Energy and Geopolitics in the Eastern Mediterranean

ASP

American Security Project

Perspective

Andrew Holland

July 2015

BOARD OF DIRECTORS



The Honorable Gary Hart, Chairman Emeritus

Senator Hart served the State of Colorado in the U.S. Senate and was a member of the Committee on Armed Services during his tenure.



Governor Christine Todd Whitman, Chairperson

Christine Todd Whitman is the President of the Whitman Strategy Group, a consulting firm that specializes in energy and environmental issues.



Nelson W. Cunningham, President of ASP

Nelson Cunningham is President of McLarty Associates, the international strategic advisory firm headed by former White House Chief of Staff and Special Envoy for the Americas Thomas F. "Mack" McLarty, III.



Brigadier General Stephen A. Cheney, USMC (Ret.)

Brigadier General Cheney is the Chief Executive Officer of ASP.



Norman R. Augustine

Mr. Augustine was Chairman and Principal Officer of the American Red Cross for nine years and Chairman of the Council of the National Academy of Engineering.



Ambassador Jeffrey Bleich

The Hon. Jeffery Bleich heads the Global Practice for Munger, Tolles & Olson. He served as the U.S. Ambassador to Australia from 2009 to 2013. He previously served in the Clinton Administration.



Alejandro Brito

Alejandro Brito is President of Brito Development Group (BDG), LLP. In the last twenty years, Mr. Brito has overseen the design, construction, development and management of over 1,500 luxury housing units in Puerto Rico.



Ambassador Donald Beyer

The Hon. Donald Beyer is the former United States Ambassador to to Switzerland and Liechtenstein, as well as a former Lieutenant Governor and President of the Senate of Virginia.



Lieutenant General John Castellaw, USMC (Ret.)

John Castellaw is President of the Crockett Policy Institute (CPI), a non-partisan policy and research organization headquartered in Tennessee.



Lieutenant General Daniel Christman, USA (Ret.)

Lieutenant General Christman is Senior Vice President for International Affairs at the United States Chamber of Commerce.



Robert B. Crowe

Robert B. Crowe is a Partner of Nelson Mullins Riley & Scarborough in its Boston and Washington, DC offices. He is co-chair of the firm's Government Relations practice.



Lee Cullum

Lee Cullum, at one time a commentator on the PBS NewsHour and "All Things Considered" on NPR, currently contributes to the Dallas Morning News and hosts "CEO."



Admiral William Fallon, USN (Ret.)

Admiral Fallon has led U.S. and Allied forces and played a leadership role in military and diplomatic matters at the highest levels of the U.S. government.



Raj Fernando

Raj Fernando is CEO and founder of Chopper Trading, a technology based trading firm headquartered in Chicago.



Vice Admiral Lee Gunn, USN (Ret.)

Vice Admiral Gunn is the President of the Institute of Public Research at the CNA Corporation, a non-profit corporation in Virginia.



The Honorable Chuck Hagel

Chuck Hagel served as the 24th U.S. Secretary of Defense and served two terms in the United States Senate (1997-2009). Hagel was a senior member of the Senate Foreign Relations; Banking, Housing and Urban Affairs; and Intelligence Committees.



Lieutenant General Claudia Kennedy, USA (Ret.)

Lieutenant General Kennedy was the first woman to achieve the rank of three-star general in the United States Army.



General Lester L. Lyles, USAF (Ret.)

General Lyles retired from the United States Air Force after a distinguished 35 year career. He is presently Chairman of USAA, a member of the Defense Science Board, and a member of the President's Intelligence Advisory Board.



Hani Masri

Hani Masri is Chairman of Capital Investment Management Inc. based in McLean, Virginia and specializing in fund and investment real estate management in the U.S. He also serves as President of M2 Investors, Inc.



Dennis Mehiel

Dennis Mehiel is the Principal Shareholder and Chairman of U.S. Corrugated, Inc.



Stuart Piltch

Stuart Piltch is the Co-Founder and Managing Director of Cambridge Advisory Group, an actuarial and benefits consulting firm based in Philadelphia.



