Rystad Predicts Significant Growth in Southeast Asia's Offshore Gas Sector

Southeast Asia Poised for Offshore Gas Renaissance

Indonesia and Malaysia Lead the Way in Southeast Asia's Offshore Gas Boom

Major Projects Drive Southeast Asia's Offshore Gas Growth

Southeast Asia Poised for \$100 Billion Offshore Gas Boom

Southeast Asia's offshore gas industry is poised for a \$100 billion boom by 2028, driven by planned investments, deepwater projects, and CCS advancements.

Upstream Solution, Offshore Gas, Southeast Asia, Rystad Energy, Energy Security, Natural Gas, Carbon Capture and Storage, Deepwater Development, Indonesia, Malaysia

- Southeast Asia's offshore gas industry is poised for a \$100 billion boom by 2028, driven by planned investments, deepwater projects, and CCS advancements.
- Indonesia and Malaysia are leading the region's offshore gas growth, with major projects and recent discoveries boosting their potential.
- Economic challenges, particularly in deepwater and sour gas ventures, could impact the profitability of some projects.

Offshore gas production in Southeast Asia is poised to unlock a \$100 billion potential, driven by a flurry of planned final investment decisions (FIDs) expected to materialize by 2028, according to Rystad Energy's latest analysis. This represents a more than twofold increase over the \$45 billion worth of developments that reached FID from 2014 to 2023 and signals a surge for the region's offshore gas industry. The upcoming period of rapid growth is bolstered by deepwater projects, recent successful discoveries in Indonesia and Malaysia, and positive carbon capture and storage (CCS) advancements, which will be crucial in meeting the region's sanctioning agenda in the years ahead.

Oil and gas majors are expected to drive 25% of these planned investments through 2028, while national oil companies (NOCs) will account for a 31% share. Notably, East Asia's upstream companies are emerging with a 15% share and show potential for growth through their focus on mergers and acquisition (M&A) opportunities and

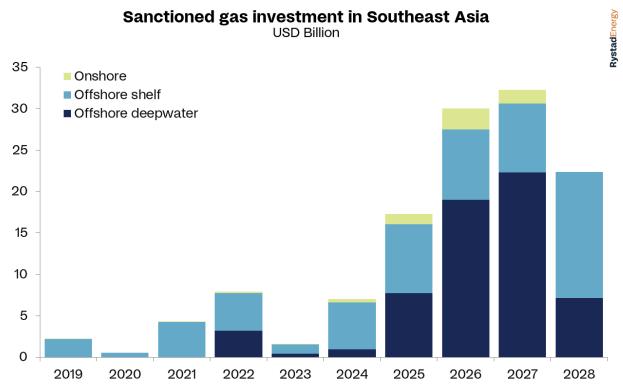
upcoming exploration ventures. The role of majors could further expand to 27% following TotalEnergies' substantial acquisition efforts in Malaysia.

Discussions among Southeast Asian countries have focused on the future of domestic developments and limiting their dependence on gas imports. Energy security and the transition to gas as a fuel have become growing concerns for governments in the region. To address the energy trilemma – balancing energy security, energy equity and environmental sustainability – countries can prioritize utilizing domestic resources for gas development while crafting policies and incentives that promote sustainable practices and enhance regional energy security.

Despite the region's promising future for offshore gas development, persistent project delays remain a concern. Deepwater and sour gas economics, infrastructure readiness and regional politics have caused widespread delays, some of which have been ongoing for over two decades. However, the emergence of CCS hubs in Malaysia and Indonesia could be a game-changer. The high carbon dioxide (CO2) content in upcoming offshore projects necessitates CCS for financing and regulatory compliance. Furthermore, both countries are exploring depleted reservoirs from mature fields as potential CO2 storage sites. The growing recognition of these reservoirs' potential, combined with the pressing need for emissions reductions, is significantly boosting demand for CO2 storage and fueling a surge in offshore gas development expected from 2025 onwards.

