

2018 ANNUAL REPORT

Riding the Oil Markets: Iraq's Economy in Transition





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Contents

Introduction: The Struggle to Diversify	1
Riding the Energy Markets	2
Oil and Gas Continue Ascendance	4
Slow Recovery for the Kurdish Region's Energy Sector	8
2019 Oil Production Growth Potential	9
Legal Disputes & Opportunities for Resolution	10
North Oil Company: A Year of Hope	
Overcoming the Infrastructure Challenge	13
Gas Utilization Strides Forward	14
Refining Capacity to Expand, Major Challenges Remain	15
Electricity: A Struggle on Many Fronts	16
The Struggle for Economic Reform	
Reform Focus Areas	20
Economic Governance Gains	22
First Mover Advantages	23

Introduction: The Struggle to Diversify

Iraq's fortunes in 2018 transitioned from concern that reconstruction funding would not be available following the Kuwait Reconstruction Conference, to optimism as the oil price recovered from \$63 in February to \$85 in October. By April, BMI research were predicting economic growth of 4.5% in 2019.

Missing from this picture was the modest emergence of non-oil investment in Iraq through early 2018, in the form of small ventures in the hotel sector, the app economy and the cement industry. While relatively small compared to potential energy sector investment, these projects illustrate the potential there is for economic diversification. Unfortunately, much focus has been on oil prices and foreign donations, to the neglect of a better environment for greater investment and sustainable job creation.

In one of the more interesting trends of 2018, small scale Iraqi entrepreneurs have beaten a path to new business in the digital economy. 2018 saw more media coverage of pioneering companies such as Baghdad's Miswag grocery

service, circumventing or (in the case of Sulaymaniyah-based Bazary) actually changing legislation at the local level. Miswag even used a voucher system for online transactions, a workaround for Iraq's largely un-banked population.³

These trends in the e-commerce and the app economy have been building for some time in Iraq, with early champions of innovation such as Fikra Space pushing against bureaucracy, a testament to the entrepreneurial spirit that has been dormant in Iraq. But until Iraq's banking system and access to banking catches up with the requirements of these job creating new industries, most critically in the realm of start-up capital, struggles will continue for these "leapfrogging" trends. There is a risk non-Iraqi firms in the app economy will take advantage of new opportunities, with companies such as the UAE-based Careem taxi-app launching in Baghdad this year.

Efforts to support the sector have been limited so far. A Central Bank of Iraq (CBI) start-up capital fund, Tamwil, has disbursed only a small amount of available funds because the requirements for securing loans are beyond

¹ Dan Eberhart. Oil markets are in for a rough ride in 2019. Forbes. 07.01.19

https://www.forbes.com/sites/daneberhart/2019/01/07/oil-markets-are-in-for-wild-ride-in-2019/#575b4495485e

 $^{^{\}rm 2}$ Mahmoud Kassem. Iraq economy forecast to grow 1.5% in 2018 according to BMI. The National.

https://www.thenational.ae/business/iraq-economy-forecast-to-grow-1-5-in-2018-according-to-bmi-1.718054

³ Aaron Bartnick. Obstacles and Opportunities for Entrepreneurship in Iraq and the Kurdistan Region. American University of Iraq Sulaimani. https://auis.edu.krd/iris/sites/default/files/IRIS_Entreprene urship%20in%20Iraq%20and%20KRI%20report.pdf

the capacity of most small businesses.⁴ Iraq's efforts to facilitate the private sector must go much further, although Tamwil is at least an improvement on the nearly impossible requirements for obtaining a loan from most Iragi banks, which make it prohibitively difficult for non-government employees. There is now growing private sector pressure on banks, including discussions being held, to ease the flow of start-up capital for new business.5 Without these vital efforts, Iraq will dependent upon hydrocarbon revenues that increasingly cannot serve a rapidly growing population. See below for more analysis on regulation in Irag's SME sector.

Riding the Energy Markets

The trajectory of oil prices through 2018, from a surge back to a crash and then a see-saw of movement on conflicting data, again illustrates how Iraq's fate rests upon factors outside its control, presenting an almost perfect picture of resource dependency.

Without urgent implementation of reforms, Iraq will be at the mercy of global markets, with factors such as U.S.-China trade tensions or the budgeting decisions of shale producers comprising just a few of the factors influencing oil in 2019.6 The challenge is to

adapt to this difficult situation and make policy accordingly.

By mid-2018, Iraq's monthly oil revenues were rising well above the state salary and pensions expenditure of around \$5 billion, approaching \$7.5 billion by July (see below for more detailed analysis of the oil sector.) There followed demands from many lawmakers in Iraq to end "austerity" as total federal oil production rose to 4.68 mbpd in September,7 leading to pushback against the 2019 budget, which assumed \$56/ bbl.

Extra finances had become available only through stabilisation of expenditure: Iraq had sustained enough fiscal discipline for foreign reserves to surpass \$60 bn by October.⁸ This was a substantial improvement on the \$47 bn foreign reserves at the end of 2017 and a massive change from the previous low oil price cycle years, that had drained Iraq's financial resources.⁹

At the same time, the optimistic picture at the end of 2018 was tested as oil prices reduced, despite Moody's Investors Service predicting that growth in Iraq would rise to 4.1% in 2019, up from 2.8%. 10 Whether this will translate into

https://finance.yahoo.com/news/shale-under-pressure-oil-falls-000000507.html

⁷ Daniel Lalor. Iraq's oil production and exports safe, protests hit key port Umm Qasr. S&P Global Platts.https://www.spglobal.com/platts/en/market-insights/latest-news/oil/090618-iraqs-oil-production-and-exports-safe-protests-hit-key-port-umm-qasr

⁸ John Lee. Iraq's foreign reserves to 60bn. Iraq Business News. 25.10.18. http://www.iraq-businessnews.com/2018/10/25/iraqs-foreign-reserves-

⁹ Frank Gunter. Immunizing Iraq against Al Qaeda 3.0. Orbis. Summer 2018, Vol.62. No.3. P.389.

¹⁰ Dania Saadi. Iraq's GDP to grow 4.1% in 2019 thanks to oil prices, Moodys says. The National. 13.12.18. https://www.thenational.ae/business/economy/iraq-s-

⁴lbid



⁵ Ibrahim Saleh. How To Get A Loan In Baghdad - At 30% Interest, Repaid In 3 Months. Nigash.

http://www.nigash.org/en/articles/economy/5983/

⁶ Nick Cunningham. Shale under pressure as oil falls below \$50. Oilprice.com. 18.12.18.

real, sustainable growth, rather than traditional expenditure of petrodollars, is in question. For comparison, Iraq's economic growth exploded over 10% in 2012, making it one of the fastest growing economies in the world, but this did not translate into service delivery or lasting poverty reduction.¹¹

There is now a serious debate over what investment funding will be available for 2019, following the 40% plunge of the Brent benchmark,12 which pushed December's oil revenues down to \$6.1 billion despite rising production.¹³ The challenge for 2019 is that if oil prices do not recover significantly, Irag's oil revenues simply cover salaries and pensions, leaving Iraq with similar reconstruction challenges seen in 2017. There is a risk that any investment will remain dependent on inadequate foreign donations in liberated cities, or unsustainable borrowing, while service delivery across the south will continue to lag. France's January 2019 pledge of EUR 1 billion, announced by Jean Yves Le Drian, will be highly welcome but pale in comparison to reconstruction needs. 14 Failure to raise non-oil

revenues and bring in foreign investment will pose a major risk to Iraq's near term future.

As we reported in our 2019 draft budget analysis 15, planned spending across ministries for 2019 remains weighted towards operational expenditure. There were few signs that this situation would change at the end of 2018, as the draft budget was revised with cuts to both the Ministry of Education and Ministry of Electricity budgets, despite pressing needs in those sectors (although electricity had a significantly higher budget than in 2018.) Operational expenditure was expected to grow as the same pension rights and benefits are considered for employees on short term contracts, as their full time counterparts. 16

gdp-to-grow-4-1-in-2019-thanks-to-oil-prices-moody-s-says-1.802292

http://musingsoniraq.blogspot.com/2013/05/behindiraqs-impressive-gdp-growth-rate.html

https://www.cnbc.com/2018/12/31/brent-crude-rises-but-set-for-first-yearly-drop-since-2015.html

¹⁶John Lee. Iraq to extend pensions to short term employees. Iraq Business News. 19.12.18. http://www.iraq-businessnews.com/2018/12/19/iraq-to-extend-pensions-to-short-term-employees/



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¹¹ Joel Wing. Behind Iraq's Impressive growth rate. Musings on Iraq. 01.05.13.

¹² Tom Dichristopher. Brent crude rises but set for first yearly drop since 2015. CNBC. 31.12.18.

