

REACHING OUT ACROSS BORDERS

Mauritania and Senegal are taking steps to work together to unlock the potential of large gas discoveries on the maritime border between both nations. Thomas Golembeski, vice president of corporate communications at Kosmos Energy discusses the oil company's gas project on the maritime border in an exclusive interview with *Oil Review Africa*.

IN THE BACKDROP of the fall in oil prices, even as many oil and gas companies are cutting back on exploration spending, exploration activity in the West African countries of Senegal and Mauritania has attracted global attention.

It was in 2012 that US based oil company, Kosmos Energy, acquired three blocks offshore Mauritania. Early 2D and 3D seismic studies conducted by the company revealed a very large geological gas fairway that began in Mauritania and stretched across the maritime boundary into Senegal. Kosmos began its exploration shortly afterward and since April 2015, the company has drilled five consecutive wells in the region with a 100 per cent success rate: Tortue-1, Marsouin-1, Guembeul-1, Ahmeyim-2 and Teranga-1.

“ Both governments are ‘highly motivated’ to see this project come to completion and have expressed willingness to work together to develop the resource.

The gas discovery on the maritime border between the two nations could hold up to 50 tcf of resource potential.



Image Credit: Kosmos Energy

The company's exploration activities revealed a prolific inboard gas fairway that extends roughly 80 km north of the maritime boundary between Senegal and Mauritania and 80 km south of the maritime boundary, stretching from the Marsouin-1 well in Mauritania through the Greater Tortue area on the maritime boundary to the Teranga-1 well in Senegal. According to the company, it has discovered a gross Pmean resource of approximately 25 tcf and estimates the fairway may hold more than 50 tcf of resource potential. The discovery at the Guembeul-1 well has been described as one of the most significant finds for the

West African gas industry in several years.

“Tortue-1 found the gas, Guembeul-1 confirmed that the gas was on both side of the maritime boundary and Ahmein-2 confirmed that there was sufficient gas resource to underpin an LNG gas development project,” said Thomas Golembeski, vice president of corporate communications at Kosmos Energy describing the exploration journey.

Sharing the resource

While this gas discovery holds great potential for the economies of both nations, as the hydrocarbon resource is split

almost exactly in half by Mauritania's border with Senegal, the question of resource sharing looms large. To gain benefit from the resource, both governments will have to work closely together and co-operate over the costs and results of the development, as well as over security, social and environmental issues.

According to Golembeski, both governments are ‘highly motivated’ to see this project come to completion and have expressed willingness to work together to develop the resource.

“Both Mauritania and Senegal recognize the many benefits the Ahmeyim/Guembeul gas project and the large gas discoveries offshore will bring to both

countries over the long term. President Aziz (Mauritania) and President Sall (Senegal) fully support the project and have made public statements about their desire to see it move quickly and their willingness to cooperate to make it happen," Golembeski noted.

Senegal's energy minister Thierno Alassane Sall told state television this year after the find, "This is the best news possible for our country." He added that it would allow Senegal "to be self-sufficient in energy and also export gas to the rest of the world".

The working group

To facilitate co-operation between the two nations and to take the project forward, a working group has been formed with the representatives of the national oil companies, representatives of the ministries and Kosmos. The working group has been meeting regularly since November 2015 and have already agreed upon on the development concept and the location for the offshore floating LNG infrastructure, which is on the maritime border between the two countries, about eight kilometres from the coast to house processing facilities and gas production from the field.

The working group has agreed upon a small-scale phased approach for the development of the resource that, according to them, represents the fastest and most competitive way for the two countries to begin initial LNG exports and deliver early gas to the domestic markets. The current development concept – which is still being refined – aims to produce approximately 8 tcf of gas over 30 years. According to Golembeski, this small-scale, phased approach is better than alternatives as a larger scale project would add 5-10 years to first gas production and marketing a large volume of LNG, such as 10 metric tonnes

per annum or more, would delay the development as well as delivery of gas to domestic markets.

