

# EASTERN MEDITERRANEAN ENERGY: A DECADE AFTER THE MAJOR DISCOVERIES

*In close to a decade after major natural gas discoveries in the Eastern Mediterranean, new energy volumes have increased supplies to the domestic markets in Israel and Egypt and modest export to Jordan is planned to begin in 2020. Important steps have been taken to advance energy trade between countries of the region, yet there is little credence to the expectation that gas can catalyze peace in the Eastern Mediterranean. While new energy resources provide many benefits to the region, they have also raised the specter of clashes over maritime border delimitation, as well as provide Russia with an additional lever of influence.*

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**C**lose to a decade has passed since the initial major natural gas discoveries in the Eastern Mediterranean region. Despite the fanfare and hype surrounding the Eastern Mediterranean gas discoveries, to date, the new volumes have only increased domestic gas supplies in Israel and Egypt. However, no international gas trade has been established from or within the Eastern Mediterranean. Many observers and policymakers on Eastern Mediterranean developments had opined that the gas discoveries in the region would serve as an impetus for peace and cooperation, and a catalyst for the resolution of a number of the region's conflicts, most notably the Cypriot and Israeli-Palestinian ones. To date, however, the gas discoveries have done little to prod peace in the region. On the contrary, the gas discoveries have raised the likelihood of conflict in the region, centered over delimitation of the maritime borders in the Eastern Mediterranean, as players have challenged drilling rights. Many of these maritime disputes involve Turkey and thus, these potential conflicts might lead to the direct involvement of the Turkish navy with parties challenging Turkey's declared maritime borders. Major oil and natural gas exploration continue in the region, with the participation of a wide geographic origin of companies, including Russian companies.

This article will examine the current state of natural gas production and export in the Eastern Mediterranean basin, and geopolitical and energy security implications of the discoveries. The article argues that the natural gas discoveries in the Eastern Mediterranean are not likely to advance peace among actors in the region. However, gas trade in the region between states that are at peace with each other can contribute to domestic prosperity and thus, stability and thus, also strengthen existing peaceful relations. Specifically, energy diplomacy between Turkey and Israel provides a positive, non-contested avenue for cooperation and sends an important signal to Turkish and Israeli citizens. The article also claims that most of the states in the region are vying to serve as "gas hubs," even though this affords little geopolitical value as it is unlikely that any of the region's states will attain this goal. In addition, following the anticipated stabilization of Syria, there is a high probability that Russian companies will accelerate their offshore and onshore exploration efforts in Syria, which will give Moscow an additional lever for influence in the Eastern Mediterranean region.

### ***The State of Natural Gas Production and Exploration in the Eastern Mediterranean***

Beginning in 2009, there have been a series of major natural gas discoveries in the Eastern Mediterranean region. The most significant discoveries were in Egypt and Israel. Cyprus also has had modest gas finds. Exploration continues in the Eastern Mediterranean region, and it is anticipated that there will be additional discoveries

in the area, potentially in Syria and Lebanon, where currently no exploration is taking place.

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*“Gas discoveries have raised the likelihood of conflict in the Eastern Mediterranean, centered over delimitation of the maritime borders in the region.”*

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### **Israel**

Israel experienced a series of major natural gas discoveries in 2009 and 2010: the Tamar field which contains approximately 320 bcm<sup>1</sup>, and the Leviathan field which holds approximately 600 bcm. Gas supplies from these fields started arriving in Israel’s domestic market in 2013. Since then, Israel’s gas demand has been growing significantly. As such, Israel is aiming to produce 70 percent of its electricity by natural gas by 2020 and to transfer major portions of the country’s transportation to be powered by gas during the 2030-2035 period. Furthermore, there has been a final investment decision on a section of Leviathan where development will begin in addition to the government-aided development of the smaller fields of Tanin and Karish, which are aimed at the Israeli domestic market. Israel’s Minister of Energy and Water, Dr. Yuval Steinitz, announced a new bidding round for exploration licenses in Israel’s Exclusive Economic Zone (EEZ) in early November 2018. The bids are due in June 2019 and the selected license holders will be announced a month later. Israel is actively working to attract interest in this exploration bid round from foreign oil companies.<sup>2</sup>

Conversely, the international export of Israel’s gas fields has had much more modest milestones. Work is proceeding on a pipeline from Israel to Jordan to supply up to three bcm a year of natural gas from Israel’s Leviathan field beginning in 2020, following a commercial agreement concluded in 2016. In parallel, the Jordanian government announced in October 2018 that it would not extend leases to Israel to lands in the border areas between the countries as the leases are part of the 1994 Jordanian-Israeli peace agreement. Jordan’s decision could complicate the planned gas trade between Israel and Jordan. However, most probably, Amman and Jerusalem will make efforts to separate the commercial and trade agreements from current tensions.

