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Discovery of Energy Reserves in the Levant and Impacts on Regional Security

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ABSTRACT

There has been much discussion over whether the recent discovery of energy reserves in the eastern Mediterranean will encourage regional cooperation or exacerbate tensions between states in the Levant. Energy issues and geopolitical concerns do overlap. Difficulties with regard to Cyprus and Israel's ties with its Arab neighbours jeopardize energy projects. Cooperation between states over energy resources may only occur if governments enjoy reasonable relations. Energy companies are eager to make profits, and so increasing attention will focus on how gas reserves in the Levant region may be developed and monetized, with gas exported to outside markets. Longstanding problems concerning the exploitation of gas reserves in disputed Cypriot offshore waters, and strains in Turkish-Israeli relations, may prevent the construction of a gas pipeline connecting Israeli gas fields with the Turkish mainland. Gas may also be exported from Cypriot, Egyptian and Israeli offshore fields to markets in Europe through the proposed EastMed Gas Pipeline or be delivered in the form of liquefied natural gas. Various political, technical and commercial issues need to be addressed before these export projects may be realized, although this would then be at the cost of excluding Turkey from a wider regional framework of cooperation.

Keywords: Gas, Energy, Levant, Geopolitics, Security, Cooperation.

Levant'da Enerji Kaynaklarının Keşfi ve Bölgesel Güvenliğe Etkileri

ÖZET

Doğu Akdeniz'de yeni keşfedilen enerji kaynaklarının bölgesel işbirliğini teşvik edip etmeyeceği ya da Levant'taki devletler arasındaki gerginlikleri artırıp artırmayacağı konusundaki tartışmalar sürüp gitmektedir. Enerji sorunları ve jeopolitik kaygılar birbiriyle çakışmaktadır. Kıbrıs'ın durumu ile ilgili konular ve İsrail'in Arap komşularıyla ilişkileri bağlamında yaşanan sorunlar, enerji projelerini zora sokmaktadır. Devletlerin enerji kaynaklarının üretilmesi bağlamındaki işbirliği ancak bunlar arasında akılcı ve gerçekçi ilişkiler söz konusuysa mümkün olabilir. Enerji şirketlerinin kar elde etme beklentilerine bağlı olarak artan ilgileri, Levant'taki gaz rezervlerinin geliştirilmesi ve üretilen gazın dış pazarlara ihraç edilmesine odaklanmaktadır. Uzunca bir süredir devam eden ve Kıbrıs açıklarında yer alan gaz rezervlerinin durumuna yönelik sorunlar ile Türk-İsrail ilişkilerinde yaşanan gerilimler, İsrail gaz sahasını Türk anakarasına bağlayan bir gaz boru hattının inşasına engel olmaktadır. Gazın, Kıbrıs, Mısır ve İsrail'in açık deniz sahalarından Avrupa'daki pazarlara taşınmasını öngören Doğu Akdeniz Doğalgaz Boru Hattı Projesi vasıtasıyla ya da sıvılaştırılmış doğal gaz şeklinde ihraç edilmesi senaryoları da gündemde yer almaktadır. Türkiye'yi daha geniş bir bölgesel işbirliği çerçevesinden dışlama ihtimali taşıyan bu türde projelerin gerçekleştirilmesinden önce çeşitli siyasi, teknik ve ticari konuların ele alınması gerekmektedir.

Anahtar Kelimeler: Gaz, Enerji, Levant, Jeopolitik, Güvenlik, İşbirliği

Introduction

Much attention has recently focused on the discovery of a number of gas fields in the eastern Mediterranean. Questions have been raised over whether these new energy reserves will create incentives to improve relations between states in the area and help promote regional cooperation, or will they contribute to the exacerbation of tensions in the eastern Mediterranean. If governments continue to disagree over the demarcation of maritime boundaries and fail to support projects, which would entail the laying of pipelines through their exclusive economic zones (EEZs), much of the gas and oil reserves will remain unexploited. Frustration over the inability to monetize energy resources could then worsen ties between states in the area. On the other hand, cooperation between states over energy issues could boost struggling economies as well as ease political tensions.

This paper will explore these issues with particular reference to energy resources in the Levant Basin Province and surrounding areas in the eastern Mediterranean. In this context, the nexus between energy and foreign policy concerns is discussed. It is important to note, though, that matters relating to energy have their own separate set of dynamics and that the role of energy companies, for example, needs to be considered. The paper will examine the attempts by governments in the region and beyond to boost cooperation by encouraging energy projects, thereby seeking to enhance regional security. However, geopolitical tensions in the area, especially over Cyprus and Israel's relations with its Arab neighbours, put at risk the realization of these projects.

Energy and Foreign Policy

The close connection between energy issues and foreign policy interests has been ably demonstrated by Correlje and van der Linde in their presentation of two possible storylines.¹ According to the “regions and empires” storyline, a neo-realist view of international relations prevails in which states emphasize the significance of geopolitical concerns and energy companies follow the policy line of their home governments. In contrast, the “markets and institutions” storyline depicts international relations within a neo-liberal framework in which functioning markets and effective institutions play key roles and the priority of energy companies is to make profits. In the case of the eastern Mediterranean, arguably features of both of these storylines are observed.

Proponents of the notion of “economic peace”, such as Bijaoui, contend that economic interdependence between states promotes peace and prevents conflict.² In line with this argument, economic development through the exploitation of energy resources may help overcome political hurdles and ease tensions between states. In the Obama administration, the United States (U.S.) Special Envoy and Coordinator for International Affairs, Amos Hochstein, in effect promoted “economic peace” by pursuing a policy of encouraging governments in the eastern Mediterranean to cooperate in the energy field to provide incentives to bolster political accommodation.³ Problems of high unemployment, economic stagnation and the financial difficulties of states in the region

1 Aad Correlje and Coby van der Linde, “Energy Supply Security and Geopolitics: A European Perspective”, *Energy Policy*, Vol.34, No.5, 2006, p.532-545.

