

Sub-Saharan Africa LNG

Overview of LNG in Sub-Saharan Africa



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SUB-SAHARAN AFRICA LNG MARKET INSIGHT

The purpose of this report is to illustrate the state of the LNG market in sub-Saharan Africa, identifying the key drivers of supply and demand. Stirling LNG is committed to providing high-level insights into the LNG market in key regions and countries and our analysts are constantly monitoring the evolution of the medium to long-term market, providing analysis and evaluating investment risks and opportunities in the region. For a discussion on the LNG market in North Africa, please see the equivalent report on the Middle East and North Africa (MENA) region.

We advise on developing a portfolio strategy for the purchase of LNG contracts and identify the risks and opportunities on the purchase of such contracts by region.

INTRODUCTION

Sub-Saharan Africa presents opportunities for both exporters and importers of LNG. On the export side, the region has a robust and growing market centred around Nigeria, Angola, Equatorial Guinea and Cameroon (chart below). Between them, these four countries exported 28.3 million tonnes (mt) of LNG, representing 8.9% of the global traded market. Other countries including Mozambique will shortly be joining this club of exporters and Stirling LNG expects the entire region to further strengthen its position as an important exporter through the 2020s. On the import side, a number of interesting opportunities exist linked to the socioeconomic development of maturing countries and their desire for affordable and reliable electricity supplies and the second part of this paper looks at a few examples.

SUB-SAHARAN AFRICA LNG EXPORT CAPACITY (MTPA) AND 2018 EXPORTS (MT)



NIGERIA

Nigeria is currently the world's fifth largest LNG export market. In 2018, the country exported 20.4 mt of LNG, securing 6.5% of the total LNG market share. This volume was down slightly year on year (YOY) but is still close to the top of the historic range, reflecting robust demand for Nigerian exports and efficient operations of its LNG export terminal. With a total national nameplate liquefaction capacity of 22 million tonnes per annum (mtpa) at its six train facility at Bonny Island, 2018 saw Nigeria operate its export terminal at 93% utilisation. Almost half (45%) of Nigeria's 2018 exports landed in Europe with Spain, France and Turkey accounting for most of the European imports.

Stirling LNG expects Nigerian LNG exports to increase considerably in the 2020s as new liquefaction capacity is brought online. The country is planning to increase its liquefaction capacity by 7.2 mtpa to close to 30 mtpa by adding a large seventh train. More than 90% of Nigeria's LNG exports are currently sold under long-term contracts.

ANGOLA

Angola is the second largest exporter of LNG in the region but has only been exporting since its single 5.2 mtpa terminal was commissioned in 2013-14. In 2018, its LNG exports totalled 3.8 mt, up slightly on 2017 and a sizeable increase of 3.1 mt on 2016. Nearly three quarters of Angola's 2018 exports were directed to Asia with India taking the largest share. With liquefaction utilisation rates currently below 80%, the near term focus for Angola is improving feedgas supply and export plant efficiency rather than planning the construction of any new export terminals.

EQUATORIAL GUINEA

Equatorial Guinea exported 3.5 mt of LNG in 2018, and has sustained exports at around this level for at least the past seven years. Just over half (55%) of the country's 2018 exports were imported by Asia with India and China receiving the majority of the volumes. Equatorial Guinea currently operates a single 3.7 mtpa export terminal which, in 2018, achieved a utilisation rate of 95%. The failure to reach FID on the Fortuna FLNG project has compromised the country's efforts to bring about liquefaction capacity additions in the near future but interest from international oil and gas majors remains in Equatorial Guinea and Stirling LNG expects that the country will further strengthen its position in the LNG market with the addition of new liquefaction capacity in the medium term.

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CAMEROON

Cameroon entered the LNG export market in 2018 with the completion of its 2.4 mtpa Kribi FLNG facility. During that year, it exported 0.6 mt of LNG, mainly to China and India, but much higher utilisation rates are expected as the terminal "bedsin". Consequently, Stirling LNG expects Cameroon's LNG exports to further increase and stabilise in the 2020s as the Kribi facility reaches full operation.

MOZAMBIQUE

While Mozambique is not currently an exporter of LNG, its first export terminal, Coral South FLNG, is currently under construction and is expected to start operations in 2022. ENI is the majority owner/developer of the project and its liquefaction capacity is expected to reach 3.4 mtpa once fully commissioned.

SENEGAL – MAURITANIA

Senegal and Mauritania do not currently export LNG but the governments of both countries are committed to becoming an LNG exporter in the near future by developing the cross-border Tortue/Ahmeyin gas field. FID has been reached to develop the Greater Tortue FLNG facility, which is expected to start operations in 2022 with a total liquefaction capacity of 2.5 mtpa.