¹³ Daniel Lalor. Iraq crude exports hit new high at 373 million bd in December. S&P Global Platts. 02.01.19. https://www.spglobal.com/platts/en/market-insights/latest-news/oil/010219-iraq-crude-oil-exports-hit-new-high-at-373-million-b-d-in-december

¹⁴ France pledges EUR 1bn in aid to rebuild Iraq. AP. 14.01.18. https://newschannel20.com/news/nation-world/france-pledges-1b-euros-in-aid-to-rebuild-iraq

¹⁵ https://iraqenergy.org/2018/10/29/iraqs-2019-draft-budget-law-analysis/

Oil and Gas Continue Ascendance

Preliminary data show that Iraq's federal government oil production has reached 4.45 mbpd by December compared to approximately 4.2 mbpd recorded at the beginning of January 2018. Starting at 360 kbpd in January, the KRI's production rose by approximately 105 kbpd to 465 kbpd by December. Combined, Iraq's operational production capacity stands at 4.915 mbpd with 185 kbpd remaining underutilized. In terms of exports (Figure 1), State Oil Marketing Organisation (SOMO) has ended the year reaching a level of 3.726 mbpd with 3.63 mbpd being sold from Basra's southern ports and the remainder through Turkey via Ceyhan and Trucking 17. With a revenue of \$6.1 billion, SOMO's selling price in December averaged at \$52.803 per barrel 18. Compared to the federal government's exports of 3.490 mbpd recorded in January, this shows a difference of 236 kbpd in 2018.

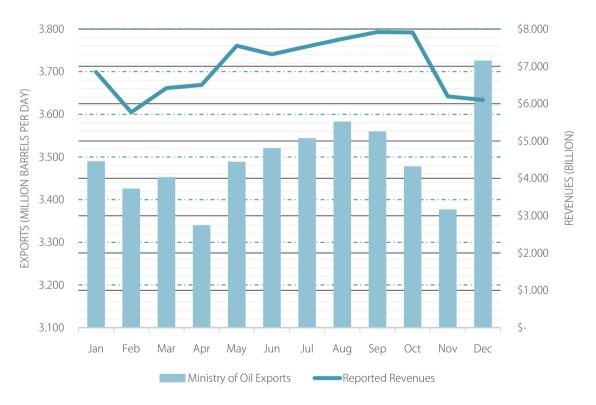


Figure 1: Iraq's 2018 Oil Exports & Revenues Source: State Oil Marketing Organisation (SOMO), Iraq Energy Institute Analysis

¹⁸Ministry of Oil, official website. https://oil.gov.ig/index.php?name=News&file=article&sid=2172



¹⁷ Ahmed Rasheed. Iraq's oil exports rise to 3.73 million bpd in December: oil ministry. Reuters. 02.01.18. https://www.reuters.com/article/us-iraq-oil-exports/iraqs-oil-exports-rise-to-3-73-million-bpd-in-december-oil-ministry-idUSKCN1OW0OU

As shown in Figure 1 and 2, Iraq's highest revenue month was September at \$7.919 billion despite exports falling slightly below the previous month's record exports. Exports were 3.560 mbpd in September compared to 3.583 mbpd in August. This revenue gain came on the back of the highest recorded average monthly price in 2018 at \$74.16 per barrel. In August the selling price slightly reduced to \$73.38 per barrel shipped. Iraq's published sale prices in November and December were the least since March after seven months of price gains above \$60 per barrel starting in April as shown in Figure 2.

Exports were seen to ramp up in anticipation for OPEC+'s ministerial meeting on June 23rd where a supply jump of 1 mbpd was agreed upon. Compared to April's 3.340 mbpd where 3-4 days of maintenance in Basra's export terminals caused the lowest dip in the year, Iraq's May exports saw an increase of 149 kbpd to reach 3.489 mbpd. In June, another 32 kbpd were added and in July a further 23 kbpd. By August, an additional 39 kbpd in exports brought the total gain to 243 kbpd compared to April. The sudden jump in exports, even before the June meeting, was not exclusive to Iraq: Saudi Arabia hiked exports by 350 kbpd from May's 7.15 mbpd to June's 7.5 mbpd.

Other OPEC+ partners followed suit including Russia, while Libya and Nigeria production was at near full capacity. The driver was replacing Iran's sanctioned market share. In the US, shale producers started pumping at record levels reaching 11 mbpd with Bank of America-Merill Lynch expecting more than 12 mbpd by 2019 as the oil price approached \$75 per barrel in September and October (see World Bank Average Crude Oil Spot Price in Figure 2).

By November 23rd, it was clear that the international market was oversupplied, with crude oil inventories rising in the US and other OECD nations. Brent fell by 30% from

October's peak of \$86 per barrel to \$61 per barrel. Additionally, fears of negative trade war impacts and a realization that exemptions for Iranian oil importers reduced the effectiveness of US sanctions, accelerated the oil price correction¹⁹. By December, OPEC+ met again to re-adjust supply down by 1.2 mbpd²⁰. Earlier in October, oil minister Ghadhban asserted Iraq's interest to work with OPEC+ to stabilize the global market.

Iraq's exports fell significantly in October and in November. October's level of 3.478 mbpd was 82 kbpd lower than September, then suffered a decline of 106 kbpd in November due to weather conditions in Basra's ports. These infrastructural and seasonal problems reversed in December allowing SOMO to end the year with a new record of exports at 3.726 mbpd aided by new routes that permitted the flow of 99 kbpd from Kirkuk via KPTT to Turkey and approximately 20-30 kbpd from Qayara by trucking²¹.

In 2018, on a 12-month average, SOMO's monthly selling prices were discounted by \$3.88 below the OPEC reference basket and \$3.51 below Dubai. This was also \$5.43 below Brent's monthly average price. From January to May, SOMO's price was below WTI. After May, published average monthly prices were above WTI except in July (See Figures 3 and 4). Moreover, the selling price was above the

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¹⁹ The rise and fall of oil prices in 2018. Petroleum Economist. 12.12.18 https://www.petroleum-economist.com/articles/markets/trends/2018/the-rise-and-fall-of-oil-prices-in-2018

²⁰ The 5th OPEC and non-OPEC Ministerial Meeting concludes.OPEC website. 07.12.18 https://www.opec.org/opec_web/en/press_room/5279.ht

²¹ Iraq's southern exports hold near record in January. Reuters. 21.01.19

http://www.arabnews.com/node/1439376/business-economy

2018 budget forecasted price of \$46 per barrel for 11 months of the year.

That said, in December Iraq was selling oil at \$52.8 per on average, \$3.2 below the 2019 budget assumed oil price of \$56. While Brent is trading at \$62 per barrel on 6 February 2019 well above the 2019 budgeted oil price, December's selling price shows how price volatility may impact Irag's forecasted revenues, particularly if the price reverses back to the \$50 range due to guestionable commitment to the OPEC+ deal in the rest of 2019. This may indicate a lost opportunity to reduce the planned deficit, particularly if the oil price does not recover in 2019 as a result of the OPEC+ deal. This realization drives Irag's support for the market balancing measure decided in December in Vienna²².

In 2019, Iraq is expected to lower exports by 140 kbpd as part of the OPEC+ supply cut. In mid-October, SOMO allocated 67% of next year's exports to buyers in Asia, 20% in Europe and 13% in North and South America. Shipments will flow from both Basra and Kirkuk

As expected, Iraq is attempting to lure importers of Iranian crude in Asia. SOMO has increased available volumes to Asian customers by 7% in 2019²³. Earlier in March, Alaa Al-Yasiry, SOMO's director general had announced their intention to build storage capacity in Japan and South Korea. There had been proposals for partnership from Exxon Mobil, Total, Sumitomo and Unipec²⁴.

This strategy is also supported by catering to Asian buyers with appetite for low sulphur lighter crudes. Iraq's Ministry of Oil is introducing Basrah Light as a third grade with an API of 34-43. Effectively, this displaces the current Basrah Light to become Basrah Medium. Separating Basrah Medium and Heavy in 2015 helped SOMO retain Asian consumers' confidence in Iraqi crude quality by isolating high sulphur and heavy volumes from newly developed fields. This also saves loading time by eliminating tanker delay during blending²⁵.

https://www.reuters.com/article/us-iraq-oil-japan-southkorea/iraq-may-build-oil-storage-in-japan-southkorea-to-drive-asian-sales-idUSKBN1H31EK

https://www.reuters.com/article/us-iraq-oil/iraq-aims-to-boost-light-crude-exports-to-1-million-bpd-in-2019-idUSKCN1MA0GC



²² Federal Ministry of Oil, Iraq.

https://oil.gov.iq/index.php?name=News&file=article&sid =2174

²³ Ahmed Rasheed. Iraq allocates 2019 oil sales. Reuters. 27.11.18 https://www.reuters.com/article/us-iraq-oil/iraq-allocates-2019-oil-sales-idUSKCN1NW0Z3

²⁴ Ahmed Rasheed. Iraq may build oil storage in Japan, South Korea to drive Asian sales. Reuters. 27.03.18

²⁵ Ahmed Rasheed. Iraq aims to boost light crude exports to 1 million bpd in 2019. 27.09.18

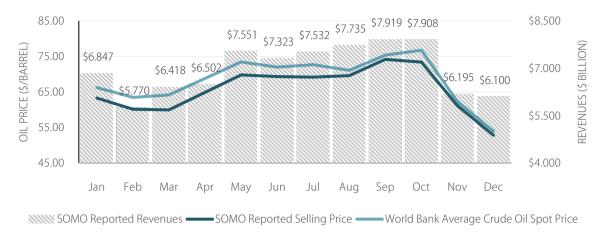


Figure 2: Monthly SOMO Selling Price & Revenues Source: State Oil Marketing Organisation (SOMO), Iraq Energy Institute Analysis