Ed Reilly

Edward Reilly is Global Chief Executive Officer of the Strategic Communications practice of FTI Consulting.



Dante Disparte, Chairman of the Business Council for American Security, Ex Officio Member

Disparte is the founder and CEO of Risk Cooperative, a strategy, risk and capital management firm focusing on mid-market opportunities.

In this Report:

Since 2009, there have been a succession of substantial natural gas finds in the Levantine Basin, under the Mediterranean Sea between Israel and Cyprus. How to regulate, tax, and export the gas continues to be controversial in Israeli politics. However, the strategic benefits of using energy resources to more closely tie Israel with its long-hostile neighbors are too compelling to ignore.

Interact:

Join our discussion on Twitter with the hashtag #ASPEnergy Discuss Eastern Mediterranean energy security with the author at @theandyholland Learn more about ASP at @amsecproject

IN BRIEF

- New energy finds in Israel's offshore waters are significant enough to both provide energy security to Israel and to tie the long-isolated nation with its neighbors.
- Arab countries around the Eastern Mediterranean, like Jordan and Egypt, are actively searching for new sources of energy to support their people through unstable economic and political times.
- While no one should expect energy exports to make peace where none exists, shared economic ties can be a foundation for growing political ties as well.
- However, domestic political challenges within Israel have threatened the commercial viability of extracting gas, which could jeopardize all the geopolitical benefits of energy cooperation.
- It is in American interests to support a regionally integrated energy system around the Eastern Mediterranean because it could support peace and stability in a volatile region.

About the Author

Andrew Holland is the American Security Project's Director of Studies and Senior Fellow for Energy and Climate. He is a Washington-based expert on energy, climate change, and infrastructure policy. He works at the center of debates about how to achieve sustainable energy security and how to effectively address climate change. He served as Legislative Assistant on Energy, Environment, and Infrastructure for then-Senator Chuck Hagel of Nebraska. He has also worked in the US House of Representatives.

A "Bolt from the Blue"

There's a commonly-told joke among Israelis: Moses led the Israelites through the desert for forty years, and they ended up in the only corner of the Middle East that doesn't have any oil. But that's now changing. Starting five years ago, a series of natural gas fields were found offshore in Israel's portion of the Eastern Mediterranean. These finds have the potential to reshape Israel's economy, its relations with its neighbors, and build shared security across the region. They also could generate conflict, create new high-value terrorist

targets, and undermine regional security.

In early 2009, a consortium of Israeli and American energy companies announced a significant find from an exploratory well in the Tamar field about 80 kilometers off the coast of Haifa. Nearly 2 years later, in December of 2010, a similar consortium of American and Israeli companies announced an even bigger find at the Leviathan field, about 50 kilometers further out to sea from Tamar. In late 2011, further west – across the maritime border between Israel and Cyprus – some of the same consortium members found the Aphrodite field.

For a time, this quick succession of announcements produced an optimism that Israel would become self-sufficient in energy, that the region would come together to cooperate on energy, and that revenues from selling gas to markets as far away as South Korea had the potential to wipe away budget deficits.

American Security Project CYPRUS Leviathan **Aphrodite** Dali Gaza Marine Eastern Mediterranean Energy Infrastructure and Gas Fields ■ Refinery Oil pipeline, active Natural gas pipeline, active Oil and gas fields Capital Sources: U.S. Energy Information Administration, IHS Edin Representation of international boundaries and names not authoritative

These optimistic assessments were overstated: Israel and Cyprus are not about to reap an energy windfall like Persian Gulf States Qatar, Kuwait, or the United Arab Emirates: there simply is not enough gas or oil in these formations. Put together, there is about 34 trillion cubic feet of natural gas in proven reserves in the waters of Cyprus, Israel and the Palestinian Authority. This is not enough to be world-changing – larger offshore gas fields like Qatar's North Dome or Russia's Shtokman fields are estimated to have 1235 trillion cubic feet and 110 trillion cubic feet respectively – but they do have the potential to change the energy outlook and regional relations of countries bordering the Eastern Mediterranean.² Throughout history, the discovery of new energy resources have sometimes catalyzed competition and conflict – but they have also triggered new cooperation.

