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Introduction

The global energy market, which is causing nothing less than an economic and political upheaval that will lead to enduring global shifts, all culminate in the need for Europe especially, to re-appraise its energy security policies. This, combined with Israel's growth as a natural gas player and the signing of the Abraham Accords, is an opportunity for Israel and its new allies in the Arab World, together with Egypt and Jordan, to play a significant role to help further stabilize the region and contribute positively to the global economic scene.

This paper will take a look at the disconnect between global and European energy demand and long-term supply, and will provide an overview of the Israeli gas sector, as well as relevant aspects of the greater Eastern Mediterranean region, including Egypt, Jordan, Cyprus, Turkey and Lebanon.

The analysis will conclude with some executable recommendations on how to help contribute to marrying the surplus gas available in Israel (and other regional markets) with global energy needs, via new developments and gas export projects. The Abraham Accords have already had an impact on the region's gas sector, as at the end of 2021, Abu Dhabi state investor Mubadala bought a stake in Israel's second largest gas reservoir - the Tamar field.

Accomplishing the tasks ahead will be formidable, as natural gas requires large upfront investment in complex infrastructure. Geopolitical hurdles must still be overcome. If one or more projects succeed, they have the propensity to continue the transformation of the region itself, whilst uniquely contributing to the energy and economic security of allies across the world.

This paper deals with the natural gas aspects alone and not with other energy-related cooperation.

Global Energy Markets

2022 was marked by the unprecedented shocks on the European and global gas markets. Europe's pipeline imports from Russia, previously the key supplier to the region, halved from 2021 levels (from ~170 to 85 bcm). Although European countries are still receiving small amounts of Russian pipeline gas and the "dust hasn't yet settled" on the European gas market, one can be certain that the era of abundant supply of Russian pipeline gas in Europe is over.

The gas crisis had very deep and vast repercussions over the European economy, particularly in the industrial sector. EU gas demand in the industrial sector fell by 25% in 2022. Gas consumers

¹ BP and Energy Institute data ² International Energy Agency estimates



across a variety of industries, including fertilizers, steel and aluminum, were forced to reduce or even halt production. Germany, historically the largest buyer of Russian pipeline gas, was hit especially hard. The world's largest chemicals group, the German company BASF, alone announced a cut of 2,600 jobs in response to the energy crisis and soaring energy costs. Even today, industrial demand has not fully recovered.

In 2022, The EU undertook massive efforts to diversify gas supplies, and officially set a target of achieving independence from Russian gas by 2027.

The decrease in Russian exports to Europe triggered a rally in the global spot gas prices in 2022. In Europe, TTF spot prices averaged \$37-\$38/MMBtu (eight times their five-year average in 2016-2020), surging to an all-time high of over \$90/MMBtu in August. A spike of demand for new LNG supplies in Europe spurred global competition for LNG cargoes and, as in the domino effect, led to record gas prices in the Asian region, where the JKM averaged a record \$34/MMBtu (five times its five-year average during 2016-2020).

High demand for LNG from gas-stranded Europe also impacted LNG exporters. Specifically, in the US, Henry Hub prices rose over 50% to an average \$6.5/MMBtu in 2022 – their highest annual level since 2008.

By June 2023, European and Asian spot prices fell back to a \$10-12/MMBtu level, as European countries were able to both drastically reduce demand, launch new LNG import infrastructure and ensure additional LNG supplies.

One major shift in Europe that has taken place and is a trend that is likely to continue, is that a proportion of Russian pipeline gas has been replaced by imports of liquefied gas (LNG) from global suppliers. As a result, in 2022 for the first time, LNG deliveries to Europe overtook the volumes of gas imported via pipelines. Even Russian LNG to Europe (surprisingly to many observers) showed double-digit growth, despite the above-mentioned huge cut in its pipeline supplies.

