

Executive Summary

Regarding to the coronavirus disease 2019 (COVID-19) pandemic that has affected the health and safety of people around the world, PTTEP puts it first priority in the well-being of employees, counterparties and all stakeholders. With the Business Continuity Management plan (BCM), PTTEP has enforced preventive measures for employees at its head office to work from home while strictly increasing safety measures at all operating sites both offshore and onshore, in upcountry and overseas, in order to reduce the risk of virus transmission.

In addition to the health and safety effects, the COVID-19 pandemic has a severe economic impact throughout the world. The demand for oil consumption has aggressively reduced in the near-term as a result of lock-downs in many countries to prevent the spread of infection. The oil price war, that was triggered in early-March 2020 from the disagreement in production cut among OPEC+ members, has caused a sharp drop in crude oil prices. As a result, the companies in the oil and gas sector has been widely affected, PTTEP, as an E&P company, has continuously monitored the situation with readiness to adapt under challenging circumstances.

For the impact on 2020 performance, PTTEP views that the average sales volume previously targeted for this year is expected to decrease by about 7% in association with lower oil demand forecast as a result of economic recession. However, the sales volume of natural gas, which represents the majority of PTTEP's products, has already been secured in accordance with the sales agreement. On the average selling price perspective, the gas selling price for this year will not be significantly impacted due to the time lagging in pricing mechanism of the sales agreements. However, if the low-oil price environment is prolonged, it will likely continue impacting PTTEP in future periods. Nonetheless, the oil price hedging against the volatility has been partially in place for the year. In addition, PTTEP has a low-cost structure as a result of the success in cost reduction programs which brought the unit cost down around 30% during the global oil price crisis in the past 4-5 years. And, with the strong financial positions and liquidity, PTTEP is certain that it has the ability to sustain through the oil price volatility period for at least 2 years.

In order to cope with this crisis, PTTEP still focuses on operations under the "Execute" strategy for this year. With utmost priority on future operations and energy security for Thailand, PTTEP has revised its investment down around 15-20% from its original plan for the year. The investment plan revision includes effective cost management and prioritizing exploration drillings. Lastly, PTTEP continues to focus on the transitions of new assets, especially the G1/61 and G2/61 projects in order to deliver production volume as planned in 2022-2023.

For Q1/2020, PTTEP reported net income of 275 MMUSD, a decrease of 28% compared to the previous quarter. This is mainly driven by lower sales volume and selling prices as a result of lower oil prices, coupled with the tax expenses recognition from the USD/THB depreciation during the quarter. Nonetheless, PTTEP was able to maintain the low unit cost at 31 USD/barrel of oil equivalent and incurred gain from oil price hedging. PTTEP reported cash flow generated from operations of 981 MMUSD and has maintained EBITDA margin of 72%. PTTEP's financial structure remains strong reflecting the cash and short-term investments of 3,248 MMUSD with debt to equity ratio at 0.29. The credit rating agencies have also affirmed PTTEP's ratings at the same level as Thailand's, from the recent annual reviews.

Table of key financial results

(Unit: Million US Dollar)	Q4 2019	Q1 2020	Q1 2019	% Inc. (Dec.) QoQ	% Inc. (Dec.) YoY
Total Revenue	1,841	1,771	1,428	(4)	24
Sales Revenue	1,755	1,482	1,328	(16)	12
EBITDA	1,188	1,082	1,025	(9)	6
Profit(loss) for the period	384	275	394	(28)	(30)
Basic earnings(loss) per share (Unit: US Dollar)	0.09	0.07	0.10	(22)	(30)
Profit(loss) from normal operation	379	290	374	(23)	(22)
Profit(loss) from non-recurring items	5	(15)	20	>(100)	>100



Economic Overview in the first quarter of 2020

Crude Oil Price

Dubai crude price fell in Q1/2020 to an average of \$50.4 per barrel, lower than Q4/2019 average price of \$62.0 per barrel. There were positive factors for the oil price at early 2020 from US sanction against Iran and Venezuela and Libya output from civil war. However, the price was heavily affected by the pandemic outbreak of COVID-19. Most countries implement measures to control the spread by country lockdown, travel restrictions and physical distancing which impact directly to global oil demand 15-35 million barrels per day in April and May, compared to previous year. This is mainly from lower consumption of jet fuel, road fuel and other petroleum liquids. The latest 2020 total oil demand estimates were reduced by 10% (from 101 million barrels per day to 91 million barrels per day). To minimize the impact to oil market, OPEC+ had requested its members to cut additional output by 1.5 million barrels per day during OPEC+ meeting on March 5-6, 2020. The results turned out in an opposite direction, when Russia refused to cut their production followed by the action from Saudi Arabia to cut its official selling price and made the announcement to counter back by increasing the oil supply to a record high of 12.3 million barrels per day in April 2020. Russia also set to boost its oil production and exports by 0.5 million barrels per day in April 2020. Moreover, during the end of February, US was making their production record up to 13.1 million barrels per day and their oil inventories also increased. The spot price of Dubai subsequently went down to \$23.4 per barrel at the end of March 2020.

Many countries including US are launching stimulus package, lowering their policy interest rate and launching unlimited Quantitative Easing (QE), which includes a buyback of treasuries and mortgage-backed securities. While many US producers announced spending cuts for 2020 according to the low oil price, there are several outcomes to monitor from Q2/2020 onwards whether Saudi Arabia, US and Russia can reach any agreements. The oil demand from China, South Korea and Japan tends to increase from their COVID-19 containment ability, as well as the recovery of economic slowdown.

Liquefied Natural Gas (LNG)

For LNG Market in Q1/2020, the average Asian spot price decreased dramatically from previous year to \$3.62 per MMBTU (Source: Platts) mainly driven by the rapid spread of COVID-19 pandemic, resulting in energy demand destruction globally. Moreover, oil price war between Saudi Arabia and Russia at the beginning of March also led to significant crash in global oil price. On the supply side, the LNG market remained oversupply due to incremental volumes from new projects, mainly from projects in Australia, Russia and US with total capacity of 388 million ton per annum (MTPA), while LNG's demand stayed at 366 MTPA (Source: FGE), reduced from previous estimate of 373 MTPA due to the COVID-19 outbreak.

Thailand's Energy Demand

Thailand's energy demand for January to February 2020 was reported at 2.13 million BOED, an increase of 0.2% relative to the same period of the previous year (Source: EPPO, The Ministry of Energy). However, the overall domestic energy demand during March to the end of 2020 is expected to decline from the COVID-19 outbreak.

Exchange Rates (Thai Baht against US Dollar)

In Q1/2020, the THB continued to weaken against USD, depreciating 8.4% from the end of 2019 and becoming the worst-performing Asian currency. This is mainly due to the global COVID-19 outbreak, which negatively impact Thailand's tourism revenues and other business activities. Moreover, the oil price collapse has added pressure to the global economy. Under this backdrop, the U.S. Federal Reserve implemented a total of 150 bps cut to its policy interest rate in March to 0-0.25% and announced unlimited QE. However, the dollar continued to strengthen as a result of capital outflows from emerging markets into safe-haven assets. Outside the U.S., central banks across the world have followed, by implementing rate cuts, including the Bank of Thailand which had cut its policy rate twice to a new record low of 0.75% and implemented additional monetary policies to boost economic growth. These measures are still not sufficient to mitigate impact from the global economic slowdown.

