

PTTEP Year-End 2023 Analyst Meeting

Edited Transcript

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10:30 – 12:00 hrs.

Speakers: **Khun Montri Rawanchaikul**
Chief Executive Officer

Khun Chayong Borisuitsawat
Executive Vice President - Strategy, Business Development and Human Resources

Khun Sumrid Sumneing
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 fourth 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 overall update on the operating results throughout the year 2023, the demand and supply outlook of natural gas in Thailand, the Company's determination to strengthen energy security for Thailand, investment in renewable energy businesses, social and environmental contribution, and the Company's goals in 2024 in alignment the strategic direction – Drive Value, Decarbonize and Diversify **2) Khun Chayong Borisuitsawat**, Executive Vice President – Strategy, Business Development and Human Resources, who will discuss the global outlook for oil and gas prices, the Company's investment portfolio, progress of E&P and beyond E&P projects, progress of the carbon capture and storage project, which is one of PTTEP's key projects in response to energy transition, and **3) Khun Sumrid Sumneing**, Executive Vice President – Finance and Accounting Group, who will summarize key events in 2023, which are reflected upon the operating results in 2023, financial position, dividends and the overall outlook of the operating results in the first quarter of 2024. And 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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2023 Key Takeaways:

Starting off from the overall outlook in 2023, I must admit that we have been through several challenges in 2023. There were a number of uncontrollable factors along the way, for instance, the issue concerning the leakage at Chevron's Benjamas 2 Vessel and the issue with Petronas's FLNG vessel at Sabah H, which stopped operating for one month. Also, regarding our own vessel in Malaysia, the petroleum storage tank has not been cleaned during the pandemic, leading to the accumulation of sand that requires cleaning, and consequently resulting in the halt in operations. The impact of these incidents has led to a decreased sales volume, but we have tried our best in every possible way. We exceeded our daily production target at Bongkot or G2/61 of 825 MMSCFD, while we surpassed Arthit's gas sales agreement of below 300 MMSCFD at 360 MMSCFD. The Gulf of Thailand is our prime focus to compensate the shortfall from G1/61. In the meantime, we have successfully ramped up production at Algeria Hassi Bir Rekaiz (HBR) from 13 KBPD to 17 KBPD. All in all, the total sales volume was reported at 462 KBOED, which is slightly lower than our target and the previous year. And given the price volatility, the average gas price in 2023 was 6 USD/MMBTU, decreasing by about 4% from 2022.

Having said that, with decreased sales volume and price, the operating results should have been lower than the year before. However, we take everything that happened as lessons learned. With significantly lower non-operating losses, which are from hedging, impairment and write-offs, our net income increased in 2023, making it another record-high year on top of 2022. The unit cost also improved as a result of effective cost management.

We have achieved our production target of 400 MMSCFD for G1/61 in the middle of the year, and we are most confident that we will meet the target of 800 MMSCFD by 1 April 2024. You may notice that production will be accelerated around the end of March in order to ensure that the target is achieved. All in all, we never once delivered the gas below the DCQ in 2023.

Meanwhile, PTTEP's balance sheet and financial position are quite strong, with clear business directions and growth potential in E&P businesses and others. Therefore, energy transition is not something we can overlook. Before COVID-19, many people discussed energy disruption, saying that oil and gas will no longer be in demand. At this point, the trend is more toward energy transition than energy disruption but it takes time to change, because nothing can replace oil and gas as fast and in such a low price. We have spent many years studying where we are going to be at the end, to which we have found the answer that we will be an upstream energy producer and convert it to other formats of energy. Our intention is not to become an electricity producer, but rather producing electricity to convert it into other types of energy. Hence, we have initiated a green hydrogen project in Oman. The process involves converting seawater into freshwater, and then goes through the electrolysis process, whereby the electricity used in the process must be clean electricity from renewable sources. Electrolysis separates water into hydrogen, which is converted to ammonia for logistic purposes. It sounds complicated just thinking about it. The clean energy has to be either solar or wind energy, and Oman presents outstanding opportunities as there are vast dessert areas, strong winds and access to seawater. However, the question is who the potential buyer of hydrogen will be, as there have to be the markets in order to make it a business.

Fortunately, the government of South Korea has prescribed the policy that hydrogen will be required to mix with LNG to supply to power plants by 2030. With an off taker, the government is ready to subsidize no matter how expensive hydrogen is. Therefore, we have been looking for opportunities to collaborate with South Korean companies to operate the hydrogen project in Oman. The company was newly established in December 2023 as a joint venture between PTTEP, South Korea's POSCO, and ENGIE; a leading French renewable energy company, together with Samsung Engineering. We are going to spend the next two years studying the wind and sunlight capacity, before making the Final Investment Decision (FID) by 2027. The first production of hydrogen should be expected by 2030.

