

Executive Summary

During Q1/2022, average Dubai price stood at 96.2 USD/barrel, 23 percent higher than in Q4/2021 where the Dubai price was averaged at 78.3 USD/barrel. The increase caused by Russia-Ukraine tension and a continuously decline in OECD countries crude inventory below average 5-year low, resulting from crude demand recovery at faster pace than supply recovery. In the beginning of the quarter, crude supply was tight while demand picked up from economic recovery and easing of traveling restriction from COVID-19 situation in several countries. Onto March, tension between Russia and Ukraine had sent Dubai price to peak at 127.8 USD per barrel, after several countries announced their exits or no further investment in Russian operations as well as suspended the imports of Russian oil and related products. Nonetheless, towards the end of the quarter, the situation relaxed from the peace talk between the two countries, the average oil price of March then went down to 110.9 USD per barrel. For the year 2022, the average Dubai price is expected to be around 90-130 USD/barrel. Key factors to watch remain the prolonged Russia-Ukraine situations and how fast the war ends, Strategic Petroleum Reserves (SPR), and amount of oil supply from key producers.

For the progress of E&P operations, in Q1/2022, TotalEnergies EP Myanmar, the operator and partner in Yadana project, in Myanmar, had notified PTTEP and all partners on its intention to withdraw from the project. Later, on March 14, 2022, PTTEP, has been appointed to take over the operatorship effective on July 20, 2022. The operatorship transfer is currently underway to ensure operations continuity. PTTEP sets priority to long-term energy security of Thailand and Myanmar in taking this decision. The gas supply from Yadana project accounted for 11 percent of Thailand's natural gas consumption and 50 percent of total gas consumption in Myanmar. For G1/61 (Erawan) project, PTTEP gained access to the site since January 2022 and since then making progress in preparation works, site survey for pipeline installation, and the transfer of operatorship and will commence operatorship at the start of Production Sharing Contract (PSC) on April 24, 2022, together with G2/61 (Bongkot) where PTTEP is the operator in the Bongkot concession.

In terms of pursuing the High-Performance Organization and Thrive in Lower Carbon Future, during 2022 Annual General Shareholders' Meeting held on March 28, 2022, PTTEP Group had announced the "Net Zero Greenhouse Gas Emissions" target by the year 2050 for our E&P business. Moreover, we set two targets on the pathway to Net Zero which are the reduction of greenhouse gas emissions intensity by 30% by 2030 and 50% by 2040, from 2020 base year, through "EP Net Zero 2050" aspiration.

On the financial performance front, during Q1/2022, the global oil price rally had caused the average selling price to rise 10 percent from the previous quarter to stand at 51.35 USD/BOE, with a slight increase in average sales volume per day. Our unit cost was also lowered to stand at 26.54 USD/BOE. However, PTTEP had recognized oil price hedging loss amounting to 240 MMUSD in this quarter. Net income for Q1/2022 was then reported at 318 MMUSD. As at the end of the quarter, PTTEP had total assets of 24,143 MMUSD, of which 3,346 MMUSD was cash on hand, while total liabilities were reported at 11,740 MMUSD, of which 4,095 MMUSD was interest-bearing debt. Total shareholders' equity stood at 12,403 MMUSD with debt-to-equity ratio at 0.33 time, reflecting healthy financial structure and robust financial position.

Table of key financial results

(Unit: Million US Dollar)	Q4 2021	Q1 2022	Q1 2021	% Inc. (Dec.) QoQ	% Inc. (Dec.) YoY
Total Revenue	1,989	2,083	1,779	5	17
Sales Revenue *	1,867	2,030	1,391	9	46
EBITDA **	1,330	1,601	1,041	20	54
Profit (Loss) for the period	321	318	376	(1)	(15)
Basic earnings (loss) per share (Unit: US	0.08	0.08	0.09	0	(11)
Profit (Loss) from normal operation	513	570	282	11	>100
Profit (Loss) from non-operating items	(192)	(252)	94	(31)	>(100)

* Included deemed income for tax payment by Oman government but were excluded in the average sales volume and selling price calculation

** Excluded gain from a bargain purchase of Oman block 61 Project, partial write-off of exploration and evaluation assets of the exploration project in Brazil and impairment loss on assets and goodwill which were recognized during 2021



Economic Overview in the first quarter of 2022

Crude Oil Price

Dubai crude price in Q1/2022 increased to an average of 96.2 USD per barrel, higher than Q4/2021 at an average price of 78.3 USD per barrel. Price acceleration was mainly due to Russia – Ukraine crisis and concern on the below pre-pandemic 5-year average of crude inventories from OECD member countries as a result of demand rallies faster than supply recovery.

Crude supply crunch in January had been progressed from Kazakhstan protests causing crude transportation disrupted, Libya and Nigeria declaring forces majeures on their oil production, and OPEC+ failures to meet its own production targets of 400,000 barrels per day. In contrary, crude demand continued a solid recovery path in 2022 with improved economic data from lockdown relaxation despite a surge of new COVID-19 cases caused by Omicron. In February, Russia – Ukraine tension kept Dubai crude price elevated to an average of 92.3 USD per barrel. U.S. and its allies announced series of harsh sanctions against Russia with exemption of the energy sector. Many major E&P companies, however, notified their exits or no further investment in Russian operations as well as many buyers shunned Russian oil. In addition, Saudi Arabia and UAE's rejection of U.S. and UK calls to pump more crude to ease pressure on prices, has raised anxieties about the disruption of global energy supply.

Prolonged Russia – Ukraine war in March triggered Dubai crude price to an average of 110.9 USD per barrel, hitting a multi-year record high at the peak of 127.8 USD per barrel following U.S. announced banning all Russian oil and gas imports, UK phasing out Russian oil imports by the end of 2022, as well as EU to switch to alternative supplies and be independent from Russian gas. Talks to revive an Iran nuclear deal, which would allow a lifting of sanctions on Iranian oil, also faced the prospect of collapse after Russian intervened the talk. The current oil price escalation would lead to acceleration in inflation globally which shall eventually erode world economy. Nevertheless, the face-to-face peace talk between Russia and Ukraine at the end of March showed sign of progress where Ukraine proposed adopting a neutral status and Russia promised to reduce its military operations around Kyiv. Together with China's Shanghai lockdown to curb a surge in COVID-19 infections, prompting March's Dubai crude price ended lower.

