

Analysis

May 2024

Four-month update: Worrying downtrend in upstream progress

In the first four months of this year, achievements in Indonesia's upstream oil and gas sector have been less than satisfactory. Numerous activities have hindered the growth of upstream oil and gas, including hydro-meteorological disasters and drilling rig limitations. Well-planned and extraordinary efforts are needed to address these challenges in order to achieve the ambitious production targets set for 2030.

On the other hand, several updates regarding mergers and acquisitions (M&A) in 2024 have also emerged. These updates signal that, despite the lackluster growth in the upstream oil and gas industry, fields in Indonesia continue to attract attention from investors.

In this short article, we delve into the noteworthy developments throughout January-April 2024, aiming to shed light on the evolving landscape and identify key strategies for government and contractors to capitalize on this momentum effectively.

Seven exploration wells have been spudded

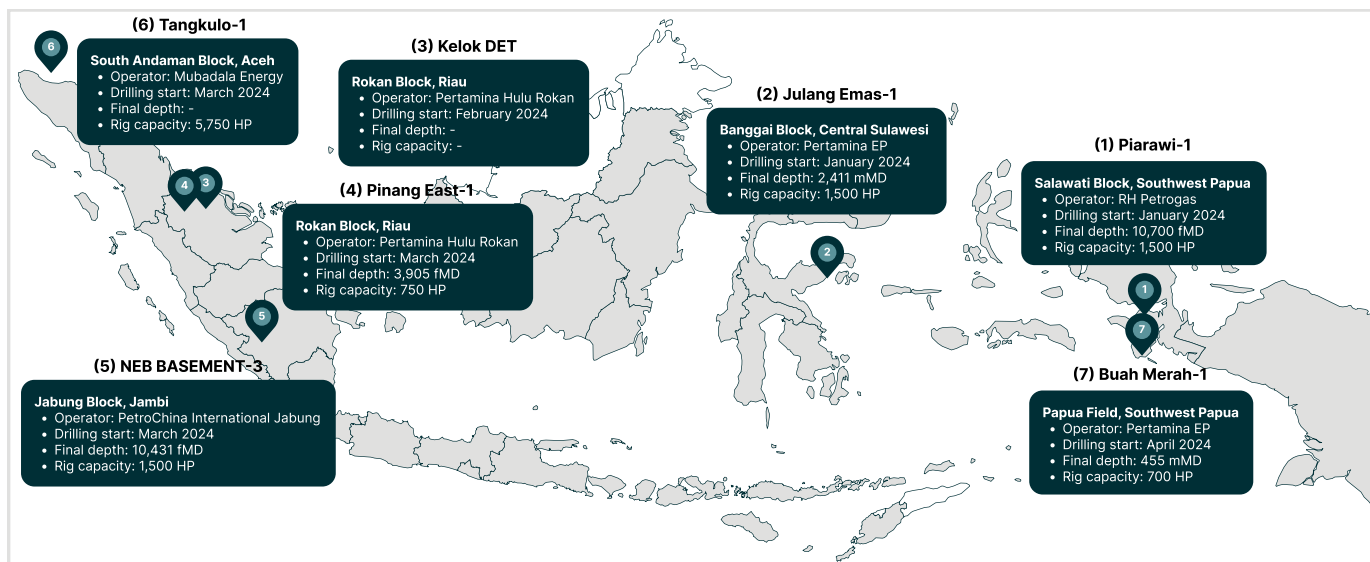
According to Petromindo's Upstream Database, at least 7 exploration wells have been drilled in an effort to confirm the commercial viability of hydrocarbon content within the oil and gas reservoirs. The number of exploration wells drilled in the first four months of this year has surpassed the drilling achievements of the same period last year, which amounted to 4 wells.

Nevertheless, the achievements of this quarter have yet to demonstrate significant progress, considering that the target set by the upstream oil and gas authority SKK Migas for the entire year of 2024 is 48 exploration wells. Several issues such as land acquisition, unpredictable hydrometeorological disaster and the availability of rigs continue to pose untimely challenges for drilling activities.

