



Iraqi Drilling Company personnel drill a well at the West Qurna 1 field in Basra in May 2019.

Rumaila's quest for water key to production increase

Future growth at Iraq's largest oil field hinges on unresolved plans for meeting the project's massive demand for new water supplies.

Iraq's largest oil field, accounting for nearly one-third of the country's total production, is poised to surpass 1.5 million barrels per day (bpd) - but its growth hinges on a key resource: water.

"This is a water-management field," said Nick White, acting deputy general manager for the Rumaila Operating Organization (ROO), an umbrella entity that includes field operator BP, along with PetroChina and the state-owned Basra Oil Company (BOC).

A mature field that has been producing for more than six decades, Rumaila's production naturally declines by 15 to 20 percent each year, according to several people familiar with the project. As a result, just to keep production from falling, ROO constantly needs to get the most out of existing wells while also drilling new formations.

"In 2019, we are still targeting an excess of 1.5 million [bpd]," White said - but such production levels are only possible with a sound water-management plan.

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Optimism swells over giant Eridu discovery

Lukoil has upgraded an assessment of its Block 10 exploration results – the latest success stemming from a 2012 contract auction that was initially seen as lackluster.

Russia's Lukoil has presided over a major discovery at Iraq's exploration Block 10, raising new expectations of ultimately producing over 300,000 barrels per day (bpd) from the Eridu field.

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DELIVERING THE FUELS THAT ENERGIZE PROSPERITY

Q&A: Ihsan Ismaael, director general of Basra Oil Company

Iraq's largest state oil company is expanding production capacity and building new infrastructure as it waits out OPEC quota.

Have all of the ExxonMobil staff returned, including the Americans? Is there a new agreement between BOC or the Oil Ministry and Exxon?

ExxonMobil has started to gradually return its employees to West Qurna 1 field. Employees are returning to work, from different types of nationalities including Americans. There are no new terms for their return to the field except the security coordination with Basra Operations Command and the Ministry of Defense.

What is the current production of the field? And what's the plan for a production increase?

The production of West Qurna 1 is currently about 450,000 to 490,000 bpd. A new production unit was added with 100,000 bpd capacity. BOC has lots of capabilities through other fields to increase production, but we are committed to OPEC's agreement.

There has been about 200,000 bpd capacity increase at the Zubair field. What are the changes and developments that helped to reach that increase?

Zubair field is one of the best oil fields in terms of implementation of surface facilities, and it has the capacity to treat 500,000 bpd via the new facilities and 200,000 bpd by the old ones. The plan is to reach production capacity of 700,000 bpd by 2027.

Iraq's OPEC-related cuts have come mainly from state-operated fields. Is there any concern that the fields will be damaged as a result of such severe curtailments?

BOC is the most active company focused on protecting and maintaining the reservoirs. Engineers are tasked to manage and head the joint operating committees, and they do what is continuously required to maintain the reservoirs, as their maintenance and protection is a nonnegotiable goal.

What are the plans to expand the export outlets? What about the delayed Fao depot?

The Fao depot is currently under the supervision and technical evaluation of Toyo



Ihsan Ismaael, director general of the Basra Oil Company, inspects a bridge keeping rising floodwaters out of the Majnoon oil field on April 9, 2019.

company [Toyo Engineering Corp.]. A consulting contract was previously signed and the final results will come out in three months so we can make a real plan to build the Fao depot. Currently it is under SCOP [State Company for Oil Projects] supervision, which was assigned to jointly work with the Oil Ministry on the implementation. We hope there will be a new development and implementation plan after the report of Toyo company.

What is the nature of the compromise deal between BOC and Leighton company – the result you reached or will reach – and the timetable?

Leighton has abandoned all its rights and previous demands made to BOC to obtain all its confiscated properties that have been held in Dubai for more than five years. Leighton exited the tender without paying anything to BOC. BOC took its rights and was five years late in carrying out the project, while the equipment was stuck in UAE ports, as they are needed to carry out the contracted project.

What is the status of rebuilding the strategic pipeline, which will connect

southern crude to the northern network?

BOC is working to rehabilitate Basra's strategic line, to export Basra crude through the northern region to the Turkish port of Ceyhan. There is a plan of action to rehabilitate PS2 and PS3, which has technical problems in Najaf province, and there is guidance from the Oil Minister to SCOP that handles the project, to speed up the implementation, while BOC will be providing the support and the funds.

What's the status of the common seawater supply project (CSSP), which has been in negotiations or awarded recently?

Initially, the project was assigned to Hyundai as a non-binding initial referral, and the Oil Ministry is in the process of preparing a financing plan to ensure the implementation of the project.

Will it be funded by the budget or is it going to be an investment project?

It will be discussed to clarify the financing whether by the government or investment. ♦

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Optimism swells over giant Eridu discovery

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Preliminary estimates suggest Eridu could hold between 7 and 10 billion barrels of reserves, which would make it one of the top seven largest fields in the country, according to two senior officials at the Dhi Qar Oil Company (DQOC), which is Iraq's state partner in the development of Block 10.

"Expected production is 300,000 bpd, though these are just estimates, and well drilling is ongoing," said one of the DQOC officials. "The reservoir's pressure is good, and we are optimistic."

Both DQOC officials and two other industry officials confirmed that production is expected to reach 300,000 bpd. That figure is unlikely to be finalized until at least 2020, when the consortium is scheduled to set a development plan for the field.

The two DQOC officials estimated that commercial production would begin by 2022, with an initial target of 50,000 bpd.