Given PTTEP' experiences working offshore for over 40 years, we have been keeping our eyes on the offshore wind farm project. However, we have learned the hard way for investing in projects that have not started production or generated revenue and we have to wait, and the impairment has become inevitable. Rather, we focus on projects that have started operating and generating revenue, though the cost of acquisition might be higher. Hence, we found an offshore wind farm project in Scotland; SSE, who is also a major electricity producer in Scotland, holds 49% interest, and TotalEnergies holds 51% interest, taking

advantage of TotalEnergies's knowledge and capacity in operating offshore projects. We have been considering this project for about a year and we find it very appealing as the base of the turbine is nestled in the sea at a depth of 60 meters, and the project operates at the deepest seabed that has ever existed for an offshore wind farm. There used to be a question regarding the potential to operate an offshore wind farm, given our experiences in operating offshore platforms and operations. They are completely different as the platform operates on the vertical, while the wind farm operates on the horizontal, so the engineering principle is totally different. As a result, we partnered with Total and secured the indirect participating interest at 25.5%. On completion of the deal, there will be a number of procedures to take, for instance, payment of duty stamp in Scotland. We can expect revenue generation from the second quarter of this year onwards. This project has 114 turbines in total, and each turbine can produce electricity of approximately 10 MW. This is part of our plan to respond to the energy transition, taking into account the fact that the investment capital is sufficient, and the risk level is acceptable, despite the long period of time it takes to study the details and negotiate the deal.

Over the past few years, I have been discussing Thailand as a hub for carbon capture and storage (CCS Hub), resonating with the Net Zero aspiration by 2065, which is hardly achievable without the CCS hub. With CCS, we expect to capture 40 million tons of carbon dioxide equivalent, out of 320 million tons of carbon dioxide equivalent emitted each year. Hence, the CCS hub should fully materialize during 2040-2050. With that, we have forged collaboration among 4 organizations; PTTEP, Department of Mineral Fuels, JOGMEC; Japan Organization for Metals and Energy Security, who has assigned INPEX; an E&P company of similar size and production capacity to PTTEP. We will be jointly conducting research and exploration in the northern area of the Gulf of Thailand, starting in the end of 2023 or early 2024, to determine the potential of the area before working further on other details. The government's participation is somehow required in a project like this, so it is yet to be determined what the potential rewards will be, for instance, carbon credits, incentives, and relevant obligations – how many years the carbon will be stored and how often the inspection is going to be.

Another highlight is that we produce renewable energy to reduce energy consumption in oil & gas projects, and so we have implemented the solar energy production of about 10 MW at S1 Project, spanning over the area of almost 100 rais to reduce gas utilization at S1 itself.

History of Thailand Energy Security:

Thailand has been evolving over time in terms of energy consumption. There are several energy types consumed, for instance, imported oil, coal, electricity, and LNG, which later took the center stage as seen from the continuously growing volume. From the graph, there was a slump in energy consumption during 2021-2022 due to COVID-19, though it should have rebounded in 2023. There has been a decline in domestic natural gas in the Gulf of Thailand. Apart from its roles in conducting business, PTTEP also contributes as a domestic supplier of natural gas to ensure energy security for the country. Changes that affect the public, such as electricity expense, are caused by several factors. However, we operate on clear terms and conditions. For instance, gas sales agreements do not fluctuate with the global price. On the other hand, LNG prices do fluctuate with the global price since the majority of LNG in Thailand is based on the spot price rather than contracted price, which poses a risk.

Currently, natural gas represents about 34% of the energy mix in Thailand, while oil comes close at 36%. Daily consumption for oil and gas is approximately 1 MMBPD and 4,000 MMSCFD respectively. This trend is likely to remain unchanged for now, though we have to keep up to date with the new Power Development Plan (PDP) that the government should be releasing in the second or third quarter and see how the energy mix will be. The tendency is that we can expect a higher proportion of renewable energy, which is understandable as gas supply has depleted and we have to rely on imports for both oil and LNG.

Key Fields Supplying Gas to Thailand:

This slide highlights PTTEP's roles as the gas supplier to Thailand. Previously, our production has considerably exceeded the gas separation plant's capacity, which has the capacity of about 2,760 MMSCFD. From the graph, gas supplies from MTJDA all the way to G1/61 are wet gas and should be processed at the gas separation plant. As a side note, wet gas is mainly from Malaysia and the northern part of the Gulf of Thailand, while dry gas from the west side such as Myanmar does not need to be processed at the gas separation plant as they do not bear any petrochemical values. Hence, gas from Myanmar and LNG is of similar attribute. At this point, our production is close to the gas separation plant's capacity and is likely to decrease. Having said that, there might be an opportunity in the Overlapping Claims Area between Thailand and Cambodia (OCA) that lies in the Gulf of Thailand area, in a way that the

value of wet gas might be higher. It depends on the results of the negotiation between both governments on how we are going to proceed.

