Executive Summary

In Q3/2020, economy displayed signs of recovery in many industries. Global crude oil prices have recovered from their lowest point in the previous quarter reflecting oil production cut by OPEC+ and crude demand recovery after the easing of lockdown restriction in many countries despite concerns on COVID-19 pandemic. Similarly, the Asian Spot LNG price has also improved and this has caused the overall volume of 2020 Spot LNG imports to Thailand to be lower than previously expected. As a result, the gas demand from Gulf of Thailand in Q3/2020 was higher than the previous quarter, especially from our main projects namely Bongkot and Contract 4 projects.

In terms of our operations under the "Execute & Expand" strategy, along with the studying on field development plan, we have started drilling of an appraisal well at Sarawak SK410B Project to further evaluate upside potential after the successful exploration in mid-2019, expecting results within this year. We also have good progress in the G1/61 Project (Erawan field) and G2/61 Project (Bongkot field) operations transition. We have commenced the preparation phase which includes planning for exploration drilling, construction of production platform and gas pipelines in order to ensure gas production according to the contracts. However, for the Erawan field, we are still negotiating with the current concessionaire on the site access for wellhead platforms and sealines installation which we aim to reach an agreement at the earliest possible. For our new business, we have expanded AI & Robotics Venture (ARV) business by establishing two joint venture companies namely ATI Technologies Co., Ltd. for Smart Farming related business and Zeaquest Co., Ltd. for subsea inspection, repair and maintenance (Subsea IRM) business. This expansion is aligned with our strategy to increase our investment into new businesses. The Smart Farming focuses on providing integrated agricultural platform services by using technologies for in-depth data analytics in order to enhance the potential of the agricultural sector in Thailand. This is in collaboration with Thaicom Public Company Limited in developing unmanned aerial vehicle (UAV) or drone solutions for agriculture. Meanwhile, the Subsea IRM focuses on the development of AI and robotic technologies such as robots that can be used for inspection and maintenance of subsea petroleum pipelines. This is in collaboration with Mermaid Maritime Public Company Limited in providing commercial maritime engineering services to oil & gas and marine renewable energy companies operating in Asia and globally.

PTTEP's performance in Q3/2020 reflected by the recovery in global crude oil prices. Average selling price increased by 11% from 34.97 USD/barrel of oil equivalent (BOE) in Q2/2020 to 38.77 USD/barrel of oil equivalent (BOE). Sales volume increased by 5% compared to the previous quarter to 344,314 barrel of oil equivalent per day (BOED) mainly due to buyer's higher nomination for projects in the Gulf of Thailand. On the cost side, PTTEP was able to maintain its competitive unit cost at 30 USD/barrel of oil equivalent (BOE). Therefore, in Q3/2020, PTTEP reported net income at 230 MMUSD, 72% increase comparing to Q2/2020 and maintained EBITDA margin at 71%. As of Q3/2020, PTTEP's financial structure remains strong with cash and short-term investments of 3,491 MMUSD and debt to equity ratio at 0.33, ready to withstand the oil price fluctuation and to accommodate business opportunities to create sustainable growth for the company.

Table of key financial results

(Unit: Million US Dollar)	Q2 2020	Q3 2020	Q3 2019	% Inc. (Dec.) QoQ	% Inc. (Dec.) YoY	9M 2020	9M 2019	% Inc. (Dec.) YTD
Total Revenue	1,095	1,305	1,593	19	(18)	4,082	4,572	(11)
Sales Revenue	1,041	1,228	1,494	18	(18)	3,751	4,291	(13)
EBITDA	711	890	1,054	25	(16)	2,682	3,166	(15)
Profit(loss) for the period	134	230	358	72	(36)	639	1,185	(46)
Basic earnings(loss) per share (Unit: US Dollar)	0.03	0.06	0.09	100	(33)	0.16	0.29	(45)
Profit(loss) from normal operation	128	195	303	52	(36)	613	1,066	(42)
Profit(loss) from non-recurring items	6	35	55	>100	(36)	26	119	(78)

Economic Overview in the third quarter of 2020

Crude Oil Price

Dubai crude oil prices in Q3/2020 averaged at 42.9 USD per barrel, increased from Q2/2020 average price at 30.7 USD per barrel. This is driven by the OPEC+ that extended the production cut of 9.7 million barrels per day (BPD) until July. Although the actual compliance to this cut was 97% in July, OPEC+ has continued the production cut measure by 7.7 million BPD in August until the end of 2020, and demanding laggard members (i.e. Iraq and Nigeria) to continue compensating their cuts by 2.31 million BPD in August and September. In August, the OPEC+ compliance level was 103%. However, Iraq was still unable to reach the compliance level, and despite its improvement in August, was asked to extend its compensation cut till the end of 2020.

Global crude demand has recovered from its lowest level in April 2020. This was mainly from the improvement of global road traffic that has increased to 95% of pre-COVID level. However, crude oil prices in this quarter has moved in the level of 40 USD per barrel, reflecting the bearish factors from the lowering of crude prices by Saudi Arabia and United Arab Emirates, and the resumption of crude oil production announcement by Libya in late-September that will increase the amount of supply in the market and needed to be monitored closely.

Liquefied Natural Gas (LNG)

For LNG Market in Q3/2020, the average Asian Spot LNG price increased from previous quarter to 3.63 USD per MMBTU and in late-September, the price increased to more than 5 USD per MMBTU and this was mainly driven by market concern over the unplanned shut-down of Gorgon LNG in Australia after discovering cracks in critical equipment and the shut-down of Cameron LNG in the United States (U.S.) from Hurricane Laura that hit the Gulf of Mexico in August. However, LNG price was put under pressure by high LNG inventory of North East Asian buyers (such as China, South Korea and Japan), and the uncertainty on second wave of COVID-19 outbreak. Current global LNG capacity is 377 million ton per annum (MTPA) (Source: FGE as of 22 Sep), while LNG's demand remained around 360 MTPA.