In terms of locations, the majority of the exploration wells are located in onshore producing assets, indicating that E&P companies still view these areas as opportunities to increase their oil and gas reserves through lower-risk investments. Only one well was drilled in a frontier area and deep water zone, which is a continuation of last year's Andaman drilling campaign.

Out of the total 7 exploration wells that have been drilled, only 2 wells, owned by RH Petrogas and Pertamina, have been completed and declared as a hydrocarbon discovery. However, RH Petrogas has stated that given the drilling results did not meet initial expectations, further technical studies with appropriate strategies are crucial to commercializing the oil discovered. Meanwhile, further details on Pertamina's gas discovery are not yet available.

Oil and gas exploration drilling in Q1 2024



Source: Petromindo Data Analysis

Data compiled: April 30, 2024

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We anticipate that the outcome of exploration drilling for the remaining 4 wells, whether positive or negative, will only be discernible by the mid or late second quarter, assuming there are no delays in the drilling schedule.

ExxonMobil reactivates drilling campaign in Indonesia

After eight years of no drilling activities, ExxonMobil Cepu Limited has resumed drilling campaigns in the Banyu Urip field, Block Cepu. This initiative marks the beginning of a drilling campaign scheduled from 2024 to 2026, comprising 5 infill carbonate wells and 2 clastic wells.

The drilling activities are strategically positioned among existing production wells at the Banyu Urip field, targeting oil reservoirs previously unreachable, while also aiming to confirm the reserves of the clastic reservoirs. This endeavor is projected to augment the field's production by 42 million barrels, significantly contributing to Banyu Urip's role in national oil output, which currently stands at 25%.

The Ministry of Energy and Mineral Resources expects that the drilling activities for infill and clastic wells will result in an additional production of 20,000 to 30,000 barrels of oil per day (BOPD), thus helping to mitigate the decline in production rates.

According to ExxonMobil's drilling campaign plan, the drilling of 2 infill carbonate wells scheduled for 2024 is projected to commence production within the same year through tie-ins to existing facilities. Subsequently, the drilling of 3 additional infill carbonate wells and 2 clastic wells is planned to occur over the period until 2025, with expected onstream dates in 2026.

Exploration discoveries

The past four months have been particularly dynamic for exploration activities in Indonesia. Ongoing drilling at high-impact wells (HIWs) has provided early indications of potential gas discoveries on a global scale. Additionally, several hydrocarbon discoveries have emerged, which are expected to significantly contribute to the realization of the government's ambitious targets for 2030.

- **Halwa-1 and Gayo-1:** Harbour Energy recently announced that the ongoing exploration at the Halwa-1 and Gayo-1 wells within the Andaman II PSC has shown promising indications. While the Halwa-1 well encountered low gas saturations, a small gas discovery has been made at Gayo-1. Following the completion of the testing program at Gayo, the West Capella Drillship will return to the South Andaman block to drill the shallower Tangkulo prospect, aiming to validate additional volumes of the Layaran-1 giant discovery made in 2023.
- **AVO-001:** The Anggrek Violet (AVO)-001 exploration well, drilled in November 2023, has yielded promising results. Pertamina Hulu Rokan (PHR) announced at the end of January 2024 that the well successfully proved hydrocarbons, with an extended flow oil test rate of 218 BOPD and a gas rate of 0.13 MMSCFD.
- **CEN-01:** In March 2024 a discovery was announced at the CEN-01 exploration well in Bentu PSC. Local upstream company Energi Mega Persada (EMP), which has 100% interest in the block, said that it is targeted to commence gas production at the rate of 45 MMSCFD in the near future.
- **Piarawi-1:** Singapore-based upstream company RH Petrogas announced in March 2024 that it has completed drilling of the Piarawi-1 exploration well in Salawati PSC. Although the well encountered an oil-bearing reservoir, the carbonate is tighter than expected and may require the implementation of an appropriate stimulation strategy for the optimal recovery of the oil discovered. The well is currently suspended temporarily as further appraisal works are being planned, RH Petrogas said.
- **JLE-001:** Late March, Pertamina announced gas discovery through the Julang Emas-001 (JLE-001) exploration well in Banggai block, Central Sulawesi Province. The exploration well was drilled to the depth of 2,550 meters with hydrocarbons discovered at two layers between 2.421-2.425 meters and 2.395-2.406 meters. However, further details for the discovery still under review by Pertamina.