The Oil Ministry awarded Block 10 to Lukoil and minority partner Inpex, of Japan, in a 2012 bidding round focused on exploration. The contract includes a remuneration fee of \$5.99 per barrel.

The block stretches across the north-eastern portion of Muthanna province and into the western edge of Dhi Qar province. After the Oil Ministry spun off DQOC from the Basra Oil Company (BOC), in March 2017, it assigned DQOC to oversee Block 10. (Muthanna province does not yet produce enough oil to meet a minimum threshold required to have its own state-run oil company.)

The exploratory drilling plan for Eridu involves a total of 13 wells, according to one senior DQOC official. Three exploration wells have already been drilled, and three more evaluation wells are in process, all under a contract with China's Bohai. Another seven evaluation wells are set to be drilled by the Chinese company ZPEC.

"Drilling operations are going easily," the DQOC official said. "We are drilling

to the Mishrif layer, at a depth of 1,900 meters."

The consortium's preliminary analysis suggests the field holds relatively high-quality crude, with an API gravity of between 25 and 29 and low sulfur content, according to the DQOC official.

"Our labs on site are not very accurate, though," the official added.

A third DQOC official compared the crude quality at Eridu to that of the Nasiriya field.

The data gathered during the exploration phase will inform the development plan, which will in turn dictate the construction of other infrastructure.

"Surface facilities will be built, including separation stations, storage tanks, and pipelines," the second senior DQOC official said. "All of this will be attached to the development plan."

As with many fields in southern Iraq, one challenge associated with developing Eridu will be accessing enough water to inject into the ground, to maintain reservoir pressure as crude is produced. Unlike some fields, which only need large amounts of water in later phases of their development, DQOC believes Eridu will need water right away.

"Injection must begin directly after initial production," the first DQOC official said. "Right now there is no clear injection plan. We have water at a depth of 280 meters, but we're not allowed to take it from there because it's a groundwater reserve."

Another unanswered question concerns the boundaries of the field.

"Lukoil has requested to expand Eridu field, because they found other reservoirs beyond the field's current borders," the third DQOC official said. "We will give them permits to do so, pending the approval of several departments."

A bidding round bears fruit

Eridu is just the latest success story from the fourth bidding round, which initially did not attract as much interest from

IOCs as the Oil Ministry might have hoped.

Out of 12 exploration blocks offered in 2012, only four were awarded, as companies complained that the contract terms -- which largely resembled the technical service contracts (TSCs) that govern the development of already-discovered fields -- did not present adequate financial incentives to offset the risks inherent in exploration.

Now, however, those projects that were awarded are bearing fruit.

The Fayha field, which was discovered in Block 9, in Basra province, is now producing just over 20,000 bpd from five wells, according to an official at the field. By the end of this year, it's expected to reach 50,000 bpd.

Block 9 was initially awarded to a consortium led by Kuwait Energy, which was recently acquired by China's United Energy Group (UEG).

The consortium is currently connecting pipelines to a central processing facility, and just made plans to build a gas-oil separation station, according to the field official.

In Block 12, the Russian company Bashneft, a subsidiary of Rosneft, said in May 2018 that it had discovered a new oil field that has been named Salman, after drilling a 4,277-meter exploration well. That block straddles western Muthanna province and the southern part of Najaf.

Bashneft won the block in a consortium with the UK's Premier Oil, which exited the project last year. A second well is expected to be completed by the end of 2019, according to Bashneft disclosures.

At Block 8, in Diyala province, Pakistan Petroleum is teaming up with the state-run Midland Oil Company (MdOC). The consortium has collected 318 square kilometers of 3-D seismic, according to corporate disclosures, and spudded its first exploration well in April 2019. ♦

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Rumaila's quest for water key to record production

WATER, cont'd from **page 1**

In recent years, ROO has gotten increasing volumes from the Qarmat Ali water treatment plant, pumping the water up to Rumaila and injecting it into the ground, which has helped maintain reservoir pressure.

Rumaila has and will continue to rely heavily on electric submersible pumps (ESP) to create artificial upward pressure to increase productivity in wells.

"The well program and the future for Iraq is very much around ESPs," White said. "So we will see the population grow well in excess of 1,000 ESPs, which is a big portfolio for any field."

To support the next phase of production growth, however, even more water is also needed. And one potential solution is for ROO to capture and use the water that comes out of the ground as a byproduct of crude production.

"That's the intent," said White. "It's very much around separating the water out, and then we want to use that water - produced water - in the re-injection program, because that water has got value for us in reservoir support."

The major question is whether the Oil Ministry will support such a plan.

The evolving water challenge

BP and PetroChina signed the technical service contract (TSC) for Rumaila in 2009, when the field was producing just under 1 million bpd. Since then, ROO has made steady gains.

The consortium was initially targeting a production plateau of 2.85 million bpd, but the Oil Ministry renegotiated the contract in 2014, as Iraq faced low oil prices, a financial crisis, and limited ability to fund capital spending. Now, the plateau target is 2.1 million bpd.

As the field ages, the water-management challenge is growing and evolving.

Historically, Rumaila's production has come predominantly from the northern Main Pay reservoir. At first, there was enough natural pressure to produce without much water injection, and the crude it-



The Shamiya degassing station at the Rumaila oil field on April 29, 2019.

self had very little water content and therefore needed relatively little processing.

"When you start a field, you don't have the water breakthrough," White said. "As a field matures, you get water with oil. Then you need to separate it."

To tackle the new water-management challenges, ROO has installed three-phase separators, known as free water knockouts (FWKO) to take out water and then gas, in four degassing stations in south Rumaila and one in the northern sector of the field, known as DS3.