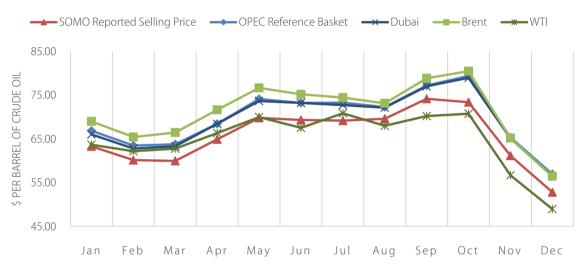


Figure 3: 2018 Average Monthly Oil Prices
Source: State Oil Marketing Organisation (SOMO), Iraq Energy Institute Analysis

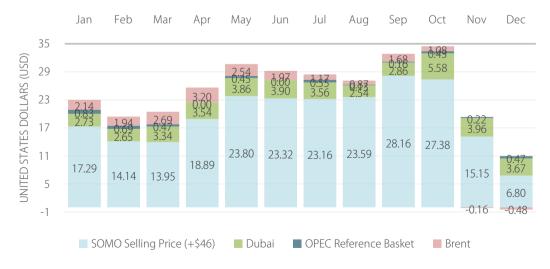


Figure 4: SOMO Selling Price Differential Above 2018 Budget's Oil Price of \$46/bbl & Incremental Discounts to Selected Indicators. Source: State Oil Marketing Organisation (SOMO), Iraq Energy Institute Analysis



The 250 kbpd federal production gain throughout the year came from the southern oilfields with the Ministry of Oil (MOO) run projects; Nahr bin Omar, Luhais, Ratawi and Tuba leading capacity additions as we reported in October²⁶. In January, Iraq's federal production was 4.2 mbpd then became 4.45 mbpd by December. These fields began the year with rising production that peaked at 260 kbpd then slowed down by the year's end to 130 kbpd. After the OPEC June meeting where supply restrictions were eased on members, Basra Oil Company (BOC) removed production restrictions over these fields in August, adding 105 kbpd to their 140 kbpd output almost immediately.

Iraq was expected to replace some of Iran's market share as the US sanctions kicked-in in November. These barrel additions helped Iraq balance slight production declines in July stemming from difficult operational circumstances triggered by the protests around the oilfields in Basra, especially in the West Qurna 1 development under Exxon Mobil. Complications included road blocks, disrupted crew schedules and restricted movement in designated security bubbles, however, these interruptions were short lived and production rebounded in few days. From an average of 450 kbpd before July, production fell to 400 kbpd then rose to 470 kbpd by the end of August in West Qurna²⁷. There were no production losses reported in

Eni's Zubair oilfield, another hotspot for the protests²⁸.

Slow Recovery for the Kurdish Region's Energy Sector

Starting the year after the dramatic loss of Avana and Bai Hasan (combined exports of 280 kbpd) the Kurdistan Region of Iraq (KRI)'s oil exports had dwindled to 360 kbpd by January 2018 after reaching a low of 230 kbpd in 2017. Before re-taking Kirkuk, in October 2017, Kurdistan's average exports to Turkey were as high as 580 kbpd. Mid-way through the year, KRI oilfields were expected to increase production by 60 kbpd by year end. Interestingly, the KRI only refines 20 kbpd of regionally produced oil, leaving the rest to be exported to make up for lost revenues and to decrease financial pressure.

By August, pipeline exports stood at 417 kbpd. With the year end production reaching 465 kbpd, the KRI operators have raised an additional 48 kbpd. The KRG's Ministry of Natural Resources (MNR) has been able to successfully uphold monthly payments to International Oil Companies (IOCs) operating in the autonomous region. As a result, the IOCs have been investing steadily in their

²⁸ Aref Mohammed. Iraqi police disburse protestors outside Zubair oilfield as unrest grows. Reuters. 17.07.18 https://www.reuters.com/article/us-iraq-protests/iraqi-police-disperse-protesters-outside-zubair-oilfield-as-unrest-grows-idUSKBN1K70IF



²⁶ 2018 Budget Analysis by IEI: https://iraqenergy.org/2018/10/29/iraqs-2019-draft-budget-law-analysis/

²⁷ Aref Mohammed. Iraqis protest at oilfields to call for jobs and basic services. Reuters. 12.07.18.

https://www.reuters.com/article/us-iraq-basra-protest/iraqis-protest-at-oilfields-to-call-for-jobs-and-basic-services-idUSKBN1K21NU

awarded fields. Norway's DNO has raised production to 50 kbpd in Peshkhabir to substitute for declines in Tawke where production stands at 80 kbpd (as an October company press release shows²⁹.) By contrast, in July 2017 Tawke's production was 109 kbpd³⁰. Local operator KAR Group has also allocated investments to ramp up the Khurmala Dome of Kirkuk. However, these new additions have brought heavier crude quality to the KRI export mix with the average API falling from 31 to 29³¹. This has caused a resurgence in interest for discounted KRI exported crude but as production steadies, API readings are expected to lighten a bit.

In 2019, an additional 110 kbpd is expected to add to KRI's exports with Gulf Keystone and Taqa expected to add 20 kbpd each. DNO is also expected to add another 20 kbpd from Peshkhabir by end of 2019. Notably, Russian companies are getting a larger piece of the Kurdish pie. Rosneft has contracted drilling rigs in the region and while controlling 60% of the Kurdistan Pipeline to Turkey (KPTT), remains a strong buyer of KRI crude in Ceyhan³².

Gazprom Neft is to add 10 kbpd to Sarqala's 25 kbpd and another 10 kbpd through the Shakal development. In November 2018, the MNR announced that KPTT capacity had been upgraded from 700 kbpd to 1 mbpd in anticipation of increased production. Nevertheless, the MNR and Rosneft may use this upgrade to lure Baghdad into delegating higher volumes from the NOC's Kirkuk oilfield³³.

2019 Oil Production Growth Potential

Overall, Iraq's production capacity has exceeded the 5 mbpd mark when taking into account Kirkuk's underutilized capacity and upcoming additions from CNPC operated Halfaya oilfield in Maysan province in the first quarter of 2019³⁴. Halfaya is expected to boost capacity from 370 kbpd to 470 kbpd³⁵. Qayara was 2018's success story: the MOO and

²⁹ DNO Operations Update: Peshkabir Production Pushes 50,000 bopd. DNO press release. 09.10.18 https://www.dno.no/en/investorrelations/announcements/2018/dno-operations-update-

peshkabir-production-pushes-50000-bopd/ ³⁰ Tsvetana Paraskova. Kurdistan Upgrades Oil Pipeline Export Capacity To 1 Million Bpd. Oilprice.com. 05.11.18 https://oilprice.com/Latest-Energy-News/World-News/Kurdistan-Upgrades-Oil-Pipeline-Export-Capacity-To-1-Million-Bpd.html

³¹Gillian Carr. Kurdish crude oil quality variance limits appeal for med buyers: sources. S&P Global Platts.07.02.18 https://www.spglobal.com/platts/en/market-insights/latest-news/oil/022618-kurdish-crude-oil-quality-variance-limits-appeal-for-med-buyers-sources

https://www.petroleum-economist.com/articles/politics-economics/middle-east/2019/iraqi-kurdistan-begins-its-recovery-after-a-difficult-year

33 Tsvetana Paraskova. Kurdistan Upgrades Oil Pipeline Export Capacity To 1 Million Bpd.11.05.18 https://oilprice.com/Latest-Energy-News/World-News/Kurdistan-Upgrades-Oil-Pipeline-Export-Capacity-To-1-Million-Bpd.html

³⁴ Aref Mohammed. Iraq lifts oil production at Halfaya oilfield to 370,000 bpd. Reuters. 12.12.18 https://www.reuters.com/article/us-iraq-oil-halfaya/iraq-lifts-oil-production-at-halfaya-oilfield-to-370000-bpd-idUSKBN1OB0PX

³⁵ Halfaya oilfield expansion. Compelo Energy. 19.12.18 https://www.compelo.com/energy/projects/halfaya-oilfield-expansion/



³² Patrick Osgood. Iraqi Kurdistan begins its recovery after a difficult year.03.01.19. Petroleum Economist.

Sanangol are ambitiously targeting to double production to 60 kbpd by May 2019³⁶.

More capacity can be developed this year. In Maysan, CNOOC operated Buzurgan, Fakka, and Abu Gharb were expected to add 80 kbpd to their 200 kbpd output. In Dhi Qar, former minister Luiebi had announced in July that a drilling program was to be commissioned by the Dhi Qar Oil Company (DQOC) to add 20 new wells to the Nassiriya oilfield to increase production from 90 kbpd to 200 kbpd³⁷, yet this plan remains dependent on how fast the company can receive additional small financing to build surface facilities for the processing and transport of oil, which may delay schedule beyond 2020. DQOC is expected to add 35 kbpd from Subba oilfied by the end of 2019 when 6 new wells are drilled and desalter units installed for the treatment of the high salt content³⁸.

In Basra, where the bulk of Iraq's oil production and exports originate, BP's Rumaila is expected to grow production from an approximate average of 1.47 mbpd to 1.6 mbpd on the back of recent facility upgrades and construction³⁹. In September, Basra Oil

Company (BOC) officials forecasted that the field would comfortably reach 1.5 mbpd in production by the end of the year after the anticipated commissioning of a new gas separation unit with a 100 kbpd capacity in North Rumaila⁴⁰. Also, the MOO is expected to renegotiate field production plateaus soon with licensing round IOCs as we reported in our analysis on the 2019 draft budget⁴¹.

Legal Disputes & Opportunities for Resolution

Iraq's oil and gas sector was on the verge of going through dramatic structural changes with the creation of the Iraq National Oil Company (INOC) as legislated by the Council of Representatives in March, 2018. The six month window to form the company passed as the process was delayed by uncertainty over the new government formation.

