a net profit of 64 MMUSD in Q1/2018, primary due to an increase in pipeline transportation revenue from an increase in transportation tariff of the pipeline transportation project in the Republic of the Union of Myanmar.

Financial Position

Unit: Million US Dollar



Assets

As at March 31, 2019, the Group had total assets in the amount of 20,150 MMUSD, an increase of 579 MMUSD from the total assets as of December 31, 2018 of 19,571 MMUSD, primarily due to;

- (1) Current assets, which were primarily comprised of cash and cash equivalents, restricted cash at financial institution, short-term investments, account receivable – parent company, and other receivables, an increase of 645 MMUSD was mainly due to an increase of 549 MMUSD in cash and cash equivalents and increase of 74 MMUSD in account receivable – parent company.
- (2) Non-current assets, which were primarily comprised of exploration and production assets in joint venture projects being recognized as part of the property, plant and equipment, exploration and evaluation assets and goodwill, a decrease of 66 MMUSD was mainly due to a decrease in other non-current assets of 68 MMUSD due to received advance payment equivalent to assessed tax and penalty from Indonesian Tax Office in Q1/2019 after Natuna 2 B.V. won tax court case.

Liabilities

As at March 31, 2019, the Group had total liabilities of 8,155 MMUSD, an increase of 604 MMUSD from total liabilities as at December 31, 2018 of 7,551 MMUSD, primarily due to;

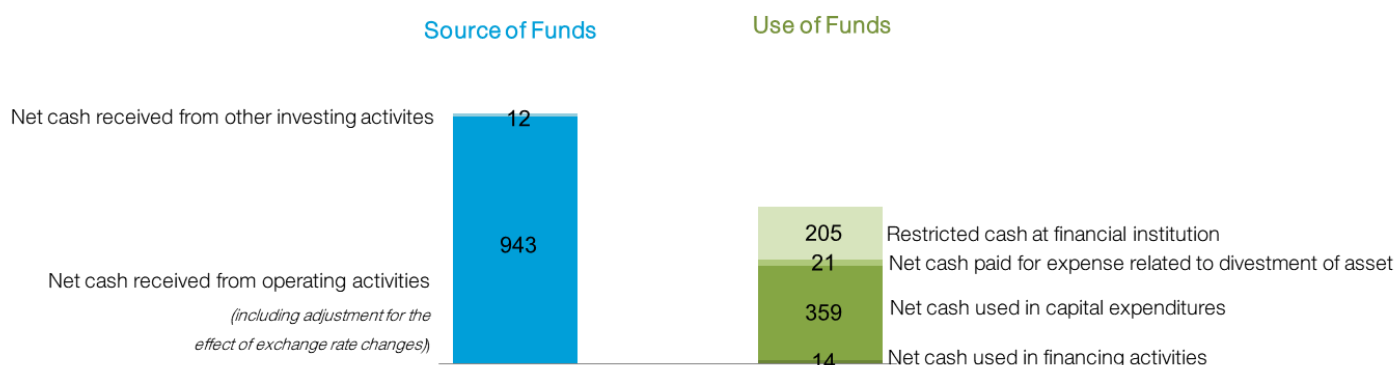
- (1) Current liabilities, which were primarily comprised of income tax payable, deferred considerations acquired through business acquisition, accrued expenses, current portion of long term financial liabilities and dividend payables, increased 589 MMUSD mainly from dividend payables for the second half of 2018 amounting to 406 MMUSD which were paid in April 2019, and income tax payable of 205 MMUSD.
- (2) Non-current liabilities, which were primarily comprised of provision for decommissioning costs, debentures and deferred tax liabilities, increased 15 MMUSD mainly from an increase of provision for decommissioning costs of 24 MMUSD due to the present value adjustment to the liabilities, resulting in the accretion expense recognition. In additional, debentures values increased 7 MMUSD mainly due to appreciation of Thai Baht against US Dollar of the Thai Baht debentures, while provision for remuneration for the renewal of petroleum production decreased 17 MMUSD.