This process is different from the classic desalter-dehydrator facilities that have been used in other parts of Rumaila, where the relatively low water content in the crude means water-separation can be left as a last step.

The use of FWKOs creates a major opportunity, according to White. Each one has the capacity to process 60,000 bpd of crude and 40,000 bpd of water - creating an additional supply of water for injection back into the reservoir.

For the time being, however, the water from Shamiya is essentially being treated as a useless byproduct - sent to the Damam reservoir rather than being reinjected.

"That is a lost stream," White said. "That is why we are keen to get the ministry and BOC to approve our produced water re-injection program as quickly as possible, so we can actually get value for everybody."

In the meantime, Qarmat Ali is the only major source water for Rumaila. The treat-

ment facility that ROO installed two years ago is now producing 1 million bpd of water, but this water is also shared with other IOCs.

Development at a crossroads

The major parameters of any development plan for the field require approval from the Oil Ministry, which has traditionally maintained relatively stringent specifications for the water that can be used for injection into oil fields.

ROO's development plans appear to hinge largely on the consortium's ability to convince the ministry to embrace an unfamiliar approach.

"There are many elements around specification, water, governance process," White said. "Things take time. Always."

The water re-injection plans are also likely to dictate whether — and to what extent — Rumaila's development will depend on the Common Seawater Supply Project (CSSP), an ambitious multi-billion dollar initiative that would take water from the Basra Gulf and send it north to several oil fields.

The project has been delayed for years.

"CSSP is still very much there as far as we are concerned," said White. "The challenge would be the financial arrangement associated with it. But any bit of water we can get to support Rumaila would be most welcome." ♦

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Deals in limbo as Oil Ministry fights political headwinds

Decision makers are moving cautiously on major oil sector initiatives while they beat back political opportunists making unsubstantiated corruption allegations.

Eight months into Iraqi Oil Minister Thamir Ghadhban's tenure, his ministry is fighting against major political headwinds as it pursues strategically important deals.

Surrounded by grandstanding politicians who have already raised a variety of unsubstantiated corruption allegations, the Oil Ministry has taken a deliberate approach to two major sets of initiatives that had gained momentum under the previous administration: upstream deals awarded in the ministry's fifth bidding round, in April 2018; and a massive suite of infrastructure projects that are critical to increasing Iraq's production and exports.

"Thamir is basically starting from zero," said a U.S. official. "He's giving close scrutiny to all contracts. No one wants dirt."

The Oil Ministry has also declined to renew two profitable joint ventures with the marketing arms of Russia's Lukoil and China's Zhenhua, which had helped enable Iraq to maximize the price at which it sells crude -- but which also prompted some MPs to accuse the government's State Oil Marketing Organization (SOMO) of financial impropriety.

Most of the political pressure is coming from a handful of populist personalities who appear more interested in establishing their images as anti-corruption crusaders than in understanding the underlying facts of the oil sector. In regular appearances on satellite television channels, and using their platform in Parliament, they have made a variety of allegations related to both upstream deals and oil sales.

Previous oil ministers have faced accusations from similar figures, but the political climate in Baghdad makes the recent scrutiny especially potent. Because Prime Minister Adil Abd al-Mahdi ascended to the premiership as a compromise candidate, he lacks a solid base that might function as a political bulwark for key ministers -- and rival parties have shown relatively little inclination or ability to reign in their most provocative members.

"The political environment is very fragmented. There are clear alliances, blocs, trends, but very little command and control," said a senior Iraqi political figure. "This isn't a coordinated political effort to undermine the ministry; it's a couple of guys looking to get on television. And there is absolutely no indication that there's any substance to their allegations."

at the ministry and before Parliament committees, saying those pointing fingers at the ministry are welcome to present the evidence they have. The ministry's press office has also released detailed statements in response to various allegations, correcting the factual errors and misrepresentations that tend to underpin the most sensational claims.



Oil Minister Thamir Ghadhban (third from left), flanked by deputies and senior directors general, hosts MPs and other critics at the State Oil Marketing Organization's headquarters to explain how the oil sale process works on April 9, 2019. (Iraqi Oil Ministry's media office)

The official acknowledged that corruption has been pervasive throughout Iraq, including in the oil sector, but said that political figures were highly unlikely to talk about actual crimes -- or provide evidence of them -- because so many parties are entangled in the schemes. Instead, politicians who want to raise their appeal with anti-corruption voters typically fabricate or exaggerate allegations either against their rivals or against officials with comparatively little political protection.

Ghadhban has publicly addressed his critics frequently, in meetings he has held

Ghadhban himself has not blamed his critics directly for slowing his ministry's work, instead attributing the ministry's pace to its adherence to a system of internal checks designed to protect against the kinds of problems that MPs are concerned about.

"For contracts, there is a system," Ghadhban told reporters on the sidelines of a recent ministry event. "There are operating companies that are empowered by law to negotiate contracts according to certain authorities... and there is a centralized committee, headed by me, with all concerned directors general and deputy ministers -- they look at those contracts. And

not only that, we have a specialized team... they look at every contract in detail, scrutinize the cost of all the items and they come back with recommendations."

Joint ventures scuttled

Leading the charge of accusers against the ministry is Uday Awad, an MP with the militia-turned-political party Asaib Ahl al-Haq, who now sits on the Parliament Oil and Energy Committee.

Shortly after Ghadhban took office last year, Awad took aim at SOMO and its joint ventures with Litasco and Zhenhua.

"SOMO's corruption has become one of the most dangerous matters that threatens the state," Awad said at the time. "There are indications that a huge amount of money has been wasted by the company, estimated in the millions of dollars."

