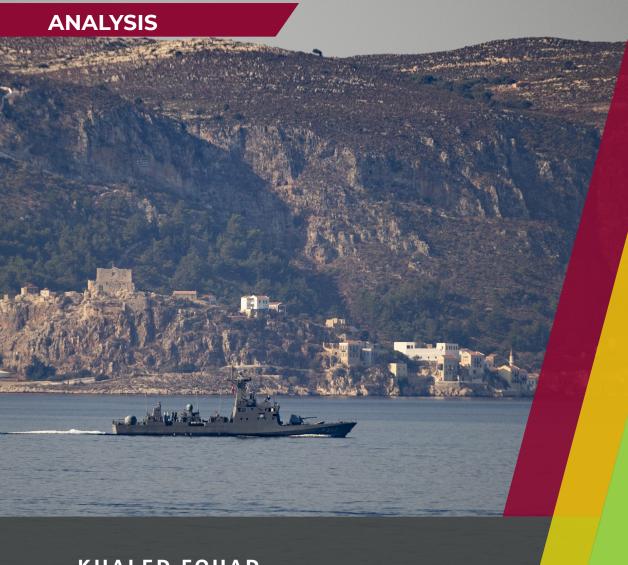
DRIFT INTO THE UNKNOWN: WHY IS THE SITUATION IN THE EASTERN **MEDITERRANEAN FLARING UP?**



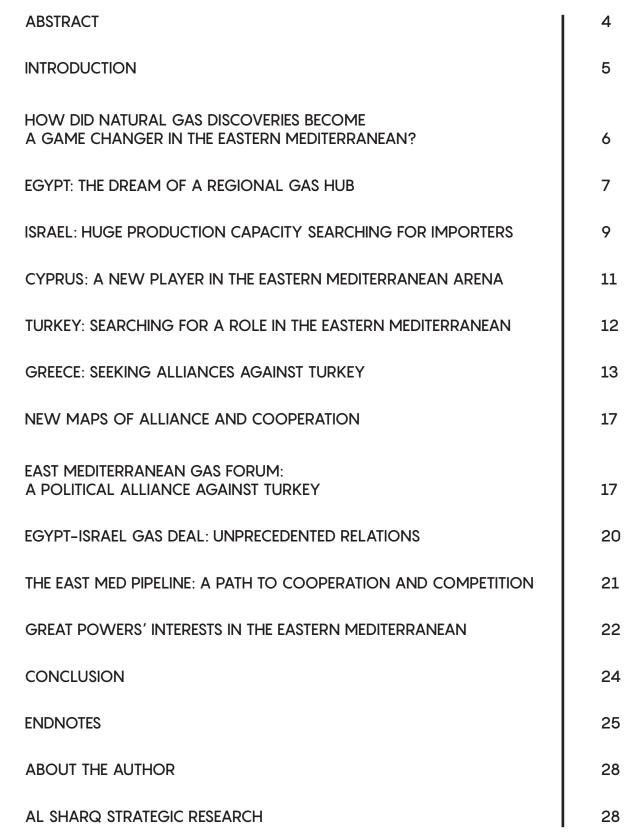
KHALED FOUAD

6 OCTOBER 2020





Contents





DRIFT INTO THE UNKNOWN: WHY IS THE SITUATION IN THE EASTERN MEDITERRANEAN FLARING UP?

ABSTRACT: The huge natural gas discoveries in the past years in the Eastern Mediterranean have added a new dimension to the highly tense region, making it similar, in terms of geopolitical conditions, to other strategic regions rich in oil and gas such as the Arabian Gulf and the South China Sea. In light of the new gas discoveries, major players in the Eastern Mediterranean are competing to acquire a share of the abundant quantities of natural gas in the seabed and at the same time pursuing to gain geopolitical importance and influence in a promising region. As a result, disputes over maritime delimitation among the countries of the region have increased, which in turn has reflected on changing alliances and disputes in the Eastern Mediterranean. The study examines the prospects of relationships among the countries of the region through elaborate overlapping and intersecting interests, disputes over maritime delimitation, and the perspective of the great powers toward the region. Finally, the study concludes that natural gas resources in the Eastern Mediterranean are more likely to be an incentive for tension and competition rather than cooperation unless there are serious settlements to the chronic disputes.

Introduction

The Eastern Mediterranean region has long been home to conflicts and crises, most prominently the chronic dispute between the Arab countries and Israel, as well as the ongoing conflict between Greece and Cyprus on the one hand and Turkey on the other. The huge natural gas discoveries in the past years in the Eastern Mediterranean have added a new dimension to the highly tense region, making it similar, in terms of geopolitical conditions, to other strategic regions rich in oil and gas such as the Arabian Gulf and the South China Sea.¹

Egypt, Israel, and Cyprus have the largest natural gas discoveries in the Eastern Mediterranean region. These countries do not only seek gas self-sufficiency, but they also strive for becoming exporters to the global natural gas markets, especially the European market. Turkey and Greece, apart from their ambition to explore natural gas in the Eastern Mediterranean, are also attempting to reach the European market. However, they are seeking to do so through gas transporters by means of pipelines passing through their territories to achieve strategic and economic gains.

This paper examines how the Eastern Mediterranean has become a geopolitical hot spot and how the large quantities of gas discovered has revived the historical regional disputes and represented a significant factor in changing the map of alliances and disputes in the region. This paper demonstrates how the main issue which all the disputes are centered around is the maritime delimitation.

To answer these questions, the paper will explore the main players in the Eastern Mediterranean and their interests, disputes over the exclusive economic zones (EEZ), map of alliances, and interests of great powers in the Eastern Mediterranean. The paper argues that gas discoveries in the Eastern Mediterranean can lead to escalating tension in the region unless there are serious settlements to the chronic disputes.

The paper will explore the main players in the Eastern Mediterranean and their interests, disputes over the exclusive economic zones (EEZ), map of alliances, and interests of great powers in the Eastern Mediterranean

How did Natural Gas Discoveries become a Game Changer in the Eastern Mediterranean?

The eastern part of the Mediterranean Sea known as the Eastern Mediterranean region, is distinguished by a special location at the crossroads of three continents — Europe, Africa, and Asia — and also includes a large part of the Middle East. The Eastern Mediterranean is surrounded by eleven major countries— Cyprus, Egypt, Greece, Israel, Italy, Jordan, Lebanon, Libya, Syria, Palestine, and Turkey. The vast majority of the geopolitical models introduced in the late 19th and early 20th centuries by Mackinder, Spykman, and Mahan "define the Eastern Mediterranean as a region of major importance, where the fermented political developments occurring there may have a global impact."²

The Eastern Mediterranean region holds huge reserves of natural gas, where the US Geological Survey (USGS) has estimated a mean of 122 trillion cubic feet (3.45 trillion cubic meters) of recoverable natural gas and a mean of 1.7 billion barrels of recoverable oil in the Levant Basin which lies in the Eastern Mediterranean.³ The expected large natural gas reserves in the Eastern Mediterranean region added the region to the list of the world's largest regions with respect to natural gas reserves.