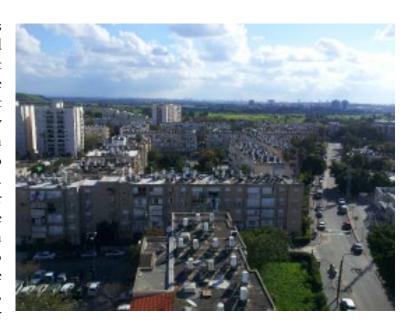
In 2010, the US Geological Service estimated total undiscovered reserves in the Levantine basin at 122 trillion cubic feet of gas, and 1.7 billion barrels of recoverable oil.³ The Levantine basin extends across the Eastern Mediterranean, with potions in the waters of Lebanon, Syria, Egypt and the Palestinian territories. This implies that there is the potential for more finds in the geological formations under the Eastern Mediterranean.

There are few external events in geopolitics that are a "Bolt from the Blue" – changes in geopolitics, economics, and international relations are usually the result of slow, incremental changes, not sudden, unpredicted events. But, in order to have a meaningful impact on geopolitics, economics, and people's everyday lives, policymakers must take advantage of the opportunity.

That means that Israeli politicians will have to overcome short-term political concerns in favor of laying a long-term vision for energy development. It means that Arab political figures in countries like Egypt and Jordan will have to acknowledge that they have more to gain from working with Israel than from trying to undermine it. It means that the region must build collective security in the face of threats from terrorists. If these countries and companies can cooperate on energy development, there is enough gas for everyone to reap the benefits. However, if the players put up barriers and block access, then everyone will lose. The numbers show the potential; only actions by policymakers can reap the benefits.

An Economic Opportunity for Israel

For decades after its creation, Israel was isolated from its neighbors. This applied especially to energy trade. The Arab boycott precluded it from acquiring any of the abundant cheap oil sold by its neighbors. It was forced to import virtually all its energy supplies from partners around the world, with oil imported from Russia, Africa, and Mexico and coal imported from South America. This has created a unique energy system for Israel. Solar power (there is more than ample sunlight in Israel) is more widely used than almost anywhere else in the world: over 90% of the homes include solar water heaters. 4 The Israeli economy is extremely energy efficient, using more than three time less energy per dollar of GDP than neighbors like Egypt or Jordan – it is even 25% less energy intensive than the United States.⁵



Tel Aviv, Israel. Note the Rooftop Water Heaters

Even with an efficient energy system that has a growing portion of renewable energy, imports still made up 91% of Israel's total primary energy consumption.⁶ This is a net drain on the Israeli economy, and makes the country strategically vulnerable to interdiction by its adversaries.

There are contradicting predictions about whether offshore natural gas production will reduce domestic electricity prices. On balance, though, in 2015, the first year after which the Tamar field has been providing gas to Israeli power plants, electricity prices will be 9.4% lower than the previous year. It will certainly reduce capital flight, currently going to pay for energy imports, and it will provide revenue to the government from royalties.

AMERICAN SECURITY PROJECT

But this is about more than just economic advantages. Energy is a strategic commodity. Israel's neighbors to the east, around the Persian Gulf have understood the strategic advantage that comes from control over hydrocarbon resources. Until 2012, Israel had imported gas from Egypt, but attacks by insurgents in the Sinai Peninsula after the Arab Spring revolts of 2011 caused those shipments to cease. With domestic production, there would no longer be a threat that an outside actor could harm the Israeli economy in this way. Even more importantly, Israel can work with countries in the region, whether overtly or implicitly, to use its newfound energy as a way to bolster the forces of stability in and increasingly unstable and unpredictable region.

