

Price could be right as BP targets Oman tight gas deal

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The Omani government and BP are both hoping to develop the Khazzan-Makarem field. (PA)

Shut out of Abu Dhabi's oil and gas developments, BP is looking to close in on one of its last remaining supersized projects in the Gulf over the next couple of months: the development of tight gas fields in Oman.

Both BP and the Omani government are strongly committed to a project that would deliver 28 million cubic metres a day (MMcm/d) of non-associated gas, but determining fiscal terms will be fundamental to any chances of Block 61 gas being produced.

The vast sums needed to unlock the gas reserves at the Khazzan-Makarem field and reach the target production rate by 2016-2017 necessitate a higher price than the \$3 per million Btu (MMBtu) the sultanate established in 2012 as the de facto rate for domestic gas sold to industrial users.

The field's complex geology and demanding drilling conditions will inevitably result in high development costs, consultancy Wood Mackenzie noted in an assessment of the project released in June. Gas-in-place is reported to be in the region of 2.8 trillion cubic metres, but could be up to 4.2 tcm, it said. The difficult geology, deep reservoirs and high concentrations of hydrogen sulphide in the two deepest reservoirs prompted Petroleum Development Oman to relinquish the acreage in 2004 – preparing the ground for BP to move in with its technological expertise and capital.

Rising costs

As with other mammoth gas developments in the Middle East, BP has had to contend with some hefty cost inflation. According to an adviser to the Oil and Gas Ministry speaking to reporters on 1 September, the initial upfront investment in the project will be \$24 billion – well in excess of the \$15-20 billion figures regularly cited by BP, which themselves were double what was initially cited as the likely development cost.

BP is already five years into a six-year, \$800 million appraisal programme to assess the field's commercial viability, involving one of the largest onshore seismic studies ever undertaken. So far 12 wells have been drilled, but the plan for the field envisages drilling 282 wells in total.

Prospectivity is being talked up. BP has indicated that it could yield up to three times the initial 28 MMcm/d rate.

Omanis will be hoping it is right. If all goes to plan, Block 61 should provide 40% of the country's domestic supply by 2030.

According to Wood Mackenzie, Oman's gas demand is expected to grow at an average of 3.5% a year, from 51 MMcm/d to 93 MMcm/d by 2030. By then, the power and industrial sectors are likely to account for just under 90% of this demand.

Oman's three LNG trains are running at around 80% of their nominal 10.4 million tons per annum capacity and, with spectacularly bad timing, conventional Omani gas production is set to decline beyond 2015.

This puts added pressure on Oman's Ministry of Oil and Gas to agree to a higher gas price for Block 61. Wood Mackenzie has estimated that \$4.50/MMBtu would justify the substantial development costs and prove supportive of project economics.

Interfax understands that BP is anxious to sign a heads of agreement within the next two months, which would pave the way for a final investment decision in 2013 – contingent on reaching terms on gas pricing.

There is good reason to believe the supermajor's optimism is justified. Unlike in Abu Dhabi's unconventional gas development at the Shah field – where BP worked on the initial optimisation studies on the sour gas reverses – the company believes it is in a stronger position to secure a deal on its terms in Oman. Firstly, there is an urgency to Oman's quest for more gas that is not shared by oil-rich Abu Dhabi; secondly, when it comes to developing tight gas, BP is the

Block 61 in the Khazzan-Makarem gas field



Source: BP/Interfax

acknowledged market leader.

"So far, BP is the only company that could undertake development of tight gas at the Khazzan-Makarem fields. There's no choice for Oman's government to go to other companies," said Siamak Adibi, Middle East gas analyst at FGE Energy.

BP will deploy cutting edge technology to unlock Block 61 tight gas, drilling horizontal wells and using hydraulic fracturing technologies to force cracks in the rock to encourage flow through porous rocks located at depths of 4,000-5,000 m.

There is more to the relationship than BP proffering technical expertise in return for revenue streams, however. "BP is interested in Oman not just financially, but also because it wants to develop a long-term relationship by leveraging its technical expertise and the full depth of its international operations to assist with tight gas extraction," said Justin Dargin, a Gulf gas specialist at The University of Oxford's School of Environment and Geography.

Sheikh Ali bin Thabit al-Battashi, an adviser to the Ministry of Oil and Gas who leads negotiations with BP, told reporters on 1 September that the company would start full-scale development of Khazzan-Makarem by the end of the third quarter of 2013 and that the first delivery of gas will be available by the fourth quarter of 2016 or the first quarter of 2017.

The sultanate's commitment reflects domestic challenges that set it apart from other Gulf states. "Oman is unique in that it has significant entrenched poverty, but also significant oil and gas reserves. If you include the Arab Spring in the equation, it compounds the fundamental issues of economic diversification for the country – now it's even more important for Omani authorities to diversify and create a labour-intensive economy," said Dargin.

Time is pressing. Oman only has a limited window to develop unconventional gas resources while ensuring that its industrial drive does not falter. Under the government's Vision 2020 masterplan, there are just eight years to meet its target of full economic diversification.

Getting into the Gulf

That strategic imperative is matched by BP's corporate need to obtain a toehold in the emerging Gulf gas market. That entry point, company chiefs reckon, could in time morph into a bridgehead to participate in the broader development of the Gulf's still largely untapped gas reserves.

"BP is seeking to competitively entrench itself in the Gulf gas market for the long term. However, if you look at how the international oil companies [IOCs] are positioning themselves for the Gulf gas sector, they view it as a very strategic market," said Dargin.

One reason for this is that IOCs anticipate fiscal and regulatory changes that would further benefit a company that already enjoys a prominent position.

"For the IOCs it is extremely strategic to get a foothold into Gulf gas market because the perception is that, within five to six years, there will be significant price reform or evolution of contractual terms," said Dargin. "Even if, domestically, the Gulf countries don't reform prices they could still reform the contractual terms for IOCs, which would make it attractive for them to invest in the gas sector."

What makes Oman particularly attractive in this regard is that it is the pioneer among Gulf states in moving to flexible pricing. A prime example was the changes to the Oman India Fertiliser Co.'s (Omfico's) contract at its urea manufacturing plant in Sur. The feedstock gas price was increased in May 2012, from \$0.77/MMBtu to \$1.50/MMBtu for 2012, rising to \$3/MMBtu by 2015, said Wood Mackenzie.

Omfico was aiming for \$3/MMBtu, but under the agreed terms an annual escalation of \$0.50/MMBtu was written in. Once the price gets to \$3/MMBtu the annual escalation will be either 3% or the US inflation rate, whichever is the lowest.

For BP, confronting high capex levels on Khazzan-Makarem, \$3/MMBtu would barely cover the cost of production. Nonetheless, the pragmatic stance towards price terms gives it comfort that a commercially acceptable deal is in the offing on Block 61.

Oman's pressing need to access its substantial unconventional gas reserves could send ripples far beyond the sultanate's borders. "What Oman is doing is more or less an internal structural adjustment programme," said Dargin. "It's shock therapy, trying to evolve an energy dependent economy that isn't based upon market-based price signals."

BP – which also showed a canny instinct in the Middle East three years ago when it secured the largest of Iraq's oil developments, at Rumaila – may thus find itself strategically positioned in one of the Middle East's last untapped hydrocarbons growth areas.