In the last few years, the Eastern Mediterranean region has gained great geopolitical importance due to the emergence of huge gas discoveries. This has occurred in light of global competition for natural gas, which is one of the most important sources of low carbon emission in the 21st century, and in light of expectations of a growing demand for natural gas by up to 50% in 2030.⁴

Natural gas in the Eastern Mediterranean has a list of complex variables such as geographic location and size of gas resources, method of extracting available gas, cost of technology and processing facilities, alternative transportation lines, supply and demand of the regional and global markets, and prices of natural gas and liquefied natural gas (LNG). All these variables directly impact regional political dynamics and the foreign policy of the states of the region. There are five main players in the Eastern Mediterranean—Egypt, Turkey, Greece, Israel, and Cyprus. This paper will focus on those players and their gas discoveries, gas infrastructure, exploration activities, future investments, and interests.

Egypt: The Dream of a Regional Gas Hub

The first decade of the 21st century constituted a major breakthrough in natural gas production in Egypt, which enabled Egypt to export gas to the external markets. One of the most prominent gas deals that Egypt made during this period was the deal with Israel in 2005, which raised controversy in Egypt. The Egyptians' opposition was due to gas prices being lower than the international prices for Israel as well as lower than the prices that Egyptian companies used to pay at that time. Egypt has not only exported natural gas to Israel, but it has become the main source of gas to both Jordan and Lebanon.

However, the boom in Egyptian gas production did not last long; after reaching the peak production rates in 2009, where Egypt's production reached about 6.1 billion cubic feet (bcf) per day, a gradual decline in production started between 2009 and 2015 where production fell by 27%, reaching 4.4 bcf per day at the end of 2015.⁶ At the same time, Egypt gas consumption reached high levels because of the rapidly growing population. In this case, gas consumption reached 4.6 cubic feet per day in 2015.⁷ As a result, Egypt stopped gas exports and started to import gas to satisfy the growing domestic demand. For example, in the beginning of 2016, Egypt's gas imports reached 1.1 bcf per day.⁸

With the beginning of the second decade of the 21st century, Egypt began exploration activities in the Mediterranean deep waters. In April 2015, the Italian Eni company confirmed the existence of huge gas reserves in the Zohr field causing the company to send the giant 'Saipem 10000' drilling rig to the concession area and start drilling halfway through 2015. In August 2015, the Egyptian government and Eni announced the large discovery of the Zohr field.⁹

The Zohr field is considered the largest natural gas field in the Mediterranean, bypassing the Israeli Tamar and Leviathan fields and the Cypriot Aphrodite field. The natural gas

However, the boom in Egyptian gas production did not last long; after reaching the peak production rates in 2009, where Egypt's production reached about 6.1 billion cubic feet (bcf) per day, a gradual decline in production started between 2009 and 2015 where production fell by 27%, reaching 4.4 bcf per day at the end of 2015

reserve in the Zohr field is estimated at 30 tcf which equals 850 billion cubic meter (bcm).¹º After the discovery of the Zohr field, Egypt achieved self-sufficiency in natural gas and shifted from a gas importing state to a gas exporting state. In September 2018, Egypt announced stopping the import of liquefied natural gas after its total production reached 6.6 bcf per day, which is sufficient to meet the need of the Egyptian local market.¹¹ At the end of 2019, Egypt's production of natural gas reached 7 bcf per day, and it is expected to reach 8 bcf per day in 2021.¹²

Egypt seeks to exploit its huge gas reserves through following a strategy that depends on transforming Egypt into a regional gas export hub in the Eastern Mediterranean. This strategy could enable Egypt to have strategic, political, and economic gains. In terms of the infrastructure, Egypt owns the only two LNG plants in the Eastern Mediterranean. Damietta and Idku LNG plants are developed LNG and export infrastructures that help Egypt achieve its goal of becoming the only regional gas trading and exporting hub in the Eastern Mediterranean. The total LNG export capacity of the two Egyptian plants amounts to 19 bcm/year: "this would allow to export any volumes from Zohr and other fields not used in the domestic market." ¹³

Furthermore, Egypt has two natural gas pipelines. The Arab Gas Pipeline runs from the Sinai Peninsula through Jordan and extends into Lebanon and Syria, and the Arish-Ashkelon Pipeline or the EMG Pipeline connects the Egyptian city of Arish in the Sinai Peninsula to the Israeli city of Ashkelon on the Mediterranean coast. The EMG Pipeline was initially developed to supply Israel through Egypt's gas exports, as shown in Figure 1.

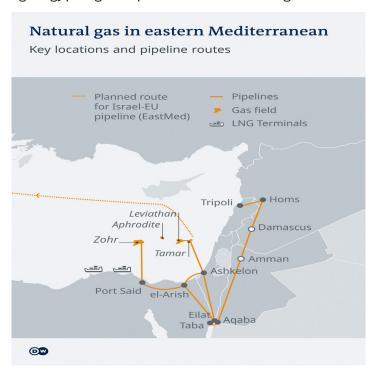


Figure 1: Geographical locations of the main gas discoveries, LNG plants, and pipelines in the Eastern Mediterranean¹⁴

Halfway through 2020, Egypt announced the signing of a direct order with five supermajor oil and gas companies, Exxon Mobile, Chevron, Shell, BP, and Total, to start exploration activities and drilling operations in seven offshore blocks off Egypt's western coast in the deep water of the Eastern Mediterranean

Egypt continues to attract international oil and gas companies to invest in searching for oil and gas on its unexplored EEZ in the Eastern Mediterranean. Halfway through 2020, Egypt announced the signing of a direct order with five supermajor oil and gas companies, Exxon Mobile, Chevron, Shell, BP, and Total, to start exploration activities and drilling operations in seven offshore blocks off Egypt's western coast in the deep water of the Eastern Mediterranean.¹⁵

Concerning strategic and political gains, Egypt's transformation into a regional energy hub will contribute to reinforcing Egypt's role as a potential regional energy player in the Eastern Mediterranean. This will provide Egypt with influence in Israel and Cyprus in case Egypt becomes the only stop when transporting the Israeli and Cypriot gas to Europe. At the same time, Egypt can have influence in Europe by passing sizable quantities of natural gas going to Europe through the Egyptian plants for liquefying gas. This new position for Egypt as a regional gas hub could give Egypt geopolitical importance and increase its capabilities as a leading regional power in the Eastern Mediterranean region.¹⁶

In conclusion, concerning economic gains, Egypt's transformation into a regional gas hub involves exporting its gas surplus to Europe, re-operating the two Egyptian plants, and getting fees from Israel and Cyprus in exchange for liquefying their gas and exporting it to Europe. This means Egypt will have great economic gains that could contribute to raising its gross domestic product (GDP).¹⁷

Israel: Huge Production Capacity Searching for Importers

Israel is one of the largest consumers of natural gas in the Eastern Mediterranean, using natural gas as a fuel source for electricity generation. In 2010, electricity generation in Israel consumed 40% of total natural gas consumption and is forecasted to reach 60% in 2027 and 68% in 2040.¹⁸ At the time, most of Israel's natural gas consumption has come from the Mari-B field, which is the first offshore natural gas field in Israel, and from Egyptian gas imports, which represent up to 40% of Israel's demand in 2010.