While the legislation was passed, it has been contested by sector experts in addition to the government of Maysan. The latter is demanding a seat on the INOC board of governors. The sector experts, a couple of whom are veteran economists from the original INOC, filed a complaint that objects to

³⁶ Eklavya Gupte. Iraq targets ambitious output jump at Qayara oil field. S&P Global Platts. 28.09.18 https://www.spglobal.com/platts/en/marketinsights/latest-news/oil/092818-iraq-targets-ambitiousoutput-jump-at-qayara-oil-field

³⁷ Ahmed Rasheed. Iraq to take over development of mansuriyah gas field, nassiriyah oil field. Reuters. 31.07.18. https://www.reuters.com/article/us-iraq-energy-gas/iraq-to-take-over-development-of-mansuriyah-gas-field-nassirya-oilfield-idUSKBN1KL1KG

Director general of dhi qar oil company stresses need to continue to develop Gharraf oil field. News Sabah.
 16.12.18 http://newsabah.com/newspaper/172136
 Callum Turcan. BP And PetroChina Set To Rake In Billions

³⁹ Callum Turcan. BP And PetroChina Set To Rake In Billions Developing Iraq's Super-Massive Rumaila Oil Field. Seeking Alpha. 17.08.18

https://seekingalpha.com/article/4199988-bp-petrochinaset-rake-billions-developing-iraqs-super-massive-rumailaoil-field

⁴⁰ Iraq's Basra oil head says plans to hike crude output will require new pipelines. S&P Global Platts. 10.10.18. https://www.spglobal.com/platts/en/market-insights/latest-news/oil/101018-iraqs-basra-oil-head-says-plans-to-hike-crude-output-will-require-new-pipelines ⁴¹ IEI 2019 budget analysis.

articles that outline INOC's power and authority in addition to revenue management and board appointments. After selecting experts to advise on the complaint, the Federal Supreme Court has found constitutional discrepancies in articles 3, 4, 7, 8, 11, 12, 13, 16 and 18 of the draft law. These articles diverge with the constitution on issues of jurisdiction, oversight and hydrocarbon resource governance. This decision was taken on January 23rd after defences filed by the government and parliament against the plaintiffs⁴². The Prime Minister's deputy for energy affairs and minister of oil Thamir al-Ghadhban, who historically supported the reformation of INOC, has indicated willingness to re-draft the law within the council of ministers⁴³. Thus far, the MOO run companies and IOCs have been operating without any interruptions from the INOC case.

The reestablishment of INOC is expected to be a long process. A new INOC draft law, or written assurances, will be required to counter the recent Federal Supreme Court decision. In the case of a new law, it will need to pass through parliament to become legally binding.

⁴² Federal court: Articles related to the formation of the Iraqi national oil company are unconstitutional. Buratha news agency. 23.01.19

http://burathanews.com/arabic/news/344289

Meanwhile, the Federal Supreme Court has been postponing another case brought by Baghdad against Erbil's independent oil production and exports since 2012. For the first time, the KRG has sent a defence team in April 2018 to engage the case, an indication of possible willingness to compromise in order to secure KRI allocations in the 2019 budget then, while the Abdul Mehdi government is anticipated to have a friendlier approach with the KRG than his predecessors. This was later confirmed after the new budget was passed with the KRI export obligation omitted. The KRG no longer has to abide by an export quota to receive federal funding for salaries or budgeted expenses. This is a stark policy shift in Baghdad as it historically attempted to sanction international oil companies operating in the KRI or sue buyers and traders of Kurdish oil. Positively, this move will allow further reconciliation between Baghdad and Erbil. It could possibly pave the way for future coordination on exports and refining. This unprecedented constructive environment in Baghdad and Erbil may accelerate settling the legal framework for securing the KRI's export obligation of 250 kbpd to the federal budget on the long term (although no longer necessary in 2019) while ensuring KRI related budget articles are fulfilled without modification or delay by future cabinets in Baghdad.

North Oil Company: A Year of Hope

While the Washington brokered agreement between Baghdad and Erbil allowed the flow of 100 kbpd of Kirkuk's federal oil through the



⁴³ The Baghdad Post: the government is ready to ammend the laws of the national oil company. 17.01.19

https://www.thebaghdadpost.com/ar/Story/145699/%D8 %A7%D9%84%D8%AD%D9%83%D9%88%D9%85%D8% A9-%D8%AA%D8%A8%D8%AF%D9%8A-

[%]D8%A7%D8%B3%D8%AA%D8%B9%D8%AF%D8%A7% D8%AF%D9%87%D8%A7-

[%]D9%84%D8%AA%D8%B9%D8%AF%D9%8A%D9%84-%D9%82%D8%A7%D9%86%D9%88%D9%86-

[%]D8%B4%D8%B1%D9%83%D8%A9-

[%]D8%A7%D9%84%D9%86%D9%81%D8%B7-

[%]D8%A7%D9%84%D9%88%D8%B7%D9%86%D9%8A%D 8%A9

Kurdistan Pipeline to Turkey (KPTT), the two North Oil Company (NOC) operated oilfields of Avana Dome and Bai Hasan can offer more production and exports. State Oil Marketing Organization (SOMO)'s exports through KPTT have reached 99 kbpd in December rising from an initial 50-60 kbpd at their resumption in early November⁴⁴. This is still below the 300 kbpd that the KRG used to pump from these fields before October 2017. So far, there has clarification not been anv on the compensation mechanisms agreed upon with the Kurdistan Regional Government (KRG). In October, we reported that Rosneft, that owns 60% of the KPTT, was holding private talks with the federal government and KRG and proposing a transfer fee of \$3.5 per barrel⁴⁵.

In July, Kirkuk's North Oil Company (NOC) production from Avana and Bai Hasan had doubled to 60 kbpd then grew to 90 kbpd in September. This was mostly being sent to Kirkuk refinery and Baghdad's Daura refinery and power plants, 46 in addition to Sulimaniya's Baziyan and Erbil's Kalak and Ninewa refineries as feedstock. In 2018, this measure helped Baghdad use northern stranded production for local refining and power generation while freeing volumes for exports from the south. The commercial refining agreement between the government of former Prime Minister Abadi and Erbil was a positive development as gasoline and diesel were desperately needed

in the newly liberated northern provinces. It also set the stage for the KPTT exports agreement under Prime Minister Abdul Mehdi.

By December, production from the NOC Kirkuk cluster of oilfields reached 360-370 kbpd after a long period of stagnation at 160-170 kbpd⁴⁷. At this rate, 280 kbpd are utilized for refining and power generation while 90 kbpd are exported. This is a remarkable development given the delicate security situation in newly liberated provinces, especially on peripheries of Kirkuk, where assassinations and limited attacks on vital infrastructure were witnessed in 2018.

Another development is that BP has started working on a Kirkuk production capacity development plan with company teams already present on the ground. NOC expects them to deliver a technical proposal by year end before an agreement is inked between MOO and the British oil and gas major⁴⁸. BP is expected to raise Kirkuk's production to 750 kbpd⁴⁹.

The other northern state-run oilfield to add to production and exports is NOC's Qayara in Mosul. The MOO has started to price it as a benchmark in addition to crudes from Kirkuk and Basra's heavy and light. Since November, Qayara's production is being trucked south to Khor Al-Zubair port in Basra and north to Ceyhan in Turkey. This replaces a trucking deal to Iran of 60 kbpd, an exchange initially set for refined Iranian products, later utilized as a means for paying Iraq's electricity bill owed to

to-kurdistan-oil-recovery-1.702203

12

⁴⁴ Dmitry Zhdannikov, Ahmed Rasheed. Update: Iraq restarts some Kirkuk oil exports after year long halt. Reuters. 16.11.18 https://uk.reuters.com/article/iraq-kurdistan-oil/update-4-iraq-restarts-some-kirkuk-oil-exports-after-year-long-halt-idUKL8N1XR24O

⁴⁵ 2018 first draft budget analysis report by IEI. Available at: https://iraqenergy.org/2018/10/29/iraqs-2019-draftbudget-law-analysis/

⁴⁶ Much of Kirkuk's oil to feed Iraqi refineries, limiting exports: Minister. Kurdistan 24. 26.12.18 http://www.kurdistan24.net/en/economy/f77bc237-a93b-482a-8b47-b9857c00eb3c

⁴⁷ Ahmed Rasheed. Iraq's Kirkuk oil exports to stay restricted. Reuters. 26.12.18

https://www.reuters.com/article/us-iraq-oil/iraqs-kirkuk-oil-exports-to-stay-restricted-idUSKCN1OP0GN

⁴⁸ Ibid.

⁴⁹ Alan Mohtadi. Compromise is key to Kurdistan oil recovery. The National. 06.02.18 https://www.thenational.ae/business/compromise-is-key-

Iran. The arrangement was dropped after the re-imposition of sanctions in November. An average of 30-40 kbpd was trucked from June to November but interruptedly either on a weekly or daily basis.

SOMO's tender for Qayara exports highlighted the Zakho Border Gate as the route for the 30 kbpd to be trucked. Baghdad's future federally controlled land port with Ankara, the Ovakov Crossing, has not been opened as of February 2019. It is not clear whether the KRG has collected a fee for truck movements or whether this new export route will bring much needed petrodollar allocations to Nineveh Province. Despite this progressive step towards diversification of export routes, Qayara's production is underutilized due to the inadequate number of trucks available. Operated by Sonangol, only 15-20 kbpd of Oavavra's 30 kbpd capacity is being trucked. From 83 kb in November, the field has contributed a share of 157 kb to overall exports in January of 2019⁵⁰.