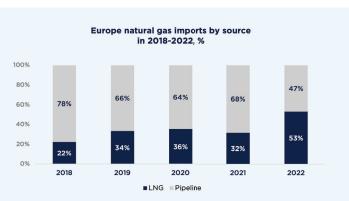


Figure 1. Europe natural gas imports by source in 2018-2022, % Source: authors' analysis based on BP and Energy Institute data

The European shift towards LNG significantly impacted the global gas trade. As overall natural gas pipeline net trade fell ${\sim}15\%$

globally in 2022 (namely by 78 bcm), global LNG supply grew 5% (26 bcm) to 542 Bcm.

Over the last 18 months from February 2022, with the outbreak of the Russian-Ukraine war, countries moved from being shocked out of decades of complacency during which they were overly confident that Russian gas would be readily available cheaply and forever, or as long as they needed until markets could reliably shift to renewable energies, to feeling now over-confident and complacent that the worst of the crisis has been overcome.

Europe is banking on a repeat of last winter's reduction in gas consumption and the continued availability of uncontracted LNG in the global market. However, last year, this was achieved mostly thanks to a combination of external factors which were out of European stakeholders' control. These included mild weather and low demand for LNG from locked-down China. Those factors, along with European countries' measures, including EU incentives to reduce demand by 15% and targets to refill underground gas storages ahead of the heating season, secured for Europe a relatively "soft landing" in the winter season of the highly turbulent 2022.

However, as analysts have warned, "luck is not a sustainable strategy". In May 2023, Fatih Birol, head of the International Energy Agency, warned that Europe had not yet won its energy war with Russia, despite a big drop in gas prices. Others alerted that global energy markets are heading into a "self-inflicted train crash in slow motion", as investment in renewables and fossil fuels falls short of ever-rising demand and as clean energy spending is falling far-short of the world's ability to shift away from fossil fuels. As a consequence, global demand for natural gas is continuing to rise.

Moreover, even future LNG supplies may not be readily available to Europe, which will have to compete for every molecule with the Far East, where buyers are more willing to sign long-term contracts, needed to ensure future development of supplies.

Insofar as gas pricing is concerned, Rystad Energy, an independent energy research and intelligence company, forecasted that "in the absence of readily available LNG from key supply nations worldwide - the US, Australia, Qatar - that global gas prices will likely remain at or above the \$12/MMBtu mark on average for the foreseeable future". This, it added, "is likely to deprive emerging Asian nations of being able to afford gas to assist meeting their energy needs".

The crisis of 2022 raised the need for new reliable long-term supply chains of natural gas to Europe. One of the new emerging gas supply sources is the EastMed region, which has recently witnessed a leap forward in terms of interstate cooperation and the development of political ties due to the signing and implementation of the Abraham Accords.

Thus, the current situation offers historical opportunities for strategically realigning the relationship between Europe and the Abraham Accords countries (including Israel) via energy, namely – natural gas. Given the globalization of the gas trade, growth of natural gas supply from the EastMed region would not only benefit the closest market – Europe, but also contribute to stabilizing the global energy market.

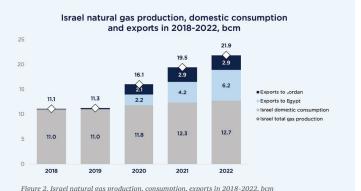


Overview of the Eastern Mediterranean Gas Sector

Israel

Israel gas reserves mid-2023 – over 1,000 bcm, including Tamar and Tamar South West (285 bcm); Leviathan (619 bcm), Karish and Tanin (99 bcm); small fields including Katlan (~50 bcm).

Israel gas market fundamentals in 2022 – country produced 21.9 bcm: 12.7 bcm was consumed in Israel; 9.2 bcm exported (6.2 bcm to Egypt, 2.9 bcm to Jordan). In the past 5 years, gas production in Israel doubled, which allowed satisfying growing domestic consumption while significantly increasing exports to Egypt and Jordan.