Liquefied Natural Gas (LNG)

For LNG Market in Q1/2022, the average Asian Spot LNG price remained at a high level from Q4/2021 at an average of 31.22 USD per MMBTU from high gas demand caused by below-normal temperatures across Europe and Northeast Asia regions which also resulted in Europe's significantly lower inventory levels. In addition, uncertainty regarding the supply of Russian gas into Europe from Russia-Ukraine conflict also affected the overall global energy prices. The conflict which escalated into war between Russia and Ukraine has caused Asian Spot LNG price to reach its highest level at around 85 USD per MMBTU at the beginning of March. The price has then maintained in the range of 30-40 USD per MMBTU until the end of March.

Thailand's Energy Demand

According to the Energy Policy and Planning Office (EPPO), Ministry of Energy, domestic energy demand in January 2022 is approximately 2 million BOE, which has increased 4.7% comparing to the same period of the previous year. This figure is becoming closer to the domestic demand in January 2020 which was before the COVID-19 pandemic in Thailand. The increases in domestic energy demand are mainly in the form of higher petroleum consumption, coal consumption, and imported electricity for transportation and industrial uses. The overall increases reflect a rebound in economic activities after the COVID-19 pandemic.

Exchange Rates (Thai Baht against US Dollar)

The THB against USD was volatile but overall strengthened from 33.42 at the end of 2021 to close at 33.30 by end of Q1/2022. Although the Covid-19 pandemic continues to hinder the Thai economy in the first quarter of 2022, its impact on the THB has been limited due to positivity regarding tourism recovery, resulting in fund flows from foreign investors providing tailwinds for THB. The Bank of Thailand so far has kept interest rates unchanged at 0.5% as expected by markets. Other major factors influencing the THB includes risk-off factors from heightened Russia-Ukraine tensions and anticipated aggressive Federal Reserve's rate hike schedule to combat inflation, which could lead to THB depreciation.

Management Discussion and Analysis (MD&A) for the first quarter of 2022

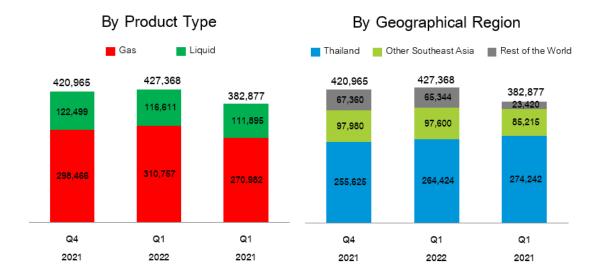


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Financial Performance

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 2021	Q1 2022	Q1 2021	% Inc. (Dec.) QoQ	% Inc. (Dec.) YoY
Average selling price (/BOE)	46.87	51.35	40.38	10	27
Liquid price (/BOE)	76.17	91.19	56.59	20	61
Gas price (/MMBTU)	5.81	6.07	5.61	4	8
Average Dubai crude oil price (/BBL)	78.27	96.21	60.21	23	60

Remark: The average sales volume and selling price were excluded deemed income for tax payment by Oman government.

For the First quarter of 2022 compared with the Fourth quarter of 2021

In Q1/2022, the average sales volume of PTTEP and its subsidiaries (the "Group") increased to 427,368 BOED when compared with Q4/2021 of 420,965 BOED, primarily from Arthit Project due to higher gas nomination from buyer and Zawtika Project due to maintenance shutdown in the previous quarter, offset with a decrease in crude sales volume from Malaysia Project. The average selling price in Q1/2022 increased 10% to 51.35 USD/BOE (Q4/2021: 46.87 USD/BOE).

For the First quarter of 2022 compared with the First quarter of 2021

When compared the average sales volume for Q1/2022 to Q1/2021 of 382,877 BOED, the average sales volume increased primarily from the acquisition of Oman Block 61 Project in March 2021 and Malaysia Block H Project from first gas production in February 2021 including Arthit Project due to higher gas nomination from buyer, offset with Bongkot Project due to lower gas sales volume. The average selling price increased 27% to 51.35 USD/BOE (Q1/2021: 40.38 USD/BOE).



Overall Operating Results

For the First quarter of 2022 compared with the Fourth quarter of 2021

In Q1/2022, the Group had net profit of 318 MMUSD, a decrease of 3 MMUSD or 1% from a net profit in Q4/2021 of 321 MMUSD despite an increase in revenue from sales, because there was a recognition of loss from oil price hedging instruments. The net profit for Q1/2022 of 318 MMUSD can be separated as following.

The profit from normal operation in Q1/2022 was 570 MMUSD, an increase of 57 MMUSD when compared with a profit in Q4/2021 of 513 MMUSD, primarily from an increase in revenue from sales of 163 MMUSD from 10% higher average selling price while total sales volume slightly decreased from lower number of days compared with Q4/2021. However, the average sales volume increased by 2%. In addition, operating expenses decreased by 78 MMUSD primarily from Bongkot Project due to lower maintenance activities and Malaysia Project due to lower sales volume. On the other hand, depreciation, depletion and amortization increased by 97 MMUSD primarily from Bongkot Project and other income decreased by 77 MMUSD mainly from an increase in participating interests of Malaysia Block K Project in the previous quarter.

The loss from non-operating items in Q1/2022 was 252 MMUSD, an increase of 60 MMUSD when compared with a loss in Q4/2021 of 192 MMUSD, from higher loss on financial instruments mainly from oil price hedging instruments of 240 MMUSD due to an upward trend of forward oil price which included unrealized loss from mark-to-market of 195 MMUSD, while there was 5 MMUSD gain in the previous quarter due to a downward trend of forward oil price. However, the Group had recognized impairment loss on assets of 183 MMUSD from Mozambique Area 1 Project and Yetagun Project in Q4/2021.

For the First quarter of 2022 compared with the First quarter of 2021

In Q1/2022, the Group had net profit of 318 MMUSD, a decrease of 58 MMUSD or 15% from a net profit in Q1/2021 of 376 MMUSD despite an increase in revenue from sales, because there was higher loss from oil price hedging instruments, together with there was gain from a bargain purchase of Oman Block 61 Project, offset with partial write-off of exploration and evaluation assets of the exploration project in Brazil recognized in Q1/2021. The net profit for Q1/2022 of 318 MMUSD can be separated as following.

