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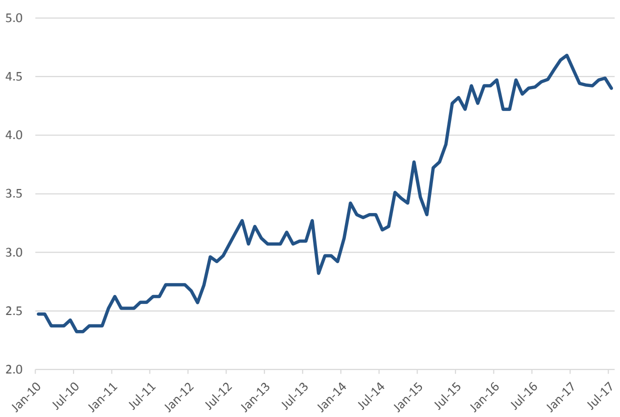
Iraq's oil revenue conundrum: challenges and opportunities of the upstream sector

Despite crude production growth having remained below expectations in the past decade, Iraq has been able to develop its ailing oil infrastructure and boost exports with the help of international oil companies (IOCs). But low oil prices in 2016 drove export revenues to less than half of their 2013 levels. Looking ahead, oil prices are expected to remain low, and the country will have to maintain stable production growth. Reforming current contracts will be a key component in attracting and retaining existing IOCs to help support future capacity growth. Furthermore, Iraq is challenged to go beyond just increasing output and create more value across the entire oil supply chain. Increasing refining capacity will reduce the existing import bill whilst helping the country transition into becoming a net product exporter. But is Iraq on track to strategically drive its oil revenues and shape the future of the sector?

Despite significantly increasing exports in recent years, low oil prices damaged Iraq's hopes for higher revenues. With foreign reserves of less than $50bn and dependence on crude exports for 99% of the government budget, the sharp fall in the oil price has put a significant strain on public spending and negatively impacted the development of the oil sector.

Iraq crude oil production (m b/d)



Source: EIA

In addition to the decline in revenues, soaring costs from Iraq's war against ISIS have further affected their ability to carry out planned developments across the energy sector. Considering the likelihood of oil prices remaining at current levels, the country will have to rely on additional exports for higher revenues, thus requiring significant support from IOCs to increase production capacity. Given that many of them were frustrated by the government's past inability to make timely payments, it is no surprise that there is an industry-wide trend to reconsider future involvements in Iraq, aided by the fact that neighbouring Iran – with the exception of political risk – offers more favourable contracts for fields with similar profiles.

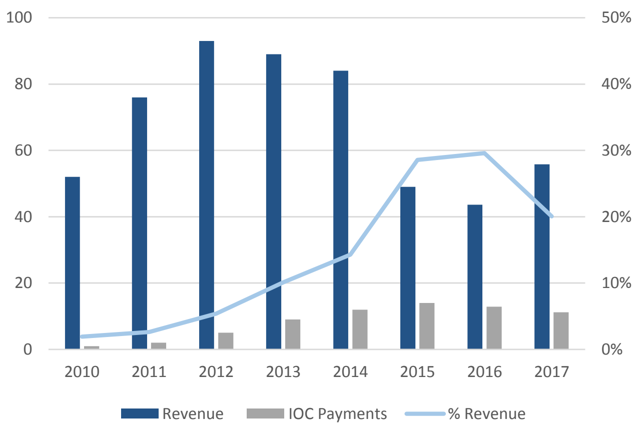
On the positive side, the government is working on solutions to some of the major obstacles to capacity growth and has made progress in de-bottlenecking infrastructure and expanding export capacities. A significant portion of growth in recent years can be attributed to improvements in crude quality. As part of its strategic decision to produce more crude, the country began drilling a heavier crude mix from the Mishrif reservoir to blend with its Basra Light, triggering a discount within the Basra Light formula. The split into Basra Light and the new 23.5 API Basra Heavy made sense given the upward trajectory in higher volumes of the grade from new production, whilst at the same time preserving the quality of the 29.7 API Basra Light.

However, more investments are needed to achieve the required levels of output growth. Securing more natural gas and progressing with water projects will be instrumental in the recovery and production of additional crude from southern Iraq.

The critical role of IOCs

In 2016, the Iraqi Ministry of Oil announced that it would offer 12 fields to international companies through direct negotiations instead of the previous lengthy procedure of licensing rounds and subsequent bidding rounds for the exploration of four blocks. The 12 fields are situated in three different regions: four in Basra, five in Misan and three in Karbala. As of mid-October 2017, at least 19 small and medium-sized firms, mainly from Asia, had prequalified. However, it is evident that Iraq's comparatively unattractive contracts are weighing on the sector's potential. IOCs operate as contractors for the government, with little control over how the fields are developed, and receive margins of around $1.15-2.00/b.