Capital Structure

As at March 31, 2019, the capital structure comprised of equity in the amount of 11,995 MMUSD and total liabilities of 8,155 MMUSD, including the interest-bearing debts of 1,961 MMUSD with a weighted average cost of debt of 5.32% and the average maturity of 8.42 years. All interest-bearing debts are fixed interest and denominated in US Dollar currency.

Cash Flows

Unit: Million US Dollar



As at March 31, 2019, the Group 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 4,357 MMUSD, an increase of 356 MMUSD from cash and cash equivalents including short-term investment as at December 31, 2018 of 4,001 MMUSD.

Sources of funds in the amount of 955 MMUSD primarily came from Net cash received from operating activities as a result of the positive net cash flows from sales revenues, offset with cash payments for expenditures and income tax expenses.

Uses of funds in the amount of 599 MMUSD primarily came from Net cash used in additional investment activities for exploration and production assets, primarily for investment in the S1 Project and the Zawtika Project including the restricted cash at financial institution for business acquisition. For the Net cash used in financing activities, there were mainly the interest payments.

Key Financial Ratios

	Q4 2018	Q1 2019	Q1 2018
Profitability Ratio (%)			
EBITDA to revenue from sales	71.08	75.62	74.22
Return on equity	9.51	9.12	5.71
Net profit margin	20.51	19.04	14.28
Leverage Ratio (Times)			
Debt to equity	0.16	0.16	0.24
Debt to EBITDA	0.63	0.60	0.91

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	=	Net profit for the past 12 months to average shareholders' equity
Net profit margin	=	Net profit to total revenue (for the past 12 months)
Debt to equity	=	Interest Bearing Debt to shareholders' equity
Debt to EBITDA	=	Average Interest Bearing Debt to profit before deduction of interest, tax and depreciation for the past 12 months

Operational Highlights



Thailand and Southeast Asia



Middle East



America



Australia



Africa

As of Q1/2019, PTTEP's domestic and international operations altogether sum to 46¹ projects in 12 countries. The followings are key project highlights.

Projects in Thailand

PTTEP currently has 18¹ projects in Thailand, majority in the **production phase**, located in the Gulf of Thailand and onshore. The sales volume from the projects in Thailand for this quarter averaged 264,607 BOED, accounting for 83% of PTTEP's total sales volume. The key activities of producing projects include; the **Bongkot Project** maintained the production plateau as planned. In February 2019, PTTEP signed the Production Sharing Contracts (PSCs) of Block G1/61 (Erawan field) and Block G2/61 (Bongkot field), with the production starting from 2022 and 2023 to 2032 at minimum production volume of 800 MMSCFD and 700 MMSCFD respectively. The **S1 Project** has continuously drilled additional production wells to maintain production levels. Apart from the producing projects, **Ubon Field of the Contract 4 Project** is in the process of pre-development with expected first production by 2023 at planned capacity of 25,000 BPD for crude oil and natural gas of 50 MMSCFD (approximately 8,300 BOED).

Projects in Southeast Asia

PTTEP has 17 projects in this region which are located in the Republic of the Union of Myanmar (Myanmar), the Socialist Republic of Vietnam (Vietnam), Malaysia and the Republic of Indonesia (Indonesia). For Q1/2019, the average sales volume from projects in this region amounted to 50,252 BOED, which accounted for 16% of PTTEP's total sales volume.

The highlights of key projects in the **production phase** within this region can be summarized as follows. The **Zawtika Project**, located in the Gulf of Moattama, Myanmar, completed production drilling in Phase 1C with 4 production platforms and has continuously drilled additional wells to maintain production plateau. In Q1/2019, the natural gas sales volume averaged 290 MMSCFD (approximately 46,431 BOED). The **Vietnam 16-1 Project**, located offshore in the southeast of Vietnam, is currently drilling an additional production well to maintain production plateau with crude oil and natural gas sales volume for Q1/2019 averaged 16,665 BPD and 6 MMSCFD (approximately 1,352 BOED) respectively.

