AOW
INVESTING IN AFRICAN ENERGY

IN PARTNERSHIP WITH

WELLIGENCE
ENERGY ANALYTICS

SENEGAL

COUNTRY OVERVIEW REPORT

SEPTEMBER 2024

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EXECUTIVE SUMMARY

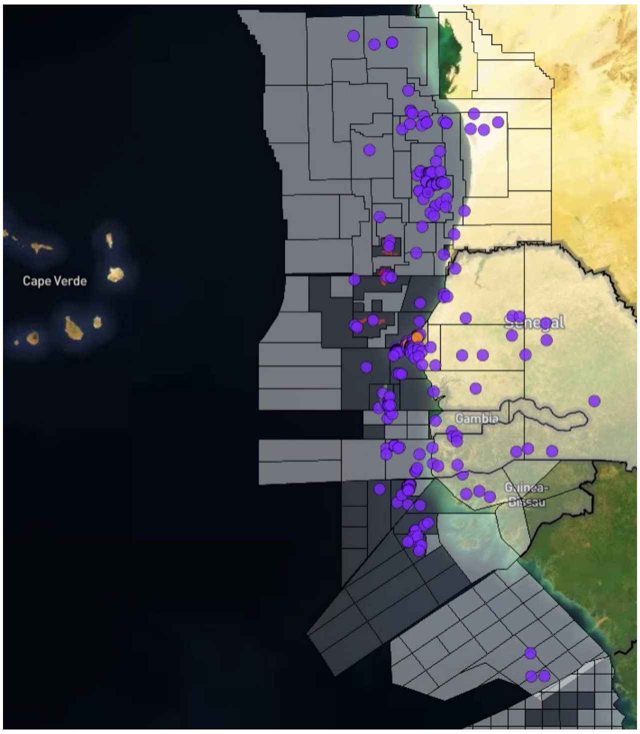
Country Overview

Senegal is an emerging hydrocarbon nation on Africa's Atlantic west coast. A series of offshore oil and gas discoveries in 2014-2015 are starting to elevate the country into the league of significant producers.

Onshore exploration began in the 1950s and offshore drilling in the mid-1960s, but there was no significant success through the next decade. Subsequently, several small onshore gas discoveries were made and developed. Onshore gas production started in 1997 and continues to this day – volumes are small and supply the domestic market.

In 2014, Cairn Energy discovered the FAN and Sangomar fields on the Sangomar Deep Offshore Block. Following several M&A deals, Woodside Energy now operates the development. Phase 1 came onstream in 2024 and we expect Phase 2 in 2026. Oil production has quickly peaked at ~100,000 bbl/d; longer term, significant gas resource could be developed.

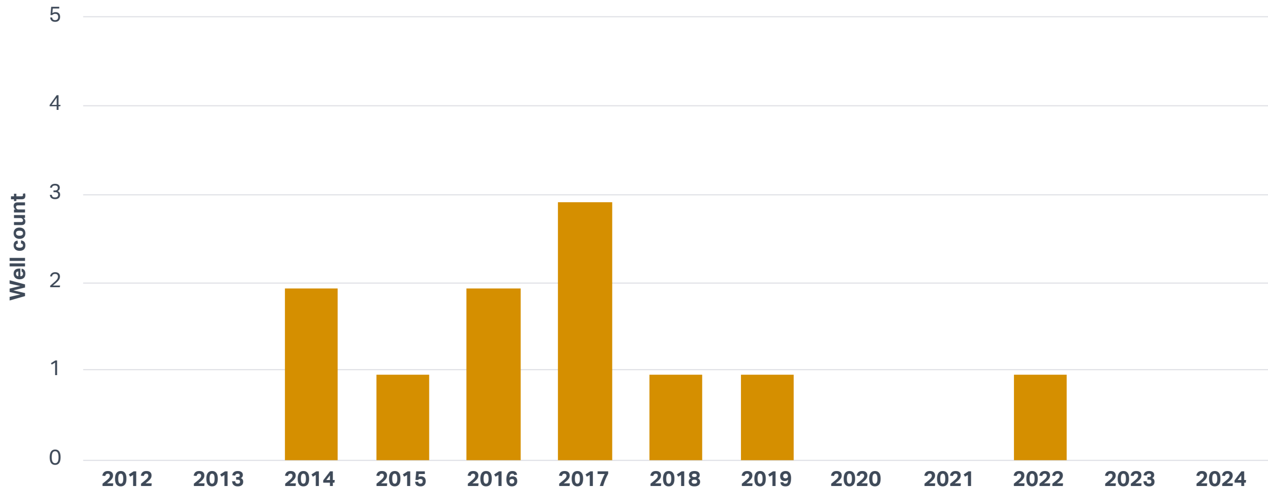
In 2015, Kosmos made the giant Tortue (aka Ahmeyim) discovery in Mauritania, which straddles the maritime border with Senegal and is unitised 50/50. Subsequent E&A activity firmed up a very large resource, estimated at ~15 Tcf, and bp, which farmed-in in 2016, is progressing with the 2.5 MMtpa Greater Tortue Ahmeyim (GTA) FLNG project. This is expected to start in late 2024. Further phases are likely. The Teranga and Yakaar gas discoveries (2016 and 2017) in Senegalese waters have stand-alone potential. bp has exited these discoveries and new investment will be required to develop them.