Meanwhile, PTTEP remains committed to our producing assets G1/61, G2/61, together with 60% stakes in Contract 4. As an operator at Arthit, we are producing at a higher capacity than DCQ, while we are also pushing for an extension phase for MTJDA. Sinphuhorm project in northeastern Thailand is also a critical one as it is the only onshore station that supplies gas to power plants. On the west, there are Zawtika and Yadana projects in Myanmar, which can never be stopped despite the pressure being exerted on them as they nurture 11 power plants on the west side of Thailand, representing about 17% of domestic electricity demand.

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PTTEP's GoT Gas Supply Outlook: Q1 2024:

The official commitment for G1/61 project is to deliver gas production of 800 MMSCFD by 1 April 2024, hence 600 MMSCFD in December 2023 is not an official commitment. We are currently producing 840 MMSCFD for G2/61 (formerly Bongkot), against the commitment of 700 MMSCFD. The tendency over the next few months is to maintain production at 800 MMSCFD, with a surplus of about 100 MMSCFD. Arthit also reports a continuous surplus, with a surplus of about 60 MMSCFD in January, proceeded by a minor drop while waiting for a clearer investment plan with a surplus of approximately 30 MMSCFD. All in all, G2/61 and Arthit have contributed a lot in compensating for the missing capacity from G1/61. From March onwards, we will start to see the accumulated surplus of contracted commitments; 800 MMSCFD from G1/61, 700 MMSCFD from G2/61, 280 MMSCFD from Arthit, as well as Contract 4 though we are only the partner, not the operator. Having said that, PTTEP is not the cause of the country's gas supply shortfall.

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"SEAGREEN" Offshore Wind Farm Acquisition:

As mentioned earlier, we are very excited about the Seagreen project, after having considered many projects and we are thrilled to finalize this deal. We are confident in our partner; TotalEnergies, as we have been working together for over 30 years, since the times in the Gulf of Thailand, Yadana in Myanmar, and currently in Mozambique. Apart from signing an SPA, we have also signed an MoU with TotalEnergies to jointly study renewable energy potential, focusing on offshore wind farms. Seagreen is essentially a low-risk asset with stable cash flow, with a total capacity of 1.1 GW, operated by 114 wind turbines. The project

has started full operations since October 2023, while the fixed and floating revenue streams are 70% and 30% respectively. The overall risk level is considered acceptable. It is located around 20-30 kilometers off the coast of Angus in Scotland. The submarine cables installed at over 40-60 meters depth. The electricity generated powers two-thirds of all Scotland homes and the project is able to displace over 2 million tonnes of carbon dioxide equivalent to reduce greenhouse gas. So, we are looking forward to pushing this project forward and determining potential expansion opportunities.

As many of you already know, Scotland is very windy, then the wind turbines are very efficient. With the current technology, wind turbines need consistent access to strong winds, but in the future, we have to wait and see whether the turbines can operate in less windy environments, which will be of benefits to PTTEP and our country in the future.

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Green Hydrogen in Oman:

The green hydrogen project in Oman is located in Duqm, a very windy area located in the middle of a desert that will be developed into an industrial estate. There are refineries and a gas-fired power plant supplying electricity to the refineries in Duqm. However, the key focus for the hydrogen project is mainly for exports.

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“Lan Sang Arun” Solar S1:

Lan Saeng Arun Solar Farm has a capacity of 10 MW, capable of reducing the greenhouse gas of 13,000 tonnes of carbon dioxide equivalent. The construction took 2 years to complete and may take some more time to negotiate and obtain the electricity generation license.

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Social & Environmental Contribution in 2023:

I'd like to communicate to analysts and the media about our social and environmental contributions. ESG is at the heart of PTTEP's operations that we take seriously but we also look beyond ESG to other matters such as talent management, grooming new generations in replacement of retired executives, and safety, which is critically important, especially for employees, assets, and the environment.

Our accumulated greenhouse gas reduction is approximately 2.5 million tons of carbon dioxide equivalent or equivalent to 12.5% in 2023, from base year 2020. We have also increased the reforestation space as a carbon offset measure.

As for the government revenues, the income tax, royalties, and others are 54,280 million Baht. We have paid on time and announced explicitly of the amount that we paid.

On the social and environmental aspect, we have created positive impact on the ocean biodiversity and ecosystem, with the achievement of low chemical spill rate, zero hazardous waste and social return on investment. I believe analysts have closely been monitoring our activities on ESG. However, there may be objections saying that despite high social contributions, our profit margins have also been lucrative, and the electricity expense is still high. Though it might be a waste of time discussing the issue here, I find it necessary to address it with the media so we can all help communicate with the general public. More details will be discussed in the next slide.