In fact, the joint ventures were structured to help Iraq earn a premium on its own oil sales: SOMO sold oil to the JVs at the standard price, and then the JVs tried to resell the same crude for a higher price. Any of the resulting profits were split between the government and the private partner, effectively giving Iraq the opportunity to earn extra crude revenue while minimizing downside risk.

As a side benefit, the JVs also helped provide a better understanding of the market that Iraq sells into, improving SOMO's ability to set prices that strike the optimal balance between maximizing revenues while still attracting buyers.

Awad, however, may have misunderstood the nature of the profit split, and claimed that he possessed documents detailing financial mishandling. Awad has not responded to several requests to provide or discuss his evidence. On May 6 he told a press conference that he planned to sue the state-run Basra Oil Company, and oil firms BP, Eni, Anton Oil, Kuwait Energy, and Lukoil for allegedly violating employment laws.

"The corruption mafia within SOMO will be hit for dealing with the Russians and Chinese companies in exchange for commissions that go into the pockets of the corrupt," Awad said in a statement.

Following a publicity campaign, which also included appearances on satellite

news channels, Awad gathered signatures from 13 members of the Parliament Oil and Energy Committee, summoning SOMO Director General Alaa al-Yassiri and two of his senior deputies for questioning. They appeared in Parliament on Jan. 22, and reporters were not allowed in.

From outside the doors of the meeting, Iraq Oil Report could hear bouts of yelling as Awad led the questioning of Yassiri. By most accounts provided by committee members, the SOMO leaders answered the questions with clarity and pointed out errors in the documents presented by Awad.

"It was a very productive meeting, during which the director of SOMO unveiled the details of SOMO operations," said Ghalib Mohammed, a member of the committee from the Gorran party. "I believe Yassiri provided convincing answers to many of the questions in a transparent way."

According to a statement issued by SOMO on Feb. 21, the main evidence of wrongdoing provided by the MPs was a false "establishment document" of the JV with Zhenhua that incorrectly stated the contract term as 50 years.

"SOMO has proved that the document and the contract are false, by showing the true draft, which was submitted to the Council of Ministers and confirms that the contract term is only five years," the SOMO statement said.

Nonetheless, Awad continued his campaign against SOMO in regular television appearances. In one interview, he said he was ready to submit evidence to the Parliament "clearly proving the minister's involvement in hiding files related to SOMO and continuing his protection of this corrupt company."

At some point in early 2019, the ministry decided to scuttle the JVs. A senior ministry official and an industry official said the contracts required an annual renewal, and the ministry had simply let them expire.

"There was a sort of assessment to stay as we used to be, before, in terms of selling," Ghadhban said recently on the sidelines of a ministry event. "It's more practical, and perhaps it's too early now to go ahead with joint ventures. Perhaps in the future, but not now."

Critical infrastructure on hold

Political pressure also appears to be one of the many factors complicating late-stage negotiations over the Southern Iraq Integrated Project (SIIP) between the Oil Ministry and a consortium consisting of ExxonMobil and the China National Petroleum Corp. (CNPC).

The most recent version of the deal involves three projects critical to the future of Iraq's oil sector: infrastructure to raise export capacity through the Basra Gulf; facilities to treat associated gas, enabling Iraq to reduce flaring and increase domestic energy production; and a project to provide water to several oil fields around Basra.

To pay for the infrastructure the consortium would get development rights for two oil fields, Ratawi and Nahr Bin Omar, currently operated by Basra Oil Company (BOC).

In the waning days of former Oil Minister Jabbar al-Luiebi, talks began to gain momentum. And when Ghadhban took office, he consistently listed the project as one of his top priorities.

But after half a year, negotiations are still ongoing.

One of the most foreboding developments is that, according to both a senior Iraqi official and a senior American official who are familiar with the negotiations, the Iraqi government intends to submit the deal for approval by the Parliament. That would break a precedent set with other oil deals, which have gone forward with only the approval of the executive branch.

"The Oil Ministry wants MPs to understand that, if we do this deal, it's going to mean a portion of our oil exports won't feed state revenues for a few years, until a certain threshold of repayment is reached," the Iraqi official said. "The Parliament is going to own this, or it's not going to happen."

The deal seemingly took a significant step forward on May 8, when the Cabinet endorsed further negotiations with Exxon, though no final deal has been reached as of publication. ♦

Q&A: Bahaa Nima Abid, acting director of the Siba gas field

The first of federal Iraq's three gas fields awarded in a 2010 bidding round is now nearly ready for commercial production, helping the country become a sustainable producer of electricity.

What is current production of gas and condensates?

The [first commercial] production target is 25 million standard cubic feet per day [scf/d], until gradually reaching a daily production rate of 100 million scf/d.

The station was opened in April 2018, and production started in at the beginning of August 2018.

Current production is 20 million scf/d. The commercial production threshold of 25 million scf/d has not been officially reached by the operator, because of operational and reservoir considerations.

The foundation of the contract focuses on gas production rather than condensates. LPG is considered a secondary product, and production is currently 4,000 to 5,000 bpd.

What is the timetable to increase production of both gas and condensates?

According to the contract, the operator is not obligated to produce condensates. It is only dry gas - 25 million scf/d to reach commercial production, 100 million scf/d for the plateau. The rest is secondary production.

Note that the condensates production is good. If [dry gas production] reaches 100



Bahaa Nima Abid, acting director of the Siba gas field, at his office in April 2019.

million scf/d, then the condensates will be 20,000 bpd.