2 Ilan Bijaoui, *The Economic Reconciliation Process: Middle Eastern Populations in Conflict*, New York, Palgrave Macmillan, 2014, p.4.

3 Tareq Baconi, “Pipelines and Pipedreams: How the EU can Support a Regional Gas Hub in the Eastern Mediterranean”, *ECFR Policy Brief*, April 2017, p.1-2, http://www.ecfr.eu/publications/summary/pipelines_and_pipedreams_how_the_eu_can_support_a_regional_gas_hub_in_7276, (Accessed on 2 October 2017).

provided further reasons for governments to engage in political compromise and work together to benefit from the consumption and sale of energy resources. Given their recent economic difficulties, the benefits for governments in the eastern Mediterranean could be substantial if energy reserves are developed and exported to potentially lucrative outside markets. However, a number of technical, legal, political and commercial issues would first need to be addressed before energy projects may start to be implemented, and profits and transit fees secured.

The deep-rooted political problems in the eastern Mediterranean may prevent the realization of an “economic peace” in the area. For example, there is an apprehension, especially among Arab governments and peoples, that Israel could use its newly discovered energy reserves to create an “infrastructure of dependency” in the region and hence consolidate the current *status quo*, which is perceived to be in Israel’s favour.⁴ Under the Trump administration, Hochstein’s replacements as Acting U.S. Special Envoys have been much less active in the eastern Mediterranean as Washington follows an “America First” policy.

Schaffer has argued that there is no evidence that energy can bring peace in regions of tension and conflict. Cooperation between states over energy resources may only occur after governments begin to improve relations. Companies rarely operate in zones of conflict and banks are unlikely to fund investments in areas of tension. The construction of pipelines across state borders only commences after the signing of intergovernmental agreements.⁵ Other commentators have noted that when states have “deeply securitized political relations”, energy issues are more likely to heighten tensions, and in such circumstances, energy may be used as a political weapon.⁶

On the other hand, an improved political environment does not mean that certain energy projects will automatically be realized. Governments do not build pipelines. Energy companies, funding agencies, and regulatory bodies play a crucial role. Projects require financing, technical know-how, and often need to meet certain environmental standards. Usually, projects will not receive the go-ahead if they are deemed to be economically unviable. In effect, a series of benchmarks needs to be met before energy projects are approved and implemented. Producers need to have access to a market. The export of oil or gas to outside consumers may require the approval of certain transit states, and here again political problems may obstruct or delay projects which have been recognized as commercially feasible. Politics alone will not result in the realization of energy projects. However, some measure of cooperation between governments is required before companies start to build pipelines and other energy infrastructure.

Energy in the Levant

According to a U.S. Geological Survey published in 2010, the Levant Basin Province is a geological structure, which covers 83,000 square kilometres of the eastern Mediterranean. The basin extends over parts of the maritime areas of the island of Cyprus, Egypt, Israel, the Palestinian Territories, Lebanon, Syria and Turkey. The survey estimated that the Levant Basin Province held undiscovered

4 Tareq Baconi, “How Israel Uses Gas to Enforce Palestinian Dependency and Promote Normalization”, *Al-Shabaka Policy Brief*, 12 March 2017, <https://al-shabaka.org/briefs/how-israel-uses-gas-to-enforce-palestinian-dependency-and-promote-normalization/>, (Accessed on 20 September 2017).

5 Brenda Schaffer, *Energy Politics*, Philadelphia, University of Pennsylvania Press, 2009, p.4 and 38.

6 Constantinos Adamides and Odysseas Christou, “Can Resolving Cyprus Hold the Key to Regional Energy Cooperation?” *Turkish Policy Quarterly*, Vol.15, No.2, 2016, p.87.

reserves of 1.7 billion barrels of recoverable oil and around 122 trillion cubic feet (about 3,420 billion cubic meters [bcm]) of recoverable gas.⁷ These estimates were announced before the discovery of significant volumes of gas in Egyptian and Israeli offshore fields.

There are in total eight energy basins in the eastern Mediterranean. Until recently, most hydrocarbon production in the eastern Mediterranean was concentrated in the Nile Delta Basin, the West Arabian Province, and the Zagros Province. A report published in 2013 noted that the energy reserves of the eastern Mediterranean as a whole represented less than one per cent of the world's total proven reserves of oil and natural gas.⁸ However, these resources are potentially important sources of revenue for states in the region. In addition to providing the means of energy to power the expanding economies of states in the eastern Mediterranean, gas in particular may be exported to neighbouring markets in Europe.

Although in geological terms the eastern Mediterranean is divided into a number of separate basins of which the Levant Basin Province is only one part, the area as a whole is closely connected politically and economically and the production, sale and consumption of oil and gas in the region will in many cases require cooperation between various governments. Given that most attention has recently focused on the discovery of large gas fields in the eastern Mediterranean, this paper will concentrate on the possible impact of gas extraction on regional security.

In late 2011 the American company Noble Energy announced that it had discovered substantial volumes of gas in the offshore Aphrodite field to the south of Cyprus. The field is estimated to hold recoverable reserves of approximately 120-129 bcm.⁹ Together with its partners, Shell and the Israeli companies Delek Drilling and Avner Exploration, Noble is aiming to commence production in 2020 or shortly after, once markets have been identified and pipeline connections laid. Two larger gas fields have been recently discovered in the Levant Basin Province in Israeli waters. The Tamar field, which has reserves of about 318 bcm, has started operations and is delivering gas to the Israeli mainland and to Jordan.¹⁰ Noble is also the operator of this field in a consortium with several Israeli partners. The Leviathan field has reserves of approximately 605 bcm.¹¹ Noble and the Israeli companies, Delek and Ratio Oil Exploration, are planning to begin production by the end of 2019, but major export deals with states in the region have yet to be concluded.