The **exploration phase** projects in this region are mainly located in onshore and offshore of Myanmar. The major highlights include the **Myanmar M3 Project**, is awaiting approval for the Field Development Plan that was proposed in Q4/2018, from the Government of Myanmar. The **Myanmar MD-7 Project**, is in preparation for drilling plan for an exploration well in Q4/2019. The **Myanmar M11 Project**, is also in preparation for drilling plan of an exploration well in Q2/2019 and is seeking partner to manage the project's risk. The **Myanmar MOGE 3 Project**, completed the drilling of an exploration well in January 2019 and is in process of drilling the second exploration well as well as preparing for 2 exploration wells drilling in 2019. For Malaysia, the **Sarawak SK410B Project**, is currently under drilling preparation of an appraisal well in 2019. The **Sarawak SK417 Project** and **Sarawak SK438 Project**, are currently evaluating the petroleum potential. The **PM407 Project** and **PM 415 Project**, signed the Production Sharing Contracts on 21 March 2019, are currently evaluation the petroleum potential. For offshore Vietnam, the **Vietnam B & 48/95 Project** and the **Vietnam 52/97 Project** are under preparation of PSC extension approval request and currently in the negotiation process on commercial terms in order to push forward the Final Investment Decision (FID) with the first production target at the end of 2022 and ramping up capacity to 490 MMSCFD.

¹ Including G1/61 and G2/61 projects with production starting in 2022 and 2023

Projects in the Middle East

PTTEP has 2 projects under *exploration phase* in this region, located in the north-west of Abu Dhabi, United Arab Emirates. The **Abu Dhabi Offshore 1 Project** and **Abu Dhabi Offshore 2 Project**, signed the concession agreements on 12 January 2019, are currently evaluation the petroleum potential.

Projects in the Americas

PTTEP has 5 projects in this region located in Canada, the Federative Republic of Brazil (Brazil) and United Mexican States (Mexico). All projects are in the *exploration phase*.

The **Mariana Oil Sands Project**, located in Alberta, Canada, was granted the approval for the development Thornbury Phase 1 field in May 2018 and is under the evaluation of appropriate project development plan.

PTTEP has 2 projects in Brazil. The **Barreirinhas AP1 Project** is located in the Barreirinhas Basin, offshore to the northeast of Brazil, and the **Brazil BM-ES-23 Project** is located offshore in the Espirito Santo basin, east of Brazil. Both projects are currently evaluating the petroleum potential.

PTTEP has 2 projects in Mexico: **The Mexico block 12 (2.4) Project**, located in the Mexican Ridges, western Gulf of Mexico and; the **Mexico block 29 (2.4) Project**, located in the Campeche, southern Gulf of Mexico. The projects are currently evaluating the petroleum potential.

Projects in Australia

PTTEP has 1 project in this region, **PTTEP Australasia Project**, which is located in the Commonwealth of Australia (Australia), comprising of 8 permits.

The **Montara Field** is in the *production phase*. The divestment of the field to Jadestone Energy was completed on 28 September 2018. The operatorship transfer is awaiting for approval from the National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA) which is expected to be within Q2/2019.

The **Cash Maple Field** is in the *exploration phase*. The field is under the evaluation of appropriated development plan and is seeking partner to manage the project's risk. The **AC/P54 Field**, completed the drilling of the exploration well in Q1/2019 with the successful results. The well encountered gas and condensate with the net pay thickness around 34 metres, which the result will be further incorporated in development planning of Cash-Maple field.

Projects in Africa

PTTEP has 3 projects in this region, located in the People's Democratic Republic of Algeria (Algeria) and the Republic of Mozambique (Mozambique).

The **Algeria 433a and 416b Project**, which is in the *production phase*, is located onshore in the eastern part of Algeria. In Q1/2019, the project has average production volumes of 18,399 BPD.

