ARABIA MONITOR ENERGY

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HIGHLIGHTS

- Saudi **Aramco** has confirmed a domestic-only listing for its Initial Public Offering (IPO), but the share price implies Aramco is valued at ~USD 300B lower than the initial target.
- The protests in **Iraq** since May 2019 are continuing, with some though so far limited impact on oil production and exports.
- **ADNOC** has created a new forward pricing mechanism for its Murban crude (currently 1.7 Mb/d of production) to be launched in H1 2020. It raises some questions over Abu Dhabi's OPEC production quota and its impact on the benchmark.
- Although all of **Iran's** leadership seems unified behind the November 15th 50% fuel price hike and fuel rationing program, President Hassan Rouhani and his allies face deeper political criticism.
- Our spotlight of the month shows how the oil scene for 2020 will be tough for producers as oil prices will remain depressed. **OPEC**+ may thus need to extend cuts to mid-2020 at its next meeting in March 2020.

OIL PRICE SCORING

OIL PRICE SCORING (Rated Based on Impact on Oil Price)			
OPEC agreement	Positive	↑	OPEC agreed to deepen the cuts by 500 kb/d through the end of March 2020, putting total supply cuts for the group to 1.7 Mb/d; OPEC production increased 943 kb/d in October as Aramco's production rebounded, and the UAE lowered compliance. Consequently, OPEC compliance declined compared to the previous month, but was still above 100% for the group; Iraq's compliance remains short at -26%; UAE's compliance in October was the lowest seen for the year at 65%.
OPEC supply outlook	Positive	↑	Iraq and the UAE are expected to increase production capacity in 2020, but overall call on OPEC for 2020 will be lower than 2019; Iraq will remain the outlier in the OPEC deal, while the UAE will largely comply with its production quota; Saudi Arabia and Kuwait will be the largest compliers to the cuts, but despite the production cuts, Saudi Arabia is not willing to reduce exports to China.
Non-OPEC supply outlook	Positive	↑	OPEC revised down non-OPEC oil supply growth for 2020 by 36 kb/d from last month; non-OPEC supply is now forecast to grow by 2.17 Mb/d, mainly due to slower US growth, revised down by 33 kb/d to growth of 1.5 Mb/d for 2020.
Global Demand	Negative	↔	OPEC forecasts 2020 oil demand growth at 1.08 Mb/d unchanged from the previous month, averaging 100.9 Mb/d. China and other developing Asia are assessed the largest contributors to oil demand growth with a combined addition of 0.68 Mb/d.
Progress of non-oil technologies	Neutral	↔	Saudi's 300 MW Sakaka solar plant begins operations, and will be fully operational by end-2019; Oman's first wind farm begins operation; Egypt awarded 200 MW to Acwa at the lowest solar PV bid seen in North Africa so far (USD¢ 2.48/kWh); Dubai's 900 MW solar tender was awarded to ACWA Power for USD¢ 1.69/kWh

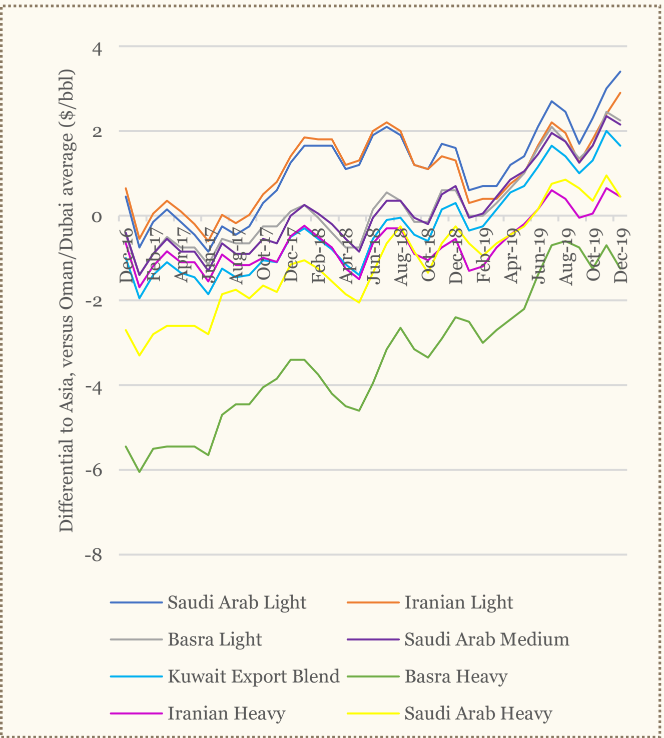
Very positive · Positive · Neutral · Negative · Very negative · Improvement in last month · No change · Deterioration in last month

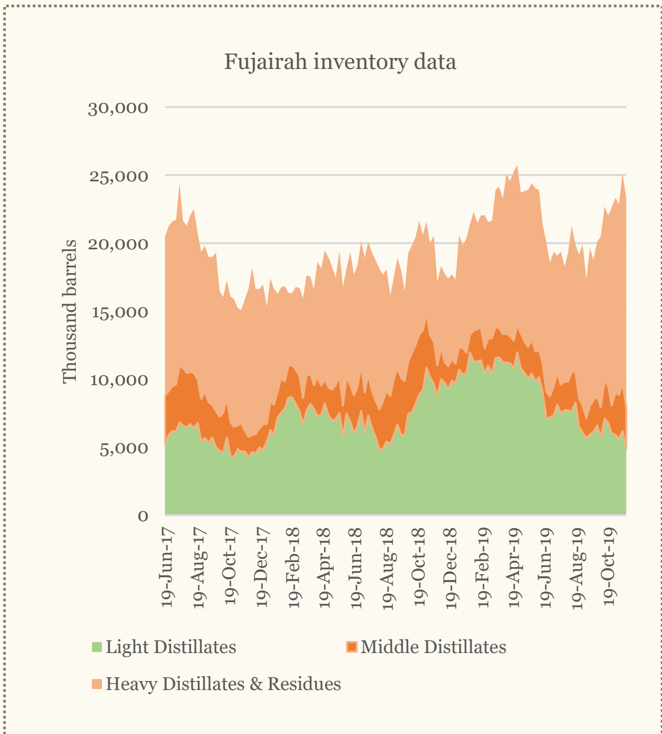
SECTION SNAPSHOT

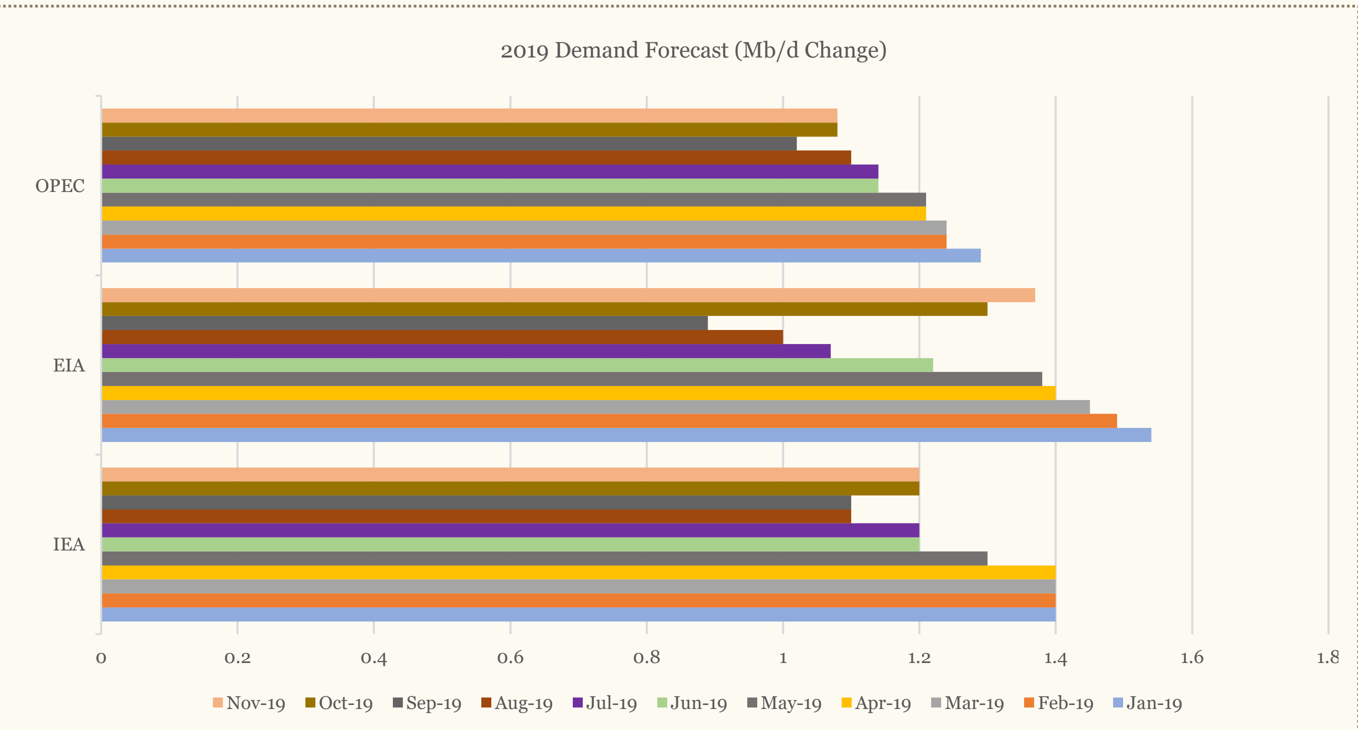
- Saudi Arabia raised its December official selling price (OSP) for its Arab Light grade for Asian customers, the highest since January 2014, to a premium of USD 3.40/bbl to the Oman/Dubai average amid higher Middle East benchmarks. However, a slump in fuel oil margins led to a deep price cut for its heavy grade. Other producers followed.

- Major bunkering hubs are preparing for the IMO 2020 fuel oil sulphur regulations. In Fujairah, total oil stocks rose by 2.8 million barrels (mb) from the previous month with middle distillate and fuel oil stocks rising 0.3 mb and 3.1 mb, respectively, and light distillates declining by 0.6 mb.

- The IEA and OPEC did not change their oil demand projections from the previous month. The IEA sees oil demand growing by 1.2 Mb/d whereas OPEC forecasts demand growth of 1.08 Mb/d by 2020. The EIA is most optimistic, forecasting growth of 1.37 Mb/d in 2020, 0.07 Mb/d higher than the previous month's estimate.