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Finance – 5 Years Investment Budget:

With the profits of 2,208 million USD in 2023, the investment activities will formally kick off in 2024, with the investment budget of 6.7 billion USD. The amount of CAPEX is so high that if we take this year's profits to invest in CAPEX next year, it might not be enough. The CAPEX will mostly be allotted for projects in the Gulf of Thailand, Malaysia, the Middle East (a new FDP of a newly discovered field), a small portion for Oman, and the resumption of a project in Mozambique. The total amount of CAPEX over the next 3 years will be approximately 12 billion USD. Therefore, the generated profits are unlikely to be saved up but to power the operating cash flows and the OPEX.

The CAPEX is categorized into production phase and development phase to support company's growth. Overall, the 5-year Budget was announced in December with the total amount of 33 billion USD. This year, the exploration budget is 254 million USD, consisting of 8 wells in Malaysia, 2 wells in Oman, 1 well in the UAE and 1 well in Thailand. At this point, we tend to concentrate our exploration focus in areas we are familiar with, unlike in the past when our exploration activities spanned over diverse locations as we did not understand our expertise well like we do today.

2024 Focus Areas:

Before moving on to the next section with Khun Chayong on the oil price outlook and the market in general, we remain firm on our 3 strategies and they are not only on papers but we have actually delivered them in a tangible manner, for instance, Drive Value and Decarbonize – though a CCS hub is the target that we have yet to prove in this year, reduce greenhouse gas emissions and add value to gas at the pilot project ‘Arthit’. Meanwhile, Ocean for Life is something we have been doing continuously, with compliments and rewards received from many parties of our dedication to the ocean. As for Diversify, we have green hydrogen, offshore wind farm, Lan Saeng Arun Solar Farm, as well as the AI and Robotics Ventures (ARV) that has just celebrated the fifth anniversary a few months ago. ARV has started to gain its growth momentum after having been finding its own footing for a while. It has a successful application of using drones for carbon detection and absorption in forest areas. ARV has raised funds from interested prospects to continue with its drone applications and carbon detection technology.

Regarding CCS, we are conducting a study on setting up a CCS hub in the Gulf of Thailand. It is necessary to have this project which is about 40 million tons of greenhouse gas to support Thailand’s Net Zero emission target by 2065. The budget allocated for the ‘Diversify’ strategy can be quite dynamic as we cannot see future projects entirely. However, we have set the 5-year budget of 600 million USD, with the provision of 2 billion USD that has not yet been set aside as a budget. And that is the overall summary of PTTEP in 2023. Let me hand over to Khun Chayong to discuss the market and strategy updates.

PART 2: Market & Strategy Update

Khun Chayong Borisuitsawat,
Executive Vice President – Strategy, Business Development and Human Resources



Market Update:

In this section, I will be sharing updates on the market and the overall portfolio of PTTEP. There was a decrease in crude oil price in 2023 due to the continuous increase in supply from the OPEC+, depending largely on the production capacity from within and outside of the OPEC. As for concerns over the economic slowdown and continuous interest rate hikes following inflation, they serve as potential factors causing the

crude oil price to decrease. On the global oil demand outlook for 2024, it has been forecasted that economic growth in Asia should contribute to an increase in oil demand, while demand in the US and Europe is likely to remain stable, with the possible decrease in interest rates. With that, oil demand may either remain stable or increase slightly.

On global oil supply, the production control among the OPEC+ still remains effective until the first quarter of 2024. The OPEC+ plans to keep oil production cuts unchanged and maintain production at this level to support the oil price. However, there are other factors, for example, certain non-OPEC+ members may have the tendency to ramp up their production. With that, PTTEP's guidance is that the oil price should be in the range of 70-80 USD/barrel, despite an increase in oil demand during the summer in the third quarter especially for countries in the northern hemisphere, which may cause the oil price to increase slightly. Speaking of other geopolitical factors, the tension between Russia and Ukraine, and between Israel and Hamas are still on-going, but oil production and supply are hardly going to be affected as the incidents occur in a rather limited circle. Although, the Houthi movement in the Red Sea can be an issue as the transportation course is blocked, there are other alternatives that can alleviate the demand and supply conditions.

With regards to our hedging policy, our aim is to protect the potential downside and minimize the impact on cash flow and net income. We are taking a more dynamic approach on this matter, which we have done quite well in the past year.

As for the natural gas situation that may affect the price and production capacity in the Gulf of Thailand, LNG price decreased to 14 USD/MMBTU in 2023, with a continuous decrease in LNG price caused by high inventory accumulation. Moreover, the weather conditions during the winter were not as severe as expected, so LNG demand has been affected to a certain extent, resulting in a consequential price drop. Meanwhile, the global LNG markets is expected to well balance soon, given incoming supply from the Middle East and Indonesia. However, it also depends on whether LNG demand will pick up at the end of 2024. From PTTEP's point of view, LNG price should be somewhere between 14-18 USD/MMBTU, which is quite in line with the guidance of analysts.