The profit from normal operation in Q1/2022 was 570 MMUSD, an increase of 288 MMUSD when compared with a profit in Q1/2021 of 282 MMUSD, primarily from an increase in revenue from sales of 639 MMUSD with 27% increase in average selling price and 12% increase in average sales volume. However, income taxes increased by 312 MMUSD mainly from higher profit from projects in Thailand and Oman.

The loss from non-operating items in Q1/2022 was 252 MMUSD, a change of 346 MMUSD when compared with a profit in Q1/2021 of 94 MMUSD, from higher loss on financial instruments primarily from oil price hedging instruments of 133 MMUSD due to more upward trend of forward oil price than Q1/2021 which included an increase in unrealized loss from mark-to-market of 106 MMUSD. In addition, there was gain from a bargain purchase of Oman Block 61 Project of 350 MMUSD, offset with partial write-off of exploration and evaluation assets of the exploration project in Brazil of 145 MMUSD recognized in Q1/2021 while no such transaction recognized this quarter.

Management Discussion and Analysis (MD&A) for the first quarter of 2022



Operating Results by Segments

Net Profit (loss) (Unit: Million US Dollar)	Q4 2021	Q1 2022	Q1 2021	% Inc. (Dec.) QoQ	% Inc. (Dec.) YoY
Exploration and production	401	631	539	57	17
Southeast Asia	546	584	324	7	80
- Thailand	372	418	270	12	55
- Other Southeast Asia	174	166	54	(5)	>100
Middle East	37	54	351	46	(85)
Australia	7	(1)	(1)	>(100)	0
America	(23)	(7)	(146)	70	95
Africa	(169)	(3)	7	98	>(100)
Others	3	4	4	33	0
Head office and others	(80)	(313)	(163)	>(100)	(92)
Total	321	318	376	(1)	(15)

For the First quarter of 2022 compared with the Fourth quarter of 2021

For Q1/2022, the Group reported a net profit of 318 MMUSD, a decrease of 3 MMUSD or 1% when compared with a net profit of 321 MMUSD in Q4/2021, primarily from a decrease in Head Office and Others segment of 233 MMUSD while there was an increase in Exploration and Production segment in Africa of 166 MMUSD and Southeast Asia (Thailand increased by 46 MMUSD).

Head Office and Others segment

In Q1/2022, Head Office and Others segment reported a net loss of 313 MMUSD, an increase of 233 MMUSD or more than 100% when compared with a net loss of 80 MMUSD in Q4/2021, primarily from higher loss on financial instruments from oil price hedging instruments due to an upward trend of forward oil price while there was gain in the previous quarter due to a downward trend of forward oil price.

Exploration and Production segment

Africa

In Q1/2022, Africa reported a net loss of 3 MMUSD, a decrease of 166 MMUSD or 98% when compared with a net loss of 169 MMUSD in Q4/2021, primarily from impairment loss on Mozambique Area 1 Project in the previous quarter.

- Southeast Asia
 - Thailand

In Q1/2022, Thailand reported a net profit of 418 MMUSD, an increase of 46 MMUSD or 12% when compared with a net profit of 372 MMUSD in Q4/2021, primarily from an increase in revenue from sales due to higher average selling price while depreciation, depletion and amortization increased mainly from Bongkot Project.

For the First quarter of 2022 compared with the First quarter of 2021

For Q1/2022, the Group reported a net profit of 318 MMUSD, a decrease of 58 MMUSD or 15% when compared with a net profit of 376 MMUSD in Q1/2021, primarily from a decrease in Head Office and Others segment of 150 MMUSD while there was an increase in Exploration and Production segment in Southeast Asia (Thailand increased by 148 MMUSD) and America of 139 MMUSD offset with a decrease in Middle East of 297 MMUSD.



Head Office and Others segment

In Q1/2022, Head Office and Other segment reported a net loss of 313 MMUSD, an increase of 150 MMUSD or 92% when compared with a net loss of 163 MMUSD in Q1/2021, primarily from higher loss on financial instruments from oil price hedging instruments due to more upward trend of forward oil price than Q1/2021.

Exploration and Production segment

- Southeast Asia
 - Thailand

In Q1/2022, Thailand reported a net profit of 418 MMUSD, an increase of 148 MMUSD or 55% when compared with a net profit of 270 MMUSD in Q1/2021, primarily from an increase in revenue from sales due to higher average selling price, together with a decrease in depreciation, depletion and amortization mainly from Bongkot Project while income taxes increased in accordance with higher profit.

America

In Q1/2022, America reported a net loss of 7 MMUSD, a decrease of 139 MMUSD or 95% when compared with a net loss of 146 MMUSD in Q1/2021, primarily from partial write-off of exploration and evaluation assets of the exploration project in Brazil in Q1/2021.

Middle East

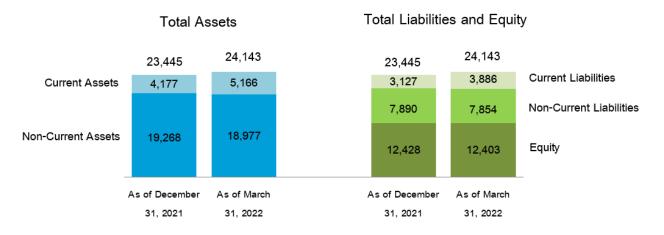
In Q1/2022, Middle East reported a net profit of 54 MMUSD, a decrease of 297 MMUSD or 85% when compared with a net profit of 351 MMUSD in Q1/2021, primarily from a recognition of gain from a bargain purchase of Oman Block 61 Project in Q1/2021.

Management Discussion and Analysis (MD&A) for the first quarter of 2022



Financial Position

Unit: Million US Dollar



Assets

As at March 31, 2022, the Group had total assets of 24,143 MMUSD, an increase of 698 MMUSD from total assets as at December 31, 2021 of 23,445 MMUSD, primarily due to;

(1) Current assets, which were primarily comprised of cash and cash equivalents, trade and other receivables and inventories, an increase of 989 MMUSD mainly from an increase in cash and cash equivalents of 787 MMUSD and assets held-for-sale of 127 MMUSD from classifying an investment in an associate in accordance with the Group's divestment plan.

While

(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, a decrease of 291 MMUSD mainly due to a decrease in property, plant and equipment from depreciation, depletion and amortization despite additional investments in exploration and production assets.