Sources:

1. Figure 1: News sources; MEES; NIOC; SOMO; Qamar Energy Research
2. Figure 2: FEDCom/S&P Global Platts Fujairah Inventory Data
3. Figure 3: IEA, OPEC and EIA monthly oil reports

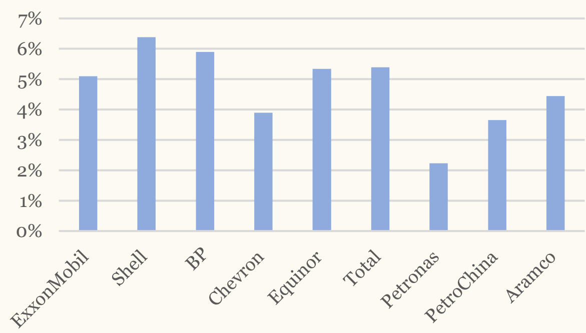
HEADLINE DEVELOPMENTS

Established Producers Supply

Saudi Aramco has confirmed a domestic-only listing for its Initial Public Offering (IPO), selling 1.5% of its shares (3 billion shares) in December 2019 at USD 8.53 per share, on top of its targeted range of USD 8.10 to 8.53. The shares were allocated to both institutional and retail investors on the domestic Tadawul bourse. The exact price will be set on 5th December. Most of the proceeds of the sale (up to USD 25.6B) will be invested back into the economy as promises have been made of diversification. Saudi citizens have grown more frustrated, and the lack of diversification in the economy is one of the reasons the former energy minister was sacked in September. At USD 8.53 a share, which corresponds to a USD 1.7T market value, Aramco would be valued at about 18 times projected 2019 earnings of USD 0.46 (USD 92B). That is a discount to ExxonMobil (20.03) and BP (27.7), but a premium to the other majors like Shell (11.88) and Total (14.85). As seen in Figure 1, Aramco's implied 4.45% dividend yield would be slightly below the 5.34% average paid by the five majors it refers to in its prospectus[1]. Saudi Aramco's low yield at a base dividend of USD 75B in 2020 indicates a fully valued, if not overpriced share. Earlier this year, Aramco's USD 12B bonds received USD 100B in orders, demonstrating high demand, inflating their prices. However, their performance was rather tepid with the short-term tranches flat and some even lower than where they priced on the first trading day. The same path is seen with the Aramco IPO where some retail (individual) investors are taking out loans to buy significant numbers of shares. Towards the end of November, Aramco's IPO attracted USD 44.3B in bids, 1.7x oversubscribed. To avoid price dips, Aramco is offering retail investors bonus shares if they limit their trading for the first 6 months. Nearly 90% of the institutional bids came from domestic Saudi entities. Allies Abu Dhabi and Kuwait will also contribute, with ADIA investing from USD 1-2B.

[1] ExxonMobil, Shell, BP, Chevron, Total

FIGURE 1: ARAMCO'S PLANNED DIVIDEND YIELD COMPARED TO PEERS[2]



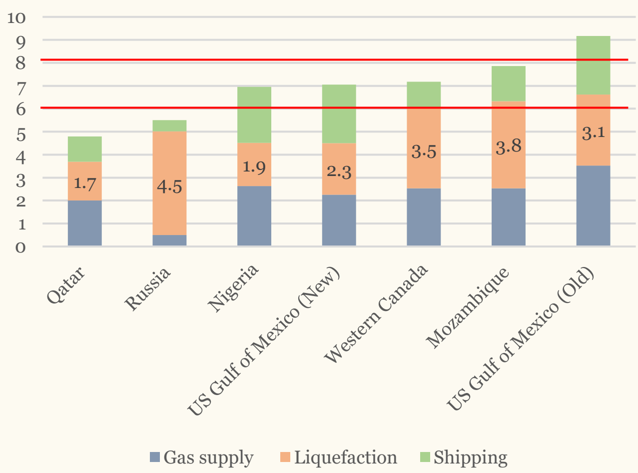
ADNOC Onshore's capacity is intended to gain 200 kb/d. A contract was awarded to Archirodon to maintain long-term output at the Bab field, which produces Murban crude, at 485 kb/d by 2022. Bab is currently being expanded from 420 kb/d to 450 kb/d, and Bu Hasa from 550 kb/d to 650 kb/d by 2020. ADNOC's current oil capacity is still below its 2018 target of 3.5 Mb/d. The target has not been reached yet due to slower than expected start-up of new fields and brownfield expansions, but this has not been problematic as the OPEC cuts have constrained output anyway. ADNOC still aims to reach its 3.5 Mb/d target by the end of 2019 and plans for capacity to reach 4 Mb/d by 2020. ADNOC could fall short of the 3.5 Mb/d target in 2019 as well if the first phase of the Upper Zakum expansion project sees further delays. We also predict that the 2020 target will be reached by 2023-24.

Qatar Petroleum (QP) announced plans to raise its LNG production capacity to 127 million tonnes per annum (Mtpa) by 2027 from its current level of 77 Mtpa, a 65% increase. It was already targeting 110 Mtpa capacity by 2024 via the construction of an additional four 8 Mtpa LNG megatrains (total of 32 Mtpa). The 2027 target will require another two similar sized trains (total 16 Mtpa). The strategy to increase capacity by 65% came after successful appraisal of the giant North Field's onshore section. QP announced an increase in its recoverable resources of the North Field by 18% to 1170 trillion cubic feet (TCF), from 990 TCF, after years of appraisals and testing on the field during the moratorium, but the onshore extension further boosted confidence. Besides the natural gas supply increases, large volumes of condensates, LPG, and ethane will also be monetised. QP has not yet awarded a contract for the construction of the four trains, though it did announce that it has shortlisted contenders and only plans to award it to only one company by 2020, if it decides to.

[2] Qamar Energy; News Sources

Qatar is not worried about the sanctioning of competing LNG capacity worldwide, especially in US, Australia and Russia, because it will remain the most competitive in terms of costs, even till 2027 (Figure 2). To remain competitive, exporters need to leverage LNG technology to reduce costs, particularly in liquefaction. Depending on the market, they need to achieve liquefaction costs (net of feed-gas cost) of USD 2.1-4.1/MMBtu. This allows LNG to be delivered to high-income markets at less than USD 8/MMBtu, and to low-income markets below USD 6/MMBtu.

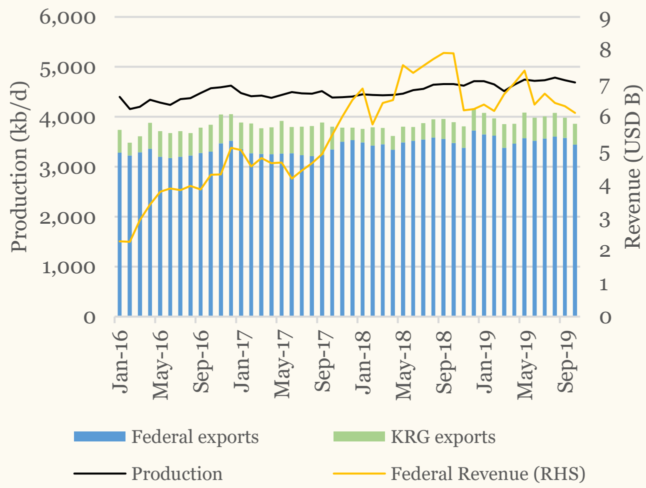
FIGURE 2: LNG PROJECT COMPETITIVENESS (2025) TO JAPAN, KOREA, TAIWAN OR CHINA (USD/MMBTU)[3]



Emerging Producers Supply

Protesters in **Iraq** have been targeting oil facilities in the south, impacting production and exports. The Iraqi government has been saying that the decline is associated with OPEC compliance; however, it was mainly due to the demonstrations. Angry protestors blocked roads used by oil workers to go West Qurna 1 which was producing around 465 kb/d before any disruptions, West Qurna 2 (443 kb/d), Rumaila (1,485 kb/d), Nahr Bin Omar (30 kb/d), and Majnoon (143 kb/d). These fields account for ~54% of current production. The most significant outage was at the Qayarah heavy oil field near Mosul, for 10 days. The field produces 30 kb/d, though production after the restart is around 14-20 kb/d. Small reform packages are being discussed in Iraq, but progress will be slow and will not necessarily meet all demands by protestors because the sectarian government system is designed to preclude conflict rather than produce capable governments. Even though elections were held in 2018, early elections could come up soon, if a new electoral reform is agreed on. The Iraqi Parliament accepted the resignation of Prime Minister (PM) Adel Abdul Mahdi on the last day of November, a day after security forces opened fire on a group of protestors in Nassriyah, killing and injuring protestors. The search for a new successor will need to be accelerated because the current Iraqi constitution does not state how long Abdul Mahdi's government can hold on to its power if the nomination of a new candidate is delayed.

FIGURE 3: FEDERAL IRAQ AND KRG PRODUCTION AND EXPORTS[4]



American companies Bechtel and Enka withdrew from the Ratawi gas consortium in **Iraq.** The only player still allegedly interested is Honeywell, though the gas project is not likely to go ahead. We had suspicions on the project since it was first announced after ExxonMobil lost interest in the Southern Iraq Integrated Project (SIIP) over profit sharing/commercial issues. The US company also withdrew staff from Iraq over security concerns (after a rocket hit close to an ExxonMobil housing unit), and the Ministry of Oil has said they have not heard from the operator since. The Ratawi oil and gas field was part of ExxonMobil's SIIP upstream package, but the MoU signed with the American consortium back in July (now only Honeywell) involved building a 300 MMscf/d gas processing unit for the five southern Iraqi oil fields (Ratawi, West Qurna 2, Majnoon, Luhaiss, Subba). However, what is baffling about the Ratawi gas hub project is that there is another planned 300 MMscf/d gas processing plant in Ratawi by the Basra Oil Company (BOC). In our view, the only gas processing plants that will come online in the next 5 years are the expansion

[3] Oxford Energy – Outlook for Competitive LNG supply

[4] Production includes both Federal Iraq & KRG (source: OPEC monthly oil reports). Export sources: Ministry of Oil; Iraq Oil Report

of Basra Gas Company (BGC)'s plants by 140 MMscf/d by 2019-20, another BGC expansion of 300 MMscf/d by 2023 (to reach total 1,400 MMscf/d), the Nassiriya, Halfaya, and BOC Ratawi plants adding 900 MMscf/d of new capacity. These new plants will increase gas processing capacity in Iraq to 3,600MMscf/d from 2,270 MMscf/d.

New Supplies/Discoveries

The Kurdistan Regional Government (**KRG**) is optimistic about a new light oil discovery, from the upper part of Triassic Kurra Chine B reservoir, announced by DNO, operator of the Baeshiqa license with ExxonMobil (32%), the Turkish Energy Company (16%) and the KRG (20%). The discovery, made from the Baeshiqa-2 exploration well, also shows possible deposits of sour gas. According to a memo leaked by WikiLeaks in 2016, the Baeshiqa block is estimated to hold two prospects with a combined 580 million barrels of oil equivalent (Mboe). However, the announced discovery appears less promising than this. DNO is planning to spud a third exploration well in early 2020. Production growth in the region is coming from mostly heavy oil fields: Atrush (producing 30-35 kb/d with plans to increase to 50 kb/d), Shaikan (producing 36 kb/d with a target to increase to 55 kb/d by 2020) and Sarta (to start production in 2020 eyeing 20 kb/d of production). The Khurmala Dome field, with output at ~160-170 kb/d, produces medium-light crude with an API of 34°. The prospective new light oil discovery would help diversify the quality of its crude oil for exports and will be used for crude blending. The API of the light crude is not yet determined, though the light crude of oil producing neighbours lies between 32-36°.