Historically, the country has been considered stable and business-friendly. However, there was unrest around the election in 2024. A new President was elected and has started a process to re-negotiate oil and gas. The NOC Petrosen was created in 1981.

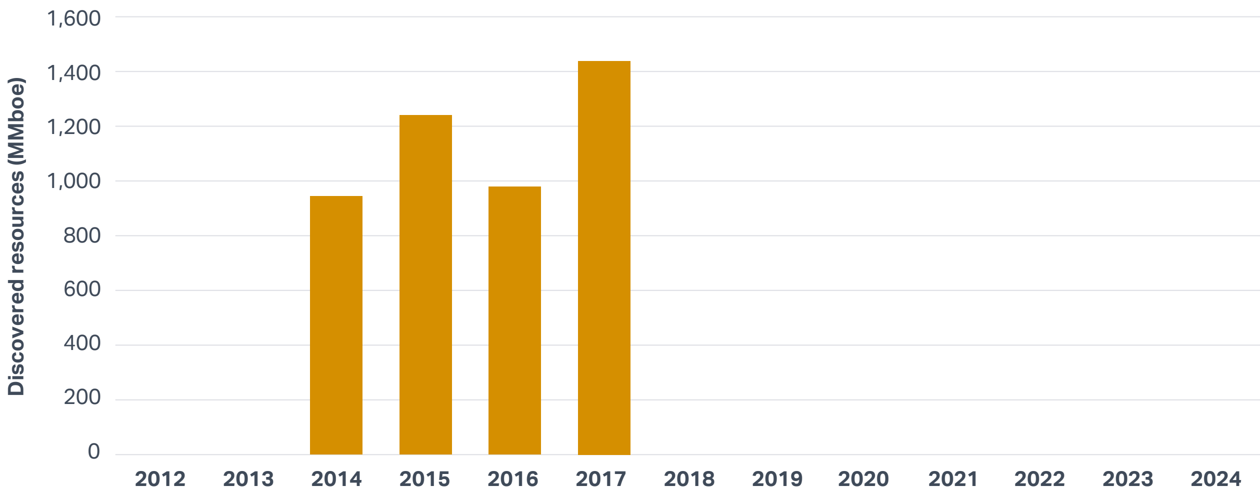
EXPLORATION HISTORY

Number of offshore exploration wells – 2012-2024



Source: Welligence Energy Analytics

Discovered resources – 2012-2024