Liabilities

As at March 31, 2022, the Group had total liabilities of 11,740 MMUSD, an increase of 723 MMUSD from total liabilities as at December 31, 2021 of 11,017 MMUSD, primarily due to;

(1) Current liabilities, which were primarily comprised of income tax payable, trade and other payables and current portion of long-term liabilities, an increase of 759 MMUSD mainly due to dividend payable for the second half of 2021 of 358 MMUSD, an increase in income tax payable of 275 MMUSD based on profit for the period, together with an increase in financial derivative liabilities of 176 MMUSD mainly from oil price hedging instruments.

While

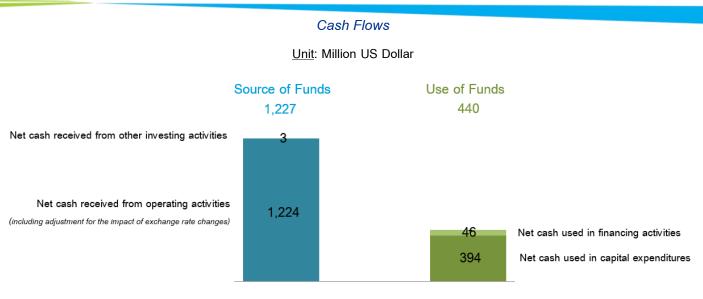
(2) Non-current liabilities, which were primarily comprised of debentures, provision for decommissioning costs, and deferred tax liabilities, a decrease of 36 MMUSD mainly due to a decrease in provision for remuneration for the renewal of petroleum production primarily from Bongkot Project.

Equity

As at March 31, 2022, the Group had equity of 12,403 MMUSD, a decrease of 25 MMUSD from equity as at December 31, 2021 of 12,428 MMUSD, primarily due to the net profit for the period, offset with the dividend payment for the second half of 2021.

Management Discussion and Analysis (MD&A) for the first quarter of 2022





For three months in 2022

As at March 31, 2022, the Group had cash and cash equivalents of 3,346 MMUSD, an increase of 787 MMUSD when compared with December 31, 2021 of 2,559 MMUSD.

Source of funds amount of 1,227 MMUSD primarily came from Net cash received from operating activities as a result of the positive net cash flow from revenue from sales, offset with cash payment for expenses and income taxes.

Uses of funds amount of 440 MMUSD primarily came from the Net cash used for additional capital expenditures in exploration and production assets mainly from G2/61 Project, S1 Project, Bongkot Project, and Zawtika Project, as well as Net cash used in financing activities primarily from repayment of lease liabilities during Q1/2022.

Management Discussion and Analysis (MD&A) for the first quarter of 2022



Key Financial Ratios

	Q4 2021	Q1 2022	Q1 2021
Profitability Ratio (%)			
EBITDA* margin	70.27	77.69	73.73
Return on equity	9.99	9.39	6.92
Net profit margin	16.55	15.13	15.04
Leverage Ratio (Times)			
Debt to equity	0.33	0.33	0.32
Debt to EBITDA*	0.80	0.72	1.04

* EBITDA excluded gain from a bargain purchase of Oman Block 61 Project, partial write-off of exploration and evaluation assets of the exploration project in Brazil and impairment loss on assets and goodwill which were recognized during 2021.

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EBITDA margin

 Profit before deduction of interest, tax and depreciation to revenue from sales (included deemed income for tax payment by Oman government) including revenue from pipeline transportation

= Net profit for the past 12 months to average equity

= Net profit to total revenue (for the past 12 months)

= Interest Bearing Debt to equity

 Average Interest-Bearing Debt to profit before deduction of interest, tax and depreciation for the past 12 months

Return on equity Net profit margin Debt to equity Debt to EBITDA



Operational Highlights

As of Q1/2022, PTTEP Group has over 40 projects with domestic and international operations in 15 countries. The following are key project highlights.

Projects in Southeast Asia

PTTEP Group'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 Q1/2022, the average sales volume from projects in Thailand is 264,400 BOED, accounting for 62% of total sales volume. Average sales volume from other countries in this region is 97,600 BOED, which accounted for 23% of total sales volume.

- Projects in Thailand

The majority of PTTEP Group'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, where natural gas, liquefied petroleum gas (LPG) and crude oil are produced, currently is under execution of the 10 years strategy which has been approved for the long-term operation. The project is continuously drilling additional production wells with exploration drilling plan to maintain its production level. The environmental impact assessments were also undertaken into both existing and new production areas. The Bongkot Project, Arthit Project and Contract 4 Project, which produce natural gas, condensate and crude oil, was able to deliver production volumes as nominated from the buyer. For G1/61 Project (Erawan field), the Project has continued transitional efforts including staff recruitments, sales agreement negotiation, procurement activities and platform constructions in preparation for readiness for production and operations. In January 2022, the Project has accessed into Erawan field under current agreement signed in December 2021 to prepare for the development and the site survey for pipeline installation, as well as the operation systems such as the production system and the information technology system. In addition, on 20 April 2022, PTTEP Energy Development Company Limited (PTTEP ED), a wholly owned subsidiary of PTTEP, has reached an agreement with MP G2 (Thailand) Limited, a subsidiary of Mubadala Petroleum (Thailand) Holdings Limited (Mubadala), for PTTEP ED to be a sole investment operator and shall recognize all revenues and costs from the petroleum produced with effective date from 1 December 2021. For G2/61 Project (Bongkot field) was on track for its transition plan. On 20 April 2022, PTTEP ED together with Department of Mineral Fuels as sellers, have entered into Gas Sale Agreement, Condensate Sale Agreement and Crude Sale Agreement with PTT Public Company Limited and PTTEP ED will become an operator under a Production Sharing Contract of both projects from 24 April 2022 onwards.

