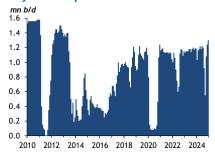
LIBYA SPECIAL REPORT

The first upstream round since 2007 will test foreign firms' appetite, amid political uncertainty and contractors' payment concerns, writes Aydin Calik

Libya crude production



Libya sets sights on 2mn b/d output goal

When the chairman of Libya's NOC quit just two days before this week's annual Libya Energy and Economic Summit conference in Tripoli, there was a slew of last-minute delegate registrations for the event. Industry figures rushed in to ascertain who might permanently replace Farhat Ben Gudara, the state-owned giant's boss since July 2022. What happens next could have huge ramifications for Libya's oil and gas sector.

For now, NOC is being led by Masoud Suleiman, an industry veteran who is well respected by his peers for his experience and technical expertise. But competence only goes so far in Libya. Whether Suleiman gets to keep his job largely hinges on whether he is acceptable to both the western and eastern sides of the politically divided country — a balancing act that eventually proved too difficult for Ben Gudara.

"He will have to get the approval of Haftar," one industry source told *Argus*, referring to General Khalifa Haftar, who controls much of Libya's east and southwest, including most of Libya's oil and gas facilities. If Haftar is not satisfied, he will almost certainly halt oil production, which he has done several times before to extract political and economic concessions from the internationally recognised government in Tripoli, currently led by Abdelhamid Dbeibeh.

Opec member Libya has added 200,000 b/d of crude production in the past few months, with output now at a decade-high 1.4mn b/d. This has been possible because of an unwritten oil revenue-sharing agreement between the country's east and west, which Ben Gudara underpinned. If this arrangement — and the stability that it fostered — continues, Libya could make further strides towards its 2mn b/d crude production goal, and its 4bn ft 3 /d (41.3bn m 3 /yr) gas output target, up from around 1.3bn ft 3 /d today.

Oil minister Khalifa Abdulsadek, who is also an NOC board member, shared with the Tripoli conference a roadmap towards the 2mn b/d goal that consists of "multiple lanes". The most important of these is the redevelopment of the country's workhorse brownfields — including Amal, Ghani, Defa and Waha — which he says would alone be enough to hit 2mn b/d. This level would be sustained through greenfield projects, such as Waha Oil's 100,000 b/d North Gialo and 80,000 b/d NC-98. A third lane, involving the development of marginal fields of up to 20,000 b/d each by Libyan firms would provide further support.

Drill, habibi, drill

"But you also need to replace what you produce," Abdulsadek says, referring to the need for exploration. Libya has Africa's largest oil reserves, at 50bn bl. After abandoning exploration programmes in 2014 for security reasons, European oil firms Eni, BP, OMV and Repsol have in recent weeks resumed exploration drilling, signalling their long-term commitment to the north African country. Algerian state-owned Sonatrach is also gearing up to resume exploration drilling in Libya this year, while Russia's Tatneft is eager to restart exploration and develop a small discovery, once NOC lifts force majeure on its activities, a source says.

Libya can go above $2mn \, b/d$ and $4bn \, ft^3/d$, Abdulsadek says. This is where the country's upcoming licensing round — its first since 2007 — comes into play. It is set to offer 22 exploration blocks, both onshore and offshore, with updated terms set out following consultations with international oil companies (IOCs) and consultancy Wood Mackenzie, replacing the outdated Epsa 4 contract model. "We need to make sure that we have a very competitive investor environment," Abdulsadek says.

Another key area is renewables. Libya is hoping that TotalEnergies will push forward with a long-delayed 500MW solar photovoltaic project. This would help free



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up gas that would otherwise be burnt in power plants for the 775mn ft³/d (7.9bn m³/yr) Greenstream export pipeline to Italy, which is running at less than 10pc of capacity because of rising domestic demand. This is a missed opportunity, given that Europe needs to replace the huge volumes of Russian gas that it has lost since 2022. "Filling up Greenstream is what keeps me up at night," Abdulsadek says, referring to his hope that Libya can again become a key gas supplier to Europe.

Italy's Eni is leading the charge here, with three new offshore gas developments that are due to come on line over the next three years and add almost 1bn ft³/d once they are at full capacity. Additional gas could be unlocked from the Sirte basin, but this is dependent on NOC tackling bottlenecks along the east-to-west gas pipeline, Abdulsadek says. Another potential growth area for gas is Libya's unconventional resources. "Libya has huge unconventional resources, especially in the Ghadames basin with neighbouring Algeria," the minister says. But he stresses that these are in the "last lane", reflecting their "costly and logistically challenging" nature.