Thailand's Energy Demand

Thailand's energy demand for January – August 2020 was approximately 2 million BOED, a significant decrease of 9% compared to the same period last year (Source: EPPO, The Ministry of Energy). The decrease can be attributed primarily to the slowing economy caused by the COVID-19 pandemic which resulted in a lockdown of the country that impacted almost every segment, especially the tourism industry and jet fuel usage. Overall, energy usage decreased for every segment except for hydro and imported electricity.

Exchange Rates (Thai Baht against US Dollar)

In Q3/2020, THB against USD fluctuated within the range of 31 – 31.80 THB/USD in line with other regional currencies and closed at 31.66 THB/USD, depreciated from Q2/2020 closing at 30.89 THB/USD, attributed to domestic concerns. The recent COVID-19 resurgence (2nd wave) outside Thailand and rising local political uncertainty could impact Thailand's economic recovery. In addition, profit repatriation and dividend payment of foreign companies also supported USD upside. However, the uncontained COVID situation in US, its weak economic data, and the Federal Reserve's easing monetary policy guidance weighted down on USD.

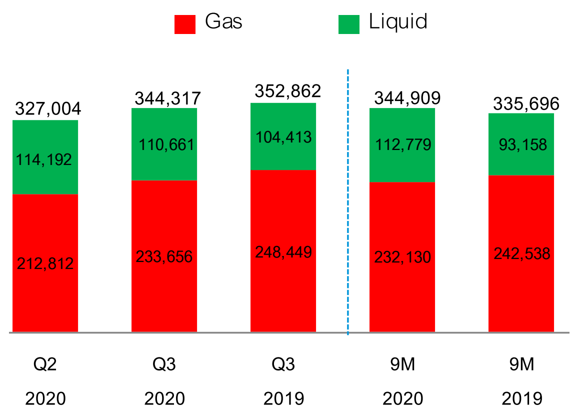
In terms of the impacts on income taxes from THB fluctuations, due to the difference in tax filing currency (THB) and financial reporting functional currency (USD) according to accounting standards, the amendments on relevant tax laws has been made by Revenue Department to support tax filing in the company's functional currency in April 2019 with subsequent related legislations announced in June 2020, has allowed PTTEP Group to be able to file income tax in US dollar currency, which is the Company's financial reporting functional currency (USD), for the accounting periods starting from 2020 onwards. Starting from Q4/2020, there will be no impact to company's future financial performance from income tax due to THB fluctuation.

Financial Performance

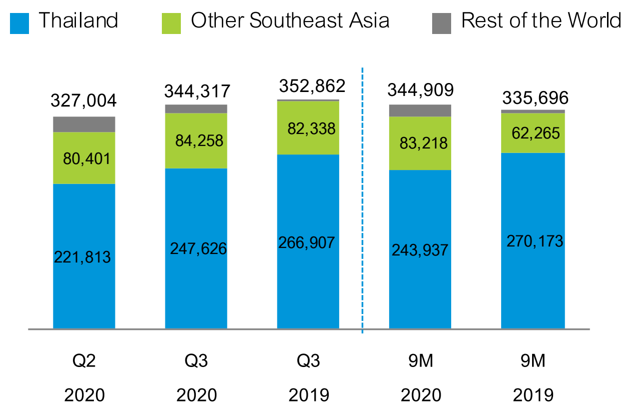
Average Sales Volume and Selling Price

Unit: Barrels of Oil Equivalent per Day

By Product Type



By Geographical Region



Average selling price and Dubai crude oil price (Unit : US Dollar)	Q2 2020	Q3 2020	Q3 2019	% Inc. (Dec.) QoQ	% Inc. (Dec.) YoY	9M 2020	9M 2019	% Inc. (Dec.) YTD
Average selling price (/BOE)	34.97	38.77	46.03	11	(16)	39.69	46.83	(15)
Liquid price (/BOE)	28.92	41.82	58.77	45	(29)	41.14	60.82	(32)
Gas price (/MMBTU)	6.37	6.22	6.78	(2)	(8)	6.50	6.91	(6)
Average Dubai crude oil price	30.72	42.88	61.26	40	(30)	41.45	64.02	(35)

For the Third quarter of 2020 compared with the Second quarter of 2020

In Q3/2020, the average sales volume of PTTEP and its subsidiaries (the "Group") increased to 344,317 barrels of oil equivalent per day (BOED) when compared with Q2/2020 of 327,004 BOED. The increase was primarily from Bongkot and Contract 4 Projects due to higher gas nomination from buyer while there was a decrease in crude oil sales volume of Partex group. The average selling price in Q3/2020 increased to 38.77 USD/BOE (in Q2/2020: 34.97 USD/BOE).

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

When compared the average sales volume for Q3/2020 to Q3/2019 of 352,862 BOED, the average sales volume decreased primarily from Contract 4 project and MTJDA project due to lower gas nomination from buyers, offset with an increase in sales volume of Partex group from the business acquisition in Q4/2019. The average selling price decreased to 38.77 USD/BOE (Q3/2019: 46.03 USD/BOE).

For the nine-month period ended September 2020 compared with 2019

The average sales volume for the nine-month period ended September 2020, increased to 344,909 BOED when compared with the same period of 2019 (for the nine-month period ended September 2019 of 335,696 BOED). The increase was primarily due to Malaysia project and Partex group from the business acquisition in the second half of 2019, offset with Contract 4 project which had a decrease in sales volume due to lower gas nomination from buyer. The average selling price decreased to 39.69 USD/BOE (for the nine-month period ended September 2019: 46.83 USD/BOE)

Overall Operating Results

For the Third quarter of 2020 compared with the Second quarter of 2020

For Q3/2020, the Group had a net profit of 230 MMUSD, an increase of 96 MMUSD or 72% from a net profit in Q2/2020 of 134 MMUSD. The increase was due to an increase in total revenues of 210 MMUSD which was primarily from an increase in sales revenue of 187 MMUSD, as well as, a recognition of gain on financial instruments of 27 MMUSD in Q3/2020 (Q2/2020: recognized loss of 78 MMUSD). However, the total expenses increased 114 MMUSD mainly due to an increase in income tax expenses of 208 MMUSD while there was no impairment loss on asset recognized in Q3/2020. (Q2/2020: recognized loss of 47 MMUSD mainly from Mariana Oil Sands project) The net profit for Q3/2020 of 230 MMUSD can be separated as following.