In terms of PTTEP financial performance, the impacts from THB fluctuations were mainly in the form of income taxes arose from the difference in tax filing currency (THB) and financial reporting functional currency (USD) according to accounting standards. However, in April 2019, amendments were made on relevant tax laws that allow, upon Revenue Department's approval, tax to be filed in the company's functional currency which will ultimately reduce such impacts from FX movements. PTTEP has obtained this approval and switched the tax filing currency to USD according to the Petroleum Income Tax Act since Q2/2019, while other companies in PTTEP's group are still required to file income taxes in THB, as approval from the Revenue Department is pending. Despite the pending approval, overall FX impact on income tax is reduced.



PTTEP's Actions on the outbreak of COVID-19

Due to the coronavirus pandemic (COVID-19) that widely impacted and caused most countries to implement control measures to contain the spread of such disease by country lockdown, including travel restrictions, the crude oil demand then dropped significantly. Together with the oversupply situation after failure to reach Production Cuts Agreement among OPEC and Russia at the beginning of March; global crude prices plunged by 60 Percent with a tendency to continuously fluctuate. To deal with the aforementioned crisis and challenges in the future, PTTEP is ready to adjust its 2020 work plans in the following areas;

Safety and Social Responsibility

PTTEP has implemented the Business Continuity Management (BCM) plans to ensure effective business operations and petroleum production continuity for Thailand. With kind concern for the health and safety of employees and in compliance with government policy to limit the spread of the virus, the preventive and surveillance policies are as follows;

- Head office in Bangkok: Implement Work from Home Policy
- All operational areas, both onshore and offshore: 14-day quarantine period is required for all staff and contractors before entering production sites
- For stakeholders: Postponed the Annual General Meeting of Shareholders for the year 2020, with no effect to the right of shareholders to receive dividends on the same date as previously announced

In addition, the company has supported front line organizations to prevent the spread COVID-19 including the donation of "Negative pressure patient transfer bed" and "Mobile negative pressure box", developed by ARV (subsidiary of PTTEP) and its partner to ensure safety of medical personnel, the support on the production of Chula COVID-19 Strip Test by Chulalongkorn University, the support on the purchasing an ambulance and a ventilator machine to boost healthcare service efficiency of Thammasat University Field Hospital.

Impact on financial performance and financial position

Revenue

The majority of PTTEP's products are natural gas of approximately 70% and oil and condensate of approximately 30% (in proportion to PTTEP's sales volume). In terms of selling price, the natural gas price has already been secured in accordance with the sales agreement with price formula partly linked to fuel oil and referred to an average historical price of past 6 to 24 months. Therefore, the gas price will not immediately be affected by falling oil prices. However, if the low-oil price environment is prolonged, it may impact PTTEP in future periods. While the crude oil price might be directly impacted by the oil price volatility, the Company has entered into oil price hedging contracts for certain crude oil portion to cope with the downside.

Although, the crude oil demand has decreased considerably from the situation of the COVID-19, the Company's sales volume in 2020 is expected to be lower than the target by approximately 7%, as the gas sales volume, which is the main product, has already been committed based on long-term gas sales agreement.

Cost

PTTEP has a low-cost structure compared to peers after the streamline of cost structure, in response to previous oil price crisis in the past 4-5 years. The unit cost of the Company was then reduced from \$40 per barrel of oil equivalent to \$30 per barrel of oil equivalent or approximately 30%. The majority of our investments are in Thailand, Malaysia, Myanmar, and the Middle East where the operation cost is relatively low compared to other regions of the world. With the cash cost of approximately \$15 per barrel of oil equivalent, the Company can maintain solid operating cash flow with earnings before interest, taxes, depreciation, and amortization (EBITDA Margin) at 65-70 percent.

Financial Structure

With a robust financial position represented by strong liquidity position with cash on hand over 3 billion USD, low debt-to-equity ratio of 0.29x and no debt repayment obligations in short term, PTTEP is confident that it is able to sustain for at least 2-3 years in this period of volatility. Besides, after the annual review of the Credit Rating agencies in March and April, the credit rating affirmed the credit ratings of PTTEP at the same level as Thailand's current sovereign rating reflecting the solid financial position, with strong liquidity profile.

Investment Plan Revision

PTTEP has revised its investment plan by reducing 2020 expenditure by 15-20%, with no impact to future operations and interruptions to the energy supply of the country through the following plans;

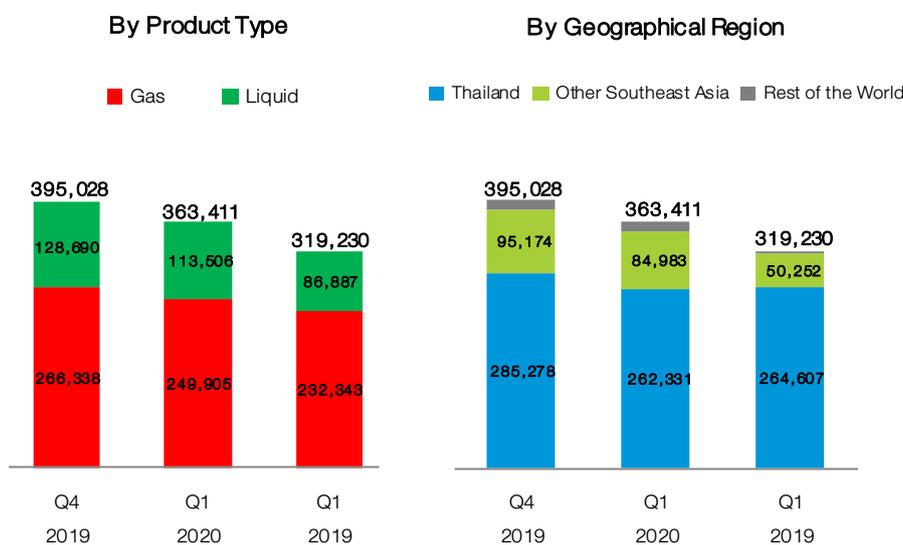
- Effective cost management on current producing assets
- Defer some exploration activities
- Reduce non-operation related expenses

The Company is ready to continue its 2020 work plans which focus on maintaining sales volume of legacy assets and its competitiveness. The priorities also include the transitions of G1/61 (Erawan field) and G2/61 (Bongkot field) and the support of the development projects overseas to ensure progress as planned.