The Strategic Opportunity to Integrate the Eastern Mediterranean

The international relations between the countries that share borders along the Eastern Mediterranean are marked by tension, distrust, and conflict. Egypt, Jordan, and Turkey recognize Israel as a state, but Lebanon and Syria remain in a technical state of war. Lebanon and Israel dispute their maritime borders into the Eastern Mediterranean, and clashed over whether the natural gas finds were actually in Israeli waters (the dispute was resolved in 2010, with Lebanon acknowledging Israeli sovereignty). Even if we take out bilateral relations with Israel, few of the states around the region are stable and well-functioning, and their international affairs have been overlooked in the years since the Arab Spring rocked their governments.

Into such a fraught atmosphere of geopolitical tension, security uncertainty, and economic unrest, the "bolt from the blue" of natural gas could help to cement peaceful relationships. Economically, it makes sense for Israel to export to its neighbors, and its neighbors show a strong economic demand for energy imports. However, economic interests do not always defeat domestic political interests.

While no one should expect that energy cooperation would be a source of peace, evidence is that it does reinforce peace. By neighboring countries cooperating on economic issues, it could create lasting relationships which will foster further cooperation on more difficult political issues.

Since the Arab Spring in 2011, domestic Egyptian politics has seen a series of fluctuations. Whereas the export of gas from Egypt to Israel along the Sinai pipeline was once a cornerstone of the 1979 peace treaty, attacks on the pipeline after the fall of Mubarak caused those to cease. Meanwhile, mismanagement, rising demand, and subsidies have ensured that Egypt now no longer has surplus gas to sell, even if security could be assured. Even though there is domestic political opposition to any relationship at all with Israel, the economic incentives can overcome short-sighted opposition: Egyptian firm Dolphinus Holdings signed a deal to import at least 5 billion cubic meters of gas from Israel to Egypt.⁸

Jordan, too, is a potential recipient of offshore gas. While there have been some significant public protests in Jordan, the benefits of cooperation appear to be overcoming protests. The Arab Potash Company and Jordan Bromine Company have signed deals to import Israeli gas to their companies on the Dead Sea.⁹

However, both Egypt and Jordan are also looking for alternative supplies of gas: markets, economics, and politics will determine how energy is supplied. It is clear, however, that the economic incentives of cooperation between Israel and its partners are overcoming the political obstacles to cooperation.

The Risks: Competition for Resources

Ironically, it is not the Israeli gas finds, but those in Cypriot waters, that are provoking the most active competition for resources. While there are few geopolitical rivalries as difficult to solve as the Israeli-Arab relationship, the ongoing rivalry between Cyprus and Turkey may rank as high. Turkey and the Turkish Republic of Northern Cyprus have claimed that the internationally-recognized government of Cyprus has no right to explore in its waters. Turkish military vessels have harassed vessels exploring for gas in Cypriot waters. In response, the Cypriot government suspended talks on a permanent peace settlement on the island.

These incidents are driving a naval buildup around the Eastern Mediterranean. Turkey has ordered sixteen new patrol vessels; Israel has spent \$16 million on four new patrol vessels specifically for protecting the offshore rigs. Cyprus, even in the face of dire fiscal challenges, has leased French frigates.

Even in this tense relationship there is the potential for economic incentives to overcome hostile politics. For decades, Turkey has held an ambition to become an energy transit country and an energy hub. Its natural geographic position at the strategic crossroads between



supply centers in the Middle East and Russia and demand centers in Europe make it a natural fit. In addition, Turkey claims to see development of energy in the region as a means of building economic prosperity: it is almost entirely reliant on foreign energy (importing roughly 98% of its consumed energy). Despite Turkey's harsh rhetoric on both Cyprus and Israel, private investment could drive economic ties before political ties are re-established. The offshore Cypriot reserves in the Aphrodite field are significantly less than Israeli reserves in Tamar and Leviathan, but the promise of cooperation remains.

The Risks: The Allure of Resource Populism

Since the natural gas finds were announced, domestic Israeli politics has been shaken by a series of massive public protests demanding social reform and action to reduce the cost of living. The Israeli populace has been actively debating the role of energy exploration, contracts, and exports since gas was found in 2009. In order for the potential of natural gas to be fully realized in economics, security, and geopolitics, the gas has to come out of the ground.