In 2009 and 2010, Israel announced huge discoveries of natural gas in the Eastern Mediterranean waters, the Tamar and Leviathan fields. The gas reserves of the Tamar field were estimated at 11 tcf and production started in 2013; the gas reserves of the Leviathan field were estimated at 22 tcf and production started in late 2019. The two fields represent 90% of Israel's proven gas reserves. It is noteworthy to point out that Israel's domestic consumption is less than 1% of the huge gas discoveries¹⁹ in Israel's water; the local market in Israel consumed 11.3 bcm of natural gas in 2019 where Tamar field alone provides 92% of the domestic consumption and "Leviathan will make up the rest, with the excess going to exports."²⁰

These discoveries not only gave Israel the ability to satisfy its domestic consumption but also enabled it to move from being a net gas importer in the past decades to a net exporter of gas approaching the beginning of the third decade of the 21st century. Israel owns three natural gas pipelines. Two of them run from Israel to Jordan. The first pipeline in the Sodom area of Israel transports gas from the Tamar field to private customers in Jordan. The second pipeline in the Beit She'an area of Israel exports natural gas from the Leviathan field to the National Electric Power Company (NEPCO) owned by Jordan's government.²¹ The third pipeline was the Arish-Ashkelon Pipeline which connected Egypt and Israel, as shown in Figure 2.



Figure 2: Israel's gas pipeline network²²

Recently, the main challenge facing Israel is to provide a route to export its sizable gas production, where despite exporting gas to Egypt and Jordan, Israel's production capacity is still a problematic issue with no obvious importers

One of the most pivotal issues relating to Israeli national security is securing the energy supply which is considered as a "central concern of Israeli policymakers."²³ Following Egypt's January 25 revolution, Egypt halted gas supplies to Israel due to several militant attacks on the Arish–Ashkelon pipeline in Sinai. This situation has been reflected on the priorities for Israeli policymakers where the main task for them after the gas disruption in 2012 was to formulate an energy policy that would enable them to avoid any possible threat of energy shortage in the future.

Formulation of an energy policy in Israel that would organize demand management was considered as Israel's first line of energy security. After the discovery of the Tamar and Leviathan fields, the Israeli government in 2013 adopted a gas export policy that obliges Israel to use 60% of its natural gas reserves in domestic consumption, achieving natural gas self-sufficiency until 2040.²⁴ Through this policy, Israel seeks to impose a strategy in natural gas export that attains self-sufficiency until 2040 and at the same time gives Israel an opportunity to become one of the major natural gas exporters in the Eastern Mediterranean. Accordingly, it would expand its influence in the region.

Recently, the main challenge facing Israel is to provide a route to export its sizable gas production, where despite exporting gas to Egypt and Jordan, Israel's production capacity is still a problematic issue with no obvious importers.²⁵

Cyprus: A New Player in the Eastern Mediterranean Arena

In 2011 Greek Cyprus announced a natural gas discovery off Cyprus's south coast, the Aphrodite field with a reserve estimate of up to 4.5 tcf. The Aphrodite field expected to meet the domestic gas demand in Cyprus and export part of the reserve to the international markets. Cyprus started to develop the Aphrodite field only 8 years after its discovery, due to the limited amount of its gas reserves. Nicosia announced at the end of 2019 that it had signed a contract with a consortium comprised of Shell, US-based Noble Energy, and 'Delek for extracting the gas reserves in the Aphrodite field.²⁶

After the gas discoveries, Cyprus seeks to impose its existence in the Eastern Mediterranean as a new player possibly becoming a part of the alliances in the region and could conduct a settlement with Turkey concerning the chronic dispute between the two sides

Cyprus does not currently have an infrastructure to transport gas abroad, but in September 2018 it signed an agreement with Egypt to establish a natural gas undersea pipeline between the two countries with the aim of transporting gas from the Cypriot Aphrodite field to liquefaction stations in Egypt and re-exporting it again.²⁷ Negotiations are still ongoing between Cyprus and foreign partners in the Aphrodite field (Shell, Noble Energy, and Delek) to construct the pipeline between Cyprus and Egypt.

After the gas discoveries, Cyprus seeks to impose its existence in the Eastern Mediterranean as a new player possibly becoming a part of the alliances in the region and could conduct a settlement with Turkey concerning the chronic dispute between the two sides.

Turkey: Searching for a Role in the Eastern Mediterranean

Turkey is a net gas importer country relying on gas imports from Russia, Azerbaijan, and Iran, in addition to LNG from other countries. Turkey's gas imports in 2019 reached 45 bcm to cover its local market demands.²⁸ The new Turkish gas discovery in the black sea announced in August 2020 could enable Turkey to meet a part of its local market needs.

Turkey played an essential role in the past decades in transporting natural gas to Europe. The Trans-Anatolian Natural Gas Pipeline (TANAP) that passes through Turkey's territory transports natural gas from Azerbaijan to southern Europe. In addition to the Blue Stream pipeline, which Turkey receives Russian gas through, Turkey will continue transporting natural gas to Europe through the new Turkish Stream pipeline which carries Russian gas to Turkey and Europe. The Turkish Stream pipeline was set to start working by 2019, but the pipeline stopped due to US sanctions.

In spite of disputes between Turkey and the other players in the Eastern Mediterranean, Turkey insists on being a part of the energy equation in the region and seeks to continue its exploration activities in the Eastern Mediterranean and even in the contested waters. It aims to find sizable quantities of oil and gas.

The Trans-Anatolian Natural Gas Pipeline (TANAP) that passes through Turkey's territory transports natural gas from Azerbaijan to southern Europe. In addition to the Blue Stream pipeline, which Turkey receives Russian gas through, Turkey will continue transporting natural gas to Europe through the new Turkish Stream pipeline which carries Russian gas to Turkey

Greece: Seeking Alliances against Turkey

Greece does not have gas discoveries in the Eastern Mediterranean. Greece is a net gas importer county that has imported about 5 bcm of natural gas in 2019. Greece seeks to play a bigger role in the coming few years as a gateway for LNG supplies into Southeast Europe through the Revithoussa import terminal and the planned Alexandroupolis project.²⁹

On the other side, after the emergence of huge gas reserves in the Eastern Mediterranean, Greece not only seeks to find gas discoveries in the region, it pursues to continue the geopolitical rivalry with Turkey in the Eastern Mediterranean and find regional alliances against Turkey.