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<sup>1</sup> Billion Cubic Meters (bcm).

<sup>2</sup> Ministry of Energy, State of Israel, Spokesmen announcements, 11 April 2018, <https://www.gov.il/he/Departments/news/bidround2>.

There is strong commercial interest from Israeli gas producers and Egyptian gas companies, supported by the governments of both countries, to establish Israeli gas exports to Egypt. This year, the prospects of establishing gas supplies from Israel to Egypt that may serve Egypt's domestic market or be used for production at Egypt's idle LNG export plants in Idku and Damietta, received impetus. This was due to the acquisition by Israel's Delek Drilling and the US Noble Energy of a major stake in the defunct East Mediterranean Gas Company (EMG) pipeline between Egypt and Israel. The government of Egypt had conditioned Israeli gas exports to Egypt on EMG's drop of an arbitration award decision owed by Egypt. However, prior to the acquisition of the stake in the pipeline, the parties interested in facilitating the gas export to Egypt—Delek Group and the Israeli government—had no standing in EMG's decision. The acquisition of EMG by Delek will now enable this and if the pipeline is in usable condition after sitting idle for seven years, the pipeline's flow can be reversed and supply gas from Israel to Egypt. This being said, the EMG acquisition is still conditional, and gas supply needs regulatory approval in both Egypt and Israel in June 2019 for this potential deal be finalized. This export plan to Egypt would use gas from the Tamar field. If implemented, it poses security of supply risks to the Israeli market, since it would mean that Israel might initiate export from the only field supplying its domestic market, before additional supplies from Leviathan were commenced.

Israeli policymakers are also promoting the exportation of Israeli gas to Europe, particularly to Greece and potentially onward to Italy. Similarly, EU institutions have granted Projects of Common Interest grants to multiple projects that promote gas export from Israel and Cyprus to Europe. One proposed export route would link Israel, Cyprus, Greece, and potentially Italy. While energy ministers and heads of government from Israel, Cyprus, and Greece hold frequent meetings—at times with participation of senior EU energy officials—to promote this route, there seems to be little commercial interest. This is reflected by the absence of senior relevant company representatives at these meetings. Despite the political endorsement and active promotion of this route, it seems that export of Israeli gas to Europe via Greece is not likely to materialize anytime in the near future.

Another possible export route that has been contemplated over the years is from Israel—potentially together with Cyprus—to Turkey. Both high-level officials in Turkey and Israel have recently expressed interest in renewing negotiations between the two countries on gas trade. Israeli exports to Turkey could also include the additional export of Israeli gas to Europe via TANAP. This could occur directly via connection to TANAP or indirectly through swaps, whereby Israel would supply gas to Turkey and less offtake from TANAP would go to the Turkish market. Thus, additional gas could be supplied to markets in Europe.

The discussion of potential Turkish-Israeli gas trade would not only contribute to promoting this export route, but could help return bilateral relations between Ankara and Jerusalem to a cooperative level. A meeting of high-ranking Turkish and Israeli officials on a topic of mutual interest could be an important symbol to both the Turkish and Israeli publics. The improvement in US-Turkish relations that took place in fall 2018 could also be reinforced through the improvement of Turkey's relations with Israel. However, despite expressed high-level interest in both Turkey and Israel in establishing the gas trade between them, it seems that an official high-level meeting on the topic has not taken place for over a year.

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### *Cyprus*

Since 2011, Cyprus has had a series of small gas discoveries amounting to an estimated 180 bcm of gas. To date, none of the finds are in development and even Cyprus's domestic market is still in need of new energy supplies. However, commercial interest in exploration around Cyprus is very high and exploration activity continues, which could yield additional discoveries.