Overcoming the Infrastructure Challenge

Rough weather in the northern region of the Gulf remains a strong factor in intermittent export declines from Basra. In October, tankers were reported to have slowed down their loadings causing a decline in exports and subsequently revenues, a situation cushioned by higher oil prices. As Irag's nameplate export

Figures from Ministry of Oil website: https://oil.gov.iq/index.php?name=Pages&op=page&pid= 113 capacity stands at 4.9 mbpd while production is steadily overtaking the 5 mbpd mark, more infrastructure will be needed for future exports. We have outlined Iraq's infrastructure problems in our October report⁵¹.

Limited storage capacity creates a backlog at exporting terminals as seen in November. When tanks are at full capacity, oil field operators are instructed to lower their production. Forced production curtailment is feared to cause long term reservoir damage as oil wells are regulated up and down in short time cycles. As mentioned, weather conditions are another factor for tanker loading delays.

Exxon Mobil and CNPC are in the final stages of finalizing an infrastructure deal with Baghdad that may include the long delayed CSSP water treatment project. The latter is vital for sustaining current production and supporting future additions. The multibillion-dollar package has been negotiated for years, but thus far no details of included projects or final costs are available⁵². If signed, work could start as early as the first quarter of 2019. We have analysed the CSSP in a special report⁵³.

An announced goal upon signing the agreement is the expansion of southern export capacity from 3.9 mbpd to 6.5 mbpd⁵⁴. In the north, building a new federal pipeline to Turkey will account for 1 mbpd in exports

https://iraqenergy.org/2018/10/29/iraqs-2019-draft-budget-law-analysis/

⁵⁴ Iraq's Kirkuk oil exports to stay restricted. Ahmed Rasheed/RTR



⁵¹ IEI 2018 Budget analysis:

⁵² Ahmed Rasheed. Iraq has not reached agreement with Exxon on southern oilfields: Minister. 25.12.17. https://www.reuters.com/article/iraq-oil-exxonmobil/iraq-has-not-reached-agreement-with-exxon-onsouthern-oilfields-oil-minister-idUSL8N1OP0DK ⁵³ CSSP project report by Robin Mills and Mohammed Walji. Available at: https://iraqenergy.org/

while another 1 mbpd proposed Basra-Aqaba pipeline is on track towards construction as both Amman and Baghdad are keen on seeing the project coming to light. In addition to diversifying Iraq's export outlets, the pipeline will help create refining synergies with Jordan⁵⁵

Gas Utilization Strides Forward

Irag's natural gas sector is poised to finally see positive progress after years of delays. Additional production is coming online from flared gas capturing activities by the Basra Gas Company (BGC) in Rumaila, West Qurna 1 and Zubair. There has also been further progress in gas capture in the Nassiriya oilfield and the newly producing Siba gas development. Combined, they have added approximately 340 million standard cubic feet per day (scf/d) of production in 2018. According to the MOO, Iraq continues to flare 56% of the 2.953 billion scf/d produced throughout the country⁵⁶. Associated gas flaring happens mainly in the South. Iraq continues to import 980 million scf/d from Iran for use in power generation⁵⁷.

BGC has been producing around 900 million scf/d of dry gas as of the beginning of 2018 with NGL upgrade projects that increased that by an estimated 250 million scf/d by the end of 2018⁵⁸. BGC's future production is to rise to 1,300 million scf/d, 700 million scf/d below the agreed upon capacity of 2,000 million scf/d with the MOO. Iraq has reached self-sufficiency with LPG production from BGC averaging at 4,814 tons a day⁵⁹ while 360 tons per day of LPG are exported, as of December⁶⁰. In 2018, Iraq also exported 735,230 thousand cubic meters of condensate. By year end, 32 shipments of condensate were exported and 53 for LPG⁶¹. DQOC expects to capture 30-50 million scf/d from Nassiriya,62 while non-BGC production ranges between 200 and 250 million scf/d⁶³ with the majority of this

⁵⁸ Basra Gas Company press release:

http://www.basrahgas.com/node/206

⁵⁹ Ministry of Oil website:

https://oil.gov.iq/index.php?name=News&file=article&sid =2173

⁶⁰ Ministry of Oil website:

https://oil.gov.iq/index.php?name=Pages&op=page&pid= 113

⁶¹ Ministry of Oil

website:https://oil.gov.iq/index.php?name=News&file=article&sid=2176

- ⁶² Ahmed Rasheed. Iraq to take over development of mansuriyah gas field, nassiriyah oil field. Reuters. 31.07.18. https://www.reuters.com/article/us-iraq-energy-gas/iraqto-take-over-development-of-mansuriyah-gas-fieldnassirya-oilfield-idUSKBN1KL1KG
- ⁶³ Al Sumaria: Ministry of Oil announces higher production of dry gas to 950 cubic metres. 31.12.18.

https://www.alsumaria.tv/news/256628/%D8%A7%D9%84%D9%86%D9%81%D8%B7-

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%D8%A7%D9%86%D8%AA%D8%A7%D8%AC-

%D8%A7%D9%84%D8%BA%D8%A7%D8%B2-

%D8%A7%D9%84%D8%AC%D8%A7%D9%81-



⁵⁵ Ahmed Rasheed, John Davison. Exclusive: Iraq close to deal with foreign firms to upgrade output, export capacity. Reuters.06.11.18 https://www.reuters.com/article/us-iraq-energy-infrastructure-exclusive/exclusive-iraq-close-to-deal-with-foreign-firms-to-upgrade-output-export-capacity-idUSKCN1NB1U4

⁵⁶ Energy News Monitor | Volume XV; Issue 30 https://www.orfonline.org/research/energy-news-monitor-volume-xv-issue-30-47116/

⁵⁷ Tsvetana Paraskova. Iran looks to sign zero tariff agreement with Iraq. Oilprice.com 16.01.19 https://oilprice.com/Latest-Energy-News/World-

production to be immediately utilized at gas powered electricity plants. Recently, an American firm Orion, was awarded a contract for gas processing at BOC's Nahr bin Omar oilfield⁶⁴. The infrastructure package with Exxon Mobil and CNPC may include both Nahr bin Omar and Ratawi gas development⁶⁵. In Anbar, the Akkas development remains behind schedule while Siba in Basra changed hands from Kuwait Energy to Hong Kong based, UEG66. The latter has acquisitioned the Kuwaiti oil and gas firm for \$650 million⁶⁷. Kuwait Energy produced 25 million scf/d from Siba in April of 2018 from 5 drilled wells⁶⁸ and the field's gas reserves are estimated at 1.083 trillion scf

Elsewhere, Mansouriya in Diyala Province will move back to MOO operatorship after an exit deal is finalized with TPAO⁶⁹. Iraq remains

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%D9%85%D9%82%D9%85%D9%82/ar

⁶⁴ Ahmed Rasheed. Iraq, Orion sign deal to process gas from giant oilfield. Reuters. 21.01.18.

https://www.reuters.com/article/us-iraq-gas-energy/iraq-orion-sign-deal-to-process-gas-from-giant-oilfield-idUSKBN1FB0W6

⁶⁵ Paul Hicken. Iraq infrastructure deal with Exxon, PetroChina 'soon': oil minister Ghadhban. S&P Global Platts. 27.12.18

https://www.spglobal.com/platts/en/market-insights/latest-news/oil/122718-iraq-infrastructure-deal-with-exxon-petrochina-soon-oil-minister-ghadhban ⁶⁶ UEG acquisition of Kuwait energy. Compelo energy. https://www.compelo.com/energy/news/ueg-acquisition-

⁶⁷ United Energy Group: press release. 24.09.18.
 http://www.uegl.com.hk/en/newsDetail?nid=35
 ⁶⁸ Aref Mohammed. Kuwait Energy starts producing natural gas from field in southern Iraq. Reuters. 25.04.18
 https://www.reuters.com/article/us-iraq-energy-gas/kuwait-energy-starts-producing-natural-gas-from-field-in-southern-iraq-idUSKBN1HW0WU

kuwait-energy/

⁶⁹ Ahmed Rasheed. Iraq to take over development of mansuriyah gas field, nassiriyah oil field. Reuters. 31.07.18.

committed to cease flaring by 2021 by building adequate NGL capacity, however, financial problems after the 2014 oil price crash have delayed state investments⁷⁰. In December, Ghadhban told reporters that gas export negotiations with Kuwait have reached final stages⁷¹.