Disputes Over Maritime Delimitation

In 1982, the United Nations Convention on the Law of the Sea (UNCLOS) was drafted to control the exploitation of energy resources and represent countries' ownership over places beyond territorial waters and hundreds of kilometers away from coasts of countries.³⁰ The Law of the Sea established regulations for dividing sea and ocean waters beyond territorial waters of coastal states, known as the Exclusive Economic Zone (EEZ), and these areas were defined by 200 nautical miles from coasts of countries.

Countries with EEZs have the right to exploit the riches in these areas as well as the right to explore and produce oil and natural gas, but they do not have the right to control maritime navigation in these areas. They must provide freedom of international navigation and overflight in the EEZ. However, there are still some countries that have not ratified the UNCLOS such as Turkey, Venezuela, Israel, and the United States, and therefore they do not recognize the 200 miles of the EEZ.³¹

The maritime delimitation in the Eastern Mediterranean is a very complicated process. This seems obvious as there is a group of opposite coastal states in limited waters, as is the case in the Eastern Mediterranean, where the EEZs are to be defined by the two opposite countries with the shortest distance between their coasts. They have the right to divide the ownership of EEZs equally between them. These procedures explain how much complications are related to the delimitation process in the Eastern Mediterranean region, especially in light of the state of instability due to the chronic disputes between several parties in the region.

Most of the Eastern Mediterranean states have not delineated their maritime borders. There were only three treaties that have been concluded in the past decade to define the EEZ on the basis of UNCLOS. The first treaty between Cyprus and Egypt was signed in 2003. The second treaty between Cyprus and Lebanon was signed in 2007. The third treaty between Cyprus and Israel was signed in 2010.³² Due to disputes sparked in the Eastern Mediterranean, there were another three maritime delimitation treaties. The first was between Turkey and Libya in November 2019. The second was between Greece and Italy in June 2020. The third was between Egypt and Greece in August 2020.

At the present time, one of the most prominent disputes in the Eastern Mediterranean region is that related to the delimitation of the maritime borders of the EEZ between more than one country. The huge gas reserves in the region have multiplied the complications related to the EEZ agreements, especially that the unilateral moves of exploration activities by the countries of the region have not stopped. At the same time, most regional countries have sought to strengthen their offshore naval capabilities, which increases the possibilities of confrontation at sea.³³

One of the main disputes concerning maritime delimitation in the Eastern Mediterranean is that between Turkey and Greece where the impacts of this dispute extend to most of the region's states. The dispute between the two countries has historical roots. After the defeat of the Ottoman Empire in World War I, most of the islands in the Eastern Mediterranean and the Aegean sea which previously belonged to the Ottoman Empire became under Greek sovereignty.

Kastellorizo was one of those islands that became a Greek island while being only one mile off the Turkish coast. After the emergence of huge gas discoveries in the Eastern Mediterranean, Kastellorizo appeared again and sparked a crisis between Turkey and Greece.

Turkey refuses to become an UNCLOS signatory since
Turkey believes that it is illogical to define the EEZs of
Greece to include the island of Kastelorizo as it wastes large
areas, almost 148,000 square kilometers of Turkish EEZs

The position of the Kastellorizo is the problem. The small island, which is very close to the southern Turkish coast, has EEZs that belong to Greece according to the law of the sea. UNCLOS Article 121 affirms that human habitation island coastlines generate EEZs the same as any coastal land formation.³⁴ Consequently, Turkey will lose huge areas of EEZs off its southern coast.

Turkey refuses to become an UNCLOS signatory since Turkey believes that it is illogical to define the EEZs of Greece to include the island of Kastelorizo as it wastes large areas, almost 148,000 square kilometers of Turkish EEZs. 35 Turkey stated that "it is unfair that Greece should have the right to potentially exploit energy resources in parts of the Mediterranean seabed that lie within sight of Turkey but many hundreds of miles from the Greek mainland." 36

As a result of differences between the Turkish and Greek perspectives, tensions escalated between the two sides. As a result, Turkey signed a maritime delimitation agreement with Libya and conducted exploration activities in the contested waters, while Greece on the other side signed maritime delimitation agreements with both Italy and Egypt. Figure 3 shows the disputed EEZs in the Eastern Mediterranean.

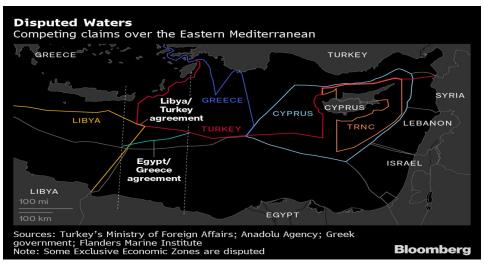


Figure 3: EEZs claimed in the Eastern Mediterranean³⁷

Israel was not far from the disputes over the EEZs. While Tel Aviv signed a maritime agreement with Cyprus, no agreement has been signed with Lebanon on defining their EEZs

The Turkish-Cypriot dispute is one of the most prominent challenges for using the natural gas discoveries as a motivation and catalyst for cooperation between the Eastern Mediterranean countries. Tensions increased between the two sides after Cyprus discovered the Aphrodite natural gas field in the far south of the Republic of Cyprus's EEZ in the Mediterranean, and Turkey argues that the Republic of Cyprus has no right to conduct energy exploration and production activities off its southern coast without the explicit consent of the Turkish Republic of Northern Cyprus (TRNC). However, the conflict between the two sides did not develop into serious confrontations with only some interceptions from the Turkish naval forces to exploration and drilling ships of foreign companies carrying out exploration activities in the disputed waters between the two parties.³⁸ In return, the Republic of Cyprus sought to expand and strengthen its security relationship with Israel, Egypt, and Greece.

Israel was not far from the disputes over the EEZs. While Tel Aviv signed a maritime agreement with Cyprus, no agreement has been signed with Lebanon on defining their EEZs.¹ The Lebanese signing of exploration contracts with international companies and the high expectations of discovering natural gas off its coasts led to the outbreak of a crisis between Lebanon and Israel over defining the EEZs between the two sides in what is known as the "Block 9" crisis. Since 2011, several international mediations attempted to achieve a settlement between the two countries. Recently after the Beirut explosion in August 5, 2020, there are high expectations for resolving the dispute on the maritime border as Lebanon's president stated his willingness to reach an agreement with Israel.³9

On the other side, the historical conflict between Israel and Palestine extends to the demarcation of the maritime borders. The Palestinian Authority decided in July 2017 to form a national team to start the demarcation of the maritime borders of Palestine. According to the Oslo Accords, the maritime borders of the PA are those that extend off the Gaza coast in the Mediterranean, which fall under the control of Hamas. These waters include the Gaza Marine field, which was discovered in 2000 with a reserve

¹⁻ EDITOR'S NOTE: On October 2, 2020, the speaker of the Lebanese parliament announced that Lebanon and Israel will be holding talks to settle the maritime border dispute under the auspices of the UN. The talks would begin after mid-October.

estimated at one tcf. The exploitation of the Gaza field has not started until now due to the division between the PA and Hamas. In addition, it seems that the demarcation of the maritime borders between the PA and Israel is far from reality, given that "neither the PA nor Israel would want Hamas to be strengthened by the development of the gas field."⁴⁰

New Maps of Alliance and Cooperation

Sizable natural gas discoveries in the Eastern Mediterranean acted as an important incentive for ending some regional conflicts through engagement in alliances and deals; at the same time it revived other existing regional conflicts and led to new clashes. There is a new map that takes shape in the Eastern Mediterranean where the incentives for both alliances and disputes are equal between the region's states.

