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Security implications of new gas discoveries in the Black Sea and the Eastern Mediterranean



New Strategy Center

Bucharest

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About New Strategy Center

New Strategy Center is a Romanian think tank specializing in foreign, defence and security policy, a non-partisan, non-governmental organisation. New Strategy Center operates at three main levels: providing analytical inputs and expert advice to decision-makers; holding regular debates, both inhouse and public, on subjects of topical interest; expanding external outreach through partnerships with similar institutions or organisations all over the world, joint policy papers and international conferences. The Balkans and the Black Sea space are priority areas of interest for New Strategy Center.

About Greek Energy Forum

The Greek Energy Forum (GEF) is an international, non-for-profit organisation, comprising a diverse group of energy professionals and academics that share a common interest and passion for the broader energy, shipping, and hydrocarbons industries in Greece and Southeastern Europe. GEF is focused on providing a platform for the sharing of knowledge and being a dialogue hub amongst energy professionals, promoting change through focusing on the issues of diversity, innovation, and sustainability in the energy setting of Southeastern Europe and East Mediterranean. At a time of significant developments and constant change in the energy, shipping, and hydrocarbons industries in the region, the Greek Energy Forum works in providing impartial, insightful opinions on impactful energy developments, provide best practice examples, and propose and communicate innovative energy policy proposals to governments and decision makers via its well-respected, politically neutral voice, with a view to catalyzing regional growth.

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Introduction

Europe represents a major regional sub-system where vital security interests of all the major actors in the international system coexist or collide. Europe is the region where NATO's Eastern flank meets Russia's ambitions towards what it sees to be its buffer zones and where China envisions the final destination of its Belt and Road Initiative. For all major actors of the international system, regional strategic objectives are directly linked to their overall national security strategies. Out of the diversity of tools utilized to promote an actor's national security strategies, energy presents a crucial element.

The Black Sea and Eastern Mediterranean form a strategic continuum derived from their historical and geographical proximity. In the energy realm, geographical proximity translates into the emergence of energy subsystems. The long-haul gas deliveries from Russia are a paradoxical proof since it has been the meeting point of two antagonistic systems, the ideological distance between them being bridged by energy dependencies. In today's geopolitical environment, the two sub-systems form a regional continuum with global reverberations, with countries like Russia, Turkey, France and the US operating in both sub-systems. Following its oil and gas "Shale Revolution" the United States, have generated tremendous change in their capacity to utilize energy among their strategic objectives' tools. For the first time since the end of World War 2 US has regained full control over its energy security and for the first time since the end of the Cold War it has acquired the potential to lower NATO's eastern flank's dependence on Russian energy resources. Rising exports of American LNG change the distribution channels of natural gas on a global scale, while LNG shipments create alternative routes for natural gas that are in direct competition with the traditional pipeline routes.

Long before the invasion in Ukraine, Russia has been utilizing energy-related pressure instruments to promote its own security objectives. Such instruments included pressing transit states to support Russian policies and Russian regulatory preferences, manipulating the pricing policy of energy supplies to third countries, controlling energy assets, such as pipelines and gas operators in key countries, disrupting oil and gas supplies, imposing restrictive supply contracts, and developing alternative supply routes to divert gas flows. Seeking to exercise influence over European companies' management and strategy and gain access to sensitive information, China has also been utilizing energy-related pressure instruments in Europe through takeovers of major photovoltaic and wind parks and nuclear plants in north Europe, and the acquisition of critical shares in electricity grids and coal-fired plants in south-eastern Europe.

For the European Union, the energy-related security interests of third parties within its borders generate a framework of potential collision or alignment with its own security and energy strategies. The systemic shift on the European gas markets is perhaps most acutely felt on the Alliance's Eastern Flank, with the regional sub-system experiencing an overlapping, indigenous-driven revolution. The energy shock meets developing path-dependencies, with the promise of turning the region from an energy importer into a self-sustainable sub-system with exports ambitions. The great regional energy game seems that is just getting started, with a wide spectrum of possible developments on the table. As recent history has proven, energy carries the potential of cooperation but can also bring the worst out in states, regional cooperation risks turning into a zero-sum energy calculus and a desire for the strategic advantages fuelled by energy. Conversely, in an international environment facing a retreat of post-Cold War globalization and a chronic competition for

material and immaterial resources, the high stakes associated may fuel a renaissance in regional cooperation.

The strategic value of energy projects

The direct link between energy projects and national security deems critical to determine the conditions under which an energy project carries strategic value for any actor in the international system. Combining the components that define a state actor's behaviour for survival in the international system with the principals of energy security, we can identify the elements of an energy project that carry strategic value.¹ As security threats formulate strategic objectives, these are directly linked to a state's effort for survival in the international system. In turn, survival in the international system can be achieved through internal and external balancing. Under this perspective, energy projects and energy flows can potentially offer strategic value when they contribute to a state's internal and external efforts, thus assisting in achieving its strategic objectives built to address the security threats it faces.

Consequently, the strategic framework under which energy projects can be examined needs to incorporate an examination of three distinct but interconnected elements and the degree in which the project contributes in each one. These include the project's contribution in maximizing the international actor's levels of power, its ability to generate significant change in the balance of power within the system, and its potential to enhance the international actor's self-help efforts through internal or external balancing.

Figure 1. The Strategic Framework of Energy Projects (SFEP)

	Strategic element	Energy-project function
1	Power Levels	Contribution in maximisation
2	Balance of Power	Generation of significant change
3	Self-Help potential	Enhancement of Internal or External Balancing

Under the above analysis, for an energy project to carry strategic value for the actors in involves, at least one of three conditions need to be met.

Chapter 1. Black Sea

The Black Sea sits at the forefront of the biggest geopolitical struggle since 1945 while energy in itself is spearheading it, leading to a double strategic prioritization converging in a space which in turn is at the confluence of the East Mediterranean, Middle East, and the South Caucasus.

The Black Sea has been an arena for geopolitical confrontations ever since the 18th century, sitting at the confluence of the Ottoman, Tsarist and Habsburg empires. Starting with the 19th century, the changing regional dynamics translated into increase outside influence, best

¹ Mathioulakis M. (2020), "Strategic Elements of the Energy Union and the Role of Regulation in Energy Security", in M. Mathioulakis (ed), *Aspects of the Energy Union - Application and Effects of European Energy Policies in SE Europe and Eastern Mediterranean* (pp. 73-100). Cham, Switzerland: Springer Nature, Palgrave Macmillan

epitomized by Crimean War. In the 20th century, the region became the intersection point of multiple energy corridors, acting as a bridge between Central Asia, the Caucasus, the Eastern Mediterranean, the Middle East, the Balkans and Central Europe. The demise of the Soviet Union turned the Black Sea into a demarcation line between the Russian Federation and the countries in South-Eastern Europe seeking Euro-Atlantic integration. In recent times, the Black Sea has become the focal point of Russian revisionism, first through the invasion of Georgia in 2008, followed by the annexation of Crimea in 2014. Nowadays, the Black Sea sits at the forefront of Russia's invasion of Ukraine, while concomitantly holding the keys to the wider regions energy diversification efforts, away from the near Russian prewar monopoly.

