

## PTTEP Q2 2022 Analyst Meeting

### Edited Transcript

**Venue:** Microsoft Teams Meeting  
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**Speakers:** Khun Montri Rawanchaikul  
*Chief Executive Officer*  
Khun Natruedee Khositaphai  
*Executive Vice President – Strategy and Business Development Group*  
Khun Sumrid Sumneing  
*Executive Vice President, Finance and Accounting Group*

*The slides of the presentation, as referenced throughout the transcript, can be found [here](#).*



## Introduction

### Moderator

Welcome to PTTEP's Analyst Meeting, featuring the announcement of the Company's operating performance in the second quarter of 2022. Before we begin, please allow me to introduce the executives who will be reporting the Company's performance today; 1) Khun Montri Rawanchaikul, Chief Executive Officer, who will share with us key successes in the first half of 2022, update on company's strategies, as well as latest update on carbon capture and storage (CCS) 2) Khun Natruedee Khositaphai, Executive Vice President – Strategy and Business Development Group, who will discuss the market outlook for oil and LNG, with the operations update for key projects, for both E&P and Beyond E&P businesses, as well as the progress of 'ocean for life' project, and 3) Khun Sumrid Sumneing, Executive Vice President – Finance and Accounting Group, who will summarize PTTEP's financial performance in the second quarter of 2022, financial position, interim dividend payment and the financial outlook for 2022. Without further ado, please join me in welcoming our CEO to commence the presentation.

## PART 1: Half-year Highlights and Strategy Update

**Khun Montri Rawanchaikul,**  
**Chief Executive Officer**



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### 1H2022 Highlights, Strategy Refinement, and CCS:

Company's performance was essentially the results of the business execution over the past 6 months. One of the highlighted events is the completion of the operatorship transfer of G1/61 project on April 24, 2022, whereby the execution has so far been smooth, despite a brief shutdown to install additional equipment. In fact, the plan is to install 8 new production platforms; one platform has already been installed, while the installation of the other one is almost completed. At this point, the drilling plan is being executed to connect the pipelines, with the initial capacity of approximately 200 MMCFD, which will gradually be ramped up in the next 2 years, to achieve the expected capacity in April 2024 of approximately 800 MMCFD. The teams currently working on this project, including new hires, all share the same goals and work alongside one another in unity.

With PTTEP's extensive investment in Malaysia, we can identify opportunities of added value in Sabah 412 project, which is adjacent to our existing Sabah H that commenced production in February 2021. With the potential to expand, we have decided to pursue the area we are familiar with and work together with our partner on the execution.

Apart from our focus to invest further in assets in Thailand and neighboring countries, we also look for the opportunity in the Middle East; UAE and Oman. Since our operator in Abu Dhabi is now operating a project in Sharjah, we took the opportunity to make an additional investment in Sharjah Area C project – out of the 3 areas (A, B and C). Area B is already in operation and has been in operation for quite some time, while Area C is an exploration project that can share production facilities of the whole block.

Meanwhile, the production sharing contract of Malaysia-Thailand Joint Development Area (MTJDA) between Thailand and Malaysia is going to end in 2028, which concerned many parties. With that, the cabinets of both countries have agreed to reconsolidate the areas in block B-17-01 and B-17-02 into what is regarded as MTJDA annexation, which the production period will be extended for another 10 years to

2038. The investment endeavors will be accelerated to identify gas fields, given Thailand's gas crisis and Malaysia's rising demand for gas.

Another hot issue that has been addressed recently is the protocols on climate management and environmental impact. PTTEP has already announced in the AGM in March 2022 that our Net Zero Greenhouse Gas Emission target by the year 2050. During the pathway to such target, we are aiming to reduce the emissions of CO<sub>2</sub> from our operations, whereby about 280,000 tonnes of CO<sub>2</sub> equivalent has already been reduced to date.

Another key highlight is that the operatorship transfer for Yadana project in Myanmar has already been completed on July 20, 2022, after the withdrawal of TotalEnergies. The process has been carried out smoothly, making us an official operator of Yadana.