Describing the working concept, Golembeski pointed out that "successful execution of the first phase of development – on an accelerated timeline – will enhance the marketability of the remaining gas in the basin, which will make it easier to finance subsequent phases of LNG exports."

Intergovernmental cooperation agreement

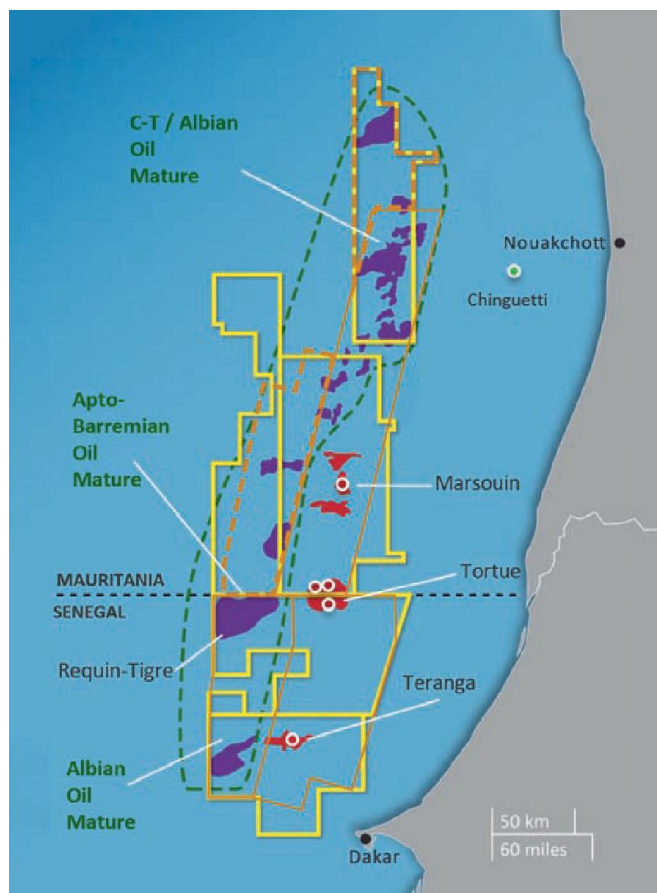
"We have made tremendous progress in a short period of time," Golembeski said describing progress made with cooperation between the two governments.

The working group has drafted an intergovernmental cooperation agreement between the two nations for the development of the project.

The agreement is based on the Frigg Agreement of 1976 between Norway and the UK and will provide for a 50-50 split of the resource in the beginning, with a mechanism to re-determine the interest based on actual production data once gas begins to flow. The agreement is currently being reviewed by the two governments.

"Once that review is done, it will be sent to the respective legislative bodies for approval and the presidents will sign it and we are hopeful that we will have the intergovernmental cooperation agreement signed by the end of the year," Golembeski said.

Golembeski added that Kosmos will soon be starting an environmental and social impact assessment (ESIA) to ensure the site and development concept are environmentally sound, and that any potential social impacts are properly addressed. At the same time, work continues to validate the technical viability of the site selected.



Map representing Kosmos Energy's oil wells in the Senegal-Mauritania border region.

The project is targeting first gas in early in the next decade.

A promising future

Golembeski explained that apart from pursuing the gas project, the company also has plans to carry out further exploration in the outward sections of its blocks in Mauritania and Senegal, because it believes that there is more hydrocarbon potential there including possibly oil.

Discussing the future of the development project, Golembeski said, "We are looking to bring in a partner because this Mauritania-Senegal basin that we have now opened is very large

and we expect that it will get even bigger." The company is in conversation with a number of companies who are interested in partnering with them for both the gas projects and well as the forward exploration programme.

Golembeski is confident about the company's decision to pursue exploration in the current bleak hydrocarbon market. "We see a demand width opening up beyond 2020-21 time-frame where we can get our gas into the market and it will be competitive with gas anywhere in the world. As far as forward exploration plans go, we see deep water exploration has a role to play in future energy supply and now is a good time to be exploring because costs have come down for drilling activities and with everyone else in the industry cutting back on exploration programmes, we see that as an opportunity." ♦

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