- Projects in Myanmar

The key *producing projects* in Myanmar include the Zawtika Project, a natural gas producing project which located in the Gulf of Moattama in Myanmar, was able to deliver sales and production as per obligation. However, the COVID-19 and turbulence situation in Myanmar including financial sanctions imposed by western countries have caused some delays in certain activities. PTTEP has monitored the situation closely, identified potential risk, and prepared asset readiness following the Business Continuity Management plan (BCM) to ensure uninterrupted supply of petroleum, including closely coordination with PTT, the Department of Mineral Fuels, Ministry of Energy and Ministry of Foreign Affairs, on a regular basis for immediate mitigation plan to ensure continuity of gas production. In addition, the Project has been executing Phase 1D Field Development Plan in order to maintain the production level under the contract. Currently, the construction of wellhead platforms is in progress as plan. The Yetagun Project, a natural gas and condensate producing project, the Project has maintained the production volume after resuming its production in October 2021. The Yadana Project, a natural gas producing field, following the withdrawal of TotalEnergies EP Myanmar from Yadana project and Moattama Gas Transportation Company (MGTC), the gas pipeline company for Yadana project, PTTEP Group has been appointed as new operator by the Project's partners on 14 March with an effective date on 20 July 2022. The Project is currently underway to assure the continuity of the operations.



For exploration project, the Myanmar M3 Project, which includes the Domestic Gas to Power project, is awaiting development due to the political issue in Myanmar. PTTEP Group is still closely monitoring the situations to assess risks, as well as to prepare for an appropriate action plan.

Projects in Malaysia

The *producing projects* in Malaysia include the **Block K Project**, an oil producing field consisting of Kikeh, Siakap North-Petai (SNP) and Gumusut-Kakap (GK) fields which are located in the deep-water offshore Sabah. In Q1/2022, the SNP infill wells started production and the Project commenced drilling well in GK in early March. The **Sarawak SK309 and SK311 Project** are oil and gas producing fields located in the shallow water of offshore Sarawak. The new Pemanis well has started production in December 2021 and another infill well has completed drilling, with production expected in this quarter. The **Block H Project**, located in the deep-water of offshore Sabah, is capable of producing up to 270 MMSCFD. Continue prospect evaluation and perform two Exploration wells planning for 2022 drilling campaign.

Exploration projects in Malaysia are highlighted as follows. The Sarawak SK410B Project, which includes a massive gas discovery in Lang Lebah Field, is currently undergoing field development study to reflect the larger gas discovery volume such as increasing processing plant capacity, managing higher CO₂ as per GHG aspiration target. Front End Engineering Design (FEED) is scheduled to begin in early 2022 and the Final Investment Decision is expected to be in 2023. The Project still has several petroleum prospects, which are being studied. The project plan is to drill at least one additional exploration well in 2022. The Sarawak SK417 Project discovered natural gas reservoirs in Nangka-1 well and performed subsurface study on petroleum potential in the nearby area. The project is now planning and preparing to drill one appraisal well in 2022 exploration campaign to prove up all resource potential. The Sarawak SK405B Project discovered crude oil and natural gas reservoirs in Sirung-1 well and performed subsurface study on petroleum potential in the nearby area. The project is now planning and preparing for the drilling of one exploration wells in 2022 exploration campaign. The Sarawak SK438 Project completed Kulintang-1 exploration well and discovered a satisfactory reservoir of natural gas. The Project also conducted studies on additional appraisal program and development plan for this field, as well as on new petroleum potential candidates. Currently, the project is planning and preparing for the drilling of exploration wells in 2022 -2023 exploration campaign. The Sarawak SK314A project is currently planning and preparing for the drilling of two exploration wells in 2022 - 2023 exploration campaign. The PM407 Project is continuously conducting 3D seismic interpretation together with the geological and geophysical studies on petroleum potential. Currently, the project is in the process of candidate prospect evaluation prior to proceed on prospect selection for the future exploration strategy and well planning for additional exploration drilling. The PM415 Project has been evaluating the remaining of petroleum potential with a collaboration with Joint Venture Partner which will result in the upcoming exploration strategy in the near future. The Sabah SB412 Project is the project that PTTEP Group won in the 2021 Malaysia Bid Round, which was held in March. The Project is currently preparing for exploration activities, beginning with 3D Seismic reprocessing and continue with other exploration activities.

- Projects in Vietnam

The key *Producing Projects* in Vietnam include the Vietnam 9-2 Project, which is natural gas and crude oil field, located offshore in the southeast region of Vietnam. In 2022, The Project has plan to drill 1 development wells in Q4/2022. Vietnam 16-1 Project, which is natural gas and crude oil field, located offshore in the southeast region of Vietnam. In 2022, the Project has plan to drill 2 development wells in Q3 - Q4/2022. 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

PTTEP Group's project highlights in this region are located in Sultanate of Oman (Oman) and United Arab Emirates (UAE).

The projects in Oman under *production phase* include the PDO (Block 6) Project, which is the largest potential onshore oil producing asset in Oman, and the Mukhaizna (Block 53) Project, which is a large producing onshore oil field located in the southern part of Oman. In Q1/2022, both projects continue to produce as per OPEC+ agreement. For Oman Block 61 Project, with its natural gas and condensate resources, the Project currently has a full production capacity of natural gas and condensate at 1,500 MMSCFD and 69,000 Barrels per day (BPD), respectively. For *Exploration Projects*, Oman Onshore block 12 Project continues the geological and geophysical studies throughout the year 2022 and plan to drill two exploration wells in 2023.

All of the projects in UAE are under *exploration phase*, located offshore in the northwest of Abu Dhabi. The Abu Dhabi Offshore 1 Project is currently being evaluated for petroleum potential for future exploration. The Abu Dhabi Offshore 2 Project is in progress of one exploration well drilling, expected to be completed in end of April 2022. Following that, one additional appraisal well will be drilled. The Abu Dhabi Offshore 3 Project is currently evaluating petroleum potential in preparation for the drilling of an appraisal well and exploration well in 2023-2024. For the Sharjah Onshore Area C Project, PTTEP Group has signed Farm-in/Farm-out Agreement to acquire 25% stake from Eni Sharjah B.V. ("ENI") with the completion date on 1 March 2022. The Project is currently in progress of seismic activity.

Projects in the Americas

PTTEP Group'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 is located in Alberta, Canada. The Project is underway for reclamation activities according to government's conditions.

Projects in Brazil include the Barreirinhas AP1 Project located in the Barreirinhas Basin, offshore of the northeastern region of Brazil, is waiting for exploration wells drilling permit from the government. The Brazil BM-ES-23 Project located offshore in the Espirito Santo basin, east of Brazil, is currently evaluating the petroleum potential for further development.

Projects in Mexico include the Mexico block 12 (2.4) Project which is located in the Mexican Ridges, Western Gulf of Mexico. The Project is currently evaluating the petroleum potential for further way forward. The Mexico block 29 (2.4) Project is located in the Campeche basin. The Project is now undergoing a pre-development study.