Egypt is still slated for further growth in 2020 from new gas production. The giant Zohr natural gas field is will be producing 3 bcf/d by the end of the year, up from 2.7 bcf/d in August 2019. On another field, Eni will link its third well on the Baltim field to production by the end of 2019 increasing total production of the field by 100 MMscf/d and 650 b/d of gas condensates. Overall, after linking the third well, gross production will reach 290 MMscf/d of natural gas and 1.95 kb/d of condensates. Moreover, the Burullus Gas Company (operated by Shell) will bring online the Silva natural gas well in phase 9B of the deep Western Delta concession area at 60-80 MMscf/d. The Silva well will be the third to be put on production within a month after the Saphir East and East Swan wells in October. Total production of the three wells will reach 240 MMscf/d. Egypt Kuwait Holding has also reported new production from its Offshore North Sinai concession. Production reached 80 MMscf/d with the start-up of the fourth and fifth production wells in September and October respectively. It aims to connect the sixth well to increase total production to 115 MMscf/d. If developments go as planned for Eni, Burullus and Egypt Kuwait Holding, production will increase by 495-515 MMscf/d by the end of the year from these projects alone.

UK oil and gas exploratory firm SDX Energy announced production had started at the company's South Disouq concession in **Egypt**, in which it owns a 55% stake. Gross production at the field will gradually ramp up to its plateau targeted rate of 50 MMscf/d by Q1 2020. Next year the UK firm also plans to drill five exploration wells on the field. All the gas produced on the field will be sold to the Egyptian Natural Gas Holding Company (Egas). Despite the gas production increases, due to low gas prices, Egypt has cancelled loading of some LNG cargoes, and has requested ENI to cut back production from Zohr, with the domestic market temporarily saturated.

Demand

CNPC withdrawing from the South Pars Phase-11 development project is unlikely to risk feedstock natural gas supply to existing and upcoming methanol plants in **Iran**. Petrochemical exports are constrained by sanctions, and the country's current methanol output is supported by natural gas supplied by various operational phases of South Pars, as well as from onshore gas fields around Assaluyeh. Iran's gas demand is also forecast to remain muted over the next 5-6 years, mainly due to an underperforming economy and industry, which creates a surplus of gas that can then be utilised for upcoming methanol and other petrochemical plants, and expansions to existing capacity. This however requires steady export demand by Iran's main petrochemical customers: India, China, and recently Brazil. Iran has been delivering methanol cargoes at a discount of USD 40/tonne to a market price of USD 260-280/tonne, and current US sanctions seem unclear on the level of enforcement on methanol, ammonia, and urea. Petropars should be able to develop significant production from South Pars Phase-11 on its own, as it did with other phases of the gas field, and should struggle only with the later planned LNG facility (CNPC would have found this difficult too), given the significant content of US-origin technology in modern liquefaction plants. Nevertheless, methanol development shall be delayed due to lack of access to financing and difficulty with obtaining imported equipment, but should not affect the timelines for operational readiness of the plants. Likely these shall be pushed back another few months, but current gas output should be sufficient for feedstock. Bushehr and Kimia Pars were slated to begin operations early this year, then pushed to November of this year, but we see a timeline of end-

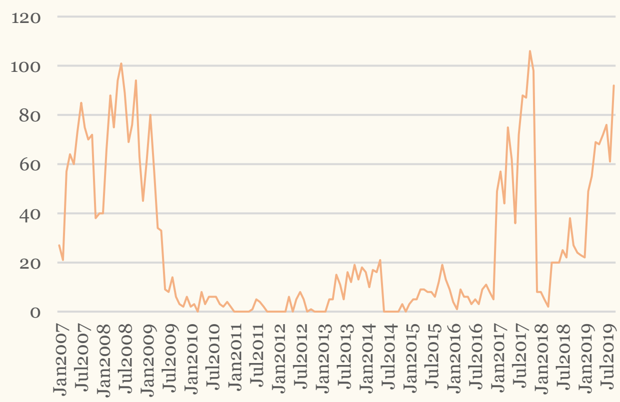
2020/early-2021 as more realistic. With requisite funding Kaveh could become fully operational by next year, and existing gas supply should be sufficient to cover its needs. Also the offshore Balal gas field is expected to begin production by 2022 (doubtful, but it may be online around 2025) by Pars Oil and Gas Company and PetroPars, so if gas feedstock falls short for petrochemical use, it could provide additional supplies. The field is expected to start production at 500 million standard cubic feet per day (MMscf/d).

Exports

With the introduction of the MARPOL IMO 2020 sulphur regulations, a few oil-exporting Middle Eastern countries are unprepared, predominately Iraq, Iran and Kuwait. **Iraq's** surplus of heavy fuel oil (HFO) will increase in 2020 as it produces more gas for power and continues gas imports from Iran (800 MMscf/d), lowering domestic demand for HFO, but it will find difficulty in exporting the product, and it does not have necessary storage capacity. Its options are limited to blending with crude oil, which will unfavourably lower quality, or exporting the HFO at depressed prices. The under-construction 150 kb/d capacity, Karbala refinery, producing Euro 5 spec products, could ease some obstacles. However, it is still only 70% complete and the remaining 30% may need financing. **Iran's** refineries are not rehabilitated to produce compliant fuel oil, and with the increase in gas production from South Pars, consumption for fuel oil in power has sharply decreased. Additionally, it will have challenges exporting the excess fuel oil due to high sulphur content and US sanctions. In **Kuwait**, the start-up of the clean fuels project (CFP) by 2020 (which was repeatedly delayed), is configured to produce 1% sulphur heavy fuel output instead of the required 0.5% by regulation. Consequently, the state refinery company decided to reconfigure operations to produce more Euro 5 specification gasoline and less of the 1% sulphur heavy fuel oil. The biggest winners in the region, on the other hand, are Saudi Arabia and the UAE, thanks to major refinery upgrades over the past few years. The Yasref and Satorp refineries in **Saudi Arabia** and the expansion of the Ruwais facility in the **UAE** added 1.2 Mb/d of new, clean refining capacity. As more demand for diesel (middle distillate) increases, Saudi Arabia and UAE will gain as they are net exporters. Moreover, Saudi Arabia (and possibly Kuwait) can import cheaper HFO to replace direct crude oil burn in summer periods.

On a related Iraqi fuel oil export matter, Thamir Ghadhban, oil minister in **Iraq**, realigned the responsibilities of the Iraqi Oil Tankers Company (IOTC) and the Ministry of Oil's marketing arm, SOMO in terms of fuel oil exports. Now, the IOTC will only be focused on storage, loading, and transportation operations, while its previous duties of selling HFO internationally will be given to SOMO (about USD 700M of HFO sales[5]). Fuel oil exports averaged 17 kb/d in 2018 from January to September, and in the same period this year, fuel oil exports have risen to 63 kb/d[6]. This consolidation will give exclusive rights for SOMO for collecting and marketing crude oil and oil products, especially prior to plans of selling HFO on the spot market, an area it is well familiar with compared to IOTC.

FIGURE 4: FEDERAL IRAQ'S FUEL OIL EXPORTS (KB/D)[7]



ADNOC will be introducing a new Murban futures crude exchange (the ICE Futures Abu Dhabi), to be launched in H1 2020 as a joint venture with major IOCs and trading firms including Shell, BP, Total, CNPC, and Vitol. ADNOC wants to establish Murban as a key Asian light sour crude market, alongside West Texas Intermediate (WTI), Brent, Dubai-Oman (though it will somewhat replace the dominance of the Dubai and Oman benchmarks in the region) and China's new INE delivered crude contract. Though it would be competing with the Dubai/Oman benchmark traded on the CME, those two are not OPEC members, and thus, are independent from government policy. ADNOC also plans to drop destination restrictions on its oil, allowing it to trade freely on the open market, and move to forward rather than retroactive pricing. It is finalising the acquisition of a 10% stake in Vitol's storage business VTTI to gain access to their worldwide storage facilities in the Netherlands, the US, Asia and Africa and is expanding its storage facilities in Fujairah, India and Jordan.

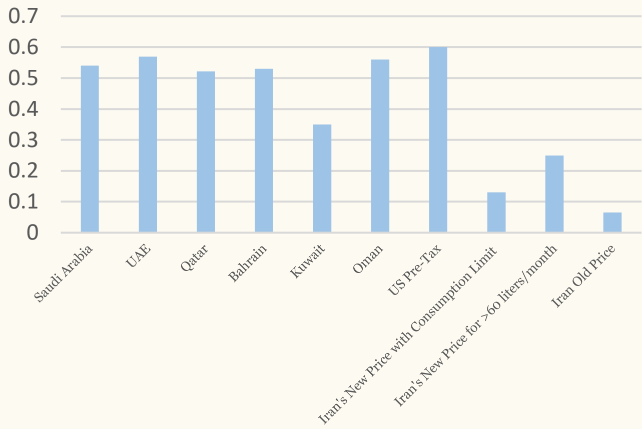
[5] Shafaaq
[6] JODI

[7] JODI

Iran exported 451 kb/d of crude oil and 125 kb/d of condensates in October, a total of 611 kb/d, 128 kb/d higher than the month before as China imported more gas condensates from Iran. Iran's net oil export revenues have been under immense pressure. Its real (USD 2018) net oil export revenue in 2017 was around USD 57B, as much as the UAE's and higher than revenues for Kuwait, Algeria, Angola, Nigeria, Libya, Venezuela, and the smaller OPEC producers. In 2018, revenues increased to USD 67B, mostly due to higher oil prices, but in 2019, were drastically cut to USD 19B from January to July[8]. Full-year 2019 revenues may be in the range of USD 25B, plus about USD 11B from petrochemical exports. Since July 2019, US sanctions have only got tougher, and oil exports continued to dwindle. These revenue figures do not account for any discounts than Iran gives its customers, so they could in fact be even lower. On the other hand, other OPEC members are seeing higher revenues since the start of the 2016 cuts. So far this year, Saudi Arabia is earning USD 630M per day, up USD 125M per day since the fourth quarter of 2016, despite it bearing the burden of the OPEC supply cuts with output down around 740 kb/d versus Q4 2016[9]. The only OPEC producers not making more money are Venezuela and Iran. With its economy under stress, the Iranian government introduced a gasoline rationing program (limits to private cars, motorcycles and taxis) and raised fuel prices by 50%. However, Iran's gasoline prices are still the lowest in the world other than Venezuela's. The current government is trying to hold out as long as it can until the 2020 US governmental elections, as it hopes it could enter new negotiations with a new Democratic president. The subsidy cuts led to large nationwide violent protests, which could hurt President Hassan Rouhani, who won previous elections in part over the strength of his economic policies given the hoped-for effect of the sanctions removal.