Well-Diversified Portfolio & Key Business Update:

This slide captures the investment overview in each country. Our investment portfolio is about the same as before. Sales contribution in Thailand accounts for 67%, mostly contributed by G1/61, with the expected production of 800 MMSCFD by April 1, 2024, leading to the overall increase in volume for PTTEP. Meanwhile, we are ramping up production for G2/61 at 800 MMSCFD, against the commitment of 700 MMSCFD, which can help alleviate the import burden, so it is likely that we maintain production at this level. In the meantime, Arthit is producing at over 300 MMSCFD. The overall volume in Thailand in 2024 will increase mainly from G1/61 contribution of 800 MMSCFD, while other projects such as MTJDA and Contract 4 are consistently maintaining production at a certain level.

For Southeast Asia, we are considering the extension of the soon to be expired contract of Yadana project and Zawtika to maintain consistent production. As for producing assets in Malaysia such as SK309 and SK311, Kikeh and Block H, their production capacity has been well maintained, while we are expediting the final investment decisions for 3-4 newly discovered projects within the next few years; SK325, SK405B and SK438. These three fields have the potential to be expedited as the pipeline infrastructure is readily available that can be linked to the existing facilities. These three projects can contribute with volume addition in the long run. Also, we expect the final investment decision for Lang Lebah within this year and the first gas production can be expected in 2028.

Moving on to Australia, we have divested Cash Maple last year, while Oliver Field is in the process of evaluating its commercial potential. If no interested prospect turns up, we may consider relinquishing the asset back to the government, marking our complete exit from Australia.

The Middle East contributes about 11% of the sales volume, with the strategic production sites at PDO Block 6 and Block 61 in Oman. Oman has a great potential for gas field development and the government is looking for partners to jointly develop the project. We are also studying in details of the opportunities in Oman to determine whether they are worth pursuing further. In the meantime, we have discovered the Offshore 2 project in UAE, with ENI as the operator, who is working to expedite production. With regards to our growth strategy in the UAE, we are of the view that the UAE is full of potential, and we can anticipate good news upon completion of the exploration activities.

In terms of Africa, our investment projects are in Algeria and Mozambique. This region is currently contributing 2% of the total sales volume. In Algeria, we have Hassi Bir Rakaiz and Bir Seba, whereby Hassi Bir Rakaiz is producing at 17 KBPD, with the potential to ramp up to 30 KBPD in 2028 and 60 KBPD in 2030, while Bir Seba is producing at 16 KBPD. Moreover, we are going to resume operations in Mozambique project early this year, with the first cargo scheduled in 2028. With all projects combined, we can anticipate a significant increase in production during 2027-2028, with the estimated daily production of 800,000-900,000 barrels of oil equivalent.

Moving over to North and South America, we currently have only one exploration project in Mexico. Due to a very high potential of existing projects in other countries, it is likely that we are going to divest the asset in Mexico. We have also completely executed the divestment of assets in Canada and Brazil.

In the meantime, we have allocated 10% of the CAPEX to invest in Beyond E&P businesses in high-potential locations, equivalent to the CAPEX amount of approximately 2 billion USD for next 5 Years.

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Carbon Capture and Storage (CCS) at PTTEP:

As mentioned before, our intention is to implement a CCS project at our existing field, which is Arthit as the pilot project. The progress has been quite far ahead, with the completion of front-end engineering design (FEED) as well as economic outcomes of the project. Negotiations with the government is underway, involving matters such as the incentives to recover additional costs as the project requires a high investment capital, as well as the liabilities in terms of measurement, monitoring and verification (MMV). We expect the negotiation to finalize and proceed to the final investment decision by the end of this year. This is our expectation to materialize CCS at Arthit, and to be able to duplicate this success at other assets in the future.

Another project that we intend to implement CCS is Lang Lebah field in offshore Sarawak, Malaysia. Technical and commercial details are still under discussion, and the negotiations with the government regarding liabilities and the policy are still on-going. The State of Sarawak also participated in the discussion, adding another level of complexity to the matter.

On the other hand, we plan to implement CCS as a Service (CCSaaS) in the northern part of the Gulf of Thailand, spanning over the area of approximately 30,000 square kilometers. We are working on this

initiative in collaboration with Japan, whereby the agreement to explore the site has been signed. INPEX has been appointed by Japan's side to provide technical contribution, study and explore the potential before developing a business model. The government may also take part in the initiative by looking at the investment aspect or considering the possibility of bidding, with the objective of enabling CCSaaS a new business opportunity for PTTEP. This is the summary of the market outlook and strategy update. Let me hand over to Khun Sumrid for the financial results.