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 2019	Q1 2020	Q1 2019	% Inc. (Dec.) QoQ	% Inc. (Dec.) YoY
Average selling price (BOE)	48.28	44.81	46.21	(7)	(3)
Liquid price (BOE)	61.94	52.75	58.82	(15)	(10)
Gas price (MMBTU)	6.95	6.87	6.92	(1)	(1)
Average Dubai crude oil price (BBL)	62.03	50.41	63.41	(19)	(21)

For the First quarter of 2020 compared with the Fourth quarter of 2019

In Q1/2020, average sales volume of PTTEP and its subsidiaries (the "Group") decreased to 363,411 barrels of oil equivalent per day (BOED) when compared with Q4/2019 of 395,028 BOED. The decrease was primarily from a decrease in crude oil sales of Malaysia Project, and from Bongkot Project due to lower nomination from buyer. The average selling price in Q1/2020 decreased to 44.81 USD/BOE (In Q4/2019: 48.28 USD/BOE).

For the First quarter of 2020 compared with the First quarter of 2019

When compared the average sales volume for Q1/2020 to Q1/2019 of 319,230 BOED, the average sales volume increased primarily from Malaysia Project and Partex Group from business acquisition while the average selling price decreased to 44.81 USD/BOE (Q1/2019: 46.21 USD/BOE).

Overall Operating Results

For the First quarter of 2020 compared with the Fourth quarter of 2019

For Q1/2020, the Group had a net profit of 275 MMUSD, a decrease of 109 MMUSD or 28% from a net profit in Q4/2019 of 384 MMUSD. The decrease was due to the decrease of total revenue of 70 MMUSD which was primarily due to decreases in sales revenue of 273 MMUSD. However, there was a gain on financial derivatives of 222 MMUSD in Q1/2020 (Q4/2019 : recognized loss of 41 MMUSD). The total expenses increase 39 MMUSD mainly from an increase in income tax expense of 263 MMUSD from a depreciation of Thai Baht against US Dollar at 2.52 Baht per USD in Q1/2020 (Q4/2019: Thai Baht appreciated against US Dollar at 0.44 Baht per USD). The decrease was offset with decrease in operating expense of 84 MMUSD. The net profit for Q1/2020 of 275 MMUSD can be separated as following.

The profit from normal operation in Q1/2020 was 290 MMUSD, a decrease of 89 MMUSD when compared with a profit in Q4/2019 of 379 MMUSD. The reason was from a decrease in sales revenue of 273 MMUSD due to decreases in an average sales volume and selling price. However, there was an decrease in total expenses mainly from an decrease in operating expense of 84 MMUSD from a decrease in average sales volume and a lower maintenance cost, mainly from Malaysia Project, as well as a decrease in depreciation, depletion and amortization expenses of 42 MMUSD in accordance with a decrease in average sale volume.

With the consideration of the loss from non-recurring items of Q1/2020, the Group reported a loss of 15 MMUSD, a decrease of 20 MMUSD when compared with Q4/2019 which reported a profit of 5 MMUSD. The reason was primarily due to an increase in income tax expense relating to changes in foreign exchange rate of 267 MMUSD from a depreciation of Thai Baht against US Dollar at 2.52 Baht per USD in Q1/2020, while there was an appreciation of Thai Baht against US Dollar at 0.44 Baht per USD in Q4/2019. However, there was a gain on financial derivatives of 222 MMUSD in Q1/2020, while the Group recognized loss of 41 MMUSD in Q4/2019, mainly from oil price hedging instruments and forward contracts.

For the First quarter of 2020 compared with the First quarter of 2019

When compared with the same period last year which reported a net profit of 394 MMUSD, the Group had a decrease in net profit of 119 MMUSD or 30%. The decrease was due to the increase of total expense of 462 MMUSD which was primarily due to an increase in income tax expense of 344 MMUSD from a depreciation of Thai Baht against US Dollar at 2.52 Baht per USD in Q1/2020 (Q1/2019: Thai Baht appreciated against US Dollar at 0.64 Baht per USD). and increase of sale revenue. In addition, depreciation, depletion and amortization expenses increase of 77 MMUSD. However, total revenue increase 343 MMUSD which was primarily due to increases in sales revenue of 154 MMUSD and recognition of gain on financial derivatives of 222 MMUSD in Q1/2020 (Q1/2019 : recognized loss of 82 MMUSD). The net profit for Q1/2020 of 275 MMUSD can be separated as following.

The profit from normal operation for Q1/2020 was 290 MMUSD, a decrease of 84 MMUSD when compared with the profit for Q1/2019 of 374 MMUSD. The reason was an increase in total expenses primarily due to an increase in the depreciation, depletion and amortization expenses of 77 MMUSD from an increase of sales volume from Malaysia Project and Partex Group from business acquisition in the second half of 2019 and Bongkot Project which had higher average sales volume due to the decrease of shutdown days from maintenance activities. Operating expense increased 62 MMUSD in accordance with increase in sales volume from Malaysia Project and Partex Group from business acquisition as well as an increase in income tax expense of 50 MMUSD from an increase in sales revenue. However, sales revenue increased of 154 MMUSD due to an increase in average sales volume, while the average selling price decreased.

With the consideration of the loss from non-recurring items for Q1/2020 was 15 MMUSD, a decrease of 35 MMUSD when compared with the profit for Q1/2019 of 20 MMUSD. The reason was primarily due to an increase in income tax expense relating to changes in foreign exchange rate of 294 MMUSD from a depreciation of Thai Baht against US Dollar at 2.52 Baht per USD in Q1/2020, while there was an appreciation of Thai Baht against US Dollar at 0.64 Baht per USD in Q1/2019. However, there was a gain on financial derivatives of 222 MMUSD in Q1/2020, while the Group recognized loss from such transaction of 82 MMUSD in Q1/2019, mainly from oil price hedging instruments and forward contracts.

Operating Results by Segments

Net Profit (loss)	Q4	Q1	Q1	%	%
(Unit: Million US Dollar)	2019	2020	2019	Inc. (Dec.)	Inc. (Dec.)
				QoQ	YoY
Exploration and production	395	192	343	(51)	(44)
Southeast Asia	411	204	345	(50)	(41)
- Thailand	343	245	309	(29)	(21)
- Other Southeast Asia	68	(41)	36	>(100)	>(100)
Australia	(1)	(1)	(4)	0	75
America	(2)	(3)	(3)	(50)	0
Africa	(7)	(5)	5	29	>(100)
Others	(6)	(3)	-	50	(100)
Gas Separation Plants	1	1	-	0	100
Pipeline transportation	62	65	78	5	(17)
Head office and others	(74)	17	(27)	>100	>100
Total	384	275	394	(28)	(30)

For the First quarter of 2020 compared with the Fourth quarter of 2019

For Q1/2020, the Group reported a net profit of 275 MMUSD, a decrease of 109 MMUSD or 28% when compared with a net profit of 384 MMUSD in Q4/2019, primarily due to a decrease of Exploration and Production segment in Southeast Asia (Thailand decrease 98 MMUSD and Other Southeast Asia decrease 109 MMUSD), while there was an increase of Head Office and Others segment of 91 MMUSD.