The operating results for 1H2022 were underpinned by 2 major factors: higher sales volume and average selling price increase. In this regard, since the volume from G1/61 project has not yet been delivered as expected, an additional contributor was Arthit that used to operate under a Gas Sales Agreement (GSA) of 220 MMSCFD, which has now been ramped up to about 300 MMSCFD, hence leading to the volume increase of about 10 KBOED. Last but not least, Oman Block 61 that was acquired last year has also delivered higher volume than planned.

Since we are now in the midst of energy crises, one of the most important issues to discuss today is the Carbon Capture and Storage (CCS). We cannot afford to neglect the impact of global warming and carbon emission, despite the global demand for oil and gas, as it is vital for our long-term sustainability. Having said that, PTTEP is planning to implement the carbon capture and storage at Arthit project, whereby the front-end engineering design is now in progress. The investment is expected to commence in 2023 and we can anticipate to see the sequestration of emitted CO<sub>2</sub> in 2027.

One of the things that we take great pride in is that, of the improvement in our operating performance, we also made contributions in the form of corporate tax, petroleum royalty and other remunerations to the Thai government for approximately 50,000 million Baht over the past 6 months.

All in all, we are firmly determined in our role to safeguard the energy security for the country, to drive growth by identifying new assets and sales volume, to pursue decarbonization, Net Zero emission and

CCS investment at Arthit project, and lastly but most importantly, to ensure continuous social and environmental contributions.

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### **Strategy Refinement:**

Over the past 6 months, it is our intention to refine our strategies to ensure they resonate most effectively with our objectives. Amidst the energy crises and concerns over global warming, we have classified our strategic focus into 3 areas; 1) E&P growth 2) Decarbonization and 3) Beyond E&P.

With the global energy crisis, it is inevitable that we have to focus on E&P growth, maximize existing assets' production, accelerate development and turn discovery into production as fast as possible. We have just recently announced the discovery of a new gas field together with our operator, with whom we have been working for 2 years; Eni Abu Dhabi B.V., whereby we played a significant role in identifying the drilling position and following up on the drilling progress, which took about 6 months to complete. Upon successful completion of the drilling, we discovered a gas field of 3.5 TCF in the offshore area of Abu Dhabi. In this regard, Eni is known for fast-tracking the discoveries, so we are trying to push this effort into a fast-track mode to commence production as soon as possible. This endeavor also complements with the UAE's national policy to develop its own gas reserve after having imported from Qatar and given its abundant petroleum availability.

Apart from that, we need to ensure that our unit cost is competitive, and in order to address concerns on peak oil demand, we aim to enlarge the gas mix in our portfolio. In parallel with that, we will also continue to drive our LNG project in Oman as part of this direction.

With regards to decarbonization, our aspired goals are E&P Net Zero, GHG Emission Reduction & Technology Development and CCS projects – starting from Arthit, and may extend to other projects in the next 3 or 4 months. In the meantime, we are on the lookout for investment opportunities in renewable and future energy at operating sites. For instance, we have initiated solar panels to generate electricity at S1 project starting from the second quarter of 2023. And as for the environmental conservation, Khun Natruedee will share more details on the Ocean for Life project.

Moving on to Beyond E&P, we are now trying to accelerate the ARV technology, which can be classified into 4 major business lines. We are now deciding which one has the most promising potential to scale up.



In terms of the power business, we have a 'Gas to Power' project in Myanmar, which has been executed with certain progress, together with renewable energy projects.

On CCUS, the 'U' element, which is utilization, may not have a tangible outcome just yet, but we have signed an MOU to conduct a pilot study with our partner in Singapore regarding the carbon capture utilization. However, we are of the view that CCS is likely to be more impactful today as it is directly associated with greenhouse gas and climate change. Meanwhile, we take a comprehensive look on hydrogen and relevant investment opportunities. We might jointly invest with a potential partner overseas in feasible geographical locations. More information and updates will be shared once available.