[8] EIA
[9] IEA

FIGURE 5: IRANIAN GASOLINE PRICES BEFORE AND AFTER THE 2019 HIKE COMPARED TO GCC AND THE US (USD/LITRE)[10]



New gas production from foreign operated fields has quickly translated to new exports and higher revenues for the **Egyptian** government. Total exports of natural gas rose to 1.29 bcf/d during the current fiscal year (FY) as production of natural gas rose to 7 bcf/d, compared to about 6.5 bcf/d in the last FY. LNG exports from the Idku liquefaction plant were 172.8 bcf or 0.473 bcf/d for the current FY. However, the government had hoped that the plant would be operating at full capacity now with exports increasing to 1.13 bcf/d, but Egas cancelled several LNG tenders from the facility due to low bids and growing domestic gas demand. Investment in the Egyptian oil and natural gas sector in the current FY was estimated at USD 10.6B, up 15% from the previous FY, of which 94.3% came from foreign partners[11]. One company, however, planning to exit the country entirely is Sharjah based Dana Gas, as it wants to focus its resources on its assets in Kurdistan (involved in the Khor Mor and Chemchemal fields). The Abu Dhabi-listed firm has three concessions in the Nile Delta region and a 26.4% stake in a gas liquids extraction plant in the Gulf of Suez. The company is currently producing around ~34 kboe/d in Egypt. The Egyptian government repaid Dana Gas USD 81M during H1 2019 and brought its arrears down to USD 117M, so the remaining arrears could complicate any sales. Dana Gas is therefore now open to even partial sales of assets in the North African country. Another company planning to sell some of its portfolio is Shell. The Anglo-Dutch company wants to sell its existing oil and natural gas concession areas in the Western Desert (80% of its assets in Egypt) to focus on gas/LNG in Egypt. Dragon Oil, which recently took over BP's Gulf of Suez assets, and Chevron are reportedly

[10] News Sources
[11] Tekmormonitor

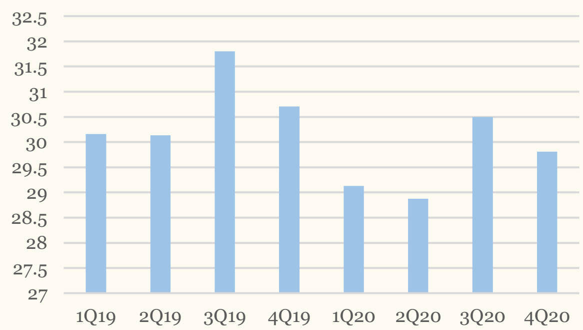
interested. After the sale, Shell will only have stakes in the Rashid and Burullus fields, currently producing 290 MMscf/d, and the Idku LNG plant. However, Shell's recently awarded exploration assets from the Egas tender are not be included in the sale.

OPEC

Markets are forecast to remain relatively well-supplied in 2020 with ongoing projects in the Americas and the Middle East. Among major non-OPEC producers, US shale shall lead, but at a diminished rate, as producers continue to trim spending plans to avoid debt distress and meet shareholder returns during a period of softer oil prices. However, US oil production will continue to reach record rates (averaging 13.29 Mb/d in 2020).

The strong growth in non-OPEC supply is putting further strain on the call on OPEC. In its November oil report, OPEC estimated its production to average 29.6 Mb/d in 2020 compared to 30.7 Mb/d in 2019 (**Error! Reference source not found.**), although it probably removed Ecuador's production of around 520 kb/d for next year[12].

FIGURE 6: CALL ON OPEC BASED ON OPEC'S NOVEMBER 2019 OIL REPORT (MB/D)



This resilient growth from non-OPEC prompted OPEC+ producers to deepen the cuts by 500 kb/d during the organisation's meeting in Vienna on December 6. The group is already cutting production by 1.5-1.6 Mb/d though it's targeted to cut 1.2 Mb/d. The 300-400 kb/d overcompliance is mainly from Saudi Arabia, so in reality, the deeper cuts will lead to a small cut to current levels. Saudi Arabia said it will reduce output by a further 167 kb/d to 10.151 Mb/d which means a pledged cut of 482 kb/d, but it is already cut an average of 769 kb/d this year (not including the outlier month of September due to the attacks on Aramco facilities). Russia also agreed to cut another 70 kb/d from its previously agreed 300 kb/d.

Russia's commitment to the OPEC+ agreement remains dubious, and the country was trying technical means to alleviate the burden of cuts (by reclassifying gas condensate as exempt), and it did receive the approval in the December 6 meeting, but at the same time, increased its cut allocation by 70 kb/d. But post the new energy deals between Russian oil companies and GCC governments, Putin will pressure oil producers to comply at better rates than those seen in 2019.

Markets expect the cuts to be short-term because IEA predicted an over-supplied market in 1H 2020 and a tighter market in 2H 2020. The deal will be assessed in March 2020, but since markets forecast an over-supplied market in the 1H 2020, and the cuts will not be much higher than they are now, they could be extended to end of June. OPEC would want to maintain the cuts to support prices, and avoid any rush to increase production.

If compliance is abruptly ended to maintain market share, short-term prices could drop to as low as USD 50/bbl, whereas if OPEC maintains cuts till the end of 2020, Brent oil prices could stabilise at around USD 60-70/bbl. The opportunity cost of higher prices is faster growth in non-OPEC production, particularly US shale oil and offshore basins that are breaking even below USD 75/bbl, but OPEC producers will want to maintain a disciplined approach.

In the unlikely scenario of a long-term major supply disruption due to geopolitical events, while demand remains modestly robust, and OPEC's spare capacity is insufficient to offset losses (OPEC spare capacity stood at 2.23 Mbpd in September 2019, not including the Saudi-Kuwait Neutral Zone), prices could escalate to USD 80-90/bbl. In this regard, Saudi Arabia and Kuwait will rush to restart operations on the Wafra (220 kb/d) and Khafji (280-300 kb/d) fields in the Neutral Zone.

From the GCC OPEC members, ADNOC is seeking to increase production capacity to 4 Mb/d in 2020, but this is likely to be pushed back due to the OPEC cuts, and project delays. Any capacity increases in Saudi Arabia from its current offshore field expansions is to offset natural declines in maturing fields. In the case of Kuwait, output capacity was planned to reach 4 Mb/d by 2020, but is unlikely to rise above 3.1 Mb/d due to political and bureaucratic obstacles.

[12] Ecuador plans to leave OPEC by January 1, 2020

FIGURE 7: MONTHLY CRUDE PRODUCTION FOR OPEC WILDCARDS (KB/D)[13]

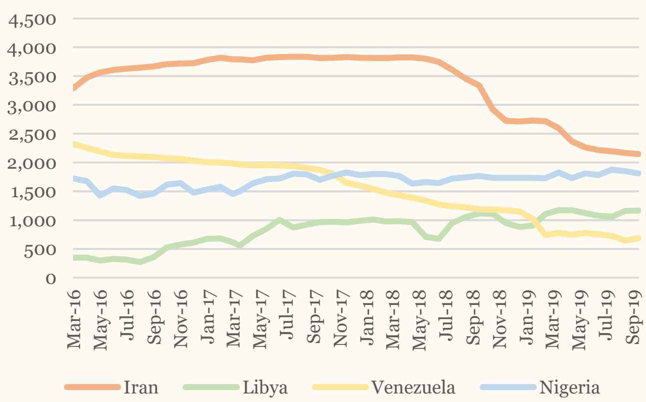


TABLE 1: OPEC COMPLIANCE (%), PLEDGED & ACTUAL CUTS (KB/D)[14]

Country	Pledged cuts	Sep'19 Compliance	Cuts	Oct'19 Compliance		Cuts
Algeria	-32	116%	-37	119%	↑	-38
Angola	-47	274%	-129	366%	↑	-172
Congo	-10	-100%	10	0%	↑	0
Ecuador	-16	-106%	24	519%	↑	-83
Equatorial Guinea	-4	125%	-5	50%	↓	-2
Gabon	-6	-167%	10	-333%	↓	20
Iraq	-141	-56%	79	-26%	↑	37
Kuwait	-85	178%	-151	159%	↓	-135
Nigeria	-53	-40%	110	30%	↑	-16
Saudi Arabia	-322	570%	-1837	231%	↓	-743
UAE	-96	89%	-85	65%	↓	-62
OPEC	*-812*	259%	-2011	147%	↓	-1194

[13] OPEC Secondary Sources; Qamar Energy

SPOTLIGHT OF THE MONTH

OIL, POLITICS AND THE GLOBAL ECONOMY IN 2020

The grand picture of world energy in 2020 will be shaped by the balance within two forces: geopolitics, and the economy.

The period from late 2019 through 2020 will be punctuated by several key dates. Of course, unexpected events will also intervene and shape the agenda at key meetings such as those of the WTO and OPEC.

Table 2 lists the most important upcoming events and their implication on oil markets in 2020.

TABLE 2: KEY POLITICAL, ECONOMIC AND OIL DATES IN LATE 2019 AND 2020

5th December 2019: Pricing of Aramco shares	Will determine the company's valuation on the Tadawul, and the success of the reform and fundraising objectives of the IPO
5th December 2019: OPEC meeting	Decision on extension / deepening of production cuts
12th December 2019: UK general election	Will decide government that implements (or halts or delays) Brexit
1st January 2020: IMO 2020	Sulphur content of marine fuels limited to maximum 0.5%, raising cost of alternatives
31st January 2020: Latest date for Brexit (if no halt/extension)	Depending on outcome of UK election; will affect energy relations with EU, and potentially damage UK and EU economies
February 2020: Iranian parliamentary elections	Will show political direction in Iran, and effect on reformist vote of the failure of the JCPOA and struggling economy
2nd March 2020: Guyana general elections	Significant for policy direction in this new oil producer
June 2020: WTO Ministerial conference, Kazakhstan	Review world trade issues, dealing with dispute resolution and the US-China trade war
July 2020: OPEC meeting	Review of OPEC targets and compliance
Summer 2020: planned	Company's first SUV crossover,

[14] OPEC secondary sources; Qamar Energy. Note: Arrows depict change from previous month

launch of Tesla Model Y	and a test for broadening electric cars' appeal
3rd November 2020: US presidential election	Crucial for US policy on energy, climate, Iran sanctions, Venezuela & other issues
9-19th November 2020: COP26 UN climate meeting, Glasgow, Scotland	Review progress and step up ambitions on the Paris Accord
December 2020: OPEC meeting	Review of OPEC targets and compliance

Geopolitics in 2020 will influence energy on a grand scale and on a local one. On the big scale, the three major ongoing confrontations are between the US and China; between the US and its Middle Eastern partners, and Iran and its allies; and between Russia and the West.

The US-China dispute has been framed by the Trump administration as primarily about trade. But disagreements between the two did not begin, and will not end, with Trump. For the first time in 30 years, the US faces a near-peer competitor, and one of growing strength, unlike the later Soviet Union. The IEA forecasts that global oil demand will be around 395 kb/d lower in 2020 if current tariffs are maintained through to next year, compared to the no-tariffs case. 47% of the impacted oil demand will come from China.

The two do not face off directly in many arenas, but Venezuela is one exception, where China (and Russia) have strongly backed the Maduro administration. While it is unlikely that Sino-American disputes escalate beyond the economic arena in 2020, China might take advantage of the Trump administration's increasingly erratic approach, for instance in the South China Sea. It might also be pushed to take a harder line by the Hong Kong protests, or its slowing economy.

In an attempt to beat US sanctions, Venezuela's government under socialist President Nicolas Maduro, the national oil company, Petroléos de Venezuela (PDVSA), is offering suppliers and contractors, that provide services to the public sector, to pay them into accounts in China using the yuan currency. This will further strain relationships between the countries involved, especially between China and the US because China is also still importing oil from another US sanctioned country, Iran (China imported around 255 kb/d from Iran in October 2019). The Maduro government is trying to keep oil production from declining further since any rapid decline will increase chaos. S&P Global Platts estimates that current US sanctions could cause production to slip to just 375 kb/d by the end of 2020.