Exploration and Production segment

- Southeast Asia

- Thailand

In Q1/2020, Thailand segment reported a net profit of 245 MMUSD, a decrease of 98 MMUSD or 29% from a net profit of 343 MMUSD in Q4/2019, primarily due to a decrease in sales revenue, mainly from decreases in average sales volume and selling price, as well as an increase in income tax expense relating to changes in foreign exchange rate from a depreciation of Thai Baht against US Dollar at 2.52 Baht per USD in Q1/2020, while there was an appreciation of Thai Baht against US Dollar at 0.44 Baht per USD in Q4/2019.

- Other Southeast Asia

In Q1/2020, Other Southeast Asia reported a net loss of 41 MMUSD a decrease of 109 MMUSD or more than 100% from a net profit of 68 MMUSD in Q4/2019, primarily due to a decrease in sales revenue, mainly from decreases in average sales volume and selling prices, and an increase in income tax expense relating to changes in foreign exchange rate from a depreciation of Thai Baht against US Dollar at 2.52 Baht per USD in Q1/2020, while there was an appreciation of Thai Baht against US Dollar at 0.44 Baht per USD in Q4/2019, as well as, the exploration wells written-off of Zawtika Project in Q1/2020.

Head Office and Others segment

In Q1/2020, Head Office and Others segment reported a net profit of 17 MMUSD, an increase of 91 MMUSD or more than 100% from a net loss of 74 MMUSD in Q4/2019, primarily due to an increase in financial derivatives as it recognized gain in Q1/2020, while recognized loss in Q4/2019 mainly due to the oil price hedging instruments and forward contracts, offset with increased in income tax expense relating to changes in foreign exchange rate from revaluation of related parties loans due to a depreciation of Thai Baht against US Dollar at 2.52 Baht per USD in Q1/2020, while there was an appreciation of Thai Baht against US Dollar at 0.44 Baht per USD in Q4/2019.

For the First quarter of 2020 compared with the First quarter of 2019

For Q1/2020, the Group reported a net profit of 275 MMUSD, a decrease of 119 MMUSD or 30% from a net profit in Q1/2019 of 394 MMUSD, primarily due to a decrease of Exploration and Production segment in Southeast Asia (Thailand decrease 64 MMUSD and Other Southeast Asia decrease 77 MMUSD), while there was an increase of Head Office and Others segment of 44 MMUSD.

Exploration and Production segment

- **Southeast Asia**
 - Thailand

In Q1/2020, Thailand segment reported a net profit of 245 MMUSD, a decrease of 64 MMUSD or 21% from a net profit of 309 MMUSD in Q1/2019, primarily due to an increase in income tax expense relating to changes in foreign exchange rate from a depreciation of Thai Baht against US Dollar at 2.52 Baht per USD in Q1/2020, while there was an appreciation of Thai Baht against US Dollar at 0.64 Baht per USD in Q1/2019.

- **Other Southeast Asia**

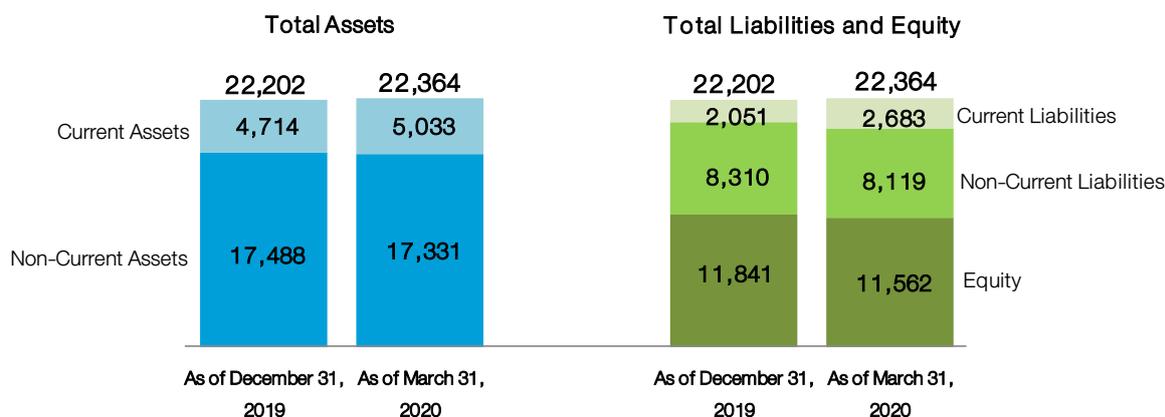
In Q1/2020, Other Southeast Asia reported a net loss of 41 MMUSD a decrease of 77 MMUSD or more than 100% from a net profit of 36 MMUSD in Q1/2019, primarily due to an increase in income tax expense relating to changes in foreign exchange rate from a depreciation of Thai Baht against US Dollar at 2.52 Baht per USD in Q1/2020, while there was an appreciation of Thai Baht against US Dollar at 0.64 Baht per USD in Q1/2019, as well as, an increase in exploration expenses due to the exploration wells written-off of Zawtika Project.

Head Office and Others segment

In Q1/2020, Head Office and Others segment reported a net profit of 17 MMUSD, an increase of 44 MMUSD or more than 100% from a net loss of 27 MMUSD in Q1/2019, primarily due to an increase in financial derivatives as it recognized gain in Q1/2020, while recognized loss in Q1/2019 mainly due to the oil price hedging instruments and forward contracts. However, there was an increase in income tax expense relating to changes in foreign exchange rate from revaluation of related parties loans due to a depreciation of Thai Baht against US Dollar at 2.52 Baht per USD in Q1/2020, while there was an appreciation of Thai Baht against US Dollar at 0.64 Baht per USD in Q1/2019.

Financial Position

Unit: Million US Dollar



Assets

As at March 31, 2020, the Group had total assets in the amount of 22,364 MMUSD, an increase of 162 MMUSD from total assets as at December 31, 2019 of 22,202 MMUSD, primarily due to;

- (1) Current assets, which were primarily comprised of cash and cash equivalents, account receivable and other receivable, other current financial assets and inventories, increased 319 MMUSD mainly from an increase in derivative assets of 211 MMUSD from fair value recognition of short-term oil price hedging instruments and forward contracts including increase in other current financial assets of 128 MMUSD.
- (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, decreased 157 MMUSD mainly due to a decrease in deferred tax assets of 187 MMUSD from a depreciation of Thai Baht.

Liabilities

As at March 31, 2020, the Group had total liabilities of 10,802 MMUSD, an increase of 441 MMUSD from total liabilities as at December 31, 2019 of 10,361 MMUSD, primarily due to;

- (1) Current liabilities, which were primarily comprised of income tax payable, trade account payables and other payables and dividend payables, increased 632 MMUSD mainly due to dividend payables as of March 31, 2020 for the second half of 2019 amounting to 456 MMUSD and income tax payable of 144 MMUSD.
- (2) Non-current liabilities, which were primarily comprised of provision for decommissioning costs, debentures and deferred tax liabilities, decreased 191 MMUSD mainly from decrease in debentures amount of 446 MMUSD primarily due to debentures redemption, offset with an increase of lease liabilities of 244 MMUSD.