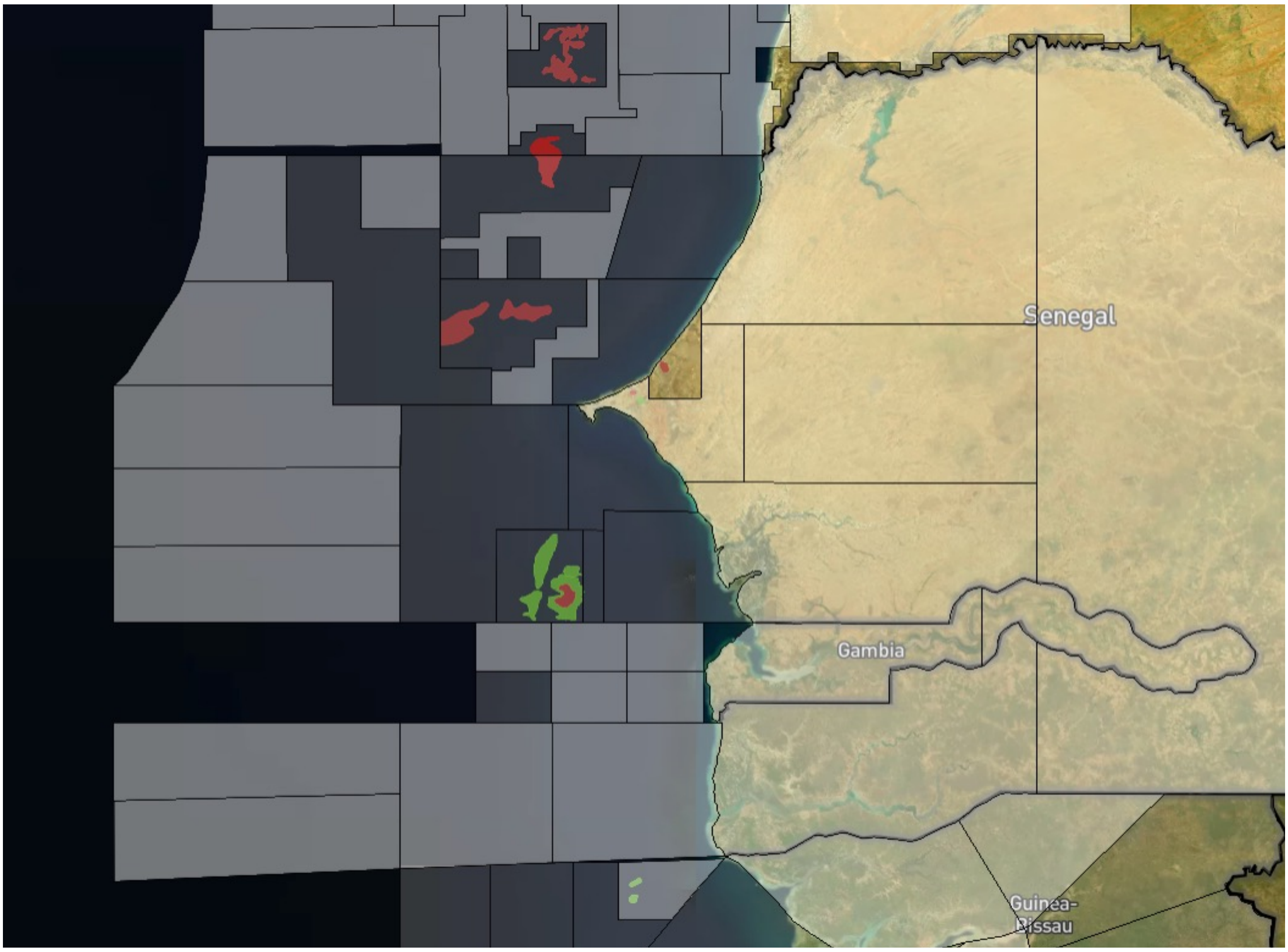


Source: Welligence Energy Analytics

- Cairn Energy's discovery of the FAN and Sangomar fields in the Sangomar Deep Offshore Block marked a major turning point for Senegal's oil and gas sector. Subsequent exploration by Kosmos and BP resulted in significant gas discoveries, including the multi-Tcf GTA field (on the Senegal-Mauritania maritime border) and Yaakar-Teranga in the Cayar Offshore Deep Block.