The profit from normal operation in Q3/2020 was 195 MMUSD, an increase of 67 MMUSD when compared with a profit in Q2/2020 of 128 MMUSD. The reason was primarily from an increase in sales revenue of 187 MMUSD due to increases in both an average selling price and sales volume. However, there was an increase in total expenses mainly from an increase in income tax expenses of 84 MMUSD from higher sales revenue, including an increase in depreciation, depletion and amortization expenses of 27 MMUSD in accordance with an increase in average sales volume.

The profit from non-recurring items in Q3/2020 was 35 MMUSD, an increase of 29 MMUSD when compared with a profit in Q2/2020 of 6 MMUSD. The reason was primarily due to a recognition of gain on financial instruments of 27 MMUSD in Q3/2020 (Q2/2020: recognized loss of 78 MMUSD), mainly from foreign exchange forward contracts and oil price hedging instruments, as well as, no recognition of impairment loss on asset in Q3/2020 (Q2/2020: recognized loss of 47 MMUSD mainly from Mariana Oil Sands project). However, there was an increase in income tax expenses relating to foreign exchange rate of 124 MMUSD when compared to Q2/2020 mainly from lower reversal amount of income taxes expenses relating to changes in foreign exchange rate which were recognized in the prior periods. Such reversal was due to the change of corporate income tax and petroleum income tax calculation currency.

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

When compared with the same period last year which reported a net profit of 358 MMUSD, the Group had a decrease in net profit of 128 MMUSD or 36%. The decrease was due to a decrease in total revenues of 288 MMUSD which was primarily due to a decrease in sales revenue of 266 MMUSD. However, the total expenses decreased 160 MMUSD, mainly from a decrease in income tax expenses of 54 MMUSD, as well as, decreases in exploration expenses and petroleum royalties of 51 MMUSD and 31 MMUSD, respectively. The net profit for Q3/2020 of 230 MMUSD can be separated as following.

The profit from normal operation in Q3/2020 was 195 MMUSD, a decrease of 108 MMUSD when compared with a profit in Q3/2019 of 303 MMUSD. The reason was primarily from a decrease in sales revenue of 266 MMUSD due to decreases in an average selling price and sales volume. However, there was a decrease in total expenses mainly from a decrease in income tax expenses of 69 MMUSD from lower sales revenue, as well as, a decrease in exploration expenses of 51 MMUSD, mainly due to lower exploration wells written-off, and a decrease in petroleum royalties of 31 MMUSD in accordance with a decrease in domestic sales revenue.

The profit from non-recurring items of Q3/2020 was 35 MMUSD, a decrease of 20 MMUSD when compared with a profit in Q3/2019 of 55 MMUSD. The reason was primarily due to an increase in income tax expenses relating to foreign exchange rate of 15 MMUSD mainly from the reversal of income taxes benefits which were recognized in the prior fiscal year in Q3/2020 due to the change of petroleum income tax calculation currency, as well as, there was a decrease in gain on exchange rate of 10 MMUSD due to the depreciation of Thai Baht against USD at 0.77 THB/USD in Q3/2020, while there was the appreciation of Thai Baht against USD at 0.15 THB/USD in Q3/2019.

For the nine-month period ended September 2020 compared with 2019

For the nine-month period ended September 2020, the Group had a net profit of 639 MMUSD, a decrease of 546 MMUSD or 46% when compared with the nine-month period ended September 2019 of 1,185 MMUSD. The decrease was due to a decrease in total revenues of 490 MMUSD which was primarily due to a decrease in sales revenue of 540 MMUSD, as well as, a decrease in gain on exchange rate of 72 MMUSD, offset with an increase in gain on financial instruments of 171 MMUSD (for the nine-month period ended September 2019: recognized loss of 68 MMUSD). In addition, total expenses increased 56 MMUSD, mainly from an increase in operating expenses and depreciation, depletion and amortization expenses of 91 MMUSD and 90 MMUSD respectively. The net profit for the nine-month period ended September 2020 of 639 MMUSD can be separated as following.

The profit from normal operation for the nine-month period ended September 2020 was 613 MMUSD, a decrease of 453 MMUSD when compared with a profit for the nine-month period ended September 2019 of 1,066 MMUSD. The reason was primarily from a decrease in sales revenue of 540 MMUSD due to a decrease in an average selling price despite of an increase in average sales volume. In addition, there were increases in operating expenses and depreciation, depletion and amortization expenses of 91 MMUSD and 90 MMUSD, respectively, such increases were in accordance with an increase in average sales volume from Malaysia Project and Partex group which were acquired in the second half of 2019.

The profit from non-recurring items for the nine-month period ended September 2020 was 26 MMUSD, a decrease of 93 MMUSD when compared with a profit for the nine-month period ended September 2019 of 119 MMUSD. The reason was primarily due to an increase in income tax expenses relating to foreign exchange rate of 213 MMUSD mainly from higher reversal amount of income tax benefits which were recognized in the prior fiscal year when compared to the nine-month period ended September 2019, such reversal was in accordance with the change in petroleum and corporate income tax calculation currency. However, the Group recognized lower income tax expenses relating to foreign exchange rate (tax saving) for the nine-month period ended September 2019 due to the appreciation of Thai Baht against USD at 1.86 THB/USD. Besides, for the nine-month period ended September 2020 the Group recognized lower gain on exchange rate of 72 MMUSD due to the depreciation of Thai Baht against USD at 1.50 THB/USD, as well as, recognized an impairment loss on assets amounting to 47 MMUSD mainly from Mariana Oil Sands project, offset with gain on financial instruments of 171 MMUSD, mainly from oil price hedging instruments and foreign exchange forward contracts (for the nine-month period ended 30 September 2019: recognized loss of 68 MMUSD).