1.1 Existing and potential new gas discoveries in the Black Sea.

Romania's Black Sea gas reserves are estimated at 200 billion cubic meters (bcm), with at least 100 bcm in the Neptune Deep offshore perimeter, located in the South-Western extremity of Romania's EEZ, bordering the Bulgarian and Turkish ones. As of now, Romania is a regional outlier in terms of its dependence on Russian gas, importing only 20-25% of its annual consumption of 11 to 12 bcm. In the summer of 2022, the Ana and Doina production platforms went online as part of the Midia West perimeter, greatly enhancing the country's efforts to become energy independent as an intermediary stop in its export ambitions. With a capacity of 1 bcm per year, the platform is operated by Black Sea Oil and Gas (BSOG), with ownership equally split between the American investor Carlyle and Romgaz.

The jewel of the crown when it comes to Romania's Black Sea gas is the Neptun Deep field, which gained a renewed importance in the aftermath of Russia's invasion. A final investment decision regarding its exploitation is due in 2023, with an equally consortium made out of OMV Petrom and Romanian state-owned company Romgaz. The investment will be implemented in the 2024-2026 period, with the first molecule of gas being expected to enter the distribution system in 2027. The project is technically complex due to the fact that gas will be extracted approximately 120km from the shore at depth ranging from 100 to 1000 meters. When fully operational, the field's capacity will amount to maximum 8 bcm per annum, which will enable Romania to fully cover its 2-2.5 bcm annual deficit.

When neighbouring countries are taken into account, the project will have profound reverberations in regional energy dynamics. The Republic of Moldova (excluding Transnistria) consumes 1.5 bcm per year,² while Bulgaria's and Serbia's needs amount to 3.3 bcm³ and 2.6 bcm⁴ respectively. Romania is thus expected to turn into an energy security provider, position which will be rewarded with an expected \$26 billion trickling into the state's coffers in the next 15 years, the equivalent of five annual national defence budgets. Romania has a very well-balanced energy mix, which will free up much of the gas for exports, while enabling the country to contribute to regional energy security via electricity exports. Bucharest is betting on nuclear energy, with the expansion of the Cernavodă Nuclear Power Plant through the construction of reactors 3 and 4. This will be complemented by the impending rollout of the Small Modular Reactors (SMRs) developed

² "Moldova Natural Gas," Worldometer, accessed April 2, 2023, <https://www.worldometers.info/gas/moldova-natural-gas/>.

³ "Bulgaria Natural Gas," Worldometer, accessed April 2, 2023, <https://www.worldometers.info/gas/bulgaria-natural-gas/>.

⁴ "Serbia Natural Gas," Worldometer, accessed April 2, 2023, <https://www.worldometers.info/gas/serbia-natural-gas/>.

by the American company New Scale.⁵ In addition, Romania's Black Sea coast has a tremendous wind energy potential, which will be exploited in the coming decade as part of its decarbonization efforts. The potential is still prospective, hanging on the government's ability to pass the necessary legislation and perhaps most importantly, on the security environment in the North-Western Black Sea.⁶

In the aftermath of Romanian deep-water explorations, Turkey allocated significant resources towards gas discoveries in its Black Sea water. In August 2020, the Sakarya gas field was discovered, located within a 7,000km² block in the ultra-deep waters of the western Black Sea, near the confluence of Romanian, Bulgarian, and Turkish EEZs, approximately 175km offshore from Eregli, Turkey. According to the latest estimates from Turkish authorities in early 2023, the Sakarya field contains 700 bcm. At its peak, starting from the middle of this decade, the Turkish authorities estimate that the field will produce approximately 14 bcm per year, amounting to 23% of Turkey's annual consumption of 60.6 bcm.⁸

Shell's Bulgarian offshore explorations amounted to no discoveries as of yet.⁹ While these drills were scientifically not conclusive due to the vast amounts of gas in Romanian and Turkish EEZ, the discovery of Sakarya gas field in the near vicinity of TotalEnergies' Khan Asparuh. The Khan Asparuh field is majority owned by TotalEnergies (57%) in conjunction with OMV Petrom. (43%).¹⁰ The discovery of Cacyuma 1 reinforced the hypothesis and might provide a new momentum for further explorations. OMV-Petrom is already processing seismic data in the Khan Asparuh perimeter in order to mature future candidate wells for drilling.¹¹ Nevertheless, energy decisions rest on political willpower, which has been severely hindered by the country's five elections in just two years. While the technical parameters of the Caycuma 1 field are still being established, proximity makes cross-border cooperation feasible if not desired by both parties.¹² The competition against Russian

⁵ "NuScale Marks SMR Progress in USA, Romania : New Nuclear - World Nuclear News." Accessed March 30, 2023. Available at: <https://www.world-nuclear-news.org/Articles/NuScale-marks-SMR-progress-in-USA,-Romania>.

⁶ Antonia Colibășanu, Leonardu Dinu, Jakub Godzimirski, George Scutaru. "How the Snake Island matters in the context of the 2022 war in Ukraine?" New Strategy Center, Nork Utenrikspolitisk, November 2022. Available at: [NSC-NUPI-How-the-Snake-Island-matters-in-the-context-of-the-2022-war-in-Ukraine.pdf](https://www.nsc-nupi.org/How-the-Snake-Island-matters-in-the-context-of-the-2022-war-in-Ukraine.pdf)

⁷ Offshore Technology. "Sakarya Gas Field Development, Black Sea, Turkey." 1 February 2023 <https://www.offshore-technology.com/projects/sakarya-gas-field-development-black-sea-turkey/>

⁸ Zeynep Karabay. "Turkiye's Gas Consumption Estimate for 2022 Shows Year-on-Year 18.8% Rise." Anadolu Agency, January 2022. Available at: <https://www.aa.com.tr/en/energy/natural-gas/turkiyes-gas-consumption-estimate-for-2022-shows-year-on-year-188-rise-/34524>

⁹ Today, Offshore Energy. "Shell's Bulgarian Offshore Well Comes to Nothing." Offshore Energy (blog), July 24, 2019. <https://www.offshore-energy.biz/shells-bulgarian-offshore-well-comes-to-nothing/>.

¹⁰ "OMV Petrom Enters Han-Asparuh Block in Black Sea." OE Digital, 1 September 2020. Available at: <https://www.oedigital.com/news/481351-omv-petrom-enters-han-asparuh-block-in-black-sea>

¹¹ Andreich. "OMV Petrom to Begin USD 30 Mln Seismic Campaign in Georgia's Offshore next Year." Romania Insider, November 12, 2021. <https://www.romania-insider.com/omv-petrom-seismic-campaign-georgia>.

¹² Esau (i_esau), Iain. "Could Prolific Turkish Gas Play Extend into Bulgarian Waters?" Upstream Online |Latest oil and gas news, January 6, 2023.

energy dominance might well lead to collaborations in a region known for its heterogeneity of strategic interest. Although a late bloomer, Bulgaria seems poised to join great regional energy game, one a scale which is yet to be established.



Most important gas perimeters in the Western Black Sea
 Source: New Strategy Center

To the east, Georgia may have overall recoverable gas resources of 266 billion cubic meters, although how much of these reserves lie in its Black Sea economic zone has yet to be determined.¹³ In 2021, OMV Petrom signed the Production Sharing contract for Georgia’s Block II perimeter, covering a total area of 5282 sq km for a period of 25 years.¹⁴ The process is still in its infancy, with its future resting on the post-war Black Sea security architecture. In Northern Black Sea, Ukraine estimated that the shelf it controlled prior to 2014 contained more than 2 trillion bcm,¹⁵ with some of it located in very promising

<https://www.upstreamonline.com/opinion/could-prolific-turkish-gas-play-extend-into-bulgarian-waters-/2-1-1382771>.