PART 3: Financial Results

Khun Sumrid Sumneing,
Executive Vice President – Finance and Accounting



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Key Events in 2023:

Let me start off with key events in 2023. The two major highlights are sales volume and prices, together with certain extra items that will be discussed later. First of all, PTTEP's operatorship in G1/61 Project started in April 2022, with the initial production capacity of 200 MMSCFD, before ramping up to 400 MMSCFD in 2023. In the meantime, G2/61 Project currently run at an average of 825 MMSCFD with the objective of compensating for the G1/61 volume shortfall. The commitment of 800 MMSCFD for G1/61 Project will be reached by April 1, 2024. In summary, we reported a net increase in sales volume from G1/61, G2/61 and Bongkot Projects of approximately 13 KBOED, compared to 2022.

Algeria Hassi Bir Rekaiz Project has commenced production in June 2022 but generated sales volume in the fourth quarter. Then in 2023, we have ramped up production from 13 KBPD to 17 KBPD, marking a significant progress for this project.

As for Yadana Project, there was an increase in participating interests from 25% to 37% upon the withdrawal of TotalEnergies, subsequently granting us the operatorship in 2022.

There was an incident concerning B8/32 Project's vessels in 2023 affected oil transportation, which we thought would have impacted the sales volume for the entire year, but the situation eventually resumed to normal in the fourth quarter. Besides, there were also issues concerning the vessels for Malaysia Block K and Block H Projects, consequently leading to unplanned shutdowns, though the operations resumed to normal at the end.

Regarding impairment, it is normally tested once a year, but the review is conducted on a quarterly basis. First of all, I would like to ensure a clear understanding on the impairment that it will likely incur when there are delays, cost increases, or there are changes in the price assumptions. These are the 3 major indicators of impairment, but it does not imply that when these happen, there will be an impairment right away. We will usually discuss internally first with regards to potential improvements or the possibility of a mitigation plan in order to manage the situation. For instance, the major cause of impairment for the Mozambique Area 1 Project was due to one and a half year delays in 2022, and one-year delay in 2023, though TotalEnergies has committed to access the site by the first half of this year. As a result, our initial projection of the first gas production has been postponed from 2027 to 2028.

Due to the divestment of assets in Brazil and Angola, the impairment losses were incurred in 2022. In 2023, there are 2 remaining assets in Australia; Oliver and Cash Maple, whereby the disposal of Cash Maple has already been completed. The gains from disposal of Cash Maple were reported at 75 million USD in non-operating items. On the other hand, the cost for Oliver is about 80 million USD, whereby a certain portion has been impaired, leading to the impairment loss of approximately 50 million USD. Therefore, we reported a net profit of 2,208 million USD for 2023.

There are several events in 2022. We reported a surplus of 71 million USD originating from the reversal of contingent payment on the commitment to increase production from 1,500 MMSCFD to 1,800 MMSCFD within 2025, which agreed upon the acquisition of Oman Block 61 Project. However, we view that such a scenario is hardly achievable, hence such provisional liability must be reversed. Also in 2022, there was a mediation for Montara class action lawsuit amounting to 129 million USD, which was already settled. You can see that there were quite a lot of extraordinary items in 2022, with a much lower number of items in 2023 that you can have a clearer explanation in the next slide.

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Financial Results | Q4/23 and FY2023:

On the right-hand side, it can be observed that profits from the operating items decreased in 2023, whereas there were improvements on the losses from non-operating items. For the operating items, the decrease was mainly due to 1% drop in volume from 468 KBOED to 462 KBOED, together with a significant drop in the average selling price of 5 USD/BOE, which has a direct impact on the operating profits. On the other hand, there was an improvement in terms of oil price hedging, from the oil price hedging loss of 186 million USD in 2022 to only 4 million USD in 2023. Likewise, an FX loss was reported at 5 million USD,

which is considered manageable. These 2 factors contributed to improving the situation with regards to non-operating items. Moreover, there were impairment charges in 2022, including Mozambique, Brazil and Angola, with the total losses of approximately 300 million USD. The figure somehow decreased in 2023 to 170 million USD, which can be categorized into 120 million USD for Mozambique and 50 million USD for Oliver. All in all, we have been doing quite well in terms of the non-operating items management. As addressed earlier by our CEO, we have gained experiences over the past 2-3 years in terms of oil price hedging, though impairment is somehow a common occurrence in business operations. Sometimes we must be willing to cut loss for the certain assets as they are not in our focus countries, or they may be an investment that we lack experience in, as seen from the fact that our focus areas are currently in 4-5 countries. Let us move on to discuss on sales volume.