Capital Structure

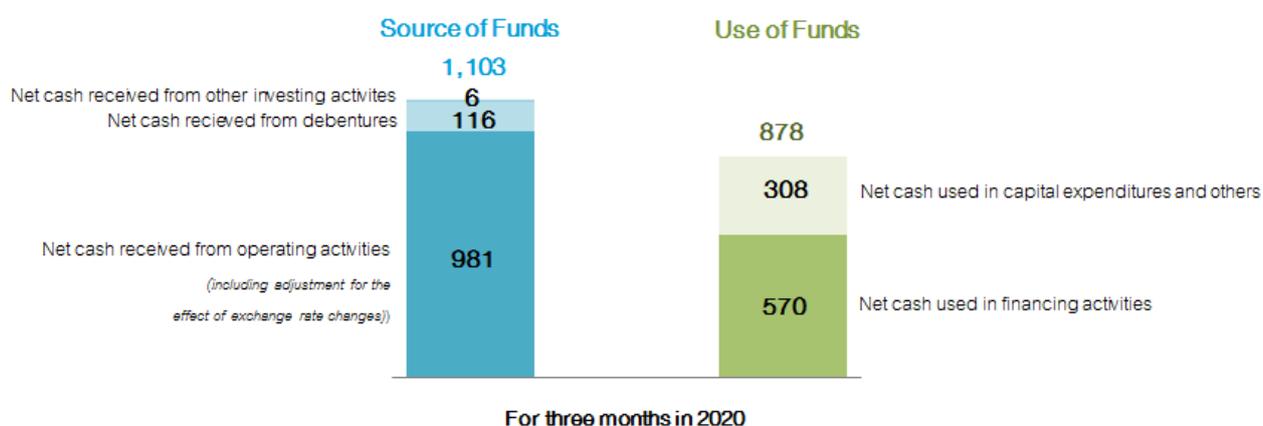
As of March 31, 2019, the capital structure consisted of 11,562 MMUSD in shareholders' equity and 10,802 MMUSD in total liabilities. The Group total liabilities comprised of 3,342 MMUSD worth of interest-bearing debts with a weighted average cost of debt of 3.93% and having average maturity of 16.15 years, of which all interest-bearing debts were denominated in USD and the fixed interest rates to the floating interest rates ratio is 79:21.

In Q1/2020, the Group managed its capital structure in relation to the US dollar denominated debentures to ensure the highest efficiency per the following details:

- On 10 January 2020, PTTEP TC repurchased the remaining USD 31 million worth of its USD 500 million subordinated perpetual capital debentures which carry a coupon rate of 4.600 % per annum, at the redemption price in accordance with the terms, conditions and methods prescribed in the bond indenture. After the repurchase, PTTEP TC has no outstanding of subordinated perpetual capital debentures.
- On 15 January 2020, PTTEP CIF repurchased USD 220 million worth of its USD 700 million senior unsecured and unsubordinated debentures, which bear a fixed coupon of 5.692 % per annum and on 25 February 2020, PTTEP CIF repurchased the remaining USD 480 million at the redemption price in accordance with the terms, conditions and methods prescribed in the bond indenture.
- On 15 January 2020, PTTEP TC issued, offered and sold senior unsecured and unsubordinated debentures to offshore investors for a total amount of USD 350 million, The debentures bear a fixed coupon of 2.993% per annum, and payable semi-annually, mature on 15 January 2030.

Cash Flows

Unit: Million US Dollar



As at March 31, 2020, the Group had cash and cash equivalents, including short-term investments in the form of bank fixed deposit with a maturity of more than three months, but within twelve months of 3,248 MMUSD, an increase of 225 MMUSD from cash and cash equivalents, including short-term investments as at December 31, 2019 of 3,023 MMUSD.

Sources of funds in the amount of 1,103 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 taxes expenses and **Net cash received from financing activities** derived from the issuance of the US Dollar denominated unsecured and unsubordinated debentures.

Uses of funds in the amount of 878 MMUSD primarily came from **Net cash used in the additional investments** in exploration and production assets, primarily for investment in Mozambique Area 1 Project and S1 Project. The **Net cash used in financing activities** were mainly from the repurchase of the US Dollar denominated unsecured and unsubordinated debentures.

Key Financial Ratios

	Q4 2019	Q1 2020	Q1 2019
Profitability Ratio (%)			
EBITDA to revenue from sales	66.74	71.85	75.62
Return on equity	13.16	12.32	9.13
Net profit margin	24.47	21.40	19.04
Leverage Ratio (Times)			
Debt to equity	0.29	0.29	0.16
Debt to EBITDA	0.62	0.60	0.60

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 equity
- Net profit margin = Net profit to total revenue (for the past 12 months)
- Debt to equity = Interest Bearing Debt to 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 Q1/2020, PTTEP has over 40 projects with domestic and international operations in 15 countries. The following are key project highlights.

Projects in Southeast Asia

PTTEP's primary operational base is in Southeast Asia, with projects located in Thailand, the Republic of the Union of Myanmar (Myanmar), the federation of Malaysia (Malaysia), the Socialist Republic of Vietnam (Vietnam), and the Republic of Indonesia (Indonesia). In this quarter, the average sales volume from projects in Thailand is 262,331 BOED, accounting for 72% of total sales volume. Average sales volume from other countries in this region is 84,983 BOED, which accounted for 23% of total sales volume.

- Projects in Thailand

The majority of PTTEP's projects in Thailand, located in the Gulf of Thailand and onshore, are in the *production phase*. Key activities of the main producing projects are as follows. The **S1 Project** maintained production volumes as planned. The **Bongkot Project**, **Contract 4 Project** and **Arthit Project** delivered production volumes as nominated from the buyer. **G1/61 Project** (Erawan field) and **G2/61 Project** (Bongkot field) have commenced the preparation phase which includes planning for exploration drilling, construction of production platform and gas pipelines, and other studies to ensure gas production in accordance with the minimum volume stated in the Production Sharing Contract (PSC) of 1,500 MMSCFD in total, starting from 2022-2023 onwards. PTTEP has closely coordinated with the existing concessionaire and the Department of Mineral Fuels to ensure a smooth operational transition.

- Projects in Myanmar

The key *producing project* in Myanmar is the **Zawtika Project** located in the Gulf of Moattama, maintained production volumes as planned. Projects in *exploration phase* are highlighted and detailed as follows. The **Myanmar M3 Project** obtained approval from the Government of Myanmar to extend the PSC for another year, until January 2021. The project is in the process of waiting for an approval of the Field Development Plan from the Government. The **Myanmar MD-7 Project**, which has completed the drilling of an exploration well in March 2020 and is currently evaluating the exploration results.