Greater Eastern Mediterranean Region

- Egypt Has large reserves of gas, produced 67 bcm in 2022, but as a country with a population of 110 million, it consumed nearly all gas produced locally (61 bcm in 2022). Egypt imported 6.2 bcm from Israel. The delta between Egyptian gas production combined with imports from Israel, and local gas consumption, was exported as LNG as well as small pipeline volumes to Jordan, leading to total exports of around 10 bcm in 2022.
- Jordan Has no gas reserves to speak of and is a net importer from Israel and Egypt. The country's annual gas consumption stands at around 3.5 bcm per year.
- Cyprus Has proven recoverable gas reserves of about 400 bcm, which can be developed separately or combined with Israeli gas export quotas to be channeled to international markets. None of the fields have been developed and Cyprus to date consumes no gas.
- Turkey In 2022, the country consumed 53.2 bcm. Its first significant gas discovery (Sakarya) came on-stream in 2023, but the country is still highly dependent on imports from Russia, Iran and Azerbaijan, as well as LNG.
- Lebanon Has to date not made any gas discoveries and is not consuming any gas.

Regional Gas Projects and Key Milestones

Below is the chronological list of new natural gas-related projects and recent developments in the Eastern Mediterranean gas sector, many of which are possible thanks to the regional cooperation between countries, including the Abraham Accords member nations:

- February 2014 Tamar signed the first ever gas export contract from Israel. This is a small agreement to supply a total of 1.9 bcm of gas to Jordan's Arab Potash and Bromine companies at the Dead Sea for over 15 years. Actual supplies started in January 2017. In 2018, the total quantity was increased by an additional 1 bcm over 15 years.
- September 2016 Leviathan signed a long-term supply contract with Jordanian state electricity company NEPCO, for 45 bcm over 15 years, with supplies starting in January, 2020.
- October 2019 Leviathan and Tamar signed gas exporting contracts to Egypt for a combined 85 bcm of gas (60 bcm from Leviathan and 25 from Tamar). Supplies started in 2020.
- September 2021 Israeli company Ratio Petroleum entered into an agreement with Morocco's National Office of Mines and Hydrocarbons for the exclusive rights to study and explore hydrocarbons in the Atlantic Dakhla Bloc.
- December 2021 Mubadala bought what eventually became an 11% share in Israel's Tamar field, Most notably, Mubadala also owns 10% of Egypt's biggest gas field Zohr, and 20% of Egypt's as-yet-undeveloped smaller Nour discovery, where BP is also a partner (10%). Tamar supplies most of its product to Israel, supplemented with smaller volumes to Egypt and tiny quantities to Jordan. The Tamar field is waiting to take a final investment decision (FID) to expand its production capacity by another 4 bcm a year, with this extra gas earmarked for the Israeli and Egyptian markets. For this to go ahead, the Israeli government owned gas transmission company, INGL, must complete an offshore pipeline loop between Ashdod and Ashkelon anticipated to be completed by April 2024 at the latest, and the government must take FID on constructing an onshore pipeline between Nitzana on the Israeli side and the Arab Gas Pipeline on the Egyptian side, and the Tamar partners, including Mubadala, need to forge new gas contracts with buyers in Egypt, or via Egypt as LNG to international markets.
- December 2022 Israel's NewMed Energy signed a deal with Morocco and Adarco Energy for offshore natural gas exploration and production licenses.
- 15th June 2022 A memorandum of Understanding (MOU) was signed between Israel, Egypt and the EU to export LNG via Egypt's facilities to European countries. The MOU also stated that the EU would encourage European countries to participate in new natural gas exploration rounds to be held offshore Israel. Bids for the 4th such licensing round were submitted to the Israeli Ministry of Energy in July 2023. There has been wide-ranging interest by international oil and gas companies, helped by the Abraham Accords, and by BP and ADNOC's keen interest to enter into proven gas fields in Israel. Nevertheless, it remains to be seen which companies will eventually bid and which will be granted new exploration licenses at the end of the year.