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### **CCS – Key Contributor to Net Zero:**

Since I have widely discussed the significance of CCS, now I would share more about what we have done at Arthit project. In the gas production process, there are technologies that can remove CO<sub>2</sub> and transports CO<sub>2</sub> from one place to another within the project site. After that, there will be another reinjection platform to store CO<sub>2</sub> from the previous procedures. There are 2 approaches of how CO<sub>2</sub> gets stored; storing it in the depleted reservoir after the gas in that reservoir has entirely been lifted, and storing it in the subsea saline aquifer, which is a major approach in becoming a CCS hub in the area, whereby we are now in the process of studying the possibility. As for Arthit, we will be storing the removed CO<sub>2</sub> in the depleted reservoir.

There are several key enablers to make CCS a success, for instance, technical aspect, which we have learned from and discussed with those who have prior experiences elsewhere such as in the UK, Norway, Australia and the USA. The next enabler is the business model and operating cost, which we believe is going to add value for our gas. However, to implement CCS in large-scale projects in the future, we have to look at the environmental impact as well. Although CO<sub>2</sub> is not a toxic gas, we need to ensure that there is no issue with subsea storage, no bubbles forming around the storage area, and to establish an understanding of surrounding communities on what CO<sub>2</sub> is and how it should be stored. The last enabler is that we have been trying to form collaboration with the government bodies that take part in the Net Zero initiative to ensure we share the same goal and achieve Thailand's Net Zero target by 2065 as planned.

## PART 2: Business Update

**Khun Natruedee Khositapha,**  
**Executive Vice President – Strategy and Business Development Group**



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### Market Update:

Crude oil and LNG prices have been quite volatile recently. However, we have projected that crude oil price should be in the range of 90-110 USD/barrel in the second half of the year, after having gone through a similar pattern of fluctuation in the past few weeks. With that being said, we need to closely monitor the situation as there are a lot of uncertainty factors associated with this, for instance, the impact of Russia-Ukraine war on the global market as well as the demand-supply mechanism. We are of the view that demand should gradually pick up in the second half, despite a certain degree of uncertainty. The second half is usually the travelling season in the US and Europe, however, the potential new wave of COVID-19 can be a threatening factor, especially now in China, that imposes several travel restrictions. Meanwhile, worries over the economic recovery still remain prevalent.

On the supply side, the OPEC+ is going to increase production starting from August onwards, potentially going to resume to pre-COVID level, coupled with increased production from the USA. However, there may be a potential production limitation in Russia, so there are still a number of uncertainty factors involved.

LNG price, on the other hand, has been around 30 USD/MMBTU, with a promising level of demand in the travelling season. However, the Russia-Ukraine war remains a pressuring factor and limited gas pipelines also lead to lower production. LNG demand has been increasing in major Asian countries; China, India and Bangladesh. In the meantime, several projects aiming to increase LNG supply will start operating in the next year, which will also make considerable supply contributions.

Other market factors are, for examples, the EU sanction on Russia, increasing market demand in the second half, possibility of lifting the Iranian sanction, overall economic outlook and strict COVID-19 preventive measures in certain countries such as China, which can have a significant impact should there be another lockdown.

**Projects Update:**

As already addressed by the CEO, we have completed the operatorship transfer for G1/61 project, with the plan to gradually increase production. As a result of delays of site access prior to the operatorship transfer, the estimated production in 2022 is about 200-250 MMSCFD, before reaching 800 MMSCFD in early 2024. Apart from the existing projects, the offshore bidding rounds of 2022 in Thailand for G1/65, G2/65 and G3/65 blocks have come up, which we are currently under technical review process.

For assets in Malaysia, the front-end engineering design for Lang Lebah is in progress, with the scheduled FID in 2023. The drilling campaigns for other projects in the pipeline are now being executed as planned. Moreover, Malaysia is opening the new bid round in 2022, which we are considering to join.

Moving on to Myanmar, the operatorship transfer for Yadana project was completed on July 20, 2022, while PTTEP's withdrawal from Yetagun project was also completed on May 31, 2022.

