

PTTEP Q2 2023 Analyst Meeting

Edited Transcript

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Speakers: Khun Montri Rawanchaikul
Chief Executive Officer

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Executive Vice President - Strategy and Sustainable Growth

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Executive Vice President - Finance and Accounting

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 2023. Before we begin, please allow me to introduce the executives who will be delivering the presentation today; **1) Khun Montri Rawanchaikul**, Chief Executive Officer, who will share with us the global trends in carbon emission reduction activities, which essentially affect the operations of energy businesses, as well as compare PTTEP's operating performance in low-carbon businesses with peers in the industry, and the progress of the 3 projects that serve to enhance the country's energy security and progress of the EP & Beyond businesses **2) Khun Chayong Borisuitsawat**, Executive Vice President – Strategy and Sustainable Growth, who will discuss the global oil and gas market updates, as well as PTTEP's carbon emission reduction activities through different projects, cost management directions enabled by the GoT Synergy project and the Company's digital transformation efforts **3) Khun Sumrid Sumneing**, Executive Vice President – Finance and Accounting, who will summarize PTTEP's performance in the second quarter of 2023, financial position, and the dividend payment from the operating results in the first half of 2023, as well as the operational outlook in the third quarter and FY2023. Without further ado, please join me in welcoming our CEO to commence the presentation.

PART 1: Business Update

Khun Montri Rawanchaikul,
Chief Executive Officer



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Global CO₂ emission Scenarios:

Given the current global climate crisis, PTTEP, as an energy producer, is heavily concerned about the impacts of global warming and climate change, which are influenced by numerous factors. If no action is taken and we allow changes in the energy trends to follow their courses, we can expect the global temperature to rise by 2.4 degree Celsius (as indicated by the black line on the graph). This has quite significant implication as a temperature rise of 1.5 degree Celsius is already a concern to cause an adverse impact on the planet, so an increase of 2.4 degree Celsius is beyond questions.

A resolution was reached at the recent Conference of the Parties (COP) Summit in Paris, highlighting the imperative need to take action to reduce CO₂ emissions and attain Net Zero, in order to reduce the temperature to the green line as indicated on the graph, which is significant level. However, the world has been going through several crises; geopolitical issues and wars, energy shortage, resulted in sharp rise in LNG prices compared to oil prices. Many countries were forced to opt for diesel for electricity generation and many others have switched back to coal. Meanwhile, many countries have announced their Net Zero policies, and if we successfully execute these initiatives, we can anticipate reaching the blue line on the graph. However, we also have to keep an eye on the upcoming COP28 Summit in the UAE in December 2023, where we expect to learn more on how each country is going to execute and materialize their policies.

PTTEP's business is the upstream oil and gas producer, which usually incurs carbon dioxide contents as part of the process. However, we emit a very low amount of methane compared to other industries. We also keep the carbon dioxide emission under control. Furthermore, technology has become more readily available such as Carbon Capture and Storage (CCS).

Global Low-carbon Business Arena:

With regards to relevant technologies, we need to keep updated on the government policies and the proceeding after carbon is captured and stored. If we look at major oil and gas companies, many of them are moving towards the low-carbon business arena, and we can see less of the businesses with 'Last-man Standing' standpoint, or those that insist on operating as the conventional oil and gas producer. Previously, many producers in the Middle East positioned themselves as the 'Last man Standing', but as concerns over the climatic conditions and global warming grow, they are gradually shifting towards the 'Cautious Diversified' group to minimize carbon footprint and to make natural gas production processes cleaner.

PTTEP is also in the 'Cautious Diversified' group, focusing on Carbon Capture and Storage (CCS), and natural gas production. Natural gas is widely used in energy production, especially electricity generation, transportation, and industrial consumption. With this, PTTEP is aware of the fact that our natural gas production plays a critical role in ensuring energy security, while ensuring that the gas we produce is cleaner. Besides, we are also looking at new energies and have incorporated technology to progress further. At this point, we can see several players moving into a 'Cautious Diversified' group, for instance, Pertamina and some other companies in Europe and the USA.

European companies have become more advanced as they are transitioning towards being the 'Energy Supplier' group, using less natural gas and oil. In the meantime, we can see many of them executing CCS initiatives, for instance, BP, Shell or Total, who has changed into TotalEnergies, with increased portfolio in renewable energy such as solar, wind and hydrogen. Going forward, we can expect to see more and more companies pursuing new forms of energy. Meanwhile, Orsted has transformed into a 'Fully Diversified' group, by completely transitioning to the renewable energy portfolio and starting into hydrogen business.