Refining Capacity to Expand, Major Challenges Remain

The Ministry of Oil announced in September that 140 kbpd of refined liquids production will be restored in the damaged Baiji refinery by the year's end. Out of the previous lost capacity of 310 kbpd, the MOO was able to restore 70 kbpd by bringing the Salahaddin 2 (SD-2) refining unit back to full capacity. As for the Salahaddin 1 (SD-1) unit, it has been going through refurbishment in anticipation for coming online in 2019. The ministry has diverted some of Kirkuk oilfield's unused capacity to SD-1 and plans to increase flows as SD-2 comes into operation in 2019.

https://www.reuters.com/article/us-iraq-energy-gas/iraq-to-take-over-development-of-mansuriyah-gas-field-nassirya-oilfield-idUSKBN1KL1KG

⁷⁰ Jennifer Gnana. Iraq to reach 'zero gas flaring' by 2021, says oil minister. The National. 13.01.18 https://www.thenational.ae/business/energy/iraq-to-reach-zero-gas-flaring-by-2021-says-oil-minister-1.695074 ⁷¹ Kuwait News Agency. Gas export arrangement to Kuwait reaches final stages: minister. 23.12.18 https://www.kuna.net.kw/ArticleDetails.aspx?id=2767047 &language=en

In April, MOO signed a contract for the construction of the 300 kbpd Fao refinery and plant petrochemicals Basra in PowerChina and Norinco International⁷². The long awaited 150 kbpd refining project in Nasiriyah was finally awarded to Pacific Future Energy (PFE), a Canadian firm. PFE will work on the project with Montreal's SNC-Lavalin. Nevertheless, the fate of the deal, in addition to financial details, remain unclear. This is concerning, considering contracts signed by caretaker government during the transition period were considered annulled. Another 150 kbpd refinery project in Anbar has not attracted foreign investor appetite yet, a similar situation for the 100 kbpd proposed Qayara refinery.

In January of 2018, the MOO signed a contract to build a 70 kbpd refinery specializing in high octane gasoline production with KRI based Ranya International. The KRG is an investor in the project⁷³. In February, representatives from Kuwaiti Al-Arfaj Holdings signed an MOU for future cooperation with MOO on Methane production and gas capturing projects in Iraq. Interestingly, both sides are willing to study future prospects for building a refinery in India⁷⁴. By April, a 70 kbpd refining unit was inaugurated in Basra by the Southern Refining Company (SRC). While these developments show sustained interest in Iraq's refining sector, hurdles to foreign investors remain in

place including highly subsidized domestic fuel market, and limitations on capacity to export refined volumes. The latter may reverse with the construction of the Fao refinery with the potential to export excess refined volumes via Basra's ports.

Electricity: A Struggle on Many Fronts

Iraq's electricity sector in many ways began 2018 with similar challenges as 2019; the now traditional delay to approve the budget at the start of the year, while an ambitious program of reforms was well underway, most notably tariff collection trials in Baghdad. Today, the reforms are no single project such as tariff rationalisation but rather, a multifaceted plan to reform the sector and build technical and human capacity on the long run.

With the Ministry collecting less than 10% the sums spent on generation and salaries (around \$7 billion total budget for 2018), the Zayouna and Yarmouk trials for tariffs which began in 2016 in Baghdad aimed to almost double this in line with IMF conditions, to around \$2 billion. Private contractors, 75 76 were brought in to speed up the process of tariff collection, but there was intense opposition to rolling out the plans nationwide. This was both at the

https://www.reuters.com/article/iraq-oil-refining-china/iraq-signs-contract-with-powerchina-norinco-to-build-fao-oil-refinery-idUSL8N1S60M3

=1861

https://www.iraqoilreport.com/wp-content/uploads/ior-pe-mar2018.pdf



⁷² Iraq signs contract with PowerChina, Norinco to build Fao oil refinery. Reuters. 29.04.18

⁷³ UPDATE 1-Iraq signs agreement to build oil refinery near Kirkuk, Reuters. 08.02.18

https://af.reuters.com/article/commoditiesNews/idAFL8N 1PY3M8

⁷⁴ Iraq Ministry of Oil. https://oil.gov.iq/index.php?name=News&file=article&sid

⁷⁵ Salam Zidaneh.Efforts to privatise electricity face resistance. Al Monitor. 13.03.17. https://www.almonitor.com/pulse/home.html

⁷⁶ Iraq pushes electricity reform, prompting protests. Iraq Oil Report. March 2018.

local level, with provincial councils rejecting the plans while at the national level, politicians complained about the proposed increases.

By most accounts the trials were a huge success with some data pointing to a 30% drop in demand as houses were connected to smart meters. This led to 24 hr electricity as consumers cut their usage and theft from the grid was largely eliminated, a rarity in Iraq since ISIS destroyed up to 4.5 GW after 2014,⁷⁷ while customers paid less than they would to private generator providers.

But widespread fear that these policies impact the poor forced PM Abadi to reduce the fees in January 2018. Concrete work on generation continued in 2018, buoyed by higher oil prices. In January, Mitsubishi signed a contract for the continued upgrade to Basra's Hartha power station, the renovation of which is now many years old. Mitsubishi is expected to finish the refurbishment of unit 1 (there are four units at Hartha, each 200 MW) by 2021,⁷⁸ while Siemens has worked on installing new control systems for units 2 and 3.⁷⁹

Reconstruction at Hartha had previously been delayed in 2009 following a failed effort by an Italian contractor to reverse engineer spare turbine parts for the original Mitsubishi turbines, which were no longer available. This led to a payment dispute with a Russian contractor, which had already begun work despite the parts being stuck at customs for several months due to a bureaucratic delay. Only when the parts arrived was it discovered that they did not fit the turbines. A fire at the power station the following year was yet another setback for a power station that has been intermittently under reconstruction since 1991.

In April, Siemens secured more work to add 700 MW to the 1500 MW Rumaila Gas Power Plant, with an expected completion date of 2020. ⁸¹ That month, GE announced that it would be repairing the 750 MW power station at Qayarah, which had been largely destroyed by ISIS. ⁸² More post conflict reconstruction was lined up in July when it was announced that Orascom would be joining Siemens in adding another 500 MW to the Baiji power plant, which was expected to reach 1500 MW by the year end. ⁸³

⁷⁷ Luay al Khatteeb, Harry Istepanian. Turn a Light on: Electricity reform in Iraq. Brookings Institute. June 2016. https://www.brookings.edu/wp-

content/uploads/2016/06/Alkhatteeb-Istepanian-English-PDF.pdf

⁷⁸ John Lee. MHPS to upgrade Hartha power station. Iraq Business News. 26.01.18. http://www.iraq-

businessnews.com/2018/01/26/mhps-to-upgrade-hartha-power-station/

⁷⁹ Siemens (press release) Al-Hartha Thermal Power Plant: SPPA-T3000 ensures the electricity supply in the Iraqi province of Basrah.

https://www.energy.siemens.com/nl/pool/hq/automation/automation-control-pg/sppa-t3000/documents/secure-power-supply-iraq-sppa-t3000-e.pdf.pdf

⁸⁰ World Bank: Implementation and results report.
Emergency electricity reconstruction project. 29.05.16.
http://documents.worldbank.org/curated/en/4601114681
97953935/pdf/ICR3577-ICR-P087734-PUBLIC-Box396260B.pdf

Siemens (press release.) Siemens to add 700 MW to Rumaila power plant in Iraq.

http://www.middleeast.siemens.com/me/en/news_event s/news/news_2018/siemens-to-add-700-mw-to-rumaila-power-plant-in-iraq.htm

⁸² GE Power helps rebuild 750 MW power plant in Iraq. tradearabia.com

^{02.04.18}

http://www.tradearabia.com/news/CONS_338572.html ⁸³ Zawya. Orascom Construction, Siemens to rebuild power plant in Iraq.08.07.18

https://www.zawya.com/mena/en/business/story/Orascom_Construction_Siemens_to_rebuild_power_plant_in_lraq-SNG_120529274/

A third major project for Siemens was the announcement in August that the company would upgrade the Shatt Al Basra Gas Power Plant, installing another 650 MW capacity to the 1,250 MW facility. As with Siemens' Rumaila project, this is not scheduled for completion until 2020.⁸⁴ Major work on transmission and distribution infrastructure--in some ways Iraq's electricity Achilles' heel, continued at the start of summer with ABB securing a contract to install five fixed and 15 mobile 132kV substations to improve grid efficiency.⁸⁵ Technical and non-technical losses to Iraq's grid can be as high as 42% with speculation it reaches 50%.⁸⁶

By the summer, Iraq was experiencing its worst electricity crisis since 2005. This is despite electricity generation rising 300% since 2003,87 because demand, along with Iraq's growing population, rises ahead of supply generation capacity, at around 7% per year (although summer demand varies on the severity of the summer and economic factors that are hard to predict.) Problems with grid efficiency and illegal connections, particularly in informal settlements, hinder the ability of new capacity to translate into new power.

By mid-2018, Iraq's generating capacity stood at around 14-15 GW, far below installed capacity of 26.2 GW, with demand for the summer spiking at around 23.5 GW.⁸⁸ Iraq's demand is expected to reach 26 GW during 2019. Two major problems made this situation dramatically worse. Firstly, water levels for the Mosul dam hydropower plant were already critically low in May after low seasonal rainfall,⁸⁹ a problem made worse at the start of June when Turkey began filling the Ilisu dam, although Turkey postponed the filling a week later after an outcry in Iraq.⁹⁰ The Mosul dam is producing well below its nameplate capacity of 1050 MW.

Almost one month later, Iran cut approximately 1.5 GW from Irag's following delayed payments to Tavanir, the Iranian electricity company exporting the power, while Iran also shored up power supplies to deal with its own electricity crisis.91 Iraq was therefore struggling to keep supply close to 15 GW over the summer. It appears these net losses, combined with water shortages described above, worsened the ensuing protests, which would go on for the next three months culminating in a major crisis.

http://www.middleeast.siemens.com/me/en/news_event s/news/news_2018/siemens-to-add-650-mw-to-power-plant-in-iraq.htm

https://www.power-technology.com/news/abb-supply-substations-strengthen-power-grid-iraq/

https://www.eia.gov/beta/international/analysis.php?iso=l

⁸⁴ Tamara Hamdan. Siemens. Siemens to add 650 MW to power plant in Iraq.

