Africa's Oil and Gas Sector: Positioning for the Future

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Panellists
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Africa's proven oil reserves are at 129 billion barrels and natural gas proven reserves are 35% higher than those in the U.S. Although Africa's proven oil and gas reserves have increased, production has not grown in the same proportion. The continent still has a huge potential for unexploited oil and gas production. What can Africa do to unlock its massive potential and how can Singapore facilitate and anticipate this process?

Key Learning 1: Mozambique has massive gas reserves

- **More experienced operators are needed**: There are some concerns regarding the capability of the operators of the natural gas blocks in Mozambique to develop the whole potential of its gas reserves. The venture, which is currently headed by Eni and Anadarko, will require a large amount of money. The view of the panellist is that other major players, like Exxon or Shell, with more extensive knowledge in natural gas exploration and with deeper pockets, should join the group and engage in the development of the gas fields.
- **Local government's early spending vs. bureaucratic investment process**: As a project with enormous revenue potential, Mozambique's government may start spending before the project begins production. On the other hand, the government does not have a friendly process framework that allows for fast decisions and facilitates the project development. The timing for a project to be developed is crucial since oil and gas prices, as other commodities, are market driven. The project may end up cancelled if the market is not favourable.
- **Mozambique's location is very advantageous**: Mozambique is located in proximity to Asia, which is a growing market for liquid natural gas (LNG). In fact, the reserves in Mozambique are so large that there is enough gas to serve the Asian market and to be used in Africa and erase its energy deficit.

Key Learning 2: Tanzania challenge

- **Lack of legal framework**: Tanzania also has large and attractive gas reserves. However, investments in the country have been delayed as it lacks a legal framework that dictates the rules and conditions on how the gas developments should be implemented. The country does not have previous experience dealing with a major gas project, which makes the process of developing the currently discovery more complicated and risky for foreign investors. Tanzania, differently from Mozambique, has strong partners – Shell, Statoil and Exxon – with good track record in gas exploration. But the question remains: can the government organize itself and work together with these companies to reach the next development stage?

Key Learning 3: Oil exploration in South Africa

- **West coast offshore blocks near Namibia**: 1000 km^2 area, with reserves of crude oil, condensate and gas. It will be the first time in South African history that indigenous crude was found.
- **Shale gas in the semi-arid Karoo Basin**: the region is believed to have 390 trillion cubic feet (Tcf) of recoverable gas reserves, being the 5th largest gas reserve in the world. If only 5% of this is brought to production, it will reflect into 300,000 sustainable jobs in the whole gas production and market value chain, adding USD 8 billion in government revenue and a GDP growth of 3.3%. However, after 6 years, an exploration license is still to be issued.
- **The benefits of partnering with private companies**: South Africa lacks the large monetary resources and technical skills necessary to explore to full potential of its indigenous reserves. Partnering with private companies that are willing to invest in the country is crucial to the development of this potential. This will address the three things that keep the South African government and most of its population awake at night: the stubborn levels of unemployment, increasing levels of poverty and growing inequality.
- **Bringing LNG into South Africa**: although South Africa has enough oil and gas reserves to eventually become a net exporter at this stage, it is still years behind having the infrastructure necessary to explore this potential. The country may face the need to import natural gas or LNG for power generation. This gas could come from Mozambique through an inter-country pipeline.

Key Learning 4: Nigeria and the militancy in the Delta

- **The recurrent problem of interruption of production in the Delta**: the onshore oil production near the Delta in Nigeria suffers from constant interruption due to attacks by militants. They consider the country is only extracting wealth from the soil, but not benefitting any of the communities living in the region. Production from the area is frequently interrupted due to force major events when these militants damage or destroy the infrastructure that is used to produce or export the oil. Recently a cease-fire was established but the question remains: how long will it last? The way the government and companies are dealing with this persistent issue is through relentlessly engaging with the local communities. Once the members of the local villages see themselves as part of the process and benefitting from it, through employment and through improvement of their living standards, the fighting will likely cease. Results have already shown up after the onshore and shallow water developments, previously owned by international oil majors, were bought by local companies, which can adopt a closer and more friendly approach in dealing with the communities.

- **Nigeria has major gas reserves**: the country has 83 Tcf of natural gas reserves, and most of it was discovered when companies were searching for oil. Hence, if natural gas becomes the focus of exploration, these reserves are likely to dramatically increase. The country has not targeted gas exploration so far because oil prices were much higher in the recent past. However, with the current low oil price, gas exploration becomes more competitive. The country is studying selling natural gas to its domestic market, which faces an increased demand for the product.

Key Learning 5: Libya's political stalemate

- **Libya oil production will probably take a longer time to recover**: the bulk of the country's oil infrastructure is either damaged or straddles disputed territory, making a significant increase in output a remote prospect even after rival leaders agreed on working together. The country is still divided and it is likely that it will still take a long time until Libya resumes the level of oil production seen during Qaddafi's regime.

Key Learning 6: African refining capacity

- **Africa is still very dependent on exporting raw materials**: while the continent exports crude oil, it imports gasoline and diesel as the current refining capacity is far from the level needed to supply domestic markets. One way to change this would be through the privatization of the existing refineries. If Nigeria can increase its refining capacity, it will be able not only to consume the crude oil it produces and refine it, but the country can also potentially become a hub for petroleum products exports in Africa
- **Each country wants to have its own refinery but that is not the way to go**: refineries with less than 400,000 barrels per day of processing capacity usually are not competitive. However, to supply the internal market this volume may be more than what is necessary. The African countries should work together and aggregate demand, building large refineries that can serve more than one market.

Key Learning 7: What can Singapore bring to facilitate Upstream and Downstream development?

- **Discipline, leadership and policy consistency**: Singapore's core values that are still lacking in many parts of Africa.
- **Asia was a developing market not so long ago**: in its history, Asia has passed through what Africa is passing through now. There are commonalities of experience. The histories of both continents share more in common than with Europe or North America.
- **African countries should create an attractive business environment**: in order to attract businesses, Africa has to create policies that incentivize the influx of foreign investors. Tax breaks and partnerships in infrastructure building are two examples of it.

Key Learning 8: Which countries to invest in Oil and Gas in Africa?

- **Nigeria**: its Oil and Gas history, experience and large reserves still makes the country an attractive destination for O&G investments.
- **Ethiopia**: its high GDP growth, government commitment and housing for its own people makes Ethiopia a sleeping giant.
- **South Africa**: changings are coming with the recent local elections.
- **East Africa (Kenya, Tanzania, Uganda)**: access to a large domestic market within a short distance from one to the other and easy connectivity make the region attractive.