The re-entry to the site in Mozambique is now pending, due to safety concerns, however, first LNG cargo in late 2025 still remains unchanged.

Meanwhile, the Algeria Hassi Bir Rekaiz project's first oil has already commenced in June 2022 and production will gradually be ramped up. With PTTEP's stakes of 49%, the estimated sales volume for the second half of this year will be approximately 7,000 barrels per day.

We have already announced a successful discovery of the Offshore Block 2 project in the UAE, together with other opportunities in the Middle East that we are still looking for.

In terms of Beyond E&P business opportunities, there are many areas of activities and highlights that are potentially going to enhance growth for PTTEP going forward. For instance, ARV has signed an MOU with Krungthai Bank to execute a pilot project on the first national corporate identification platform (NCID) in ASEAN, digitizing corporate KYC process for bank account opening. Under ARV, there are a few subsidiaries that have delivered key outcomes, for instance, Varuna's delivery of the green area management web application to Chaipattana Foundation to implement smart farming in Khung Bangkrachao area; Skyler also signed an MOU with Nam Thuan Energy Investment JSC to cooperate on the technology using smart drone solutions for renewable energy projects in Vietnam; Cariva – focusing on healthcare and wellness, has launched 3 applications; 'Arvic' for personal health assistant platform that



aggregates health data from various sources into one place, 'Beaut' for wellness marketplace connecting customers and wellness service providers, and 'Nextcercise' for personal exercise tracking; and lastly Rovula that has successfully demoed subwater inspection using an in-house "XPLOER" robot for EGAT at Sirindhorn Dam (the world largest floating solar plant).

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### **SD Update – Ocean for Life:**

With regards to the sustainability update and progress on our initiatives under Ocean for Life strategy, some people may find it challenging to establish tangible results, which is why we always have concrete targets and roadmap for what we do.

In order to meet the United Nations Sustainable Development Goal 14 (UN SDG14) On 'Life below Water', we have set our Net Positive Impact target on biodiversity and ecosystem services in offshore operations by 2030, while also increasing the community income for local community participating in our program of 50% or more compared to the time prior to project implementation.

For PTTEP, the ocean is our second home, so we see ourselves as the 'guardian of the ocean', with 3 intents; 1) clean & friendly operations – aiming to conserve and create an environment-friendly surrounding from our operations 2) ocean health & biodiversity monitoring and 3) ramp up CSR around the ocean.

Regarding the ocean health and biodiversity monitoring, we have signed an MOU with Hydro-Informatics Institute (HII) to develop the ocean data platform and ensure sustainable marine resources. Additionally, we have implemented the Blue Carbon initiative on mangrove, seagrass, seaweed seashell and coral to potentially support greenhouse gas offsetting and increase biodiversity balance, in order to achieve PTTEP's Net Zero target. In doing so, we have signed a number of MOUs with government bodies and educational institutes such as Kasetsart University and Chulalongkorn University in carrying out relevant studies and research on related matters.

Speaking of CSR activities, we usually execute them around the area of our operations, but later we have expanded this initiative along the coastline covering 17 provinces. Examples of CSR initiatives are ocean waste management with clear measurement criteria, mangrove forestation, aquatic animal hatchery learning center with the plan for further expansion, sea turtle nursery and conservation center to enhance marine biodiversity. The center is located at Sattahip, Chon Buri province, and will be expanded to

Songkhla province and Mannai Island. Other initiatives are coastal conservation area and fish home, which has already been established in 9 provinces, out of the goal of 17 provinces, and lastly, seafood product value enhancement to increase community income in areas we operate. PTTEP has provided the locals with training by experts on the production of processed seafood, as well as online marketing to generate community income. Every initiative has its own roadmap and plan, which will continuously be executed throughout the rest of the year.