⁸⁵Power Technology. ABB to supply substations to strengthen power grid in Iraq. 06.06.18.

⁸⁶ EIA. Iraq country analysis. 07.01.19.

⁸⁷ Douglas Olivant. Summer is coming: the crucible for the new Iraqi government. War on the rocks. 16. 01.19. https://warontherocks.com/2019/01/summer-is-coming-the-crucible-for-the-new-iraqi-government/

⁸⁸ EIA. Iraq country analysis. 07.01.19.

https://www.eia.gov/beta/international/analysis.php?iso=IRQ

⁸⁹ John Catherine. Critically low water levels at Mosul dam. Kurdistan 24. 26.05.18.

http://www.kurdistan24.net/en/news/24e461e8-3a84-4543-a829-fc4d7ebabf20

⁹⁰ Mina Aldroubi. Turkey postpones filling of dam amid fears of water crisis in Iraq. The National. 10.06.18. https://www.thenational.ae/world/mena/turkey-postpones-filling-of-dam-amid-fears-of-water-crisis-in-iraq-1.738488

⁹¹ John Catherine. Iran cuts off electricity to sweltering Iraq due to unpaid fees: Ministry. Kurdistan 24. 01.07.09. http://www.kurdistan24.net/en/news/5109cf38-809b-4098-aca7-3c5bbc2c1253

With the heat of summer residing and the severity of protests decreasing, Siemens and GE continued talks with the ministry as both companies positioned to compete over "road maps" to add 11 GW (Siemens) and 14 GW (GE) to Irag's grid.⁹² The Ministry of Electricity has decided on a synthesis of the proposed plans coordinating the efforts of both companies and looking to add as much capacity as possible in the short term, although this would be strategically focused on areas which had suffered a chronic lack of power, in part using GE's and Siemens' mobile power stations, which run on natural gas from oil fields.93 In the long run, it is hoped that World Bank supported efforts to modernise grid management, through the use of Supervisory Control and Data Acquisition systems (SCADA) and geo-referenced customer databases will lead to modern, real time assessments of grid efficiency.94

Concurrent with this plan, long term projects have been put in place to improve grid efficiency and upgrade power stations to combined cycle, which includes GE's plan to install 36 Advanced Gas Path (AGP) units under the Power Up Plan II.⁹⁵ This will make

use of Iraq's growing gas processing capacity, which has hit a year end high of 1050 million standard cubic ft/day (mmcfd) through the Shell-Mitsubishi-South Gas Company Basra Gas company, with an eventual target of 2 mmscf/d. Much of this gas will go to power generation, saving Iraq money by using gas that would be flared and further cutting the wasteful use of crude oil and diesel in power plants.

It is hoped that 2019 will see around 2-4 GW additional power coming to the Iraqi grid, with the projects mentioned above adding much more in the coming years, not including other non-Siemens/GE led projects such as South Korea's STX Marine Service deal to restore diesel electric capacity, which began over the summer.⁹⁶

In the long term, Iraq will urgently need to revisit plans for privatisation of distribution, to help ensure funding viability of massive Independent Power Producer (IPP) projects like the 3 GW Bismiyah power station. Otherwise, the relentless rise of demand, at around 7% per year and growing costs will only mean more problems in future, with demand projected to soar to 30 GW, perhaps even 40 GW, by 2030 (although much of this will depend on industrial demand, which is extremely hard to predict.)

Iraq is working on concrete sustainable measures to be taken to reduce the number of hours of power cuts especially during the peak summer months in the next few years. In addition to signing two MOUs late last year

⁹² Siemens and GE sign agreements for power projects in Iraq. The National.

https://www.thenational.ae/business/energy/siemensand-ge-sign-agreements-for-power-projects-in-iraq-1.782634

⁹³ Iraq's Basra Gas Co output to increase 17 percent by end-2018: ministry. Reuters. 29.11.18

https://www.reuters.com/article/us-iraq-gas/iraqs-basra-gas-co-output-to-increase-17-percent-by-end-2018-ministry-idUSKCN1NY1AA

⁹⁴ World Bank: Electricity Services Reconstruction and Enhancement Project

http://documents.worldbank.org/curated/en/4736915084 07427654/pdf/PIDISDSC21808-PSDS-REPLACEMENT-

P162454-Concept-PUBLIC.pdf

⁹⁵ GE press release. 04.04.18

https://www.powermag.com/press-releases/ge-powers-

technology-helps-iraqs-najibiya-power-plant-reduce-downtime/

⁹⁶ John Lee. South Korea wins \$500 million deal for electricity in Iraq. Iraq Business News. 01.11.18. http://www.iraq-businessnews.com/2018/11/01/s-korea-wins-500m-deal-for-electricity-in-iraq/

with the giant electricity companies GE and Siemens to come up with quick and long term solutions for the power shortage, more IPPs are willing to enter the Iraqi market to build large scale gas fired power generation and solar PV.

The Struggle for Economic Reform

Recognising that even the best energy sector scenarios cannot create jobs sustainably, Iraq in 2018 saw another push for regulatory reform to incentivise private investment. Much difficulty, as PM Adil Abdul Mehdi has stated, is political obstacles to reform. We note for example, that some Iraqi government entities are cognizant that oil prices are unpredictable and the private sector is weak, as emphasised in the Ministry of Planning National Development Plan 2018-2022.⁹⁷

These warnings are not new, as multiple government plans to diversify the economy over the years have made clear, but there is an evident struaale implement recommendations. During the Kuwait conference. the National Investment Commission (NIC) reminded prospective investors of ongoing efforts to consolidate investor access and registration in a One Stop Shop (OSS) which was established as the OSS Department under Investment Law No. 13 of 2006.98 One of the big challenges for business, both local and foreign, has not only been procedures to start a business, but also dealing with different government entities. An OSS plan has intended to stop this problem, but it has encountered difficulties.

In November, the NIC complained that the OSS Department was often cut out of decision making when in fact it should have been central, with the role of streamlining and bureaucracy. The NIC eliminating complained there were still major problems in allocating land for investment. Laws on this matter were often interpreted according to local or national interests. According to the NIC, "relevant state departments are very conservative regarding allocated lands for investment which has created a huge obstacle for investment projects." The NIC warned that political quotas, corruption and central aovernment interference in the work of Provincial Investment Commissions were some companies to abandon leading projects. 99 Iraq will need another major push in this area if job creation is to be feasible at the required scale for stabilisation.

Reform Focus Areas

In part due to these ongoing problems, Iraq's attempts to increase non-oil investment have suffered in 2018, despite notable projects announced throughout the year and despite

⁹⁷ Ministry of Planning, Federal Government of Iraq. National Development Plan 2018-2022. http://www.iraq-jccme.jp/pdf/archives/nationaldevelopmentplan2018_20 22.pdf

⁹⁸ National Investment Commission, Iraq. http://investpromo.gov.iq/one-stop-shop/

⁹⁹ National Investment Commission, Iraq. Official website. http://investpromo.gov.iq/newsticker/the-national-investment-commission-holds-an-elaborated-meeting-in-the-presence-of-the-secretary-general-of-the-ministers-council/

minor reforms (discussed below) that if extended to other sectors, could be promising.

Important non-oil projects announced at the end of 2017 and early 2018 have not materialised or been delayed. This is a tragedy since one of the key ingredients to economic stability is job creation. More concerningly, 2018 again saw demands directed at a multiplicity of state and non-state actors, ranging from national oil companies, local and federal governments, the religious establishment and a range of different groups. While reform demands focused on three key issues--electricity, jobs and clean water, there has been attempts in 2018 to address the challenges.

Firstly, in July former Minister of Oil Jabbar al Luaibi summoned IOCs to discuss the Integrated South Project, the scaled down Common Seawater Supply Project (CSSP) that now aims to provide 5 mbpd of treated seawater (down from 12 mbpd) for enhanced oil recovery, vital for Irag's long term production targets. 100 In the long run, new seawater injection facilities may still rise to 7 mbpd in order for Iraq to meet ambitious production targets by the early 2020s. 101 One reason for this was concern over freshwater availability in some areas of the south; in the absence of this project, IOCs are drawing freshwater from the Garraf river. In Irag's hot summers, an overall lack of water is contributing to seawater encroachment of the Shatt al Arab, negatively impacting drinking quality Basra, problem water in

compounded by Turkish and Iranian dam construction, water-use inefficiency within Iraq and leaking infrastructure. At most, the water requirements for IOCs are projected to reach around 1.7 billion cubic metres (bcm) per year by 2035, with domestic demand projected to reach over 6 bcm/year. For comparison, Iraq's marshes are thought to need around 5.3 bcm/year to maintain their ecosystem. However, with a rapidly growing population, vast water demand for agriculture and difficulty in making accurate projections, the sooner Iraq can complete seawater injection facilities the better.