There are also unexploited gas reserves in the waters off Lebanon, Gaza and Syria. Offshore Lebanese blocks may hold 660 million barrels of oil and 849 bcm of gas.¹² The offshore Gaza Marine

7 Christopher J. Schenk et al., *U.S. Geological Survey – World Petroleum Resources Project: “Assessment of Undiscovered Oil and Gas Reserves in the Levant Basin Province, Eastern Mediterranean”*, Report, No.2010-3014, March 2010, <http://pubs.usgs.gov/fs/2010/3014/pdf/FS10-3014.pdf>, (Accessed on 25 September 2017).

8 U.S. Energy Information Administration, “Eastern Mediterranean Region” (last updated 15 August 2013), p.5, https://www.eia.gov/beta/international/analysis_includes/regions_of_interest/Eastern_Mediterranean/eastern-mediterranean.pdf, (Accessed on 25 September 2017).

9 Delek Drilling, “Aphrodite Gas Field”, <http://www.delekdrilling.co.il/en/project/aphrodite-gas-field>, (Accessed on 25 September 2017).

10 Hillel Koren, “Tamar Partners Increase Gas Field Estimate by 13%”, *Globes*, 2 July 2017, <http://www.globes.co.il/en/article-tamar-partners-increase-estimate-by-13-1001195086>, (Accessed on 4 October 2017).

11 “Leviathan Value Raised up to \$7.4 b”, *Globes*, 26 September 2017, <http://www.globes.co.il/en/article-leviathan-value-revised-up-to-74b-1001206229>, (Accessed on 4 October 2017).

12 Laura El-Katiri, “Political Dialogue to Facilitate the Development of Energy Resources in the Eastern Mediterranean”, Silvia Colombo and Nicolo Sartori (Eds.), *The OSCE's Contribution to Energy Governance in the Mediterranean Region*, Rome, Istituto Affari Internazionali, 2016, p.11.

has an estimated 28.3 bcm of gas.¹³ Although small, these reserves would provide a guaranteed source of energy for the one power plant in Gaza. Prior to the outbreak of hostilities, Syria was a significant producer of oil and gas. However, in 2015 the Russian firm *Soyuzneftegaz* pulled out of a \$90 million deal to drill for oil and gas in Syrian waters on account of the risks associated with the on-going conflict.¹⁴

The discovery by ENI in 2015 of substantial reserves of gas in the offshore Egyptian Zohr field in the Shorouk Block in the Nile Delta Basin may have significant repercussions for gas exploration in the neighbouring Levant Basin Province. Zohr has an estimated 840 bcm of reserves.¹⁵ This was the first time gas had been discovered in carbonate rock in the eastern Mediterranean. Companies working at the field - the Italian ENI, the Russian Rosneft, and BP – started production at Zohr in December 2017.¹⁶ The intention is to export a portion of the gas after local energy needs are satisfied. Zohr is located only six kilometres from the Cypriot offshore Block 11 where the French firm Total has carried out exploratory drilling. The Zohr discovery has raised hopes that similar volumes could be tapped in the carbonate formations in the Cypriot EEZ in the Levant Basin Province. The Cypriot Energy Minister, Yiorgis Lakkotrypis, declared that the gas discovery at Zohr had compelled his government to do a complete re-evaluation of the energy potential of the Cypriot EEZ which led Nicosia to launch a third licensing round for offshore energy exploration.¹⁷ However, expectations have been somewhat lowered after Lakkotrypis announced in September 2017 that initial drilling in the Onisiphoros gas field in Block 11 had been disappointing.¹⁸ It appeared that the field could not be developed as a “stand-alone” project.

Discovering gas fields in the eastern Mediterranean is all well and good, but for these finds to be monetized gas must be sold at a reasonable price in markets. This, in turn, requires the laying of pipelines and the construction of other energy infrastructure, which would necessitate cooperation between companies and governments.

Energy and Regional Cooperation in the Levant

There are on-going attempts to promote cooperation and boost security in the broader Mediterranean region by making use of recent gas finds. These initiatives come from within and outside the region and involve energy companies, states and the European Union (EU). The record so far has been mixed.

13 Suzanne Carlson, “Pivoting Energy Relations in the Eastern Mediterranean”, *Turkish Policy Quarterly*, Vol.15 No.1, 2016, p.76.

14 Natalia Shurmina and Anastasia Lyrchikova, “Reuter’s Summit – Russia’s Soyuzneftegaz Drops Plans for Offshore Oil and Gas Exploration in Syria”, *Reuters*, 29 September 2015, <http://www.reuters.com/article/russia-syria-oil/reuters-summit-russias-soyuzneftegaz-drops-plans-for-offshore-oil-and-gas-exploration-in-syria-idUSLSN11Z2HO20150929>, (Accessed on 4 October 2017).

15 Hedy Cohen, “ENI’s Egypt Gas Find Limits Israel’s Export Options”, *Globes*, 1 September 2015, <http://www.globes.co.il/en/article-enis-egypt-gas-find-limits-israels-export-options-1001065749>, (Accessed on 4 October 2017).

16 “Rosneft Starts Production at Gas Field in Egypt”, *Reuters*, 20 December 2017, <https://www.reuters.com/article/us-russia-egypt-zohr/rosneft-starts-production-at-zohr-gas-field-in-egypt-idUSKBN1EE200>, (Accessed on 23 January 2017).

17 Charles Ellinas *et al.*, “Hydrocarbon Developments in the Eastern Mediterranean: The Case for Pragmatism”, August 2016, <http://www.atlanticcouncil.org/publications/reports/hydrocarbon-developments-in-the-eastern-mediterranean>, p.5, (Accessed on 25 September 2017).

18 Elias Hazou, “Onisiphoros Gas Field Not Commercially Viable”, *Cyprus Mail*, 12 September 2017, <http://cyprus-mail.com/2017/09/12/onisiphoros-gas-field-not-commercially-viable/>, (Accessed on 4 October 2017).