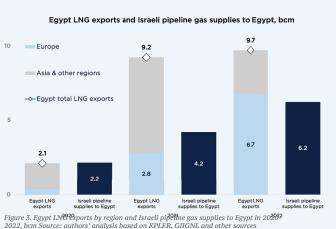


On the MOU regarding the plans to export gas to European countries, nothing has progressed since this non-binding document was signed. To benefit from the EU's keenness to diversify supplies, this MOU should be ratified into a final binding contract.

 October 2022 – Under the auspices of special US energy envoy Amos Hochstein, Israel and Lebanon signed a maritime border agreement. For Lebanon, this enables the consortium of French TotalEnergies, Italian Eni and Qatargas to drill an exploration well in the Zidon/Qana prospect. In May 2023, the consortium hired the services of Transocean's Barent's drillship, and drilling is anticipated to commence before the end of this year. If a discovery is made, Total has agreed to pay Israel a to-bedetermined share of royalties.

Without an agreement between the two states, exploration would not have been possible, either by Lebanon or Israel. It was Israeli-Emirati normalization, combined again with the global need for additional energy, and the dire predicament that Lebanon found itself in, aided by US mediation, that enabled the stakeholders in Lebanon to reach an agreement with Israel.

• 2022 - Egypt exported a record amount of LNG for more than 10 years. In response to a spike of demand for LNG in Europe, the bulk of Egyptian LNG was sent to European, including Turkish, buyers. It represented a significant change in the geographical structure of Egyptian LNG exports compared to the previous years, when the cargoes were mainly sent to Asia and other regions. The record Egyptian LNG send-out and high deliveries to Europe were greatly supported by the growing supplies of Israeli pipeline gas to Egypt, which accounted for 6.2 bcm in 2022.



1022, bcm Source: authors' analysis based on KPLER, GIIGNL and other sources

• February 2023 – the Abu Dhabi National Oil Company (ADNOC) together with BP submitted an offer to buy 50% of Israel's NewMed Energy, which owns 45% of Israel's biggest gas field, Leviathan. ADNOC is responsible for overseeing Abu Dhabi's oil and gas production which finances the country, making this by far the biggest public demonstration of the UAE's commitment to the relationship yet. ADNOC chose to partner with BP in its first

international upstream attempt, and in so doing is partnering with a technically and financially first-class company with a wealth of experience and considerable assets in the East Med gas basin. BP is the second biggest gas producer in Egypt.

The NewMed acquisition is to be conducted through a new JV by ADNOC and BP. ADNOC says the partners "intend to form a new joint venture that will be focused on gas development in international areas of mutual interest including the East Mediterranean. The proposed transaction with NewMed Energy would be a significant first step in establishing this dynamic joint venture. The two companies intend to explore a range of mechanisms for the formation and potential further expansion of their new partnership." This would thus bring together Israel, Egypt, UAE and other member nations of the Abraham Accords as the first link into such a new joint venture.

This transaction has not yet been completed, and is, inter alia, still awaiting approval from Israeli authorities. One has to hope that the authorized entities will give their approval as soon as possible.

- May 2023 Israel's cabinet approved the plan to expand infrastructure for natural gas supplies from Israel to Egypt by adding the Nitzana pipeline with 6 bcm/year capacity. It is worth mentioning that the FID on the new pipeline is yet to be taken.
- May 2023 The partners in the Cypriot Aphrodite reservoir (Chevron, Shell, NewMed), commenced drilling of the Aphrodite-2 appraisal well, to re-examine volumes and the characteristics of the reservoir. Drilling will take about 3 months. On 31st May, the partners submitted a development plan to the Cypriot authorities, which entails bringing the gas from the field to Egypt (if and when development is indeed sanctioned). The development of Aphrodite also still requires Cyprus and Israel reaching a unitization agreement to determine the volume of gas that is on the Cypriot side as well as those volumes from the Aphrodite field that seep into the Ishai license on the Israeli side. Progress is being made in this respect to reach a mutually agreeable financial agreement.
- 14th June 2023 Cyprus Minister of Energy George Papanastasiou and Israeli Minister of Energy Israel Katz met in Israel to promote energy cooperation between the two countries. The subjects on the table include: laying a gas pipeline from Israel to Cyprus to provide Israeli gas to Cyprus, alongside the laying of a sub-sea electricity cable to connect Israel's electricity grid to that of Cyprus, in order to enable Israel to import electricity generated on the island. The gas project also includes discussion of constructing an export liquefaction facility using a small-scale LNG facility at Vasilikos in Cyprus for export of Israel and Cypriot gas to Europe, as well as to supply gas to Cyprus for electricity generation.