- Projects in Malaysia

The *producing projects* in Malaysia include the **Block K Project**, consisting of Kikeh, Siakap North-Petai (SNP) and Gumusut-Kakap (GK) fields which are located in the deep water of offshore Sabah. The **Sarawak SK309 and Sarawak SK311 Project** are oil and gas producing fields located in the shallow water of offshore Sarawak. In this quarter, Government of Malaysia has released a Movement Control Order ("MCO") since 18 March 2020, in response to the COVID-19 outbreak. No significant impact on production was observed in 1Q/2020.

Development Projects in Malaysia are as follows. **Block H Project**, located in the deepwater of offshore Sabah with capacity of 270 MMSCFD, is under development with the first gas expected in the second half of 2020. The subsea infrastructure is under installation and is in the process of drilling gas production wells. The Petronas Floating LNG (FLNG2) host facility that will receive gas from the Block H Project is currently being installed in the project area. *Exploration Projects* in Malaysia are highlighted as follows. The **Sarawak SK410B Project** is currently preparing for the drilling of an appraisal well to further evaluate potential upside in the second half of 2020 along with studying on the field development plan. The **Sarawak SK417 Project**, the **Sarawak SK438 Project**, the **Sarawak SK405B**, and the **PM 415 Project** are currently being evaluated for petroleum potential and prepare for exploration drilling in 2020-2021. Other Malaysia projects are in the process of prioritizing exploration drilling plan.

- Projects in Vietnam

The key *Producing Project* is the **Vietnam 16-1 Project**, located offshore in the southeastern region. The project is currently preparing to drill an appraisal well in Q1/2020 to maintain production plateau as planned. For *Exploration Projects*, the **Vietnam B & 48/95 Project** and the **Vietnam 52/97 Project**, located offshore, are currently in the negotiation process on commercial terms in order to push forward the Final Investment Decision (FID). The projects are expected to have its first gas by end of 2023 with production capacity gradually ramping up to 490 MMSCFD.

Projects in the Middle East

In this quarter, the average sales volume from projects in the Middle East is approximately 8,262 BOED, accounting for 2% of total sales volume. PTTEP's projects in this region are located in Sultanate of Oman (Oman) and United Arab Emirates (UAE).

Projects under *production phase* in this region include the **PDO (Block 6) Project** which is the largest potential onshore producing oil asset in Oman. The **Mukhaizna (Block 53) Project** is a large producing onshore oil field located in southern Oman. In this quarter, both projects maintained production volumes as planned. For *Exploration Projects*, **Oman Onshore block 12 Project** with Total, in February 2020, signed an Exploration and Production Sharing Agreement (EPSA) with Oman's Ministry of Oil and Gas (MOG) for exploration and production rights, located onshore central part of the Sultanate of Oman. The project will carry out geological and geophysical studies and exploration drilling within the first 3 years of the exploration period.

Middle East projects under *exploration phase* are located offshore in the northwest of Abu Dhabi, UAE. The **Abu Dhabi Offshore 1 Project** is currently being evaluated for petroleum potential for future exploration. The **Abu Dhabi Offshore 2 Project**, is currently being evaluated for petroleum potential to prepare for drilling of one exploration well in Q3/2020.

Projects in the Americas

PTTEP's exploration projects in this region are located in Canada, the Federative Republic of Brazil (Brazil) and United Mexican States (Mexico).

The **Mariana Oil Sands Project**, located in Alberta, Canada, is currently under evaluation for an appropriate project management plan.

Projects in Brazil include the **Barreirinhas AP1 Project** located in the Barreirinhas Basin, offshore of the northeastern region of Brazil, and the **Brazil BM-ES-23 Project** located offshore in the Espirito Santo basin, east of Brazil. Both projects are currently being evaluated for petroleum potential.

Projects in Mexico include the **Mexico block 12 (2.4) Project** located in the Mexican Ridges, western Gulf of Mexico, is currently being evaluated for petroleum potential. The **Mexico block 29 (2.4) Project**, located in the Campeche, southern Gulf of Mexico, is in process of drilling 2 exploration wells, expected to complete in Q2/2020.

Projects in Australia

PTTEP's projects in this region include only the **PTTEP Australasia Project**, which is located in the Commonwealth of Australia (Australia) and consists of 8 permits.

The **Cash Maple Field** is currently under evaluation for the appropriate development plan. The **AC/P54** in **Orchid Field** is in the **exploration phase**, completed drilling of an exploration well in 2019 with successful results. The well encountered gas and condensate. The project plans to include its development along with the Cash Maple Field.

Projects in Africa

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

The **Algeria 433a and 416b Project**, both of which are in the **production phase**, are located onshore in the eastern part of Algeria. In this quarter, the projects maintained production volumes as planned.

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 from an approved development plan by the government. Development activities of the project have commenced since Q1/2019 with expected first oil production for the initial phase of around 10,000-13,000 barrels per day (BPD) in 2021. In the second phase, production capacity is planned to ramp up to around 50,000-60,000 BPD in 2025.

The **Mozambique Area 1 Project**, which is in the **development phase**, is a large LNG project located in offshore Mozambique. In Q1/2020, the project is in progress of the detailed engineering design and procurement of long lead equipment. The project also successfully tested the first flight landing at the newly constructed airstrip in the construction site (Afungi Site) with the operation license obtained and ready to use. Currently, the project is under the process of procuring LNG Carriers. Project finance is at its final stage, preparing loan agreements for signing in Q2/2020, with the plan for first commercial cargo by 2024.



Strategies under Sustainable Development Framework

PTTEP aligns its Sustainable Development policy with global practices and UN principles. Operating under the concept "From We to World" in order to become the sustainable organization that takes conscious consideration of all stakeholders' interests, maintains energy security, delivers value and fosters sustainability for the wider society. In the first quarter, PTTEP received Gold Class of the SAM Sustainability Award in the Sustainability Yearbook 2020 for the excellence in sustainability performance.

To be in line with the vision to become the "Energy Partner of Choice", PTTEP has established our sustainable development framework which comprises of three main components namely: High Performance Organization (HPO); Governance, Risk Management and Compliance (GRC); and Stakeholder Value Creation (SVC). Key activities in the first quarter are as follows:

High Performance Organization (HPO) Amidst the current low oil price situation due to the COVID-19 pandemic and the oil price war between Saudi Arabia and Russia, PTTEP is still ready to proceed with 2020 work plans, focusing on key EXECUTE strategies with extending EXPAND strategies as the opportunity exists:

(1) EXECUTE: Strategy to maintain sales volume of legacy assets and its competitive advantage

- In light of the prolonged low-oil price environment, PTTEP is considering revising its investment plan such as effective cost management and postponing certain activities such as drilling plans for selected projects. Nevertheless, while utmost priority is to ensure that these postponements do not impact future operations nor will they interrupt the energy supply of the country.
- In particular to the transitions of Bongkot, Erawan and the newly acquired assets, PTTEP is continuing to actively proceed and shall continue to actively engage all stakeholders to ensure that production from all assets will be as planned.
- For the international assets such as the Mozambique Area 1 Project and the Algeria Hassi Bir Rekaiz Project, the Company is fully engaged with all stakeholders in order to ensure that progress on the development plan fits in with our overall strategies.