East Mediterranean Gas Forum: A Political Alliance against Turkey

At the beginning of 2019, Egypt, Israel, Greece, and Cyprus announced the formation of the Eastern Mediterranean Gas Forum (EMGF) as a step toward energy cooperation in the Eastern Mediterranean that paved the way for the region to be a source of energy for Europe. In late September 2020, the founding member countries of the organization announced the transformation of EMGF to an intergovernmental organization.⁴¹ The regional organization would be responsible for creating shared regional energy policies for the countries of the EMGF which would enable them to enlarge the energy production and reach the European market. The EU and the US appreciate and support the new organization as the US requested to become a permanent observer of the EMGF while France asked to join the EMGF as a member.

The creation of this new organization could not be seen only from an economic perspective or as enhancing the growing energy ties of the organization's countries. The disputes between the countries in the Eastern Mediterranean is considered a significant factor for the creation of the forum. Turkey was notably absent from the forum. This refers to its relationship with the other forum countries where relations between Turkey and Egypt deteriorated sharply since the military coup in Egypt in 2013 and after Gen. Abdel-Fattah el-Sisi came to power. In addition, Turkey has continued to support the Egyptian Muslim Brotherhood, which angers the Egyptian regime.

At the beginning of 2019, Egypt, Israel, Greece, and Cyprus announced the formation of the Eastern Mediterranean Gas Forum (EMGF) as a step toward energy cooperation in the Eastern Mediterranean that paved the way for the region to be a source of energy for Europe

Cyprus's announcement of the Aphrodite discovery has sparked tensions with Turkey alongside with the chronic dispute between the two sides. Even relations between Turkey and Israel are worse than ever. Since the downgrading done by Turkey for its diplomatic relations with Israel following the Israeli raid on the Mavi Marmara ship in 2010, the relations between the two sides has frozen. Furthermore, the Arab spring developments led to a more complicated relationship with great differences in political directions on both sides concerning the new crises in the region. On the other hand, the historical conflict between Turkey and Greece has once again been revived due to the different perspectives on maritime delimitation between the two. All of these tense relations with Turkey make The Eastern Mediterranean Gas Forum not just an alliance for promoting energy cooperation among countries of the forum but also as a political alliance against Turkey.

Turkey refused to recognize the EMFG as Turkey views the forum as "an unrealistic initiative launched by some countries with political motives, under illusions of excluding Turkey from energy equation in the Eastern Mediterranean."⁴² Indeed, after the establishment of EMGF, the pace of conflicts increased between Turkey on the one hand, and Cyprus and Greece on the other concerning the delimitation of maritime boundaries and exploration activities in the Eastern Mediterranean. It was obvious that the organization forms a political alliance that tries to exclude Turkey from the Eastern Mediterranean region.

In addition to Turkey, there are three notable absences: Lebanon, Syria, and Libya. Syria and Libya are still struggling with their civil wars while Lebanon has some confusion "as to how to deal with this new regional configuration that left the country out."⁴³ Lebanon refuses to join any organization involving Israel⁴⁴ and at the same time sees the EMGF as an alliance that might threaten its interests in the Eastern Mediterranean.

In conclusion, The EMGF is an example of how the energy resources in the Eastern Mediterranean could lead to deepening relations and promote cooperation. At the same time, it could lead to political crises and disputes between countries of the region.

The most complicated question for Israel after the Tamar and Leviathan discovery was how to access the external market as Israel neither has pipelines to transport its natural gas to importers abroad nor platforms to liquefy the gas and export it through tankers

Egypt-Israel Gas Deal: Unprecedented Relations

The most complicated question for Israel after the Tamar and Leviathan discovery was how to access the external market as Israel neither has pipelines to transport its natural gas to importers abroad nor platforms to liquefy the gas and export it through tankers. To overcome this challenge, Israel had to look for the best options available, taking into consideration the political, security, and economic determinants.

The first option was the establishment of LNG plants on Israeli coasts. This option has security and economic concerns about these plants being exposed to attacks in addition to the high economic cost related to their construction. Israel could also build offshore LNG plants, but it is a very expensive option compared to the LNG plants on the coasts as well as the continued potential security threats.⁴⁵

The second option was to build a pipeline connecting Israel to Cyprus where the Israeli gas would be transported to Cyprus and then exported through LNG plants on Cypriot coasts. Although this option is more secure than building LNG plants inside Israel, there are significant political and economic obstacles as reliance on Cyprus as the main route for the export of Israeli gas would constitute a constant concern for Israel due to the Turkey-Cyprus dispute. On the other hand, the construction of a pipeline from Israel to Cyprus and the building of LNG plants on the Cypriot coasts need time and large financial backing.⁴⁶

The third option was the construction of the East Med pipeline that links Israel, Cyprus, Greece, and Italy to enable Israel and Cyprus to export their gas to European markets. Although this option faces difficult challenges in terms of the high financial cost and technical difficulties, Israel insists on establishing it as will later be explained.

The fourth option was extending a pipeline from Israel to Turkey which would facilitate the access of Israeli gas to Turkey and European markets. Although this option is considered the least costly option compared to the others, the tense Turkish-Israeli relations do not encourage moving forward with this option.⁴⁷

The fifth option was exporting Israeli gas to Egypt, making use of the Arish-Ashkelon Pipeline which connected Egypt and Israel. This option gives Israel a better opportunity than the above options as this option could provide more than one track to Israeli gas. It can feed the Egyptian market, or it can be exported to European markets through the Egyptian LNG

plants. In addition, this option provides Israel with economic returns on the gas quantities extracted from the Tamar and Leviathan fields. On the other hand, Israel could achieve strategic and political goals that have not been achieved since the peace treaty between Egypt and Israel in 1979.⁴⁸ Figure 4 shows all the proposed routes for the exportation of Israeli gas.