¹³Dickinson, Peter. “Why the Black Sea Could Emerge as the World’s next Great Energy Battleground.” *Atlantic Council* (blog), March 30, 2021.

<https://www.atlanticcouncil.org/blogs/ukrainealert/why-the-black-sea-could-emerge-as-the-worlds-next-great-energy-battleground/>.

¹⁴Agenda.ge. “Georgia Signs Deal with OMV Petrom for Oil, Gas Extraction in Georgian Black Sea Waters.” Accessed March 30, 2023. <https://agenda.ge/en/news/2021/637>.

¹⁵Berriault, Lea. “Reconstructing the Postwar Black Sea Region.” *GIS Reports* (blog), January 4, 2023. <https://www.gisreportsonline.com/r/black-sea-postwar/>.

perimeters with relatively shallow waters.¹⁶ The Skifska gas field awarded in 2012 to a consortium consisting of Royal Dutch Shell, ExxonMobil, Petrom and Nadra,¹⁷ but the investment was cancelled due to the annexation of Crimea back in 2014.

1.2 Existing & Planned energy corridors in the Black Sea

The deterioration of Russia's relationship with the West in the aftermath of the 2008 invasion of Georgia and the 2009 gas crisis prompted a rethinking of gas supply chains. In the North, this was best reflected by Nord Stream 1 & 2, while in the South, Turkish Stream and Blue Stream offered an alternative route into the Balkans. The old TransBalkan, which used to bring Russian gas to Romania, Bulgaria and Turkey and Greece via Ukraine became a novel source of breathing space during the 2022 gas crunch. With a reverse flow, it recently began to bring Azeri or LNG-sourced gas to Moldova. Russia's reorientation of its gas routes was partly mirrored by the EU, which has funded multiple interconnectors between Greece and Bulgaria, Bulgaria and Romania, Hungary and Slovakia as well Romania and the Republic of Moldova. When Russian gas blackmailing struck with full force, it made thus possible for Azeri gas flowing through TANAP and TAP or American LNG docking at the Adrianopole terminal in Turkey or the Revithousa terminal in Greece to flow through the region. These efforts were complemented by the development of a particularly important project from a strategic point of view. Connecting Bulgaria, Romania, Hungary and Austria, the project further expanded the reach of Azeri gas and American LNG. Further East, the Iași-Ungheni-Chișinău successfully kept the Republic of Moldova from collapsing under the pressure of Russia's weaponization of energy, together with the reverse flow Azeri deliveries via the TransBalkan pipeline.¹⁸ When Romania's Black Sea projects become fully operational, the Iași-Ungheni-Chișinău pipeline could cover all of Moldova's needs excluding Transnistria, which amount to the pipeline's capacity of 1.5 bcm per year. This serves to show how timely investments can yield colossal strategic gains: Vest Mold Transgaz, a subsidiary of the Romanian state-owned company Transgaz operates the Ungheni-Chisinau pipeline, currently the only pipeline on the territory of the Republic of Moldova not under Russian control, highlighting a paradigm shift underway. Moldova's European future is inextricably linked to its energy security, with Romania's Black Sea gas having the potential to free the country from Russian energy dependence.

TurkStream, BlueStream, TANAP, the Iran-Turkey Line and its two LNG terminals already make Turkey an important player in the region. At the beginning of January, Turkey's state-owned gas firm BOTAS signed a long-term deal with Bulgaria's state gas company Bulgargaz, giving the latter access to its gas network and Liquefied Natural Gas (LNG)

¹⁶“Ukraine's Reality: Upstream Access Denial » Black Sea in Access Denial Age by ROEC » BSAD is a ROEC Project | Romania Energy Center.” Accessed March 30, 2023.

<https://bsad.roec.biz/portfolio-item/ukraines-reality-upstream-access-denial/>.

¹⁷ Reuters. “Exxon, Shell-Led Group Win \$10 Billion Ukraine Gas Project,” August 15, 2012, sec. Business News.

<https://www.reuters.com/article/us-shell-exxonmobil-ukraine-idUSBRE87E0C320120815>.

¹⁸Aura Sabadus. „Moldova marks historic step o Trans-Balkan reverse flows” Independent Commodity Intelligence Services, December 2022. Available at.

<https://www.icis.com/explore/resources/news/2022/12/01/10831835/moldova-marks-historic-step-o-n-trans-balkan-reverse-flows/>

terminals to help bring in supplies.¹⁹ It remains whether this cooperation will spill into the extractive. Turkey's aspirations to become a regional gas hub, although supported by notable infrastructure developments, risk being delayed by the very nature of it: its existing energy infrastructure is intimately tied to Russian extractive capacity. If Russian gas is to permanently lose its prominence on the European gas market, much of Turkey's transit capacity will be side-lined in favour of other suppliers.

In December 2022, a proposal for a seabed energy cable linking Romania to Georgia and further East to Azeri energy powerhouse has been promised funding by the European Commission.²⁰ The cable will eventually reach Hungary and Austria following BRUA's course, with a ramification towards the Balkans.²¹ The end point of the cable expected to sit in front of Romania's Dobruja region, further contributing to the region's emergence as a regional energy hotspot, thanks to its existing wind, solar, gas and nuclear energy infrastructure. When looking at these developments in ensemble, it becomes apparent that the multitude of individual projects are being brought together by the systemic geopolitical shift, leading to a newly emerging regional energy matrix, fuelled by high stakes at a national, regional and European level.

1.3 EEZ zones in the Black Sea & Russian lawfare

In spite of its size and the six littoral states that make up its shoreline, the Black Sea has no international waters, its entire surface being covered by six EEZs belonging to the six littoral states: Bulgaria, Romania, Ukraine, Türkiye, Russia and Georgia.



The new *de facto* delimitation of the EEZ in the Black Sea after the occupation of Crimea. Source: Euractiv.

<https://www.euractiv.com/section/defence-and-security/news/eu-calls-for-de-escalation-after-russia-fires-on-and-seizes-ukrainian-ships-in-azov-sea/>

¹⁹ "Aspiring to Be the Regional Gas Hub: The Role of Turkey and Other SEE Countries - CEENERGYNEWS." Accessed March 30, 2023. <https://ceenergynews.com/oil-gas/aspiring-to-be-the-regional-gas-hub-the-role-of-turkey-and-other-see-countries/>.

²⁰ Iuliane. "EC Promises to Fund Romania-Georgia Strategic Undersea Cable Project." Romania Insider, December 19, 2022.

<https://www.romania-insider.com/ec-promises-fund-romania-georgia-undersea-cable>.

²¹ Idem.