The **Algeria Hassi Bir Rekaiz Project**, which is in the *development phase*, is located onshore in the eastern part of Algeria. The project has started development on Phase 1 following the conclusion with partners and its approved development plan by government. The development activities has commenced since March 2019 with the expected first oil production for the initial phase around 10,000-13,000 barrels per day (BPD) in early 2021 and the second phase production capacity ramping up to around 50,000-60,000 BPD in 2025.

The **Mozambique Rovuma Offshore Area 1 Project**, which is in the *exploration phase*, is a large LNG project located in offshore Mozambique. In March 2018, the project was granted the government approval of Plan of Development (POD) in Golfinho-Atum area. The project has now finalized and signed the long-term LNG Sale and Purchase Agreements (SPAs) with various buyers for 9.5 MTPA per year, which is sufficient for project finance with financial institutions. In addition, the project has been granted the approval from the government and Area 4 Project (near-by project), as the first mover of the development of Onshore LNG Plant in Mozambique, to lead the construction of the shared facilities; Material Offloading Facility and LNG Jetty constructions. The Final Investment Decision (FID) is expected in Q2/2019 with the planned first phase of production at 12.88 MTPA starting in 2024.



Company Strategy

Portfolio Management

For the past few years, PTTEP had continuously carried out our 3Rs strategy since the oil price crisis to great success. The Company has achieved over 30% unit cost reduction, added key projects from our focused area to our portfolio, made great strides in transforming the organization and established new businesses focusing on technology.

The oil price has since improved and sustained its current levels while the alternative energy and digital technology are increasingly more important in the energy industry. In light of this, PTTEP has launched a new vision and a new strategy EXPAND and EXECUTE in order to enhance the company's competitive advantage and maintain sustainable growth amid the challenges the industry is facing now and in the future.

EXPAND: Strategy to focus growth in strategic investment areas and diversify into energy related businesses for long-term sustainability

- **Coming-Home Strategy:** PTTEP focuses investments in Thailand and South East Asia where the Company targets as strategic investment areas. In March, PTTEP has successfully acquired Murphy Oil Corporation's assets in Malaysia and won the rights for exploration and production in 2 blocks located in offshore Peninsular Malaysia. In addition, PTTEP plans to propel the activities in exploration projects located in Myanmar and Malaysia to improve petroleum reserves. Moreover, PTTEP also looks to expand business opportunities such as pursuing Gas Value Chain business in Myanmar in the form of Gas-to-Power.
- **Strategic Alliance Strategy:** PTTEP aims to capture investment opportunity in other petroleum prolific areas with strategic alliances by mainly focusing on the Middle-East. In January, PTTEP together with Eni have been selected as the successful bidders for exploration and production rights of two offshore blocks in the United Arab Emirates, one of the designated low cost region.
- **Sustainable Development Strategy:** PTTEP plans to invest in businesses focusing on technology and innovation as well as R&D capability to support core E&P business and future investment opportunity related to the energy industry.

EXECUTE: Strategy to increase sales volume of legacy assets and maintain competitive advantage

- Create full value from existing assets with the emphasis on increasing production from key assets
- Maintain cost competitiveness through digital and organizational transformation
- Increase petroleum reserves by accelerating development projects that are awaiting Final Investment Decision (FID) including the Hassi Bir Rekaiz Project, that has started the development since March 2019, the Mozambique Rovuma Offshore Area 1 Project, the Vietnam B & 48/95 Project, the Vietnam 52/97 Project and the Contract 4 (Ubon Field) Project.
- Effectively execute Bongkot and Erawan transition
- Reposition in non-core assets
- Be good corporate citizenship through stakeholder value creation

Capital Management

PTTEP focuses on ensuring effective financial management by maintaining a robust capital structure. As of the end of Q1/2019, the Company maintained a strong liquidity position with cash on hand of approximately USD 4.4 billion, which is sufficient for acquiring Murphy asset in Malaysia with total consideration of USD 2.1 billion, expected to be complete in Q2/2019. The debt-to-equity ratio is 0.16 which is in line with the Company financial policies and also provides adequate liquidity in order to fund capital expenditure to maintain production, develop future projects in the pipeline, and carry out exploration activities as well as to support new investment opportunities through Merger and Acquisitions (M&A).