EXPLORATION HISTORY

Senegal licensed vs unlicensed acreage

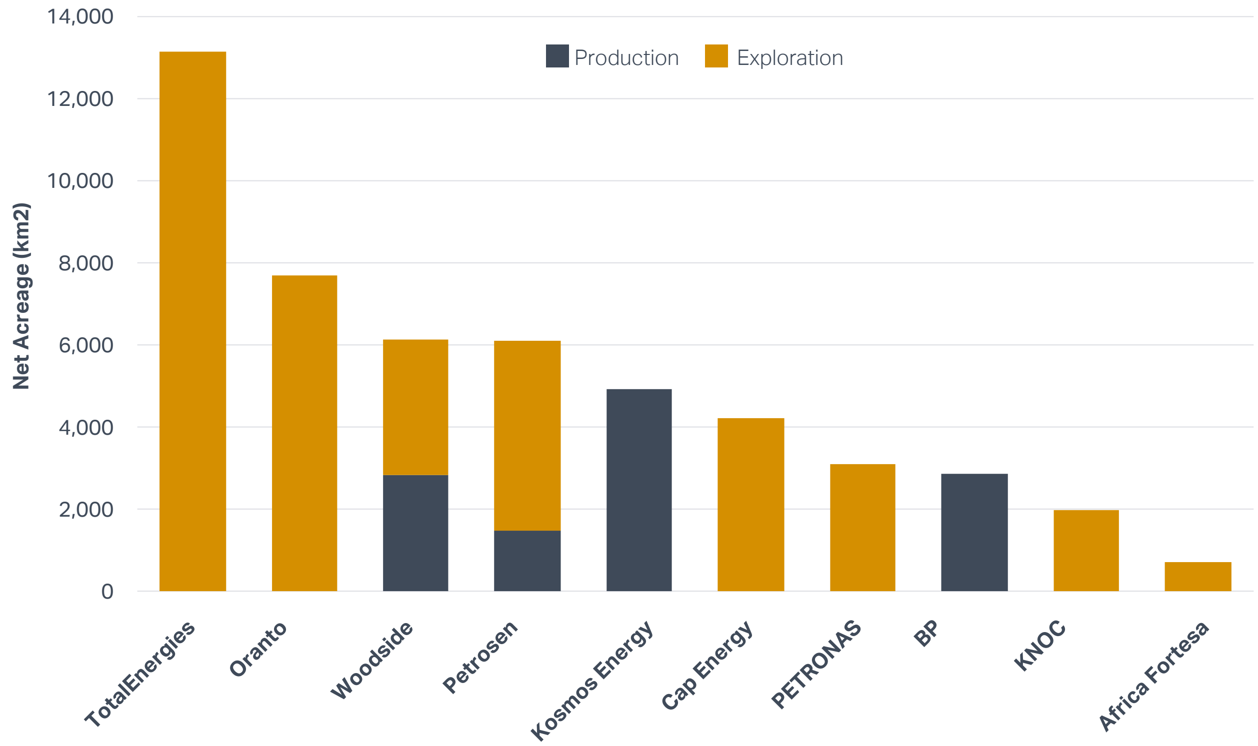


Source: Welligence Energy Analytics

- The discoveries by Cairn Energy, Kosmos, and BP sparked significant industry interest, leading TotalEnergies to secure a dominant deepwater position with the Rufisque Offshore Profond and North Ultra Deep blocks in 2017. However, exploration has dwindled. With Senegal's 2020 Licensing Round failing to attract partnerships and the Ultra-Deep blocks remaining unlicensed, short-term drilling looks unlikely.