The discovery of considerable reserves of gas at the Zohr field in August 2015 encouraged ENI to publicize its plans to develop a liquefied natural gas (LNG) hub in the eastern Mediterranean. Here, the aim is to pool gas assets in Israel, Egypt, Cyprus and Libya and to take advantage of ENI's underused LNG plant at Damietta in Egypt.¹⁹ ENI has acquired rights to conduct exploratory drilling in a number of blocks off the Cypriot coast. The intention is to deliver LNG to nearby markets in Europe.

An LNG hub in Egypt could be accommodated within the EU's wider scheme to develop a gas hub for the Mediterranean. On 11 June 2015, the European Commission launched the Euro-Mediterranean Platform for Gas Cooperation to encourage dialogue and partnership between the EU and states in the southern and eastern Mediterranean.²⁰ Through encouraging market dynamics and helping to provide a regulatory framework in the region, Brussels is aiming to support exploration, production and the development of the infrastructure necessary to establish a competitive gas market. But, given the complications involved and the problematic economic and political backdrop in the Mediterranean, a properly functioning gas hub in the region will not be realized in the immediate future.

In a report released in February 2017, the European Commission stated that the eastern Mediterranean is "a promising source of gas supply" and offers increasing "diversification opportunities".²¹ In 2016, Russia accounted for over 38 per cent of the EU's gas imports.²² The EU will need to increase gas imports given an expected decline in European gas production. Brussels does not want to be too dependent on Russia for gas supplies bearing in mind problematic relations with the Putin regime. However, it will not be easy for eastern Mediterranean gas to break into the European market. Russia can pipe gas to Europe at a cheap price and gas, for example, from the Levant Basin Province and from the Zohr field would also have to compete with increasing LNG exports from the U.S.

Governments in the eastern Mediterranean have embarked on three initiatives to enhance regional stability through tripartite cooperation. The leaders of Greece, Cyprus and Egypt have held five summit meetings since November 2014. Four similar summit meetings have been organized by Greece, Cyprus and Israel since January 2016. These gatherings have led to spin-off ministerial meetings and working groups which have included extensive discussions on energy issues. A first summit meeting of the leaders of Cyprus, Greece and Jordan held in Nicosia in January 2018 also discussed energy issues.²³ It will be difficult, though, for Greece and Cyprus to include both Egypt and Israel in a quadrilateral format because of continuing mistrust between the governments in Cairo and Tel Aviv.

19 Stephen Jewkes and Oleg Vukmanovic, "ENI Plans to Hold the Keys for East Mediterranean Gas Exports", *Reuters*, 15 September 2015, <http://uk.reuters.com/article/eni-mediterranean-gas/eni-plans-to-hold-the-keys-for-east-mediterranean-gas-exports-idUKLSN11H18O20150915> (Accessed on 4 October 2017).

20 European Commission, "Commissioner Launches Euro-Mediterranean Gas Platform", 11 June 2015, <https://ec.europa.eu/energy/en/news/commissioner-launches-euro-mediterranean-gas-platform> (Accessed on 20 September 2017).

21 European Commission, "Second Report on the State of the Energy Union – COM (2017) 53 Final", 1 February 2017, p.9, https://ec.europa.eu/commission/sites/beta-political/files/2nd-report-state-energy-union_en.pdf, (Accessed on 27 September 2017).

22 Eurostat, "EU Imports of Energy Products – Recent Developments", April 2017, http://ec.europa.eu/eurostat/statistics-explained/index.php/EU_imports_of_energy_products_-_recent_developments, (Accessed on 27 September 2017).

23 "Cyprus, Greece and Jordan Underline Close Cooperation", *Cyprus Mail*, 16 January 2018, <http://cyprus-mail.com/2018/01/16/tspiras-arrives-presidential-palace-cyprus-greece-jordan-summit/> (Accessed on 23 January 2018).

In April and December 2017 meetings did take place between the energy ministers of Greece, Cyprus, Israel and Italy to discuss the prospects for the EastMed Gas Pipeline project.²⁴ A 2,000 kilometer pipeline is envisaged which could carry 15-20 bcm of gas annually from Israel and Cyprus to Italy along a pipe that would stretch across the eastern Mediterranean and pass through Crete and mainland Greece. The \$6-7 billion project has been promoted by the European Commission and as “a project of common interest” is entitled to financial support from Brussels. It remains unclear if and when this project will be implemented. Questions have been raised over its commercial feasibility. Charles Ellinas, a prominent energy expert, has suggested that gas would need to be sold in Europe at \$8 per million British Thermal Units (mmbtu) to make the pipeline profitable. Gazprom could currently sell gas to Europe for as little as \$3 per mmbtu.²⁵ The project would also have to compete with possible future LNG exports from Egypt.

Energy companies may bolster these attempts by the EU and states in the eastern Mediterranean to encourage cooperation. The prominent role played by ENI has already been noted. Shell may also become a driver for the realization of energy projects. A co-owner in the Aphrodite field and an investor and operator in the under-used Idku LNG plant in Egypt, Shell could play a decisive role in plans to develop energy cooperation between Nicosia and Cairo. In August 2016, the governments of Cyprus and Egypt concluded a provisional agreement to lay an underwater gas pipeline to connect Aphrodite with the Egyptian mainland.²⁶ Shell is seriously considering purchasing 5 bcm annually from the Leviathan field. This volume could be combined with future output from Aphrodite and transported to Idku for export in the form of LNG.²⁷ Noble Energy, which is playing a leading role in Israeli gas projects, is also considering involvement in plans to deliver Cypriot gas to Egypt.²⁸ Recent changes in legislation in Egypt have opened up the possibility of private Egyptian companies concluding energy deals with outside partners.²⁹ In February 2018, Dolphinus Holdings signed two binding agreements with the companies working at the Tamar and Leviathan fields to purchase 64 bcm over a ten-year period.³⁰

24 Sharon Udasin, “Israel, European States Advance Plans for World’s Longest Underwater Gas Pipeline”, *The Jerusalem Post*, 3 April 2017, <http://www.jpost.com/Business-and-Innovation/Energy-ministers-eye-2025-for-completion-of-Israel-Europe-gas-pipeline-485953>, (Accessed on 4 October 2017); and, “Greece, Italy, Israel and Cyprus Back Natgas pipeline to Europe”, *Reuters*, 5 December 2017, <https://www.reuters.com/article/energy-mediterranean-natgas/greece-italy-israel-and-cyprus-back-natgas-pipeline-to-europe-idUSL8N1O537E>, (Accessed on 23 January 2018).