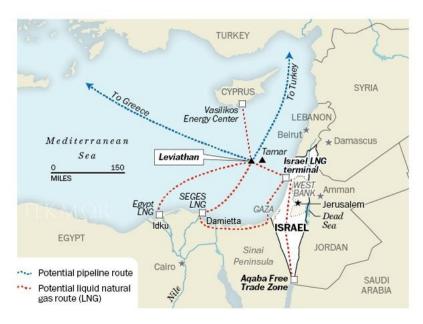


Figure 4: Proposed options for the exportation of Israeli gas⁴⁹

The option of transferring Israeli gas to Egypt can be considered the best option for exporting Israeli gas. This is a conclusion that was confirmed by a report published by the European Parliament in May 2017 stating that the best option for exporting Israeli gas is through Egyptian LNG plants. This option was considered more realistic compared to other options that are hampered by political crises on the one hand and the high economic cost on the other.⁵⁰ In the same context, a report issued by the Israeli Foreign Ministry's Foreign Affairs Policy Unit confirmed that Egypt is the best option to export Israeli gas in political, economic, and strategic terms compared to Turkey and Greece.⁵¹

In late 2014, there was talk about a deal that would allow the Israeli side to export gas to Egypt, and negotiations continued between the two sides until February 2018 when an agreement was signed between the US-based Noble Energy and Israeli Delek Company with Dolphinus Holding Company, an Egyptian private sector company that the Egyptian government owns 50% of its shares.⁵² According to the gas agreement between both sides, Israel will export 64 bcm of natural gas to Egypt over 10 years at a value of \$15 billion.⁵³ The gas deal between Egypt and Israel did not stop there, but after a year and a half of signing the agreement and before the delivery of Israeli gas shipments to Egypt, the Egyptian and Israeli parties changed the contract so that the amount of gas to be exported by Israel would become about 85.3 bcm over a period of 15 years at \$19.5 billion.⁵⁴

Thus, Israel has transformed within a few years from an importer of Egyptian gas where 40% of its domestic consumption had depended on the natural gas coming from Egypt at the beginning of the 2000s, to a gas exporter in 2020, exporting its gas surplus to Egypt

Thus, Israel has transformed within a few years from an importer of Egyptian gas where 40% of its domestic consumption had depended on the natural gas coming from Egypt at the beginning of the 2000s, to a gas exporter in 2020, exporting its gas surplus to Egypt. Israeli Prime Minister Benjamin Netanyahu expressed this briefly when he said that the gas deal with Egypt is a joyous day for Israel, marking the strategic and economic gains that Israel has achieved by signing the gas deal with Egypt.⁵⁵

The East Med Pipeline: A Path to Cooperation and Competition

Israel seeks to establish the East Med Gas Pipeline that exports its gas to European markets through Cyprus, Greece, and Italy. The pipeline extends 1900 km at an estimated cost of about 7-8 billion dollars, as shown in Figure 5. The proposed pipeline faces three main challenges that hinder the start of the project. Firstly, The East Med's Technical Feasibility, where the maximum water depth is about 2,873 m and the rough sea bed near Crete Island raises doubt concerning the technical feasibility of the project. Secondly, The East Med's Economic Viability where the estimated cost of the project is about 7-8 billion dollars means that huge financial support is needed. Thirdly, the pipelines are susceptible to physical (both technical and political) threats, 56 and this kind of threat increases with the complicated geopolitical situation as is the case in the Eastern Mediterranean.

Despite doubts about the economic viability and technical difficulties of constructing the pipeline in the deep waters of the Eastern Mediterranean,⁵⁷ Israel has not stopped its efforts to carry out the project that makes Israel the main gas hub in the Eastern Mediterranean.⁵⁸

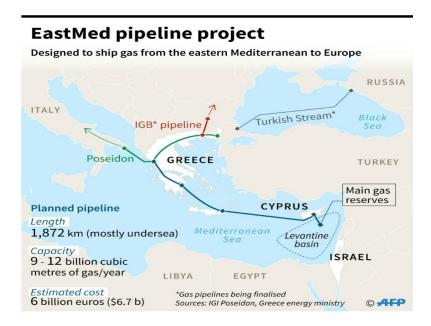


Figure 5: Planned East Med pipeline59

Establishing the East Med pipeline could achieve several fundamental goals for Israel: first, making use of Israel's huge gas reserves; second, acquiring a new position as a regional platform for gas export which increases its geopolitical importance; and third, reducing Arab influence in Europe resulting from the control of Arab oil and gas exports in the European markets which will accordingly increase Israeli influence within Europe. 60 The East Med pipeline could give Israel geopolitical importance and a competitive advantage over Egypt, which affects Egypt's position as a potential regional gas hub. The proposed East Med pipeline could provide gas from Israel and Cyprus to Europe at a cheaper price, as well as a faster and easier way compared to the liquefied gas that is likely to be exported from Egypt's LNG plants. 61 Therefore, construction of the East Med pipeline is likely to reduce Egypt's role as a regional gas hub for transporting gas to Europe, which means reducing Egypt's geopolitical importance in addition to suffering an economic loss. In other words, establishing the East Med pipeline could represent a pivotal factor that affects relations between Egypt and Israel 62, and might lead to an increase in competition and tension between the two sides.

Great Powers' Interests in the Eastern Mediterranean

Europe is one of the world's largest consumers of natural gas. At the same time, Russia supplies Europe with huge quantities of gas through a group of gas pipelines. In 2017, about 40% of Europe's gas imports came from Russia,⁶³ this percentage means that Europe basically depends on Russian gas imports. Russian gas exported to Europe gives Russia power and influence within Europe, especially under Russia's use of gas as a political tool during crises.

Energy safety has become one of the most crucial issues for the European Union countries after the Russian-Ukrainian conflict in 2014. The repetition of Russian threats to cut gas supplies to Europe has prompted the EU to revise its own gas supply security, trying to hinder the geopolitical use of gas by reducing dependence on Russian gas. The EU endorsed a strategy that could make the countries of the EU less dependent on Russian gas supplies by seeking alternative sources of natural gas away from Russia. The strategy is known as the European gas diversification.

The huge natural gas discoveries in the Eastern Mediterranean represent an appropriate chance for the EU to achieve its strategy of gas diversification. Gas exports from the Eastern Mediterranean could be partially alternative to Russian gas. For this reason, the EU seeks to stabilize the Eastern Mediterranean and promote energy ties between countries of the region. The EU offers financial support for infrastructure projects and exploration activities in the region. This was obvious when the EU invested \$100 million in a feasibility study for the proposed East Med pipeline, which could transport natural gas from Israel and Cyprus to Europe. The EU participated in meetings of the EMGF as an observer. The EU will continue to examine suitable export solutions for natural gas in the Eastern Mediterranean, where "promoting natural gas exploration in the Eastern Mediterranean remains a key goal of the European Union." ⁶⁴

On the other hand, the US is keen to support the European strategy of gas diversification to avoid dependence on Russian gas. For the US, "it is obvious that energy is used as a politic power and tool by Russia."⁶⁵ Thus the US aims to reduce the Russian political influence on Europe by prompting the EU to implement its strategy of diversification. The US sanctions for Nord Stream 2 and Turkish stream reveal the insistence of the US to reduce European dependence on Russian gas.⁶⁶

With the beginning of the third decade of the 21st century, the United States has entered the global LNG export markets as a strong competitor. The revolution in production of gas and shale oil in the United States allowed it to produce huge quantities of natural gas and seek to export liquefied gas in large quantities to global markets. This means that the US aims to open a path for its gas to enter European markets. This also provides another explanation as to why the US opposes the European reliance on Russian gas.