Reasons to be cheerful

There is cause for optimism. IOCs canvassed by *Argus* agree that Libya has become easier to operate in over the past 2-3 years. "Things are better and more stable," one country manager said. Libya's rig count of 18 is the highest since the 2011 civil war, with more on the way. An improving operational environment has coincided with IOCs' appetite for increasing oil production, with key operators such as Eni, TotalEnergies, Spain's Repsol and Austria's OMV all eager to expand. And companies such as Shell and Norway's DNO, which are not currently present, had business development people at the conference to scout out opportunities.

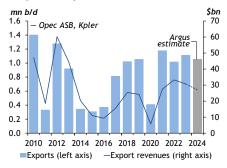
There are also reasons to be pessimistic. Libya's stability rests on a shaky equilibrium between the east and west. Any change to the balance of power risks not only derailing upstream investment plans, but halting production altogether — as happened in August and September last year, when large chunks of output were shut down because of a leadership crisis at the central bank. An even worse scenario would be a return to the full-blown conflict between east and west seen in 2020, when crude output fell below 100,000 b/d for almost six months.

But right now, the main risk to the country's ability to continue raising production is arguably a payment crisis. "The biggest problem right now is payments," the Libya manager for one major oil services firm told *Argus*. "Five years ago it was security, but now it's reversed." Libya's institutional divisions, corruption and mismanagement have left many NOC subsidiaries in debt and unable to pay for upstream work. This has seen some contractors downsize in Libya. "The risk is that a lot of progress will be undone if this issue doesn't get resolved," the oil services manager said. Another said it was impossible to make long-term commitments to Libya without payment certainty.

One IOC source said another key issue relates to NOC subsidiaries' inability to pay their share of new projects' development costs — something that is partly responsible for holding up greenfield developments. Abdulsadek says he is aware of the problem. "We're working very closely now with the central bank and the ministry of finance to secure funds for our projects," he adds. The success of these efforts will play a huge role in Libya's future production levels.

Libya's oil industry has been held back since the 2011 civil war by political divisions and security threats. If NOC's new chairman — whoever that is — can keep balancing political interests, tangible production gains could continue. And with European firms increasingly seeing oil and gas staying core to their long-term business, the time is ripe for attracting new upstream investment.

Libya oil exports and revenues



LIBYA SPECIAL REPORT

Oil minister seeks to overcome funding challenge

Libyan oil minister Khalifa Abdulsadek held an onstage Q&A with Argus senior correspondent Aydin Calik at this week's Libya Energy and Economic Summit in Tripoli, during which he discussed the challenges to upping crude production and overcoming downstream constraints, developing a gas strategy and facing up to the energy transition. Edited highlights follow:

You have outlined a "multi-lane" strategy for boosting crude output from 1.4mn b/d to 2mn b/d in three years. What roadblocks does this plan face? The most challenging thing that we see today is financing and access to financing. The second one would be the availability of the service companies and technologies. These two things sometimes stand in our way as we try to unlock the potential we have. But now we have most of the international service companies coming to Libya, helping us realise the vision towards the 2mn b/d. When it comes to financing, we recognise the issue. We're exploring different avenues, and at the same time, our prime minister and the government are really trying to make funds available for us. I would like to thank our partners who were there for us when it comes to financing on our behalf, and carrying NOC in some projects, until we settled the accounts one way or another, like lifting crude-in-kind. We faced lots of challenges last year and we managed to increase output.

'We used to have a lack of contractors. Now we have them, so I want to make sure that they stick around and help us reach our potential'

A key challenge, more so than security, is that many state-owned operators are struggling to pay contractors and their share of project development costs. What is the ministry doing to resolve the payments problem? The ministry is working around the clock with NOC and its subsidiaries to figure out ways to make sure that we pay our contractors. Because we used to have a lack of contractors. Now we have them, so I want to make sure that they stick around and help us reach our potential. I'm working with my prime minister and my fellow ministers on providing funds for our projects. Unfortunately, sometimes it's not easy to put together a consolidated budget for the state when you have divided institutions. We're working very closely with the central bank and the ministry of finance to secure funds for our projects.

Libya's production has risen by about 200,000 b/d to 1.4mn b/d in the past few months and there are plans for more. At what point do you think Opec might ask you to start restricting production?