25 “Cyprus Conference Focuses on Future of Energy and Challenges Ahead for the Region”, *Famagusta Gazette*, 16 March 2017, <http://famagusta-gazette.com/cyprus-conference-focuses-on-future-of-energy-and-challenges-ahead-for-the-p39022-69.htm>, (Accessed on 4 October 2017).

26 “Cyprus Signs Deal with Egypt for Gas Transfers via Pipeline”, *Reuters*, 31 August 2016, <https://www.reuters.com/article/cyprus-egypt-gas/cyprus-signs-deal-with-egypt-for-gas-transfers-via-pipeline-idUSL8N1BC0XQ>, (Accessed on 4 October 2017).

27 Yaacov Benmeleh and Rakteem Katakey, “Shell to Mull Buying Israeli, Cyprus Gas for Egypt Plant”, *Bloomberg*, 20 August 2017, <https://www.bloomberg.com/news/articles/2017-08-20/shell-is-said-to-mull-buying-israeli-cyprus-gas-for-egypt-plant>, (Accessed on 4 October 2017).

28 Sonia Gorodeisky, “Noble Mulls Helping Build Cyprus-Egypt Pipeline – Report”, *Globes*, 13 December 2017, <http://www.globes.co.il/en/article-noble-mulls-helping-build-cyprus-egypt-pipeline-report-1001215422>, (Accessed on 23 January 2018).

29 Sonia Gorodeisky, “Leviathan Partners in Egypt Gas Export Talks – Report”, *Globes*, 10 August 2017, <http://www.globes.co.il/en/article-leviathan-partners-in-egypt-gas-export-talks-report-1001200874>, (Accessed on 4 October 2017).

30 Sonia Gorodeisky and Amiram Barkat, “Delek, Noble Sign \$15 b Egyptian Gas Deal with Egyptian Co”, *Globes*, 19 February 2019, <http://www.globes.co.il/en/article-delek-noble-sign-15b-egyptian-gas-deal-1001224485>, (Accessed on 11 May 2018).

Significantly, Turkey has been excluded from the various initiatives in the eastern Mediterranean. This is primarily because of the outstanding disputes between Ankara, Nicosia and Athens over the future of the divided island of Cyprus. Disagreements over maritime boundaries are a further complication. For example, in May 2015, because of disputes over continental shelves and EEZs, the Turkish Foreign Minister, Mevlut Cavuşoğlu, declared that any agreement on gas exploration between Cyprus, Greece and Egypt would be “invalid” and Turkey would not allow such deals to proceed.³¹ According to the governments of Cyprus, Egypt and Greece, energy cooperation in the Mediterranean region would be better served if states respected international law.³² This may be taken as a pointed reference to Turkey, which is not a signatory to the United Nations Convention on the Law of the Sea (UNCLOS), although Israel is also not a signatory. Undoubtedly, the Cyprus problem is one of the major stumbling blocks to energy cooperation in the eastern Mediterranean.

Problems Concerning Cyprus

This paper will not go over in detail the longstanding tensions between the Greek and Turkish communities on the divided island of Cyprus. Hopes of a possible resolution had been raised in April 2015 after the election of Mustafa Akıncı as President of the “Turkish Republic of Northern Cyprus” (TRNC). Akıncı had close personal relations with the President of the Republic of Cyprus (RoC), Nicos Anastasiades. However, peace talks held under United Nations (UN) auspices collapsed in Switzerland in July 2017, primarily because of disagreement over the presence of Turkish troops on the island and a failure of the two sides to reach an agreement for political power sharing after the settlement.

There has been talk of how cooperation over the exploitation of gas resources in Cypriot offshore waters could facilitate a resolution of the Cyprus dispute.³³ This does not appear likely for the foreseeable future given the conflicting and entrenched positions of the Greek Cypriots and the Turkish Cypriots backed by Turkey. According to the government in Nicosia, the RoC is a sovereign state, which will not be dictated to by Turkey. Stressing that energy resources belong exclusively to the recognized government of Cyprus and that their position is in conformity with international law, the Greek Cypriots insist that energy resources may only be shared by the two communities on the island after a political settlement is concluded. The position of Turkey and the TRNC is that oil and gas exploration should only commence after a settlement is reached. Refusing to recognize the government of the RoC as a sovereign authority, the Turks and Turkish Cypriots argue, in effect, that the two communities on the island are co-owners of natural resources and both should benefit from hydrocarbons discovered in Cypriot waters.³⁴

As Turkey does not recognize the RoC as a sovereign state, no demarcation of continental shelves between Turkey and the RoC has been concluded, but Turkey and the TRNC negotiated an

31 “Turkey Disregards Mediterranean Gas Deal”, *Azvision.az*, 8 May 2015, <https://en.azvision.az/news/10553/turkey-disregards-mediterranean-gas-deal.html>, (Accessed on 4 October 2017).

32 “Egypt-Greece-Cyprus Summit’s Trilateral Declaration”, *TheMancus.com*, 10 November 2014, <http://en.protothema.gr/egypt-greece-cyprus-cairo-summits-trilateral-declaration/>, (Accessed on 11 May 2018).

33 Matthew Bryza, “Energy Cooperation Should be a Catalyst for Cyprus Peace Talks”, *Atlantic Council*, 19 January 2018, <http://www.atlanticcouncil.org/blogs/new-atlanticist/energy-cooperation-should-be-a-catalyst-for-cyprus-peace-talks>, (Accessed on 23 January 2018).

