The ABC of Oil and Gas in Lebanon

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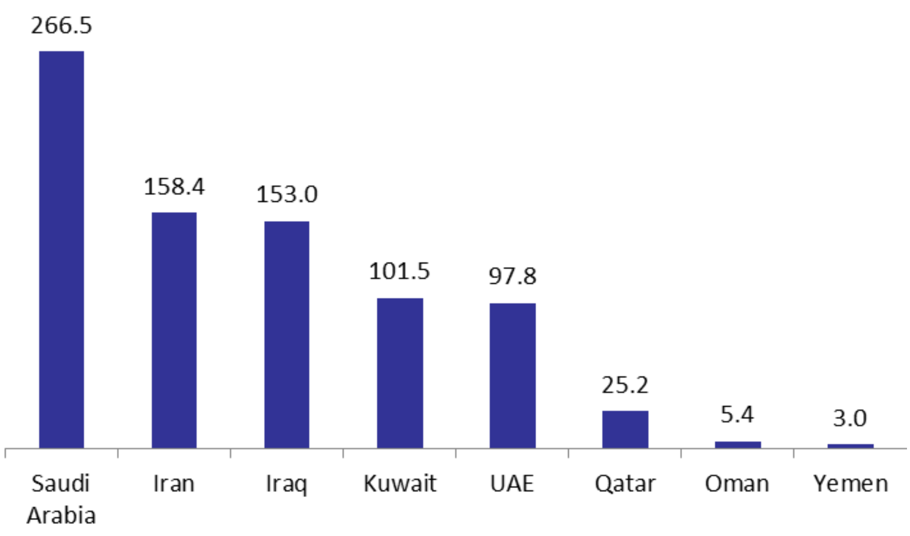
How much oil and gas?

In 2010, the US Geological Survey estimated large undiscovered oil and gas reserves in the eastern Mediterranean region. The area in question, the Levant Basin Province delineated by Turkey in the North and Egypt in the South, may hold a mean of 1.7 billion barrels of oil and a mean of 122 trillion cubic feet of gas, both recoverable.

Oil Reserves by Country - 2016 – Billions of Barrels



Source: BP Energy Charting Tool

What's in it for Lebanon?

Lebanon's geographical position will turn out advantageous since the geological survey implies that Lebanon may have oil and gas as well. Revenues from oil and gas can potentially spur Lebanon's economic growth which has been chained within the range of 1% and 2% since 2011 on account of spillovers from the Syrian crisis and the local political deadlock. Judicially exploiting oil and gas reserves can also help Lebanon invest in its chronically weak infrastructure and put its debt on a more sustainable path. The oil and gas industry also has the potential to create jobs Lebanon desperately needs; According to the World Bank, 1 out of 3 youth is unemployed in Lebanon and the country would need to create 23,000 jobs per year in order to meet the demand of job seekers.

Lebanon is well positioned to export natural gas to neighboring countries. According to the Lebanese Petroleum Administration (LPA), Lebanon can benefit from two export options; it can export oil and gas to Syria, Jordan and Egypt since it is connected to the Arab Gas Pipeline and it can also export to Turkey through an onshore or offshore pipeline. As for Liquefied Natural Gas, the LPA notes that "depending on the size of the discoveries made, Lebanon may use the existing or planned LNG plants in Lebanon or the region to supply European and Asian Markets". Exporting gas can help Lebanon narrow its chronic trade deficit which reached $13.21 billion by October 2017.

Potential oil and gas resources can enable Lebanon to become energetically independent. According to the Lebanese customs, imports of mineral products amounted to $2.95 billion by October 2017, constituting a share of 23.44% of total imports and as such were the single largest category in terms of imported value. Having its own oil and gas resources can spare Lebanon not only the energy import bill but can also help the country improve its electricity infrastructure and avoid the many power outages the country suffers from.

Oil and gas resources will generate much needed foreign currency inflows into Lebanon. Since 2011, Lebanon's Balance of Payments has been in the red due to a decline in foreign direct investments and a negative trade balance. Exporting oil and gas as well as the foreign direct investments that this wealth might generate have the potential to turn the Balance of Payment's deficit into a surplus.

More importantly, the Lebanese Pound's peg to the dollar shields Lebanon from the so called "Dutch Disease". The Dutch Disease refers to any event that gives rise to a heavy influx of foreign currency and that leads to a strong appreciation of the local currency and a drop in the competitiveness of local products on export markets. The oil and gas revenues can however create higher inflation but that can be prevented by the intervention of the Central Bank.