Ukraine inherited the Snake's Island following the dissolution of the Soviet Union, a fact recognized by Romania through the Romania-Ukraine Treaty of 1997. In spite of recognizing each other's borders, efforts to delimit the Black Sea continental shelf and the exclusive economic zone remained inconclusive, with 11,000 km² being disputed.²² In 2004, both countries agreed to settle the dispute via the Court of Justice in The Hague, with the statute of the Snake's Island as the main issue to be established. Romania argued that the island is nothing more than a rock, while Ukraine sought to prove that it is in fact an inhabited island with its own resources. The 2009 ruling favoured the Romanian standpoint, with the country²³ receiving 9,700 km² out of the 11,000 km² disputed area. Fourteen years on, the ruling remains a point of reference for the peaceful resolution of international maritime delimitation disputes.²⁴

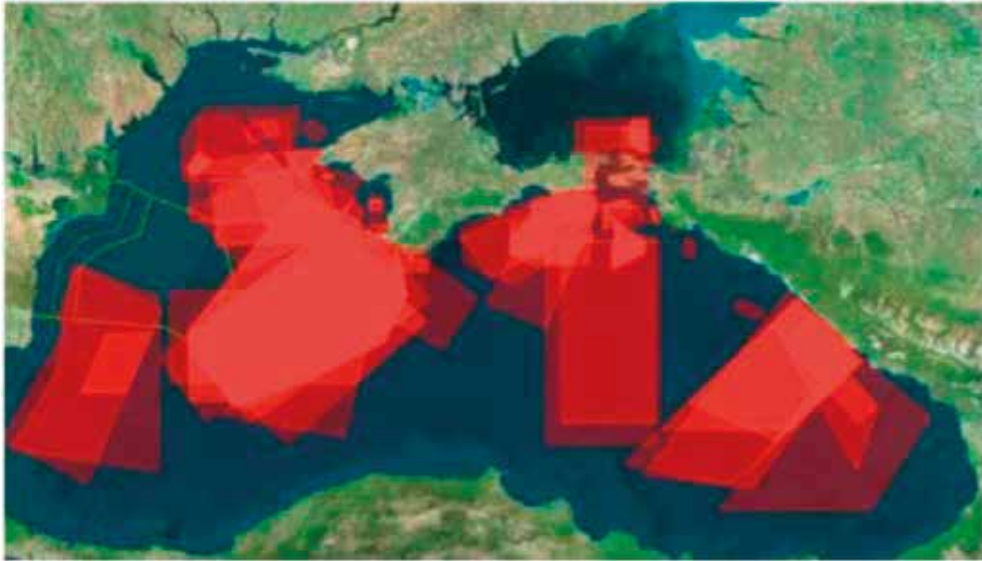
The illegal annexation of Crimea brought fundamental changes in the Black Sea's EEZ map, turning Romania and the Russian Federation into the *de facto* neighbours. Alongside the loss of the peninsula, Ukraine was deprived of its precious energy sources located in Crimea's continental shelf. Although Crimea's resources amount for only 1% of proven Russian hydrocarbons, the annexation had indirect repercussions which are felt today: with the Crimean resources locked underground, the Russian Federation muffled a potential source of competition on the energy front.

Starting with 2017, Russia abused international law by constantly organising military exercises in the Western Black Sea, often blocking entire hydrocarbon fields. Albeit legal, the almost perpetual nature of the military exercises pushed the boundaries of international law, by severely hampering freedom of navigation. Such legal warfare – lawfare – practices are part of Russia's hybrid war, aimed at achieving political goals via means which fall short of the threshold of armed conflict. Reinterpreting legal norms according to its objectives, in a similar manner to the "self-determination" referendums which served as a pretext for the illegal annexation of four Ukrainian oblasts in September 2022, the Kremlin seeks to establish a precarious regional security environment as a way to maintain pressure on riparian countries. Such practices garner a renewed gravity when contextualised within the systemic energy shift which is currently unravelling. With much of the region's energy hopes rest on the Black Sea's offshore energy potential, the blocking of hydrocarbon fields and delay or even derailment of the construction process of offshore gas infrastructure. Given the colossal stakes for Russia's regional foreign policy, for projects in a more advanced stage, such as Neptune Deep, Russia is likely to employ such tactics to harass Romania, Bulgaria or Georgia during the construction process of the offshore gas platforms.

²² Antonia Colibășanu, Leonardu Dinu, Jakub Godzimirski, George Scutaru. "How the Snake Island matters in the context of the 2022 war in Ukraine?" New Strategy Center, Nork Utenrikspolitisk, November 2022. Available at: [NSC-NUPI-How-the-Snake-Island-matters-in-the-context-of-the-2022-war-in-Ukraine.pdf](#) (newstrategycenter.ro)

²³ <https://www.enerdata.net/publications/daily-energy-news/gazprom-will-start-gas-production-khar-asavey-32-bcmyear-2024-russia.html#:~:text=At%20the%20national%20level%2C%20Russia,9.5%25%20compared%20to%202020>) & <https://www.forbes.com/sites/arielcohen/2019/02/28/as-russia-closes-in-on-crimeas-energy-resources-what-is-next-for-ukraine/>

²⁴ Romanian Ministry of Foreign Affairs, 11 YRS SINCROMNIS TRIL TO THHGU, which brought Romania 9,700 km² of continental shelf and exclusive economic one, February 3, 2020, <https://www.mae.rositesdefaultfilesfileanul2020pdf20202020.02.03brosurawebproceshaga.pdf>



Blocked perimeters under the pretext of Russian naval exercises in 2019

Source: New Strategy Center

While technological developments allow for the operation of the platforms with few to no people on site, offshore projects remain highly vulnerable during the construction phase, when they have thousands of people involved in their construction. The image is further complicated by the fact that EEZs are not covered by NATO's Article 5, opening up pathways for possible asymmetric aggressions. It is obvious that the development of offshore energy infrastructure in the Black Sea will directly impact Russia's interest in the region. Strong multilateral deterrence is essential and needs to be locally driven by the three NATO riparian countries, which ought to step up their military collaboration to discourage such acts of aggression.

Chapter 2. Eastern Mediterranean

During the past decade, energy has been gaining a growing role in the security environment of the South-Eastern Europe and Eastern Mediterranean regional subsystems. However, the complex, interdisciplinary, and multi-layered nature of energy resources and energy flows, create a challenging framework when attempting to evaluate its impact on security issues on a regional as well as global level. On a regional level, energy developments in the Eastern Mediterranean are of great interest for all the countries in the region, as well as for all the major actors of the international system, regarding their impact in both their economy and national security interests.

2.1 Existing and potential new gas discoveries in the Eastern Mediterranean

The Eastern Mediterranean holds significant volumes of natural gas reserves that are currently under various stages of development. The vast majority of identified natural gas reserves in the region are concentrated in the Levantine Basin and include four major offshore gas fields: the Israeli Tamar and Leviathan fields, the Cypriot Aphrodite field and the Egyptian Zohr field. Further fields in the region include areas under Greek maritime jurisdiction, primarily to the west and southwest of the island of Crete, as well as areas under Lebanese maritime jurisdiction, including parts of the Qana-Sidon gas field. In Israel,

Tamar field is an offshore gas field inside Israel's Exclusive Economic Zone, located approximately 80 km west of the Israeli city of Haifa, it lies in water depth of 1700m and has proven reserves of 220 bcm of natural gas.²⁵ The Leviathan gas field is located 50 km south-west of Tamar and 130 km west of Haifa in water depths of 1500 meters and has proven reserves of 620 bcm of natural gas.²⁶ The Aphrodite gas field is an offshore gas field in Cyprus' EEZ, located off the southern coast of Cyprus at the exploratory drilling block 12. Block 12 is believed to hold approximately 170 bcm of natural gas.²⁷ The Zohr gas field in Egypt's EEZ is the biggest single offshore gas field discovered in the Levantine Basin and is located approximately 150 km off the Egyptian coast in water depths of 1500m. The total proven reserves of the Zohr gas field are estimated at around 850 bcm.²⁸