The contract is for 20 years. It starts with commercial production, then increases to 100 million scf/d over nine years, and then a normal decline.

Have you hit any problems on the way to commercial production?

Yes, we have done preventative maintenance and experienced technical malfunctions. This is generally part of the work. After the opening of the station, work in the field has gone smoothly.

Where does gas from Siba go now, and how is it used?

The gas production is sent directly to the national network. Condensates are sent for export, by SOMO, which mixes them with the exported crude. There are future thoughts to invest in the condensates, without mixing them with crude.

Are there any plans to export gas from Siba to Kuwait?

The gas is currently pumped into the national network, for now, because Iraq needs the gas and has not reached the ability to meet local demand. There is no plan to export gas at the current time.

If Akkas and Mansuriya fields are developed, and if they start production, then maybe the local demand will be covered and gas can be exported. ♦

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Q&A: Fatih Birol, head of the International Energy Agency

After spearheading a major new survey of Iraq's energy sector, the IEA's executive director previews his key insights and policy recommendations.

Your recent report on Iraq's energy sector notes that the Oil Ministry and Electricity Ministry's capital spending has fallen in the last five years. Does the government need to put more money into electricity investment? What are your main policy recommendations?

Capex increases are a key issue, but it's not the most important one for me. The main problem is how to manage the current infrastructure better. There is huge room for improvement without adding one new gigawatt of new capacity.

Today we have about 32 gigawatts of capacity [in Iraq], but effective generation is only about 16 gigawatts because of lack of maintenance and inefficient use of power plants.

More importantly, out of those 16 gigawatts, when we send it to the customers, about 40 percent is lost during distribution. This is a world record. In Africa, for example, which has some of the least developed power systems in the world, the losses in distribution are about 14 percent.

This is something which can be easily identified - what are the weakest parts of this system. And with limited additional capital, but good management, we can cut the losses in half. This would help a lot to address problems this summer.

You also reached some interesting conclusions about the private generator business.

We have calculated that the average cost of neighborhood generation to customers is four times higher than customers pay in Germany. This is a huge amount of money. It's scandalous. There's a need for regulating the neighborhood generation tariffs.

We've calculated that neighborhood generation revenues were last year about \$4 billion, which is one and a half times higher than the entire capex budget of the Electricity Ministry.

Your report says Iraq could potentially take short-term actions that improve power supply by 4 to 5 gigawatts, which seems unusually optimistic.



Fatih Birol, Executive Director of the International Energy Agency. (IEA)

I am hopeful, and I'll tell you why. One, I believe it's a very urgent issue. Second, the new government here, it's a technocrat government. When I look at the prime minister, the minister of electricity, the minister of oil, they give me a lot of confidence. They have a strong intention to improve the situation, and also the skills to address these issues.

The IEA expects major changes in global HFO demand. Can you summarize how these changes are likely to affect Iraq, and what policy actions you are recommending the Iraqi government to take in response?

With the introduction of the new IMO [International Maritime Organization] rules next year, we expect that a large dent will be made in heavy fuel oil demand globally, particularly for HFO that has high sulfur.

In the immediate term, the effects can be mitigated because Iraq will continue to need to burn liquids for power generation to meet peak demand. But going forward, it is essential that Iraq's downstream sector

keeps up both with the upstream, and the evolving product demand in the country.

At present, the problem with refineries in Iraq is both quality and quantity. Iraq produced too little refined product, and most of this is HFO because of poor upgrading facilities in the refineries. We are encouraging the government of Iraq to look closely at this issue, and to try to incentivize the investments needed in the downstream sector.

The gas that Iraq is currently flaring could fuel 4.5 GW of electricity generation. It makes overwhelming economic sense to invest in developing associated gas. So why hasn't it happened? What are the key structural barriers? And are you making any policy recommendations for the Iraqi government that would help encourage investment in associated gas?

This is a fundamental issue in Iraq. The 16 bcm [billion cubic meters] flared each year is more than enough to displace all imports of gas Iraq currently relies on. In other words, it would save Iraq billions of dollars each year if it can capture and utilize the associated gas in the south of the country.

In the very recent past, there have been encouraging signs, with Basra Gas Company increasing capacity to 10 bcm and taking final investment decisions to grow this further in the next two or three years. We are also encouraged by some of the developments in other fields, and the contracting of service companies that can make a difference.

One element of Iraqi gas that is particularly interesting is its high ethane content. At 17 percent, Iraq's associated gas is very liquid-rich, and Iraq can use this in the future to underpin a petrochemicals industry. For me, the issue of gas is not only about power generation, although that clearly is a major concern, but also of broader economic diversification that can be enabled by an efficient gas market. ♦

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Q&A: Hossam Hussein Wali, director general of the South Refineries Company

Iraq's largest refinery is set to expand by over 30 percent this year.

Can you give a snapshot of SRC's current refining activity?

The South Refineries Company has three refining units of 70,000 bpd each, and is making progress in terms of expansions and production increases.

In January and February 2019, there were maintenance and rehabilitation works done on the first and second production lines, which were completed. Operations resumed, and production in March increased up to the planned rate - 200,000 bpd.

Since March 15 until now, the refining units have been 95 percent active. The improvement units are 85 percent active - that's the available capacity to produce gasoline of more than 90 octane.

What are the rehabilitation and expansion projects currently taking place at Basra refinery?

The expansion operations continue. Currently there is work on the fourth refining unit, with a processing capacity of 70,000 bpd. The work is progressing, and we hope it will be completed by September, to start testing and then operation.

