

## Lebanon: The Next Eastern Mediterranean Gas Province?

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Lebanon is the Levant's most recent candidate to launch an offshore bidding round, the first in the country's drive to become yet another gas province in the Eastern Mediterranean. Lebanon's waters are believed to hold significant hydrocarbon potential, for both natural gas and oil, making offshore Lebanon a potentially attractive location for gas explorers.

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A long-term energy importer, Lebanon's faltering economy could benefit tremendously from hydrocarbon wealth. Current plans are to import short-term LNG to replace oil in power generation, but the successful development of Lebanon's offshore resources could reverse this trend within less than a decade, turning Lebanon into a self-sufficient producer and a potential exporter of natural gas.

The development of gas projects across the Eastern Mediterranean faces a large number of geopolitical, regulatory, and commercial challenges which, if unresolved, would undermine the development of these resources altogether, let alone the export projects. Most of the Western media's focus has been on the geopolitical landscape surrounding the development of Lebanon's reserves. This is not surprising. The inter-state conflicts and rivalries that have for so long formed part of the region's geopolitical landscape have been revived, and in some cases intensified, by these recent exploration developments. However,

we believe that Lebanon's complex geopolitical landscape is likely to play a secondary role in the development of the country's natural gas resources. Instead, the pace of the development of gas reserves will be mainly driven by local political dynamics and energy policies.

### Delayed Take-off

Lebanon's history as a potential hydrocarbon province has been a relatively short one. While the first offshore studies were conducted back in 2006, the most likely impetus for Lebanese offshore plans can be linked to neighbouring Israel's offshore discovery of its 9 tcf Tamar field in 2009, followed by subsequent large discoveries amounting to some 35 tcf in Israeli and Cypriot waters. With some Israeli discoveries lying in immediate proximity to Lebanese waters, the prospects for Lebanon's own offshore resources suddenly seemed glaringly obvious. With no history of domestic oil and gas production, Lebanon has, since then, been very much at the beginning of its own industrial hydrocarbon development, which has yet to produce the country's own share in the Eastern Mediterranean's regional gas revolution.

Initial policy hurdles were overcome in August 2010 with the passing of Lebanon's long-awaited hydrocarbon law, which provides the basis for the establishment of a hydrocarbon industry and its institutional framework. After months of political infighting, the government eventually appointed Lebanon's Petroleum Administration (PA), a key committee constituted by the Offshore Hydrocarbons Law, in December 2012. The appointment of the PA paved the way for a prequalification round at the beginning of 2013, followed by the launch of Lebanon's first bidding round, for up to four offshore blocks, in May 2013.

Lebanon's prequalification round in early 2013 underlined the commercial attractiveness of the Lebanese offshore for international investors: some 50 international companies, including many of the region's sought-after IOCs, registered interest and 46 companies have now been qualified, including 12 operators. After lukewarm IOC interest in neighbouring offshore Israel and Cyprus – primarily attributed to their political sensitivity – this is positive news and, if initial interest is followed up by investment bids, it may help the prospective hydrocarbon producer monetize its yet unconfirmed hydrocarbon resources relatively rapidly.

### Elephant in the Room

Despite this year's successful prequalification round, the Lebanese timeline for the finalization of a fiscal system to guide investment into its hydrocarbon sector, and for the award of its first offshore blocks, is ambitious. With bidding expected to close in November, the government will need to issue a final investment framework (including a Model Exploration and Production Agreement and the Tender Protocol) binding on all parties no later than September this year. The decision on what terms to offer companies for their long-term investments is unlikely to be an easy task. A draft proposed scheme, reportedly combining production-sharing contracts with royalties paid to central government, was presented for consultation with bidding companies in May. Consultation will be followed by what is likely to be a painstaking task of responding to and discussing fiscal amendments, and obtaining approval by the different ministries involved. Before the Lebanese government issues a final binding decree, it also needs to approve the draft decree on block delineation,

which was submitted to the council of ministers before its resignation earlier in March this year.