The aforementioned gas fields are currently the main major gas fields under exploration. Smaller fields in the region include the Karish and Tanin fields in Israeli waters containing approximately 75 bcm of natural gas, as well as various other gas fields in Cyprus and Egypt under various stages of the exploration process. One of the most critical elements to be considered when analysing the gas fields in the region is their annual output capacity. Data on output capacity is providing crucial information towards understanding each country's export potential. According to a Stratfor analysis, the annual output capacity of the Zohr field is estimated at 28 bcm/y, Leviathan's capacity is 22 bcm/y and Tamar's capacity reaches 20 bcm/y.²⁹ Aphrodite's capacity is estimated in an MIT study to 5 bcm/y.³⁰ The significance of Levantine Basin's gas reserves and its annual output capacity is highlighted when the numbers from each field are combined. Total proven reserves just from the aforementioned fields exceed 1800 bcm and total annual output capacity reaches 75 bcm/y. For comparison, we should note that Russia's annual exports of natural gas before the pandemic and the invasion in Ukraine, were estimated at 196 bcm a year,³¹ while Gazprom, the Russian gas company, has been reporting approximately 130 bcm/y of exports to European countries.³² The total annual output from Cyprus, Israel and Egypt can reach up to half the volume of Russian exports to Europe, thus potentially changing completely the balance of power in the region.

²⁵ Delek Group. "Delek Group Announces Second Quarter 2010 Results." News release, August 25, 2010. <http://ir.delek-group.com/phoenix.zhtml?c=160695&p=irol-newsArticle&ID=1433914>.

²⁶ Noble Energy Inc. "Noble Energy Announces Significant Natural Gas Discovery at Leviathan Offshore Israel." News release, December 29, 2010. <http://investors.nobleenergyinc.com/releasedetail.cfm?ReleaseID=634137>.

²⁷ Cyprus Gas News. "Eni's Latest Offshore Gas Discovery in Egypt is a Game Changer." Accessed March 30, 2023. <http://www.cyprusgasnews.com/archives/3503/>.

²⁸ Eni. "Eni Discovers a Supergiant Gas Field in the Egyptian Offshore, the Largest Ever Found in the Mediterranean Sea." Accessed March 30, 2023. <https://www.eni.com/en-IT/media/press-release/2015/08/eni-discovers-a-supergiant-gas-field-in-the-egyptian-offshore-the-largest-ever-found-in-the-mediterranean-sea.html>.

²⁹ Stratfor. "Egypt: The Eastern Mediterranean's Next Natural Gas Hub." Stratfor, October 6, 2020. <https://www.stratfor.com/analysis/egypt-eastern-mediterraneans-next-natural-gas-hub>.

³⁰ Massachusetts Institute of Technology. Energy Initiative. "The Future of Natural Gas: An Interdisciplinary MIT Study." Massachusetts Institute of Technology, 2011. <https://energy.mit.edu/wp-content/uploads/2013/10/MITEI-RP-2013-001.pdf>.

³¹ Central Intelligence Agency. "Russia." The World Factbook. Central Intelligence Agency, 2021. <https://www.cia.gov/library/publications/the-world-factbook/geos/rs.html>.

³² Gazprom Export. "Statistics." Gazprom Export. Accessed March 6, 2023. <http://www.gazpromexport.ru/en/statistics/>.

Natural gas reserves in Cyprus, Israel and Egypt have the potential to play a crucial role in EU's energy security strategy and its efforts to eliminate, or significantly lower its dependence from imports of Russian natural gas. Overall, the volume of these reserves carries the potential for a dramatic shift in Cypriot, Israeli and Egyptian levels of power since it transforms the countries involved to net energy exporters. However, besides the volume of reserves, the political power that countries in the region can gain within the international system from their energy resources, depends primarily on the choices they make for the *transportation* channels of the explored gas resources. Without energy corridors to transport sufficient volumes of energy from the Eastern Mediterranean to other markets, the countries in the region cannot fully reap the political benefits associated with energy exports. In addition, it needs to be stressed that the format, capacity, and route of the energy corridors that can potentially be materialized in the region, affect in diverse ways the security and energy interests of other state actors in the Eastern Mediterranean subsystem such as Greece, Turkey, and Lebanon, as well as the regional strategic interests of major actors in the international system like the EU, the United States and Russia.

2.2 Planned gas energy corridors in the Eastern Mediterranean.

Out of the multitude of proposed new energy corridors connecting the Eastern Mediterranean with Europe, the gas project that seems to gather the highest potential of being materialized is the proposed EastMed gas pipeline. The EastMed pipeline, is a project that meets significant technical, economic, and political challenges. Designed to bring up to 11 bcm/y of natural gas from the newly discovered Eastern Mediterranean Israeli and Cypriot fields, the pipeline has the potential to further assist EU's diversification efforts. The project refers to approximately 1200 km of pipeline that includes 150 km offshore pipeline from the Levantine Basin to Cyprus, 650 km offshore pipeline from Cyprus to the island of Crete in Greece and another 400 km offshore pipeline from Crete to Peloponnesus in mainland Greece.³³ From then on, it includes 500 km of an onshore pipeline through Greece, where it will be connected with the Italian gas system via the offshore part of the Poseidon pipeline.³⁴

Examined under the Strategic Framework of Energy Projects (SFEP) the EastMed pipeline seems to offer strategic value primarily for Cyprus and to a lesser degree for Greece, Israel and Egypt. For Cyprus, the pipeline meets all three conditions provided under SFEP since it generates a significant change in the balance of power in the regional sub-system and enhances Cyprus' self-help efforts through internal and external balancing. For Greece, Israel and Egypt, however, the strategic value of the pipeline is existent but limited. Out of the three criteria provided by SFEP, the pipeline partially meets the condition for enhancement of Greece's, Israel's and Egypt's self-help efforts through external balancing since it creates the conditions for closer cooperation between Greece, Cyprus, and Israel.

Regarding some of the major international actors interested in the Eastern Mediterranean sub-system, the pipeline carries strategic value for the EU by meeting the third SFEP criterion regarding the enhancement of its self-help efforts in lowering dependency from Russian gas. The pipeline carries strategic value also for the United States since it enhances US efforts in the construction of a 'frontier' of deterring Russia's influence in

³³ Edison. "Gas Infrastructures." Accessed May 4, 2020. <https://www.edison.it/en/gas-infrastructures>.

³⁴ IGI-Poseidon. "EastMed - A direct link to new sources for Europe." Accessed May 4, 2020. <http://www.igi-poseidon.com/en/eastmed>.

NATO's eastern flank through the closer cooperation of its allies and partners in the regional sub-system of Eastern Mediterranean. However, such value is limited for the United States, since the pipeline does not address issues of conflict and friction between Greece and Turkey, both members of NATO.

Regarding Russia, the EastMed pipeline, and any other project that offers EU the potential of lowering its dependence on Russian energy sources, carry significant strategic value against Russian interests. Russia's efforts in counteracting such a potential have been focusing either on controlling the energy corridors connecting the Eastern Mediterranean with the EU, or on controlling the resources that would feed these corridors. To that end, the Kremlin has been building a long-lasting relationship with Turkey, were besides the existing Blue-Stream and Turk-Stream pipelines, it supports the elevation of Turkey to a regional gas-hub under Russia's "protective" umbrella.³⁵ Furthermore, Russian oil and gas companies like Lukoil, and Novatek have been active in the Eastern Mediterranean, in exploring oil and gas reserves off the coast of Egypt and conducting seismic surveys in Lebanon.³⁶ Russia's longstanding efforts to establish and enhance its energy relations with Egypt and Turkey, are combined with its overall diplomatic and military involvement in the Syrian conflict and are aiming at counterbalancing the influence of the United States and its allies in the region.