Exploration discovery in Q1 2024



Source: Petromindo Data Analysis

Data compiled: March 21, 2024

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PETRONAS secures Bobara block tender

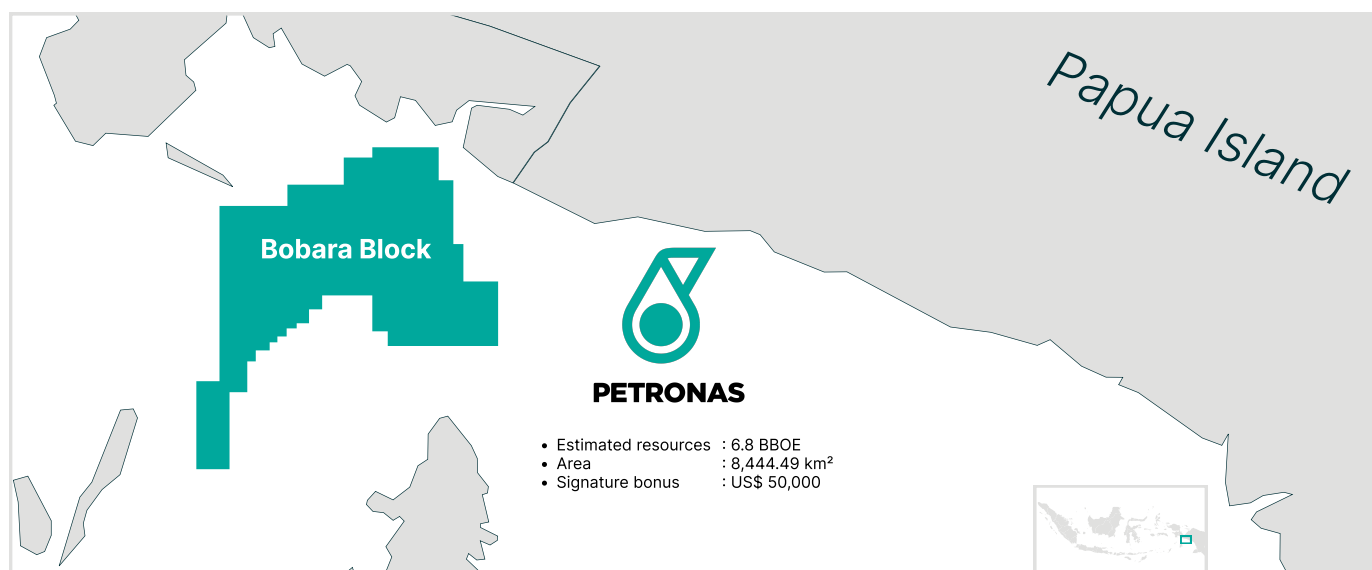
The government has awarded the Bobara block to PETRONAS Carigali North Madura II Ltd, a unit of Malaysia's PETRONAS, as part of the 2023 Third Petroleum Bidding Round program with a cost recovery scheme. The offshore block is located in the deepwater region south of West Papua Province.

The Bobara block comprises the former UK-based Ophir Energy's West Papua IV and Aru blocks, with water depths ranging from 200 to 4,500 meters. Five offset wells, namely Bumerah-1ST, ASE-1X, ASF-1X, ASA-1X, and ASB 1-X were drilled around or within the block. Unfortunately, all except Bumerah-1ST turned out to be dry holes.

According to the Ministry of Energy and Mineral Resources, the 8,444.49 sq km offshore block is expected to have potential oil and gas resources at 6.8 BBOE. PETRONAS will pay a signature bonus of USD 50,000 to the government and has a three-year firm investment of commitment worth USD 16.92 million.

PETRONAS' extensive experience in deepwater and carbonate drilling makes it an ideal operator for this block. Given the substantial resource potential and numerous prospects within the block, PETRONAS should consider drilling at least one play opener well to unlock these reserves.