34 Ayla Gürel *et al.*, *The Cyprus Hydrocarbons Issue: Context, Positions and Future Scenarios*, Oslo, Peace Research Institute, 2013, p.41-54.

agreement on the demarcation of their continental shelves in the eastern Mediterranean in September 2011. In line with this deal, the TRNC issued licenses for the Turkish Petroleum Corporation (TPAO) to carry out exploratory drilling in one onshore and seven offshore blocks claimed by the TRNC. These blocks overlap with 40 per cent of the area claimed by the RoC. More significantly, by the September 2011 agreement, Turkey contends that it has the right to explore for oil and gas in parts of offshore blocks also claimed by Nicosia but which Ankara declares to be part of Turkey's continental shelf - i.e., in blocks 1, 4, 5, 6 and 7. Ankara has insisted that there should be no exploration in these blocks "under any circumstances" and that they "will take all necessary measures" to prevent drilling there.³⁵

The RoC has concluded agreements with Egypt, Israel and Lebanon to demarcate EEZs, although the deal with Lebanon has still to be ratified by the Lebanese parliament at the time of writing. Following these agreements, Nicosia has conducted three licensing rounds in which international energy companies such as Noble, ENI, Total and ExxonMobil have secured rights to carry out exploratory drilling in offshore Cypriot blocks. This has prompted Ankara to issue warnings to these companies and to despatch vessels to monitor drilling operations, as in July 2017.³⁶ Particular attention was given to the plans of ENI and Total to commence exploratory work in early 2018 in the disputed Block 6. In a letter addressed to the UN Secretary General, the Turkish authorities expressed their "grave concern" regarding the "provocative act" by the Greek Cypriots to allow drilling work in the so-called Block 6.³⁷ Surprisingly, perhaps, tensions escalated in February 2018 after the Turkish navy blocked ENI from undertaking drilling work in Block 3.³⁸ This was immediately after Turkey had not prevented the Italian firm from carrying out preliminary drilling at the contested Block 6.³⁹

Problems over Cyprus are also impacting the possible construction of a gas pipeline connecting the Leviathan field with the Turkish mainland. Berat Albayrak, Turkey's Minister of Energy and Natural Resources, had been intending to visit Tel Aviv before the end of 2017 to sign an intergovernmental agreement for the building of the planned 8-10 bcm capacity pipeline.⁴⁰ This visit appears to have been postponed indefinitely after relations between Turkey and Israel nosedived following President Trump's decision in December 2017 to recognize Jerusalem as the capital of Israel. As in the case of the EU, an Israel-Turkey gas pipeline would enable the Turkish market to be less dependent on Russian gas imports. However, because of the on-going Syrian conflict, the pipeline would have to be run through the EEZ of Cyprus. According to UNCLOS, a coastal state does not have the right to prevent

35 Ibid, p.63-64.

36 "Turkey Sends Ships and Submarine to Monitor Drilling Vessel Near Cyprus", *Reuters*, 13 July 2017, <https://www.reuters.com/article/us-turkey-cyprus-energy-vessel/turkey-sends-ships-and-submarine-to-monitor-drilling-vessel-near-cyprus-idUSKBN19Y1XX>, (Accessed on 23 January 2018).

37 UN General Assembly, "Letter Dated 12 April 2017 from the Permanent Representative of Turkey to the United Nations Addressed to the UN Secretary General", UN General Assembly Seventy-First Session, Agenda Item 73 (a) – Oceans and the Law of the Sea, <http://undocs.org/A/71/875>, (Accessed on 21 September 2017).

38 "Report: ENI Moving Drillship to Morocco after Turkish Navy 'Threatens Force' in Cyprus", *offshoreenergytoday.com*, 23 February 2018, <https://www.offshoreenergytoday.com/report-eni-moving-drillship-to-morocco-after-turkish-navy-threatens-force-in-cyprus/>, (Accessed on 11 May 2018).

39 "Report: ENI, Total in Large Gas Discovery Offshore Cyprus", *offshoreenergytoday.com*, 5 February 2018, <https://www.offshoreenergytoday.com/report-eni-total-in-large-gas-discovery-offshore-cyprus/>, (Accessed on 11 May 2018).

40 "Turkish Energy Minister 'to Visit Israel for Pipeline Deal'", *The Times of Israel*, 12 July 2017, <http://www.timesofisrael.com/turkish-energy-minister-to-visit-israel-for-pipeline-deal/>, (Accessed on 4 October 2017).

other states from laying pipelines in its EEZ. But, the RoC, as a transit state, could delay indefinitely the laying of a pipeline in its EEZ by insisting on environmental impact assessment reports.⁴¹

Obstructing the construction of a gas pipeline between Israel and Turkey could have wider negative repercussions on energy cooperation in the eastern Mediterranean. It would seriously damage Ankara's plans for Turkey to become an overland gas corridor connecting the eastern Mediterranean with the rest of Europe. This would enhance Turkey's strategic importance, and Ankara could also benefit from collecting transit revenues. For example, there has been talk of an Israel-Turkey gas connection being extended to hook up at the Turkish-Greek border with the planned Trans-Adriatic Pipeline (TAP), which will extend to Italy via Greece.⁴² TAP will initially transport gas from Azerbaijan, but the pipeline may be doubled in capacity to carry 20 bcm each year. As of May 2018, given the political problems in the eastern Mediterranean, this additional volume would probably be filled by gas from Russia rather than from Israel.

Work on development of the Aphrodite field could also be delayed if there is no progress on advancing the Israel-Turkish gas pipeline project. Aphrodite overlaps with the Yishai gas fields in Israeli waters. Because they are part of the same geological structure, a unitization agreement needs to be concluded between the RoC and Israel to decide how much of Aphrodite extends into the Yishai fields. Tel Aviv is also insisting that its approval is required before Aphrodite may be developed. The unitization agreement had been expected to be signed in 2010 when Israel and Cyprus concluded a deal demarcating their EEZs,⁴³ but was still not signed as of May 2018. There are reports that this dispute may go to international arbitration.⁴⁴ It is possible that Israel will only approve of a unitization agreement if the RoC allows the laying of the Israel-Turkey gas pipeline through its EEZ. Continuing delays may be costly for Nicosia and could result in the collapse of plans to transport gas from Aphrodite to Egypt.