Besides plans regarding new gas pipelines like the East-Med pipeline, currently the only *major* operating option for exporting Levantine Basin's natural gas reserves to markets outside the Eastern Mediterranean is the one via LNG through the existing LNG Liquefaction Plants in Idku and Damietta, Egypt. The two plants have been the top exporting points for Egyptian natural gas since the mid-2000s, but the gradual declining of the country's export output led to their shut down by 2015.³⁷ After the discovered Zohr field gas reserves, Egypt has been upgrading and has reopened the two plants who's combined capacity, once they get into full operational mode, is reaching 15bcm/y.³⁸ Examined under the SFEP it is obvious the Egypt LNG option carries high strategic value for Egypt since it is fulfilling all three criteria of the framework. This option, however, offers limited value to all the other stakeholders in the region since none of the SFEP criteria is fulfilled neither for Cyprus, nor for Israel, Lebanon or Greece. It is therefore important to underline that under the current situation, the only existing and viable channel for the region's gas resources to reach Europe, is one that does not carry collective strategic value for the actors involved, neither for any of the major actors in the region, thus limiting, in practice, the potential for meaningful cooperation between the stakeholders involved to actively promote new energy corridors in the region. This, combined with the limited strategic value of the East-Med pipeline for Egypt and Israel, offers a credible explanation, in structural geopolitical terms,

³⁵ "Putin says gas hub can be set up in Turkey 'quite easily'." Reuters, October 31, 2022, <https://www.reuters.com/world/middle-east/putin-says-gas-hub-can-be-set-up-turkey-quite-easily-2022-10-31/>.

³⁶ ECFR (European Council on Foreign Relations). "Eastern Mediterranean Gas Fields: The Potential For Conflict And Cooperation." ECFR, 3 Dec. 2021, https://ecfr.eu/special/eastern_med/gas_fields/.

³⁷ Stratfor. "The World's Leading Geopolitical Intelligence Platform." Accessed March 30, 2023. <https://worldview.stratfor.com>.

³⁸ Energy Egypt. "El-Molla: Idku and Damietta Liquefaction Plants to Operate at Full Capacity by 2020/2021." Accessed August 7, 2016. <https://energyegypt.net/2016/08/07/el-molla-idku-and-damietta-liquefaction-plants-to-operate-at-full-capacity-by-20202021/>

for the slow progress in the materialization of new gas corridors from the Eastern Mediterranean to Europe.

2.3 EEZ violations and agreements in the Eastern Mediterranean.

The sub-system of the Eastern Mediterranean entails countries that often find themselves in turbulence relations with each other. History, religion, and political structures, blend with strategic and economic differences and intertwine with varied security interests from major actors of the international system. The complexity of the Eastern Mediterranean's framework has been intensified at times from revisionist policies of regional actors and multi-sided efforts to change or maintain the balance of power in the region. Under such a challenging framework, the discovery of significant natural gas potential generated the conditions for potentially major shifts in the balance of power between all the actors in the region. This, in turn, has generated a tremendous interest in the situation regarding the Exclusive Economic Zones (EEZ) delimitation among the states involved.

Analysing the situation on energy resources and the EEZs in the Eastern Mediterranean, it needs to be stressed that it would be a mistake to approach the issue of EEZs as an energy-sources-related matter. Disputes over EEZs in the region, originate from the security and national interest competition between states that -in the past decade- are expressed through energy-related issues and not vice versa. It is not the competition for energy sources that generates disputes over EEZs, but it is competition over security interests that generates disputes over the EEZs where the energy resources lie. To that end, it is not agreements over the distribution of rights over energy resources that can resolve EEZ disputes, but it is agreements over security interests that could possibly lead to resolving EEZ disputes. Such a clarification regarding the "order of things" is important when attempting to analyse and identify the potential for cooperation or collision regarding EEZs in the region.

The major issues regarding EEZs frictions in the Eastern Mediterranean include (a) Turkey's policies of not recognising's Cyprus' EEZ declarations, (b) Turkey's policies in challenging Greece's territorial waters and EEZ as they are defined by the provisions of the United Nations Convention on the Law of the Sea (UNCLOS),³⁹ and (c) Lebanon and Israel's maritime border dispute. Regarding EEZs in the region, the Republic of Cyprus, has been declaring its exclusive economic zone in 2004, by signing EEZ delimitation agreements with Egypt in 2003, Lebanon in 2007 and Israel in 2010.⁴⁰ In 2020, Egypt and Greece partially delimited their EEZs, under the provisions of UNCLOS.⁴¹ The EEZ delimitation between Cyprus, Israel, Lebanon and Egypt, as well as the partial delimitation between Greece and Egypt, follow the UNCLOS provisions and offer a rather solid framework for the overall situation regarding EEZs in the region. It is these agreements that have provided the base

³⁹ United Nations. "Convention on the Law of the Non-Navigational Uses of International Watercourses." United Nations Treaty Collection. Accessed March 30, 2023. https://treaties.un.org/pages/ViewDetailsIII.aspx?src=TREATY&mtdsg_no=XXI-6&chapter=21&Temp=mtdsg3&clang=_en.

⁴⁰ Ministry of Foreign Affairs. Cyprus. <https://mfa.gov.cy/themes/>.

⁴¹ "Agreement between the Government of the Hellenic Republic and the Government of the Arab Republic of Egypt on the delimitation of the exclusive economic zone between the two countries," United Nations Treaty Series, no. 56237 (September 17, 2020), accessed April 6, 2023, <https://treaties.un.org/doc/Publication/UNTS/No%20Volume/56237/Part/I-56237-080000028058a22f.pdf>.

for the historic agreement in 2022 between Israel and Lebanon to establish a permanent maritime boundary.



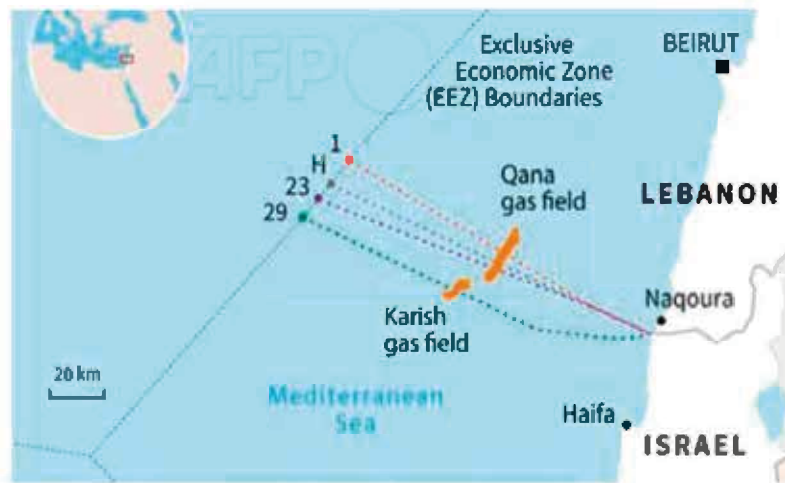
Greece-Cyprus-Egypt-Israel-Lebanon EEZ delimitations