PTTEP is firmly grounded in our stance to ensure Thailand energy security, in natural gas production, and in materializing decarbonization, executing CCS, reducing carbon footprint, and starting to diversify. Besides, we have started the discussion on using hydrogen as feedstock to produce a new type of energy, which will be firstly executed in Oman; one of the 5 places with high potential of renewable energy production. Furthermore, the consortium we are working with are ready to offtake and use the natural gas produced in their project.

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7**EP & Beyond:**

Therefore, our execution plan is quite concrete, firmly positioned as the 'Cautious Diversified' player, with the tendency to move towards EP & Beyond businesses. The term 'Beyond' refers to the technologies, for instance, Varuna, which is part of ARV's businesses. Varuna features the use of drones to inspect the carbon absorption capacity in different geographical conditions and forests. We are successful in getting joint investors on board with Varuna, with the potential execution of new related projects under ARV. Going forward, we are also going to launch the green hydrogen project, with a newly-awarded block in Oman. Finally, we have incorporated a spin-off company; FTEV (Future Tech Energy Venture) to operate the solar farm business. In this regard, the first renewable energy project under FTEV is at S1 Project in Kampaeng Phet. Previously, the electricity supplied to the site was from the gas turbine, and we attempted to minimize the use of gas by generating power from the solar farm instead. The current capacity is about 10 MW, and we are considering possibilities of expanding to other sites as well. At the moment, we are also using renewable energy sources such as solar and wind at some of our offshore facilities.

At this stage, we are planning on the potential to scale up the business. Our focus is not to compete with renewable energy companies, but rather using renewable energy as an upstream component for new formats of energy. Hence, we can expect to see solar farms in our production areas and the use of renewable energy to produce new formats of energy, such as the green hydrogen project in Oman.

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6**Energy Security & Growth:**

EP will still be our core business as to reiterate the importance of ensuring energy security, however, going forward you may hear about EP & Beyond more often. Speaking of energy security, there are 3 key projects in the Gulf of Thailand. G1/61 Project, which was transitioned from the previous concession into PSC, has been operating for about a year, though it takes two years in advance to secure the target production volume of 800 MMSCFD, with the target of 400 MMSCFD along the way, as opposed to the volume of 200 MMSCFD when the project was first kicked off. It took a considerable amount of time installing the platforms, connecting pipelines and drilling the production wells. The target of 400 MMSCFD was successfully achieved one week ahead of the plan.

The next project is G2/61 Project, previously known as Bongkot Project, which no longer operates as a concession but a PSC. G2/61 Project has a gas supply commitment over the 10-year period of 700 MMSCFD. However, as we realize the challenge facing G1/61 Project in achieving the target of 800 MMSCFD in the second year, so we have negotiated with the government to commit the production volume of G2/61 Project of 825 MMSCFD, though we managed to exceed the target at 840 MMSCFD.

Another project that we need to keep an eye on is Arthit Project, after successful exploration and installing the platforms and wells. The gas supply commitment for Arthit Project is 280 MMSCFD, but the project has been exceeding that target for over a year now, with the current volume of 340 MMSCFD. We have planned for an expansion phase for Arthit Project, and it also serves as a pilot project for CCS, which is being discussed with the government regarding the investment capital as well as the proceedings after storage. We intend to expedite the investment decision and we are now in the process of making agreements on relevant terms and conditions.

In summary, there are 3 main projects in the Gulf of Thailand: 1) G1/61 Project as an ambitious growth agent, with the aim of achieving production volume of 800 MMSCFD by April 1, 2024, 2) G2/61 Project as a steady provider, with the intent of consistently supplying energy and 3) Arthit Project as a white knight ramping up from 280 MMSCFD to 340 MMSCFD. PTTEP takes great pride in operating these 3 projects, which have been reflected in the Company's operating results in the first 6 months of the year. On which topic, Khun Sumrid will elaborate more later in the presentation. For now, let me pass on to Khun Chayong to discuss energy market direction and PTTEP's strategies.

PART 2: Market & Strategy Update

Khun Chayong Borisuitsawat,
Executive Vice President – Strategy and Sustainable Growth



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Market Update:

Regarding global crude oil and natural gas price scenarios and the future outlook, the crude oil price has experienced a slight decline YoY but an increased QoQ, with the current average of 77.6 USD/barrel. Concerns about financial challenges, for instance, increased interest rates and rising inflation, remain prevalent, though efforts have been taken to keep it under control. With that, it has been forecasted that the oil price range will be between 70–80 USD/barrel. However, oil demand in the western part of the world has improved during the summer due to increased mobility, and is likely to remain stable throughout the remaining of the year. Given ongoing economic concerns, a significant improvement in demand is unlikely.

