



## Iraq oil: Upstream ambitions undimmed, infrastructure remains key

The recent formation of a federal government suggests that Iraq's strategic upstream oil objectives – exports at 4 million barrels per day (mb/d) and production at 6mb/d by 2020 – now look to be within reach. After a political hiatus caused by slow progress in forming a new government post the May parliamentary elections, the appointment of a well-respected oil minister and growth among the country's major southern oil projects allowed Iraq to reclaim its place as one of OPEC's largest producers. The devil is still in the details. Resilient infrastructure is still needed including: networks to carry additional volumes to market via the southern oil terminals and the 5mb/d Common Seawater Supply Project.

Iraq's oil sector in the post-Saddam period has been characterised by steady progress despite a raft of political, security and infrastructural challenges. Given its large potential, the country's oil sector has been criticised for missed targets and bureaucratic interference. But its achievement in the past decade and a half has been notable, given the monumental destruction Iraq endured during years of war, following a long period of sanctions. Production gains have lifted Iraq into the top flight of global oil producers, overtaking Iran and second now only to Saudi Arabia within OPEC. This progress has been achieved despite internal political fighting, red tape and delays for operators, where as recently as October 2018, total production reached new heights of 4.65mb/d.

### Southern oil projects ramp up

In Iraq's south, with the bulk of the country's 3.6mb/d of oil exports, production has edged higher in 2018, whereas average demand growth for the first seven months was only 7kb/d year on year. Growth from new projects and existing production has come despite the political uncertainties and social unrest that caused minor disruption to oil operations during the summer months. While delivering jobs to local residents in the southern provinces has proved a challenge for the federal and provincial administrations and living conditions continue to be poor in the major urban centres of the south, there is growing expectation that the new government will address these problems.

### Iraqi upstream growth - selected oil projects (kb/d)

Field	Operator	Plateau target	Output Sept 18
Nassiriya	Dhi Qar	-	90
Gharraf	Petronas	230	87
Halfaya	CNPC	400	250
Missan Group	CNOOC	450	220
Zubair	ENI	850	454
Rumaila	BP	2,100	1,475
West Qurna-1	Exxon	1,600	455

Source: APICORP Research

Historically, delays to upstream growth have been widespread, but progress is now being made across the board. Two major southern oil projects that were scheduled to hit plateau output

by the end of 2018 – Halfaya and Gharraf – are now expected to achieve contract plateau output in 2019. For example, Halfaya - heavy oil 22.5°API - operated by PetroChina, had added 70k b/d of output as part of its final phase three development from September through November, and is on track to hit 400k b/d in 2019. Production gains are also being recorded at the giant Rumaila field, the Missan area fields, Zubair and West Qurna 1.

### Northern exports' first major step: Deal for federal exports to use the 0.7-1mb/d pipeline to Turkey

While the south has driven capacity growth for years, northern oil exports, from the area administered by the Kurdistan Regional Government (KRG), are also set for a boost following the clinching of a preliminary deal between the KRG government in Irbil and the federal government in Baghdad. The deal, brokered by incoming Prime Minister Adel Abdul-Mahdi and the recently appointed oil minister Thamir Ghadhban, opens the way for up to an additional 100k b/d of Kirkuk exports to flow through the KRG pipeline system and into the Iraq-Turkey Pipeline (ITP) to Ceyhan. The Kirkuk volumes will come on top of the 400 kb/d of KRG-produced crude being pumped via the ITP at present, bringing northern exports to 500kb/d.

The past year has been a difficult year for the KRG, since the ousting of Islamic State from Mosul, a failed independence referendum, and the subsequent government takeover of Kirkuk and other disputed areas from KRG control in October 2017. These military developments marked a low point for Kurdish ambitions for oil and economic independence. The political crisis has yet to be fully resolved. Deprived of Kirkuk oil exports, Irbil has instead sought to maximise export volumes by reducing crude allocated to the region's many small refineries.

Plans to boost throughput capacity of the Irbil export pipeline from 700k b/d to 1mb/d is also designed to offer a durable export route for federal crude. If oil ministry plans for an expansion of the Kirkuk field were to go ahead, spare capacity on the KRG pipeline would be an obvious fit for Kirkuk exports, which have dwindled in recent years. During its discovery, the Kirkuk field was the biggest oil field in the world, but is today producing less than its 450kb/d assessed capacity. The deal

signed between BP and North Oil Company (NOC) in May 2018 is expected to increase the Kirkuk field capacity to 750kb/d and total capacity from six fields in the Kirkuk region to more than 1mb/d.

## Beyond Baghdad-KRG relations, a key signpost is the role of the revived Iraq National Oil Company

The KRG's objective of maximising the transit fee for pumping federal oil through its pipeline system was one of the potential obstacles. Baghdad's prioritisation of domestic refining in an effort to reduce the reliance on expensive imported oil products may also in time diminish the volume of Kirkuk oil available for export – as capacity increases at the huge Baiji refining complex to the south of Kirkuk.