## PART 3: Financial Results

**Khun Sumrid Sumneing,**  
**Executive Vice President – Finance and Accounting Group**



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### Profit & Loss:

The profit reported for the second quarter was at 600 million USD. Key events that contributed to Q2/22 earnings were the start-up of G1/61 and G2/61 project on April 24, 2022, though volume contribution may not be fully realized until the third quarter. Next, despite the first oil production of Algeria Hassi Bir Rekaiz in June 2022, sales volume has not yet been recognized as the oil produced has not yet constitute an oil load, so the contribution has not been reflected in the operating results until the third or the fourth quarter. Moreover, in this quarter, we had withdrawn Yetagun project, there may be some outstanding liabilities and book value that we had to write off. Hence, the impact will be reflected in the financial results of the second quarter, given the withdrawal from the project in May. Lastly, the divestment of PTTGL to PTT Group somehow has minimal impact on our balance sheet.

One of the important determinants is the oil price, averaging at about 70 USD/barrel in 2021, before increasing to about 96 USD/barrel in the Q1/21, 108 USD/barrel in Q2/22 and around 105-108 USD/barrel at present. These trends can be somewhat indicative of the Company's operating performance going forward.

The net profit increased by 282 million USD or almost 90% QoQ from 318 million USD to 600 million USD in Q2/22, with 9% from the volume increase from the PSC start of G1/61 project, 8% increase in average selling price from the global oil price trend, while the unit costs also rose by 8% from the upfront OPEX of G1/61 project.

The part highlighted in green is non-operating items, with the reported loss of 252 million USD in the first quarter and the loss of 47 million USD in the second quarter, mainly due to less oil price hedging loss. There was a significant increase in the forward pricing from 75 USD/barrel to 98 USD/barrel in the first quarter, and then from 98 USD/barrel to 102 USD/barrel in the second quarter, hence leading to a smaller degree of oil price hedging mark to market loss.

Compared with last year, the net profit increased by 378 million USD or about 170% YoY, mainly contributed from a significant increase in average selling price of 32% - from 60-70 USD/barrel to about 100 USD/barrel in this year. Likewise, the sales volume contribution from G1/61 and G2/61 project also led to a significant increase in the net profit, with 6% increase in unit costs mainly from OPEX and a slightly lower oil price hedging loss compared to 2021.

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### **Volume and Price:**

Sales volume increased by about 9% QoQ from 427,368 BOED in Q1/22 to 465,459 BOED in Q2/22, mainly from the start-up of G1/61 and G2/61 project, despite a slight drop in contribution from Bongkot as part of its area has been turned to G2/61 PSC, coupled with increased production from Arthit, leading to net increase in Thailand's asset portfolio.

Volume contribution in Southeast Asia (SEA) reported a slight increase from Malaysia assets; Sabah K offset with a slight decline from Sabah H. On the other hand, there was a considerable increase in volume of about 10 KBOED from Oman Block 61.

Sales volume increased by about 5% YoY, from 443,126 BOED in Q2/21 to 465,459 BOED in Q2/22, from G1/61, G2/61, and Arthit, despite a slight drop from Bongkot. There was a slight drop in volume from other SEA including Myanmar assets of approximately 3 KBOED; Yadana and Zawtika. On the other hand, Oman Block 61 made a significant contribution to volume growth YoY.

On the 6-month perspective, the increase was about the same to YoY; a small decline from Bongkot, higher contribution from G1/61, G2/61, and Oman Block 61.

With regards to product price, Dubai crude price at the end of 2021 was about 70 USD/barrel, before increasing to 96 USD/barrel in Q1/22 and 108 USD/barrel in Q2/22, consequently resulting in the increase in liquid price, from 91 USD/barrel in Q1/22 to 105 USD/barrel in Q2/22.

Our gas price, on the other hand, usually has a lagging adjustment period compared to liquid price. It increased from 6.07 USD/MMBTU to 6.10 USD/MMBTU in the second quarter, and will continue to increase in the third and the fourth quarters. However, with the incorporation of G1/61 and G2/61 with low gas price, the gas price may not increase that much.

Nevertheless, gas price increased quite significantly from 5.60 USD/MMBTU at 6M21 to 6.08 USD/MMBTU at 6M22, while liquid price increased from 60.52 USD/barrel to 98.72 USD/barrel at 6M22, mainly owing to the global oil price increase.