Projects in Australia

PTTEP has one project in this region which is the **PTTEP Australasia Project**. This project is located in the Commonwealth of Australia (Australia) and has 6 permits.

The **Cash Maple Field and Orchid Field**, which are in exploration phase, are currently in progress to define proper direction of the project in order to increase the opportunity for development.

With regards to a claim made against PTTEP AAA in the Federal Court of Australia seeking damages on behalf of a group of Indonesian seaweed farmers (Class Action) for compensation relating to the Montara oil spill incident in 2009, PTTEP AAA has been performing all court requirements and be prepared for the appeal call.



Projects in Africa

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

The Algeria 433a and 416b Project, which is in the *production phase*, is located onshore in the eastern part of Algeria with crude oil producing. As a result of OPEC+'s continuous production quota control, the project's average production for crude oil in Q1/2022 is at approximately 16,800 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 BPD in Q2/2022. In the second phase, production capacity is planned to ramp up to around 50,000-60,000 BPD in 2026-2027.

The **Mozambique Area 1 Project**, which is a large LNG project located in offshore Mozambique, is currently in the development phase. In 2021, the project has commenced foundation work for onshore LNG facilities, temporary Beach Landing, subsea pipeline dredging and construction of security infrastructures. The project finance close and the first debt drawdown had been achieved. However, due to the security situation in city of Palma since March 2021, which is close to the project construction site, in April 2021, Force Majeure was then declared, to suspend all construction works at the site, for safety reason of all employees and stakeholders. In June 2021, South African Development Committee (SADC) and the Rwanda Defense Force (RDF) has deployed military to support Mozambique to deal with the situation. The troops are currently stationed in the area and main districts in the vicinity of the Project. The site still under good protection by Government of Mozambique (GoM) and Allies' forces (Rwanda and SADC), but insurgences still active outside the controlled perimeters. Presently, the operator is in close monitoring of the situation with the government and is studying the resumption plan in detail.

The Block 17/06 Project, which is in the *development phase*, is located offshore western of Angola and consists of 2 main development areas: on the east and the west sides of the Project. Currently, the eastern area plans to FID in the middle of 2022 and the first oil production target by the end of 2024, with the expected production capacity of 30,000 BPD (100% interest). The development plan for the western area is still being studied, with expected FID in 2024.



Strategies under Sustainable Development Framework

PTTEP adheres to the Sustainable Development global practices and UN principles. Operating under the concept of "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 and to be in line with the vision to become the "Energy Partner of Choice". Therefore, 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 highlights from the first quarter of 2022 are as follows:

High Performance Organization and Thrive in Lower Carbon Future

- (1) Sustainable E&P Business Strategy
 - Create additional value from existing assets with an emphasis on increasing production from key projects especially Thailand gas projects aiming to ensure national energy security as well as serve domestic demand. Since January 2022, PTTEP has successfully accessed G1/61 site ahead of the commencement in April 2022 to ensure a smooth transition of operatorship from current operator. In addition, PTTEP has been appointed by the remaining partners in the Yadana project to become the new operator for this project after the withdrawal of TotalEnergies EP Mynamar as an operator and joint venture partner. By taking this decision, PTTEP has thoroughly considered to ensure that there will be no interruption of natural gas supply to both countries from the Yadana project which is accounted for 50% and 11% of natural gas supply of Myanmar and Thailand, respectively.
 - Expand investments in Thailand and Southeast Asia where PTTEP targets as strategic investment areas and looks to expand business opportunities in Gas Value Chain. In the first quarter of 2022, PTTEP has been awarded the exploration Block of Sabah SB412 project, which is located off the northwest coast of Sabah, covering a large area of approximately 15,914 square kilometers. The studies of subsurface data indicate petroleum potential with surrounding blocks having reported discoveries. The area is well-equipped with infrastructure and facilities ready for petroleum development.
 - Continuously maintain competitive unit costs by using digital technology and increasing work effectiveness to strengthen PTTEP's core business amid the increasingly volatile environment of the industry
 - Capture investment opportunity with strategic alliance in the Middle East i.e. Oman and UAE, where it has low-cost base as the advantage relative to other producing regions
 - Drive LNG value chain to focus on the upstream and liquefaction plants together with development of human resource competency

(2) Diversification to Beyond E&P Business Strategy

- Scale up AI and Robotics Ventures Company Limited (ARV) and accelerate products and services to market as well as explore investment opportunities with new alliances
- Explore Power business opportunities for Gas/LNG and renewable in Vietnam and Myanmar
- Explore business opportunities in Carbon Capture Utilization and Storage (CCUS) leveraging PTTEP's expertise as well as investments in future energy i.e. Hydrogen
- Commercialize in-house technology that have been researched and developed to support E&P operations

The Company has set strategic directions by focusing on sustainability of E&P Business together with venturing into Beyond E&P Business during the energy transition, and to reduce greenhouse gas emissions. In 2022 Annual General Meeting held in March, the meeting approved the amendment of the Company's objects under clause 3 of the Memorandum of Association by adding new objects to cover more diversified businesses such as to carry out businesses in relation to energy, renewable energy,



electricity, hydrogen, carbon dioxide and carbon compounds etc. These are to align with investments in beyond E&P businesses and ensure sustainable growth of the company.

(3) Greenhouse Gas Management Strategy

- PTTEP commits to reduce the greenhouse gas emissions intensity by at least 25% by 2030 from 2012 base year. As of the end of 2021, the Company reduced greenhouse gas emissions intensity by 24.1% and expects to meet this target in 2022, 8 years ahead of target year setting.
- To reflect PTTEP's determination to take part in solving the global warming crisis in a sustainability way and support Thailand's net zero target as committed in the 26th United Nations Climate Change Conference of the Parties or COP26 in Glasgow, Scotland. PTTEP, therefore, announced a new target to achieve Net Zero Greenhouse Gas Emissions by 2050 for E&P business covering scope 1 and scope 2 under PTTEP's operational control and we also have defined the interim targets to reduce greenhouse gas emissions intensity by 30% by 2030 and 50% by 2040 from our 2020 new base year through "EP Net Zero 2050" pathway.
- The company will manage an E&P portfolio to transform PTTEP into a lower carbon organization. New projects with an emphasis on natural gas and greenhouse gas intensity will be factored into the investment decision-making process. PTTEP has continued its concrete implementation of various greenhouse gas management projects such as flare gas recovery and utilization, energy efficiency improvement, adoption of renewable energy in operations and feasibility studies to apply the Carbon Capture, Utilization and Storage (CCUS) technology for offshore operations as well as greenhouse gas offsetting projects like forestation.

