

# Israel's Natural Gas Discovery: Five Possible Scenarios

Israel's recent discovery of huge natural gas reservoirs in its territorial waters of the Mediterranean Sea has released a gushing torrent of hyperbolic hopes, ambitious export and alliance-building plans, aggressive threats from envious neighbors, pious religious references to Biblical prophecy, and even some cautious suggestions.

The gas finds of Tamar, with an estimated 8.7 trillion cubic feet, and Leviathan, with 16 trillion cubic feet, belong to the massive Levant Basin Province field that might contain a total of 122 trillion cubic feet, according to a United States Geological Survey. Together, the two Israeli sites are twice as big as the British fields in the North Sea, with an estimated value of \$300 billion, enough gas for perhaps 50-70 years of domestic use. If technology proceeds without mishap, Tamar will be yielding its resource by 2012, Leviathan by 2015.

Israel has been starved for energy in this oil-rich corner of the world because Arab League neighbors refuse to export to the Jewish nation. Only Egypt supplies gas to Israel. Domestically, Israel's only gas source is small offshore reservoirs that are expected to tap out in 2012. To accommodate the gas lack, Israel has been burning coal, primarily imported from South Africa.

The Tamar and Leviathan gas discovery has instigated a wide variety of reactions from observers. Hezbollah is snarling that Israel wants to rob oil from Lebanese territorial waters. Greece and Cyprus have hosted high-level discussions on the topic with Israeli leaders. Noam Chomsky has opined that 2008's Operation Cast Lead was Israel's ploy to seize gas and oil fields off the Gaza coast. International pundits are offering reams of advice with at least one, Gal Luft of the Institute for the Analysis of Global Security, defining Tamar and Leviathan as a "world class game-changer."

Is this true? Will Tamar and Leviathan transform the geopolitical balance of the Middle East? If so, how? Forecasts are mixed. There are numerous celebrants, such as entrepreneur Yitzchak Teschova who invested in the research; he greeted the discovery by announcing, "Today is a holiday for every citizen in Israel. It's a day of joy." Counteracting this glee are dire jeremiad warnings and even some moderate voices. Below I have listed five possible future scenarios that are earning creditable attention:

**Sabotage.** In this violent narrative, Israel never acquires the gas due to terrorist interference. The security risk in bringing the gas up has elicited a warning from Tzachi Hengbi, the Chairman of the Knesset Foreign Affairs and Defense Committee, who believes gas rigs would become "a prime destination for attacks by terror groups." Hezbollah has 45,000 missiles and rockets that can be aimed at vulnerable, isolated gas-pumping platforms. Although its artillery was unreliable in the Gaza War two years ago, Hezbollah's new weaponry has long-range capability with vastly improved accuracy. Additionally, Hezbollah presents a serious naval menace with its submarine and navy commando units, trained by Iranians. Israel's own "Sea Corps" is not as heralded as its army and air force, but it is formidable and it has the recently developed "Protector" also known as the "Death Shark" - an unmanned, stealth speedboat that can shoot down anti-ship missiles and enemy aircraft. Worst-case scenarios of this worst-case scenario involve engagement of additional nations, perhaps Syria, Iran, or even Turkey - Israel's most recent unfriendly neighbor, largely due to nine Turkish deaths in the flotilla interception.

**Pipeline To Greece.** Israeli Prime Minister Benjamin Netanyahu has met with George Papandreou, Prime Minister of Greece, to discuss plans for a pipeline between the two nations - via Cyprus. Israel recently acquired "air space" permission from Greece for its air force drills, after it was suddenly denied fly rights over Turkey's vast geography. Gas might be next modern link between the two ancient civilizations. Europe would welcome Israeli gas merchants, because it is unhappy with its over-reliance on Russian energy. Particularly eager customers would be Italy and Greece. Two large drawbacks to this plan, however, are the immense expense of the huge enterprise, and the onerous side effect of enraging the Turks (again). Turkey has its own (highly-profitable) pipeline that is presently the sole bridge-to-Europe for Russian gas and oil, with the attendant lucrative income in transit fees.

**Pipeline to Turkey.** Israel had harmonious relations with the "moderate Muslim" Turks from 1996 until quite recently. The present government led by Prime Minister Recep Erdogan has become increasingly hostile to Israel, primarily because it has apparently abandoned the secularist stance that Mustafa Kemal constitutionalized in 1924. Turkey has recently moved closer to Iran and other Islamist nations, especially since its rejection for EU inclusion.

However, a significant (and intellectually persuasive) percentage of Turkey's electorate remains opposed to Erdogan's policies, and there's an election slated for June. Turkey's military - a strong secular force - also resents Erdogan's desire to weaken its power. If Erdogan is ousted, and Turkey returns to friendly relations with Israel, it would be far more affordable for Israel to "tap into" Turkey's present pipeline than to build a new one to Greece. But still, the cost would require at least \$4 billion to construct a deep-water pipeline that bypassed Israel's entrenched enemies in Lebanon and Syria.

A possible side customer in this direction would be Georgia, the Caucasus nation that was threatened by Russia in 2008's South Ossetian War. For its own self-interest, Georgia needs to cease its reliance on Russian energy.

**Liquefy for Asia.** The populous, industrial nations of East Asia - China, Japan, South Korea - are willing to pay handsome ransoms for liquefied gas. Israel could pipe its gas to Haifa, liquefy it there, and then transport it via a retrofitted 150 mile pipeline to the port of Eilat on the Red Sea, and from there to the Asian market.

An alluring bonus to this option would be the chance to help out India (Israel's "best friend" according to a recent poll, topping the USA by a 2% margin). India currently receives Iranian natural gas via a pipeline through Pakistan, but this lifeline via the interior of an enemy is obviously perilous. Israel and India already collaborate on space exploration, an energy alliance would further cement their relationship.

Drawback: This option is the most costly, due to complexities of the liquefaction process. It also demands that Israel compete with well-established players in the field, like Qatar, the largest exporter in the world.

**Domestic Use Only.** This is the cautious route, similar to wise kings storing grain surplus in silos to feed their populace in times of famine. Tsvi Bisk of the Center for Strategic Thinking is opposed to exporting the natural gas, plus he predicts far higher costs in building the pipeline, and considerable delays - his estimate is that optimal flow will not arrive until 2020. He forecasts difficulty in assembling the required labor force, and he anticipates environmental objections (a coral reef was recently discovered nearby). Appearing in agreement with Bisk is Paul Rivlin, senior research fellow at Tel Aviv University's Dayan Center. Rivlin believes the construction costs required for export "may be prohibitive" and he doubts that Israel "could become a significant exporter."

Even if only the final, most modest scenario unfolds, it will still significantly impact the tiny nation. Jobs for hundreds of engineers and workers will be created to build sea-to-land gas lines and a 500 kilometer network for domestic distribution. The gas will boost Israel's economic growth, it will lower Israel's energy costs by \$1 billion annually, it will be environmentally friendlier than coal, and the transition to gas will also include politically dramatic battles with trade unions and industry lobbies.

Israel's neighbors - Syria, Lebanon, Cyprus, will also seek to duplicate Israel's benefits by tapping into their own shares of the Levant Basin

Province. The entire Eastern Mediterranean stands to benefit if it doesn't immolate itself with the usual hatreds.

References:

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