Despite commercial interest in gas exploration in Cyprus, Turkey poses a challenge to this. Turkey has contested the exploration activities in areas it views as belonging to its own EEZ or to Northern Cyprus (TRNC). Accordingly, Turkey's Minister of Energy and Natural Resources Fatih Dönmez stated in September 2018 that Ankara would not allow any of the exploring parties to breach Turkey's rights or those of the Turkish Republic of Northern Cyprus.<sup>3</sup> Illustrating its claim, Ankara announced its intention to conduct offshore exploration in an area of the Mediterranean claimed by both Turkey and Cyprus toward the end of 2018. The contested views and the involvement of multiple vessels, including Turkish military vessels, raise the specter of conflict in Eastern Mediterranean waters, centered on delimitation claims. Turkish Navy vessels have challenged foreign drilling vessels that have attempted exploration in areas it views as under Turkish legal jurisdiction in recent years.

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<sup>3</sup> “Turkey will protect its energy rights in Mediterranean: Minister,” *Hürriyet Daily News*, 20 September 2018, <http://www.hurriyetdailynews.com/turkey-will-protect-its-energy-rights-in-mediterranean-minister-137053>

In addition to the promotion of gas export with Israel to Greece, Cyprus has also signed an intra-government agreement with Israel to facilitate the building of a pipeline between Cyprus and Egypt,<sup>4</sup> for potential gas exportation to Egypt. However, it must be noted that this intra-government agreement is non-binding, with no commercial commitment involved in the accord at this stage.

### *Egypt*

Among the Eastern Mediterranean states, Egypt has had the most significant progress in developing its new gas resources. In the latter part of the previous decade, Egypt went from a gas exporting country to one with frequent domestic gas shortages and electricity supply disruptions. After President Abdel-Fattah el-Sisi's rise to power in 2012, improved energy and economic policies in Egypt encouraged the return of foreign energy companies for exploration. The most important of these policies was raising the domestic gas price which created incentives for supplying the domestic market and moderately reduced the domestic consumption rate. Subsidized energy leads to significant waste and creates a low incentive for companies to explore and develop gas resources.

With the return of major energy companies to exploration, Egypt witnessed a series of new natural gas discoveries which currently meet domestic demand and can serve as a basis for renewed gas export. The most important of these gas discoveries was the massive Zohr Field, which contains an estimated 850 bcm of gas. ENI is an operator of the field and Russia's Rosneft has a 30 percent stake. The field is in production and currently supplies Egypt's domestic market. Through this discovery, Egypt has been able to end its LNG gas imports and boost its export potential. Future gas exports from Egypt may likely pull resources from other states, including Cyprus and Israel. While export could take place via pipelines or through Egypt's existing LNG plants, the LNG option seems more commercially viable.

### *Lebanon and Syria*

Both Lebanon and Syria have potential for offshore finds, but currently no exploration is taking place. Despite almost a decade of attempts, successive governments in Lebanon have failed to achieve political consensus and adopt a regulatory framework for its oil and gas sector that would enable foreign exploration in Lebanon's EEZ. Thus, to date, no exploration drilling is taking place offshore of Lebanon and the country continues to have significant energy supply challenges, which includes

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<sup>4</sup> "Cyprus, Egypt commit to new gas pipeline with intergovernmental deal," *S&P Global*, 20 September 2018, <https://www.spglobal.com/platts/en/market-insights/latest-news/natural-gas/092018-cyprus-egypt-commit-to-new-gas-pipeline-with-intergovernmental-deal>

frequent electricity supply disruptions.

Prior to the onset of the civil war, Syria had impressive results in increasing its onshore gas production, aided by Russia's Soyuzneftegaz. For instance, Syria's production volume continued to increase even during the first two years of the war. Following this, Syria has announced its intention to initiate offshore exploration in 2019 and Russian companies are likely to receive priority in exploration licenses. To illustrate the close trade ties between Russia and Syria, in addition to the frequent consultations both sides hold, in February 2018, Russian Energy Minister, Alexander Novak, signed a cooperation agreement with Syria's Minister of Oil and Mineral Resources, Ali Ghanem. The agreement includes cooperation on the rehabilitation of Syria's oil and gas production and other energy infrastructure development.<sup>5</sup>

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### **Conclusions**

The Eastern Mediterranean natural gas finds have attracted immense media and policymaker attention. To date, new volumes of gas have improved the supplies to the domestic markets in Israel and Egypt and the commencement of export to Jordan from Israel is likely. Discussions have taken place regarding gas exportation within and from the region as LNG potentially via Egypt's existing plants or by pipeline to Europe. Most likely, the Eastern Mediterranean gas volumes will serve markets in the region and potentially also LNG exports. The likelihood of resources going through major pipelines from the region to Europe is still highly challenged. However, exploration is continuing, and new discoveries could change the prospects for major exports outside the region.