As yet, the Belt and Road Initiative (BRI) has not triggered serious crises, and the US does not have a plan to push back against its influence, though the EU and Japan have committed sizeable funds to a competing initiative.

The US-Iran confrontation will continue in 2020, complicated by other issues such as the Russian and Turkish interventions in Syria, and the ongoing war in Yemen.

The Iranian economy has relatively stabilised following the shock of 2018's strict US sanctions on oil exports. However, public discontent is at a high level. In the absence of negotiations, Iran will take increasingly aggressive steps to reduce compliance with the JCPOA, and to strike against neighbouring countries' energy and economic interests. Saudi Arabia and the UAE, though, have initiated some contacts with Tehran to cool the situation.

A Trump administration facing impeachment and the upcoming election is unlikely to be able to concentrate on the Iranian issue, but it might welcome further French-led mediation in the hope of a diplomatic 'win'. This would bring some Iranian oil back on the market and depress prices. Sanctions also have unpredictable effects, for instance driving up tanker rates sharply in 2019. Such unintended consequences are likely if the US targets other Iranian exports such as petrochemicals, or indeed imposes further measures against Russia or China.

The Russia-West dispute is at a quieter level, and more multi-faceted. It is also complicated by the Trump administration's conflicts of interest. It is most significant currently in the continuing tug of war over Ukraine, and hence over that country's gas transit. The Russian involvement in Syria, and its support for Iran, are also significant, but problems could flare up in unexpected places, for instance in the case of regime change in a Central Asian or Caucasus country.

On the smaller scale, local protest and discontent has become particularly widespread. Outbreaks remain all but impossible to predict, but 2019 saw major protests in Iraq, Lebanon, Iran, Algeria, Sudan, Egypt, Ecuador, Bolivia, Chile, France (the "gillets-jaunes"), Moscow, Zimbabwe and Hong Kong, some of which will continue into 2020. The protests in Iran and France were triggered by fuel price rises.

The chaotic but low-level civil war in Libya will continue, given the inability of General Haftar to take Tripoli. Haftar has been targeting the National Oil Company (NOC)'s oil assets on several occasions, most recently there have been disruptions southwest at the El-Feel oilfield[15], halting 70 kb/d of supply. Though oil production has been sporadic, it has been surprisingly robust, with quick turnarounds. Over the past 8 months, since the start of the Tripoli offensive by Haftar, production has remained over 1 Mb/d, and reached a seven-year high on April 2019 (1.172 Mb/d). However, lower prices seen this year will translate into lower revenue for the cash-stripped NOC.

Gas drilling in the disputed waters around Cyprus is another potential flashpoint for confrontation between Turkey, the EU and US. Earlier in November, Cyprus has been pushing the EU to act against Turkey's escalating military provocations when Turkey started operations on Block 7 in September, off the coast of southeastern Cyprus. Accordingly, the EU is looking at sanctioning individuals/entities involved in unauthorized drilling activity in the area, and as a response, Turkey sent a second drillship. The UN will probably intervene to mediate talks as tensions increase, particularly after the recent surprising development by Turkey and Libya's UN backed government of Fayez Al Serraj. Both countries signed two agreements on maritime boundaries in the East Mediterranean and security cooperation. The agreements came highly condemned by Egypt, Cyprus and Greece, as they completely contradict Greece's territorial waters in particular.

In 2020, there could be outbreaks of discontent in the US related to the elections, in the UK over the impact of Brexit, or in Europe for environmental causes. Some of these demonstrations could halt oil and gas production or transport, as in fact happened in Ecuador and (to a limited extent) Iraq. They could spiral into more serious crises, with MENA, Central Asia and parts of Latin America important hydrocarbon-producing regions that are vulnerable.

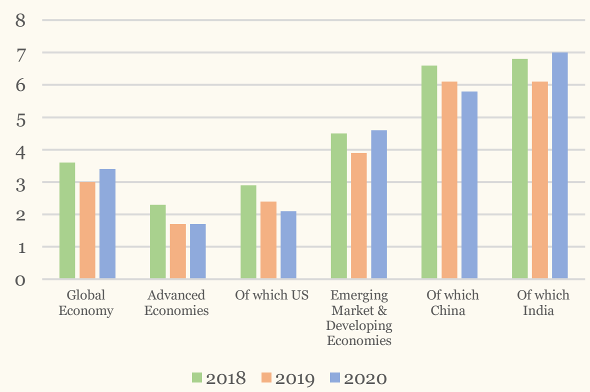
The protests in France, Zimbabwe and Iran were triggered by fuel price rises, which could be an increasing theme with subsidy reform and attempts to impose climate-related taxes. The protests in Algeria and Bolivia have hampered badly-needed foreign investment in those countries' energy sectors (lithium mining, in the case of Bolivia).

A general atmosphere of protest is also negative for the economy of the affected countries. In cases such as Lebanon and Iraq, it reflects aspirations for desperately-needed reform, but even a reform-minded new government is likely to face years of economic struggle. Hong Kong has now entered a recession and will likely stay financially fragile next year, with potential impact on the city's financial markets.

Despite the escalating geopolitical tensions, any short-term disruptions in oil supply will likely experience, as seen in 2019, a surge in oil prices for one or two days, later reverting to recent trading prices. This is largely due to healthy levels of OECD commercial oil stocks, which are still expected to rise in the first half of 2020. In October 2019, inventory levels were 21.5 million barrels above the five-year average and covered 60.7 days of forward demand[16]. Moreover, available spare capacity within OPEC members, the expectation that US shale would grow at elevated prices (likely at USD 65/bbl or above for WTI), and the ability of Canadian oil sands to deliver more barrels from current projects by easing the production limits, will moderate any price spikes.

The world economy suffered in 2019 from the US-China trade war, but prospects in 2020 look somewhat brighter (Figure 8) and a well-supplied oil market will support a precarious global economy. The US and China, though, are forecast to see a further slowdown. The IMF estimates world trade volumes of goods and services to accelerate from 1.1% growth in 2019 to 3.2% in 2020, but still lower than 2018's growth of 3.6%[17].

FIGURE 8: REAL GDP GROWTH (Y-O-Y %)



So far, the slowdown in the global economy, including advanced economies and China, has not reached recession, and OPEC reduced its oil demand forecast only by 40 kb/d for 2020 in its October 2019 monthly oil report. Also, oil demand is still projected to exceed 100 Mb/d, averaging 100.88 Mb/d on an annual level in 2020 compared to 99.8 Mb/d in 2019 (Figure 9). Growth of 1.1 Mb/d in 2020 would be slightly higher than 2019, but otherwise the lowest since 2014 (0.9 Mb/d growth).

[15] The field is operated by Mellitah Oil and Gas, a joint venture between the Libya's NOC and Eni

[16] OECD stocks stood at 2,944 million barrels; IEA November report
[17] IMF October 2019 report

FIGURE 9: GLOBAL OIL CONSUMPTION GROWTH FROM 2000 TO 2020 (MB/D)[18]

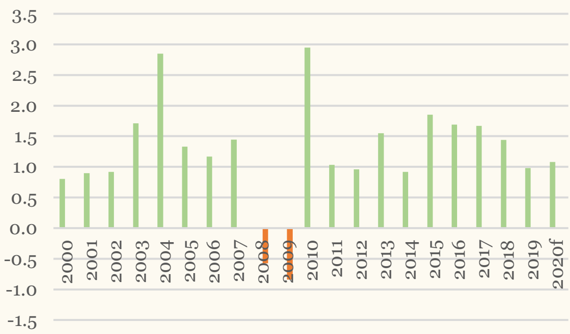
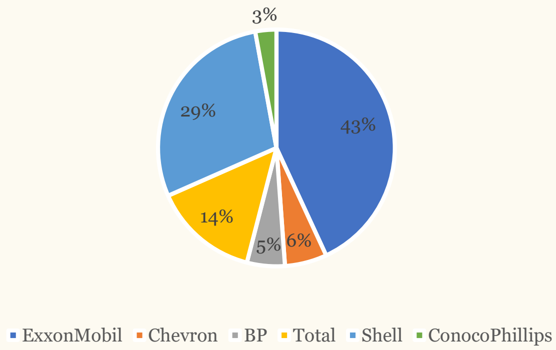


FIGURE 10: SHARE OF TOTAL ASSET SALES BY MAJOR[19]



Yet the period of low oil prices has impacted strategies for international oil companies. Appetite for capital-intensive, “riskier” projects in upstream oil shall remain lacklustre in 2020. Majors are divesting mature assets and assets in politically insecure countries (primarily in Asia, Middle East and Europe) to focus on key fields that provide quick short-term cashflows such as the US Permian basin and Gulf of Mexico.

The objective of Exploration and Production (E&P) firms is to keep shareholders interested amid low oil and gas prices and rising concerns of environmentalists regarding the carbon footprint of fossil fuel producers. The six majors are planning a total sale of USD 35B of oil and gas upstream assets (Figure 10), largely by 2021, and led by ExxonMobil but some assets could be valued at lower than planned if oil prices remain subdued. BP’s sale of its mature Alaska assets to Hilcorp for USD 5.6B, after 60 years of operation in the state, was a major upstream deal signifying the shift of new investment trends to US tight oil. This deal also came after the British major’s acquisition of BHP’s large US shale portfolio last year. Chevron is also selling two offshore ageing assets in Nigeria has launched the sale of its stakes in two Nigerian, as it seeks to focus on its fast-growing US production.

A major phase of consolidation in US shale has been expected for some time, but has not quite materialised, despite Comstock’s acquisition of Covey Park to build a leading Haynesville gas producer, and Occidental’s buy of Anadarko in August 2019 to build scale in the Permian.

The European oil and gas supermajors in particular can be expected to continue their evolution with a number of relatively small deals in renewable energy, batteries, electricity and new energy technologies, while the US firms (such as Chevron and Occidental) should press ahead in carbon capture. They are probably not ready yet for a really large-scale and transformative deal outside the petroleum sector.

2020 could be a more active year if investor patience runs out and if oil prices dip. ‘Mergers of equals’ for mid-size firms could be an option to reduce overheads. Some Gulf national oil companies and sovereign wealth funds, which already have holdings in US LNG, such as QP, Saudi Aramco and Mubadala, could also look to go upstream.

[18] BP 2019 statistical report; 2019 and 2020 figures from OPEC

[19] Rystad; Qamar Energy

SCENARIOS TO WATCH

A GAS HUB IS MOBILISED IN EGYPT

Timing: 2025

Event: Saudi Arabia's giant Red Sea natural gas fields, rising gas production from Zohr (850 BCM of in-place reserves) and the BP West Nile Delta development project (producing 15 BCM/a) in Egypt, offshore gas development of the 320 BCM Tamar field and the 600 BCM Leviathan field, as well as other smaller discoveries offshore Israel, discoveries by the Novatek consortium offshore Lebanon, and the development of Aphrodite (130 BCM) and the weighty Calypso gas field is in Block 6 (200 BCM) in Cyprus, and growing availability of Iraqi/Kurdish gas for export, resulted in the mobilisation of an integrated gas hub in Egypt as an outlet for Middle East, mainly East Mediterranean gas. The East Mediterranean continues to attract interest from IOCs over the next decade and Egypt is in geographical proximity to the GCC and Europe. The GCC countries are seeking to balance their gas systems, and Europe (including Turkey) is heavily in search for new diversified gas imports (i.e. less reliance on Russia/Gazprom on gas pipeline and LNG imports).