Source: <https://www.iene.eu/the-ordeal-of-the-greek-eez-p6076.html>

However, as presented earlier, EEZ delimitation needs to be analysed through the scope of security, rather than energy-related interests. Different to the spirit of cooperation in the region, Turkey has been disputing all the above agreements, and challenging Cyprus' delimited EEZ and Greece's territorial waters and EEZ as defined by the provisions of the UNCLOS. Long before any gas findings in the region, Turkey's illegal invasion and occupation, since 1974 of 37% of the territory of the Republic of Cyprus, and the country's overall revisionist agenda, has brought Turkey in tensions and turbulent relations with most of the states in the region that besides Greece and Cyprus, include Israel and Egypt. Under this spectrum, Turkey's challenges regarding Cypriot EEZ are originating from the country's revisionist political agenda, rather its energy policy needs. To this end, Turkey's objectives regarding Cyprus' EEZ are similar to Russia's objectives regarding the EEZ in the Black Sea after the invasion in Ukraine which is the creation of a de facto change of the UNCLOS-defined EEZ status. The above scope of analysis applies also to Turkey's policies in challenging UNCLOS-defined Greece's territorial waters and EEZ. In 2019, Turkey signed a "Memorandum of Understanding" with Libya's Government of National Accord for the delimitation of EEZs between Turkey and Libya.⁴² The agreement, in violation of the UNCLOS provisions, has been widely denounced by the international community. By ignoring international law, the "MoU" challenges Greece's sovereignty over the territorial waters of the Greek islands of Rhodes and Kastellorizo, thus serving Turkey's wider revisionist agenda against Greece in the Aegean Sea. This element stipulates that the primary drive for friction in the region remains linked to geopolitical rather than energy interests.

⁴²DC, Arab Center Washington. "The Libya-Turkey Memorandum of Understanding: Local and Regional Repercussions." Arab Center Washington DC, March 29, 2023. <https://arabcenterdc.org/resource/the-libya-turkey-memorandum-of-understanding-local-and-regional-repercussions/>.

The streak of unresolved EEZ tensions in the Eastern Mediterranean has been broken with the 2022 agreement between Lebanon and Israel on the EEZ Delimitation.⁴³ The deal between the two countries has come as a result of a political compromise at a time where both parties have been under rather vulnerable internal political conditions.



Israel - Lebanon maritime border agreement lines

Source:

Euractiv.com/ Map by AFP showing Israel-Lebanon maritime border claims.

It is worth highlighting that a critical factor for the success of the agreement is that the span of the needed compromise has been determined by the two separate agreements each country had previously signed with Cyprus. This offered the original geographical framework for negotiations that was identified to a specific, narrow area, as the overlapping area between the two separate agreements with Cyprus that were both respecting UNCLOS. As regards to the agreement itself, application of the UNCLOS provisions have been crucial for the success of the deal. A key element on this, has been related to UNCLOS provisions stipulating that a coastal state has an exclusive right to authorize or not others to explore and exploit natural resources under its EEZ.⁴⁴ In the case of the Israel-Lebanon agreement, while Lebanon has been assigned prospecting rights over the Qana gas field, the exploration of the field is still subject to the agreement between Israel and TotalEnergies, the French energy company who is the operator of Block 9 of the field. Without a careful application of UNCLOS provisions offering Israel a final say under the field that Lebanon will explore, such an agreement seems to have been unachievable.

Finally, emphasising on the argument that EEZ agreements are primarily based on security rather than energy interests, it needs to be mentioned that the aforementioned agreement was possible due to a critical provision in Section 1.B of the agreement stating that the coordinates define the maritime boundary “without prejudice to the status of the land boundary” thus allowing both parties to maintain the status quo regarding demarcation of

⁴³ DC, Arab Center Washington. “The Libya-Turkey Memorandum of Understanding: Local and Regional Repercussions.” Arab Center Washington DC, March 29, 2023. <https://arabcenterdc.org/resource/the-libya-turkey-memorandum-of-understanding-local-and-regional-repercussions/>.

⁴⁴ Hughes, W. E. (2016). Sovereignty Over and Ownership of Offshore Oil and Gas—The Law of the Sea and Joint Development Zones. In *Fundamentals of International Oil & Gas Law*. essay, PennWell.

the land boundary.⁴⁵ It is therefore crucial to realize that regardless the importance of gas exploration prospects for both parties, for the agreement to be materialized it needed to not affect the political status quo between the two regional actors.

Chapter 3. New contexts and strategic value of energy

3.1 New Generation Warfare in the context of the Ukraine war and beyond

The Nord Stream sabotage, although not attributed to any particular country, changed the rules of the game by questioning the sanctity of offshore energy infrastructure security. At a doctrinal level, the Gerasimov doctrine explicitly mentions acts of sabotage, while Russia has operationally proved itself as a malign actor willing to bend and break international rules. Such perils have an indirect influence on the freedom of navigation – even an unintentional incident such as a ship hitting a mine will have devastating effects, effectively curtailing freedom of navigation by raising insurance costs to a prohibitive level. Moreover, due to their strategic function and the colossal costs associated with the investment, a well-timed act of sabotage paired with a coordinated disinformation campaign can have devastating effects on the national political scene.

While national EEZs do not fall under Article 5, offshore gas platforms are sovereign territory once operational. In case of an attack, the biggest issue arises out traceability: the use of an unmarked underwater drone or an act of sabotage, such as the NordStream one, make the perpetrator hard if not impossible to identify, with such an act of sabotage putting the Alliance into uncharted territory. Threats are not solely limited to the material realm. The weaponization of environmental NGOs and narratives about ownership of resources can curtail both public and political support, in a field notorious for its legal wrangling over exploitation rights and divisive societal potential.

The modus operandi of actors within the international system is co-determined by actors themselves and the global structure, which in turn is in itself shaped by myriad of interactions between state and non-state actors. In the past decade, renewed local, regional and global competition weakened the normative and institutional web governing the international system since 1991, reinforcing behavioural changes at a state level. The boundary between cold and hot conflict becomes ever more translucent, while the geopolitical standpoints of ideal-driven liberal-minded states becomes intertwined with the perceived need to practice realpolitik in the face of multiplying threats. In time, this perpetual interplay between actors and structure becomes self-reinforcing: *decisive* actions taken in response to perceived structural failures serve to reinforce them. While the Russian Federation was the first to lump a diverse set of tools into a doctrine and act according to it, the occasional hard posturing of liberal states during the past years might well translate into occasional incursions outside *established* norms and values. The deconstruction of these established norms and values might see states responding to perceived contemporaneous threats with contemporaneous means, which will be most acutely felt in the energy realm, which acts as a magnifying glass or strategic competition.

⁴⁵ Baker, Luke. "Full Text of the Maritime Border Deal Agreed between Israel and Lebanon | The Times of Israel." Accessed March 30, 2023. <https://www.timesofisrael.com/full-text-of-the-maritime-border-deal-agreed-between-israel-and-lebanon/>.

3.2 Which energy developments in the Black Sea and the Eastern Mediterranean carry strategic value for the countries involved?

In the Black Sea

Turkey's discoveries, confronted with two stark choices. On one hand, it can use the gas to satisfy its buoyant demand, leaving little for exports, but contributing to the country's self-sufficiency. Conversely, with an eye on its depleted coffers and weakened currency, the government in Ankara might seek to send the pumped gas outwards, in exchange for a much-needed inflow of foreign currency, reflected in the country's ability to pursue its expansionist foreign policy and stay stable on the home front. While having the potential to decisively contribute to the country's self-sufficiency, the country's soft and hard power is built on different coordinates. With very granular relationship with Russia, the bilateral balance of power seems to largely stay the same, underpinned by an incredibly complex geostrategic tango. These relatively recent developments and Ankara's swift action to exploit those resources add yet another layer of strategic value in an already highly contested environment. Benefitting from a relative equilibrium in its relationship with Russia, Turkish ambitions to become a regional gas hub are protected from possible Russian revisionism by a thick layer of adjacent joint interests.