Operating Results by Segments

Net Profit (loss) (Unit: Million US Dollar)	Q2 2020	Q3 2020	Q3 2019	% Inc. (Dec.) QoQ	% Inc. (Dec.) YoY	9M 2020	9M 2019	% Inc. (Dec.) YTD
Exploration and production	142	254	364	79	(30)	653	1,176	(44)
Southeast Asia	208	260	374	25	(30)	737	1,185	(38)
- Thailand	158	192	298	22	(36)	595	892	(33)
- Other Southeast Asia	50	68	76	36	(11)	142	293	(52)
Australia	(10)	(1)	(7)	90	86	(12)	(13)	8
America	(46)	(2)	(3)	96	33	(51)	(9)	>(100)
Africa	(1)	(3)	4	>(100)	>(100)	(9)	22	>(100)
Others	(9)	(0.49)	(4)	95	88	(12)	(9)	(33)
Head office and others	(8)	(24)	(6)	>(100)	>(100)	(14)	9	>(100)
Total	134	230	358	72	(36)	639	1,185	(46)

For the Third quarter of 2020 compared with the Second quarter of 2020

For Q3/2020, the Group reported a net profit of 230 MMUSD, an increase of 96 MMUSD or 72% when compared with a net profit of 134 MMUSD in Q2/2020, primarily due to an increase of Exploration and Production segment in Southeast Asia (Thailand increased 34 MMUSD and other Southeast Asia increased 18 MMUSD), and increase in America of 44 MMUSD.

Exploration and Production segment

- Southeast Asia

  - Thailand

For Q3/2020, Thailand reported a net profit of 192 MMUSD, an increase of 34 MMUSD or 22% when compared with a net profit of 158 MMUSD in Q2/2020. The increases were primarily from an increase in sales revenue from increases in both average selling price and sales volume, while there was an increase in income tax expense in accordance with an increase in sales revenue and the reversal of tax benefits which were recognized in the prior fiscal year in Q3/2020 from the change in petroleum income tax calculation currency. Besides, depreciation, depletion and amortization expenses increased in accordance with the increase in sales volume, as well as, the petroleum royalties increased in accordance with the increases in sales revenue.

  - Other Southeast Asia

For Q3/2020, Other Southeast Asia reported a net profit of 68 MMUSD, an increase of 18 MMUSD or 36% from a net profit of 50 MMUSD in Q2/2020, primarily due to an increase in sales revenue from increases in both average selling price and sales volume, as well as, a decrease in exploration expenses mainly from the decrease in exploration wells written-off. However, depreciation, depletion and amortization expenses increased in accordance with the increase in sales volume.

- America

For Q3/2020, America reported a net loss of 2 MMUSD, a decrease of 44 MMUSD loss or 96% when compared with a net loss of 46 MMUSD in Q2/2020, mainly due to the recognition of impairment loss on assets from Mariana Oil Sands project in Q2/2020.

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

For Q3/2020, the Group reported a net profit of 230 MMUSD, a decrease of 128 MMUSD or 36% when compared with a net profit of 358 MMUSD in Q3/2019, primarily due to a decrease of Exploration and Production segment in Southeast Asia (mainly decrease from Thailand of 106 MMUSD), and decrease in Head Office and Others segment of 18 MMUSD.

Exploration and Production segment

- Southeast Asia

  - Thailand

For Q3/2020, Thailand reported a net profit of 192 MMUSD, a decrease of 106 MMUSD or 36% when compared with a net profit of 298 MMUSD in Q3/2019. The decreases were primarily from a decrease in sales revenue due to decreases in both average selling price and sales volume, while there were decreases in income tax expense and the petroleum royalties in accordance with a decrease in sales revenue. Besides, depreciation, depletion and amortization expenses decreased in accordance with the decreases in average sales volume.

Head Office and Others segment

For Q3/2020, Head Office and Others segment reported a net loss of 24 MMUSD, an increase of 18 MMUSD loss or more than 100% from a net loss of 6 MMUSD in Q3/2019, primarily due to an increase in income tax expense in accordance with the increase in profit before income tax, offset with a decrease in administrative expenses.

For the nine-month period ended September 2020 compared with 2019

For the nine-month period ended September 2020, the Group reported a net profit of 639 MMUSD, a decrease of 546 MMUSD or 46% when compared with a net profit of 1,185 MMUSD for the nine-month period ended September 2019, primarily due to a decrease of Exploration and Production segment in Southeast Asia (Thailand decreased 297 MMUSD and other Southeast Asia decreased 151 MMUSD), decrease in America of 42 MMUSD and decrease in Africa of 31 MMUSD.

Exploration and Production segment

- Southeast Asia

  - Thailand

For the nine-month period ended September 2020, Thailand reported a net profit of 595 MMUSD, a decrease of 297 MMUSD or 33% when compared with a net profit of 892 MMUSD for the nine-month period ended September 2019. The decreases were primarily from a decrease in sales revenue from decreases in both average selling price and sales volume, while there was a decrease in income tax expense in accordance with a decrease in sales revenue. In addition, depreciation, depletion and amortization expenses decreased, as well as, the petroleum royalties decreased in accordance with the decreases in average sales volume and sales revenue respectively.

  - Other Southeast Asia

For the nine-month period ended September 2020, Other Southeast Asia reported a net profit of 142 MMUSD, a decrease of 151 MMUSD or 52% when compared with a net profit of 293 MMUSD for the nine-month period ended September 2019, primarily due to an increase in depreciation, depletion and amortization expenses in accordance with an increase in sales volume from Malaysia Project which was acquired in the second half of 2019. In addition, sales revenue decreased due to the decrease of average sales price despite of an increase in average sales volume. However, exploration expense decreased, mainly due to a decrease in exploration well written-off.