PTTEP places great importance on effective financial management by focusing on building financial discipline and maintaining a robust capital structure. As at Q1/2022, the Company maintained a strong liquidity position with cash on hand of approximately 3,346 MMUSD. The debt-to-equity ratio is 0.33 which is in line with the Company's financial policy.

In addition, PTTEP Treasury Center Company Limited, a wholly-owned subsidiary of PTTEP Group has successfully completed the issuance of senior guaranteed debentures with bondholder's representative amount of 12,000 million Baht on 5 April 2022. The debentures have three trenched of 5, 7 and 10 years, carrying the coupon rates of 2.09% 2.69% and 3.05% per annum, respectively, and are fully guaranteed by PTTEP. Therefore, it is confident that PTTEP can maintain its solid financial position and liquidity to withstand such oil price and global economic fluctuation.

Moreover, PTTEP encourages Research and Development (R&D), technological applications, and innovation to increase the efficiency and competitiveness of the petroleum exploration and production business. The main objectives of R&D include unlocking high CO₂ reserves, removing contaminants in condensate, enhancing oil recovery, reducing environmental impact, reducing decommissioning cost, and improving operation and maintenance efficiency. As of Q1/2022, there are 51 projects under research and development and the progress of highlight projects are as follow;

- The technology for contaminant removal in condensate is successful in field trial tested which consists of the chemical demulsifier injection for particulate contaminants separation, and adsorbent technology. Currently, it is in the process of expanding technology implementation and improving its efficiency.
- The technology for supporting pipeline decommissioning activities such as the decontamination chemicals for pipelines cleaning and intelligent sampling PIG have been completed field trial in Bongkot field in Q1/2022, and the performance is satisfactory. The development team will bring the results of the field test to improve and increase efficiency as well as expanding its use to support future petroleum pipeline decommissioning activities.
- The flare gas utilization by converting to Carbon Nanotube project is in progress to carry out the front-end engineering design for the pilot production unit that is planned to construct at S1 Project in 2023.



- The wellhead operator robot project is in the process of developing a prototype robot which has capability to detect equipment abnormalities and to autonomously manipulate the process equipment in the production platform. The project plans to complete the prototype development and testing in offshore production platform by 2022.
- The Carbon Dioxide (CO₂) utilization by converting to Propylene Carbonate project is in progress to carry out the prototype process development.

PTTEP has an environmental management system which is a subset of PTTEP's Safety, Security, Health and Environment Management System (SSHE MS). In Q1/2022, PTTEP Lost Time Injury Frequency (LTIF) was 0, while the Total Recordable Incident Rate (TRIR) was 0.68. The LTIF and TRIR were in the average safety performance of the International Association of Oil & Gas Producers (IOGP).

In Q1/2021, PTTEP received the Most Innovative Deal Award from the ThaiBMA Best Bond Awards 2021. The ceremony was organized by Thai Bond Market Association (ThaiBMA) and the award is in recognition of PTTEP Digital Bond, Asia's first fully digitalized corporate bond issuance via wallet on the Pao Tang application. The transaction offers in the primary market and also allows, for the first time, a 24-hours trading platform in the secondary market to enhance the liquidity, including to support the sustainable growth of bond markets.

<u>Sustain Business Integrity Excellence</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. The main progress of works is highlighted as follows:

- Continuously follow GRC Strategies Smart Assurance and GRC in Common Sense which aims to effectively integrate assurance processes, cultivate GRC in employee mindset to be aware, accept and implement GRC, as well as prepare for becoming a GRC role model among Thai Listed Companies.
- Continuously Improve GRC implementation in Malaysia Assets more effectively by taking the results from GRC Internal Maturity and prepare for a Company-wide GRC Maturity Level assessment program.
- Enhance Risk Management System by implementing Chatbot to cover suggesting risk, searching risk information with an aim of no unidentified high-impact risks (no surprise risk)
- Develop GRC One Digital System which covers various reporting related to GRC i.e. Whistleblower Reporting, Risk Management, Business Continuity Management, Internal Control Assessment, and Compliance Reporting to assist management and relevant parties to obtain immediate GRC information for efficient decision making.
- Continue building GRC culture throughout several communication campaigns to enhance employee's understanding and awareness in order to ensure GRC implementation as part of their work.

Furthermore, PTTEP has established its Human Rights Policy and Management System in line with the international best practices to ensure concrete implementation and prevention of Human Rights violation through its business operations. The Company also conducted annual Human Rights Risk Assessment continuously. In 2022, the risk assessment covers 100% of its operating assets, non-operated joint ventures, and Tier 1 suppliers. Human Rights e-Learning in online platform was also provided to increase understanding for all employees.

Optimize Resource & Create Shared Value PTTEP concerns for natural resource conservation, environmental restoration as well as community and social development. Our strategies and main progress in 2022 are as follows:

(1) 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 which are retained at appropriate, safe, and efficient conditions along with upcycling high volume waste. In 2021, PTTEP made progress on 2 major projects, the pilot research and development to use of waste form petroleum drilling activities as an alternative material for road construction. With the department of Mineral Fuels' approval, drill cuttings from its onshore operations were tested to determine the proper ratio to be used as a component for the asphalt road. The pilot 1.2 kilometers road at PTTEP's Rapid Scale-up Center (RASC) was successfully constructed. Furthermore, PTTEP was succussed project to turn sand waste from the petroleum



production to prototyped zeolite. In 2022, PTTEP will continue this project to develop zeolite into pellets for moisture absorbents from natural gas. In addition, our hazardous waste to landfill is reported at zero which aligned with our long-term target for zero waste to landfill by 2030.

