The East Med Energy Report

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Cyprus: ENI hits gas at Cronos-1, all eyes on Zeus-1

ENI announced a gas discovery on August 22 at its Cronos-1 well in Block 6, around 160 km southwest of the island of Cyprus. This is ENI's second exploratory drilling in Block 6, following a first well that led to the discovery of the Calypso gas field in 2018. The block is operated by ENI, which holds a 50% interest, while its French partner TotalEnergies holds a 50% stake.

Cronos-1 is the fifth drilling to encounter natural gas off Cyprus, after the discovery of Aphrodite in 2011, Calypso in 2018 and Glaucus in 2019. Onesiphoros, drilled by Total in 2017 in Block 11, was deemed not commercially viable on its own.

Cronos-1 is estimated to hold a relatively modest 2.5 trillion cubic feet (tcf) of natural gas in place, but the Italian company believes that there is a "significant additional upside that will be investigated by a further exploration well in the area".

The drillship proceeded with the drilling of a second well in Block 6, Zeus-1, located to the west of Cronos-1. Much like in Greek mythology, it is hoped that Zeus-1 will dethrone Cronos-1 in terms of reserves. But, whatever the result of the drilling, it will help the companies evaluate the development options for their gas finds.

Unlike in 2018, when the Turkish navy prevented an ENI-leased drillship from reaching its drilling target in Block 3 after the discovery of Calypso, the Tungsten Explorer has not faced similar difficulties at Cronos-1 and will probably not be disturbed while drilling at Zeus-1 as operations are taking place in an area that is neither claimed by Turkey nor licensed by the Turkish Cypriots.

However, with the resumption of offshore exploration in Cyprus, Turkey is expected to step up its activity in the Eastern Mediterranean. Its recently acquired drillship, Abdulhamid Han, is currently conducting operations off the southern Turkish coast, outside of disputed waters. But, if past experience is any guide, Turkish measures are generally gradual in nature and could become more assertive.

Cypriot Energy Minister Natasa Pilides was cautiously optimistic when announcing the news of the discovery. Earlier in August, she had to interfere following speculations in Cypriot media that a large natural gas deposit was discovered in Block 6 to clarify that the drilling was still in progress.

Still, the Minister was hopeful the new find would speed up plans to export Cypriot natural gas to Europe, saying that the "prospect is much better when there are new quantities added to the pool". In an interview with Greek newspaper To Vima, she expected Cyprus to be in a position to export natural gas in the next four to five years. The Minister believes that the most likely option is to export the gas via Egypt's LNG plants. But new discoveries could ultimately revive plans for an LNG terminal in Cyprus.

Chevron nearing decision time for its projects in Israel and Cyprus

Europe's energy crisis is providing further incentives for Chevron to monetize its gas resources in the Fastern Mediterranean. The US major sees "opportunities for expansion" in the region, to serve not only regional markets but potentially European markets as well. While this is likely to involve liquefied natural gas, Chevron still mentions "talk about a pipeline" and is still "working on all of those options", according to CEO Michael Wirth, who was speaking at the <u>Barclays CEO</u> Energy-Power Conference September 7.

In Cyprus, Chevron is preparing to submit an updated "development concept" for Aphrodite, which may involve "synergies with other facilities in the region", a reference to the Idku LNG terminal in Egypt and/or the Leviathan reservoir in Israel. The partners in the Cypriot gas field are still examining whether to opt for a standalone development or joint development with Leviathan. Chevron is expected to submit its revamped plan by the end of the year, or early 2023 at the latest. In addition, the repeatedly delayed second appraisal well, which will serve as a production well at a later stage, is now scheduled to be drilled in the first quarter of 2023.

In Israel, one of the most awaited decisions in East Med may come within months. The selection of an export option for the next phase of Leviathan's development may come as early as the end of the year. A floating LNG solution is one of the options under consideration, alongside liquefaction in Egypt and reexport to world markets.

The prospect of exporting LNG to Europe now appears to be an attractive option for Chevron, and converting gas to LNG is one of the quickest ways for getting East Med gas to Europe. Historically, the US major has built its LNG business with a focus on the Pacific basin "where the demand has historically been, where the big customers have been", while in Europe, "you had to compete with Russian piped gas and Russian piped gas wins as long as it's flowing", according to Wirth. But the situation has changed following Russia's invasion of Ukraine and Chevron now sees that "Europe's going to need LNG in the mix in a way that historically they may not have".

Novatek exits Lebanon blocks

Russia's Novatek has informed the Lebanese Ministry of Energy that it intends to pull out of the consortium holding exploration rights in blocks 4 and 9 off the Lebanese coast. In addition to Novatek (20%), the consortium includes France's TotalEnergies (operator, 40%) and Italy's ENI (40%).

In a letter addressed to the Ministry on June 30, the Russian company cited "financial and economic conditions" and "alobal political risks" as reasons behind its decision to withdraw from the consortium. The exit takes effect on October 22, on the date of the expiration of the first exploration period. The government of Lebanon recently approved a one-year extension of the first exploration period in Block 4, and a 2.7- year extension in Block 9. For their part, Total and ENI confirmed in letters subsequently addressed to the Energy Ministry that they remain committed to extending the first exploration period in both blocks.