It is difficult under the current political conditions to envisage progress soon in the resolution of the Cyprus dispute. This could, however, have serious consequences for energy cooperation in the eastern Mediterranean and could damage the Greece-Cyprus-Israel regional initiative. Large reserves of gas may thus remain stranded in the Levant Basin Province for the foreseeable future. On the other hand, problems in realizing the Israel-Turkey gas pipeline could boost the prospects for the EastMed Gas Pipeline and for Egypt to become an important LNG hub as gas from Leviathan could be used to develop these alternative projects. However, in addition to Cyprus, there are other disputes over energy resources in the eastern Mediterranean, which could have a negative impact on regional stability.

41 Gareth M. Winrow, "The Anatomy of a Possible Pipeline: The Case of Turkey and Leviathan and Gas Politics in the Eastern Mediterranean", *Journal of Balkan and Near Eastern Studies*, Vol.18, No.5, 2016, p.442.

42 Matthew Bryza, "Eastern Mediterranean Natural Gas: Potential or Historic Breakthrough among Israel, Turkey and Cyprus", *Turkish Policy Quarterly*, Vol.12, No.3, 2013, p.39.

43 Amiram Barkat and Hedy Cohen, "Israel, Cyprus Disagree over Aphrodite Gas Field", *Globes*, 13 October 2015, <http://www.globes.co.il/en/article-israel-cyprus-in-disagreement-over-aphrodite-gas-field-1001073460>, (Accessed on 4 October 2017).

44 Sonia Gorodeisky and Amiram Barkat, "Israel-Cyprus Gas Dispute Goes to Int'l Arbitration", *Globes*, 1 May 2018, <http://www.globes.co.il/en/article-israel-cyprus-gas-dispute-goes-to-intl-arbitration-1001233992>, (Accessed on 11 May 2018).

Other Issues of Contention

The failure to resolve the Israeli-Palestinian dispute and continuing tensions between Israel and its Arab neighbours complicate Tel Aviv's attempts to use its new-found energy resources to improve political ties and enhance economic relations with states in the eastern Mediterranean. Energy has also been used brutally as a political weapon in the intra-Palestinian clash over the administration of the Gaza Strip as discussed below.

In spite of having diplomatic relations with Egypt and Jordan, Israeli officials have struggled to consolidate ties with these states by playing the energy card. In the case of Egypt, the Egyptian authorities recognize a maritime border with Gaza and not with Israel. Until 2012, Egypt had exported gas to Israel by a pipeline running through the Sinai. Deliveries were suspended after attacks on the pipeline by hostile Bedouin tribes and Israel is currently seeking \$2 billion in compensation from Egypt for the termination of this gas agreement.⁴⁵ Nevertheless, a breakthrough was reached with the previously mentioned agreement between Dolphinus Holdings and partners in the Tamar and Leviathan fields. Under this deal, gas may be piped to Egypt from Israel via Jordan in order to avoid the more direct but less secure route through the Sinai.

Starting in January 2017, small volumes of gas from Israel's offshore Tamar gas field are being delivered to Jordan in line with a deal concluded with two Jordanian state-owned companies, Arab Potash and Jordan Bromine. In September 2016, the partners, working at the Leviathan gas field, successfully concluded negotiations with the National Electric Power Company of Jordan to supply 8.5 bcm of gas over a 15-year period. News of these deals has aroused public anger in Jordan with concerns that funds raised could be used by the Israeli authorities to finance its continuing occupation of Palestinian territories.⁴⁶

Potentially much more worrying is the danger of open conflict between Israel and Lebanon over the ownership of disputed gas fields. Tensions escalated after Lebanese officials declared in January 2017 that they were launching a licensing round for companies to explore five offshore blocks. The Israeli authorities contend that at least three of these blocks extend into Israel's EEZ and they are threatening to pass a Maritime Areas Bill to claim ownership of the disputed territory. According to officials in Beirut, the passage of such legislation would be tantamount to a "declaration of war".⁴⁷ In December 2017 the Lebanese government announced that it had approved a bid by the Total-ENI-Novatek consortium to develop two offshore blocks. One of these – Block 9 – extends into the disputed waters.⁴⁸ Under the Trump administration, the U.S. may play a less active role in attempting to mediate between the parties and this could lead to an exacerbation of tensions between Israel and Lebanon. Officials at the U.S. State Department had been especially active in mediation in the period between 2012 and 2016.⁴⁹

45 "Swiss Court Tells Egyptian Energy Companies to Compensate Israel", *Reuters*, 28 April 2017, <https://uk.reuters.com/article/israel-egypt-compensation-idUKL8N11088R>, (Accessed on 11 May 2018).

46 "Israel Becomes a Gas Exporter with First Delivery to Jordan", *The Times of Israel*, 2 March 2017, <https://www.timesofisrael.com/israel-becomes-a-gas-exporter-with-first-delivery-to-jordan/>, (Accessed on 4 October 2017).

47 Matthew Joaquin, "Israel-Lebanon Maritime Dispute Explained", *Aljazeera*, 31 March 2017, <http://www.aljazeera.com/indepth/features/2017/03/israel-lebanon-maritime-dispute-explained-170327074710548.html>, (Accessed on 4 October 2017).

48 Dana Khraiche, "Total, Eni, Novatek Win Lebanon's First Offshore Licenses", *Bloomberg*, 15 December 2017, <https://www.bloomberg.com/news/articles/2017-12-14/total-eni-novatek-win-lebanon-s-first-offshore-energy-licenses>, (Accessed on 23 January 2018).