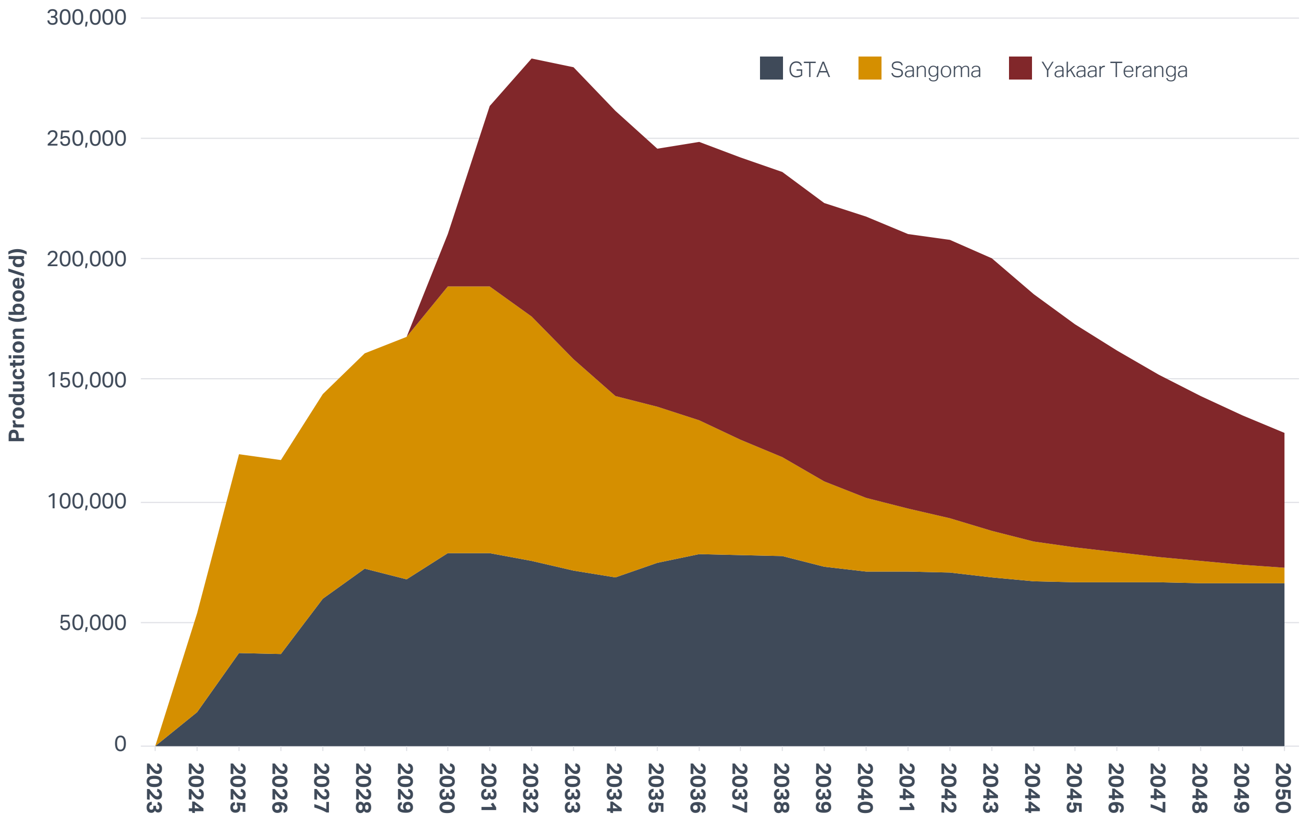
EXPLORATION HISTORY

Net Acreage positions (Km2)