The EU offers financial support for infrastructure projects and exploration activities in the region. This was obvious when the EU invested \$100 million in a feasibility study for the proposed East Med pipeline, which could transport natural gas from Israel and Cyprus to Europe

Russia on the other side competes with the United States to impose its influence and maintain its presence in the Eastern Mediterranean coasts that link Russia's vast landmass to warm water,⁶⁸ and continue expanding from the Syrian coast to the Libyan coast. At the same time, Russia seeks to maintain its position as the main gas exporter to Europe, meaning that undeveloped natural gas discoveries in the Eastern Mediterranean and tensions in the region are in favor of Russia.

Conclusion

The natural gas reserves in the Eastern Mediterranean along with the non-resolving disputes in the region and the civil wars that had broken out in both Syria and Libya have led to more tension among the countries of the region and transformed the Eastern Mediterranean into a geopolitically unstable region now more than ever.

The high possibilities for more oil and gas discoveries in the seabed of the Eastern Mediterranean could make the maritime delimitation and EEZs the main sources of conflict in the region especially after the Turkish-Libyan, Greek-Italian, and Greek-Egyptian agreements, which have reflected on the Libyan civil war and tense relations between Turkey on the one hand and Greece on the other.

All these agreements are temporary as long as there are no maritime delimitation agreements among all the countries sharing the borders. These hopeful agreements should not only rely on the law of the sea, but should also be understanding. Settlements among all the sides should result from their pursuits to solve the longstanding disputes in the region.

The policy that Europe adopted to diversify natural gas resources in order to reduce the reliance on Russian gas and to limit the Russian influence in Europe has paved the way for the Eastern Mediterranean countries to race toward the European market to export natural gas. This occurs either by exporting it directly or to pose as a transit pipeline to Europe. Thus, the race toward the European market is another factor that could intensify the competition among the countries of the Eastern Mediterranean.

In a region such as the Eastern Mediterranean characterized by complicated and long-lasting disputes that obstruct the development of political relations and economic cooperation, the emergence of huge natural gas resources is more likely to be an incentive for tension and competition rather than cooperation unless there are serious settlements to the chronic disputes. Energy relations cannot drive politics, but politics can drive energy relations in the Eastern Mediterranean.

Endnotes

- 1- Grigoriadis, I, "Energy Discoveries in the Eastern Mediterranean: Conflict or Cooperation?," in *Middle East Policy Council*, vol. 21, 3(2014), 124-133.
- 2- HadjipavliS, P, 'The geopolitical importance of the Eastern Mediterranean airspace', in *Eastern Mediterranean Geopolitical Review*, vol. 1, 1(2015), 44-60.
- 3- US Geological Survey (USGS), Assessment of Undiscovered Oil and Gas Resources of the Levant Basin Province, Eastern Mediterranean (USGS, Washington, DC, 2010).
- 4- Yergin, D, *The Quest: Energy, Security, and the Remaking of the Modern World*, 1st ed., (Penguin Press, New York, United States, 2011).
- 5- Levine, S, "Why Israel's gas deal with Egypt really blew up," in Foreign Policy, 2020.
- 6- Ratner, M, *Natural Gas Discoveries in the Eastern Mediterranean*, (Congressional Research Service, Washington, D.C., United States, 2016).
- 7- U.S. Energy Information Administration (EIA), Country Analysis Brief: Egypt, 2018.
- 8- Offshore Energy, Egypt to up gas production by 2020, 2016.
- 9- ENI, Eni discovers a supergiant gas field in the Egyptian offshore, the largest ever found in the Mediterranean Sea, 2015.
- 10- Vita International, The Giant Zohr, 2016.
- 11- Reuters, Egypt halts gas imports after final shipments arrived minister, 2018.
- 12- Adel, M, "Egypt seeks to increase gas production to 8bn scf/day in FY21," Daily News Egypt, 2018.
- 13- European Parliament, Energy: a shaping factor for regional stability in the Eastern Mediterranean, (Directorate-General for External Policies, Belgium, 2017).
- 14- Papadimitriou, J, EastMed gas pipeline flowing full of troubling questions, (Deutsche Welle (DW), 2020).
- 15- Energy Egypt, Egypt's House of Representatives approves 12 Oil & Gas E&P Agreements, 2017.
- 16- Weiss, I, 'Prospects of Mediterranean gas for the region's stability and EU's energy security', in *Mid-dle East Energy and Geopolitics*, (Konrad-Adenauer-Stiftung e. V, Lebanon, 2019).
- 17- Daily News Egypt, Government seeks to transform Egypt into regional energy hub benefiting from sector growth, 2019.
- 18- Hochberg, M, 'Israel's Energy Potential: Securing the Future,' in *Middle East Institute*, 2016.
- 19- Krauss, C, 'Israel's Energy Dilemma: More Natural Gas Than It Can Use or Export,' in *The New York Times*, 2019.
- 20- Solomon, S 2019, 'Israel to start pumping gas from Leviathan, making country an energy power-house,' in *The Times of Israel*, 2019.
- 21- Joffre, T, 'Experimental supply of Israeli natural gas reaches Jordan,' in Jerusalem Post, 2020.
- 22- Office Of The Quartet, Energy, 2019.
- 23- Sachs, N and Boersma, T, *The Energy Island: Israel Deals with its Natural Gas Discoveries*, (Brookings, Massachusetts, United States, 2015).
- 24- Haaretz, Israeli Cabinet Votes Yea on Natural Gas Export, 2013.
- 25- Ramsay, P, 'Chevron sees East Med value,' in Petroleum Economist, 2020.
- 26- Business Standard, Cyprus signs USD 9 billion gas deal with energy majors, 2019.
- 27- Henderson, S, 'Cyprus Aims to Export Gas via Egypt,' in *The Washington Institute for Near East Policy*, 2018.
- 28- Temizer, M, 'Russian share of Turkish gas imports falls as LNG rises,' in Anadolu Energy, 2020.
- 29- Energy World, Greece almost doubles LNG imports in first half; US supplies surge, 2020.
- 30- United Nations, *United Nations Convention on the Law of the Sea of 10 December 1982 Overview and full text*, 2020.
- 31- Oral, N, 'Non-Ratification of the 1982 LOS Convention: An Aegean Dilemma of Environmental and Global Consequence,' in *Publicist*, vol. 1, 2009.
- 32- Scovazzi, T, 'Maritime Boundaries in the Eastern Mediterranean Sea,' in *The German Marshall Fund of the United States*, 2012.

