

NAMCOR BLOG



2024



Energy in Africa

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Executive: Upstream Development and
Production

Summary

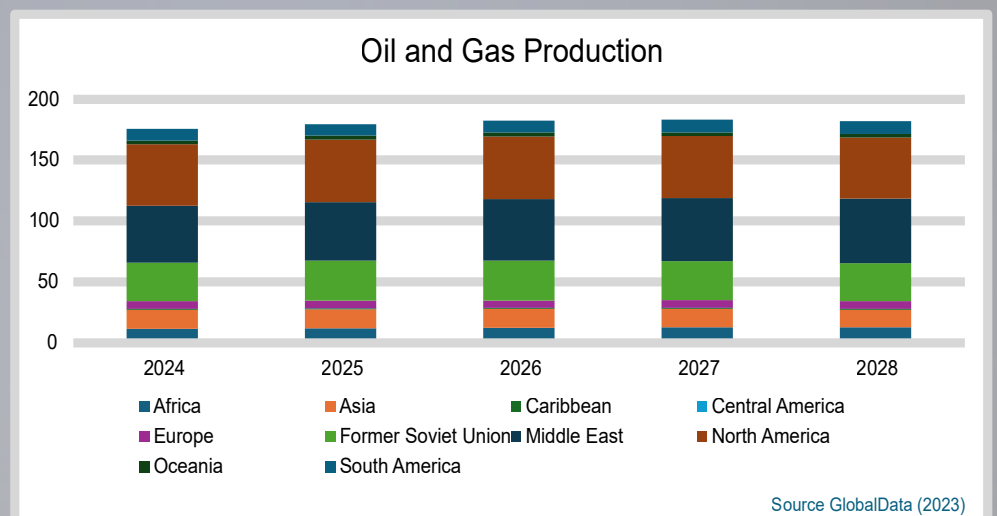
Africa's energy landscape is undergoing a fascinating transformation. While there is a surge in oil and gas exploration in 2024, particularly in countries like Namibia and Angola, a strong counter-current is pushing for renewable energy sources like solar and wind power. This shift towards renewables is driven by a growing awareness of climate change and the potential of abundant sunshine and wind in Africa.

While renewable energy offers a sustainable future, its high initial costs and the existence of widespread energy poverty can make fossil fuels a more attractive option, at least in the short term, for some governments. Despite these hurdles, the future of African energy is increasingly bright. Solar power is poised for the most significant growth, with wind power hot on its heels. In the near-term forecast, fossil fuels will retain their importance until the mid-2030s, but renewables are on track to become the preferred energy source. Furthermore, Africa is embracing innovative solutions like carbon capture and green hydrogen as well as ammonia production. Namibia, for instance, is leading the way in green hydrogen projects, showcasing the potential for a sustainable energy future.



Current Energy Trends (Global, Africa and Sub-Sahara Africa)

According to GlobalData, total oil and gas production from producing, announced, and planned fields globally is expected to increase by 3.4% during the outlook period of 2024-2028. Total production is projected to increase from 175.9 million barrels of oil equivalent per day (mboed) in 2024 to 181.9 mboed in 2028. The Middle East is anticipated to lead globally with a total production of 52.9 mboed in 2028.



Rystad Energy contends that Africa is set to dominate the list of high impact wells to be drilled in 2024, contributing to roughly a third of such wells globally. The key countries in Africa where the wells are to be drilled include Egypt, Guinea-Bissau, Equatorial Guinea, Congo, Angola, Namibia, South Africa, Mozambique, Somalia and Zimbabwe. Orange basin in Namibia and South Africa is expected to be the current hotspot attracting industry attention and planned exploration activity from multiple players.

In Namibia, there are currently four floater rigs contracted, one of which, Hercules, will leave Namibia upon the completion of its contract with Galp, but another floater might come to Namibia from South America to work with Rhino Resources. Namibia could quickly see demand for up to five rigs working at the same time for upcoming exploration work as we estimate eight exploration wells to be drilled in 2024. Companies such as Rhino Resources, Shell, TotalEnergies, Chevron, Galp and Eco Atlantic might be drilling in the near term.

In terms of expenditure, TotalEnergies has yet again committed 30% of its global exploration budget for 2024 of about USD 1 billion for Namibia, displaying the confidence shown by Majors in exploring the Namibian waters.

