

**DRILLING**

# New wave of E&P activity

**A**fter a highly disappointing period in recent years with very few successful wells drilled, African explorers have now set their sights on reversing this trend – kicking off the year with a stellar offshore gas discovery by Total at its Brulpadda well in South African waters. With a number of high impact wells expected to be drilled in the next 24 months, the hope is to trigger a new wave of oil and gas exploration and development activity in Africa, where many countries are desperately dependent on oil and gas revenues.

There have been few exploration bright spots in Africa during the past five years, although the notable exceptions include three Egyptian discoveries – Eni’s Zohr and Nooros fields, along with BP’s Atoll field – and the Ahmeyim, Yakaar and Teranga discoveries in the Senegal-Mauritania maritime border area. Notwithstanding these successful campaigns, **Figure 1’s** overview of the discovered volumes of oil and gas in Africa from 2010 through 2018 clearly illustrates the negative

**Africa appears to be making a comeback in terms of oil and gas exploration, reports Siva Prasad, Senior Analyst, Rystad Energy.**

trend that has emerged in recent years.

One key reason for the drop in discovered volumes of late is the modest level of success from the high impact wells drilled since the beginning of 2016 through until the end of 2018. During that period, a total of 19 high impact wells – classified as such on the basis of either large prospective volumes or being a play opener – have been drilled in Africa, but only four turned out to be commercially successful discoveries. The rest were either dry or showed only uncommercial volumes of hydrocarbons, including the recent Samo duster (dry hole) off the coast of Gambia and the Tullow-operated Cormorant prospect off Namibia, both drilled in the second half of 2018.

**Beacon of hope**

However, the recent success of the Brulpadda-1AX re-entry well,

drilled by Total in deepwater off South Africa, stands as a beacon of hope for African explorers as they strive to flip the script in 2019. Characterised by Africa Energy Chief Executive Garrett Soden as ‘a world-class, basin-opening opportunity in one of the last under-explored regions offshore Africa’, Brulpadda has opened up a new play – the Paddavissie Fairway – in South African blocks 11B and 12B. Total’s Chief Executive, Patrick Pouyanne, reports: ‘There are four other prospects on the licence that we have to drill. It could be around 1bn barrels of total resources of gas and condensate.’

As many as 13 more such high impact wells are planned to be drilled in Africa over the next 24 months (see **Figure 2**). The locations of these vary from onshore Egypt, Morocco and Tanzania to deepwater South Africa, Mauritania and Namibia. The participation of majors such as