Bobara block in offshore West Papua



Source: Ministry of Energy and Mineral Resources, Petromindo Data Analysis

Data compiled: March 21, 2024

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Government announced 23 oil and gas blocks being offered in 2024

The Ministry of Energy and Mineral Resources has announced plans to auction 23 oil and gas blocks in 2024, demonstrating the government's commitment for energy security development. Among these blocks, 13 will be offered through a regular tender mechanism, while the remaining 10 will be tendered via a direct offer mechanism, with some of them having completed joint studies and others still in progress.

Working area candidates for 2024 bidding round



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Of particular interest are the eastern and western Indonesia blocks. In the eastern region, attention is drawn to the Gaea and Bintuni blocks. The Gaea block, formerly known as Chevron's West Kasuri I and West Kasuri II blocks, boasts regional 2D seismic data suggesting the presence of large closures with a relatively shallow Middle Jurassic target. Additionally, the government is offering the Bintuni block, previously known as Eni's Arguni block, where all petroleum system elements are present, although the main risk is associated with the lack of structural closures.

On the western side of Indonesia, there are the Central Andaman and Southwest Andaman blocks. While not officially released yet, we assume that these two blocks are part of Andaman III block, which was returned by Repsol. The successful discovery of Layaran-1 by Mubadala in South Andaman at the end of 2023 has revitalized hopes for the development of Andaman, despite Repsol's dry hole at Rencong-1X in 2022.

M&A update in Jan-Apr 2024

Previously announced deals – completed

Two deals that was announced in 2023 was completed in Q1 2024, with the deal being for the exit of Mont D'Or Petroleum Limited (MOPL) and Neptune Energy from Indonesia E&P business.

- Canadian independent upstream oil and gas firm Criterium Energy announced in January 2024 that it has closed the previously announced acquisition of 100% participating interest of MOPL's assets, namely Tungal PSC and West Salawati PSC. Following this acquisition, Criterium anticipates executing a low-risk development program in the Tungal PSC, with an estimated production of up to 2,200 BOPD by the end of 2024.
- In February 2024, Italian energy giant Eni announced the closing of the acquisition of Neptune Energy Group Limited. The 5 acquired assets include Neptune's participation in the Eni-operated Geng North-1 giant discovery. Following the acquisition, the remaining interests in the assets are as follows:

- Muara Bakau PSC: **Eni** (88.33% + operator), and Saka Energi (11.67%)
- East Sepinggan PSC: **Eni** (85% + operator), and Pertamina (15%)
- West Ganai PSC: **Eni** (70% + operator), and Pertamina (30%)
- North Ganai PSC: **Eni** (88.26% + operator), North Ganai Energy (11.74%)
- East Ganai PSC: **Eni** (100% + operator)

The saga of Tuna block draws near its conclusion

SKK Migas recently said that over a dozen oil and gas companies are interested in acquiring the participating interest in the Tuna block that would be divested by Russia-based oil and gas company Zarubezhneft.

SKK Migas said that approximately 14 companies have expressed their interest to the authority in replacing the Russian company. The interested companies have been given time to submit their bids until March, with the authority targeting the completion of the acquisition by April 2024.

Tuna block in offshore Natuna

Harbour Energy

- Status : Development
- End of contract : March 2037
- Participating interest : Harbour (50% + operator), Zarubezhneft (50%)

Potential partners (Zarubezhneft's replacement)

Pertamina Hulu Energi, **Petronas**, **emp**, **Mubadala Energy**, **NOC**

Source: Ministry of Energy and Mineral Resources, SKK Migas, Petromindo Data Analysis

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In March, it popped into the news feed with reports that Korea National Oil Corp (KNOC) and EMP are among the suitors eyeing Zarubezhneft's interest. Additionally, several NOCs such as PHE, PETRONAS, and UAE-based Mubadala Energy were reportedly interested in the Tuna block, although there have been no official announcements regarding the M&A plans.

Zarubezhneft through its subsidiary ZN Asia Ltd holds a 50% interest in the block, while UK-based oil and gas firm Harbour Energy holds the balance as the block's operator.