(2) 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 (Guardian of the Ocean) to support economic growth and quality of life of nearshore communities, with the target to achieve Net Positive Impact of Ocean Biodiversity and Ecosystem Services (Ocean BES) value in domestic offshore operations by 2025 and all offshore operations by 2030, compared to the 2019 base year. The Company also set the target to Increase 50% of community income for focused communities and achieve 16,000 conservation networks by 2030, compared to the baseline data before PTTEP project implementation. In Q1/2022, PTTEP achieved Net Positive Impact on Ocean BES value at 29.5% in domestic offshore operations and increased community income of focused communities by 20.5%, compared to baseline data before PTTEP project implementation from aquatic animal hatchery learning center, coastal conservation area and fish home project, mangrove forestation project, H.T.M.S under water learning site project and seafood product value enhancement. In addition, PTTEP also conducted the ocean health and biodiversity monitoring project such as the coral bleaching baseline project. Drones, equipped with multi-spectrum camera, are deployed to monitor marine ecosystem and coral reefs in Koh Mannai, Hin Thoi Hoi in Rayong province and Koh Phangan in Surat Thani province. PTTEP is starting to survey the potential area for pilot study on transplanted seagrass plantation in Koh Tean in Surat Thani province in collaboration with Kasetsart University. The carbon sink of the project will support to achieve net zero greenhouse gas emissions target as well.

In Q1/2021, PTTEP received 2022 Global CSR Excellence & Leadership Awards in the category Concern of Health at the 11th World CSR Congress held in Mumbai, India, in recognition of the Stunting Prevention Program in the East Nusa Tenggara (NTT) area in Indonesia. This program has been in operation since 2020 and gradually rolled out to other regions in Indonesia.

Management Discussion and Analysis (MD&A) for the first quarter of 2022



Future Business Outlook

Oil Price Outlook

During current volatile situation, ongoing Russia – Ukraine wars have posted significant challenge for the market and higher oil price above 100 USD per barrel could further slowdown economic growth, which led to lower oil demand. The rising COVID-19 cases in China and lockdown measure also threaten the market and possibly put oil demand at risk. In 2022, oil demand is forecasted to range between 99.5 and 101.0 million barrels per day.

After OPEC+ meeting in March 2022, the group stay on course to raise production around 432,000 barrels per day and expected to maintain these monthly incremental until September 2022 without increase the output beyond the quota and focus on balancing the market despite being pressured by Western to push more supply into the market. In consequence, there is a potential that IEA members will continue to release Strategic Petroleum Reserves (SPR) especially U.S. who just announced to release 1 million barrels of SPR for 6 months from May to October 2022. U.S. President Joe Biden has also demanded oil companies to drill more in an attempt to bring down oil price.

Based on tight market and low inventory level, the Dubai crude price will largely depend on current Russia-Ukraine situation and duration to end this war, COVID-19 spread, SPR release program and production contributed from top producers leading to oil price varying between 90-130 USD per barrel in 2022 (Source: PTTEP Internal, Market Consensus) amid the high uncertainties. The other key factors to be monitored are summarized as per following; demand recovery, slower economic growth due to higher oil prices, central bank policies, as well as U.S. sanction policy to Iran and Venezuela potential lifting this year.

LNG Market

Russia – Ukraine conflict is still the main factor that affects the Asian Spot LNG price in this year as 40% of Europe's natural gas is supplied by Russia. When considering LNG growth, LNG demand in Asia is still increasing, propelled by countries such as China, India and Bangladesh, together with demand from Europe to fulfill low gas inventory levels. The situation will cause the Asian Spot LNG price to increase in Q2/2022. However, it is expected that total production capacity of existing and upcoming LNG projects in 2022 will grow by 27 MTPA to 422 MTPA from 2021 (approximately 7%), while demand for LNG is anticipated to be around 401 MTPA (Source: FGE as of March 2022). The average 2022 Asian Spot LNG price is expected to be around 23 - 26 USD per MMBTU (Source: FGE, Wood Mackenzie as of March 2022).

Thai Economy and Foreign Exchange Outlook

The Bank of Thailand expects the economy to recover and expand at 3.2% in 2022 as impact from the Covid-19 pandemic becomes limited and downside risks to the economy decreases. Higher merchandise exports and increased tourism from relaxed travel restrictions are also expected to drive growth in 2022. To help support the recovery, BOT expects to continue its accommodative monetary policy although inflationary risks have increased mainly through energy and raw food prices. BOT will continue to monitor the impact of higher living costs and labor market developments as recovery is expected to be fragile and uneven across sectors.

For 2022, the Thai Baht is expected to continue to be volatile due to the anticipated monetary policy tightening trends of the Federal Reserve and the Bank of Thailand. Continued geopolitical tensions generated from the Russia – Ukraine war as well as the unresolved global Covid-19 situation generate uncertainties that also contribute to USDTHB volatility. However, as economies recover, markets should gradually switch to a risk-on stance, which helps strengthen the THB in the long term.

PTTEP has adopted the natural hedge method to manage FX risks of revenues from petroleum products and major expenses which are in the same currency. 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 83 percent of total interest- bearing debt is fixed rate.

PTTEP

Management Discussion and Analysis (MD&A) for the first quarter of 2022

PTTEP's performance outlook for the second quarter and the year 2022

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



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

- 2. The assumption is based on average Dubai price in 2022 of 95 USD/Barrel
- 3. Including increased sales volume from G1/61 sole investment
- 4. EBITDA margin: A percentage of Earnings before interest, taxes, depreciation, and amortization to the Sales Revenues and Revenue from pipeline transportation

Sales volume:

PTTEP expects the average sales volume for the second quarter and full year of 2022 to be approximately 467,000 barrels of oil equivalent per day. The sales volume growth in 2022, compared to the previous year was mainly driven from the first full year realization of sales volume from Malaysia Block H and Oman Block 61 Project, including G1/61 and Algeria Hassi Bir Rekaiz Project which the first production is planned in the second quarter of 2022.

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 the second quarter and full year of 2022 is estimated at approximately 6.2 and 6.4 USD/MMBTU respectively, higher than the previous year, reflecting the lag time adjustment of gas price in accordance with a continuous increase in global crude price.
- Outstanding volume of oil price hedging as at the end of the first quarter, to be settled throughout the second to fourth quarter of 2022, was approximately 11.6 million barrels. The Company has consistently monitored crude oil price movements and has the flexibility to adjust its hedging plan as appropriate.

Unit Cost:

For the second quarter and full year of 2022, PTTEP expects to be able to maintain unit cost at around 28-29 USD/BOE, which is in the same level compared to average unit cost reported in 2021.