# The East Med Energy Report

#### Inside This Issue

- 1 Egypt to host COP27, UAE COP28
- 2 Israel, Jordan, UAE sign deal to swap desalinated water for solar energy
- 3 EMGF embraces natural gas as transition fuel
- **4** Delek, Mubadala close Tamar deal...
- 5 ... as Israel and the UAE seek to boost energy cooperation
- 6 Cyprus awards Block 5 to ExxonMobil and QatarEnergy
- 7 Lebanon sets a new deadline for its second offshore bid round
- **8** UAE, Turkey sign energy deals amid efforts to mend ties
- **9** Snam acquires a 25% stake in EMG

#### Egypt to host COP27, UAE COP28

Egypt was selected to host the next UN Climate Change Conference COP27 in Sharm el-Sheikh in November 2022, while the UAE will host the following edition, COP28, in November 2023.

Arab countries are finally taking a more active role in climate action. A series of announcements were made in the past few weeks and months reflecting the growing contribution of countries in the region to global efforts to combat climate change. The UAE led the way with the announcement of its Net Zero by 2050 Strategic Initiative on October 7, followed by a Saudi pledge on October 23 to cut carbon emissions to net zero by 2060 as part of the Kingdom's Green Initiative, and a similar Bahraini pledge for net zero by 2060 announced on October 25.

Two days after its carbon neutrality announcement, Saudi Arabia held the Middle East Green Initiative Summit on October 25 to develop a regional roadmap to jointly address challenges resulting from climate change. Riyadh announced ambitious new projects and frameworks to reduce carbon emissions in the region, invest in circular carbon economy solutions, develop a regional center for carbon capture, utilization, and storage (CCUS) etc.

According to Egypt's Environment Minister Yasmine Fouad, Egypt is hosting Cop27 "on behalf of Africa". The continent's concerns and unique needs will feature high on the agenda. COP26 failed to deliver on the \$100 billion per year commitment to support developing countries in tackling the climate crisis. Cairo wants to put climate financing at the heart of COP27. In the months leading up to the conference, the focus will be on outlining innovative de-risk financina solutions to developing and emerging markets and attract the private sector to help these countries meet their commitments, according to Egypt's International Cooperation Minister Rania Al-Mashat.

A higher committee chaired by Prime Minister Mostafa Madbouly and including various ministries involved in organizing COP27 was recently formed and held its first meeting on December 8 to draw up a roadmap and an action plan in preparation for the event.

In Glasgow, Egypt unveiled its 2050 National Climate Change Strategy on the sideline of COP26 and announced a more ambitious target to generate 42% of its electricity from renewable energy sources by 2030, five years ahead of its original plan. Egypt reiterated its commitment to gas as a transition fuel in Glasgow. As outlined by Petroleum Minister Tarek El Molla, Egypt's strategy to transition into using clean energy and reducing carbon dioxide emissions rests on three pillars: the promotion of natural gas as a transition fuel, maximizing the usage of renewable energy resources and the preparation of a plan to expand the use of hydrogen.

Beside financing as mentioned above, COP27 will focus on two other key areas according to El Molla: capacity building in the global south and promising technologies that have the potential to reduce emissions.

Among these promising technologies is the production of cleaner forms of hydrogen. Hydrogen is indeed expected to be one of the leading topics at COP27. Egypt has shown an increased interest in low carbon hydrogen over the past year. It set up a high-level committee to explore the opportunities presented by low carbon hydrogen and plans to contract a global consultancy firm to assist it in devising a national hydrogen strategy. Various MoUs have been signed with international companies interested in carrying out pilot projects in Egypt, and one of these projects could be showcased at next year's COP according Electricity Minister to Mohamed Shaker.

Shaker is probably referring to the 100 MW green hydrogen production facility in Ain el Sokhna that will be developed by a consortium comprising Norway's Scatec, Abu Dhabi-based Fertiglobe (a joint venture between ADNOC and chemicals producer OCI), Orascom Construction and the Sovereign Fund of Egypt.

Carbon capture, in its various forms, promises to be another hot topic at COP27 (and at COP28) as oil and gas producing countries rely on the potential of these technologies that still need to mature and become more affordable to achieve net-zero.

Given the hopes Egypt places on CCUS, as acknowledged by El-Molla, we can of expect a number related announcements initiatives and at COP27. Among these is a potential project with ENI. Egypt's Petroleum Ministry is currently discussing carbon capture and storage plans with the Italian company, which is expected to carry out technical and economic feasibility studies in the meantime.