Another factor that could greatly increase European commercial and policy level interest in the Eastern Mediterranean is the disruption of existing supplies to Europe from North Africa. Gas imports from Algeria and Libya are an important source of gas for Southern Europe. However, the disintegration of Libyan state institutions and the frequent terrorist attacks in Algeria, some of which target energy production installations, are a stark reminder that regional insecurity and instability can disrupt energy production and export. The dislodging of many ISIS members from

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<sup>5</sup> “Syria and Russia ink agreement on energy and mineral resources cooperation,” *SANA (Syria Arab News Agency)*, 6 February 2018, <https://sana.sy/en/?p=126516>

Iraq and Syria has led to an increase of their numbers in Libya and neighboring North African countries, raising security threats to the ruling governments in North Africa, and, thus the energy production there.<sup>6</sup> Long-term disruptions or threat to supplies from North Africa would render Eastern Mediterranean gas more commercially attractive.

Russian energy companies most likely will play a growing role in Eastern Mediterranean energy exploration and development. Russian energy companies are present in both Egypt and Syria and have examined entry into the Israeli energy sector. The presence of Russian energy companies in the regions would give Moscow an additional lever for influence in the Eastern Mediterranean region.

Many of the states in the Eastern Mediterranean—including Turkey, Egypt, and Cyprus—have declared their aspiration to serve as gas hubs in the region. It is difficult to understand why this desire is prevalent among Eastern Mediterranean states; it does not connote any significant geopolitical benefit, and, in fact, entails economic risk. It is highly unlikely that any gas hub will develop in the region, and, at best, some countries will serve as energy transit states. Turkey, for instance, already is a significant energy transit state. It is located next to some of the world largest gas reserves in Russia, Azerbaijan, and Iran as well as neighboring Europe, the world's largest gas importing market. However, the prospects of Turkey becoming a gas hub are quite low, and even if it was attained, it would not confer greater geopolitical value than its current status as a major gas transit state.

American, European, and regional policymakers continue to view gas resources as a way to promote peace, especially between Israel and its neighbors, as well as in divided Cyprus.<sup>7</sup> However, to date, there is not one case in international politics of a “peace pipeline,”<sup>8</sup> where the lure of energy trade served to resolve inter-state conflicts. While the gas trade is not likely to serve as a lever for peace, it can be used to produce water through fueling desalination and thus reduce water shortage conflicts that have plagued the Eastern Mediterranean region.<sup>9</sup> In addition, most of the region has unstable and infrequent electricity provision. New gas resources can improve the electricity supply in the region, which is essential for sustaining agriculture and economic growth. Economic prosperity can contribute to solidifying existing peaceful relations.

<sup>6</sup> Aaron Y. Zelin, “The Others: Foreign Fighters in Libya,” *The Washington Institute*, January 2018, <https://www.washingtoninstitute.org/policy-analysis/view/the-others-foreign-fighters-in-libya-and-the-islamic-state>

<sup>7</sup> “Gas exploration can be a catalyst for cooperation new US ambassador says,” *Cyprus Mail Online*, 4 October 2018, <https://cyprus-mail.com/2018/10/04/gas-exploration-can-be-a-catalyst-for-cooperation-new-us-ambassador-says/>

<sup>8</sup> Brenda Shaffer, “Can New Energy Supplies Bring Peace?,” *The German Marshall Fund of the United States*, 11 March 2014, <http://www.gmfus.org/publications/can-new-energy-supplies-bring-peace>

<sup>9</sup> Shaffer (2014).

In fact, it is more pertinent for policymakers to address the rising propensity for conflict in the Eastern Mediterranean due to the maritime delimitation conflicts spurred by the exploration activity in the region. In this case, conflict prevention policy is much more relevant than the promotion of “peace pipelines.” These border conflicts create a special challenge to Turkey, which is at the center of several of these conflicts. US, NATO, Turkish, and other concerned parties would benefit from looking at the potential benefits of these resources, but also at how to prevent related conflicts and security challenges as well.