The energy industry has always been an industry built on risk and reward. Drilling for oil in deep offshore areas is even more risky than usual due to the expense and expertise required for offshore deep water exploration. Added risk comes from the stigma that would preclude a company and workers from doing business with Arab countries – still the center of global energy exploration – and the very real threat of being a target for terrorist attacks. Put all these together, and it is no wonder that energy exploration only began within the last decade.

For a consortium of companies to successfully negotiate all these risks and announce a series of significant finds was important. Almost immediately after, the Israeli political system then sought to change the terms of the deal. The Israeli government considered and changed the rules on royalties, on taxes, and on export licensing. What may have been most damaging was not that the rules were changed after the fact, but that the nature of the debate was so opaque and shifting that businesses cannot have confidence that the rules won't change again. Unless businesses know what the rules are and have confidence that they're not going to change, none of that potential can be realized.

The final challenge came in December, 2014 when the Anti-trust Authority reneged on a previously agreed Consent Decree allowing the Leviathan project to go forward. The Authority effectively declared the consortium a cartel that would control electricity prices, and therefore must be broken up. In response, all exploration and preparation in the Leviathan field was ceased. In the meantime, as the election season started up, no decisions could be made. Uncertainty threatened the very viability of the project.

Markets Haven't Waited for Israeli Politics

After the re-election of Netanyahu as Prime Minister in March, 2015 and the creation of a new coalition government composed largely of pro-gas ministers, a resolution may be at hand. Though this prompted the resignation of the Antitrust Commissioner, the program is moving forward. Critically, the details will allow for greater flexibility about exports. With these results, production could soon restart in the Leviathan field.

But there is no time to waste. Global and regional energy markets are changing quickly: oil prices collapsed in late 2014, and have remained lower than any time in the past five years. There is no global natural gas price, as

Oil and natural gas fields in the Eastern Mediterranean Region

TURKEY

SYRIA

Levant Basin

Levant Basin

Oil and Gas Fields

Regionation of international boundaries

Oil and Gas Fields

prices around the world are mostly separate markets, but a global rush to LNG exports from places like Australia, Qatar, Malaysia, and – soon – the United States, could saturate markets with new gas. Regionally, Egypt has recently signed a long term deal with Russia's Gazprom to provide LNG through 2020, and Jordan received its first shipment of LNG to its new import facility in Agaba.¹³

Turkey, another country sometimes mooted as a customer for Israeli gas, has entered into a new partnership with Russia to build the Turkish Stream pipeline across the Black Sea from Russia to Turkey. The Turkish government has expressed a desire to be a new gas hub for the region, and construction is under way on the Trans-Anatolian and Trans-Adriatic Pipelines to bring Azeri gas to Europe. Additionally, potential customers like Egypt and Jordan are attempting to reduce dependence on natural gas for electricity generation by investing heavily into renewable energy sources like solar and wind.

None of this means that customers will forsake Israeli gas, but it does mean that there is greater competition. Customers like the BG Group's LNG export facility in Egypt and the Jordanian Electric Power Company have signed letters of intent to import Israeli gas, and appear to continue to have interest in buying exported Israeli gas.

The American Interest

The United States has a vested interest in building a regionally integrated energy system around the Eastern Mediterranean. Partially this is simply direct self-interest: increased regional cooperation creates a better business environment for American businesses across all sectors, not just energy. Importantly, though, this is also about building peace and shared security.

When we look back at history, so often we see a straight line, where one event directly, clearly leads to another. This is a story that is yet untold. It could be a story of missed opportunities. It could be a story where opportunities are squandered by parochial interests. It could herald the beginning of increased integration and development. We see that there are threats, there are risks, and there are opportunities. Israel and its neighbors have an opportunity to build prosperity and peace. They must not squander it.