## Israel, Jordan, UAE sign deal to swap desalinated water for solar energy

Israel, Jordan and the UAE signed a preliminary deal on November 22 to

swap desalinated water for solar energy. The U.S.-backed Declaration of Intent was signed by Israel's Energy and Water Minister Karin Elharrar, Jordan's Water and Irrigation Minister Mohammad Al-Najjar and the UAE's Climate Change Minister Mariam Almheiri at the Dubai Expo in the presence of U.S. Special Presidential Envoy for Climate John Kerry.

The agreement is a direct outcome of last year's Abraham Accords. It also sends a clear signal that the multilateral opportunities made possible by these accords go beyond their signatories.

As part of the agreement, an Emirati company would build a solar power facility in Jordan to provide 600 MW of electricity to Israel. In return, Israel would provide up to 200 million cubic meters of desalinated water per year for Jordan. Technical and economic feasibility studies for both components of the project will be conducted as of the beginning of 2022 and the signatories will adapt their regulatory frameworks to facilitate implementation.

The deal is intended as a win-win: If completed, it would contribute to alleviate Jordan's deepening water crisis and would help Israel meet its climate targets (cutting GHG emissions and expanding the share of renewable energy in its energy mix).

The deal builds on a project originally pitched by EcoPeace, environmental peacebuilding NGO promoting cooperation amona Jordanians, Palestinians and Israelis, that sought a mutually beneficial solution to swap water for energy by leveraging each side's advantages to overcome the limitations that have hindered their advancement on their own: Unlike Israel and Palestine, Jordan has vast swaths of land available for solar energy. On the other hand, Israel and Palestine have easy access to the sea, while Jordan

only has a small coastline on the Red Sea, far from its population centers. It would make sense then, according to EcoPeace, to develop a solar energy project in Jordan to supply Israel and Palestine in return for desalinated seawater.

The main difference with the trilateral agreement signed in Dubai is that the Palestinians are not involved in the project, at least not at this stage.

The deal provoked a backlash in Jordan. Jordanian MPs called for an urgent public debate to discuss the agreement while protestors took to the streets condemning growing normalization with Israel, in a reaction resembling previous reactions to Israeli gas import deals over the past years.

In an effort to contain popular discontent, the spokesperson of the Ministry of Water pointed out that the declaration of intent is not a "legal agreement", in a move that largely mimicked initial government responses to popular opposition to Israeli gas import MoUs. The next day, the Water and Irrigation Minister who signed the deal clarified that it was an Emirati company that suggested the idea of a joint project between Jordan and Israel. He added that the project will be carried out entirely by an Emirati company, so as to minimize the Israeli dimension to his Jordanian audience.

The deal drew opposition beyond Jordan as well. According to Axios, Saudi officials attempted to block the agreement because it undermined the Kingdom's Middle East Green Initiative and suggested an alternative project involving the UAE and Jordan but sidelining Israel. Though minor changes were reportedly introduced at the last minute to appease the Saudis, the parties proceeded with signing the agreement.

### EMGF embraces natural gas as transition fuel

The East Mediterranean Gas Forum (EMGF) held its sixth ministerial meeting in Cairo on November 25. COP27, which will be hosted by Egypt next year, dominated much of the attention. Participants emphasized importance of natural gas during the energy transition as the least carbonintensive fossil fuel. Egypt's Petroleum Minister Tarek El Molla was hopeful the members of the Forum would be able to develop joint initiatives supporting climate action to be launched during next year's COP, including initiatives to decarbonize natural aas.

The ministers unanimously agreed to appoint Osama Mobarez, Undersecretary at Egypt's Ministry of Petroleum, as Secretary General for a period of three years, starting January 2022. In line with the Forum's statute, which provides for a rotating presidency determined by alphabetical order, Cyprus, via its Minister of Energy, Commerce and Industry Natasa Pilides, will assume the Presidency of the Forum as of January 1, 2022, for a period of one year.

The EMGF continues to attract interest beyond the region. On the eve of the ministerial meeting, El Molla met with Bulgaria's ambassador to Cairo who expressed his country's interest in the Forum and in a potential energy cooperation with a view to diversifying Bulgaria's gas supplies via LNG imports from Egypt.

Important agreements were also signed on the sidelines of the meeting, which could pave the way for new projects:

### Egypt, Israel sign MoU to increase gas supplies:

Egypt and Israel signed an MoU to consider the possibility of increasing

Israeli gas supplies to Egypt for re-export. Currently, contracted volumes amount to 450 million cubic feet of gas per day (mmcf/d), a figure that is set to exceed 650 mmcf/d in 2022. Israeli deliveries would support exports from Egypt's LNG plants amid uncertainties over the sustainability of Egyptian LNG exports. Two new pipelines are currently under consideration to boost deliveries: an onshore pipeline through the Sinai Peninsula and an offshore pipeline linking the Leviathan gas field to Egypt's Idku LNG plant.

