GAS

Israel pushing ahead with gas plans

Israel's Tamar gas field production platform
Source: Albatross Photo Agency

The Israeli natural gas sector is undergoing significant expansion, with the country keen to progress plans to develop and commercially exploit new fields, reports *Joe Charlaff* in Jerusalem.

'This past year in energy has been the most dynamic year we have ever had,' said Dr Yuval Steinitz, Israel's Minister of Energy, speaking at the annual Energy & Business Convention, held in Tel Aviv in November 2016. At the event, he announced the beginning of Stage 2 of the government's gas plan, which 'allows for exploration of the sea for oil and natural gas in a competitive procedure for tenders', also noting that the plan was 'the first of its kind in Israel'. The opening of maritime zones for competitive bidders is expected to boost oil and natural gas exploration in Israel's exclusive offshore zone.

Steinitz provided details of the tender in which 24 new blocks were opened up for competition to energy companies across the globe. These first bid round blocks are sized up to 400 sq km each, and are located some 7 km to 150 km offshore. According to an Israeli Energy Ministry spokesperson, companies will need to submit proposals by 21 April 2017, with winners to be announced in July. 'There are a number of companies that are interested and we are working on attracting more,' said the official, who would not reveal the names of participants during the current round, which cover the as yet untapped Leviathan field and expand existing production on the Tamar field.

The Israeli government is also looking to exploit the untapped Karish and Tanin natural gas fields – announcing on 8 December 2016 that Energean Oil & Gas had secured rights to these fields from Delek Drilling and Avner Oil for $148mn.

The best chance

'The opening of the sea for natural gas and oil exploration is the best investment for Israel and its future. It is the best chance to increase the national resources bag for years to come,' commented Steinitz, a member of Prime Minister Benjamin Netanyahu's Likud party in the country's ruling coalition.

If exploration is successful, Israel's Energy Ministry wants a lot of gas pumped: 'We endorsed a plan for up to 16 production platforms,' announced Steinitz.

Independent research conducted for the Ministry by international consulting company Beicip-Franlab, has determined that there are additional resources of around 2,137bn cm of natural gas that are yet to be found in the marine region of Israel, along with 6.6bn barrels of oil. The Leviathan field has an estimated 620bn cm of gas, with the Karish and Tanin fields having an additional 55bn cm. Tamar has an estimated 282bn cm.

Reviewing the industry in Israel, Dr Amit Mor, a financial and strategic consultant, CEO and co-owner of Eco Energy, a logistic energy and financial consulting firm based in Herzliya, told conference delegates that the Tamar field, about 100 km offshore from Haifa, 1,600 metres below sea level, is connected via a 150-km pipeline to a gas processing platform located 20 km offshore southern Israel's coast. The field currently supplies gas, which provides 60% of Israel's electricity. This is expected to increase to 75%. The gas is of high quality, containing 99% methane. The field is operated by Noble Energy and Delek, with some smaller partners.

The current price of gas in Israel is around $5/mn Btu, lower than the price for most European consumers but higher than in the US, which is about $3. The field contains about 300bn cm of gas.

This expansion of supply has sparked a growth in distribution companies connecting to the national transmission grid to intermediate and smaller industries – factories, bakeries, hospitals, shopping malls and the industrial zones. In communities such as Jerusalem, which are cold in winter, households will be soon connected to the gas grid in a bid to boost heating.

The development of new fields will also strengthen the security of Israel's supply, said Mor: 'The [current] dependency on one gas source, the Tamar field, creates a major security strategic risk for the country,' he noted. In addition to power stations, all major industries are using this gas – for example, Israel Chemicals, which owns the Dead Sea Works; refineries in Haifa and Ashdod; a range of petrochemical companies; Hadera Paper; and the Nesher Israel Cement Enterprises, he said.

'The potential threat from Hamas is considerable because the gas treatment platform is also 20 km offshore from Gaza. Hamas launched several missiles during the last war,' Mar warned, also highlighting concerns about Lebanese militants Hezbollah obtaining Russian Yakhont missiles from the civil war in Syria.

Hassan Nasrallah, the head of Hezbollah, has declared that the Tamar platform is a 'sitting duck', noted Mor, but Israel's Defence Ministry has said it has protection measures against the missiles.