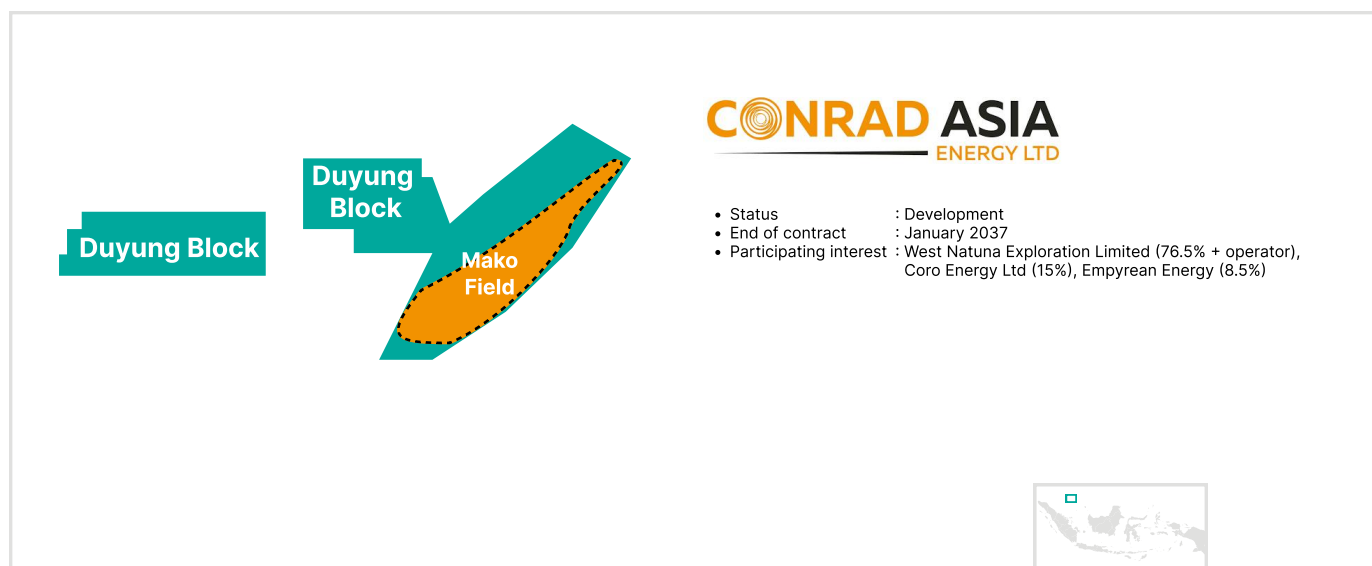
The USD 3 billion Tuna project will tap around 100 MMBOE of resources, with peak production of around 115 MMSCFD. Under the development plan, gas from the Tuna block will be sold to Vietnam via the existing Nam Con Son pipeline, while liquids will be processed by a floating production, storage, and offloading vessel.

New partner in Duyung PSC to be announced

Discussions for a Duyung farm down are progressing, as Conrad reported in late April. The announcement of the technical and commercial progress of the project, additional parties having expressed interest in acquiring a participating interest in the Duyung PSC.

Conrad further elaborated that the company is currently engaged in discussions with these potential partners without disclosing the name as it is bound by a confidentiality agreement. Conrad has also appointed Capital Partners Group as a financial advisor to assist with the debt funding portion of its share of the Mako project capital cost. Debt provider selection is continuing with preferred provider to be selected by mid Q2-2024.

Duyung block in offshore Natuna



Source: Ministry of Energy and Mineral Resources, SKK Migas, Petromindo Data Analysis

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Production start-up of Mako project is now targeted for mid-2026, or earlier if practicable, with Mako gas volumes amended accordingly. The company estimates that Mako field contains 187 BCF of 2C contingent resources.

Conrad holds a 76.5% interest in the Duyung PSC through its wholly owned subsidiary West Natuna Exploration Limited. Other participants are Coro Energy Ltd (15%) and Empyrean Energy (8.5%).

In addition to Conrad, Empyrean has earlier said that it planned to sell its entire stake in the PSC and Coro Energy has also said it may sell part or all of its stake in the block.

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