On the supply side, the production cut scheme from the OPEC+ and Russia is ongoing until the end of 2024, while Saudi Arabia has planned to cut its oil production by another 1 million barrels, which will take effect until the end of the third quarter of 2023. This could potentially lead to a tight supply situation from now to the end of the year. Moreover, the factors to keep monitoring are the situation of the Russia-Ukraine war and the pace of economic recovery.

On the other hand, the LNG price reached its lowest point at 11 USD/MMBTU in the second quarter and slightly increased currently. Forecasted demand for the third quarter shows only a marginal improvement, as it is contingent upon stock levels in Europe and northeast Asia. However, there could be an increase in demand in the fourth quarter as winter approaches. Meanwhile, there is still a chance of oversupply due to the addition of new production facilities, while demand has not been catching up as fast as there are other alternatives power generation such as renewable energy, coal or nuclear energy. Hence, PTTEP's view on the LNG price range will be 13–17 USD/MMBTU, which is in line with the market guidance.

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10**GHG Reduction Initiatives:**

Another issue I would like to emphasize is our 'Decarbonize' strategy. Decarbonize is set to be a crucial aspect of the E&P business, or oil and gas industry, for the foreseeable future. It forms a key part of our strategy to ensure the long-term viability of our operations. Apart from the key project such as CCS, we have put in place several activities to mitigate the risks related to greenhouse gas emission, for instance, flare gas recovery and utilization, increasing energy efficiency by reducing the use of electricity and making use of the heat recovery technology in generating steam and electricity. In terms of fleet management, we have integrated a hybrid transportation system and cargo management to optimize energy efficiency and reduce combustion resulting from the use of oil in our logistic activities. Furthermore, we ensure fugitive leak detection, which is already very low, and to achieve zero leak of methane from our equipment, as part of the safety protocols and greenhouse gas reduction initiatives. Last but not least, we try to incorporate renewable energy such as solar and wind at our production sites, on which the CEO already addressed that we are trying to use more renewable energy at our offshore facilities.

As of the second quarter of 2023, we managed to reduce 11.2% of the greenhouse gas density from the base year in 2020, and 1.9 million tons of CO₂ equivalent, with 400,000 tons reduced in 2023 alone.

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11**GHG Offsetting Initiatives:**

This slide is a summary of PTTEP's pathway to minimize greenhouse gas emissions from our operations. We have implemented 2 major strategies to ensure achievement of the Net Zero target; 1) exploring for lower carbon E&P portfolio for a better carbon management and for a gradual decrease in carbon emissions through new assets in the future and 2) production and planet in balance through initiatives implemented to reduce carbon emissions from existing projects, as well as reforestation projects to offset with carbon dioxide released from our producing activities.

The investment capital in these initiatives over 5-year horizon is about USD 460 million. The key initiative is carbon capture and storage (CCS), which contributes approximately 48% of total accumulated greenhouse gas reduction, together with other initiatives; energy efficiency, renewable energy in our operations, process optimization by incorporation of technology.

For the remaining greenhouse gas that we cannot reduce further, we are going to come up with the ways to offset greenhouse gas emissions by reforestation, which are land and mangrove forestation and blue carbon, as part of our Net Zero Pathway.

Cost Strategy:

One of the most important strategies to improve business efficiency is our cost strategy, especially gas production cost in the Gulf of Thailand facilities through Gulf of Thailand (GoT) Synergy. As part of the program, GoT model serves to maximize reserves and resources to ensure maximized use of available resources with our statistical know-how and experiences operating in the area and in identifying smaller exploration wells with the attempt to reduce drilling expenses via GoT Factory. The objective of GoT Factory is to lower the investment cost by using less wellhead platforms and reusing wellhead platforms from expired fields in order to optimize production costs with the production volume.

The third component is GoT Operation, with the aim of decreasing the OPEX, for instance, minimizing energy consumption and process improvement, with the incorporation of digital technology in our gas and condensate production processes to ensure minimum amount of impurities. The AI technology is also integrated in opening and sealing the wells to yield maximum production efficiency. Furthermore, the AI technology also applies to predictive maintenance activities to reduce unplanned maintenance expenses and unplanned shutdown. We also employ digital technology in positioning the wellhead platforms to make sure they are in suitable locations and minimize the number of wells. All of these are our efforts to manage operating costs and enhance energy consumption efficiencies.