For Q2/22, the volume mix between gas and liquid is 72% and 28%, while the revenue mix is 48% and 52% respectively.

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### Unit Cost:

The unit cost in the second quarter was reported at 28.79 USD/BOE, increasing from 26.54 USD/BOE in Q1/22, mainly from the increased OPEX from 5.11 USD/BOE to 6.87 USD/BOE in the second quarter – specifically from the upfront OPEX for G1/61 and G2/61 resulting from our attempt to increase production and a lack of pre-required investment due to the inability to access the site areas. The G&A expense also increased slightly QoQ from 2.23 USD/BOE to 2.47 USD/BOE in the second quarter, mainly from the settlement of committed obligations upon withdrawal from Yetagan project.

Meanwhile, OPEX also increased significantly YoY, though it has been offset with the DD&A that decreased from 15.62 USD/BOE in Q2/21 to 13.33 USD/BOE in Q2/22 due to the reduction of decommissioning liability for Bongkot. Likewise, the comparative scenario between 6M21 and 6M22 is about the same, with the unit cost increasing from 27.57 USD/BOE at 6M21 to 27.72 USD/BOE at 6M22, mainly from higher OPEX and lower DD&A.

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### Cash Flow, Financial Position and Interim Dividends

The cash on hand was at around 2.8 billion USD at the end of the second quarter, increasing from 2.5 billion USD at the beginning of the year. The cash flow from operations amounted to 2.7 billion USD, deducted by tax payment of 1.1 billion USD, CAPEX of 784 million USD, dividend of 361 million USD and others of 228 million USD. The EBITDA margin for 6M22 was reported at 76%, which is still within the announced guidance.

With regards to the balance sheet, total assets increased by about 2% QoQ, with the increase in equity of 396 million USD; derived from the net profit for the first 6 months of the year of 918 million USD, deducted by the dividend payment of 361 million USD and hybrid bond repayment of 143 million USD that was due in June.

The interim dividend payment has been approved by the Board of Directors at the rate of 4.25 Baht per share, to be paid on August 26, 2022 and the record date is on August 16, 2022. In considering dividend payment, there are a number of factors taken into account; absolute amount per share, dividend yield and payout ratio, as well as cash required to support future investment plans. The payout ratio is 50%, which is in the range of 30-50% similar to historical payments, with the dividend yield of about 3-5%.

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### **Guidance, Debt Profile and Ratings**

Sales volume tends to increase in the third and fourth quarters – specifically from Algeria Hassi Bir Rekaiz, G1/61, and G2/61 projects, with the estimated sales volume of 481 KBOED in Q3/22, and the average sales volume of 465 KBOED.

The gas price is expected to increase to 6.4 USD/MMBTU in Q3/22 with full-year guidance also at 6.4 USD/MMBTU due to the 6-12 months lagged time. However, the selling price for G1/61 and G2/61 is linked Dubai crude price, so it depends on to what extent we have forecasted the Dubai crude price. If the forecast is orientated towards a decrease, the average gas price may also decrease, hence we have come up with a full-year average of 6.4 USD/MMBTU.

The unit cost projection for Q3/22 and the rest of the year is about 29-30 USD/BOE. We have put in efforts to ramp up production for G1/61 and G2/61 projects, as can be seen from the increase in OPEX per unit. With potential delays of certain projects in the second quarter, a certain amount of OPEX may have to be recorded in the third and fourth quarters. In the meantime, the EBITDA margin outlook is likely to be about 70-75%.

In terms of the debt profile, the debt-to-equity ratio still remained at 0.33x in Q2/22. There was slight increase in the average cost of debt from 3.38% in 2021 to 3.73% in Q2/22, on the back of an increase LIBOR rate that impacts the portion of our debts with a floating rate, which constitutes about 15-20% of total debts of the company.



**PART 6: QUESTIONS & ANSWERS (Q&A)****Question # 1**

Are there any impacts from Russia-Ukraine war to the company strategy / risks in short-term to medium-term?