- America

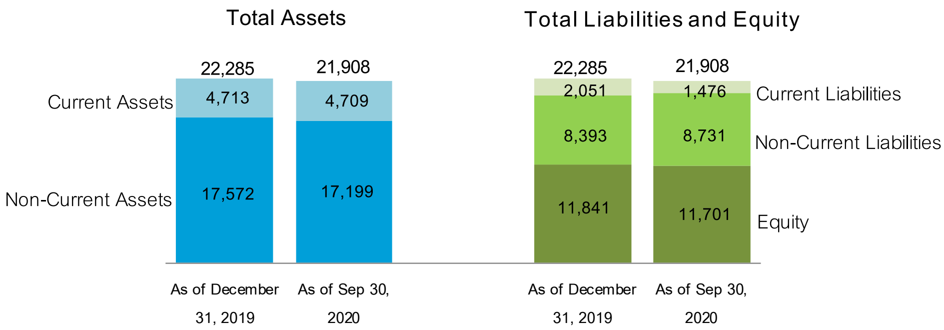
For the nine-month period ended September 2020, America reported a net loss of 51 MMUSD, an increase of 42 MMUSD loss or more than 100% when compared with a net loss of 9 MMUSD for the nine-month period ended September 2019, mainly due to the recognition of impairment loss on assets from Mariana Oil Sands project.

- Africa

For the nine-month period ended September 2020, Africa reported a net loss of 9 MMUSD, a decrease of 31 MMUSD or more than 100% when compared with a net profit of 22 MMUSD for the nine-month period ended September 2019, primarily due to a decrease in sales revenue from decreases in both average selling price and sales volume.

Financial Position

Unit: Million US Dollar



Assets

As at September 30, 2020, the Group had total assets amount of 21,908 MMUSD, a decrease of 377 MMUSD from total assets as at December 31, 2019 of 22,285 MMUSD, primarily due to;

1) Current assets, which were primarily comprised of cash and cash equivalents, short-term investments, Trade and other receivable, and inventories, decreased 4 MMUSD mainly from decreases in Trade and other receivable of 311 MMUSD in accordance with a decrease in sales revenue, offset with increases in cash and cash equivalents and short-term investments, mainly from cash flow from operation.
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, goodwill and deferred tax assets, decreased 373 MMUSD mainly due to a depreciation, depletion and amortization expenses, although there was an increase in investments for exploration and production assets.

Liabilities

As at September 30, 2020, the Group had total liabilities of 10,207 MMUSD, a decrease of 237 MMUSD from total liabilities as at December 31, 2019 of 10,444 MMUSD, primarily due to;

1) Current liabilities, which were primarily comprised of trade and other payables, and income tax payable, decreased 575 MMUSD mainly due to a decrease in income tax payable of 477 MMUSD from the payment of income tax for the year 2019, and decreases in trade and other payables of 139 MMUSD.
2) Non-current liabilities, which were primarily comprised of provision for decommissioning costs, debentures and deferred tax liabilities, increased 338 MMUSD mainly due to an increase in lease liabilities of 239 MMUSD and an increase in debentures amount of 80 MMUSD primarily due to debentures issuance.

Equity

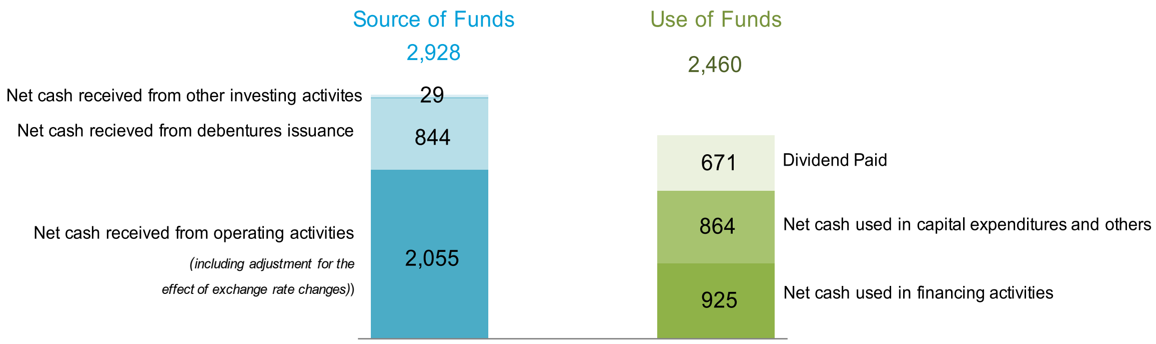
As at September 30, 2020, the Group had equity of 11,701 MMUSD, a decrease of 140 MMUSD from equity as at December 31, 2019 of 11,841 MMUSD, primarily due to the dividend payment for the second half of 2019 and for the first half of 2020 in the nine-month period ended September 2020, as well as the repurchase of the remaining of USD subordinated perpetual capital debentures offset with the profit of the nine-month period ended September 2020.

Capital Structure

As of September 30, 2020, the capital structure consisted of 11,701 MMUSD in shareholders' equity and 10,207 MMUSD in total liabilities. The Group total liabilities comprised of 3,874 MMUSD worth of interest-bearing debts with a weighted average cost of debt of 3.58% and having average maturity of 14.34 years, in which all interest-bearing debts were denominated in USD and the fixed interest rates to the floating interest rates ratio is 82:18.

Cash Flows

Unit: Million US Dollar



For nine months in 2020

As at September 30, 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 3,491 MMUSD, an increase of 468 MMUSD from cash and cash equivalents, including short-term investments as at December 31, 2019 of 3,023 MMUSD.

Sources of funds amount of 2,928 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 expense and **Net cash received from financing activities** derived from the issuance of the USD denominated unsecured and unsubordinated debentures.

Uses of funds in the amount of 2,460 MMUSD primarily came from the **Net cash used in financing activities** as a result of the repurchase of the USD denominated unsecured and unsubordinated debentures, as well as the dividend payment for the second half of 2019 and for the first half of 2020. The **Net cash used in capital expenditures** were mainly from exploration and production assets, primarily for investing in S1 and Mozambique Area 1 projects.