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21**Financial Results | Volume and Price:**

Sales volume decreased by about 1% from 468 KBOED in 2022 to 462 KBOED in 2023, despite sales volume addition from Thailand, mainly from Arthit, G1/61 and G2/61 Projects, while sales volume from Bongkot Project decreased. As mentioned before, if we combine G1/61, G2/61 and Bongkot Projects, we can observe a net increase of 13 KBOED in sales volume. Meanwhile, there have been sales volume contributions from Arthit and MTJDA Project to compensate for the G1/61 volume shortfall. As highlighted in green in the bar chart, there have been issues with certain assets in Malaysia, with the unplanned shutdowns from the vessel issue that resulted in a decline of the sales volume. Apart from Thailand and Malaysia, the sales volume decrease was from Oman Block 61 Project, caused by the lower sales volume entitlement according to Production Sharing Contract (PSC), upon the fully utilization of the cost recovery. The cost recovery means the portion of claimable expenses from the Government in the form of revenues. However, the decrease in sales volume at Oman Block 61 Project has been offset with the increase in sales volume at Algeria Algeria Hassi Bir Rekaiz Project.

If comparing the sales volume YoY, the sales volume in Q4/22 and Q4/23 was reported at 500 KBOED and 474 KBOED, respectively. The decrease in sales volume was mainly due to the lower entitlement for Oman Block 61 Project.

Shifting to the average selling price, the oil price in 2022 was higher than in 2023, with Dubai crude price dropping from 96.38 USD/barrel in 2022 to 82.09 USD/barrel in 2023. Similarly, gas price also decreased from 6.27 USD/MMBTU in 2022 to 6.0 USD/MMBTU in 2023, partially due to the higher contribution from

PSC, namely G1/61 and G2/61 Projects, and the downward trend in gas price with the lagged time adjustment of 6 months to 1 year. Liquid price also decreased in pursuit of the crude oil price, from 94.89 USD/barrel in 2022 to 79.09 USD/barrel in 2023, which is usually discounted to Dubai price about 2-3 USD/barrel. Consequently, the average selling price declined from 53.39 USD/barrel in 2022 to 48.21 USD/barrel in 2023, which is considered quite a lot. With reference to the volume mix, liquid and gas represented 28% and 72%, respectively. For YoY, the gas price in Q4/22 was 6.7 USD/MMBTU and has dropped to 5.86 USD/MMBTU in Q4/23. Gas prices in the Gul of Thailand are linked to high sulfur fuel oil prices with lagged time of 6 months to 1 year depending on the contract terms. However, the gas price of G1/61 and G2/61 Projects is linked to Dubai crude price, dating 6 months backward.

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22**Financial Results | Unit Cost :**

The unit cost has decreased slightly from 28.36 USD/barrel in 2022 to 27.65 USD/barrel in 2023. There was a considerable decrease in royalties, from 4.02 USD/barrel in 2022 to 2.67 USD/barrel in 2023, since the royalties are net off from the sales revenue according to the PSC, rather than recorded as the expenses. Therefore, it may seem as if the royalties per unit have decreased, when in fact they are still there but shown as a deductive factor, subsequently leading to a decrease in net sales volume entitlement.

The unit cost reported in the fourth quarter was 28.87 USD/barrel. Comparing between Q3/23 and Q4/23, there was a noticeable increase in G&A expenses, despite a decrease in operating expenses, mainly from the adjustments of decommissioning liabilities.

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23**Financial Results | Cashflows & Financial Position :**

At the beginning of the year, the amount of outstanding cash was about 3,539 million USD, with the ending cash reported at 4,019 million USD. The cash flows from operations amounted to 6,147 million USD, with the tax paid of 1,787 million USD. About half of this amount was the tax paid in Thailand and the other half for overseas tax payment. The investing cash flow stood at 2,370 million USD, mainly from G1/61, G2/61, S1, Zawtika, Contract 4 Projects; mostly reflecting the CAPEX plan as usual. The dividend paid amounted to 1,099 million USD, ultimately resulting in the ending cash of 4,019 million USD.

In terms of the balance sheet, we have booked an increase in accounts receivable and cash on hand. The interest-bearing debt was 3,654 million USD, inclusive of financial debt, but the portions of debt owed to

financial institutions are only about 2,700-2,800 million USD. The equity also increased in 2023 from the net profit for the year deducted by dividends paid.

With regards to the debt profile, the interest-bearing debt to equity ratio was reported at 0.25x, against the policy of 0.5x, providing us with more debt headroom. The average cost of debt is about 3.94% per annum, and the interest rate is 100% fixed rate.

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Financial Results | Dividends:

For the dividends, the Board of Directors has already approved the dividend payment of 9.50 Baht per share for 2023, with 4.25 Baht per share already paid as an interim dividend for the first half of the year. The remaining dividend payment of 5.25 Baht per share for the results of the second half of 2023 will be paid on April 22, 2024 after the Annual General Meeting of Shareholders, which will be held on April 1, 2024.

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Results Guidance:

The sales volume in Q1/24 is expected to be 473 KBOED, and for FY2024 to be 505 KBOED due to a production ramp-up of G1/61 Project to approximately 400-500 MMSCFD in the first quarter. The increased sales volume projection for the entire 2024 is mainly driven by the G1/61 Project's sales volume commitment of 800 MMSCFD, which starts in April and will continue through to the end of the year.