**Answer from PTTEP's management**

There are several factors that impact global oil price and it's quite hard to tell whether it would be a long war between Russia and Ukraine. We put our best effort to manage our unit cost so that we can withstand in any oil price volatility. On the strategy front, during recent years, we have refined our strategy to focus on the core strategic areas that we are familiar with or "Coming Home". Next, we are currently focusing on gas assets as we believed that gas would be the transitional fuel. The acquisition of Oman Block 61, discovery in UAE, and development of gas fields in Malaysia strongly support this strategy going forward. We believed the long-term effect of Russia-Ukraine war would be on the oil price front and gas shortage in Europe, should not directly impact PTTEP.

**Question # 2**

What was the exit rate of Erawan concession, and please provide production outlook for Q3&Q4

**Answer from PTTEP's management**

G1/61 project comprises of several fields e.g. Funan, Plathong. Under the concession, there were 8 central processing platforms (CPPs) for gas producing. At the start of PSC, only 5 CPPs were operated at that time due to lack of pre-required investment. The exit rate of Erawan concession was approximately 370 mmscfd. PTTEP has tried our best and speeded up to install new wellhead platforms in order to maintain as well as ramp up gas producing rate. The current rate is around 200-250 mmscfd.

**Question # 3**

How was the performance of Bongkot sole investment so far?

**Answer from PTTEP's management**

The sole investment has started in April 2022 with lower-than-expected performance due to drilling obstruction in the first place. We are now ramping up and the performance will be back on track as we expected.

**Question # 4**

EPPO has mentioned that from October 2022 onward, the gas supply from Myanmar will be declining, is this because of Yadana project which the PSC will expire in 2028? Any chance for the company to relinquish the block sooner than the expiry date?

**Answer from PTTEP's management**

PTTEP has just assumed the operatorship of Yadana project from 20 July 2022, formerly operated by TotalEnergies, so we need to further evaluate and look into the plan whether any adjustment should be required. The priority will be on energy security of the country.

**Question # 5**

If the long-term LNG price estimates are at the level around 10 USD, would this impact gas price of Mozambique project?

**Answer from PTTEP's management**

Majority of the LNG price for this project, under existing SPA, is linked to oil price. Therefore, long-term LNG forward curve is unlikely to impact the LNG price of the project.

**Question # 6**

Regarding Mozambique LNG project, from recent news, TotalEnergies as the operator may further defer construction work. Will this impact the 1<sup>st</sup> cargo timeline as well as the cost structure of the project?

**Answer from PTTEP's management**

Cost of Mozambique LNG project mostly are already fixed by contracts with the contractors. For construction work deferred, TotalEnergies is now considering whether to resume construction and end force majeures. We foresee no immediate impact on our book value at the moment and we, furthermore, already recorded an impairment for Mozambique LNG project in Q4/2021. We will closely monitor on this matter.

**Question # 7**

What is the company hedging policy for 2023? Will it change from previous practice? What is the outstanding hedging volume as at the end of Q2/22?

**Answer from PTTEP's management**

The main objectives of oil price hedging were cashflow protection, and to manage risks under the volatile oil price situation. Therefore, it's kind of risk management which is still necessary even with solid financial position. We hear the investors' concerns over opportunity loss in case the oil price keeps rising, and are currently considering the hedging policy of 2023 volumes which we shall balance between the timing, volume, and the price to be hedged appropriately. The outstanding oil price hedging volume end Q2/22 was 7.7 MMBBL.

**Question # 8**

How does the company treat CO<sub>2</sub> of Arthit project, before CCS implementation?

**Answer from PTTEP's management**

Generally, gas fed to PTT GSP has to follow the required specification and gas surplus is emitted to atmosphere as flare. Firstly, we reduce flare gas to support GHG reduction scope 1 that already starts implementing. Next is to reduce CO<sub>2</sub> in natural gas, which does not meet the specification, by using membrane technology and to store it underground. If it is successful, the gas value will improve as the heating value increased. For the scope 3 management, when the gas reaches to GSP, it is our scope 3 and PTT's scope 1. To manage GHG at this stage, the collaboration between PTT group is needed by CCS hub that recently signed MOU. In the meantime, our first start of the CCS project is at Arthit. The CCS project cost over 5 years (2022-2026) is approximately 300 MMUSD.