Oil revenue & IOC payments ($bn)



Source: Iraq Oil Ministry, MEES

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These terms created little incentive for IOCs to bring down production costs. The effect was a success in ramping up oil production, but a failure on gas management and the ability to utilise associated gas resources for domestic consumption. The government's contractual obligations proved costly during the production boom, at a time when low oil prices put downward pressure on government revenues. In response to current fiscal challenges, the government is cutting back on planned investments aimed at increasing production. Upstream investments fell from $21bn in 2014 to $12-14bn in 2015. Recently, the IMF agreed to loan the government $5.4bn conditional on settling arrears to IOCs.

A concerning development is Shell's announcement, in September this year, to withdraw from the 220k b/d Majnoon field, where it holds a 45% stake. While shell remains committed to the Basra Gas Company, there is growing apprehension that it also plans to relinquish its 20% stake in West Qurna 1. This would be a major setback for a country already struggling to justify a 6m b/d production target by 2020. In a forward-looking movement, Iraq has started negotiations with Chevron and Total, who have expressed their willingness to develop Majnoon once they can agree on a deal with Shell. Up until now, not least due to the challenging operating environment, Total has kept its presence in Iraq small. Its involvement in the country is mostly limited to the Halfaya oil field, where it holds a 22.5% stake in the consortium, averaging 44k b/d in 2015. Additionally, Total has some interest in several exploration blocks in Iraqi Kurdistan. While it has declared an interest in increasing its presence in the country, it is said to want better financial terms before investing further.

Plateau Production Targets (PPT) of key fields (m b/d)

Field	Output	Operator	New PPT	Was	Expiry
West Qurna-1	0.47	ExxonMobil	1.6	2.83	2030
Zubair	0.45	Eni	0.85	1.2	2035
West Qurna-2	0.43	Lukoil	0.8	1.8	2035
Rumaila	1.5	BP	2.1	2.85	2035
Halfaya	0.2	PetroChina	0.4	0.54	2040
Majnoon	0.22	Shell	1.0	1.8	2030
Gharaf	0.1	Petronas	0.23	0.23	2030
Total Planned	3.37		7.0	11.2	

Source: MEES

What gives hope is that the Iraqi government has been signalling that it will plan larger investments in its oil sector in 2018 to increase production. Already, the improving security situation has helped facilitate exploration, including block 12 in the Najaf and Muthanna provinces. But the long-term outlook will hinge on the amount of foreign investment the government manages to attract, especially in critical infrastructure projects such as water injection programmes. A phased-out project located at Khor al Zubair in southern Iraq is expected to have an impressive capacity of 7.5m b/d of water in its first phase, but is not due for commissioning until 2019. Substantial increases in natural gas will be required to support production targets, and whilst Iraq has made some progress on recovering flared gas, more will be needed to utilise the country's associated petroleum gas for re-injection.

Leveraging the supply chain to create value

But given the outlook for prices, the country will need to go beyond increasing production capacity to bring in the revenues needed to fund public spending. Iraq has to evaluate and leverage opportunities across the oil supply chain, including accelerating the development of the downstream sector to reduce the import bill whilst at the same time exporting fuel products alongside crude oil.

Federal Iraqi Refineries (k b/d)

Operational	500	War damaged
Basra	210	Baiji
Daura	140	Sinniya
Kirkuk	30	Kasak
Misan	30	
Najaf	30	
Samawah	30	
Nasiriya	30	
Planned	**1,250**	**Status**
Basra Expansion	70	EPC awarded
Nasiriya	150	Bids invited
Misan	150	MOU signed
Karbala	140	Under construction
Kirkuk	150	Bids invited
Basra*	100	Bids invited
Kut	100	Bids invited
Samawah	70	Bids invited
Basra	300	Bids invited
Najaf	20	Ministry project
Total	**1,750**	

Source: MEES, MEED Projects, APICORP Research

Between 2004 and 2016, the country spent over $35bn on the import of oil products. With prospects of continuing growth in demand for products, the import bill is set to place more pressure on government. Once integral to Iraq's oil economy, the loss of the Baiji district along with control of the Baiji refinery to ISIS reduced the refining capacity by nearly 50% and was a huge blow to the country. The announcement to restart Haditha in September 2017 was a step in the right direction, but is only expected to increase capacity by a modest 10k b/d. Not surprisingly, the rehabilitation of Baiji is a priority for the country and could return more than 300k b/d of capacity. Iraq also has a series of plans for new refineries and expansions of existing refineries that could boost total capacity to 1.8m b/d. However, it should be kept in mind that – with the exception of the 140k b/d Karbala refinery currently under construction and the EPC award for the Basra expansion – progress on most projects will be very slow given Iraq's current difficulty in attracting serious foreign investors.