Endnotes

- 1. "Gas Discovery Already the Bright Spot in Israel's Economy" (Oil In Israel, 2009) http://www.oilinisrael.net/tag/tamar-1
- 2. Rafael Sandrea, "Global Natural Gas Reserves A Heuristic Viewpoint" (Dec. 16, 2005) http://www.ipc66.com/publications/global_natural_gas_reserves-a_heuristic_viewpoint.pdf
- 3. Schenk, C.J., Kirschbaum, M.A., Charpentier, R.R., Klett, T.R., Brownfield, M.E., Pitman, J.K., Cook, T.A., and Tennyson, M.E., 2010, "Assessment of undiscovered oil and gas resources of the Levant Basin Province," (Eastern Mediterranean: U.S. Geological Survey Fact Sheet 2010-3014, 4 p.), Available at http://pubs.usgs.gov/fs/2010/3014/pdf/FS10-3014.pdf
- 4. Xander Vagg, "Here Comes the Sun: Israel and Solar Energy" (American Security Project, 2013), http://www.americansecurityproject.org/here-comes-the-sun-israel-and-solar-energy/
- 5. EIA international Data Browser http://www.eia.gov/beta/international/data/browser
- 6. Ibid
- 7. Stuart Winer, "Electricity prices to drop 9.4% in 2015" (Times of Israel, 2014), http://www.timesofisrael.com/electricity-prices-to-drop-by-9-4-in-2015/
- 8. Lifen Tang, "Egypt's Dolphinus to buy \$1.2 bln of natgas from Israel's Tamar field" (Dealmakers Hub, 2015), http://dealmakershub.com/2015/03/18/egypts-dolphinus-to-buy-1-2-bln-of-natgas-from-israels-tamar-field/
- 9. Lifen Tang, "Tamar partners receive Israeli Government approval for gas export to Jordon" (Dealmakers Hub, 2015), http://dealmakershub.com/2015/04/02/tamar-partners-receive-israeli-government-approval-for-gas-export-to-jordan/
- 10. George Psyllides, "Turkish frigate harasses research vessel in EEZ (Updated)" (Cyprus Mail, 2014), http://cyprus-mail. com/2014/02/03/turkish-frigate-harasses-research-vessel-in-eez/
- 11. Hedy Cohen, "Regulators present Israel gas compromise to Delek, Noble" (Globes, 2015), http://www.globes.co.il/en/article-regulators-present-gas-compromise-to-delek-noble-1001035974
- 12. Sharon Udasin and Niv Elis, "Antitrust Commissioner David Gilo to resign in August amid gas disputes" (Jerusalem Post, 2015), http://www.jpost.com/Business-and-Innovation/Antitrust-Commissioner-David-Gilo-to-resign-in-August-amid-gas-disputes-404017
- 13. Abache Abreu, "Russia's Gazprom to supply Egypt with 35 LNG cargoes over 5 years" (Platts, 2015), http://www.platts.com/latest-news/natural-gas/singapore/russias-gazprom-to-supply-egypt-with-35-lng-cargoes-27218406

The American Security Project (ASP) is a nonpartisan organization created to educate the American public and the world about the changing nature of national security in the 21st Century.

Gone are the days when a nation's security could be measured by bombers and battleships. Security in this new era requires harnessing all of America's strengths: the force of our diplomacy; the might of our military; the vigor and competitiveness of our economy; and the power of our ideals.

We believe that America must lead in the pursuit of our common goals and shared security. We must confront international challenges with our partners and with all the tools at our disposal and address emerging problems before they become security crises. And to do this we must forge a bipartisan consensus here at home.

ASP brings together prominent American business leaders, former members of Congress, retired military flag officers, and prominent former government officials. ASP conducts research on a broad range of issues and engages and empowers the American public by taking its findings directly to them via events, traditional & new media, meetings, and publications.

We live in a time when the threats to our security are as complex and diverse as terrorism, nuclear proliferation, climate change, energy challenges, and our economic wellbeing. Partisan bickering and age old solutions simply won't solve our problems. America — and the world - needs an honest dialogue about security that is as robust as it is realistic.

ASP exists to promote that dialogue, to forge that consensus, and to spur constructive action so that America meets the challenges to its security while seizing the opportunities that abound.



www.americansecurityproject.org