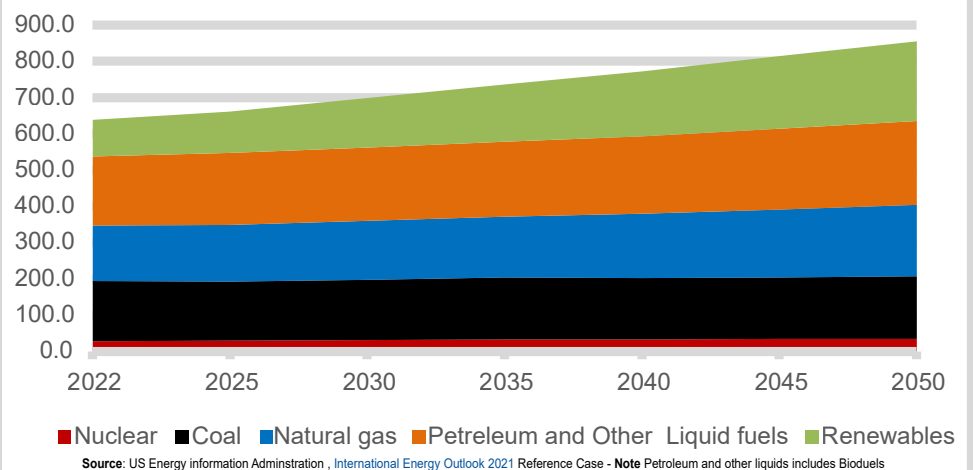
In neighbouring Angola, the rig demand is expected to be in line with 2023 levels. Angola currently has six floaters and one jackup on contract, while an additional floater is expected to come on contract in June to work with Azule Energy. Namibia will be keen on the results of a frontier exploration well to be drilled in ExxonMobil's operated Block 30 in the Namibe basin, offshore Angola which extends into Namibia.

Emerging Trends in the Energy Sector (Road to Transition)

While key exploration wells are drilled in Africa and other regions globally, timely execution and progressing with the development plan would be equally important, especially due to the impact of energy transition on oil demand. Rystad Energy has forecasted the peak demand based on the requirement to limit the global temperature increase by a defined degrees Celsius target. In a more aggressive energy transition scenario, only projects with competitive breakeven would move forward as the need for exploration and project sanctioning remains limited. In a 1.6 degree Celsius increase scenario, the oil demand is estimated to peak at 105 million barrels per day (bpd) in 2025, while in a 2.2 degree Celsius increase scenario, the oil demand is estimated to peak at 109.5 million bpd in 2032. In the Mean scenario, corresponding to a 1.9 degree Celsius increase, the oil demand is estimated to peak at 105 million bpd in 2026.

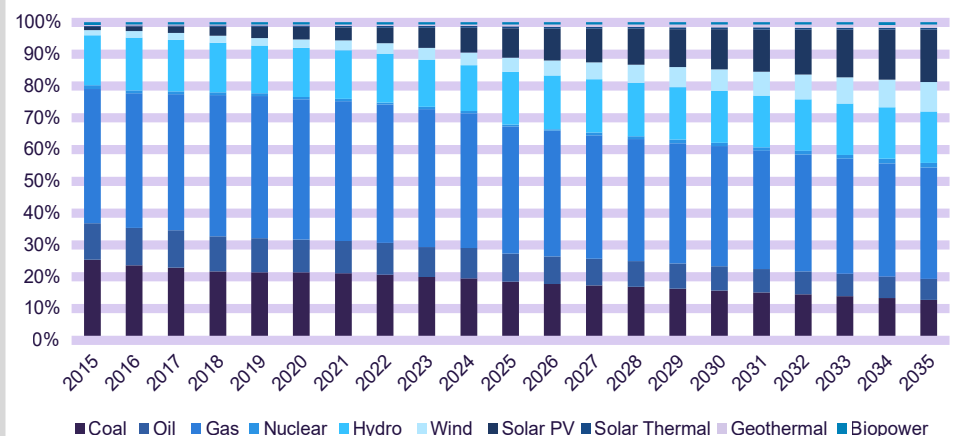
The International Energy Outlook 2021 (IEO2021) projects that, in the absence of significant changes in policy or technology, global energy consumption will increase by nearly 50% over the next 30 years. Although petroleum and other liquid fuels will remain the world's largest energy source in 2050, renewable energy sources, which include solar and wind, will grow to nearly the same level.

Global primary energy consumption by source (2022-2050), Quadrillion British thermal units



New Technologies

The share of renewables will continue to increase with solar PV having a key component in the performance of all technologies. However, fossil fuels will remain dominant till 2035.



Challenges facing Energy Transition in Africa

The high upfront capital cost of many resources, particularly renewable resources, is one of the most critical barriers to the development of the African energy market. Other challenges include energy poverty, which means governments are inclined to use fossil fuels to solve the energy deficit and prioritise industrialisation and socio-economic development at the expense of an accelerated energy transition. In Namibia, the government has made firm commitments to a just energy transition, using the country's hydrocarbon resources, especially gas, which is now globally recognised as a transition fuel, to provide the much-needed base load while providing a means of funding for the country's renewable energy ambitions.

The role of innovation and collaboration in shaping the future of energy in Africa

It cannot be overstated that innovation and collaboration are key to commercialising new technologies and rolling out large-scale energy installations. There is room for Research and Development by Academia, Industry, Policy Makers and World Institutions (Financial and Statutory) to reach a consensus on the transition that doesn't disadvantage the global south, which still need its available energy resources to develop while playing their role in emissions reduction.