- 33- Vogler, S and Thompson, E, 'Gas Discoveries in the Eastern Mediterranean: Implications for Regional Maritime Security,' in *The German Marshall Fund of the United States*, 2015.
- 34- United Nations, *United Nations Convention on the Law of the Sea of 10 December 1982 Overview and full text*, 2020.
- 35- Gafarli, T, 'Against All Odds: Turkey's Position in the Eastern Mediterranean,' TRT World Research Center, 2019.
- 36- Kingsley, P, 'Tiny Islands Make for Big Tensions Between Greece and Turkey,' in *The New York Times*, 2018.
- 37- Hacaoglu, S, Turkey Seeks to Sideline EU in Maritime Disputes With Greece, (Bloomberg, 2020).
- 38- Paraskova, T, Turkey's Navy Threatens To Sink Eni Drilling Ship Offshore Cyprus, Oil Price, 2018.
- 39- JOFFRE, T, 'Lebanese president doesn't rule out possibility of peace with Israel,' in *The Jerusalem Post*, 2020.
- 40- Henderson, S, 'Natural Gas in the Palestinian Authority: The Potential of the Gaza Marine Offshore Field,' in *The Washington Institute for Near East Policy*, 2014.
- 41- Reuters, East Mediterranean states formally establish Egypt-based gas forum, 2020.
- 42- Republic Of Turkey Ministry Of Foreign Affairs, QA-3, 16 January 2020, Statement of the Spokesperson of the Ministry of Foreign Affairs, Mr. Hami Aksoy, in Response to a Question Regarding the Meeting to Transform the Eastern Mediterranean Gas Forum into an International Organization, 2020.
- 43- Middle East Strategic Perspectives, The Eastern Mediterranean Gas Forum: A Lebanese perspective, 2019.
- 44- Rida, N, Lebanon's Aoun Refuses to Join Any Mechanism Involving Israel, Asharq Al-Awsat, 2019.
- 45- European Parliament, *Energy: a shaping factor for regional stability in the Eastern Mediterranean*, (Directorate-General for External Policies, Belgium, 2017).
- 46- Ampartzides, I, 'Energy Geopolitics in the South-Eastern Mediterranean: The Ramifications of the Cypriot Energy Policy, Report number 16,' in *Cyprus Center for European and International Relations*, 2017. 47- Shaffer, B, 'Eastern Mediterranean Energy: A Decade After The Major Discoveries', in *Turkish Policy Quarterly*, Vol. 17, 3(2018), 89-97.
- 48- Fouad, K, 'Eastern Mediterranean Gas: Taking an Unpaved Road,' in Egyptian Institute for Studies, 2019.
- 49- Udasin, S, 'Leviathan partners raise \$1.75b from international lenders Jerusalem Post,' in *Tekmor Monitor*, 2017.
- 50- European Parliament, *Energy: a shaping factor for regional stability in the Eastern Mediterranean*,(Directorate-General for External Policies, Belgium, 2017).
- 51- Eichner, I, 'Classified Report: It is better to export natural gas through Egypt instead of Turkey,' in *Yedioth Ahronoth*, 2018.
- 52- Bahgat, H, 'Who's buying Israeli gas? A company owned by the General Intelligence Service,' in *Mada*, 2018.
- 53- Wainer, D and Benmeleh, Y, 'Israel-Egypt \$15 Billion Gas Deal Boosts Energy Hub Prospects,' (Bloomberg, 2018).
- 54- Reuters 2019, Israel to increase gas exports to Egypt, companies say, 2019.
- 55- Yedioth Ahronoth, Israeli gas company announces \$15B export deal with Egypt, 2018.
- 56- Manolis, D and Loverdos, E, 'The East Med Pipeline,' in Oxford Energy Forum, vol. 93, 3(2013), 19-22.
- 57- Speranza, D and De Lorenzo, D 2017, 'Toward A New Mediterranean Gas Hub?,' in *Hafner, M and Tagliapietra*, S (ed.), *The European Gas Markets: Challenges and opportunities*, Palgrave Macmillan, Switzerland, 303–313, 2017.
- 58- Tugwell, P, Leaders From Israel, Cyprus, Greece Sign EastMed Gas Pipe Deal, (Bloomberg, 2020).
- 59- Rafenberg, M, 'Greece, Cyprus, Israel Sign EastMed Pipeline Deal,' in International Business Times, 2020.
- 60- Staff, T, 'Israel, Cyprus, Greece and Italy agree on \$7b. East Med gas pipeline to Europe,' in *The Times of Israel*, 2018.
- 61- Bowlus, J, 'Eastern Mediterranean gas: testing the field,' in Energy Reporters, 2020.

- 62- Wolfrum, S, 'Israel's Contradictory Gas Export Policy,' [Stiftung Wissenschaft und Politik (the German Institute for International and Security Affairs, SWP), Berlin, Germany, 2019].
- 63- BBC, Nord Stream 2: Trump approves sanctions on Russia gas pipeline, 2019.
- 64- European Parliament, *The prospect of Eastern Mediterranean gas production: An alternative energy supplier for the EU?*, (Directorate-General for External Policies, Belgium, 2014).
- 65- Demir, N and Tekir, O, 'Sharing Energy Resources of Eastern Mediterranean: Regional and Global Dynamics,' in *Economic and Environmental Studies*, vol. 17, 4(2017), 651-674.
- 66- Scheid, B and Dmitrieva, A, 'US gives companies 30 days to avoid Nord Stream 2 sanctions,' in S&P Global Platts, 2019.
- 67- O'dell, A, 'US DoE aims to double oil and gas production rates,' in Petroleum Economist, 2020.
- 68- Mankoff, J 2012, 'Resource Rivalry in the Eastern Mediterranean: The View from Washington,' in *The German Marshall Fund of the United States*, 2012.

ABOUT THE AUTHOR

Khaled Fouad is a Middle East energy and political analyst. He holds an MA in political sciences and international relations from Istanbul Aydin University (2020). He directed the research & studies department of the Egyptian Institute for Studies (EIS) during 2015-2019. He published many studies and articles in Aljazeera, TRT Arabic, Egyptian Institute for Studies, and Arabic post.

AL SHARQ STRATEGIC RESEARCH

A think tank that looks to undertake impartial, rigorous research to promote the ideals of democratic participation, an informed citizenry, multi-stakeholder dialogue and social justice.

Address: Istanbul Vizyon Park A1 Plaza Floor:6

No:68 Postal Code: 34197 Bahçelievler/ Istanbul / Turkey **Telephone:** +902126031815

Fax: +902126031665

Email: info@sharqforum.org



research.sharqforum.org