This gas project and the LNG option are in the view of the authors of this report, unlikely to move ahead, as Leviathan gas is earmarked for other markets and Energean's Israeli reserves are insufficient for exports. The company has indicated that although it would still be willing to sell gas to Cyprus, someone else must build the pipeline.

 18th June 2023 – The Israeli Prime Minister's bureau declared that "as part of the processes taking place between the State of Israel, Egypt and the Palestinian Authority (PA), with an emphasis on developing the Palestinian economy and maintaining security



stability in the region, it was decided to advance the development of Gaza Marine."

This 32 bcm gas field, discovered 36 km offshore Gaza, in 600m of water depth, has remained undeveloped since its discovery by BG in 2000. Some of the gas will go to feed the Palestinian local market, and could eventually replace much of the expensive and polluting LPG bought from Egypt to power the Gaza power station.

The field would be developed via Egypt, specifically with the help of Egyptian independent Cheiron, which has been tasked by the country's state firm EGAS as technical lead. Initial details of the development envisage production of 2 bcm of gas a year, with a tie-back to Arish, where gas enters the Egyptian gas network via both the offshore EMG pipeline from Israel and Egypt's section of the Arab Gas Pipeline. The pipeline between Arish and Port Said to feed the Egyptian market, has exactly enough ullage in it to accommodate this 2 bcm of Gaza Marine gas, as the remainder capacity in the line (which reaches a total of 11-12 bcm a year) is taken up by Israeli gas exports to Egypt (~9 bcm).

Qatar, which in 2021 brokered a gas/power supply deal to Gaza, and has been expanding its East Mediterranean footprint in recent years with gas stakes offshore Cyprus, Egypt and more recently Lebanon, could potentially play an intermediary role in helping this project finally move ahead. Some of the hurdles include the fact that the development of the Gaza Marine gas field needs to be economic, and as stated by Israel in its June 2023 announcement, "the project implementation will depend on coordination between the security apparatuses and direct dialogue with Egypt in coordination with the PA, and completion of the inter-ministerial staff work led by the National Security Council, in order to safeguard Israel's security and political interests". Other hurdles are likely to surface with each step, but this is a project that is well-worth promoting.

- 16th July 2023 The Israeli Ministry of Energy announced that
 the 4th Israeli offshore natural gas exploration bidding round,
 launched in December 2022, was a great success. Based on the
 Ministry's statement, 4 consortiums, comprised of 9 different
 companies, of which 5 are newcomers to the Israeli gas upstream
 sector, submitted 6 bids for new licenses. Results of the round are
 due at the end of 2023.
- Egypt and Lebanon have been in discussion for a couple of years to provide 0.3-0.6 bcm a year of gas from Egypt to Lebanon's 460 MW Deir Ammar power station near Tripoli, which is the only plant in Lebanon that is capable of receiving gas. This project is interesting because due to the way gas flows from Israel to Jordan and Egypt, the only physical means for Lebanon to receive gas, is from Israel northwards to Jordan and from there to Syria, from where molecules will flow northwards to Lebanon, using the Arab Gas Pipeline. No gas has flowed from Jordan to Syria or Lebanon since 2010.