Sustainable Development

PTTEP's Sustainable Development is aligned with global indices and UN principles. This resulted in the Company being selected as a member of Dow Jones Sustainability Index (DJSI) in the Oil and Gas Upstream & Integrated Industry sector for the fifth consecutive year, and also received the Silver Class distinction in the Sustainability Yearbook 2019 by RobecoSam for the excellence in sustainability performance. Key activities in the first quarter of 2019 covering business, society, and environment, are as follows:

Business PTTEP encourages all staff on Research& Development (R&D), creation of new technology and innovation in order to support our core business by allocating approximately 3% of net income each year as a budget for research and technology development. During the first quarter of 2018, the key projects in progress are as follows

- **Increase Exploration Success** i.e. Electromagnetic for subsurface fluid movement monitoring to enhance petroleum exploration and production efficiency and CO₂ Absorption / Absorption from Natural Gas
- **Green Practice** i.e. CO₂ emission reduction and re-utilization and In-line Metal Surface Intelligent Inspection for Decommissioning
- **Petroleum Related Technology** i.e. Autonomous Underwater Vehicle (AUV) and Inspection, Repair and Maintenance Robot

Social In 2019 PTTEP's social development strategy focuses on Stakeholder Value Creation and Basic Needs continues to get priority. Work plan covers the transformation of potential CSR project to CSV (Creating Shared Value) and the implementation of Social Enterprise project. All these are in line with Sustainable Development Goals of the United Nations. With the achievement of project implementation, PTTEP receives 4 international awards in the first quarter i.e. Platinum Winner Award from the Energy and Environment Foundation Global CSR Awards 2019 in India, the Best Community Development Award and Overall CSR Winner Award from the Gulf Sustainability and CSR Awards 2019 in United Arab Emirates and the Best CSR Campaign Award from Global Good Governance (3G) Awards 2019 in Indonesia.

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). In the first quarter of 2019 PTTEP had a Lost Time Injury Frequency (LTIF) score of 0.00 and a Total Recordable Incident Rate (TRIR) score of 0.56. The Company's performance on both safety indicators is in line with 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 revised a goal to reduce its greenhouse gas (GHG) emissions by a minimum 25% by the year 2030 versus its 2012 base year figure. As of Q1/2019, PTTEP has already achieved 21.3% reduction of GHG emissions target comparing to 2012.



Future Business Outlook

Energy Outlook

For 2019, average Dubai crude prices is expected to range between 60-70 USD per barrel although supply from US keeps increasing, especially that the recently-limited pipeline could be recovered in H2/2019, supply from other countries may decline such as Venezuela, Iran and Saudi Arabia. However, we have to keep an eye on US in May whether it is going to fully impose the sanctions on Iran; also the collaboration curb by OPEC and Non-OPEC focusing on Saudi Arabia and Russia. If such cases occur, oil supply would be tighten.

For demand side, even though US-China trade war looks improved, there are still some other economic risks such as Brexit and signal of economic slowdown in some emerging countries like Turkey (or even in developing country like Germany). Furthermore, Dubai could be impacted by IMO 2020 regulations which cap Sulphur content (Less than 0.5%) in bunker fuel being used for marine transportation. This could cut demand of sour-grade crude like Dubai at the end of 2019, prior to the fully-forced in Jan 2020.

LNG Market

The oversupply situation of Global LNG market is expected to prolong towards 2019 with total capacity of existing and upcoming LNG projects growing by 13% to 365 MTPA, while demand side is anticipated to stabilize at 311 MTPA. Average Asian Spot LNG price is expected to range between 5.7-8.2 USD/MMBTU. However, the global LNG price remains fluctuated caused by number of bearish factors e.g. increasing LNG supply from new projects sanction during 2019-2020 and bullish factors e.g. higher LNG demand in Asian Market especially from China and India, supply disruption from existing LNG projects coupled with national energy policy from various countries. Nonetheless, demand-supply of global LNG market is expected to rebalance following to 2022-2023.