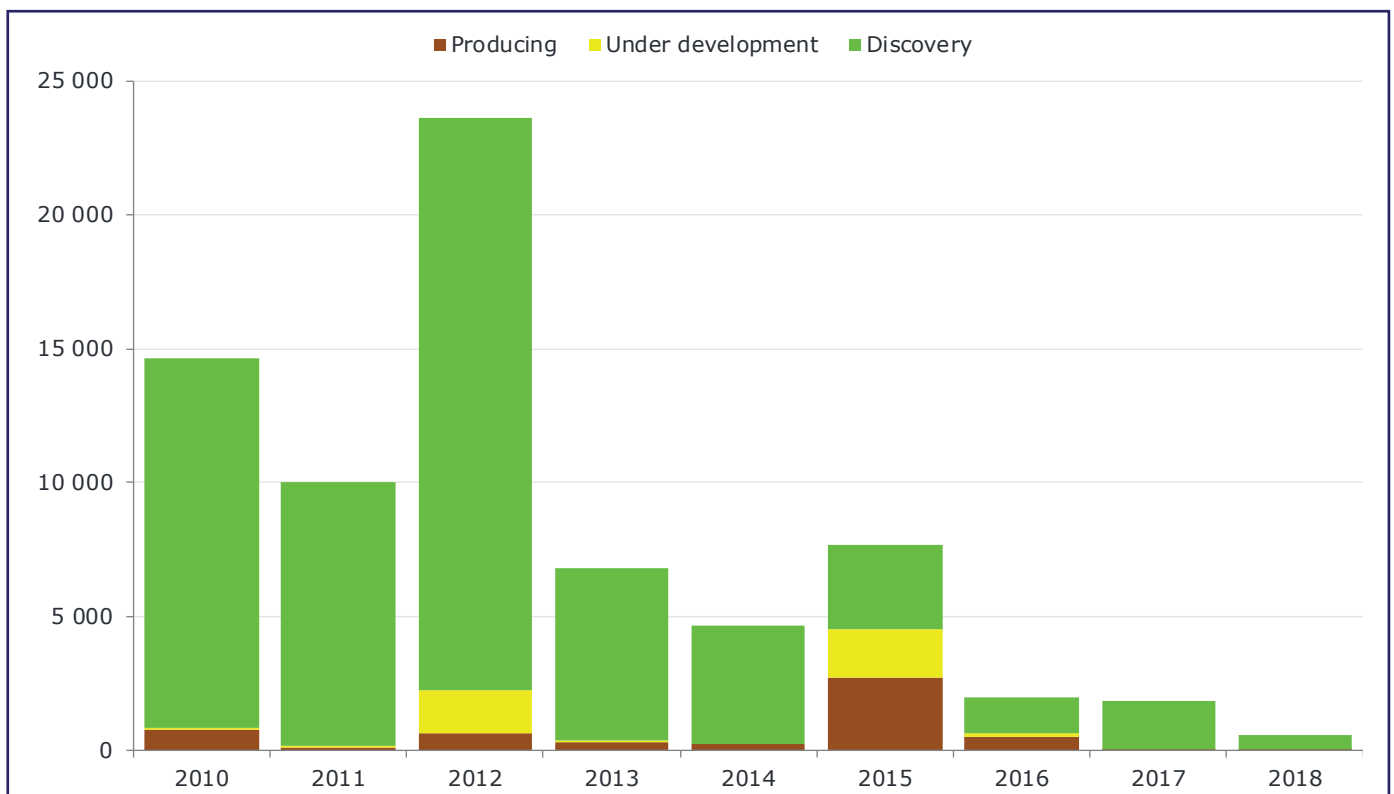


Figure 1: Total discovered volumes in Africa by year and current life-cycles (in mn boe)  
Source: Rystad Energy UCube