Lebanon's political situation may yet complicate the next steps in the schedule considerably. The country's deep political and sectarian divisions, together with the fragility of the political system, have prevented successive governments from formulating a clear energy policy. The sectarian nature of Lebanon's political system has already delayed the formation of the PA, and hence the country's first bidding round, by more than a year. The six-member PA, now in charge of managing the country's emerging hydrocarbon sector, is composed of members of different religious groups – the result of a one-year drama around names and sectarian affiliations – reflecting the secondary role played by economic objectives behind Lebanese institutional appointments. While the formation of the Petroleum Administration last year was a welcome development, and the resignation of the government has not affected the PA's work so far, the highly uncertain and volatile political environment could delay the bidding round as all the laws and decrees require cabinet approval.

More fundamentally, the underlying political and institutional dynamics that delayed the bidding round in the first place are still in full swing: sectarian tensions, which have led to outright violence, have indeed intensified over recent months, partly in response to neighbouring Syria's gradual descent into sectarian civil war, with repercussions on its next-door neighbour Lebanon. With parliamentary elections now postponed from June this year until the end of 2014 due to rising security concerns, it remains unclear if Lebanon will have a functioning government and cabinet in place in time to review fiscal proposals and to issue the much-awaited fiscal law that will guide hydrocarbon exploration, by this September.

Yet another elephant in the room is Lebanon's historically plagued relations with neighbouring Israel, as part of the long-standing Arab–Israeli conflict. Of most immediate concern are overlapping Lebanese and Israeli maritime claims over a territory of some 854 square kilometres along the working line that has become the de facto border between

the two countries since the 1980s. Negotiations over the territory are unlikely any time soon given the continued status of de facto war with each other. Neither of the two parties has yet announced any suspected resource discovery that straddles the territory in question, a factor that has likely contributed to both sides' apparent lack of interest in an escalation of conflict over the issue, apart from occasional rhetorical attacks on both sides. However, the as yet unresolved issue has kept Lebanon from agreeing its maritime borders with third party Cyprus, which borders both Israel and Lebanon; and is likely to complicate future exploration and exploitation efforts of the disputed area, while rendering potential cooperation over infrastructure and trading routes between the two neighbouring states out of the question. Furthermore, although there have been various attempts to demarcate the maritime borders with Syria, very little has been achieved on that front.

### Lebanese Long-term Options

A key issue likely to face Lebanon in the future (post 2020) is whether it should pursue an aggressive export policy to monetize its potential gas reserves. Care needs to be taken, for the current debate surrounding Lebanese reserves-to-be is based on no confirmed numbers. Although not a single well has been drilled so far in Lebanon's EEZ, this has not prevented some politicians from throwing around some big numbers about the potential size of Lebanon's hydrocarbon resources. Caretaker Minister of Energy and Water, Jibril Basil, put Lebanese estimated reserves in May 2013 at 30 tcf of natural gas (around 850 bcm) and 660 million barrels of oil in its EEZ, hypothesizing that exports could begin in as little as four years. In August 2012 Spectrum, the Norwegian company in charge of Lebanon's first 3D seismic survey, estimated recoverable dry gas reserves for Phase I of its survey at 11.6 tcf, with an initial estimate of 25.4 tcf for both phases covering Lebanon's EEZ.

The basis upon which these estimates have been derived is not clear, and Spectrum has since been criticized for what some observers have called highly speculative estimates for Lebanon's

offshore reserves. More can be said about the credibility of the numbers suggested by Lebanon's Ministry of Energy and Water, though perhaps the extent to which the ministries' own reserve estimates reflect reality does not matter in a country where there is low trust in politicians' statements anyway. Statements such as that by Jibril Basil, however, reveal the extent of the hype in this resource-poor country and the desire to be part of the 'small gas revolution' currently being experienced in Israel and Cyprus, the two Eastern Mediterranean countries with the most advanced plans in offshore gas exploration.