For this project to succeed, it is, inter alia, necessary for the US to grant a waiver for the Caesar Syria Civilian Protection Act of 2019, which places heavy sanctions on the Bashar al-Assad regime. This is due to the fact that, as mentioned, any gas and/or electricity from Egypt and Jordan - and Israel - will have to traverse Syria, thus providing financial and other benefits to the regime. Although the US supports this deal to help arrest Lebanon's economic collapse, and because it steals some of the limelight

from Hezbollah's imports of Iranian oil, there is stringent political bipartisan opposition in the US to anything which would support Assad.

Israel's Export Options

• In the immediate term, up to 17 bcm of LNG sourced from Israeli and Egyptian gas can be exported from the existing liquefaction plants in Egypt – namely Damietta and Idku. Out of these volumes, a maximum of 9-10 bcm can be sourced for now from Israel, according to the peak capacity limitations of existing pipeline routes from Israel.

The exact volume of LNG that can be exported via Egypt depends on Egypt's own production and consumption, and pipeline imports from Israel. Fundamental also are international LNG prices, as a determinant for whether Egypt earmarks volumes on the higher end for export, by using alternative fuels for power generation.

Increasing the export volumes from Israel to Egypt will require both midstream capacity additions and upstream developments.

Construction of a floating liquefaction natural gas (FLNG) facility
in Israel's Exclusive Economic Zone (EEZ), an option that would
provide Israel and the partners in the fields with the highest
degree of independence from most geopolitical obstacles. This
option would also enable direct exports to Europe and other
markets in the region and the world. The Leviathan partners are
in the midst of conducting a feasibility study for this option to
understand costs, siting, permitting and regulations. If this option
moves ahead, gas could be exported also to Turkey and Egypt.

The final entry by ADNOC and BP into NewMed would be most propitious in this respect, as global buyers would be encouraged by the presence of ADNOC in the consortium, whilst the presence of BP would help split the risks with Chevron and provide expertise of the global LNG market, as well as needed financing for this capital-intensive project. In addition, entities such as Chevron and BP could themselves offtake (purchase) some of the LNG produced from their equity held facility.

- The East Med project, which is a planned pipeline to link Israel with Cyprus and on to Greece and Italy, is the most mature in terms of feasibility studies and has even received preliminary financial grants from the EU. At the beginning of 2022, the EU reconfirmed the status of EastMed as a 'Project of Common Interest'. Yet a final decision to proceed with such an ambitious pipeline will require identifying strategic European offtakers and signing the long-term gas sales-purchase agreements with them to underpin the project's financing. It will also require substantial investment and expertise. Israel's partners in the Abraham Accords could play a key role in the successful execution of such a complex project. The EastMed Pipeline project has the added benefit of potentially being designed to carry hydrogen or other low-carbon fuels in the future, thereby supporting the EU's energy transition.
- A pipeline from Israel's offshore fields to Turkey is the shortest route to Europe, but requires political stability that has not characterized the countries' relations in recent years despite Turkey's growing interest in Israeli gas. In addition, this scenario is politically challenging vis-à-vis both Cyprus and Greece as well as Europe, which is unlikely to want to replace its dependence on Russia with a new and greater dependence on Turkey as a gas hub,

The Abraham Accords and the EastMed Natural Gas Market



especially as Russia is also looking to diversify more exports via Turkey to Europe.

In our view, the two most promising mid-term options are the EastMed Pipeline project, or the construction of a Floating Liquefied Natural Gas (FLNG) facility. These projects have the lowest geopolitical risks and both have become more realistic in the wake of the Abraham Accords. The geopolitical aspects will have to be tested with the economic feasibility of these projects.

Challenges

The signing of the Abraham Accords provided an impetus to the Eastern Mediterranean gas projects.

However, despite the significant gas reserves in the region, monetizing them will require overcoming numerous obstacles:

1. Geopolitical situation

The tense political situation in the West Bank led to the postponement of the Negev Forum meeting until at least after the summer, after having originally been slated to take place in March. Host Morocco cited the need for an "appropriate political context" amid escalating West Bank settlement activity and anti-Palestinian violence, as well as discomfort among Arab participants over Prime Minister Benjamin Netanyahu's new hardline government.

