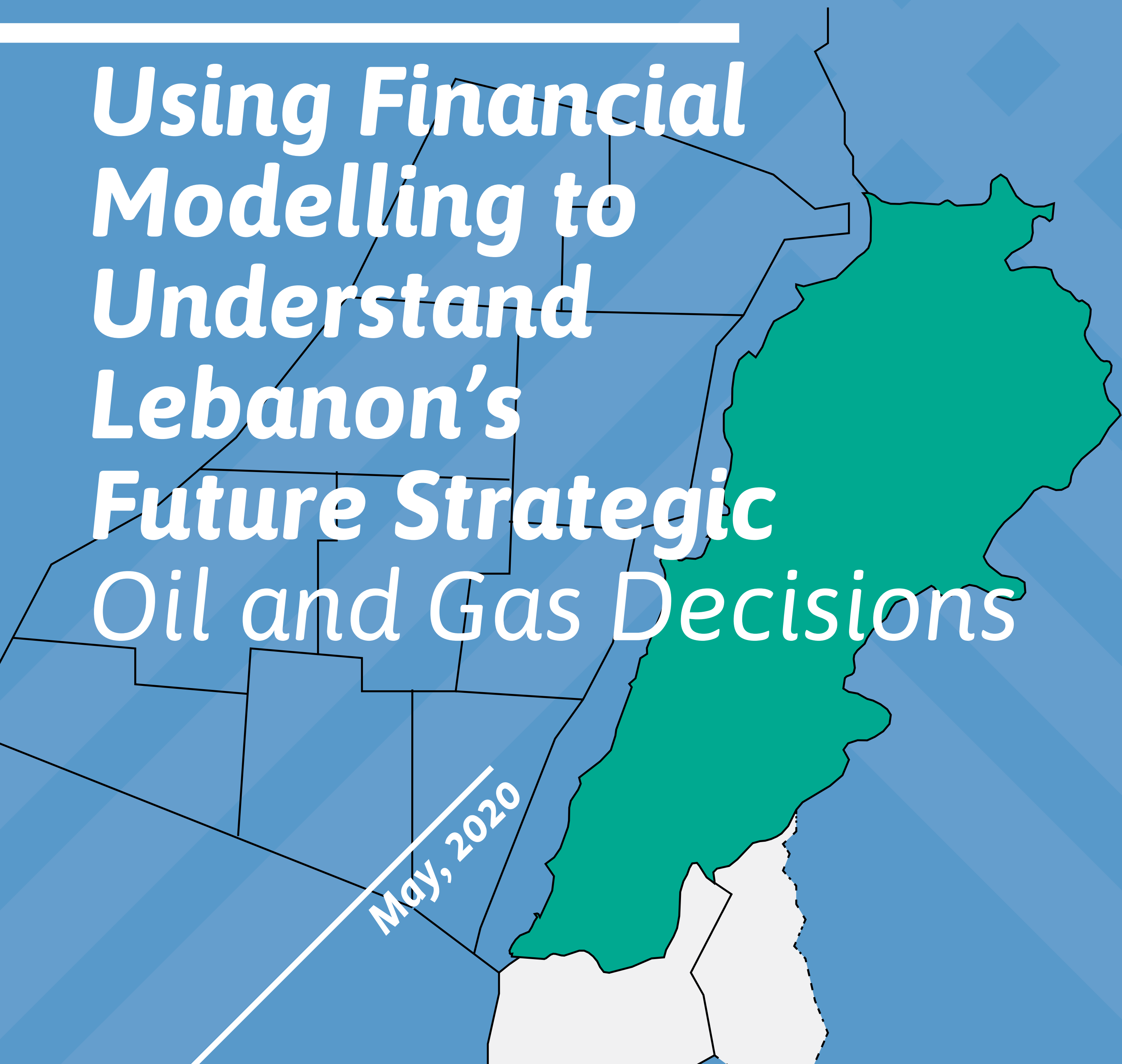
Lebanese Oil & Gas Initiative

المبادرة اللبنانية للنفط والغاز

Using Financial Modelling to Understand Lebanon's Future Strategic Oil and Gas Decisions



May, 2020

Disclaimer:

This model developed for LOGI and Kulluna Irada by OpenOil in cooperation with the Heinrich Boell Foundation, Beirut Office (HBS), and is meant to be used to help citizens assess the fiscal terms included in the Exploration and Production Agreements for 1st and 2nd licensing rounds.

Any conclusions, recommendations developed by citizens from using this model, reflect his/her opinion(s) and do not represent LOGI and HBS's positions.