PART 3: Financial Results

Khun Sumrid Sumneing,
Executive Vice President – Finance and Accounting



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Financial Results Q2/23:

The financial statement and dividend payment for the second quarter have been successfully submitted to the Stock Exchange of Thailand on July 31, 2023. Before delving into the numbers, it's important to highlight some key points. Notably, crude oil prices experienced a significant uptick in the first half of 2022, peaking at approximately 100 USD/barrel. However, since the latter part of that year, there has been a gradual decline, with current prices hovering around 84 USD/barrel. This notable shift has the potential to impact the Company's operational performance.

The net profit increased by about USD 41 million or 7% QoQ to USD 610 million in the second quarter, mainly from Bongkot Project's end of concession, as well as the reversal of certain decommissioning items leading to a slight decrease in DD&A and goodwill.

Sales volume also decreased by 3% QoQ due to the transition of Bongkot Project to a PSC regime, resulting in a volume decrease from 461 KBOED to 445 KBOED. The average selling price decreased by 4 USD/BOE QoQ, while there was a minor increase in the unit cost from 26.07 USD/BOE to 26.41 USD/BOE. Details will be discussed later.

From a YoY perspective, the net profit for the second quarter increased by about 2%, ascending from USD 600 million to USD 610 million, from the increase in non-operating gains, despite a 4% reduction in volume YoY. For Oman Block 61 Project, there existed an element known as cost recovery, representing petroleum volume recovered to compensate the cost. Such recovery was notably elevated in the preceding year. However, a decline in the cost recovery has led to a subsequent reduction in sales volume from the project. Furthermore, the average selling price decreased quite a lot by 18%, equivalent to 10 USD/BOE following drop in crude oil prices in comparison to the second quarter of 2022. Alongside this, the unit cost decreased by 8%.

On the first half of 2023, the net profit was reported at USD 1,180 million, increasing by 29% or USD 262 million compared to the first half of 2022. As of June 2022, a non-operating loss in oil price hedging was reported since the oil price in 2022 was very high, resulting in a significant impact on the oil price hedging. However, the impact was not that severe in 2023 due to a gradual decrease in oil prices, as seen from the oil price hedging gain reported for the first half of 2023 of about USD 3 million.

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15**Financial Results | Volume & Price:**

Sales volume has declined by approximately 16 KBOED QoQ mainly due to the concession expiration of Bongkot Project and transition to G2/61 Project. Meanwhile, production has resumed at Malaysia Block H Project after a shutdown in the first quarter of 2023, despite a slight volume decline at Malaysia Block K Project.

Looking at the first half of 2023, sales volume reached about 453 KBOED, increasing slightly by roughly 6 KBOED YoY, mainly contributed from assets in Thailand, especially the incorporation of G1/61 and G2/61 Projects, as well as Arthit and MTJDA Projects. However, we reported a volume decline from Oman Block 61 Project due to the cost recovery issue addressed earlier.

Moving on to price, as gas price tends to reflect the oil price several months back, meaning that if there is a decrease in oil price, gas price is likely to follow suit. The gas price in the second quarter of 2023 was 5.87 USD/MMBTU, decreasing from 6.52 USD/MMBTU in the first quarter of 2023 and from 6.10 USD/MMBTU in the second quarter of 2022. As of the first half of 2023, gas price increased slightly to 6.20 USD/MMBTU. Liquid price, on the other hand, is in line with crude oil prices, which decreased from about 100 USD/barrel in the second quarter of 2022 to only about 77 USD/barrel in the second quarter of 2023. The volume mix of gas and liquid has remained unchanged at 73% and 27% as before.

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16**Financial Results | Unit Cost:**

The unit cost was booked at 26.41 USD/BOE in the second quarter of 2023, increasing only slightly from the first quarter of 2023, mainly from higher DD&A resulting from the concession expiration of Bongkot Project in the first quarter of 2023 and subsequent reversals of decommissioning liabilities, which were reflected in the one-time adjustment in DD&A, causing the DD&A figure in the first quarter of 2023 to be lower.