Work has been partially hindered by some of the secondary contractors and workers of TechnoExport. [Editor's note: TechnoExport is a Czech company owned by a Swiss conglomerate that has worked as a subcontractor on a variety of refining projects in Iraq over the past decade.]

A meeting was held with the company's director, to amend and improve the work. There are some indications that secondary contractors will be replaced, and we obtained a new specific timetable to speed up the installation of the fourth refining unit.

Once it's active, the production capacity of Basra refinery will be 280,000 bpd.

What about the water problem - is it solved? Do you expect the same problems to reoccur, like last year?

As for the industrial water, we've taken a few actions, such as contracts to supply



Hossam Hussein Wali, the director general of the South Refineries Company.

Basra refinery with water, a semi-rental RO [reverse osmosis] water unit, which will be to provide water - 600 cubic meters per hour - to the Basra refinery.

We have also started to drill water wells on the SRC's site. That has been tested, and conforms with the requirements for industrial water. An announcement has also been made about installing another 600 cubic meter-capacity RO unit, to be ready next year - a sea station. In addition to other precautionary actions for the next summer season, including providing filters for the sea-based RO units.

When do you expect refining capacity to increase?

An increase will be reached during the last few months of this year, and at the beginning of next year, 2020. This will result in an increase of gas oil and naphtha production.

Once the Azmarah unit is completed and operated, which is expected at the end of this year, benzene - 88 octane - will in-

crease. Naphtha exports will be reduced because of increasing local benzene production, and benzene imports will go down.

How has the capacity of the Basra refinery changed in the past year or so?

The capacity is affected by several elements, such as crude quality, weather conditions, and high temperatures.

We have urged BOC to improve the quality of the crude they deliver, and they are responsive.

Some precautionary steps have been taken by SRC to increase the crude storage capacity, to improve the consistency of crude supply to the refining units so they can work at higher capacities than last year.

What is the quality of the delivered crude in terms of API and sulfur content?

It is below SRC's standards. The units are designed for 34 API, and the crude supply is currently 31 API.

If the quality were better - if the API could increase up to 33, say - we could potentially increase production of benzene.

What refined products are exported, and through which ports?

The products that are exported are the gas oil and the extra non-hydrogenated naphtha from the external refineries. Also, there is a plan to export jet fuel, once extra supply is available; currently we supply Basra International Airport.

The exports are done through Khor al-Zubair port, because it's close to SRC. There are pipelines to deliver gas oil and a pipeline for the naphtha.

What details can you give about the Fao investment refinery?

Fao refinery will be established in an area near the crude export ports. There are currently preparations ongoing to announce the project. Eight international companies will be enlisted to build it, according to the ministerial contracting. ♦

Q&A: Zuhair al-Araji, mayor of Mosul

To recover from a devastating war, Iraq's second-largest city needs a massive mobilization of resources and coherent planning and organization – but it's getting neither.

What are the various authorities in charge of reconstruction in Mosul, and how are they coordinated?

A month ago, the governor of Ninewa [Naufel Hamadi] was removed. A new governor has been appointed. A crisis cell was formed to act as a temporary administrative body in Ninewa. The crisis cell was composed of the chairman of the University of Ninewa, Muzahem Khayyat; the commander of Ninewa Operations Command, Maj. Gen. Najim al-Jibouri; and the head of the Ninewa Police Directorate, Maj. Gen. Hamad Namis.

What are the responsibilities and powers of the Ninewa Crisis Cell?

The crisis cell was formed to contain the public grievances and avert further escalation. The initial task of the crisis cell was to facilitate the release of Ninewa's budget and all the other funding that had been put on hold. The crisis cell gathered 135 billion Iraqi dinars [about \$114 million] from the stabilization and reconstruction budget, to fund the ongoing projects in Ninewa.

The crisis cell, in coordination with the local administration and numerous experts, mapped out a plan and divided the projects into three categories: urgent projects; projects we need to complete in six months or a year's time; and long-term projects. Once we underlined our priorities, the implementation phase of the projects kicked off, based on the available budget.

Where is corruption causing the most problems? How do you characterize the nature and the scale of the corruption?

With all due respect to the former governor, the former governor was running all the administrative-related affairs by himself, and through a handful of individuals in his office. The governor was unilaterally laying out plans, providing budgets, and implementing projects. He was awarding tenders to companies that he himself presented. He would appoint contractors.

The nature of the process itself raises eyebrows about corruption, even if he was not involved in corruption. Why did he shut out the local institutions during the implementation of these projects? The way the governor handled the projects raised major concerns about corruption. The former governor's ways of handling things derailed [reconstruction] efforts.

We are pursuing a different mechanism now, where four bodies are jointly involved in planning, financing, and implementing the projects.



Zuhair Muhssein al-Araji at his office in Mosul in May 2018.

Who decided how to prioritize the projects, and how?

Let me put it this way: all of our main hospitals had been demolished. Salam, which was a 400-bed hospital, was reduced to rubble. Health care is a priority, and we have a massive population who are in need to medical services.

So we installed a 50-bed facility and asked the UN to add another 50-bed medi-

cal facility. We allocated a sum of money to install temporary medical facilities, because health care is essential and we could not wait a year or two until the hospitals are reconstructed.

Health falls into the "urgent" category. So do education and services. The majority of schools are flattened to the ground. We need 1,000 schools. But with the budget we have at our disposal, we are building 100 schools.

How are security forces organized in and around Mosul?

The Iraqi Army has established a military line right outside the city. The local police is in charge security inside the city. In addition to the Iraqi Army, in the Ninewa plains, we have Christian Hashid, Shabak Hashid.