### Egypt, Greece sign MoU to expand gas cooperation:

Egypt and Greece signed an MoU to expand the scope of cooperation in the field of natural gas. The MoU focuses on three priority areas: LNG trade, exploration activities, and the linking of both countries' natural gas pipeline network.

The MoU opens new opportunities for cooperation. In particular, Greece's DEPA Commercial, which is looking to diversify its sources of gas, is discussing potential LNG imports from Egypt with EGAS, Egypt's state gas company.

→ For a deeper look at the EMGF, its internal working mechanisms, first efforts to assess prospects for monetization and the geopolitical dynamics behind its establishment see this briefing published in March 2021: "The East Mediterranean Gas Forum: Regional Cooperation Amid Conflicting Interests".

#### Delek. Mubadala close Tamar deal...

Mubadala Petroleum announced on December 9 that they have closed the acquisition of a 22% stake in the Tamar and Dalit leases, which include the offshore Tamar gas field (and the small, undeveloped, Dalit gas field). The \$1.025 billion deal was finalized after all conditions for the completion of the transaction have been met.

Israel's Petroleum Commissioner approved the transfer of rights from Delek Drilling to two subsidiaries of Abu Dhabi's Mubadala Petroleum in November and the Energy Ministry announced the completion of the deal on December 9.

As it stands, the Tamar partnership now comprise: Chevron (operator, 25%), Isramco (28.75%), Mubadala (22%), Tamar Petroleum (16.75%), Dor Gas (4%) and Everest (3.5%).

However, that composition might change again in the coming months. Israeli media reported in November that Israeli businessman Aaron Frenkel holds an option to buy half of Mubadala's stake for \$500 million. This option is to be exercised within six months.

### ... as Israel and the UAE seek to boost energy cooperation

The Israeli Minister of Energy Karine Elharrar and her Emirati counterpart the Minister of Energy and Infrastructure Suhail bin Mohammed Al Mazrouei signed a Memorandum of Understanding on November 23 at the Israeli pavilion at Expo Dubai to strengthen their cooperation in the energy sector.

The MoU promotes bilateral investments and covers clean energy and fossil fuels as well as infrastructure cybersecurity, hydrogen, electricity, water and energy storage solutions. Both sides affirmed their commitment to the sustainable development of their energy resources.

Three weeks later, at the end of Israeli PM Naftali Bennett's official visit to the UAE where he met with Abu Dhabi Crown Prince Mohammed bin Zayed, the two countries announced on

December 13 plans to establish a joint research and development fund to address challenges related to climate change and desertification and promote the use of clean energy.

### Cyprus awards Block 5 to ExxonMobil and QatarEnergy

Cyprus awarded an exploration license to ExxonMobil (operator, 60%) and QatarEnergy (40%) for Block 5 after the decision was approved by the cabinet on December 2. The exploration and production sharing contract was signed on December 10.

Block 5 lies to the north of Block 10 – also licensed to Exxon and QatarEnergy – and has been awarded based on a provision in Cyprus' Hydrocarbons Law which allows the Council of Ministers to grant a license to the holder of a license in an adjacent block for "geological or production considerations".

In June 2021, the Energy Ministry invited ENI and Total (holder of a license in the adjacent Block 6) and Exxon and QatarEnergy (holder of a license in Block 10) to submit applications for an exploration license in Block 5. The Exxonled consortium submitted an application, which was approved following negotiations with the Ministry of Energy.



The decision to award Block 5 has sparked the ire of neighboring Turkey which claims the northern part of the block falls within its continental shelf.

On the same day, Ankara vowed to prevent "any foreign country, company or vessel to engage in unauthorized hydrocarbon exploration activities in its maritime jurisdiction areas". Turkey repeated its longstanding position that it will not tolerate activities in areas that it perceives as falling within its continental shelf, although it is unlikely the new license holders would carry out operations within the contested area in the block.

Turkey also slammed the "one-sided step" which "ignores the rights of the Turkish Cypriots" and declared that it will continue to defend its rights and the rights of the Turkish Cypriots.

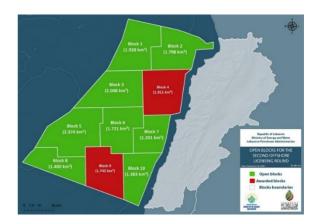
Nicosia responded the following day by denouncing Ankara's "utter disregard for conventional and customary International Law" and maintained that "Block 5 lies within the EEZ/continental shelf of Cyprus".

Exxon's drilling program in Block 10 will take place amid rising tensions between Cyprus and Turkey. Although it will be conducted in an area that is neither claimed by Turkey nor licensed by the Turkish Cypriots - which should keep tensions from spiraling into a direct confrontation – industry observers will be keeping an eye on the extent of the Turkish reaction and possible countermeasures, especially that further drillings are planned elsewhere in the Cypriot EEZ in 2022.