How long?

Lebanon's oil and gas dossier has been around since the 1930s. In fact, the first oil legislation for oil exploration dates back to the 1930s at the time of the French mandate after which 5 rounds of exploratory drilling took place over the years until 1963. The detailed timeline published by the Lebanese Oil and Gas Initiative (LOGI) shows that no round was successful, with the 1938 exploratory drilling suspended due to war and the others ending in inconclusive results. The years that followed were mired in maritime boundary disputes, regional discoveries, lengthy legislation and delayed bidding rounds.

What's new?

In December 2017, the Lebanese government finally approved a bid presented by a consortium of three companies to start oil and gas exploration. After long years of delay due to political deadlock, the French Total (40% of the consortium), the Italian ENI (40% of the consortium) and the Russian Novatek (20% of the consortium) have been granted exclusive licenses to start the exploration of oil and gas in Lebanon. The real exploration, expected in 2019, will only start after the Exploration and Production Agreement (EPA) is signed in early 2018.

What is the process?

The Lebanese government and the consortium will engage in a production-sharing agreement. In practical terms, the consortium will explore oil and gas in two out of ten maritime blocks (4 and 9) for a period of 5 years, extendable, and the profits are to be shared between the consortium and the state. According to the LPA, the "Right Holders" (the companies that sign the EPA) first pay royalties to the state, amounting to 4% of the gas produced and between 5% and 12% of the oil produced, depending on the number of barrels produced per day. The petroleum left after royalties have been paid is called "disposable petroleum". The disposable petroleum is then divided into "cost petroleum" which refers to the percentage of the oil produced allocated to the right holders to reimburse their costs and into "profit petroleum" which is shared by the government and the contractor. The right holders pay all Lebanese taxes to the state and the state's share increases after the right holders recover their investment. During this process, priority is given to Lebanese goods and services and a minimum of 80% of employees must be of Lebanese nationality.

Royalties Due for Crude Oil

Production Rate (Barrels / Day)	Royalty Rate
0 to 15,000	5%
15,001 to 25,000	6%
25,001 to 50,000	7%
50,001 to 75,000	8%
75,001 to 100,000	10%
Above 100,000	12%

Source: LPA, EPA Decree

Precautions

Although the approval of the bid is an important, overdue step, but it will take more than 7 years for the first commercial extraction of oil and gas. The LOGI, provider of this figure, explains that the licensing will take 1 year and exploration will take up to 4 to 6 years. Moreover, once the exploration is over, it will take 1 to 2 years to determine the characteristics of the reservoir and the properties of the discovered oil or gas. The next step will span over a period of 1 to 3 years and consists of the construction of the well and the development of the drilling. Finally, the first drop of oil and gas can be commercially extracted and extraction can last from 10 to 30 years.

Ensuring transparency in the lucrative energy dossier requires a clear definition of all the stakeholders and their functions. According to LOGI, the legislative authority is held by the **Lebanese Parliament** which is in charge of approving petroleum related laws and overseeing the council of ministers. The ministries involved are the **Ministry of Energy and Water**, Finance, Environment, Labor, Public Health, Defense, Interior and Public Works and Transport. The Ministry of Energy and Water implements policies, supervises petroleum operations and is in charge of environmental protection. **The Lebanese Petroleum Administration** is part of the supervisory authority of the Ministry of Energy and Water and assumes technical, regulatory, and advisory functions.

A sound management of the oil and gas resources inevitably goes through a sound management and preservation of the ensuing profits. Lebanon is looking at the Norwegian sovereign wealth fund which is now the biggest in the world with a value of $1 trillion. This is undoubtedly beneficial for Lebanon as we can draw on the experience and best practices in the management of a sovereign wealth fund that has been around for over two decades. Given the large size of the fund, Norway is currently considering shifting its management away from the Central Bank. The management of the sovereign wealth fund is an issue Lebanon should contemplate from the beginning. Having the Central Bank manage the fund at first, as opposed to creating a separate entity, can be a less-costly option since the Central Bank is already managing its $40 billion worth of foreign assets.

However, Lebanon must not regard its potential resource wealth as a free-pass from a serious enacting of reforms. Once revenues from oil start pouring in, it might be tempting to use our potential resources as a short-term pain relief from our many structural weaknesses. However, the only way to ensure that oil and gas are a blessing for generations to come is to judicially manage them in a backdrop where economic fragilities are tackled at the root.

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