When it comes to the southern parts of Mosul, like Qayarah, Shora and Hazir, Ba'aj and Hamam Alil, there is a presence of Hashid Ashayari. These Hashid groups are playing a secondary role, after the Iraqi Army.

We've seen evidence that ISIS has devolved back into a kind of insurgency. What's the extent of the threat they now pose to Mosul?

We have a large swath of open territory west of Mosul that stretches towards the Syrian border. The ISIS remnants who have fled the battlefields in Iraq and Syria have retreated to these open areas.

These remnants are sneaking into villages at night to obtain supplies, whether medical or food. Some of the villages contain no more than 10 houses. Once they sneak into the villages, they ask the local villagers for food and other supplies.

Some of the local villagers comply and provide them with supplies in exchange for some slight financial gain. For instance, if a pack of cigarettes costs 1,000 dinars, the locals would sell it to the ISIS fighters for 10,000 dinars. Same applies to food supplies: you can purchase 10 loaves of bread

for 1,000 dinars in a normal bakery, then sell the bread to ISIS for 10,000 dinars.

It's not possible to deploy a force to every village composed of 10 houses. The Iraqi Army is deployed to a strategic line. They cannot provide protection to every village.

These ISIS infiltrations are not that significant. ISIS no longer exists; what we deal with is individuals who will eventually surrender or be killed in confrontations.

The Crisis Cell was disbanded, and Muzahem Khayat resigned. What happened?

There is nothing fishy about dissolving the Crisis Cell. It was a temporary body to oversee the reconstruction process and service delivery, and to run administrative affairs, until the new governor came to office.

The press misinterpreted Muzahem Khayat's so-called resignation. Khayat held a press conference and stated that his role with the Crisis Cell has come to an end with the appointment of a new governor. He didn't use the term "resignation" because it wasn't a resignation.

Why did the commander of Ninewa Operations Command Najim al-Jibouri resign from the Crisis Cell?

Najim submitted a request for retirement six months ago. In his request, Najim had demanded to be promoted to a higher rank before his retirement. He is now neither retired nor promoted; he's been transferred to the Ministry of Interior, where he will continue to serve but without holding any key positions. ♦

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Q&A: Zardasht Shangali, Cmdr. of the Sinjar Resistance Units

After deadly clashes with the Iraqi Army in March, the YBS leader discussed improved security coordination, a strategically important Syrian border crossing, and the future of Sinjar.

We have been tracking the recent conflicts between YBS and Iraqi forces in Sinjar. How is the current situation?

The situation is normal now. We managed to defuse the tension and stop the misunderstanding that caused some tensions in Sinjar.

After the [recent] military clash at the checkpoint, we faced some complications with the Iraqi Army units in the area. It was mostly the result of misunderstandings.

I believe that the conflict was staged to shift Baghdad's position against people of Sinjar and YBS forces, specifically. We immediately started to clarify our position. We told Iraqi security leaders that we did not want this conflict. Later, by peaceful and friendly talks, we showed them what was going on. Then Baghdad leaders found out that the issue was artificially amplified.

What did you and the Iraqi leaders find wrong in the whole situation?

The Iraqis realized that the conflict was not initiated by YBS members. It was not a planned attack by us. It was actually a military accident that happened in the Bora checkpoint. We did not initiate it.

Actually, some Iraqi soldiers started shooting at YBS members. In the first conflict, two of YBS's members and an Iraqi soldier were martyred. The Iraqi Army soldier who was killed was shot from behind, at a point when all YBS members at the checkpoint were seated in a car. This shows that he could have been shot [accidentally] by another Iraqi soldier.

Anyway, it is still not clear what exactly happened.

What exactly have YBS and Iraqi leaders agreed about Sinjar going forward?

Right after the accident, Iraqi security leaders — including the Iraqi Army's chief of staff, the head of the national security institution, and the commander of the Ninewa Operations Command — came to Sinjar. We started direct talks with them, and we found out that the accident was mostly caused by lack of cooperation.



Zardasht Shangali, commander of the YBS (Sinjar Resistance Units), a paramilitary group that operates in the Sinjar district of Iraq's Ninewa province. (Zardasht Shangali)

The conflict was between YBS and the Iraqi Army's 72nd Brigade, which had arrived in the area just four days prior to the checkpoint accident.

We agreed to form two joint operations rooms, in Snunne and Sinjar, in order to have proper security and military cooperation. The Iraqi Army's 72nd Brigade, local police, and al-Hashid al-Shabi forces — who are not from the area [but come from southern and middle provinces of Iraq] — as well as YBS will be parts of the joint operations rooms.

Do they recognize YBS as part of the Iraqi security apparatus?

Yes, they have recognized YBS and YJS [the Sinjar Women's Protection Units], a sister organization of YBS] as formal security forces. They see them as legitimate and reliable Iraqi forces.

They know how YBS and YJS fiercely fought Daesh and how much they sacrificed in battle. We started fighting Daesh before

everyone else in the area. We have helped the people of Sinjar to return to their homes. We are the ones who kept the Iraqi flag in Sinjar for a long time, before the Iraqi Army and al-Hashid al-Shabi came to the area. We used to bring special forces of the Iraqi national security apparatus from Syria to Sinjar when Daesh was in the area. We fought Daesh together, in the same trenches.

Does the Iraqi government support and supply YBS forces? Does it pay your fighters, similar to the support it has offered to al-Hashid al-Turkmani, the Christian Hashid forces in Ninewa?

Yes, it does, but the support is not sufficient, and we still have half of our fighters unpaid.