Another area to highlight is the royalties, which decreased from 3.39 USD/BOE in the first quarter of 2023 to 2.31 USD/BOE in the second quarter of 2023. When it comes to a PSC regime, royalties are usually not recorded as expense, but instead net off from the reported sales volume. Hence, the change from concession to PSC regime for Bongkot Project resulted in a lower royalty expense per unit. Another factor affecting royalties is the oil price. The decrease in oil price will naturally cause royalties to decrease as well. With that, it is noticeable that royalties declined from 4.24 USD/BOE as of the first half of 2022 to 2.86 USD/BOE at the first half of 2023. Apart from these, there are no particular issues with other items as they are somehow reflective of the normal business operations.

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Financial Results | Cashflows & Financial Position

The amount of cash on hand at the end of the second quarter of 2023 was approximately USD 3 billion. In this regard, the beginning cash was USD 3.5 billion, considering cash flow from operations (before tax) amounting to USD 3 billion, net with tax payment of about USD 1.2 billion. The amount of tax paid in Thailand alone is roughly USD 800 million. The investment was about USD 1.4 billion, and the dividend payment accounted for about USD 600 million. Tax expense and dividend payment combined was almost USD 2 billion, so the ending cash as of June 2023 was about USD 3 billion.

With regards to the financial position, there was a slight decrease in assets due to allocation of cash for tax payments and some other expenses, in turn leading to lower liabilities. Shareholders' equity increased from USD 13.5 billion to USD 14 billion due to the net income of USD 1.2 billion, deducted by tax payment of about USD 600 million, so the difference will be credited to equity.

The debt-to-equity ratio remained healthy at 0.26x, against the policy of 0.5x, while the average cost of debt decreased from 3.99% per annum to 3.94% per annum. Since we operate on a 100% fixed interest rate, the rising market interest rates has no impact on our financial costs. Another reason for a decrease in financial cost is the issuance of USD 1,500 million debentures, as part of the program launched by the Stock Exchange of Thailand, Securities and Exchange Commission and Thai Bankers Association. We are among the first batch of pioneers, together with PTT Group, Toyota and KBANK, to test run the debenture issuance systems. This platform will be utilized mostly for institutional investors, whereas the one for individual investors will take a while to materialize more details.

Furthermore, as part of the liability management, we have transferred the debentures, issued back in 2012 in Canada where we have withdrawn the field and divested the assets, to the PTTEP Treasury Center and we have executed a partial buyback of such liabilities, leading to the reduction in interest rates in the second quarter of 2023.

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18**Financial Results | Dividends**

The dividend payment has already been announced at the rate of THB 4.25 per share, given the improved operating results compared to the year 2022. The XD and record dates have been set on August 15 and August 16, 2023 respectively, with the payment date scheduled on August 29, 2023.

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19**Results Guidance**

The projected sales volume for the third quarter of 2023 has been set at 470 KBOED, increase from the second quarter due to certain oil shipments of the Oman Block 6 (PDO) and Oman Block 61 Projects from the second quarter of 2023 being carried over to the third quarter of 2023, coupled with the 45-day shutdown of Malaysia Block K Project in the second quarter of 2023. The full-year volume forecast decreased slightly from 470 KBOED to 464 KBOED due to a vessel issue of the B8/32 & 9A Project, together with the unplanned shutdowns of Malaysia Block K and Malaysia Block H Projects during the first half of the year.

The gas price has been forecasted to be at 5.8 USD/MMBTU in the third quarter of 2023 due to higher sales volume contribution from PSC projects, and the delayed impact in response to the crude oil price, alongside a full year forecast of 6 USD/MMBTU. The unit cost should remain in the range of 27-28 USD/BOE, which is largely dependent on the OPEX and CAPEX spending in the second half of the year, with a note that the OPEX utilization in the first half of the year accounted for 42% of full year planned OPEX budget. Finally, the EBITDA margin has been anticipated to move in the range of 70-75%.

PART 4: QUESTIONS & ANSWERS (Q&A)**Question # 1**

Does the company have target for its renewables business in the next 3-5 years and what should we think about the changing in terms of revenue structure?

Answer from PTTEP's management

We do not have Gigawatt target for renewables as we do focus on upstream renewables where electricity generated can be used for future energy or Power-to-X, rather than conventional renewables. The Hydrogen development project in Oman is our first X.

The company's revenue structure in the next 3-5 years would still be E&P as core business, and we expect to see some part of our revenue to be from Beyond. The management is in continuous discussion on business plans as well as corresponding solid investment budget and targets for these new businesses.

Question # 2

Why does PTTEP decide to invest in the Hydrogen project in Oman?