Turkey has shown its displeasure at being excluded from recent regional gas plans, including the East Mediterranean Gas Forum (EMGF), by harassing drillships operating south of Cyprus and being generally believed to cause a hindrance for the development of gas pipeline projects in what Turkey claims – unrightfully – to pass via its EEZ.

Jordan has recently felt left-out by the greater regional rapprochement and has expressed its displeasure, leading to intensified tensions.

2. Mismatch of the long-term policies of EastMed exporters and European buyers

Other hurdles include the divergent views regarding the level and duration of gas demand in Europe, its role as a base-load energy resource or a transitional fuel, and the strength of Europe's climate goals ambition versus the ability to de facto move ahead with substantial renewable resources. All this will have an impact on the ability of gas from the Eastern Mediterranean to secure financing on the export end and long-term contracts on the import end. Both of these are essential for point-to-point pipeline projects, but even a new LNG export facility requires full financing and a certain pre-determined level of long-term gas offtake contracts (lower than 100%).

3. Large-scale natural gas projects financing

In the current market conditions, there is rising pressure to obtain financing for natural gas projects. Despite the high ecological characteristics of natural gas, financial institutions are more reluctant to provide loans for new long-term gas projects. This factor might lead to higher financing costs for any new large-scale export project from the EastMed, which will inevitably impact said project's returns.

4. Regulatory uncertainties in the gas exporting countries

The current Israeli Ministry of Energy supports natural gas exports. However, there are constant debates within the country over the need to limit the growth of natural gas exports. It adds uncertainty for the investors which rely on the gas export markets as an important source of revenue to payback their investment, and their ability to also supply more gas to the Israeli market.

In Egypt, the government often limits LNG exports from the country to satisfy seasonal spikes in domestic demand, notably in the summer when electricity consumption spikes together with air-conditioning usage, or when global spot LNG prices are not high enough. This is predominantly the case in the summer of 2023. This, and other aspects, makes much larger exports via Egypt a problematic issue.

Executable Recommendations for Key Stakeholders

In the authors' view, the Abraham Accords, as a unique broad framework, can be a tool to help to deal with the above-mentioned obstacles. In order to address the challenges, **Abraham Accords participants** should consider the following measures:

Current and new potential member-states of the Abraham Accords should consider further investments in the natural gas infrastructure in the EastMed region, including the upstream, expansion of the pipeline grid within the region (e.g., new routes of gas supply from Israel to neighboring countries), and export projects, including (F)LNG plants. The proximity of the EastMed gas sources to one of the world's key gas importing markets – Europe – could support high returns and profitability for such investments.

The Government of **Israel** must reach a clear decision that Israel is becoming a gas exporter and accordingly adopt suitable policies, while refraining from regulatory decisions that contradict the accepted conditions in international gas contracts.

It must play an active role in removing barriers and must not leave the full burden and risks on the gas companies. It must also move ahead with providing the permitting needed, and the siting and regulatory frameworks for an FLNG facility.

Egypt should create a more transparent energy market environment (including on pricing) and clearly define the regulatory framework for LNG exports. One of the solutions might be to finally review the prices for electricity in compliance with the country's program to gradually phase out electricity subsidies. This would increase the electricity usage efficiency and limit the spikes of demand for power in summer, easing the pressure on the natural gas market.

Secondly, the Egyptian government should consider providing long-term guarantees to new potential suppliers (including Israeli companies and Cyprus fields' developers), committing to not diverting gas volumes earmarked for export to the domestic Egyptian market, and securing agreed volumes for the LNG exports. This would solve the problem of the ullage in the Egyptian LNG plants, provide the country with stable export revenue from LNG exports, and create a transparent market environment for new suppliers.



The EastMed pipeline project would benefit from **Turkish support**, as was recently espoused by Eni CEO Descalzi, although vividly rejected by **Cyprus** Energy Minister George Papanastasiou, who responded that although the project certainly touches on geopolitical issues, the decision will be based on a technoeconomic study.