Opportunity: Despite the large gas discoveries and greenfield and brownfield upstream gas expansions, demand for natural gas in the Middle East is rising quickly from strong population and healthy economic growth, and water desalination needs. Gas demand rose from ~650 BCM/a in 2019 to 740 BCM/a in 2030 in the Middle East (including Egypt & Cyprus). This has launched bilateral gas agreements between various countries in the region. Egypt's rising domestic gas demand has limited LNG and gas pipeline exports, so it has established itself as a regional gas hub. Exporters use the Idku and Damietta LNG export terminals (linked through underwater pipelines) and the onshore Arab Gas Pipeline is repaired and extended to neighbouring countries.

Probability: 35%

Alternate Futures:

35%: Political disputes amongst countries in the region: Lebanon, Turkey, Israel, Greece, Egypt and Cyprus make it too complex to set up the gas hub.

10%: The East Mediterranean countries build a gas pipeline to Europe through Turkey.

20%: The GCC establishes a gas grid linked to Iraq, with the East Med isolated.

OPEC'S UNPLANNED EXIT IN 2020 IMPACTS LONG-TERM OIL PRICES

Timing: 2025

Event: In Q1 2020, Saudi Arabia, the UAE, Kuwait, and Russia decided to end the framework of cooperation in place since 2016. The OPEC producers decide they want to limit non-OPEC growth by increasing supply and lowering oil prices. Prices initially fall sharply to around USD 30-40/bbl.

Impact: OPEC producers strategised that increasing the taps now will have a long-term benefit as lower oil prices will drive slower growth of US shale, the cancellation or shelving of other upstream projects, particularly offshore Brazil and Mexico, thus eventually resulting in higher future oil prices. However, to meet strong global oil demand, new crude oil supplies of 40 MMb/d are needed to meet demand, and ~45% of these new additions will come from yet to find resources because of natural decline rates. OPEC is unable to meet all this demand and several non-OPEC projects remain unsanctioned. Oil prices increase to USD 90/bbl by 2025 from years of underinvestment.

Opportunity: OPEC's market share of global supply rises. As demand remains robust with growth over 1 Mb/d seen, coupled with low Middle East break-even costs, the UAE increases production to 4 Mb/d in 2023, Libya increases production to 2.1 Mb/d in 2024, Iraq increases production towards 6 Mb/d in 2023, Kuwait increases production capacity to 3.2 Mb/d by 2025, and it restarts production of 500 kb/d from the Neutral Zone with Saudi Arabia. When oil prices were low during the beginning of the 2020s, LNG import projects linked to oil-indexed prices increased drastically, but as oil prices started to rise by 2025, the trend is reversed.

Scenario Probability: 20%

Alternative Futures:
40%: The OPEC+ deal breaks down messily, with some countries not complying, and Saudi Arabia increasing output to try to discipline them. Eventually a looser quota framework emerges.

40%: Saudi Arabia and others successfully keep the current deal in place. OPEC remains in control and non-OPEC growth rises. Prices stabilise at USD 65-75/bbl.

TOP ENERGY DEALS IN THE NEWS

Project	Summary	Client	Contractor	Implications
LNG deal, Egypt	Egypt signed a USD 430M deal with Noble Energy to pump natural gas through the East Mediterranean Gas Co.'s pipeline.	Ministry of Investment	Noble Energy	Egypt aims to turn into a regional gas hub, through using its plants in Idku and Damietta, as well as importing gas from Israel and Cyprus and re-exporting them to other markets.
Wind Station, Jordan	The Samra Electric Power Generation Company signed a deal with Siemens Gamesa Renewable Energy Company for the maintenance of the 80-megawatt Maan wind station, to preserve the facility's operational efficiency.	The Samra Electric Power Generation Company	Siemens Gamesa Renewable Energy Company	The 10-year deal entails the transfer of expertise from Siemens Gamesa to Samra employees, highlighting the importance of the agreement in guaranteeing the security of the power supply.
Aviation fuel supply agreement, UAE	ENOC Group and GoAir India have signed an aviation fuel supply agreement, through which, ENOC will provide GoAir with jet fuel supply at the Dubai International Airport for their fleet of commercial aeroplanes.	ENOC Group	GoAir India	This partnership will provide GoAir with a larger footprint in the MENA region. ENOC has expanded its network and currently covers more than 200 airports across 25 countries.
FOB term contract, Qatar	China's top petrochemical maker Wanha Chemical Group has signed 10-year FOB term contract with Qatar Petroleum to import around 800,000 mt/year of LPG.	Qatar Petroleum	Wanhua Chemical Group	Wanhua Chemical is also in discussions with Saudi Aramco, Kuwait Petroleum Corp. (KPC) and ADNOC, to increase term LPG import volumes for next year. Its current term contract with ADNOC is to import 1 million mt/year of LPG and with KPC comprises at 44,000 mt. Its contract with Saudi Aramco comprises about 440,000 mt.

MACRO DASHBOARD

MENA OIL EXPORTERS	REAL GDP GROWTH (%)		FISCAL BALANCE (% OF GDP)	
	2018	2019f	2018	2019f
Algeria	2.1	2.3	-6.0	-11.5
Bahrain	1.8	1.8	-11.7	-8.4
Iran	-3.9	-6.0	-4.1	-4.1
Iraq	0.6	2.8	6.2	-5.2
KSA	2.2	1.8	-4.6	-7.9
Kuwait	1.7	2.5	11.3	9.5
Libya	17.9	4.3	-7.4	-10.9
Oman	2.1	1.1	-7.7	-9.9
Qatar	2.2	2.6	5.3	6.1
UAE	1.7	2.8	-1.8	-0.8
Yemen*	-2.7	2.1	-4.4	-5.1
Average**	1.2	1.3	-2.3	-4.4

MENA OIL IMPORTERS	REAL GDP GROWTH (%)		FISCAL BALANCE (% OF GDP)	
	2018	2019f	2018	2019f
Djibouti	6.7	6.7	-4.4	-2.1
Egypt	5.3	5.5	-9.6	-8.6
Jordan	2.0	2.2	-4.6	-4.0
Lebanon	0.2	1.3	-11.0	-11.7
Mauritania	3.0	6.4	1.6	0.6
Morocco	3.1	3.2	-3.7	-3.7
Palestine	5.2	2.9	-8.3	-10.4
Somalia	3.1	3.5	0.0	0.0
Sudan	-2.1	-2.3	-3.1	-2.9
Syria	…	…	…	…
Tunisia	2.5	2.7	-4.6	-3.7

* Yemen 2019 growth subject to downward revision
** Excluding Libya and Yemen

	Economic updates	Comments
Inflation	• Egypt's annual core inflation was 2.7% in October 2019, a 14-year low. It compares with a 10.5% target for the fiscal year 2019/2020.	• In November, the Central Bank of Egypt (CBE) cut its key interest rates by 100bps: the overnight deposit and lending rates stand at 12.25% and 13.25% after the cut. This followed a decline in inflation in October driven by a sharp drop in food costs and the statistical effect of a high base last year. That effect is set to fade in coming months but is likely to remain within the CBE's target range of 9%, plus or minus 3 percentage points, by the fourth quarter of 2020. o We see monetary policy easing and lower inflation as supportive of business confidence and local consumption demand, which will in turn boost private sector activity and encourage much-needed FDI. o On 25 November, Egypt's Parliament confirmed Governor of the Central Bank Tarek Amer to hold his role until 2023, a move that will be welcomed by investors as a sign that the government remains committed to orthodox policymaking.
	• Prices in Saudi Arabia declined by 0.3% YoY in October but MoM inflation picked up by 0.2%.	• The overall YoY decline was largely due to a 4.2% decline in housing and utilities, 0.8% fall in clothing and footwear as well as a 0.5% dip in communication prices. o Inflation averaged 2.6% in 2018, up from -0.8% in 2017 and lower than the IMF projection of 3%. o The government forecasts inflation at 2.3% in 2019 with YoY pressures waning.
PMI	• The Saudi Arabia PMI reached a four-year high of 57.8 in October (up from 57.3), thanks to output growth (the fastest rate of expansion in 22 months) and new businesses (the highest pace in 45 months).	• While continued structural reforms will place some pressure on overall growth in the short-term, recent data on non-oil indicators have been positive. o Improving point-of-sale transactions in October (+30% YoY), increases in ATM transactions (+2.8% YoY) and declining deflation indicate improving consumer spending in the economy. o Credit to the private sector continued to rise in October (+4.2% YoY), while bank claims to the public sector rose in September (+21.8% YoY).
	• In the UAE, the PMI remained unchanged at 51.1 in October, with new orders at the lowest since the survey began more than a decade ago.	• About 96% of the survey respondents kept workforce levels unchanged and the output price index decreased to 45.1 in October (Sep: 47.3). o Dubai Expo 2020 and a potential revival in domestic demand should be expected in the coming 12 months. o In Q2, UAE growth was estimated at 2.2% YoY, with non-oil real GDP up 1.5% and the oil sector posting 4%.

	• Egypt's PMI slipped to 47.8 in November from 49.2 in October, the fourth consecutive month in contraction territory below 50, after new orders fell at the fastest rate since May alongside lower sales and problems with liquidity.	• We find it significant that Egypt's recovery over the past two years has largely been driven by external rebalancing and public investment, while the private sector has remained under pressure, as consumption has been growing at less than 1% in the last two fiscal years versus a high of 4% in 2016/17. ○ These have in part been a result of the ongoing IMF reforms. But lower interest rates now should improve private sector cash flow through its impact on the lending rate. ○ The latter is in part a result of the ongoing IMF reforms, however, and there has been modest improvement.
Policy and Geopolitics	• In Iran, a rise in fuel prices of at least 50% triggered widespread protests, to which the government responded with sometimes deadly force and by cutting off internet access. The protests are different from the currency-crisis ones in 2017/2018, attracting broader participation and focusing on a range of issues. • There is no end in sight to Iraq's political crisis even though Parliament unanimously voted to remove Prime Minister Adel Abdul-Mahdi, who is still heads the caretaker government. The country's constitution gives President Barham Salih 15 days starting from 30 November to name a new prime minister, but Abdul-Mahdi will remain as a caretaker until the parliamentary blocs nominate an alternative. There is still no consensus around any name in circulation. Meanwhile, the security situation remains fragile.	• We expect the protests, which for now are subsiding, to continue to ease, but only until another event tied to Iran's economic troubles triggers more unrest. ○ The best-case scenario is that the Iranian economy will stabilise after economic and political reforms, coupled with some measure of relief from US-imposed sanctions. ○ The worst case is that protests spread with no leadership, more casualties rack up, and factions of the existing leadership begin to clash with one another. ○ The protests signal the economic strain that is beginning to take a toll on Iran, but they are unlikely to collapse the regime. The decision to change the fuel policy was abrupt, but it was not impulsive. ○ The protests further reduce the odds of negotiations with the US over the next year. The Iranian leadership does not want to take any steps that validate the US pressure campaign. Concessions are seen as weakness that Tehran will try to avoid at all costs. ○ Iran will continue to lash out in response to the US campaign. It is likely it will expand its nuclear program in violation of the JCPOA international agreement. • While it is unclear what Iraqi political parties will agree upon, it appears as though the process will face significant pushback from disenchanted voters. This pushback may result in the passing of the new electoral laws in preparation for an early election that may take place in 2020.

