## BULLETIN

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## Prospects for Gas Exports from Israel

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The discovery of huge natural gas deposits off the Israeli coast has initiated a debate about the future of the country's energy policy. The decision to export surplus gas involves the selection of strategic partners for this endeavour. In view of the limited possibilities of export to the Levant countries, Israel seeks to strengthen cooperation with Cyprus and Greece, which would allow the country to sell its gas to the European market. However, the inclusion of regional resources into the European gas import structure will require the EU's involvement in the establishment of appropriate infrastructure.

The Abundance of the Israeli Deposits. Despite being one of the most developed countries in the hydrocarbonrich Middle East, Israel, until recently, had not found significant reserves on its territory and was almost entirely dependent on energy resource imports. In 2000, the discovery of a natural gas field off the coast of Israel in the Levantine Basin marked the beginning of an economic and geopolitical transformation in the country.

Ten years after the inauguration of commercial production of gas from the first deposit, Mari-B (in 2004), the share of this resource in Israel's energy mix increased from near zero to about 20% and will certainly continue to grow. Two huge deposits, Tamar, discovered in 2009 and containing more than 250 bcm of gas, and Leviathan, discovered in 2010, which is estimated at 500 bcm, will go into production in 2018 and 2016, respectively. Furthermore, subsequent, smaller wells, such as Dalit, Dolphin or Karish, are being prepared for exploitation.

The question of the allocation of the newly discovered Israeli resources has recently been included in the key debates in the country. Israelis seek a balance between satisfying their own present and future energy needs and the export potential of the gas. The 2012 Tzemach Committee report recommended exports of 50% of Israel's gas resources, provided that domestic needs will be covered for the next 25 years (estimated at 450 bcm, almost as much as Leviathan alone). Taking into account the post-publication reaction from environmentalists and the public's concerns about Israel's energy security, the government of Prime Minister Benjamin Netanyahu, after consultation with the Supreme Court in October 2013, reduced the amount of exports to 40% of the reserves. According to the government, even with this drop, gas exports could still bring Israel nearly \$60 billion in profit over the next 20 years. The decision on the amount of gas that will be available for export is, however, only the first step in the process of making the Israeli resources available for sale to foreign markets.

Regional Obstacles to the Export Plan. The regional context of relations does not promise success for Israel's economic plans for the exploitation of the discovered deposits. Its turbulent relations with its neighbours mean that Israel will likely have problems selling gas to them. The first obstacle is Israel's unclear demarcation of its territorial waters and exclusive economic zone and, thus, the issue of the gas fields' ownership. Hezbollah claims Lebanon has part of the Leviathan field and promises to punish Israel for any interference with it (though the area, again, is not exactly specified). Similarly, there is still no consensus on Israel's maritime border with Egypt or with the Palestinian Authority. Israel therefore must conduct any gas drilling carefully so as not to exacerbate existing conflicts.

Moreover, Israel has encountered difficulties finding customers for its gas. The neighbouring Arab states, which are traditionally reluctant to trade with Israel, have focused on finding their own resources in the Levantine Basin. For example, Syria, which had already planned gas exploration licensing in its coastal waters before the civil war, announced in December 2013 the signing of a 25-year contract with Russian company Soyuzneftegaz. Also, Lebanon has preliminary estimates that speak of significant gas deposits, although the country has not yet decided to grant

permits for drilling. Thus, Israel not only has few prospects to sell gas to the Levantine countries but also perhaps will have to face export competition.

The lack of adequate gas transmission infrastructure caused by the political instability of the region may also hinder gas exports from Israel. Theoretically, the only existing interconnector, which until April 2012 served to send gas from Egypt to Israel, could be used for reverse flows. Cairo, however, has not taken up the option to buy the Israeli resources. Israel therefore is conducting talks with Turkey and Jordan about the construction of gas pipelines, nonetheless the agreement signed on 5 January 2014 with the Palestinian Authority on the 20-year supply of gas from the Leviathan field to the Jenin power plant, remains the only one concluded so far. The Israeli government is considering the development of transmission infrastructure in the Levant, but regional conflicts may deter foreign investors, which would be indispensable for such a project.