Thai Economy and Foreign Exchange Outlook

The Bank of Thailand has forecasted the Thai economy in 2019 to grow by 4.0%, recessing from last year. The major negative catalysts would be weak growth in Thai exports due to impacts of trade protectionism from the U.S., the slowdown of the U.S and European Union economy, and the slow recovery in Thai Tourism due to soft number of Chinese tourist as well as the delay in the Government spending.

For the movement of the USD/THB exchange rate going forward, investors tend to prefer holding relatively safe assets (e.g. USD, Yen) over risky ones. This is attributed to the warning announced by the International Monetary Fund (IMF) that the global economy has begun to slow down since the beginning of 2019. Consequently, there will be a high chance that THB would depreciate as a result of negative factors in the global market. However, on a relatively short term basis, concern on the U.S.-China trade war seems to improve according to the significant progress in the negotiation between the two countries.

PTTEP's financial performance will be affected by USD/THB exchange rate fluctuations mainly through income tax. The effect arises since the Company's functional currency is the US Dollar whereas tax filing currency is the Thai Baht. However, the implication of this difference would not create impact to the Company's cash flows. Moreover, the interest rate outlook would not impact to the Company's financial performance as its current interest-bearing debt are in fixed-rate.

Other important factors that affect the Company's operations

IMO 2020 Regulations, the International Maritime Organization (IMO) agreed to limit Sulphur content in all marine fuels to 0.5% (from current 3.5%) effective on January 1, 2020 onwards. As the result, demand of High Sulphur Fuel Oil (HSFO) is expected to decrease significantly and will likely lead to lower HSFO's price. According to PTTEP gas sale agreement especially in the Gulf of Thailand, HSFO is a factor accounted in the gas pricing formula which led to a risk of lower selling price. However PTTEP has realized in the impact of this issue while expecting minimal impacts thanks to lagging of fuel price linked to gas sale formula varied from 6-12 months. In the meantime PTTEP is actively negotiating with buyers and started to hedge against volatility of HSFO. In addition, from 2022 onwards, PTTEP expects material decrease of the impacts according to gas selling price of Bongkot and Erawan under the new production sharing contracts linked to Dubai crude price.

Enactment of the Revenue Code Amendment Act (No. 50) B.E. 2562 and the Petroleum Income Tax Amendment (No. 9) B.E. 2562 in April 2019, which will allow tax filing in company's functional currency that can be a currency other than Thai Baht. This will subsequently reduce the impact of FX volatility on financial statements and will become effective from the first day of accounting period in 2019 once approved by the Revenue Department.

*PTTEP's performance outlook for 2019**

PTTEP's performance depends on three major factors including Sales volumes, Gas price and Unit cost with the guidance summary as follows;



* Excluding the acquisition of Murphy's assets in Malaysia

** Based on average Dubai price assumption of 66 USD/BBL for 2019

Sales volume:

PTTEP focuses on maintaining the production level in Thailand with the estimated sales volume for Q2/2019 and full-year 2019 of approximately 330 KBOED and 321 KBOED, respectively. The target sales volume is supported by the additional participating interests in the Bongkot Project since mid of 2018.

Sales price:

- PTTEP's liquid prices will fluctuate relative with global crude prices.
- PTTEP's gas prices are linked via a price formula with 6-12 months lag-time to referenced global oil prices indices. Average gas price for Q2/2019 and full-year 2019 are estimated at approximately 6.9 USD/MMBTU, reflecting the upturn in oil price environment. (Based on average Dubai price assumption of 66 USD/BBL for full-year 2019)
- Outstanding volume of oil price hedging as of Q1/2019 is approximately 5 million barrel; the Company, however, consistently monitors crude oil price movements and has the flexibility to adjust the hedging plan as appropriate.

Unit Cost:

In Q2/2019 and for the full-year 2019, PTTEP endeavors to uphold its competitive unit cost at around 32 USE/BOE and 31 USD/BOE respectively, in line with planned investment and activities.