Key Financial Ratios

	Q2 2020	Q3 2020	Q3 2019	9M 2020	9M 2019
Profitability Ratio (%)					
EBITDA to revenue from sales	66.72	70.99	69.15	70.14	72.24
Return on equity	9.76	8.64	12.26	8.64	12.26
Net profit margin	18.28	17.01	23.64	17.01	23.64
Leverage Ratio (Times)					
Debt to equity	0.33	0.33	0.18	0.33	0.18
Debt to EBITDA	0.73	0.78	0.49	0.78	0.49

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

As of Q3/2020, PTTEP has operations in over 40 projects both domestic and international in 15 countries. The followings 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 Malaya (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 247,626 BOED, accounting for 72% of total sales volume. Average sales volume from other countries in this region is 84,258 BOED, which accounted for 24% 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** was able to maintain production volumes as planned. The **Bongkot Project, Arthit Project** and **Contract 4 Project was able to** deliver production volumes as nominated from the buyer. For **G1/61 Project** (Erawan field) and **G2/61 Project** (Bongkot field), work have commenced on the preparation phase which includes planning for exploration drilling, construction of wellhead platform and interfield 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 especially for Erawan field site access agreement so that wellhead platforms and pipelines can be installed as planned. According to the news, Chevron TH has continued arbitration proceedings to resolve dispute over who should be responsible for decommissioning costs of the Erawan gas field. The dispute is between the Department of Mineral Fuels (DMF) and Chevron TH and not related to PTTEP site access negotiation with Chevron TH as mentioned above.

- Projects in Myanmar

The key ***producing project*** in Myanmar is the **Zawtika Project** located in the Gulf of Moattama, which can maintained production volumes as planned. Projects in ***exploration phase*** are highlighted and detailed as follows. The **Myanmar M3 Project**, the project is waiting an approval from the Government Approval on Field Development Plan, which was resubmitted in Q3/2020. The approval is expected after the Notice to Proceed of the Gas to Power Project has been approved. The **Myanmar MD-7 Project**, has completed the drilling of an exploration well in March 2020 and found no commercial reserves. Currently, the project is in preparation for relinquishment.

- 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 SK311 Project** are oil and gas producing fields located in the shallow water of offshore Sarawak. In this quarter, the production of both projects had been lower than planned, due to lower energy demand from the COVID-19 outbreak. The Malaysian government announced the Malaysian Recovery Movement Control Order to control the spread of COVID-19, consequently delaying some maintenance work. Some impact on production was observed.

Development Projects in Malaysia are as follows. **Block H Project**, located in the deep-water of offshore Sabah with capacity of 270 MMSCFD. During the final stage of commissioning prior to the original first gas target in late Q3 2020, there was a failure of a subsea component. No hydrocarbon was released to the environment during this event. The remediation plan is well in progress, with support from PETRONAS. As a result, the revised first gas delivery is expected at the earliest opportunity in 2021.

Exploration Projects in Malaysia are highlighted as follows. The **Sarawak SK410B Project** is currently drilling an appraisal well to confirm petroleum potential upside resources of the Lang Lebah field along with studying on the field development plan. The petroleum potential results are expected within this year and the Final Investment Decision (FID) is expected in 2022. The **Sarawak SK417 Project**, the **Sarawak SK438 Project**, and the **Sarawak SK405B** are currently preparing for exploration and appraisal wells to be drilled in the 2020/2021 exploration campaign. The **PM415 Project** is currently drilling 2 exploration wells to explore and evaluate petroleum potential in the area. Other Malaysia Exploration projects are in the process of studying and 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 has completed drilling an appraisal well in Q2/2020 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 have production capacity approximately 490 MMSCFD.

Projects in the Middle East

In this quarter, the average sales volume from projects in the Middle East is approximately 8,340 BOED, accounting for 2% of total sales volume. PTTEP's project highlights 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 oil producing asset in Oman. The **Mukhaizna (Block 53) Project** is a large producing onshore oil field located in southern Oman. In this quarter, both projects continue to curb production per OPEC+ agreement to support price due to weakening energy demand. 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.

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 the drilling of the first exploration well.

Projects in the Americas

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

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 to prepare for drilling of an exploration well in 2021. The **Mexico block 29 (2.4) Project**, located in the Campeche, southern Gulf of Mexico, is currently preparing to evaluate for petroleum potential as well as future development plans for further regulatory approval in Polok and Chinwol field.

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***, 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. Currently, the project had lowered its production volume approximately 15-20% since May 2020, resulting from the agreement of OPEC+. In this quarter, the project had average production of 15,000 – 16,000 barrels per day (BPD) and currently started developing the second phase which production capacity is planned to ramp up to around 38,000-40,000 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 the development on Phase 1 following the conclusion from an approved development plan by the government in Q1/2019. The project is currently under construction and drilling production wells with expected first oil production for the initial phase of around 10,000-13,000 barrels per day (BPD) in the second half of 2021. In the second phase, production capacity is planned to ramp up to around 50,000-60,000 BPD in 2025. In addition, PTTEP has entered into the Asset Sale and Purchase Agreement (ASPA) for the participating interest of 24.5% in the project from CNOOC, the current partner of the project, at the transaction value of CNOOC's proportion of development cost until approval received. The transaction will be completed when receiving confirmation and official announcement by Algerian government. After the completion of the transaction, PTTEP's stake in the project will increase from 24.5% to 49%. The main joint venture partner is SONATRACH, the national state-owned oil company of Algeria, with the participating interest of 51%.

The **Mozambique Area 1 Project**, which is in the ***development phase***, is a large LNG project located in offshore Mozambique. In Q3/2020, the project has resumed the LNG construction at construction site since June 2020 after the epidemic situation of COVID-19 and the LNG site construction progress is still in line with plan. Presently, the project also successfully selected the LNG Ship-owner and is now in the conclusion process of the Time Charter Party Agreement. In addition, the project is in the process of document preparation for 1st drawdown from Project Finance with expected at the end of 2020 to advance the first two-train LNG development for its first commercial cargo by 2024 as planned.

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.