LOGI's recommendations are expressed in the policy brief developed by LOGI and based on the findings presented by Open Oil in the following narrative published by them.

Commissioned by:
Lebanese Oil and Gas Initiative (LOGI) and Kulluna Irada (KI)

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What has been done?

In 2017 LOGI reviewed the legislative framework surrounding the oil and gas sector in Lebanon. One of its core recommendations was addressed to the Lebanese government and Minister of Energy and Water asking them to disclosure all oil and gas related contracts. In March 2018, the Minister of Energy and Water, published Lebanon's first signed Exploration and Production Agreements, making Lebanon the first East Med country to do so and the 27th country (back then) around the world to have full contract disclosure.

To follow up on this important transparency milestone, LOGI in collaboration with Kulluna Irada and in partnership with the Heinrich Boel Stiftung-Middle East worked with Open Oil, to develop a financial model based on the disclosed EPAs. The purpose was to develop a tool that will help us assess the deal Lebanon has signed with the consortium of 3 international oil companies, Total, Eni, and Novatek. Additionally, the model would also help us draw different scenarios upon which several policy options could be anchored.

In May 2020, Open Oil completed the development of the model and drafted a technical narrative portraying a financial analysis of the potential of the sector.

Based on these findings and the latest developments brought about by the COVID-19 outbreak and its spill over on the global economy, the disappointing results of Block 4 exploration, and the collapse of oil and gas prices, we would like to share the following insights, conclusions and possible options:

Did Lebanon sign a fair deal with the Consortium for the 1st licensing round?

The deal was fair: The model shows an average government take (undiscounted) of 56% across Blocks 4 and 9. This falls in the middle of the curve of government take metrics for similar circumstances.

Impact of Oil & Gas Discoveries on Lebanon's Economy:

• At this point in time, we are not sure of what we might discover. A number of geopolitical, and economic factors will affect Lebanon's trajectory and shape the development of its oil and gas sector. Following the most positive scenario, if Lebanon discovers and develops a large oil and gas field similar in size to Israel's Leviathan Field (16 TCF), and were able to develop all its reserves, then in the model's base scenario Lebanon's share of revenue would be in a range of $6.1billion, expressed in today's money (Assuming $6 per MBTU through life of project in real terms). At best, these revenues will not contribute to more than 8-14% of GDP (2019 GDP of $54 bn used for comparison). If we are to use the Lebanese Ministry of Finance disclosed number for Lebanon's public debt of $80 bn, which is highly contested currently by several International Financial Institutions, then $6.1 billion in revenues will not amount to more than 7.62% of the proclaimed public debt. However, because of both short-term and structural changes in the global gas market it is not clear that reserves of this size could be developed commercially. Following a bleaker scenario, if Lebanon discovers and develops a commercially viable medium sized oil and gas field similar in size to Cyprus's Aphrodite Field (4.5TCF), then Lebanon's share of revenue would be around $1.7 billion in today's money (Assuming $6 per MBTU through life of project in real terms).

• Oil and Gas will not solve Lebanon's current economic crisis. It should not be the main pillar of an economic rescue plan or strategy, but it could however act as a potential pillar for future economic expansion. It could contribute to alleviating power supply shortages/crisis through the domestic use of produced gas, thus reducing external commodity dependence and subsequently enhancing macro-economic growth.

• If used domestically, switching the majority of electricity generation from imported fuel oil to domestically produced natural gas would have the potential to make efficiency gains of billions of dollars a year in the Lebanese economy as a whole, and to improve significantly public finances long-term if it were used to drive energy liberalisation policy and the end of state subsidies. Further research is needed on both of these aspects.

Re-Assessing Lebanon's O&G Strategic Options: Export or Use Domestically?

1. At this stage, everything is speculative. The most positive scenario indicates that the oil and gas sector is not game changer at this stage. With the latest global economic developments due to COVID-19 and crashing oil and gas prices, Lebanon's natural gas export options to international markets need to be revisited. Research into the different strategic options of using oil and gas produced is needed.

2. International Oil Companies may exhibit reluctance and lose interest in bidding if Lebanon moves towards the internal use option. Two main reasons for this potential loss of interest is:

- The financial opportunity would prove less attractive to them, unless they locked in long-term price guarantees they placed confidence in. If large enough discoveries are made, Lebanon could potentially adopt a dual strategy of locking in the national market as prime customer, but exporting surplus.

- The security of payments: With their future main customer, EDL, which is owned by the State of Lebanon, bankrupt, what would be the State's ability to redress the situation if EDL decides not to pay the month, quarter or year? The companies will be investing billions of dollars in developing the field.