Insofar as the UAE is concerned, all countries in the region could benefit from its gas experience and from it being a rare country that both imports and exports LNG. Although the UAE has never been short of gas potential, yet it remains a substantial net importer.

As the UAE is looking to change its status by the second half of this decade with its intention of establishing a second LNG export facility (ADNOC's project), Israel, Cyprus and Egypt, can all gain greater understanding on how such developments are accomplished. In addition, the UAE is connected to Qatar via a gas pipeline and imports 20 bcm of gas from Qatar, thus bringing in another potential player into the greater region. Last year, ADNOC announced plans to form ADNOC Gas, bringing together ADNOC Gas Processing and ADNOC LNG into one entity. A five-year plan for capital expenditure of \$150bn was approved for the period 2023-2027, showing the vast sums that are being invested in the region's natural gas sector.

It is vital that the **USA** and **EU** work with the countries of the Eastern Mediterranean and Abraham Accords to advance strategic solutions, such as those proposed here. Together, Europe and the countries of the region can advance energy independence from Russia, while building a more stable and sustainable future for the Eastern Mediterranean and the Middle East.

Buyers in Europe need to reassess the value of long-term gas contracts for their energy security. Alternatively, European stakeholders could design and define new such infrastructure as providing them with an interim solution until they are able to safely progress with the energy transition and in so doing, agree to pay a higher gas price, and/or help finance some of the infrastructure needed. Today's energy crisis in Europe throws into sharp relief the need to reconsider governments' role in energy infrastructure. Designing certain projects specifically as transition assets might be an effective solution.

Conclusion

Despite Europe's long-term plan to wean itself off fossil fuels, it still requires gas, creating a window of opportunity for Israeli (and Cypriot, Egyptian) gas supplies over the next 20-25 years.

Renewable energies cannot ensure continuous electricity or energy supply to Europe, which could lead to an electricity shortage and considerable costs. The risk to the climate and environment largely stems from the use of coal in the short to medium term, and a shortage of gas could lead to more coal consumption.

Rebuilding Europe's gas supply mix is expected to take several years and will require large investments in new pipelines and LNG receiving terminals, and long-term contracts to enable the development of new export assets. Volumes from the key EastMed natural gas players, and potentially in the future from additional regional players such as northern Iraq, Lebanon and Morocco, could play a substantial role in filling the gap left by Russian gas.

However, in order to unlock the natural gas reserves of the EastMed region and the Abraham Accords member nations for the benefit

of local economies and natural gas buyers, primary conditions should be ensured, including political stability, security, trust and cooperation between natural gas sellers and buyers, as well as accessible funding.

The Abraham Accords have provided a unique political stability framework for a number of success stories in terms of those conditions. Since the signing of the Accords in 2020, Israel and Egypt have significantly expanded natural gas trade volumes, UAE's companies have greatly increased their presence in the Israeli gas sector, and even Jordan is currently receiving larger volumes of gas from Israel than anticipated. Leading Israeli oil and gas players have stepped into exploration activities offshore Morocco.

The future of EastMed natural gas exports, and the region's contribution to the mitigation of the European and global natural gas crisis, will greatly depend on the possibility of further development of similar "success stories".

Under the "umbrella" of the Abraham Accords, and on the basis of further trust-building between member-nations and external stakeholders, the Abraham Accords countries and the EastMed region enjoy a unique opportunity for further unlocking their natural gas reserves, and strengthening strategic ties with Europe and the global energy community.

About the Authors



Gina Cohen is a natural gas analyst, consultant, lecturer at university and at international conferences, and author of two books on natural gas. Over the years, Gina has worked as a consultant to numerous major gas exploration companies operating in the Eastern Mediterranean, as well as to major gas buyers in the region. Gina has collaborated with government institutions, in Israel and abroad. Gina's articles and comments are regularly published by Israeli newspapers and international news agencies; she is a frequent speaker at international oil and gas conferences.



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About the Abraham Accords Peace Institute

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