



Background note on Africa's Current Path Energy Future to 2043

Gas

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In its Global LNG Outlook 2023-2027, the Institute for Energy Economics and Financial Analysis (IEEFA) indicated that global demand for LNG is slowing. The institute “expects that sustained high global LNG prices; weak LNG demand growth and elevated price sensitivity in Asia; declines in gas consumption in Europe; and a multi-year string of global capital investments in cost-competitive energy alternatives will undermine global LNG demand growth over the next several years.”

Nigeria, Algeria, Mozambique, Egypt, Tanzania and Libya have considerable proven natural gas reserves, but there is very little installed gas infrastructure that would allow for domestic use. Instead, since the demand for gas is expanding particularly rapidly in Asia, the vast majority of Africa’s natural gas production will likely end up as exports to feed demand in China, India and elsewhere. Under the European Climate Law, for example, the EU aims to reduce gas demand by 35% compared to 2019 levels by 2030. The European Commission’s REPowerEU proposal could also imply a 52% reduction in EU gas demand by 2030 compared to 2019.

The IEEFA anticipates that the global LNG market will see a large number of new projects come online starting in mid-2025 and in 2026, giving way to a potential supply glut with lower-than-anticipated prices, smaller netbacks, tighter margins, and lower profits for LNG exporters.

Nigeria, Egypt, Libya, and Algeria account for almost 80% of Africa’s gas reserves. However, most new discoveries are in recent entrants to Africa’s gas market, namely Mozambique, Senegal, Tanzania, Mauritania, South Africa, Ethiopia, and Morocco.

According to the BP Statistical Review of World Energy 2023, proven gas reserves in Africa totalled 55.6 BBOE (around 10% of the global total). The ten countries with the largest reserves, collectively representing more than 80% of the total, are as follows :

Country	Proven gas reserves (BBOE)
Nigeria	11.5
Algeria	5.6
Egypt	8.5
Mozambique	5.6
Libya	5.4
Angola	5.3

Ghana	3.8
Tanzania	3.2
Senegal	3
South Africa	2.98

Amongst these countries, investment decisions have been made as follows:

- Nigeria has several major gas projects underway, including the Train 7 project at the Nigeria LNG plant and the AKK gas pipeline.
- Algeria - various, including the Sonatrach-Eni joint venture to develop the Berkine gas field.
- Egypt - Egypt's gas reserves are concentrated in the Mediterranean Sea, particularly in the Zohr field, which is expected to boost gas production significantly in the coming years. Egypt also invests in new gas exploration and production projects in the Red Sea and the Nile Delta.
- Libya's gas reserves are concentrated in the Ghadames Basin, located in the northwestern part of the country. The largest gas field in Libya is the Wafa field, which has an estimated 2.5 trillion cubic feet of gas in place, but production has been negatively affected by the war in the country.
- Mozambique has several major LNG projects underway, including the Mozambique LNG project led by TotalEnergies and the Rovuma LNG project led by ExxonMobil. The country has an estimated 180 trillion cubic feet of natural gas reserves, making it one of the most gas-rich countries in the world. In its Energy Outlook 2023, BP forecasts that Mozambique's gas production will reach 41.6 bcm in 2032 (0.224224 BBOE). The ongoing insurgency in Cabo Delgado province delayed the start of the project, now reported to restart in 2024 or 2025..
- The Tanzania LNG project could cost up to US\$42 billion project develop and export liquefied natural gas (LNG) from Tanzania's offshore gas reserves. Talks on developing the LNG plant have been held intermittently since 2017 but have moved ahead more rapidly, with construction beginning around 2026, with first exports forecast for 2028.

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Dr Jakkie Cilliers is the ISS's founder and former executive director of the ISS. He currently serves as chair of the ISS Board of Trustees and head of the African Futures and Innovation (AFI) programme at the Pretoria office of the ISS. His 2017 best-seller *Fate of the Nation* addresses South Africa's futures from political, economic and social perspectives. His three most recent books, *Africa First! Igniting a Growth Revolution* (March 2020), *The Future of Africa: Challenges and Opportunities* (April 2021), and *Africa Tomorrow: Pathways to Prosperity* (June 2022) take a rigorous look at the continent as a whole.

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