Answer from PTTEP's management

The crucial part of a green hydrogen project is its renewable sources. Oman, where most areas are desert, is particularly suitable and efficient for low-cost renewables e.g., solar during daytime and wind during night. Therefore, we view that country like Oman and UAE have a high potential for renewables, which can be a steppingstone for PTTEP to venture into green hydrogen business.

Question # 3

What is the company's view on CCSaaS and Varuna, in terms of strategy and cost? How does this fit into PTTEP's strategy.

Answer from PTTEP's management

For CCS and CCSaaS, there are generally 3 key elements to factor in;

- 1) License to operate – to be issued by the Government
- 2) Incentives and returns in terms of carbon credit and gas price, which are still ambiguous
- 3) MMV (measurement, monitoring and verification) or liability. The longer period of liability, the higher cost. Usually, in overseas, liability of CCS project is matched with the end of the projects' life and then hand over to the Government.

We believe that CCSaaS is achievable in Thailand given the geological structure to store CO₂ in the northern part of Gulf of Thailand. The CO₂ from eastern industrial estates can be transported and kept in

place under the seabed. The Government needs to push forwards on license, incentives and liability as mentioned.

For CCS, our pilot Project is at Arthit in the Gulf of Thailand. It is in the process of discussion on the incentives, as well as the gas price after CCS implementation. For the breakeven, it requires a clarity of those 3 elements, then the breakeven can be calculated. Other countries like Malaysia and Japan also face the same concerns as Thailand and they are on the way to resolve them. For example, Japan will issue a law related to CCS at the end of this year.

Direction for energy, especially in Asia in the next 20 – 30 years, is to produce cleaner natural gas, to make CCS happen and to use new energies such as hydrogen and ammonia.

Question # 4

Regarding GoT Synergy, does the company have the target for cost reduction?

Answer from PTTEP's management

We have the aspirational target to reduce unit cost to 25\$/BOE. In terms of initiatives from GoT synergy, we expect CAPEX reduction in Gulf of Thailand around 8%, aligned with our plan for facility synergy. For OPEX, we will emphasize on energy efficiency and process improvement. However, we foresee only a slight decline in our absolute OPEX, given growth in our operations/production. For digital transformation, we will adopt the technology to add value in the entire operation flows, improve efficiency and drive the unit cost down.

Based on historical unit cost, we have spent 5-6 years and reduced the unit cost from 43\$/BOE to the current level and we are proud of this result. We put a lot of thought on our investment decisions, OPEX, and cost control, and drove down the cost to the range of 26 – 27\$/BOE. However, to reduce the unit cost further to 25\$/BOE, it needs great efforts. The digital transformation as mentioned will play a crucial role in this part in terms of increasing speed and accuracy, which leads to cost reduction.

Question # 5

According to view on LNG price, where the price in 2026-2028 is still over 10\$/mmbtu, despite the expected over supply during those years, what is the rationale behind this?

Answer from PTTEP's management

Predicting market LNG price is very challenging as it depends largely on future LNG facilities investment. Other key factors that will impact the price will be global gas demand, the pace of future energy development e.g., ammonia, as well as the remaining project life of the Henry Hub LNG, which is the main sources of LNG supply currently. However, in the near term, we are quite confident that it will be the supply shortage especially in winter seasons.

Question # 6

Currently, the oil from Russia is shipped from West to East, with more competition in Asian market that drive down crude premium overall. Do those geopolitical risks impact the oil production/price in Oman/ LNG in Mozambique in the future?

Answer from PTTEP's management

During this energy transition era, there might be a shift from oil to gas in some of the sectors. However, in the longer-term, oil is still expected to be source of energy for electricity generation, aviation (jet fuels), and industrial sectors. While the demand and supply of oil is predictable, the current level of global oil demand at 101 million barrels per day is expected to maintain flat into the future years, with no further growth. Our view is that the impact to global oil price from such global oil demand will supersede the supply release from geopolitical situations.

Question # 7

After G1/61 Project reaches its full production capacity at 800mmscfd in April 2023, will its standalone unit cost be maintained below \$25/BOE?

Answer from PTTEP's management

G1/61 Project might not be the major contributor for PTTEP's consolidated unit cost reduction. It could also come from our oversea projects. Like GoT Synergy in the Gulf of Thailand, we expect to adopt the same concept to our Malaysia assets to drive down the costs. As for G1/61 Project, the cost of facilities/equipment transferred from the government will not be high. However, the new wellhead platform installation and additional wells drilling are required to ramp-up and maintain the production and the major costs of G1/61 Project will be from these parts.



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Forward-looking Information

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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.