We recognize the potential of new project investments and capital commitments in the region, which surged from \$9.5 billion in 2022-2023 to approximately \$30 billion in 2024-25. As we delve deeper into the data, it becomes increasingly clear that this upward trajectory is projected to continue until 2028. Recent discoveries and the involvement of NOCs will play a vital role in this growth, particularly in deepwater developments, which are pivotal in determining how much of this anticipated \$100 billion boom can be realized,

Prateek Pandey, Vice President of Upstream Research, Rystad Energy



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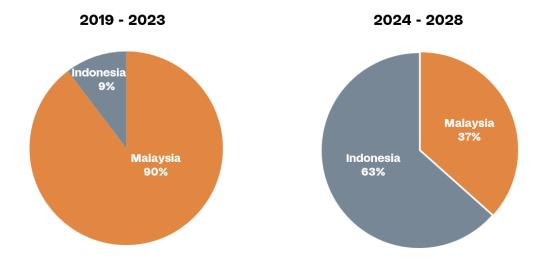
In only looking at forecasts for sanctioned investments between two leading nations in the region, Indonesia and Malaysia, the former stands out with expectations to accelerate its offshore gas activities. This is driven by major projects such as the Inpex-operate Abadi LNG, Eni's Indonesia Deepwater Development (IDD) and BP's Tangguh Ubadari Carbon Capture (UCC). These initiatives, along with recent discoveries in the East Kalimantan and Andaman provinces, are projected to account for 75% of Indonesia's total offshore gas investments slated for FID. This significant increase positions Indonesia as a formidable contender to Malaysia's established dominance, although Malaysia continues to maintain robust activity levels with recent FIDs, exploration success and planned exploration efforts.

Indonesia anticipates increased FID activity starting in 2025, bolstered by major projects spearheaded by global players like BP and Eni. Malaysia's upcoming FID projects underscore significant discoveries made since 2020, primarily managed by Petronas,

PTTEP and Shell. Across Southeast Asia, more than half of planned gas projects contain CO2 content exceeding 5% and are predominantly managed by NOCs and major international companies, with a notable trend towards cluster development strategies for deepwater projects.data centers and EVs in the US, while continuing to displace coal in the generation mix.

## Sanctioned offshore gas investments

Percentage of final investment decisions, 2019 - 2028

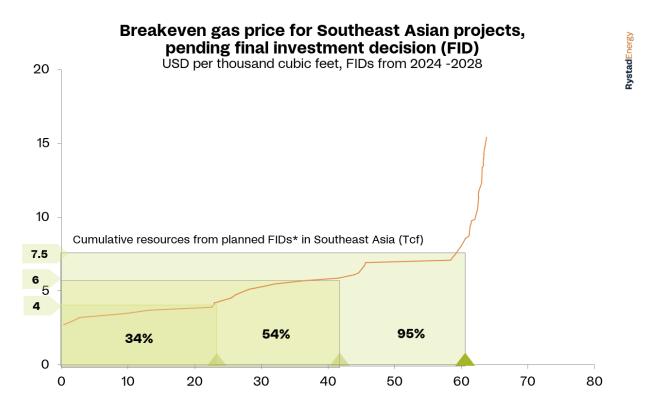


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The region's gas sector anticipates substantial growth, with projected gas resources from FIDs set to rise to 58 trillion cubic feet (Tcf) by 2028, marking a three-fold increase from levels observed in the past 5 years, 2019-2024. This growth hinges on efficiently monetizing recent discoveries and advancing delayed developments. Despite a favorable investment climate, operators face economic challenges, particularly in deepwater and sour gas ventures. Rystad Energy's analysis indicates that many projects require gas prices above historical averages of \$4 per thousand cubic feet to achieve profitability, with an optimal threshold closer to \$6 per thousand cubic feet.

These economic realities have sparked discussions on revising domestic gas pricing policies across the region. Notably, a gas price of \$7.5 per thousand cubic feet could

potentially make up to 95% of planned developments economically viable, especially those associated with LNG projects in Indonesia and domestic supply initiatives in Vietnam. Supply chain companies could also see increased value for floater-based projects and deepwater drilling, adding motivation for them to facilitate this offshore gas renaissance that is on the cards for the region. As stakeholders navigate these market conditions, the region's offshore gas sector appears poised for significant growth, supported by strategic investments and evolving economic conditions.



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By Rystad Energy