SOMO's new approach to marketing Iraqi oil

The industry has long called for Iraq's SOMO (State Organisation for Marketing Oil) to become more creative and proactive in its marketing approach. As recently as this year, the company has paid heed to these suggestion with a new transformation policy that would see it transition into a trading company.

In April 2017, SOMO sold its first cargo via an auction on the Dubai Mercantile Exchange (DME), which witnessed the participation of more than 20 companies bidding for 2 million barrels of Basra Light crude. The DME provides SOMO with a platform to access a wider market and sell more competitively, having had the June cargo sell at a $0.31/b premium to the official selling price (OSP), thus helping the country to maximise revenues on exports.

Following this success, SOMO stated its aim to trade 2 million barrels of Basra Light on the spot market each month. In early May 2017, the organisation announced a joint venture with Lukeoil's Litasco – one of the world's largest trading companies – in setting up LIMA energy, a trading company to market and trade Iraqi, Russian and other crude. Prior to that, Iraq's national oil company had almost exclusively relied on its trading arms or subsidiaries to sell its crude, bypassing traditional oil traders such as Glencore and Vitol. The joint venture follows the same model as Oman Trading International, which began as a venture between Oman Oil and Vitol, but is now fully owned by Oman Oil, trading Omani crude, products and LNG.

SOMO claimed that the success of LIMA could see the expansion into a new company focusing on shipping or storage. In August 2017, Al-Iraqi Shipping Services and Oil Trading Company (AISSOT) was set up via a joint venture involving Iraqi Oil Tankers Co (IOTC) and Arab Maritime Petroleum Transport Co (AMPTC), a pan-Arab company established by OAPEC. The company will start bunkering operations at ports in southern Iraq and will handle trading of petroleum products, ship chartering, oil terminals and various marine services. AISSOT is already in a position to invest and gradually acquire a fleet to transport Iraqi crude at competitive rates.

In what is seen as a drive to gain influence and bring in more revenue, SOMO has also proposed to switch its price benchmark for Basra crude in Asia to DME Oman futures from as early as January 2018. This would mark a shift away from fellow OPEC members, who conventionally use price assessments from Platts as their benchmark. The mechanism is intended to reflect the real value of Iraqi crude by adopting a new marker. While it will require careful consideration, it further highlights SOMO's efforts to diversify its activities. Already, they have indicated the possibility of hedging to ensure long-term and stable export revenues as well as the possibility of introducing a third grade – Basra Medium –, but no mention has been made of the timeline or likely volumes as of yet.

Conclusion

Withstanding both domestic and global turbulence, Iraq's resilient crude production has surprised many industry observers. But the country still faces substantial challenges going forward if it is to meet its production target. While Iraq has made some progress in improving poor infrastructure, stronger efforts will be needed to support future output growth.

Iraq has to expand export facilities in the south and add more Single Point Mooring facilities (SPMs), but will also need to diversify its export outlets. This includes constructing new pipelines and utilising existing outlets as well as the possibility of exporting through neighbouring countries. Achieving production targets will also require substantial increases in both natural gas and water injection to increase recovery rates and boost production. Despite having made steps towards reducing gas flaring, Iraq remains the second largest gas flaring country in the world.

Going forward, there are four key success factors for Iraq: One, the country should reform the existing contracts to ensure IOCs have the right incentives as well as the right operational environment to increase output capacity.

Two, Iraq should prioritise the capture of natural gas for re-injection in the process of crude production. In this regard, water injection will also be a priority. As of today, it is known that the South Oil Company will undertake the Common Seawater Supply Project (CSSP) aimed at supplying water to at least five southern Basra fields and one field in Misan. But the first phase of the project is slated for 2019 at the earliest and comes at a significant cost of around $4-6bn. Financing has indeed been a major hurdle for the oil and gas sector overall.

The third success factor is thus for Iraq to attract foreign investment. Securing financing will help the country develop projects across the oil supply chain and ramp up refining capacity, which will reduce both the import bill and enable Iraq to export products alongside crude. In the meantime, the proactive approach adopted by SOMO as well as the formation of two new joint ventures with the aim of maximising revenue and diversifying export signal a step in the right direction.

Last, Iraq has made remarkable progress on security, but the country has to prove that it is able to maintain and intensify these efforts in the long term. There is further risk of political instability following the Kurdish referendum in September 2017 and potentially following the Iraqi general election in early 2018. Steering the course that achieves both security and stability will be crucial in creating a competitive market environment. This will be done through the implementation of effective policies, thus enabling the government to control oil revenues and carry out the necessary work in developing the crude oil supply chain.

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