Opec understands our position and the difficulties that the country has been through over the past years. We've had our production stop over extended periods of time. So they understand what has happened over the past 14 years or so. Second, our Opec quota was around 1.6mn b/d, so we're not there yet. And even when we get there, we're trying to provide our refineries with crude to refine for local consumption. I think we're providing our refineries with between 120,000 b/d and 150,000 b/d. But we're working on expanding refining. We're thinking of boosting refining capacity once we've got the Ras Lanuf refinery back to anywhere between 300,000 b/d and 400,000 b/d. So technically speaking, we should still be within the bracket of our Opec quota — even once we hit 2mn b/d.

What about Libya's gas potential? When do you think you will be able to fill the Greenstream export pipeline that connects Libya to Italy?

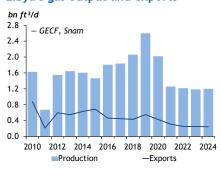
If there is something that keeps me awake at night, it is filling up the Greenstream. Europe is badly in need for gas. Yet we have a pipeline capable of delivering 1bn ft^3/d (10.3bn m^3/yr) and it is not even at 10pc capacity now. We have

'If there is something that keeps me awake at night, it is filling up the Greenstream pipeline'



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Libya's gas output and exports



'We are importing most of the refined products that we need. But at some point we want to produce enough to meet 100pc of our demand'

'We do believe in energy transitioning, but not necessarily the timeframe that has been put forward. Probably the energy mix would change in 2050, but oil and gas will still be driving it' undertaken serious steps towards a gas export strategy that maximises exports from new offshore developments. These are supposed to offset the decline from the Wafa field. But we also need to look at local demand that is increasing by the day. Most local demand is for power generation. That's why we're trying to introduce this energy mix, whereby we could probably offset 20-30pc in the next 4-5 years and free up more gas for export. And then we need to go after gas that has been developed, but not yet brought on stream. We have multiple discoveries and gas caps ready to be blown down and brought to the market. The challenge we have now is that we have a bottleneck in the coastal pipeline that delivers gas from east to west. And then we are trying to minimise flaring and instead utilise the gas for power generation.

Eni is working on the Bouri GUP, for example?

Yes, we've sanctioned a Gas Utilisation Project at the Bouri oil field that is going to handle around 120mn ft³/d. And then we hope to commission the 42-inch pipeline that will evacuate gas from the Sirte basin to the coastal pipeline. And our team is now in the process of engaging with the Petroleum Research Development Centre in order to figure out the timing for blowing down one of the major gas caps at the 103D field, which is capable of producing anywhere between 300mn and 400mn ft³/d for the next 20 years. Roughly speaking, this gas cap contains more than two trillion ft³.

What are your downstream plans?

We are importing most of the refined products that we need. But at some point we want to produce enough to meet 100pc of our demand. Right now, I think that we are at about 140,000 b/d if you consider the Zawiya and Sarir, Brega and Tobruk refineries, which is not enough. The deficit is huge — anywhere between 250,000 b/d and 300,000 b/d.

What is the status of the 220,000 b/d Ras Lanuf refinery?

Ras Lanuf is not really a fully operated refinery — it's more of a topping plant. It can produce diesel for now. But diesel is really needed in this country. Once we get Ras Lanuf up and running, we might be able to make up the deficit we're witnessing. So, the very first project that we want to focus on is bringing Ras Lanuf back and then to upgrade it to a full refinery. But it needs some investment. Ras Lanuf is an integrated petrochemicals complex. Unless the refinery is functioning to provide all the naphtha to make ethylene and propylene, then you're not really getting good economy out of the refinery and the complex. Second, we have projects to upgrade the Zawiya refinery to around 200,000 b/d. I think the upgrade would add another 90,000 b/d. At the same time, we on the NOC board and at the ministry keep questioning ourselves, should we open the downstream for investors? I think we're leaning towards having more investors downstream.

How do you view the energy transition? Is it a problem?

The energy transition for us is not a problem. We are confident that oil and gas — which is our bread and butter — are going to be needed for years and years to come. We do believe in energy transitioning, but we do not necessarily believe the timeframe that has been put forward by different international agencies. Probably the energy mix would change in 2050, but oil and gas will still be driving the energy mix. And at the same time, if you look at our country, we have all the resources. So even with the energy transition, we will still have a strong economy going forward.