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 this quarter are as follows:

<u>High Performance Organization (HPO)</u> PTTEP is still ready to proceed with 2020 work plans, focusing on EXECUTE and EXPAND strategies. Nevertheless, the company has sharpened our execution plans in order to adapt to the changing situation, enhance the company's competitive advantage and promote sustainable growth. The afore-mentioned plans can be highlighted as follows:

1) **Strengthen PTTEP's core business** by optimizing development and production plan using competitive costs to ensure resiliency in the industry's increasingly volatile environment and to continuously reduce unit cost to be at the top quartile in the industry (at the level of 25 USD/BOE) and average production growth (CAGR) of 5% by 2030. The Company plans to reduce investment spending throughout 2020 and beyond while deferring non-essential activities to optimize all asset's values and synergize development plans according to post-COVID-19 demand forecasts. In addition, the Company will also be implementing new technologies to improve work efficiency and further cost reduction
2) **Grow the E&P portfolio** to maintain the reserves to production ratio of 7 years by seeking new opportunities during this crisis with world-class strategic partners
3) **Drive the LNG value chain** by reshaping the Company's LNG strategy and targeting JV investments in the upstream and liquefaction plants while developing LNG capabilities
4) **Diversify to new businesses** such as the Power business, Renewable energy in solar and wind, scale-up the AI & Robotics Venture (ARV) on 4 core sectors: Subsea, Agricultural, Medical and Drone Inspection and accelerate plan to develop Gas-to-Power in Myanmar. The Company's target is that, within 2030, 20% of total net income will be from these new businesses.
5) **Transform to the New Normal** One of the PTTEP's primary focus is to prepare the Company for a post-COVID-19 world by increasing long-term performance through various Transformation Initiatives. The following initiatives enable the Company to adapt to fluctuating oil prices in any situation:
    - Organizational Transformation: Create a mindset shift for employees by providing a purposeful target, encouraging working as a network instead of a hierarchy, empowering everyone, promoting experimentation, transparency and cooperation in having common goals and being ready for change via workshops and special camps. This new mindset will allow employees to work happily and generate greater benefits for the company.
    - New Normal Transformation: Adopt "New Way of Working" in the way to allow personnel the flexibility and autonomy to organize their work by enabling remote working. Promote new mind-set such as open-mindedness, willingness to try, more frequent communication, efficient team management and constructive feedbacks
    - Digital Transformation: facilitate the New Way of Working by implementing digital and online technology such as developing a Digital HR system that can perform workforce data analytics and utilizing A.I. to help with talent management and succession planning.

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 Q3/2020, the Company maintained a strong liquidity position with cash on hand of approximately USD 3.5 billion. The debt-to-equity ratio is 0.33x 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 3.58%, with no debt service obligation in 2020 and 2021. PTTEP is, therefore, confident that its solid financial position and liquidity will let the Company withstand oil price fluctuation and unfavorable global economic situation.

Moreover, PTTEP has encouraged Research and Development (R&D), technological applications and innovation to increase efficiency and lower unit cost of exploration and production activities. The objectives of R&D include unlocking high CO2 reserve, removing contaminants in condensate, enhancing oil recovery, reducing environmental impact, reducing decommissioning cost and improving operation and maintenance efficiency. In the third quarter of 2020, there are about 38 projects under research and development in which 10 projects are under field trial phase. PTTEP has an environmental management system which is a subset of PTTEP's Safety, Security, Health and Environment Management System (SSHE MS). In the third quarter of 2020, PTTEP had Lost Time Injury Frequency (LTIF) of 0.04 and a Total Recordable Incident Rate (TRIR) of 0.20. 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).

In Q3/2020, PTTEP has been selected as a member of the FTSE4 Good Index Series for the 5th consecutive year from FTSE Russell. This shows that PTTEP has been independently assessed and qualified according to the FTSE4 Good criteria and satisfied the requirements to demonstrate strong Environmental, Social and Governance (ESG).

<u>Governance, Risk Management and Compliance (GRC)</u> 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 of GRC Roadmap in the third quarter are as follows:

- Extended communication on GRC Strategy and promote the knowledge and understanding of GRC to employees in oversea projects through GRC training course (GRC101) to support operation in oversea projects in accordance with GRC Principles and Strategy, including improvement of communication channels utilized digital technologies in PTTEP such as doing GRC Live Broadcast event to all employees to continuously promote GRC Culture during COVID-19 pandemic situation.
- Studied all assurances of every functions (Second Line of Defense) to analyze and set the guideline in order to develop the assurance processes which will be more flexible, concise, agile and effective, as well as, to be able to response promptly to any changes of the organization.

Moreover, in Q3/2020, PTTEP was honored to receive the Award for 2020 Role Model Organization on Human Rights in State Enterprise sector from the Department of Rights and Liberties Protection, Ministry of Justice for the second consecutive year. The recognition is a result of PTTEP's principle in respecting diversity and applying fundamental human right in all operations including having human rights management system and promoting good understanding on human rights for all staffs through training courses. PTTEP also has whistleblowing procedure and system for internal and external stakeholders to access.

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. The strategies of SVC are as follows:

- **Greenhouse Gas Reduction Strategy**: To mitigate global warming and climate change, 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 Q3 2020, the Company reduced greenhouse gas emissions intensity by 9% through continuously project implementation including flare gases recovering and utilization, energy & process efficiency improvement and reducing methane leakage from production processes.
- **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 also 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 which completed the pilot stage for 120 meters road pavement at the PTTEP Technology and Innovation Centre (PTIC) helipad in August 2020. In addition, in Q3, our hazardous waste to landfill is reported at zero in line with our long-term target for zero waste to landfill by 2030.

- **Ocean for Life Strategy**: PTTEP, whose operations are mostly offshore, aims to be a leader in conserving restoring and monitoring natural resources and marine ecosystems to support economic growth and quality of life of nearshore communities, with the objectives to enrich marine biodiversity and improve local economy for communities dependent on marine resources, compared to the 2019 base year. In Q3/2020, PTTEP completed 5 zones of Coastal Conservation Area and Fish Home in Songkhla, Nakhon Sri Thammarat and Pattani provinces which is the project under the Ramp up CSR around Ocean.

Furthermore, PTTEP also supports the SVC strategy by carrying out research and development (R&D) projects such as the Greenhouse Gas (GHG) reduction by converting Carbon Dioxide to high valued products, the Carbon nanotube production from flare gas, the waste reduction by converting the produced sand to high value products, and the green buoy for underwater condition monitoring project. These projects are currently under development and field trial.

In Q3/2020, PTTEP received the 2020 LESS Award Letter of Recognition from Thailand Greenhouse Gas Management Organization (TGO). This award recognized PTTEP's contribution to TGO's Low Emission Support Scheme (LESS) which PTTEP reduced greenhouse gas emissions at PTTEP Headquarters and its Petroleum Development Support Base in Songkla and Ranong.