Moving beyond borders

Meanwhile, Yossi Abu, CEO of Delek subsidiaries Delek Drilling & Avner Oil & Gas Exploration, stressed that Israel's transmission system would enable the country to move gas beyond its borders in 2017. For example, Tamar recently signed an agreement with the Jordan Bromine Company, the Jordan-based Arab Potash Company and the Israel-based potash company Dead Sea Works to export gas from the Tamar field to Jordan. Once the gas is in Jordan, it will be fed into the Arab Gas Pipeline, which will enable exports to Egypt. 'We are at the stage where other export alternatives have opened up to us,' Abu stressed.

He said agreements are in place with the Jordanians and the Egyptians to facilitate such sales, noting that the pipeline already transmits gas from Jordan to Egypt via the Jordanian port of Aqaba, which is next to the Israeli resort of Eilat. Another option being explored is moving gas direct to Egypt across the border area of Kerem Shalom, which abuts Gaza.

'In terms of infrastructure of natural gas, we are talking about a few dozen kilometres of land pipelines, which is not very much in terms of infrastructure for natural gas, and there are immediate possibilities to create a regional market. [The] Leviathan [field] is considered an island of supply in an ocean of demand. We are talking about the local market, Jordan, a little in the Palestinian Authority and Egypt,' said Abu.

Looking to oil

As for oil, despite the discovery of reserves, Israel currently does not produce any significant amounts of crude oil – less than 1,000 b/d. It could use the oil though, given its consumption of around 250,000 b/d. Israel currently imports 75mn b/y, much from Azerbaijan via the Baku–Tbilisi–Ceyhan (BTC) pipeline to Turkey, and henceforth by tanker. The rest is imported from Russia in marine tankers to the petroleum port of Ashkelon. Petroleum products are refined at the Haifa and Ashdod refineries – 80% of output is used for transportation.

While Israel's Energy Ministry does not have detailed plans for boosting offshore oil production, it did stress in a note to *Petroleum Review*: 'We will be happy to allow companies to produce oil if they will find it offshore.'

Most of the petroleum is imported via infrastructure operated by the Eilat-Ashkelon Pipeline Company through Ashkelon via storage tanks and pipelines delivering oil to Ashdod and Haifa. The company's concession expires in March 2017. This may shake up operations considerably, as under the agreement's terms the company's properties and the oil ports in Eilat and Ashkelon enjoy extra-territorial rights independent of the Israel government. However, there is talk among Israeli energy experts that the concession may be extended by two to three years, before being converted to a standard operational licence.

As can maybe be expected, Iran and Israel have disputes over this agreement. Iran is claiming billions of dollars for loss of revenues and the Israeli government is suing Iran for interfering with the flow of oil in the facilities, diverting it for export. The case is currently under international arbitration.

Gideon Tadmor, formerly Chairman of Delek Drilling, and now owner and Chairman of the Navitas Group, told the conference that Israel's new exploration could free it of such problems: 'Opening the sea for exploration in the Mediterranean was necessary for renewing growth in this industry. Opening the offshore sites is necessary for renewing exploration in the Mediterranean.' He emphasised that given the state of the market, Israel needs to develop its oil reserves efficiently and make them attractive to oil and gas companies as operational prospects. 'We have to realise that the upstream industry in the world is at a unique point right now.'

Small companies that suffer from cash flow problems are having to sell assets, and that is keeping prices low, Tadmor noted. Majors are also assessing their reserves, redefining their core thresholds: 'Anything that is not part of the core programme can be sold, whether it's exploration, development or assets.' He warned that this could matter with a big, explored, yet untapped field such as Leviathan, which companies could regard as a chip to cash-in rather than a project to develop. 'We are in a buyers' market, which I expect to continue for the next few years,' he said. 'Publications talk about assets worth $200bn that are reported as assets on the shelf available for sale.' He added that the ability to sell such rights is becoming more attractive, given there has been a drastic decrease in the costs of services and facilities associated with oil production. 'We are negotiating for a project for offshore drilling that is equivalent in money in Israel to about $120mn,' he noted.

'In order to develop an active sector in oil and gas exploration we must realise that we live in a global world with global opportunities. We must be attractive to outside players and comparable to other opportunities around the world,' Tadmor concluded. ●

LNG regasification vessel off the coast of Israel
Source: Maya Etzioni