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

- **Coming-Home Strategy** and the **Strategic Alliance Strategy**: PTTEP remains committed to expansion in core areas such as Thailand, Malaysia, and Myanmar and in the Middle East region such as Oman and the UAE, as they are considered to be the areas with low operating costs compared to other regions. In February 2020, the Company has obtained the exploration and production rights of Block 12, located onshore in the central part of the Sultanate of Oman.
- PTTEP's **New Business Investment Strategy for Sustainability** focuses on organizational transformation as well as R&D capability and studies to support both current E&P business and future investment opportunities. PTTEP is ready to innovate to enhance its efficiency and business agility amidst the changing industry landscape. Furthermore, the Company is continuing to evaluate new business opportunities such as a Gas-to-Power business in Myanmar and its Artificial Intelligence business through its subsidiary: AI & Robotics Venture. During February 2020, PTTEP has entered into the Eastern Economic Corridor of Innovation (EECi) agreements to jointly research and innovate, as part of the development of innovation and economic zones in the eastern parts of Thailand.

PTTEP places great importance on effective financial management by focusing on building financial discipline and maintaining a robust capital structure. As at the end of Q1/2020, the Company maintained a strong liquidity position with cash on hand of approximately USD 3 billion. The debt-to-equity ratio is 0.29x which is in line with the Company's financial policy. In addition, the Company has implemented liability management activities, continuing from 2019, with respect to its USD denominated bonds which reduce the cost of capital from 4.41% to 3.93%, with no debt service obligation in 2020 and 2021.

Moreover, PTTEP has an environmental management system which is a subset of PTTEP's Safety, Security, Health and Environment Management System (SSHE MS) with a focus on loss prevention. In the first quarter of 2020, PTTEP had zero Lost Time Injury (LTI) score and a Total Recordable Incident Rate (TRIR) score of 0.24. The Company's performance on both safety indicators (LTIF and TRIR) is in line with the average of the members of the International Association of Oil and Gas Producers (IOGP).

As PTTEP has operated under High Performance Organization (HPO), the Company was honored with 2 awards from Thailand Best Employer Brand Awards 2020 in the category of Thailand's Best Employer Brand and Best Use of Technology for Recruitment. The awards ceremony was organized by World HRD Congress and Employer Branding Institute – INDIA to honor Thai organizations for their efforts and achievements in human resources management.

Governance, Risk Management and Compliance (GRC) PTTEP is committed to conducting its business with transparency and effectiveness by adhering to the good corporate governance principles, maintaining robust risk management and internal control system as well as strictly conforming to applicable laws and regulations to assure stable and sustainable growth of the company. The main progress are as follows:

- Establishing 2 essential GRC long-term strategies, namely, Smart Assurance and GRC in Common Sense which the former aims to effectively and concisely integrate assurance processes, while the latter focuses on cultivate GRC in employee mindset to be aware, accept and implement GRC in daily operation and key decision making. PTTEP is also willing to extend and share the GRC practices to its business alliances and interested organizations.
- Continuing implementation of GRC in the projects acquired in 2019.
- Preparing compliance program for the Personal Data Protection Act B.E. 2562 which will be effective in Q2/2020

In Q1 2020, as announced by The Office of National Anti-Corruption Commission (NACC), PTTEP has won the ninth NACC Integrity Awards (Year 2019) for the second consecutive year. This has been the third time receiving this wining award. Such recognition is our pride and it reflects PTTEP's constant commitment to stand out as a role model in running its business with transparency and integrity in accordance with the good corporate governance principles.

Stakeholder Value Creation (SVC) PTTEP concern for natural resource conservation, environmental restoration as well as community and social development. The Company has also supported front line organizations to fight with COVID-19 as mentioned above. The strategies of SVC are as follows:

- **Greenhouse Gas Reduction Strategy:** PTTEP aims to become a Low Carbon Footprint organization and aims to reduce its greenhouse gas emissions intensity by at least 25% by 2030, compared to the 2012 base year. As of the end of Q1 2020, the Company reduced greenhouse gas emissions intensity by 12% through continuously project implementation including flare gases recovering and utilization, energy efficiency and reducing methane leakage from production processes. In Q1, the Company launched a pilot project on wind & solar hybrid renewable energy system at the Arthit project's production platform.

- **Circular Model for E&P Strategy:** PTTEP's work processes were redesigned and resources were reused and recycled. The target is to reuse at least 50% of main structures and equipment which are retained at appropriate, safe, and efficient conditions by 2030. The Company conducted the study on the use of rocks and soils generated from our drilling activities (drill cuttings) as alternative material for road construction and maintenance. In addition, PTTEP has set the long-term target for zero waste to landfill by 2030. In Q1, our hazardous waste to landfill is reported as zero.
- **Ocean for Life Strategy:** PTTEP, whose operations are mostly offshore, aims to be a leader in conserving and restoring natural resources and marine ecosystems to support economic growth and community quality of life. The company has set the target to enrich marine biodiversity and improve local economy for communities, dependent on marine resources, compared to the 2020 base year. The highlight projects are decommissioning for new lives under the sea by transforming petroleum production jackets into artificial reefs or the Rig to Reef project, Sea Turtle Conservation Project to raise survival rates and Crab Hatchery Learning Center to pass on knowledge and sustainably raising fishermen's income. Additionally, PTTEP has collaborated with the Department of Marine Science, Kasetsart University to conduct the Baseline Study of Microplastics in the Gulf of Thailand's Offshore Project to help both government and private sectors in formulating measures against ocean waste. In Q1, a test of Microplastic sampling tool has been conducted by researchers in preparation for the 1st sampling of Microplastics in the Gulf of Thailand.

Furthermore, PTTEP has supported Research and Development (R&D) and apply the technology for green practices such as Technology development for subsea pipeline decommissioning which follows international standards and will not affect the environment, Technology development for Greenhouse Gas (GHG) reduction by converting Carbon dioxide to high valued products and Carbon nanotube production from flare gas. These projects are currently under development and field trials.

In Q1 2020, PTTEP received the Global CSR award a Platinum Winner, honoring the H.T.M.S. Underwater Learning Center Project at the Energy and Environment Foundation Global CSR Awards 2020, which held in New Delhi, India.

Future Business Outlook

Oil Price Outlook

Oil market in 2020 is deeply depressed, arguably the most bearish market in 20 years from the unprecedented “double shock”: Demand shock by COVID-19 and Supply shock by Price war between Saudi Arabia and Russia to produce at their maximum capacity. The timing of hardest hit will be in Q2/2020 as the economic slowdown from COVID-19 situation is supposedly at its peak. In April 2020, the magnitude of oversupply is expected to be more than 20 million barrels per day, which will risk making the world running out of oil storage and lead to production shut-in by several oil companies with high cost structures.