Future Business Outlook

Oil Price Outlook

Oil market outlook in Q4/2020 is expected to continue its gradual recovery from COVID-19 crisis, but with a slightly slower pace than previously expected as the hit from COVID-19 pandemic now expected to linger longer. The second outbreak of COVID-19 persist in UK and France, while the outbreak situation in U.S. and India is still on-going. Although economic activities have been continuously recovered, and some have almost returned to pre-COVID-19 level such as traffic activities and manufacturing activities, it is expected that it may take up to the second half of 2021 for global oil demand to recover to pre-COVID-19 level.

On the supply side, it is expected to remain regulated by OPEC+ and most members have been successful in maintaining production cut agreement. However, there are some delinquent countries such as Iraq and Nigeria who failed to comply with the agreement, and this could cause a conflict in future production cut agreement. In addition, severe CAPEX cut from oil producers around the world, especially the US which had its oil rigs activities declined significantly to the lowest level in around 10 years, will also help slow down oil supply growth, or may even make negative supply growth. However, these drilling activities, especially US shale, can partially return if oil prices rise high enough. Therefore, this will set oil price to be able to recover, but not drastic, averaged around $40-45 per barrel in Q4/2020. Important factors to watch are the US election in November, which will greatly affect global economy direction, and OPEC annual meeting in December, which will set direction on oil supply.

LNG Market Outlook

The oversupply situation of Global LNG market is expected to prolong throughout 2020, with total production capacity of existing and upcoming LNG projects growing by 20 MTPA (approximately 6%) from 2019 (Source: FGE as of September 2020). LNG market was tightening in 2H/2020 with major LNG facilities offline in Australia and the United States. We expected a rally in LNG price during Q4 2020 due to higher demand in winter season and recovering economic activities in many countries. The average Asian Spot LNG price is expected to be around 3.5 USD/MMBTU (Average from 3 Sources: FGE, WM, PIRA). 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 is expected to rebalance in 2025.

Additionally, the Spot LNG price that had fallen to below 3 USD per MMBTU in Q2/2020 had caused the Energy Regulatory Commission (ERC) had set a policy to import more LNG spot cargoes in order to reduce electricity cost. Coupled with lower energy demand, this resulted in lower gas nomination. However, the Spot LNG had begun to pick up to more than 5 USD per MMBTU. As a result, actual imports of LNG spot in 2020 are expected to be lower than anticipated. This is evidenced by higher gas demand in Q3/2020 when compared with the previous quarter, especially from our main projects such as Bongkot and Contract 4 projects. It is expected that gas demand will continue to increase in Q4/2020.

Thai Economy and Foreign Exchange Outlook

The Bank of Thailand expects the economy to be less contractionary for the remainder of 2020 driven by the recovery of economic activities. However, it expects Thailand's economy in 2021 to underperform a previous forecast due to the likely higher unemployment rate from increased business shut-downs. Moreover, the risk from the second COVID-19 wave in Thailand and rising cases around the world negatively impact tourism and export sector recovery. However, Thailand's financial system continues to be robust and headline inflation looks to rise by rate of economic recovery and is expected to reach the lower bound of the target range at 1% in 2021. In terms of monetary policy, the possibility of further rate cuts by the Central Bank is low so as to maintain monetary policy space.

THB volatility is expected to continue for the rest of the year with expected range of 30.50-31.50 THB/USD and with a general THB strengthening trend. A large part is due to the downward pressure on the USD attributed to the expectation of continued global economic recovery, Federal Reserve accommodative monetary policy guidance and the persistence of trade war tensions between US and China. Furthermore, capital inflows to emerging markets would pressure THB to further appreciate, which might negatively impact Thailand's economic recovery. Key areas to monitor include Thailand's current political uncertainty, the direction of government stimulus, and the result of the November US election, which can greatly impact financial markets volatility.

PTTEP has adopted the natural hedge method to manage FX risks by matching USD and USD-linked 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. Moreover, interest rate volatility does not materially impact the Company's financial performance as 82% of total interest- bearing debt is fixed rate.

Other important factors that affect the Company's operations

<u>Enactment of the Revenue Code Amendment Act (No. 50) B.E. 2562 and the Petroleum Income Tax Act Amendment (No. 9) B.E. 2562</u> In April 2019 and related regulations were enacted in June 2020. It allows PTTEP group to be able to file income tax returns in US dollar currency, which is the Company's financial reporting functional currency (USD), for the accounting periods starting from 2020 onwards. The effect from the change was recognized in financial statement Q2/2020 and Q3/2020. There will be no effect from the change in the volatility of Thai Baht in terms of income tax to the company's future financial performance from Q4/2020 onwards.

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;

Sales Volume	Gas Price	Unit Cost	EBITDA Margin
Year 2020	Year 2020	Year 2020	Year 2020
~350	~6.3	~30	65-70%
Thousand BOED	USD/MMBTU	USD/BOE	of sales revenue

Note: 1. The sales volume includes the sales volume from ADNOC Gas Processing (AGP)

2. The assumption is based on average Dubai price in 2020 of 41 USD/BBL

<u>Sales volume:</u>

PTTEP expects the average sales volume for the full-year of 2020 to be approximately 350,000 barrels of oil equivalent per day, decreasing from the previous year due to the situation of the Covid-19 pandemic which resulted in lower energy demand together with an increase in LNG import from the significantly drop in LNG spot price.

<u>Sales price:</u>

- 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 the full-year of 2020 is estimated at approximately 6.3 USD/MMBTU, reflecting the adjustment of selling price in accordance to global crude prices.
- Outstanding volume of oil price hedging at the end of the third quarter of 2020 is approximately 9 million barrels; the Company, however, consistently monitors crude oil price movements and has the flexibility to adjust its hedging plan as appropriate.

<u>Unit Cost:</u>

For the full-year of 2020, PTTEP expects to be able to maintain unit cost at around 30 USD/BOE, in line with planned investments according to current situation. PTTEP also expects to reduce investment expenditures by more than 16% from the original estimated of 4,600 Million USD at the beginning of the year.