- Protests in Lebanon -- the most significant domestic political unrest in the country since the end of the civil war nearly 30 years ago –- show no signs of abating, hitting the country's debt and its urgently needed economic reform. There are consultations over designating a new prime minister and forming a new government, but nothing concrete has emerged.

- Our best-case scenario sees a mostly technocratic government appointed to make bold moves to demonstrate a commitment to reform plans necessary to unlock funds promised by the CEDRE international donor meeting. These would include taking swift and concrete action to regain investor confidence, notably by completing and implementing the electricity reform agenda and starting to fight corruption.
  - The worst-case scenario sees the protests heating up with sectarian strife sewn among protesters, and a return to civil war violence.
  - Our base-line scenario would be a fragile stalemate in government until the formation of a new Cabinet that combines figures from the existing system with new individuals representing the protest movement. For the moment, we do not pin high hopes on rapid reform measures.
  - The protests have had a severely negative impact on the Lebanese eurobond market, which has a history of sharp moves linked to political uncertainty. While the central bank continues to defend the currency peg to the US dollar, interest rates and financial market volatility have risen. We continue to believe, however, that the likelihood of debt restructuring over the next two quarters remains low.
    - A relieving factor is the large share of public debt in the hands of Banque du Liban (BDL) and domestic commercial banks (about 50% combined), although the accumulation raises the risk profile of the financial sector.
    - The question today is whether the BDL is able to inject enough liquidity into the system to prevent the economy from contracting sharply, causing unemployment to spike dangerously. The social consequences of high unemployment are clear to all, except perhaps the politicians.

- On 19 November, Kuwait's Minister of Foreign Affairs Sheikh Sabah Khalid Al-Sabah was appointed prime minister after the previous government submitted its resignation prompted by an escalation of tensions between the National Assembly and government.

- Government resignations are a common occurrence in Kuwait. The new prime minister's first test will be to form a Cabinet that gains the Assembly's confidence and tackles issues raised by protesters earlier in the month and picked up by lawmakers.
  - Overall, political disputes will continue to limit the scope for further and more meaningful foreign investment, while Gulf neighbours without any parliamentary impediments move ahead.

	• We expect the Algerian presidential elections to go ahead on 12 December (without any seismic political change) and for turnout to be low.	• In our view, the real test for the Hirak opposition movement lies beyond the election. The main things to watch out for include: ○ What will be the scale of the protests after election day and how will the regime react? ○ Will foreign partners continue to silently support the Algerian regime? ○ Which former minister from the Bouteflika era will be appointed by the army in the role of president?
	• Newly appointed Tunisian Prime Minister Habib Jemli faces the daunting task of putting together a ruling coalition by end-January after the moderate Islamist Ennahda party took only a quarter of the seats in Assembly elections in October. A majority of at least 109 seats is needed to pass legislation, meaning Jemli will require the backing of at least one other party.	• In the latest sign of thawing relations and a potential for cooperation on a coalition, Ennahda's election opponent, the Heart of Tunisia party led by media mogul Nabil Karoui, endorsed Ennahda's veteran leader Rached Ghannouchi as Assembly speaker. ○ If Ennahda fails to reach agreements with other parties by the January deadline, however, President Kais Saied would have a month to consult other political parties about forming a government. ○ If this initiative were also to fail, the Tunisian Constitution allows for Saied to dissolve the Assembly and call for fresh legislative elections. ○ Giving the fragility of Tunisia's democratic transition, this scenario would be the least favourable. ○ We expect technocrats to head the important "sovereign" ministries -- defence, interior, foreign affairs and justice. But the establishment of the Constitutional Court is also urgent for the new government. The hiatus in getting all this done will hamper near-term progress on economic reform, particularly the pressing 2020 budget.

OUTLOOK FOR 2019

	Oil	Gas	Alternative energy	Politics / Geopolitics
Algeria	Oil production to remain around 1.03 Mb/d as the country struggles to increase oil capacity from maturing fields. The long-awaited new fiscal regime has been drafted and is awaiting approval from the upper house of Parliament. The 51/49 foreign ownership rule remains, but new contracts are introduced in an effort to attract IOCs back to the country. Sonatrach contracted four rigs from KCA Deutag, the largest of which is a three-year deal for two rigs and the other two are for short drilling programme. Sonatrach has planned for its first offshore drilling programme to start in the H2 of 2019 by ENI and Total.	To boost its downstream diversification strategy, Sonatrach and Turkish Ronesans Holdings signed a contract to build a petrochemical complex at Ceyhan. Turkey is Algeria's biggest importer of LNG exports, but its exports to Europe are dwindling due to high competition. To find a market for its gas, Sonatrach wants to hold discussions with ExxonMobil and Chevron to develop its domestic petrochemical industry. Eni renewed its gas import agreement with Sonatrach and extended it to 2027. However, LNG contracts with Total for 10 BCM/y and Edison for 2 BCM/y expiring by 2020 have not yet been renewed. Total's purchase of Anadarko's assets from Oxy which included the Mozambique LNG plant may impact its demand of Algerian gas.	Algeria opens its 150 MW solar tender to be developed on a build-own-operate basis and will award 20-year power purchase agreements and is also planning tenders to produce 2,000 MW before the end of 2020.	So far, the political unrest has not impacted oil and gas production and exports, but hydrocarbon sector reforms, such as the Renewable Energy and Energy Efficiency Development Plan, could be at risk if political turmoil continues. Though Interim president Abdelkader Bensalah has replaced the CEO of Sonatrach, Hachichi Rachid, with Chikhi Kamel Eddine. This marks the 8th CEO since 2010, indicating to IOCs already operating in the country, and those contemplating entrance, the capriciousness of the sector.
Egypt	Eni will link its third well on the Baltim field to production by the end of 2019 increasing total production of the field by 100 MMscf/d and 650 b/d of gas condensates. Despite this small increase by Eni, Egypt's oil production is on a downward trend, unlikely to meet its 690 kb/d target in 2020, currently producing 71 kb/d below the target. Accordingly, Egyptian refineries continue operating below capacity and the country will rely on imports until substantial investments in refinery projects are completed.	Shell and Dana Gas are looking to sell assets in Egypt by year-end. Shell wants to sell some of its assets while Dana Gas wants to exit the country entirely. Egas resumed natural gas exports to Jordan at 290 MMscf/d at the beginning of October 2019. BP has started the implementation of the third phase of the Raven gas project to bring its total production output to 1.5 bcf/day by early 2020. A gas processing plant, which will receive Raven's supply, is under	Lekela (Amsterdam based) announced the start of construction work on its 250 MW West Bakr wind project. Scatec Solar competed its 390 MW solar capacity for the Benban solar complex. EDF Renewables and Elsewedy Electric have also commissioned 65 MW from two solar plants. By the end of December 2019, capacity will reach 1.47 GW from the planned 1.8 GW at the Benban complex. The consultancy and supervision services for the Zaafarana 50 MW solar PV project was awarded to German company INTEC	Recent, but quickly dissolved, anti-government protests in Egypt against President Sisi explained the simmering anti-government sentiment over dissatisfaction of the President's authoritarian rule, lack of economic opportunity for the middle class, and low employment for youth. If protests restart and get larger, the President will either violently supress the protests (though this would probably blowback on the leadership), or the government will offer piecemeal solutions for economic reform.

	Major winners of the Egas concession awards were Shell for three areas in the Western Desert (the new acreage is not included in the upcoming sale of assets in Egypt), Neptune Energy in the Gulf of Suez, Merlon El Fayum in West Fayum, and Pacific Oil and Ganope for Ras El Ush, also in the Gulf of Suez. Eni's JV IEOC, was awarded a gas license to explore in the South East Siwa and West Razek concessions.	construction, with a capacity of 900 MMscf/d. Noble Energy and its partners closed the acquisition of a 39% equity interest in the Eastern Mediterranean Gas Company (EMG), which will support the delivery of gas from the Israeli Tamar and Leviathan fields into Egypt, commencing January 2020 at 200 MMscf/d and increasing to 650 MMscf/d by mid-2022.	Engineering. The German Development Bank (KfW) is funding the project through a USD 55M loan and the plant is expected to come online in the last quarter of 2020.	
Kuwait	Kuwait Petroleum Corporation (KPC) will reduce its 2020 goal to 3.125 Mb/d due to political bottlenecks resulting in slow progress. Its long-term goal of 4.75 Mb/d by 2040 will also be reduced to 4 Mb/d. Therefore, in 2020, Kuwait's compliance to the cuts will remain high. Petrofac was awarded a contract to install a new 120 kb/d capacity gathering centre at Burgan in 2017 which is scheduled for mid-2020 start up, though no palpable updates have been announced on the project. Since production at the field has fallen by between 100-200 kb/d from natural declines, it requires investment in enhanced oil recovery technology. Thus, the project with Petrofac could have been delayed. Start-up of the Lower Fars heavy oil project by end-2019, will add 75 kb/d once full capacity is reached. If full capacity is reached in 2020, it will increase production capacity from the current 2.88 Mb/d to 2.955 Mb/d.	In July KOC awarded Halliburton a three-year contract that will start in mid-2020 to look for offshore oil and gas in the Arabian Gulf. Kuwait's 15 BCM/y LNG terminal will be completed by 2021. Kuwait currently imports 5.2 BCM/y.	Operations of the Clean Fuels Project are moving to start up in late 2020. Bids submission for the 1.5 GW KNPC construction tender for PV Dabdaba project delayed. Some contenders include SNC-Lavalin, Acwa Power, Metallurgical Corporation of China, and Masdar. The solar plant will be constructed on a design-build-operate-maintain basis within the Al-Shagaya Renewable Energy Park.	Anti-corruption protests and corruption spats between ministers has resulted in the replacement of the prime minister (PM) Jaber Al-Mubarak by the Emir, Sabah al-Sabah. The new PM Sheikh Sabah al-Khaled al-Sabah (previously foreign minister from October 2011 to 19 November 2019), is a senior member of the ruling family. Other ministers have resigned over corruption rumours. Next parliamentary elections are due in November 2020. Reshuffles at the top of the oil ministry are not a far-off concept, as seen in the past. The current oil minister, Khaled al-Fadhel, could either be seen as a strong collaborator for the success of the OPEC deal, as it has strongly complied with Saudi Arabia, or as the minister under which the oil production and refinery targets were again not met, and even reduced.