PROSPECTIVE LNG IMPORT COUNTRIES

GHANA

Ghana produces gas domestically but also relies on pipeline imports from Nigeria. With Ghana's demand for natural gas expected to grow with increased power sector demand growth and switching away from oil-fired generation, a number of LNG import projects have been proposed. Stirling LNG believes that Ghana could be a viable market for LNG exporters provided that power generators and ultimately end consumers are prepared to pay for it. This ultimately requires sufficient economic development in the region in the coming years.

MADAGASCAR

Madagascar has good potential for renewable energy but generates the majority of its electricity through diesel plants and, as a result, electricity remains expensive. Although there are no known proposals to develop LNG imports into Madagascar, Stirling LNG believes that the country is an appealing prospect to develop LNG import facilities due to its favourable geographical proximity to Mozambique and the Middle East.

MAURITIUS

Mauritius relies heavily on coal and oil-fired power generation and is ranked second in energy consumption in the region. In 2017, the country's Central Electricity Board (CEB) initiated a request for information (RFI) to potential developers for setting up an LNG facility to supply natural gas to a newly constructed CCGT plant at Fort George. It has been reported that Petronet from India have been shortlisted to set up the LNG terminal, however the earliest start date is likely at least two years away.

KENYA

Kenya has a lot of geothermal and hydro generation in its energy mix, supplemented by oil. In 2015, Kenya put Qatar on hold on signing an agreement following the 1.8 tcf gas discovery by Africa Oil and Marathon Oil Corporation. In 2016, Kenya dropped the plan to build an LNG terminal in Mombasa but the bids were reportedly not acceptable. In 2019, it was reported that the Mombasa LNG terminal had been revived in light of growing demand and the need to diversify energy sources.

NAMIBIA

Namibia's electricity generation comes mainly from hydro production and South Africa imports. However as electricity demand increases, the country will need another fuel supply and there are proposals to build a LNG supplied gas-fired plant at Walvis Bay.

CONCLUSION

Sub-Saharan Africa represents a growing market opportunity for developers of both import and export LNG facilities. The 2020s will see the region add to its existing exports as new facilities in Mozambique and potentially Senegal/Mauritania start to come online. However, it is on the import side that the region should be of particular interest to market participants. Given that the global LNG market is currently characterised by a state of oversupply, new import opportunities present themselves in countries where growing demand for gas is linked to growth in electricity demand. Stirling LNG believes Sub-Saharan Africa is well positioned to grow its LNG import requirements in the coming years.

In addition to Sub-Saharan Africa, we also provide detailed LNG analysis in other key regions including the Americas, Europe, Asia Pacific and MENA.

In addition to advising on the portfolio construction for the purchase of medium to long term LNG contracts for off-takers, the firm also advises on project finance on oil and gas infrastructure projects. For further information, please visit www.stirlinglng.com.

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REFERENCES

LNG for Africa

https://www.kapsarc.org/wp-content/uploads/2016/11/KS-1658-DP052A-LNG-for-Africa.pdf

IGU 2019 World LNG Report

https://www.igu.org/sites/default/files/node-news_item-field_file/IGU%20Annual%20Report%202019_23%20loresfinal.pdf

BP Energy Outlook 2019

https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2019-fullreport.pdf

Global Gas and LNG outlook to 2035

https://www.mckinsey.com/solutions/energy-insights/global-gas-lng-outlook-to-2035/~/media/3C7FB7DF5E4A47E393AF0CDB080FAD08.ashx

The LNG industry GIIGNI Annual Report 2019 https://giignl.org/sites/default/files/PUBLIC_AREA/Publications/giignl_annual_report_2019-compressed.pdf

LNG outlook 2019

https://www.gasstrategies.com/sites/default/files/download/lng-outlook-2019.pdf

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ABOUT STIRLING INFRASTRUCTURE

Stirling LNG is a division of Stirling Infrastructure Partners. Stirling LNG performs three key functions:

Buying and selling LNG on behalf of off-takers and LNG suppliers on short, medium and long-term contracts. The firm provides purchase and sales solutions to finance these contracts.

Arranging capital for gas infrastructure and advising on the acquisition and disposal of upstream, midstream, and downstream oil and gas assets.

Arranging capital for major oil & gas companies and project sponsors. The firm specialises in financing the development of new and existing gas power plants and gas infrastructure. This includes both floating and on-land assets.

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