Gas price in the first quarter should remain unchanged from Q4/23 at 5.8 USD/MMBTU, though there will be price adjustments, whereby the oil price at a given period will be taken into account. Having said that, with the downward trend of the oil price, the lagged time adjustment of gas price will take effect, as seen from the full-year forecast of 5.7 USD/MMBTU with the decrease in the oil price assumption compared to the previous year. The unit cost should be between 28-29 USD/barrel. Some people may wonder why the unit cost cannot be reduced to 25 USD/barrel. It is mostly due to the effect of inflation and the unit cost has been adjusted to align with the actual situation, together with the increase in rig costs. A certain portion of expense has been fixed since a few years ago, and that same rate still applies today, but new contracts are associated with increased expenses. Last but not least, the EBITDA margin is likely to remain stable in the range of 70-75%.

PART 4: QUESTIONS & ANSWERS (Q&A)

Question # 1

Regarding an overlapping claim area (OCA) between Thailand and Cambodia, could the company share the view on possible scenarios of the mutual agreement to move forward with petroleum development in this overlapping area? What would happen to the concessions previously granted by the government of both countries in the same acreage?

Answer from PTTEP's management

The resolution on the existing concessions and allocation of the new petroleum development rights depends on Thailand and Cambodia governments' negotiation and further mutual agreements (if any) and PTTEP might not be in a position to comment on this.

The domestic gas (including OCA) will be crucial for the energy security of the country, as Thailand gas consumption tends to increasingly rely on LNG imports and the LNG price is rather high. While the OCA has not yet been explored thoroughly, we view that there should be high gas potential, in the proximity close to G1/61 (Erawan) project. The exploration and production in this area can be expedited than in the past given more advanced technologies and facility readiness in the area, as well as the gas pipeline in place.

Question # 2

Is PTTEP still focusing on Myanmar as one of strategic areas, considering the lack of significant progress in Myanmar, such as projects in the exploration phase?

Answer from PTTEP's management

Myanmar remains our focus area in terms of energy security for both Thailand and Myanmar. We aim to ensure an uninterrupted gas supply to the western part of Thailand.

Question # 3

Should an impairment in Yadana Project be anticipated, similar to the previous impairment charges for Yetagun Project (in the past) due to a significant decrease in sales volume?

Answer from PTTEP's management

The situation with Yadana Project differs from that of Yetagan Project. The gradual drop in gas production of Yadana project is in line with the production profile where the field is approaching its declining stage. The Yadana PSC, without extension, will end in 2028. However, for Yetagan project, the decrease in production capacity, was due to technical issues which were unforeseen.

Question # 4

Is Mozambique still a focus area despite experiencing triple impairments, or is PTTEP considering to pull out as the project's location is quite far from strategic area?

Answer from PTTEP's management

Currently, we are confident as the security situation at the site has improved, with troops deployed from multiple department to ensure the security around the project's site. Additionally, the discussion with TotalEnergies has been ongoing and the site re-access time line has been agreed. We believe that possession of LNG is highly advantageous these days, and with the expertised operator like TotalEnergies, this project should be value-added to PTTEP's portfolio.

Question # 5

Has the company been impacted by the recent government's policy on the natural gas price structure?

Answer from PTTEP's management

The significant impact on PTTEP is unlikely, as we are the upstream natural gas production. The gas price formula of PTTEP has already been agreed under long-term agreements, which are Production Sharing Contract (PSC) and Gas Sale Agreement (GSA). However, PTTEP needs to make sure that we can deliver gas volume following the commitment under such contracts.

Question # 6

Could PTTEP share more colour on the Renewable Business target in the next 5 years?

Answer from PTTEP's management

At the moment, PTTEP has put in place the target for diversification into the new business for the energy transition. However, there are still lost of moving parts so the absolute number for the target has not yet been agreed on.

During these days, there are three challenges that should be addressed when making investment decision in energy business. These three elements make up the Energy Trilemma including Energy Security, Energy Sustainability, and Energy Affordability, where Lean and Clean should make up the effective energy strategies in the near future.

Question # 7

Why the offshore wind farm project (recently acquired) is not the collaboration between PTTEP and GPSC? Will this overlap in terms of the companies' strategies under same umbrella of PTT group?

Answer from PTTEP's management

As flagship companies under PTT group are listed in Stock Exchange of Thailand, we agreed to grow our portfolio to support energy transition independently, however, without overlapping in terms of the area of the project or the competitive bidding in the same project.

Question # 8

According to lithium resources discovery in Thailand, is PTTEP interested to invest in lithium production?

Answer from PTTEP's management

In the past, PTTEP had been researched the lithium-ion for the possible future of energy storage. However, we found that there are, to certain extent, the risks of price volatility and demand uncertainty. In addition, PTTEP does not specialize in this area. We mainly focus on the petroleum exploration and production.



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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.*