

Lebanon's petroleum future: What comes next?

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No oil or gas have been discovered in Lebanon. Listening to some politicians, you'd think we were on the cusp of becoming the next Qatar. All we have today are seismic surveys that show subsea formations consistent with the presence of petroleum. We also know that our neighbors have made discoveries of their own. The signs are positive, but we won't know what's down there until wells are drilled. That process is expected to begin this month, but it may be 10 years before any petroleum is sold.

That's to say, petroleum will not solve Lebanon's current crisis. It would be irresponsible to pin our hopes on a pipe(line) dream.

I'm not all pessimist though. I think we have a good chance striking gold, err gas and oil. But the road to becoming a petroleum exporter is long and fraught with challenges.

Most of our reserves are likely to be in the form of natural gas. Early estimates suggest we may discover around 25 trillion cubic feet (100 tcf if caretaker Foreign Minister Gebran Bassil is to be believed, which he is not to be). Again, it could be zero. For context, fully developing a 25 tcf reservoir is a more than \$30 billion endeavor. That means convincing investors to sink more than \$30 billion in hopes of earning a return over 20 plus years. We don't know what will happen in Lebanon tomorrow let alone in 20 years.

So far, the government has licensed two of 10 blocks. Blocks are geographical areas that are licensed separately. The chances of making a discovery from the first exploration well is low. There is also no guarantee that gas reserves, should they exist, are located in the licensed blocks. That's why it's critical for the government to license the remaining blocks so that exploration can begin there. It could take more than a year to map out the resource. We also have not delineated maritime borders with Cyprus, Syria and Israel.

Once a decent sized reservoir is discovered and any border issues are resolved, the real work begins. The "right holders" (i.e., the licensors: Total, Eni and Novatek for the two licensed blocks) will undertake environmental and social impact studies and a Front End Engineering Design study to determine how the gas will be extracted. Then, they will prepare a "development plan" for approval by the Cabinet (if we have one at the time). Identifying and preparing onshore or offshore project sites could be complicated by environmental, social and political factors.

Once engineering/design is complete, the right holders will request bids for construction, seek gas buyers (unless Total purchases some or all of the gas as it has done on other of its projects) and approach financing institutions. Will buyers commit to purchasing gas from a politically unstable country for the 10-plus-year terms banks require? The Yemen LNG project, operated by Total, has been shuttered for years because of civil war. Gas buyers make long-term supply plans that don't jive with the chaos to which we're accustomed. Buyers have many other options. Depending on the project size and marketing plan, finding buyers could take some time.

Gas buyers often bring financing. For example, if Tokyo Gas was a buyer, JBIC, a Japanese government lender, wouldn't be far behind with a loan. Depending on the project's size, financing from many sources may be required. If the gas isn't marketed optimally, it may be difficult to finance a large project. There are other financing-related challenges.

As many have pointed out, the government waived its right to participate as a co-investor alongside the right holders in the two licensed blocks. By participating, through a state-owned gas company for example, the government would be directly involved in project development, gain technical know-how and share in profits. It's unclear why the government opted not to participate, but the decision might shed light on some looming challenges should it decide to participate in the future.

Needless to say, the state-owned company may become an abyss of corruption with endless political bickering over its formation and management causing long delays in the development of any gas project.

The government is also broke, you may have heard. To cover its share of exploration/development costs, the state-owned company could negotiate a "carry agreement" with the other right holders under which they would fund its share via a "carry loan." That loan is then repaid using the company's share of future profits (with interest, of course). This is a complex agreement to negotiate. How large is the government's participation? What is the (likely high) interest rate? On what terms is it repaid?

Separately, the right holders will likely arrange project finance loans to finance most of the construction costs. These loans are repaid from future project revenue. However, in a typical project financing, before the project is complete and performing as designed, right holders are on the hook for the loan (up to 70 percent of a project's costs could be funded with debt). The decision by other right holders to guarantee the state-owned company's share will depend on several factors and is unlikely for a large project.

If other right holders don't guarantee the company's share, the government must do so, potentially increasing its already high debt-to-GDP ratio and impairing its ability to borrow and fund its deficit. In the event of a Eurobond restructuring, the government's relationship with international lenders would already be strained. If Lebanon becomes an IMF program country, IMF signoff would be needed for any government borrowing/guarantees. While the IMF looks favorably on "productive borrowing," these sorts of complications cause delays.

Finally, Lebanon's Eurobonds prevent the government from borrowing some types of secured financing (i.e., backed by collateral) without any exception for debt used to finance the construction/acquisition of property, which is a common exception in other Eurobonds.

This could constrain the government's ability to participate as a right holder (and to build the infrastructure necessary for domestic gas use) by limiting the type of debt it can borrow.

These challenges, while not insurmountable (other countries have faced worse), may impact the government's decision or ability to participate as a right holder and cause delays and controversy. With billions of dollars in potential future profits at stake, the government must clarify its plans for future licenses, explain its decision not to participate in the first two licenses and confirm whether it sought to retain an option to participate in the two licensed blocks. In this context, arranging financing could take longer than a year.

Only after these issues are resolved will construction begin. Construction could take three to six years. It may be 10 years before the government sees a lira from gas sales. Fortunately, the tax rules agreed between the government and the right holders for the two blocks are reasonable. Early analysis shows direct tax revenue over a 30-year period could equal more than \$50 billion under today's gas prices for a 17 tcf discovery. Not bad but not enough to fundamentally change the country.

But we don't have to wait 10 years to benefit from the employment and business opportunities created by the construction itself. Unfortunately for the private generator owners, I suspect the construction contractors will bring their own generators.

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