The consortium was awarded both licenses following the conclusion of the first licensing round in 2017. The operator drilled a first well in Block 4 in 2020, with disappointing results. Total was scheduled to drill another well in Block 9,

but operations were delayed due to the Covid-19 pandemic and the risks related to the maritime border dispute with Israel.

Novatek never viewed the Eastern Mediterranean as a priority. The company's CEO, Leonid Mikhelson, told reporters on the sidelines of the Eastern Economic Forum in Vladivostok on September 8 that the company prefers to focus its international activities on the Asia-Pacific region and announced that the company is also planning to exit an ENI-led consortium holding exploration rights offshore Montenegro, its only other project in the Eastern Mediterranean.

Israel gas production up 22% in H1 2022

Israeli natural gas production rose to an all-time high in the first half of 2022 reaching 10.85 bcm, up by 21.9% compared to the 8.9 bcm produced over the same period last year. Just over half of this output, 5.62 bcm, was produced from Leviathan, while the remaining 5.23 bcm were produced from Tamar.

Out of the total production, 6.26 bcm were meant for the domestic market and 4.59 bcm were exported to Egypt and Jordan.

Gas royalties rose 48% during the first half of the year, reaching NIS 824 million (about USD 242 million) according to the Israeli Energy Ministry.

The surge in production comes as Israel looks to boost exports to Egypt. The inauguration of a <u>new export route to Egypt via the Arab Gas Pipeline</u> in March 2022 allowed Israel to boost its deliveries to Egypt in the first half of this year. It also allowed Cairo to maintain its LNG exports despite rising domestic demand in summer months. Much of the gas

exported to Egypt is liquefied and reexported to world markets, particularly to Europe as it faces an unprecedented energy crisis.

Israeli gas production is set to rise further when Karish comes online. The project is on track to start production "within weeks" according to the operator, Energean.

Syria's oil & gas sector losses exceed \$107bn

Since the outbreak of the war in 2011, Syria's oil and gas sector has incurred \$107.10 billion in losses, according to a letter sent by the country's Foreign Ministry to the UN Secretary General and President of the UN Security Council on August 29. The Ministry relied on data provided by the Ministry of Oil and Mineral Resources. Direct losses, which include smuggling, illegal trade and sabotage according to the letter, amounted to \$24.2 billion. Indirect losses, which refer to the value of lost production, were estimated at \$82.9 billion.

Earlier in the month, the Minister of Oil and Mineral Resources Bassam Tohme gave an overview of the performance of the sector in the first half of 2022. During this period, Syria produced about 14.5 million barrels of oil, with an average of 80,300 b/d, of which about 14,200 were produced in areas held by the government and delivered to the country's refineries in Homs and Banias. The rest, about 66,000 b/d, were produced in Kurdish-controlled areas in the north-eastern part of the country. Tohme referred to these volumes as "stolen by U.S. occupation forces and their mercenaries".

The two refineries in Homs and Banias (each with a capacity of 120,000 b/d) produced 1.99 mn tons of oil products in

the first half of 2022, well below their capacity.

Gas production in the first half of the year reached about 2 bcm, with an average of 11.3mn m³/d, compared to over 8 bcm in 2011. According to the Minister, 82% of this volume was delivered to the Ministry of Electricity, 3% to the Ministry of Industry and 15% to the Ministry of Oil and Mineral Resources.

ENI clinches new offshore block in Egypt

The Egyptian government gave its initial approval on August 25 to award the Northeast Arish block to ENI. The block is located in the eastern part of the Egyptian EEZ, adjacent to Palestinian and Israeli waters. It borders two other blocks awarded to ENI earlier this year following the 2021 bid round: Block E5, in which BP holds a participating interest, and Block E6.

Egypt is doubling down on exploration with the hope of eventually increasing production to make up for declining output from legacy fields. For its part, ENI is looking to boost its gas production in Egypt. It already produces about 60% of the country's natural gas production. Last April, the Italian company signed an agreement with EGAS to step up its exploration activity and to boost Egyptian LNG exports to Europe, and to Italy in particular.

The company's CEO Claudio Descalzi visited Cairo and met with President Abdel Fattah El-Sisi on August 30. The visit was an opportunity for ENI to reaffirm its commitment to boosting production in Egypt through an ambitious exploration and development campaign. Leveraging existing facilities would allow the operator to fast-track development of new finds.

NewMed, Enlight to develop green projects in MENA

Israeli companies NewMed Energy and Enlight Renewable Energy signed an MoU on August 14 to develop renewable energy projects in the Middle East.

NewMed Energy, previously Delek Drilling, announced its intention to expand the scope of its activities to include alternative energies when it unveiled its new identity last February.

The joint venture will focus developing renewable energy projects including solar, wind and energy storage with local partners in various MENA countries. It is eyeing in particular investments in Egypt, Jordan, Morocco, the UAE, Bahrain, Oman and Saudi Arabia, although the last two have no official ties with Israel. The 2020 Abraham Accords opened up new opportunities for cooperation between Israel and countries in the MENA region making the development of such projects possible.

The deal is subject to approval by NewMed's shareholders and to the signing of a detailed agreement with Enlight.