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If and when offshore work confirms commercially recoverable offshore resources in Lebanon, the balance between the use of gas to meet domestic demand and for export purposes will ultimately determine the companies' profitability, together with their incentive to develop the reserve base. Meeting domestic demand, especially in the power sector, should assume top priority in government policy. But this requires that Lebanon has a clear policy regarding the pricing of gas for the domestic market, which is potentially a contentious issue in negotiations between government and companies. Furthermore, since gas demand is strongly interlinked with the evolution of electricity demand, it is essential that the government embark on the reform of the power sector and electricity prices. The challenge is grave. Électricité du Liban (EdL) suffers from huge financial and operating losses, which constitute between 20 per cent and 25 per cent of the government's primary expenditure. EdL also suffers from chronic underinvestment, which has so far prevented it from modernizing its grid and expanding power generation capacity. In addition, increasing the penetration of gas in the power mix requires heavy investment in the gas

grid, including the planned project to build a coastal gas pipeline from the north to the south of the country. This project has faced many hurdles in the past, and there is always the risk that gas could start flowing from offshore fields without the government putting in place the necessary infrastructure to move it around onshore.

The most likely outcome for Lebanon is the adoption of a balanced approach between meeting domestic demand and allowing companies to export. Gas demand is estimated to reach 2.6 bcm in 2020, increasing to almost 4 bcm by 2030. If the discoveries are large enough, there will be plenty of gas to meet both domestic and export requirements by the middle of the next decade. But this raises another set of questions: Should Lebanon aim at directing its exports towards regional markets by pipelines, or should it invest in the more expensive liquefaction facilities? Ultimately, the complex geopolitical landscape will impact Lebanon's choices over possible monetization options and hence will be pivotal in determining the future direction of gas trade flows. The long-term border conflicts across the region serve as impediments to the realization of synergies and the optimization of resource development. However, Lebanon is in a better position than its neighbours as it has more options – such as pipeline gas exports either to Turkey through Syria or to Jordan and Egypt through the Arab Gas Pipeline – to monetize its reserves in the long term.

It is important to stress that while there is much hype about Lebanon's gas potential, the country is not expected to produce any natural gas by 2020 and

thus it will have to import all of its gas requirements in the short to medium term if it is to achieve its ambitious objective of increasing the share of natural gas in power generation. Due to rising demand in their own markets and limited potential to expand supply, pipeline gas from Syria and Egypt is unlikely to be forthcoming any time soon, at least not in large quantities. Recently, Iran and Lebanon agreed to build a gas pipeline through Iraq and Syria to supply Iranian gas for Lebanon's power plants. This project, however, is unlikely to materialize due to a number of factors, which include: instability in Syria, sharp political divisions within Lebanon regarding the role of Iran in the country, the financial sanctions on Iran that limit the options for financing the project, and the limited availability of Iranian gas for export.

Thus, Lebanon faces little choice over the short term but to rely on LNG imports. The question then is: should Lebanon wait until gas reserves are brought on stream, and in the meantime continue to rely on expensive liquids to fuel its power sector, or should it pursue the LNG option? While LNG imports are likely to be less costly than liquids, especially at currently high international oil prices, the infrastructure cost of switching fuels could be high.

### **An Uneasy Road Ahead**

The road towards Lebanon becoming a gas producer is very long and it is still very early for the government and politicians to start planning on how to spend the gas revenues. In the next few years, the government will be confronted

with many complex decisions. Like other countries, Lebanon will realize sooner rather than later that the key challenges to be faced in developing its hydrocarbon reserve base will probably not be found underground, in the form of resource and technological constraints, but above ground, in formulation of a gas promoting national legislative and fiscal policy, appropriate and effective institutional structures, and the management of gas revenues.

In the current context of political polarization, the regulatory environment is likely to be highly volatile and key policy decisions (and their implementation) are likely to be subject to constant delays. The Energy Ministry has promised 'full transparency in the evaluation process through the bidding round', but given the weak institutions, the lack of a clear governance structure, and the absence of accountability, it is doubtful whether such transparency will ever be achieved, especially in an industry where the size of the rents can be very large and the competition for rents fierce. Also, if Lebanon is to meet its ambitious target of joining the family of gas producing countries soon, it has to overhaul its general business practices – including the processes of obtaining permits and customs and security clearance. These measures are essential to shelter the gas industry from the corruption and red tape that currently characterize Lebanon's business environment.

The way Lebanon deals with these above ground challenges will determine whether the promised 'gas revolution' will ever materialize and whether it will prove to be a revolution for the country as a whole or just for the privileged few. ■