**Question # 9**

How much will the decarbonization (e.g. CCS implementation) impact cost profile of the company?

**Answer from PTTEP's management**

The CCS will affect the increase in cost of the project but it is still economical, as it shall improve the quality of the gas (in terms of heating value) so that the gas can be sold at higher price. However, for the big picture, if Thailand is going to be the CCS hub, all relevant parties, both the government and private sectors, will need to collaborate and define the carbon credit methodology to be adopted to push forward this kind of CCS project.

**Question # 10**

Please provide some examples of CCS projects in Thailand, as well as overseas? How do they progress so far?

**Answer from PTTEP's management**

There are both big scale and small scale of CCS projects globally, for example, the Japanese Tomakomai project, which is a collaboration among several E&P companies. Its capacity is about 1 million ton per annum. The project already finished the storage process and currently under monitoring stage whether there will be any impact to environment nearby. Another big project to mention about is Northern Light in Norway, in the North Sea area, initiated by the government with private sectors to jointly invest and obtain carbon credit in return. Apart from that, there is the project in the UK named Teesside, which is opened for concession bidding process. Chevron also has the Gorgon project in Australia.

**Question # 11**

Regarding the unit cost, how much will be the outlook for OPEX per unit, when G1/61 and G2/61 reach its full capacity in the next few years? How much will be the OPEX per unit for 2H2022?

**Answer from PTTEP's management**

The OPEX per unit for 2H2022 might range between 8-9 per BOE. When G1/61 and G2/61 reach full capacity, OPEX per unit will be around 7\$ per BOE.

**Question # 12**

Which projects contribute additional sales volume to Q3/2022 outlook, compared to Q2/2022?

**Answer from PTTEP's management**

The main addition was from full quarter realization of G1/61 project, as well as sales volume from Algeria Hassi Bir Rekaiz project which the 1st oil was delivered in June.



You can reach the Investor Relations team for more information and inquiry through the following channels:

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## DISCLAIMER

## Forward-looking Information

The information, statements, forecasts and projections contained herein reflect the Company's current views with respect to future events and financial performance. These views are based on assumptions subject to various risks. No assurance is given that these future events will occur, or that the Company's assumptions are correct. Actual results may differ materially from those projected.

## Petroleum Reserves and Resources Information

In this transcript, the Company discloses petroleum reserves and resources that are not included in the Securities Exchange and Commission of Thailand (SEC) Annual Registration Statement Form 56-1 under "Supplemental Information on Petroleum Exploration and Production Activities". The reserves and resources data contained in this transcript reflects the Company's best estimates of its reserves and resources. While the Company periodically obtains an independent audit of a portion of its proved reserves, no independent qualified reserves evaluator or auditor was involved in the preparation of reserves and resources data disclosed in this transcript. Unless stated otherwise, reserves and resources are stated at the Company's gross basis.

This transcript may contain the terms "proved reserves", "probable reserves", and/or "contingent resources". Unless stated otherwise, the Company adopts similar description as defined by the Society of Petroleum Engineers.

**Proved Reserves** - Proved reserves are defined as those quantities of petroleum which, by analysis of geological and engineering data, can be estimated with reasonable certainty to be commercially recoverable, from a given date forward, from known reservoirs and under current economic conditions, operating methods, and government regulations.

**Probable Reserves** - Probable reserves are defined as those unproved reserves which analysis of geological and engineering data suggests are more likely than not to be recoverable.

**Contingent Resources** - Contingent resources are defined as those quantities of petroleum which are estimated, on a given date, to be potentially recoverable from known accumulations, but which are not currently considered to be commercially recoverable. The reasons for non-commerciality could be economic including market availability, political, environmental, or technological.