The prospects for enduring stability in the Kurdish-federal relations are in part the function of a pragmatic, new senior leadership in the federal government. Parliament's October vote to install Patriotic Union of Kurdistan moderate Barham Saleh as president was an important step, allowing Saleh to nominate in turn Abdul-Mahdi as prime minister. This enabled a return to the oil ministry for veteran Iraqi oil official Thamir Ghadhban, replacing Jabbar al-Luaibi, whom Abadi had appointed to head the revived Iraq National Oil Company (INOC), due to take control of the country's national oil companies as well as manage shared infrastructure. This could dampen some of the political tensions that have riled the oil sector in 2018 if handled properly and offer a stronger advocate for the national

### KRG oil production capacity October 2018 (b/d)

Field	Capacity
Atrush	28,000
Demir Dagh	3,600
Khor Mor	14,100
Khurmala Dome	160,000
Sarqala	25,000
Shaikan	31,000
Shewashan	1,000
Simrit	6,000
Swara Tika	20,000
Taq Taq	12,000
Tawke (inc Peshkhabir)	130,000
<b>Total</b>	<b>430,700</b>

Source: APICORP Research

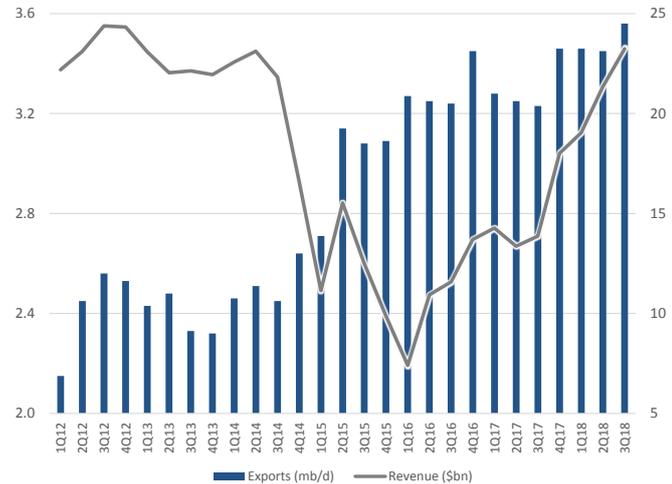
companies within federal government. Critics of the INOC legislation suggest, however, that it may also serve to deepen claims for autonomy in some oil-producing regions, including Basra.

### Implications for 2019 federal budget: possible deficit expected

The draft 2019 Iraq budget assumes an increase in exports to 3.8mb/d and an average oil price of \$56. Although total exports topped out this year at 3.6mb/d in September, the oil ministry officials believe the export system can handle volumes above 3.7mb/d with the current configuration of single-point moorings (SPMs) and storage facilities. What will make a significant difference will be work to increase pumping throughput– and the refurbishment of subsea pipelines, some heavily corroded.

But even if this potential was to be realised, given the assumptions in the draft budget, the government will still experience a projected deficit of between \$23-30bn or 9-12% of GDP depending on the discount Iraqi crude sells at. Further down the road, Iraq is looking at establishing a new marine loading facility that would increase southern exports above the 4mb/d level.

### Iraq exports vs revenue



Source: MEES

As a founding member of OPEC, Iraq's commitment to the organisation will also play a role in its growth trajectory. The country's recovery after years of sanctions and underinvestment has allowed it to claim exemptions from quotas in the past and increase its exports. But as the country continues to outpace its peers in terms of upstream growth, it has been allocated production limits along with other member countries. For now, given faltering production in the oil sectors of some other members, this is not so significant a problem. How Baghdad intends to accommodate its OPEC obligations alongside its growth ambitions will be a significant challenge in the longer term.

### Conclusion

Iraq is set to continue its upstream growth story in 2019 despite persistent challenges, inherent to post-war reconstruction and political reconciliation process. The new government of Prime Minister Abdul-Mahdi has demonstrated a strong degree of pragmatism aimed at resolving political differences in the name of maximising output and export revenue. Declining oil prices since early October challenged spending levels – but Iraq has shown resilience in the face of tighter budgets. The success story for Baghdad has been the ability to pursue upstream growth and make use of shared infrastructure – despite heavy delays in debottlenecking export infrastructure. .

Iraq's capacity to continue to adjust and to look for new and diversified export routes will be key moving forwards. Greater security in key transit provinces, such as Anbar, and the experienced cadre of Iraqi oil technocrats should strengthen growth prospects. On the other hand, the government's ability to meet the basic needs of its citizens in terms of power provision and employment will be a key test. In many respects, Iraq's growth story may be considered only partly complete.

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