### Lebanon sets a new deadline for its second offshore bid round

In a decision issued on November 23, the Lebanese Energy Minister Walid Fayad has set June 15, 2022 as the new deadline to submit applications in Lebanon's second offshore licensing round. The tender was launched in April 2019 and was initially set to close on January 31, 2020. It was extended multiple times, first at the request of international oil and gas companies and then due to the impact of the Covid-19 pandemic.

Interested companies must form a consortium of at least three companies, one of which an operator, to be able to place bids.



The decision expanded the number of blocks on offer. In an effort to maximize interest in the tender, all unlicensed blocks are now open for bidding, i.e., blocks 1, 2, 3, 5, 6, 7, 8 and 10. Blocks 4 and 9 are licensed to Total (operator, 40%), ENI (40%) and Novatek (20%).

Certain terms governing the tender have been revised to simplify the process and attract companies to participate in the bid round. The revisions give companies 12 months before deciding to drill or drop, allow a higher cost recovery, ease local content obligations during the exploration phase and offer various financial incentives compared to the previous bid round. These amendments will have to be approved by the Council of Ministers.

In his first foreign trip following the decision to revive the tender, Fayad accompanied President Michel Aoun in

an official visit to Qatar on November 29. It was an opportunity for the Minister to aguae the interest of the Qataris in Lebanon's offshore potential. QatarEnergy, which holds exploration license in Cyprus' Block 10 along with partner ExxonMobil and recently submitted a successful application for another license in Block 5 off the Cypriot coast, will evaluate a potential participation in Lebanon's bid round in light of drilling results in Cyprus' Block 10.

QatarEnergy also inquired about Lebanese plans to import LNG via the acquisitions of FSRU(s) and has appointed an official to follow-up on these projects.

On December 12, Fayad headed to France, which is leading an initiative to help Lebanon deal with its financial crisis. The Energy Minister met, among others, with TotalEnergies CEO Patrick Pouyanné to discuss the company's exploration plans offshore Lebanon and interest in the licensing round. The French company also agreed to conduct a preliminary study for a potential FSRU to be stationed off Zahrani, covering related LNG supplies.

### UAE, Turkey sign energy deals amid efforts to mend ties

Abu Dhabi's Crown Prince Mohammed bin Zayed Al-Nahyan visited Ankara on November 24 as the UAE and Turkey work to mend ties after years of tension during which the Emirates developed close relations with regional rivals, Egypt, Greece, Cyprus and Israel.

A series of cooperation agreements and MoUs were signed after talks between Turkish President Recep Tayyip Erdogan and Sheikh Mohammed bin Zayed in a move that is hoped to pave the way for a "new phase" in bilateral relations. Following the meeting, the UAE also

announced the establishment of a \$10 billion fund to support strategic investments in Turkey, including investments in the energy sector.

The deals signed in Ankara will open the way for direct investments and cooperation in the energy field. They include an MoU to boost energy cooperation between the two countries signed by UAE Energy Minister Suhail bin Mohammed Al Mazrouei and his Turkish counterpart Fatih Dönmez, and a cooperation agreement in the field of energy infrastructure signed between Abu Dhabi's state holding company ADQ and Turkish company Kalyon Yatrim Holding.

The Turkish President is planning an official visit to the UAE, which could take place as early as February 2022.

The Crown Prince's visit to Turkey is part of a broader foreign policy effort geared towards de-escalating regional tensions and promoting trade partnerships.

The pace of developments may have taken some of Abu Dhabi's partners by surprise. Following his visit to Ankara, the Crown Prince held a conversation with Egyptian President Abdel Fattah al-Sisi on November 25 during which the two leaders discussed "further cementing" cooperation between Egypt and the UAE and agreed to "continue consultation and coordination" on issues of common interest.

On December 3, the Crown Prince held another phone conversation with Greek PM **Kyriakos** Mitsotakis. MBZ and "further Mitsotakis discussed strengthening the existing strategic partnership" between the UAE and Greece, and the Crown Prince affirmed his country's "keenness to continue coordination, consultation exchange of views with the Greek side".

#### Snam acquires a 25% stake in EMG

Italian gas infrastructure company Snam has acquired Thailand's PTT Energy Resources' 25% stake in the East Mediterranean Gas Company (EMG) for approximately \$50 million on December 1.

EMG owns a 90-km gas pipeline linking Al-Arish in Egypt and Ashkelon in Israel. The pipeline is currently being used to export gas from Israel's Leviathan and Tamar gas fields to Egypt. The pipeline has a maximum capacity of 12 million cubic meters per day but that is expected to increase, according to the Italian company.

The deal marks Snam's entrance in the Eastern Mediterranean, a region where the Italian company expects notable gas demand growth and energy transition initiatives.