49 Joe Macaron, "US Hits Deadlock in Lebanon-Israel Border Mediation", *Al Monitor*, 22 February 2018, <https://www.al-monitor.com/pulse/originals/2018/02/us-mediation-lebanon-israel-gas-impasse.html>, (Accessed on 11 May 2018).

Israel wasted an opportunity to improve ties with the Palestinians after a provisional deal signed in January 2014 to fuel the planned power generating plant at Jenin on the West Bank with gas from the Leviathan field. The Palestine Power Generation Company withdrew from the agreement in March 2015 citing delays over regulatory issues in Israel rather than political tensions.⁵⁰ However, politics has prevented energy cooperation between the Israelis and Palestinians with regard to the offshore Gaza Marine gas field. The Israelis have opposed the field's development because of clashes with Hamas in the Gaza Strip.

The most blatant use of energy as a political weapon was evident in the case of Gaza and the bitter rivalry between Hamas and Fatah. Furious over Hamas forming a local administration committee to run Gaza, the Fatah-controlled Palestinian Authority in the West Bank blocked the export of diesel fuel deliveries, which led to the temporary closing of the power plant in Gaza in April 2017.⁵¹ The Palestinian Authority also cut back on payments for electricity from Israel that was transmitted to Gaza. Confronted with a humanitarian disaster, in September 2017 Hamas agreed to dismantle the administration committee and hand over all government functions in Gaza to Fatah. This resulted in the Palestinian Authority in January 2018 resuming payments for electricity to be delivered to Gaza from Israel.⁵²

The case of Gaza is a clear illustration of how energy and politics at the local level may overlap. The examples of the dispute over Cyprus and Israel's difficulties with its Arab neighbours and Turkey show how energy issues cannot be separated from geopolitics and wider regional security concerns in the eastern Mediterranean. Here, one should also note that the Syrian conflict has stalled the further development of Syrian oil and gas fields and prevented the possible laying of an Israel-Turkey gas pipeline through Syria's EEZ. It is highly unlikely that Syria will re-emerge as a significant energy player in the eastern Mediterranean in the foreseeable future given the intensification of the civil war in Syria in early 2018.

Prospects

Both the "regions and empires" and "markets and institutions" storylines of Correlje and van der Linde appear to be at play with regard to energy resources in the eastern Mediterranean. This seems to be evident in the case of Russia, a key outside player, which has become increasingly involved in the geopolitics of the region. It may be argued that it is in Russia's interests to act as a spoiler to ensure that gas is not exported from the eastern Mediterranean, which could then challenge Gazprom's position in the European market. However, Moscow has the advantage of being able to sell its piped gas to the EU at a lower price than its rivals, and Gazprom will be able to further cement its hold if the planned two legs of the Turkish Stream network are realized, linking Russia to Europe via Turkey, and bypassing Ukraine. While the first leg will carry Russian gas to Turkey, a second leg, if completed, will transport

50 Sharon Udasin, "Palestinian Power Company Nixing Leviathan Gas Import Deal", *The Jerusalem Post*, 11 March 2015, <http://www.jpost.com/Business/Palestinian-Power-Generation-Company-nixing-Leviathan-gas-import-deal-393570>, (Accessed on 4 October 2017).

51 "Gaza's Only Power Plant Runs out of Fuel", *Aljazeera*, 16 April 2017, <http://www.aljazeera.com/news/2017/04/gaza-power-plant-runs-fuel-170416165402729.html>, (Accessed on 23 January 2018).

52 Nidal al-Mughrabi, "Palestinian Authority Says Resuming Payment for Gaza's Israeli Electricity", *Reuters*, 3 January 2018, <https://uk.reuters.com/article/uk-israel-palestinians/palestinian-authority-says-resuming-payment-for-gazas-israeli-electricity-idUKKBN1ES1HF>, (Accessed on 23 January 2018).

16 bcm annually to European markets.⁵³ Given the recent hostilities between Russia and Ukraine, a second leg would ensure that substantial volumes of Russian gas would continue to be exported to Europe without being dependent on Ukraine as a transit state. In this context, it seems that Russia is able to keep its options open and is also willing to participate upstream in energy producing countries in the eastern Mediterranean. For example, in December 2016 Rosneft acquired a 30 per cent stake in the Egyptian Zohr gas field.⁵⁴

The example of the Levant Basin Province and other nearby geological structures in the eastern Mediterranean shows how energy and foreign policy issues overlap. The longstanding political problems and tensions in the region may frustrate the ambitions of the economic peace proponents. The realization of energy projects may continue to be impeded and further obstacles placed in the way of closer regional cooperation. However, neither governments nor companies will want to see large volumes of gas stranded in the eastern Mediterranean. The discovery of energy resources may not bring peace to zones of conflict and tension. But, if large commercial opportunities beckon, companies and banks may be prepared to accept a certain measure of political risk to promote particular energy projects. In such circumstances governments may decide that it is in their interests to compromise over longstanding political concerns.

With regard to the eastern Mediterranean, the prospects for the construction of a gas pipeline from the Leviathan gas field to Turkey still appear slim given the deep-rooted problems over Cyprus and tensions with Israel. Competition is more likely between the proposed EastMed Gas Pipeline and plans to export large volumes of LNG from Egyptian ports to Europe, although this would then be at the expense of including Turkey in a wider regional framework of cooperation.

53 Elena Kosolapova, "Russian Gas from Turkish Stream Likely to go Through TAP – Expert", *Trend News Agency*, 12 July 2017, <https://en.trend.az/other/commentary/2776531.html>, (Accessed on 23 January 2018).

54 Stephen Jewkes and Valentina Za, "ENI Spreads Egypt Gas Field Risk with Rosneft Stake Sale", *Reuters*, 12 December 2016, <https://www.reuters.com/article/us-eni-zohr-rosneft-oil/eni-spreads-egypt-gas-field-risk-with-rosneft-stake-sale-idUSKBN14112U>, (Accessed on 4 October 2017).