While the period of COVID-19 outbreak remains uncertain, it is expected that the situation will recover in 2H/2020 as China has already started to contain the virus and is ramping up its economic activities since mid of February 2020 and US, as well as some European countries started to see the more flattened numbers of daily new patients since early April 2020. Therefore, the demand will recover as global containment measures are gradually relaxed and may even be accelerated by intense fiscal and monetary policies to boost economy. The supply side is expected to be more balanced since OPEC+ has successfully struck a historic deal on April 12, 2020 to cut production by 9.7 million barrels per day during May to June 2020, then switch to 7.6 million barrels per day during July to December 2020, and 5.4 million barrels per day during January 2021 to April 2022, where other G20 Countries are also expected to cut their production by additional 5 million barrels per day by market driven mechanism. Moreover, the supply growth is expected to significantly slow down as several oil producers have started cutting their capital spending and postpone investments due to oil price collapse.

Therefore, the oil prices are expected to be bottomed out in Q2/2020, and rebound in 2H/2020 with yearly average price around \$35-\$40 per barrel.

LNG Market

The oversupply situation of Global LNG market is expected to prolong towards 2020 with total production capacity of existing and upcoming LNG projects growing by 27 MTPA (approximately 7%) from 2019. While LNG demand in the power generation and industrial sectors decreased significantly from the spreading of COVID-19. This pandemic causes many cities across the globe to lockdown, resulting in global economy slowdown especially in China which is the world's second largest LNG importer. As mentioned above, LNG price is expected to remain under pressure at low level. The average Asian Spot LNG price is expected to be in the range between 3.0-3.5 USD/MMBTU. However, there will be some bullish factors e.g. supply disruption from existing LNG projects coupled with the lack of FIDs over 2016-2017 which will result in significantly decreased LNG supply growth during 2022 – 2024. Nonetheless, the market could start to rebalance in 2024.

Thai Economy and Foreign Exchange Outlook

The Bank of Thailand expects that Thai economy in 2020 will continue to slow down, due to unanticipated severity of COVID-19 outbreak in many countries, affecting the level of economic activity, particularly in the tourism sector and related industries such as hotels, restaurants, airlines and other transportation businesses. Public spending is also likely to further contract from the delayed enactment of the 2020 government budget regulations. However, private consumption continues to expand from increase in consumer goods purchases and current account surplus, despite lower import prices.

THB is expected to further depreciate against USD, in the range of 32 to 33 THB/USD, amid COVID-19 concerns and oil price volatility situation, which bear negative impact on the Thai and global economy. In the near term, foreign tourist arrivals will sharply decline due to enforced travel restrictions across the world in an effort to contain COVID-19. Furthermore, the THB is under pressure from capital outflows of bond and stock markets into safer assets, including cash outflows for dividend payments by foreign companies in Thailand for the upcoming quarter. Given the current situation, fiscal and government relief measures are the key mechanisms to alleviate negative economic impact and maintain financial market stability. The Thai economy will likely recover in 2021 and the THB will experience lower levels of volatility given the COVID-19 outbreak is contained.

PTTEP has adopted the natural hedge method to manage FX risk by matching USD and USD-linked sales revenues from petroleum products with major USD expenses. Remaining FX risk exposures from non-USD revenues and expenses are managed by utilizing financial hedging instruments such as forwards and cross currency swaps. In addition, FX impact on income tax from the difference of tax filing currency and accounting functional currency, is reduced due to the change in PTTEP's tax filing currency to USD. Moreover, interest rate volatility does not materially impact the Company's financial performance as 79% of total interest-bearing debt is fixed rate.

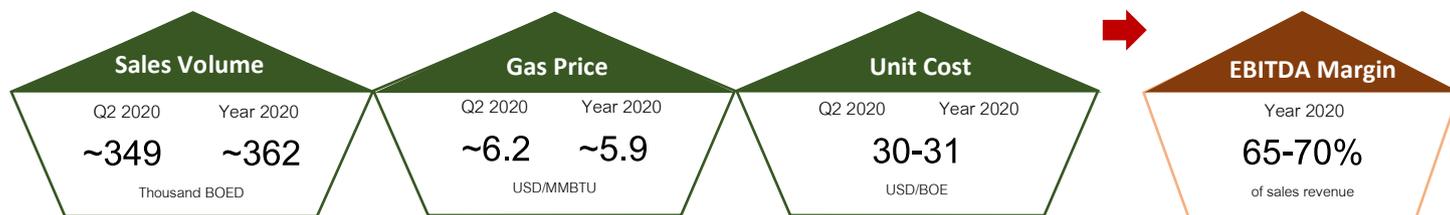
Other important factors that affect the Company's operations

IMO 2020 Regulations. 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 6-24 months. In the meantime, PTTEP has started to hedge against such volatility of HSFO. In addition, from 2022 onwards, PTTEP expects material decrease of the impacts as the gas selling price of Bongkot and Erawan under the new production sharing contracts are linked to Dubai crude price, rather than HSFO. In Q1/2020, HSFO price was less volatile, compared to other oil price indexes due to less demand fluctuation.

Enactment of the Revenue Code Amendment Act (No. 50) B.E. 2562 and the Petroleum Income Tax Act Amendment (No. 9) B.E. 2562 in April 2019, which allow income tax filing to be done in the Company's functional currency other than Thai Baht. This will subsequently reduce the impact of foreign exchange volatility on financial statements. In Q2/2019, PTTEP obtained approval to change the currency for tax filing under Petroleum Income Tax and had recognized the effect. However, for other companies in PTTEP's Group, tax filings continue to be in Thai Baht; as a result, the impact of foreign exchange volatility on financial statements remain but in a reduced magnitude.

PTTEP's performance outlook for 2020

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



Note: 1. The sales volume includes the sales volume from ADNOC Gas Processing (AGP) which was part of the acquisition of Partex completed in November 2019.

2. The assumption is based on average Dubai price in 2020 of 37 USD/BBL

Sales volume:

PTTEP expects the average sales volume for the Q2/2020 and for the full-year of 2020 to be approximately 349,000 and 362,000 barrels of oil equivalent per day respectively, decreasing by approximately 7 percent from the target sales volume of the year 2020 due to the situation of the Covid-19 pandemic and oil price crisis

Sales price:

- PTTEP's liquid prices will fluctuate according to global crude prices.
- PTTEP's gas price formulas are partially linked to oil prices with reference to average historical prices ranging from the past 6 to 24 months. The average gas price for Q2/2020 and the full-year of 2020 are estimated at approximately 6.2 and 5.9 USD/MMBTU respectively, reflecting the adjustment of selling price in accordance to global crude prices.
- Outstanding volume of oil price hedging at the end of the first quarter of 2020 is approximately 10 million barrels; the Company, however, consistently monitors crude oil price movements and has the flexibility to adjust its hedging plan as appropriate.

Unit Cost:

For Q2/2019 and the full-year of 2020, PTTEP expects to be able to maintain unit cost at around 30-31 USD/BOE, in line with planned investments according to current situation.