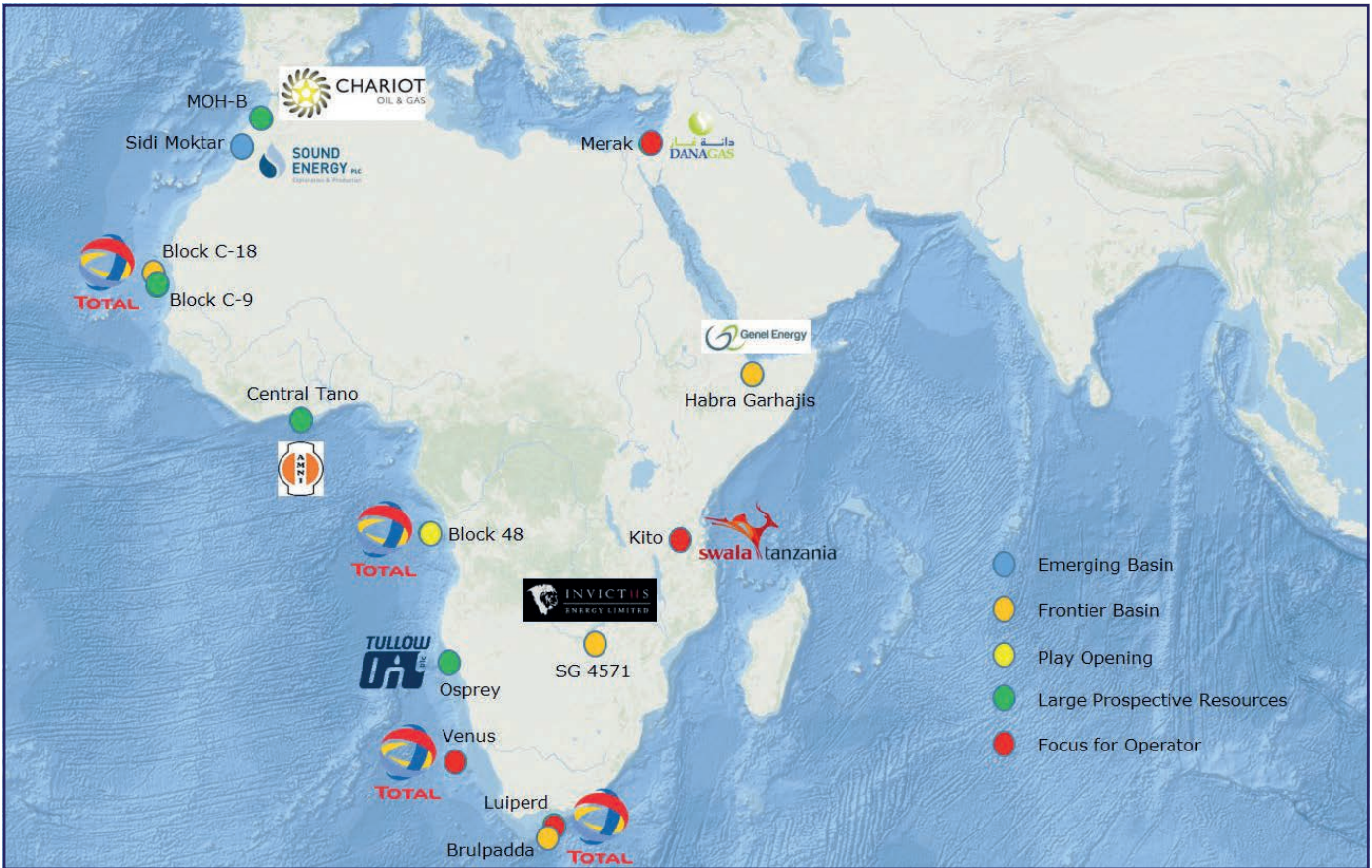


Figure 2: High impact wells in Africa, 2019–2020

Source: Rystad Energy ECube

Total, along with independents like Tullow and Kosmos, both of which have already seen success in Africa, helps to build confidence with regard to the near term future of exploration on the continent.

Also, the acceleration of offshore exploration drilling activity in Africa this year – increasing by close to 150% versus 2018 – is an encouraging sign for the upstream industry. A higher level of

exploration licensing activity is also expected in the next couple of years, after having been relatively dormant over the recent past.

**Project sanctioning issues**

Although Africa recorded a reasonable amount of success in terms of discovered volumes between 2010 and 2015, sanctioning and development of these reserves is an entirely

different story. A paltry 19% of the overall discovered volumes have been sanctioned thus far – and only reached that level thanks to the high profile Zohr gas field and the Nooros and Atoll projects in Egypt, along with the Coral FLNG project off Mozambique, all of which were sanctioned in 2016 and 2017.

Many of the recent discoveries are located in frontier basins, like Mozambique, Tanzania and Mauritania, requiring large investments and lengthy project schedules in order to build infrastructure.

Even when applying a cautious assumed timeline for field sanctioning activity in Africa, discoveries made from 2010 to 2018 are expected to add about 1.88mn boe/d of new production by 2025, growing to beyond 3.25mn boe/d by 2030 (see Figure 3).

**Shaping the future**

The multiple factors that dictate this timeline for development of the discovered volumes, and the success or failure of current exploration programmes, will play an important role in shaping the future of the continent, given its high dependence on oil and gas revenues. ●

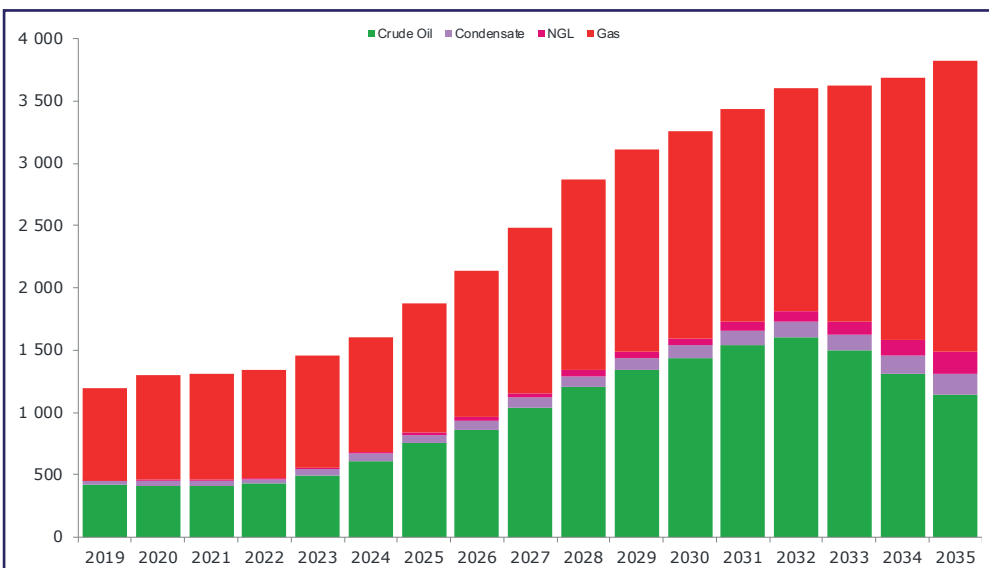


Figure 3: Forecast production from African discoveries made from 2010–2018 (in '000 boe/d)

Source: Rystad Energy UCube