Secondly, a significant challenge is job creation. As we have noted, Iraq needs to create approximately 500,000 jobs per year, due to rapid population growth, a target that cannot be reached even remotely by the public sector. Some estimates place the maximum number of jobs Iraq needs to create in 2018 as high as 900,000.103 In southern Iraq, high unemployment has led to tribal disputes over who is allowed to work at oilfields, where hiring of local security guards is often a tribal matter. This led to a promise of creating 10,000 jobs in the sector, although we note some of the major tribes have hundreds of thousands of unemployed young men. The dynamic of protesters demanding jobs is likely to continue, a pattern that is now years old and ultimately unsustainable.

https://iraqenergy.org/product/towards-sustainable-water-resources-management-in-iraq-report/

103Frank Gunter. Immunizing Iraq against Al Qaeda 3.0.

Orbis. Summer 2018, Vol.62. No.3. P.389.



21

¹⁰⁰ Iraq's IOCs press on upstream, despite protests. Middle East Oil and Gas. 24.07.18.

https://newsbase.com/topstories/iraq%E2%80%99s-iocs-press-upstream-despite-protests

¹⁰¹ Gerald Butt. Iraq wrestles with water supply dilemma. Petroleum Economist. 13.11.18 http://www.petroleum-economist.com/articles/politics-economics/middle-east/2018/iraq-wrestles-with-water-supply-dilemma

¹⁰² Iraq Energy Institute. Towards sustainable water resources management in Iraq.

Economic Governance Gains

Despite these unfavourable indicators, Iraq made some headway in 2018 to facilitate foreign investment and announce plans to renew efforts against corruption in 2019. Firstly, the Iraqi government has said it is introducing changes to simplify visa and residency procedures for visitors, international investors and entrepreneurs from a number of countries, beginning with Lebanon following agreement between the governments. 104 Irag's visa application process has in the past been notoriously difficult and often cited as an obstruction to investment, so any progress in this area is notable.

This follows important progress in February 2018, when Iraq acceded to the New York Convention on commercial arbitration, often regarded as the international "gold standard" for aligning the rights of investors and governments. Iraq's accession to the convention follows its signing of the ICSID convention in 2017, which focuses on investor-state disputes.¹⁰⁵

Within Iraq itself, progress on kickstarting the small and medium enterprise sector (SME) has been mixed. In the 2019 World Bank Ease of

Doing Business survey, which attempts to assessment of SMEs standardise comparison across borders, Iraq ranked 155 out of 190 on procedures for starting a business, ahead of Iran (173) but behind Saudi Arabia (141). The bank classes SMEs as having a startup capital 10 times the per capita income and employing between 10-50 domestic nationals. 106 In Iraq, the average time for men to start a business was 20.5 days with 8 procedures, while women took on average nine procedures over 27 days. On these metrics, Iraq was behind in the region, particularly on the length of time required to start a business.

The report also details other areas where bureaucracy is stifling business. For example, it takes on average 312 hours per year for medium size businesses to deal with tax and related post filing procedures and complying with tax legislation, compared to 197 hrs for the rest of the MENA region. The report also details Iraq's currently weak legal environment for businesses and weak contractual enforcement, where Iraq ranks at 48.02, behind the MENA regional average of 55.04.

Contract enforcement and an equitable access to markets is of course related to Iraq's overall rule of law environment. Aware of these challenges, prime minister Adil Abdul Mehdi held his first meeting with the Supreme Council for Combating Corruption at the end of December, where he urged stronger cooperation in the body which works with the Commission of Integrity and Ministry Inspector Generals.¹⁰⁷ Performance in this area is

¹⁰⁷ Sangar Ali. PM says corruption 'distorts' Iraq's image and reputation, calls for its eradication. Kurdistan 24.01.01.19.



22

¹⁰⁴ John Lee. Iraq to ease visa procedures for investors. Iraq Business News. 24.11.18 http://www.iraq-businessnews.com/2018/11/24/iraq-to-easy-visa-procedures-for-investors/

¹⁰⁵ C. Mark Baker. Marking the 60th anniversary of the New York Convention —A Q&A with Norton Rose Fulbright's global co-heads of international arbitration. Norton Rose Fulbright. 01.05.18.

http://www.nortonrosefulbright.com/knowledge/publications/165605/marking-the-60th-anniversary-of-the-new-york-convention-mdashbra-qa-with-norton-rosefulbrights-global-c

¹⁰⁶ 2018 World Bank Ease of Doing Business Report, Iraq. http://www.doingbusiness.org/content/dam/doingBusiness/country/i/iraq/IRQ.pdf

important, as earlier in 2018 commissioner Hasan al Yaseri resigned his position at the Commission of Integrity in protest claiming that only 15% of 10,000 cases had resulted in a court case in the previous year.

On the investment front, President Barham Salih discussed the need to improve the environment for FDI by "draining Irag's swamp" of corruption at the Mediterranean Dialogue Forum in Rome at the end of November. He announced the creation of a national infrastructure and industrial development agency, which would attract investment for "deep port facilities in Basra, railway networks, highway networks, airports, industrial cities, dams, irrigation projects in the Nineveh plains, Garmiyan and Erbil, as well as land reclamations in the south."

This would, he said, put Iraq at the "heart of a new Silk Road." ¹⁰⁸ Any progress here in 2019 will depend very much on improving the investment environment for mega projects. In this area, some companies were still showing appetite for risk through 2018, with a significant breakthrough being the cooperation between Standard Chartered Bank and the Trade Bank of Iraq who together finalised a \$600-million financing agreement for General Electric's "Power Up Plan," which aims to add 2 GW to the grid and maintain over 6 GW. ¹⁰⁹

http://www.kurdistan24.net/en/news/889ab739-2cb7-4b20-94e1-70e4dd909b19

http://www.rudaw.net/english/middleeast/iraq/22112018

¹⁰⁹ Trade Bank of Iraq, StanChart, GE close \$600 million power finance deal. Reuters. 25.11.18

First Mover Advantages

Despite these challenges, a number of non-oil sector companies pushed ahead with investments in 2018. In a sign that Iraq was joining the world's increasingly digital economy, UAE-based Careem ride hailing app launched in Baghdad in January, a rival in many developing countries to Uber, with half a million drivers registered globally. In February 2019, we launched a series of articles covering this nascent but potentially transformative sector.

Another significant development was the entry of a Lebanese firm in the dairy sector in Basra, with a \$10 million factory that will produce 10 tons of produce per hour.¹¹¹ The factory is already operational, but it is noteworthy that the investor was initially looking at Basra in 2013, either a sign that companies are regaining confidence after the 2014-17 conflict, or the bureaucratic hurdles faced when launching a business.

Nearby, the Saudi Northern Cement Company acquired Iraq's Umm Qasr Northern Cement Company in February 2018, another investment in a sector that should be growing with Iraq's reconstruction needs.¹¹² Here the

¹¹⁰ Christian Nelson and John Everington. Careem launches ride-hailing services in Baghdad. The National. 15.01.18.

https://www.thenational.ae/business/technology/careem-launches-ride-hailing-services-in-baghdad-1.695627

¹¹¹ Iraq Eyes Cutting Imports With New Basra Dairy Plant. Reuters. 25.11.18.

https://en.radiofarda.com/a/iraq-eyes-cutting-imports-with-new-basra-dairy-plant/29613233.html

¹¹² Northern Cement aquires Umm Qasr Cement Company. Cwgrp.com. 12.02.18.

https://www.cwgrp.com/cemweeknews/m-a/496996-



¹⁰⁸ Salih envisions Iraq as hub of revitalised middle east. Rudaw. 22.11.18.

challenge for Iraq is to balance protecting its own industries with the need to keep reconstruction costs down.

Cement market entrants such as Pakistan's Lucky Cement and France's Lafarge (who have been in Iraq for over a decade) will benefit from cement tariffs currently in place. This year, cement production projects in Iraq amounted to at least \$300 million in investment, with Lucky Cement launching a 1.2 million ton/year project as a joint venture with a local firm in Samawah, in addition to its existing plant in Basra. 113 Elsewhere, the Danish company FLSmidth has a \$200 million contract with the Iraqi Cement Company for a 6,000 ton/day (2.2 million tons/yr) facility in Al Muthana, a project initiated in 2016.¹¹⁴ These plants will receive a huge boost if and when reconstruction of seriously damaged areas such as West Mosul gets underway, but tariffs may crowd out cheaper sources of cement, or raise the cost of the imports for the Iraqi market.

Iraq's steel industry faces a similar conundrum. At the present time, cheap imports are making it hard for steel production in Iraq and the Kurdish region-- a similar problem faced by the steel industry globally since the steel glut. In 2018, Iraq used 1.41 million tons of steel, only 430,000 tons of which was produced locally, with around 980,000 tons imported, with Iranian, Turkish and Ukrainian companies

supplying the bulk of these imports. In a sign of the distorting effect of tariffs, Iraqi fees on steel imports at the Ibrahim Khalil border crossing are far higher than tariffs on imports coming into Basra. As a result, steel importers in the KRI are now using Basra, despite the long distance, to import steel.¹¹⁵

northern-cement-acquires-umm-qasr-northern-cement-company

businessnews.com/2018/05/01/lucky-cement-to-invest-109m-in-samawah/

meconstructionnews.com

http://meconstructionnews.com/18640/denmarks-flsmidth-signs-200m-deal-with-iraq-cement-co

¹¹⁵ Demand for Kurdish steel tempered by cheap imports. Rudaw. 17.12.18





¹¹³ John Lee. Lucky Cement to invest \$109 million in Samawa. 01.05.18. http://www.iraq-businessnews.com/2018/05/01/lucky-cement-to-invest-

¹¹⁴Gavin Davids. \$200 million deal signed between Iraq Cement and Denmark's FLSmidth.



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