YBS has about 4,000 members. Part of this force is within the structure of al-Hashid al-Shabi. It is supplied and paid by Iraqi national security institution. We are a formal security force in Iraq. National army and security leaders sit with us to discuss all security issues in Sinjar.

Your political opponents say YBS is an arm of the PKK, and you are just implementing PKK's agenda. What is your relationship with the PKK?

First, YBS consists of the local people of Sinjar. About 90 percent of them Yazidis, and the rest are local Arabs. They are all from Sinjar.

PKK came to Sinjar to protect our people when there was not any other force to protect us. It was the time when Daesh was conducting a genocide campaign against our defenseless people. Both the Iraqi federal government and the Kurdistan Regional Government were aware of the PKK's intervention in Sinjar. PKK was welcomed at the time because it was protecting the dignity of Sinjari and all Iraqi people. We will never forget this support.

However, on April 1, 2018, PKK formally and totally left Sinjar. There is not any PKK militant here. YBS consists of the young people of Sinjar.

The people who are accusing us of being PKK are those who do not want Sinjar to have its own security forces. They actually do not want Sinjar to become a stable place, so that displaced people can return to their homes. They are against reconstructing Sinjar.

Second, there are some members of Iraqi Parliament who bring up the PKK issue from time to time. I think they would be better off discussing how and why, on Aug. 3, 2014, Sinjar was left defenseless against Daesh terrorists. Why are they not questioning the military

forces and officials who left Sinjar for Daesh?

These parliament members are not from Sinjar, and they did not get the votes of the Sinjari people. They do not represent Sinjar. They should stop disrespecting Sinjar and its people.

Has the recent agreement between YBS and the Iraqi government changed anything regarding the posture of your forces in Sinjar?

No, we have not changed anything. All YBS forces are still in their positions.

We are expecting the Iraqi federal government to implement the agreement regarding the joint operations rooms in Sinjar and Snune. Leaders of Iraqi national security institution promised to create badges for YBS fighters and their vehicles. The promise has not been met yet. We are still waiting for Baghdad to fulfill its end of the agreement. ♦

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Federal Supreme Court oil lawsuit awaits PM signature

Baghdad's seven-year-old case against KRG oil sector inches closer to resolution, with next hearing set for Aug. 5.

Iraq's highest court has postponed until at least August a ruling in a landmark lawsuit challenging the autonomous Kurdistan Regional Government's (KRG) independent oil operations.

The lawsuit, first filed by the federal government in 2012, is one of three ongoing legal actions against the KRG's policy of producing and exporting oil without oversight from Baghdad.

The Iraqi Constitution does not clearly establish the balance of oil authorities between the federal government and the KRG, instead calling on Parliament to pass new laws fleshing out the structure of the country's oil sector. But those legislative efforts have been stuck for more than a decade, and Iraq has developed two separate oil sectors according to diverging interpretations of the constitution.

With no foreseeable prospects of a long-term political resolution, the issue is now in several different courts.

In addition to the Federal Supreme Court case, Baghdad has made a multi-billion-dollar claim against the Turkish government in a Paris court of arbitration for facilitating the KRG's independent oil exports, in an alleged violation of the Iraq-Turkey Pipeline treaty. Officials familiar with the proceedings say a judgment is expected within a year.

Another legal action was filed in April, by the state-run North Oil Company (NOC), in the Kirkuk Investigative Court, challenging

the KRG's decade-long control over the Khurmala Dome formation of the Kirkuk oil field.

While those two lawsuits affect key aspects of the KRG oil sector, the Federal Supreme Court case is the one that most directly addresses the core constitutional arguments at the heart of Iraq's oil disputes.

The case was first filed under then-Prime Minister Nouri al-Maliki, but was stuck for years because the KRG, exploiting a procedural loophole, did not show up in court. Hearings picked up starting in April 2018, when KRG lawyers began attending hearings.

Since then, proceedings have been slow, as Chief Justice Medhat al-Mahmoud has hinted at the court's reluctance to rule on an issue where a political settlement might be possible.

Mahmoud has repeatedly requested that lawyers obtain signatures from leaders in both Baghdad and Erbil, in an apparent effort to confirm that top decision-makers -- who have struck short-term deals to facilitate some limited oil sector cooperation -- actually support the hard-line arguments being made by their legal representatives.

At a June 17 hearing, Iraqi Prime Minister Adil Abd al-Mahdi was the only person whose signature the court had requested but not received.

When Mahmoud asked why Abd al-Mahdi had not signed the statement, the federal government's lawyer, Haider al-Sofi, said he had given the court's instructions

to the prime minister's office.

"I submitted to you today a statement attached with an official letter from the office of the Secretary General of the Council of Ministers, Hamed al-Ghazi, and the official has signed with his real signature, and the prime minister signed an internal statement attached to this letter," Sofi said.

Mahmoud said he had received the letter signed by Ghazi, but he indicated he did not have the prime minister's signature.

"We asked you to bring the real signature of the prime minister -- the court was clear," Mahmoud said. "We need a statement signed by the federal prime minister, as we asked before."

After the hearing, Iraq Oil Report asked Sofi whether the prime minister would provide his signature in time for the next session, now scheduled for Aug. 5.

"I will explain the situation and it will be his decision," Sofi said.

Imad Allaq, representing the Oil Ministry, said his team also submitted an updated bill of complaints that was four pages long.

The KRG, represented by Rushdie Khalis, is legally obligated to submit a response.

The updated Oil Ministry complaint "doesn't say anything new from the previous one," Khalis said, "but legally we need to respond. So I requested more time." ♦

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