3. As a rule, there is no guarantee of any export market at any time. However, if the current status of the global markets changes, then developing the national project (domestic use) using an LNG option, may lead to further incremental development (depending on global market appetite) of an export program. This will occur in addition to the national supply program.

4. Today, in light of the current economic developments, and the grim geopolitical prospects regarding exporting through a pipeline to Europe, the LNG option may offer a more flexible attachment that support either/ both domestic use and export options. With plans currently and have been for some time on the table for EDL to develop an LNG regasification unit, the LNG option may be a viable national option.

5. Difficult choices await the government as bidders for the 2nd licensing round are more prone to bid lower than they did for the 1st licensing round. International Oil companies will need guarantees of being paid international rates on national markets especially if plans to install LNG regasification units (FSRU) for the power grid move forward.

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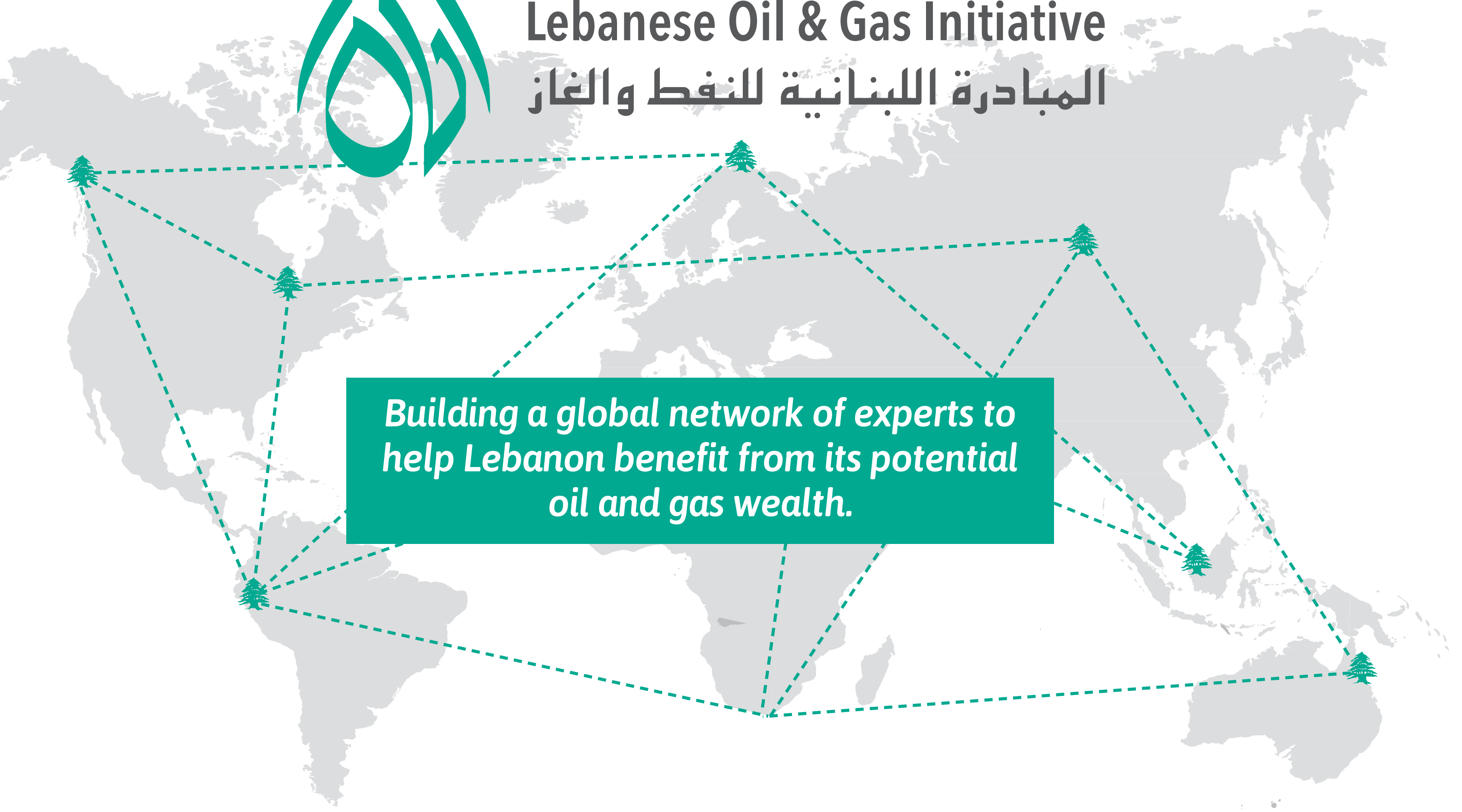

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