Romania's gas discoveries and planned energy transport routes in which it has a direct stake both score high within SFEP. Revenue derived from those projects would serve to maximise the country's power through an influx of capital, while being hugely helpful by turning the country from a timid importer of energy into a regional exporter. The projects have perhaps the biggest impact in the regional balance of power through an inverse relationship with Russian exports. Russia's zero-sum game view on international relations would touch base with reality in such a scenario, where Romania would be able to decisively contribute towards the satisfaction of local energy needs in the Western Balkans, Bulgaria and especially Moldova, severely curtailing any remaining Russian leverage in absence of geographical proximity and eroded economic prowess due to sanctions.

In Ukraine's case, the colossal distance between plans and realities on the ground make any assessment of the strategic value of these projects a purely speculative endeavour. In Georgia's case, the prospective OMV-Petrom exploitation meets the SFEP criteria in two ways without altering the country's standing in a fundamental way. Georgia has already turn to Azeri gas as a replacement for Russian imports. While the project will contribute to Georgia's self-sufficiency, it will do little to impact the balance of power in its profoundly asymmetrical relationship with Russia.

If and when the current exploration will yield results, the subsequent projects would fulfil all three criteria by turning the country in a self-sufficient consumer, maximising its power and further tilting the balance of power by removing Kremlin's leverage on the country. Bulgaria taking a decisive step towards relative energy self-sufficiency would translate into existing resources being freed up for the Western Balkans, further undermining the Kremlin's energy grip on the region. Russia would see its leverage diminished, with whatever hope there is for a potential partial return of Russian gas onto European market would be dashed if the Black Sea will fulfil its energy potential. Concomitantly, littoral states would benefit from a notable power bump with the opening up new geopolitical avenues through self-sufficiency, decisively shifting the power balance in the region.

The emergence of a Black Sea subsystem generating different degrees of strategic value for all actors leads to divergence in project prioritization by the actors involved, which in turn leads to diverge allocation of material and immaterial resources, further sharpening competition in the region.

In the Eastern Mediterranean

The massive volumes of natural gas resources discovered in the Eastern Mediterranean can potentially be distributed to the EU via a pipeline through Greece, or a pipeline through Turkey, or can be liquefied, onshore or offshore, either in Egypt, Cyprus or Israel, and be shipped as LNG to the EU, China or India. Each of the aforementioned options and their possible combinations, create a completely different set of dynamics and generate different levels of power for the countries of the Eastern Mediterranean subsystem, as well as for major powers of the international system such as the EU, the United States, Russia and China.

There are three key elements that need to be considered when the options for distributions of the Eastern Mediterranean natural gas reserves are examined.

- The first element we need to keep in mind is that by Egypt, Israel and Cyprus becoming net energy exporters, any prospect for exports of natural gas towards each other is eliminated. Any transportation of gas from one country to another can serve solely as a transit route towards exports to other markets.
- The second point to be made is that the verified and extractable volumes of natural gas in Egypt, Israel and Cyprus, can be financially viable for exports only if channelled through a common distribution channel between the countries involved. Although Egypt's Zohr field is of tremendous potential, the country's internal energy needs reduce its overall export dynamic.⁴⁶ As a result, reserves from the Zohr, Leviathan and Aphrodite fields need to flow through a *common* distribution channel in order to have a chance of producing profit rather than losses for the countries involved.
- The third issue to be considered refers to the realization that the position of the offshore discoveries of natural gas, combined with the geographical characteristics of the Mediterranean Sea and the international politics framework in Eastern Mediterranean, makes *any* of the possible alternatives a challenging, uncertain and costly project. None of the options face optimal developing conditions when compared with other regions around the world. Nevertheless, the verified and extractable volumes of natural gas in the area are of such magnitude that cannot be ignored.

The above three parameters determine the framework for cooperation or competition between all the regional actors in the Eastern Mediterranean. These, combined with the SFEP results of existing and planned infrastructure analysed earlier in this study should be expected to define the future of energy developments in the region.

⁴⁶ Scott Stewart, "Egypt: The Eastern Mediterranean's Next Natural Gas Hub," Stratfor, November 16, 2015, <https://www.stratfor.com/analysis/egypt-eastern-mediterraneans-next-natural-gas-hub>.

Conclusion

What do the developments in the Black Sea and the Eastern Mediterranean mean for European energy security?

On a regional level, EU's energy objectives for the Eastern Mediterranean and the Black Sea relate primarily to issues of energy security and the internal energy market. The afore-mentioned projects create a web of infrastructure that carries the capacity to promote EU's objectives regarding its energy security but also aligns with the security interests of regional actors like Israel and Egypt thus extending EU's security beyond its borders in the Eastern Mediterranean and the Balkans. The Western Balkans and the Republic of Moldova weigh heavily on the European project, in spite of their small populations and modest economies. Energy has always had an overweighted role, acting as a hook on the countries' ability to pursue their foreign policy goals. Romanian and Turkish gas discoveries in the Black Sea, could be proven both sufficient and well connected to the above-mentioned countries' efforts to replace Russian energy. This in turn could greatly enhance the Western Balkans and Moldova's security, while opening up new geopolitical avenues.

This multi-alignment rising in both the Black Sea and the Eastern Mediterranean, creates a unique opportunity for cooperation on a regional level, using energy as the 'connecting element' that can bring together state actors with diverse security and energy backgrounds and needs. However, the EU's overall policies on climate change also bear a direct effect on its regional interests. In particular, the EU's commitment to reduce CO2 emissions, lead to policies aiming to rapidly reduce and eliminate gas consumption in Europe. Taking into consideration that natural gas developments in the Black Sea and the Eastern Mediterranean can offer elevated intra-EU produced energy sources, the decision to lower or eliminate gas demand in Europe could present a contradiction in terms of energy security conditions.

The European Union has a direct stake in the Black Sea and Eastern Mediterranean gas projects because they represent alternative sources of energy located close to home, in EEZs belonging primarily to reliable partners. This will have a direct benefit for EU countries in the region and beyond. The war in Ukraine has shown how a profound energy dependency can influence foreign policy, as it probably did in the case of Austria and Hungary. Moreover, the projects would help secure EU's periphery by bringing the Western Balkans and the Republic of Moldova closer to European integration through energy relations.

The energy shift in the two subsystems takes place under special circumstances, dictated by the 2050 deadline for decarbonisation agreed by EU member states as well as the developments following the war in Ukraine. The immediate need to diversify away from Russian gas is augmented by the definitive deadline under which this project will operate. With only 27 years left until 2050, most of these projects will face a lifespan of under 25 years, already forcing the limits of long-term rentability. In a realm notorious for decades-long negotiations, these historical conditions will leave little time for negotiations. Historical developments are not an inevitable exogenous process, but a reality constructed by actors and their interactions. If administered correctly, the gas discoveries in the Black Sea and Eastern Mediterranean can have a transformative effect on relations between the countries of the two sub-systems. Instead of being the focal point of strategic competition and reductionist realpolitik, energy can

become the liaison in a long chain of issues linkage, acting as a driver and not a barrier for regional cooperation.



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