Source: Welligence Energy Analytics

COUNTRY-LEVEL PRODUCTION



Source: Welligence Energy Analytics

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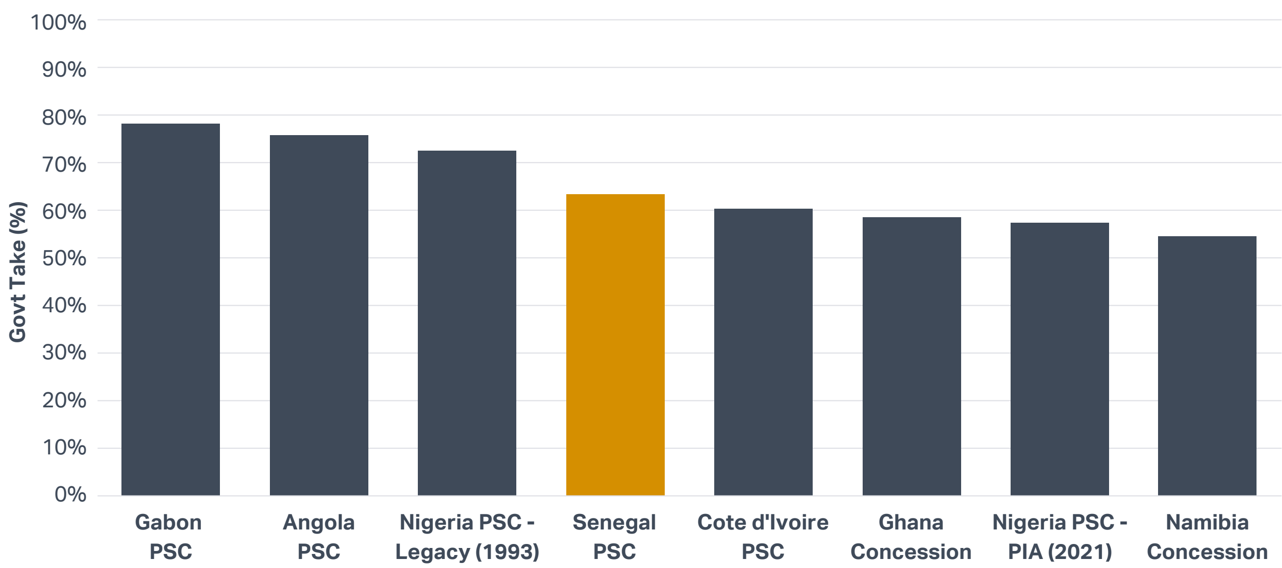
BENCHMARKING – GOVERNMENT TAKE



Source: Welligence Energy Analytics

- Senegal's PSC regime offers competitive fiscal terms compared to some of its neighbours, with the country historically seen as business-friendly. However, following the March 2024 presidential election, a commission has been established to review oil and gas contracts to make them more favourable to the government, a significant move and one that will have investors watching nervously.

WHAT TO EXPECT IN THE NEXT 12 TO 24 MONTHS

Greater Tortue Area FLNG	Bp's cross-border Senegal/Mauritania GTA FLNG development is by far the biggest undertaken by either country. The project, split 50/50, is expected onstream towards the end of 2024, will supply ~2.5 MMtpa of LNG and develop 15 Tcf of gas. Small amounts of gas will supply domestic markets. The development is an innovative concept and involves an FPSO, an FLNG facility as well as a breakwater. A second phase, involving a Gravity Based Structure, is due onstream in 2027.
Uncertainty over contract revision	President Bassirou Diomaye Faye was elected in March 2024. He has set up a commission to review oil and gas contracts with the aim of making them more favourable to the Government. Key operators bp, Woodside and Kosmos will be watching closely as they consider future development phases of and/or new projects.
Sangomar looks good for Woodside	The Sangomar oil development is key for operator Woodside Energy and is Senegal's first offshore development. The project started production in June 2024 and has quickly ramped up to a peak of 100,000 bbl/d. Phase 1 cost ~US$5.2 billion. Ensuring project and production integrity is key ahead of Phase 2 which is expected to start in 2026/27. The company increased its stake after entering the project in 2016 and now holds 82%, a stake it has previously look to dilute.
Questions over Yakaar Teranga	The fields, entirely in Senegalese waters, hold an estimated 25 Tcf of gas-in-place. But bp's exit from the discoveries in 2023 has stalled any development. Kosmos has taken bp's stake and assumed operatorship. It has completed work on a development concept and is now actively looking to attract new investor(s). This will be vital if gas from Yakaar Teranga is to be commercialised.
Recent exploration has disappointed, but Senegal is not drilled out	Kosmos and TotalEnergies drilled the Requin Tigre and Jamm-1XB wells in 2018 and 2019, respectively. Both targeted oil but were plugged and abandoned. Woodside drilled a sub-commercial ILX well in 2022. Nonetheless, TotalEnergies retains two deepwater exploration blocks and fast-tracked seismic processing and acquisition while there is exploration potential around Sangomar. There is also extensive offshore and onshore exploration available through direct negotiation.