**Pragmatic Cooperation.** In view of the limited prospects for gas exports in the Levant, Israel is obliged to seek energy partners to the west. The choice of Cyprus and Greece is a sign of pragmatism and Israel's calculation of possible economic benefits. Cooperation with these countries has become possible thanks to the gas discoveries, even though until recently it was not obvious because of their divergent political interests—until 2010, Israel had held strong economic and military ties with Turkey, antagonising its relations with Cyprus, and in 2012, Cyprus and Greece recognised Palestine as a non-member observer state at the UN.

Israel wants to strengthen its cooperation with Cyprus as both countries face similar challenges arising from gas production. The gas fields discovered in 2011 off the coast of Cyprus (estimated at 100–170 bcm) greatly exceed the country's energy demand, which is met for now with imported oil. However, with Cyprus still mired in an economic crisis, gas exports, especially as LNG (liquefied natural gas), may prove to be too costly an undertaking. Despite assurances by the European Investment Bank of financing possibilities for the construction of an LNG terminal at Vasilikos, the profitability of an investment of nearly €9 billion is questionable. Therefore, Israel's involvement in a joint venture with Cyprus, including the use of the terminal for common export functions, could ensure the profitability of such a project.

Primarily, though, Israel wants to use Cyprus and Greece as distribution centres for its gas exports to the EU. In addition to the Cypriot terminal, Israel could co-finance the construction of a direct pipeline to Europe through Greece. The European direction of Israel's gas export plan has been confirmed by recent visits by Israeli officials to Eastern Mediterranean countries that plan to build LNG re-gasification terminals. Hence, Israeli gas liquefied in Vasilikos could be successfully sold to, for example, Bulgaria or Croatia. The proximity of the Suez Canal also allows those partners to even think about exporting LNG to Asian markets, in particular Japan.

Given the prospects for fruitful cooperation on energy issues with Cyprus and Greece, Israel has decided to go further. A tripartite agreement on the laying of an underwater electrical cable between Israel and Cyprus, and then farther, to Crete, thus connecting Israel to the European electricity grid, was signed in August 2013. Given the risks resulting from the region's instability, the states also decided to work together to protect their energy infrastructure in the Mediterranean, for example, by holding joint military exercises involving drilling platform security. The exchange of best practices in energy efficiency and protection of water resources are further dimensions of this enhanced energy partnership. Thus, this initially unlikely grouping of Israel, Cyprus and Greece has changed into one of the most important alliances in the Mediterranean.

**Recommendations.** It is estimated that by 2020 nearly 360 bcm of the 500 bcm of gas consumed annually in the EU will originate outside of the Member States' territory. Taking into account the need for the diversification of energy sources, the inclusion of Israeli gas into the European import structure (in terms of gas, currently dominated by Russia, Norway and Algeria, which together provide about 75% of the EU's total supply) can improve energy security and increase competition on the Union's gas market.

Whether the EU seizes this opportunity depends primarily on its involvement in the construction of the requisite infrastructure. In October 2013, the European Commission qualified the underwater electrical cable between Hadera, Vasilikos and Korakia, the offshore pipeline from Cyprus to the Greek mainland via Crete, and the LNG storage unit located on Cyprus as Projects of Common Interest. Those projects will therefore benefit from accelerated licensing procedures, improved regulatory conditions, and co-financing from the EU budget, which in turn can further increase the motivation of European energy companies to operate in the region. Such concrete actions, which are expected by Cyprus and Greece, will encourage the implementation of these costly projects.

The EU should also continue to support the development of LNG terminals on the north of the continent. Although for relatively short distances (up to 2,000 km) gas transmission by pipeline is cheaper than as LNG, liquefied natural gas exports to countries in the northern part of Europe (including, hypothetically, to the terminal in Świnoujście, Poland), may prove for Israel and Cyprus more cost effective than LNG exports to the southern EU countries.