	Mechanical completion for the upgrade of the 270 kb/d Mina Abdullah and 466 kb/d Mina al Ahmadi refineries by 100 kb/d is expected at the end of this year, but start-up by 2020.			
Iran	We predict 2019 crude oil production to average 2.35 Mb/d compared to 3.56 Mb/d in 2018. Iran announced a new heavy oil discovery in Khuzestan of 22B barrels of oil in place (10% of which is estimated as recoverable). The discovery lies below several existing fields with declared 31.3B barrels of oil in place Iran is now only betting on China to maintain oil exports during US sanctions, which are below 300 kb/d. Payments for these exports to China are not clear. China can be paying cash for this relatively small quantity of crude, and some of the oil imports are used to pay off Iranian debts to Sinopec and CNPC that have investments and financial claims in Iran. To further add to Iran's financial strains, exports to Syria are also not paid for in cash.	Exports to Turkey (9.6 BCM/y) to continue despite sanctions. Iran-Pakistan gas pipeline is reportedly back in discussion, due to notices by Iran to take Pakistan to arbitration court for delaying the project, but Pakistan will not take any meaningful action until US sanctions are lifted on Iran. Current sales gas production at South Pars is 21.5 bcf/d and planned to reach 26.5 bcf/d by the end of 2019 and 33.5 bcf/d by the end of 2020 from Phases 13 and 22-24. Phase 14 likely delayed to the end of 2020. Production targets would be missed. Phases 22-24 will be launched at around 50 – 55% of planned capacity.	Non-hydro renewable energy capacity of 650 MW (253 MW in solar). The government plans for it to go above 1 GW by end-2019 (445 MW under construction - mostly wind and solar). Iran is planning to build a 1 GW solar park in the central province of Markaz by 2022 but delays are likely due to access to finance.	The IMF estimated in October 2019 that Iran's economy will decline by ~10% during March 2019-March 2020—a much sharper drop than projected in IMF's 2018 report. Severe economic distress was behind the recent increase in fuel prices. The government will keep recent protests over fuel hikes under control with violent crackdowns if necessary, allowing it to stay in strong control until US elections. Holding tight control will also allow the current government to avoid having to make any compromises to the US. The civil unrest, however, will not impact Iran's regional affairs. It will continue ramping up its nuclear program as well as targeting oil exports on the Strait of Hormuz to pressure US into negotiations. Iran is losing public momentum in Iraq after the nationalistic protests, the resignation of the prime minister (PM), its closest ally, and the burning of the Iranian consulate in Najaf. This will not, however, limit Iran from maintaining its influence in the country and attempting to quell protests. Iran will continue acting quietly with the approval of the current Iraqi administration. Tehran will sway the appointment of the next PM, with little pushback from other Iraqi governmental actors

				because of its high reliance on Iran economically and defensively.
Iraq	There could be delays in IOC-operated oilfield expansion plans, such as the 90 kb/d increase in production at Lukoil's (75%) WQ2 (currently producing 400 kb/d) due to bureaucratic delays, which are exacerbated by recent events. Oil capacity to see small declines throughout the rest of 2019 due to protests and their technical impact on oil infrastructure and their political impact as we see even slower parliamentary approvals. However actual output will depend on OPEC compliance. Export capacity will rise by 500 kb/d by the end of 2019 with a new subsea pipeline connected to the al-Basra Oil Terminal. The full JICA pipeline project will be completed in 2021 and will add a total of 1 Mb/d of available capacity. Fuel oil exports will now be directed by SOMO instead of the Iraqi Oil Tankers Company (IOTC). Fuel oil exports were impacted in October and November by demonstration blockades to export berths in Khor al-Zubair. The Ministry of Oil (MoO) has accepted bids for the long-delayed export pipeline to Jordan. The project will ultimately include a spur connecting Basra to Turkey. The route will be based on old plans – from Rumaila to Haditha	The US extended Iraq's waiver for gas and electricity imports for another 90 days. The MoO is seeking international partners for its Mansuriyah gas field which will plateau at 300 MMscf/d according to official data. The ministry has already prepared the tender packages and reported that many companies are interested (Gazprom and Chinese entities mostly). Gas supply from the field will be diverted to the 750 MW Mansuriyah power station, and potentially the new Bismaya plant in Baghdad (4,500 MW).	The Ministry of Electricity kicks off a 755 MW solar tender mapped across the provinces of Wasit, Karbala, Al-Muthanna, Babel and Diwaniyah. They are expected to be completed by the end of 2020 but delays likely.	Adel Abdul Mehdi's resignation, which was insisted on from top Iraqi Shiite cleric Grand Ayatollah Ali al-Sistani, was one of the demands of the protestors. The Prime Minister was losing so much legitimacy in the eyes of the public after the violent attempts to mollify unarmed protestors. Current protests in Federal Iraq, mostly around Baghdad, and now expanding in the south, will slow progress on next year's budget as the protests show little signs of dying out. Regularly, annual budgets are delayed due parliamentary disagreements and political paralysis, and now with the current situation, it will undoubtfully be delayed this year too. Thamir Ghadhban replaced the Basra Oil Company's director general with a more technocratic leader, Bassim Abdulkarim, who aims to increase collaborations with international oil companies. More replacements within the MoO and its subsidiaries are to be expected.

	(2.25 Mb/d – part of the capacity to go north to Turkey) and then to Aqaba, Jordan (1 Mb/d).			
Iraqi Kurdistan	DNO and ExxonMobil made a light oil and sour gas discovery on the Baeshiqa license, although the size appears disappointing relative to pre-drill expectations. Further testing is required to determine the next steps towards appraisal and assessment of commerciality, such as reserves declaration. The licenses surrounding the block all have heavy oil discoveries, so the discovery, once proved commercial, will be appreciated by the government. First production at the Sarta block (Genel Energy and Chevron) expected in mid-2020. Current civil construction work for the 20 kb/d central processing facility under Phase 1A is underway. The phase is designed to recover 2P gross reserves of 34 MMbbls through two existing wells both of which flowed at c.7.5 kb/d on test.	The Pearl Petroleum consortium produces 400 MMscf/d and expects to reach 900 MMscf/d by 2022 (possibility of exports to Federal Iraq or Turkey if Rosneft's pipeline is ready by then).	Limited investment in renewables (priority would be given to thermal power stations), but some interest in small-scale solar. Slow progress in construction and rehabilitation of new dams.	The possible delay in the 2020 budget due to protests in Iraq and the resignation of Adel Abdul Mahdi will put further strain on the KRG's finances, raising the risk that Baghdad could stop making monthly financial transfers. The KRG has reached a tentative deal with Federal Iraq to deliver 250 kb/d of oil to SOMO in exchange for 12.67% of Iraq's budget revenue. The KRG is pushing for the deal while the administration of Adel Abdul Mehdi is still in place as he has been pushing for an amicable solution for the deal.
Lebanon	Preliminary results show that offshore Lebanon could be oil-prospective. Offshore oil and gas drilling by Total, Eni and Novatek delayed to 2020. Second oil and gas bid round open for blocks 1, 2, 5, 8, and 10; bids to be submitted before Jan. 31, 2020. Progress on the second round could be delayed with the new expected government reshuffles, and the country still has limited oil and gas laws and policies, which have yet to be passed and approved. However,	To continue to use power ships for electricity supplies to at least 2021/2022 until the three planned FSRUs are ready. The electricity ministry wants to add a third temporary power ship of 1,450 MW capacity by 2020 to ease the power supply-demand gap estimated at 1 GW. This strategy could delay the LNG imports even further. There are discussions with Egypt on importing gas visa the Arab Gas Pipeline in the short-term until LNG imports commence, though many obstacles exist, such as transport	The Lebanese Center for Energy Conservation (LCEC) is currently engaged in three renewable energy tenders, two solar projects, and one wind project. The most progressed project did not get passed the Expressions of Interest (EoIs) phase despite objectives to have them completed by 2020. Given the current political situation and the government's longwinded pace, we do not expect awards until mid-2020, if even then.	Saad Al Hariri clearly stated that he does not want to head the new government. This will be a setback to President Michel Aoun, Hezbollah and the Amal Movement. They all hoped on having Hariri's support to help establish a techno-political administration in the country. The push for systemic political change in Lebanon, if successful, could weaken the proxy positions of Iran. On the other hand, Saudi Arabia will continue holding off any support to Lebanon, until a clearer political

	neglecting the upstream sector would be detrimental.	routes through war-torn Syria.		outlook is detected, particularly on Hezbollah's position in the future government.
Libya	The National Oil Company (NOC) announced that CNPC is looking at cooperation in Libyan exploration and development, oilfield services, and trading of Libyan crude as the African country plans over-ambitiously to hit 1.5 Mb/d in 2020 and 2.1 Mb/d by 2024. The NOC plans to reach the 2020 target through the addition of 350 kb/d, allowing for a decline rate of 7-8%. This will cost USD 1.2B and will be carried out through workovers, infill drilling, artificial lift, and repairs of infrastructure. The internationally recognised government gave the NOC USD 1.06B to "maintain" current production and pay obligations to other companies. This is around the same required cost for increasing production by 350 kb/d while maintaining for natural declines. Thus, the allocated amount may not be enough to cover the expensive infrastructure repairs from years of conflict. Wintershall is considering existing the country after decades due to disputes with the NOC.	Waha Oil Company (WOC) announced the start of Phase 2 of the Faregh field development project to boost daily production capacity to 250 MMscf/d (from 75 MMscf/d) and 15 kb/d of gas condensates. Initially the gas will be injected into the Intisar 103 oilfield to enhance production and secondarily be used for supplying power plants in the eastern region and the Libyan Norwegian Fertilizer Company (LifeCo) in Marsa El Brega. Eni's completion of the 400 MMscf/d Phase 2 of Bahr Essalam offshore gas project will raise gas exports to Italy in 2019 close to 2013 levels of 600 MMscf/d. The NOC aims to increase gas production to 3.5 bcf/d by 2020 from an estimated 1.5 bcf/d by end-2019 (considering the two expansions above). This means in 2020, production will need to rise by ~2 bcf/d, which seems quite optimistic given budget constraints, particularly with an outlook of lower oil and gas prices. The NOC said that an agreement was struck with Egyptian Minister of Petroleum Tarek El Mulla for Egyptian companies to resume work in Libya. Projects to be resumed include a Petrojet contract to build a gas transmission pipeline from Intisar oil field to Sarir power plant.	Libya's Misurata Free Zone (MFZ) has signed a MoU with consultancy iQ Power in March 2018 to develop integrated CSP and PV projects with up to 300 MW total capacity, but no new progress since then. In September 2019, GE signed an MoU with the Libyan government to implement new power production capacity of 6,000 MW by raising the efficiency of existing power plants, and the establishment of new renewable power projects. Progress on both projects will be slow due to highly subsidised energy prices and insecurity.	The country's factions are unlikely to resolve its divisions and foster unity this year. If the Haftar led LNA takes Tripoli, the GNA will collapse completely. Militant factions will continue using oil infrastructure to gain leverage and power; Oil production around Mellitah and Zawiya could be cut off.
Oman	Rex International Holding aims to start oil production at 5 kb/d from block 50 offshore Oman by the end	Mabrouk gas field (4.5 TCF) development advancing with PDO award of pipeline construction to	Oman's first wind farm, 50 MW in Dhofar, developed by Masdar and financed by the Abu Dhabi Fund for	Yusuf bin Alawi bin Abdullah, foreign affairs minister said that Oman will support President

	of 2019. The Singapore based company holds a 92.65% indirect stake in Masirah Oil Ltd, which holds 100% in the Block 50 concession. The Rabab Harweel integrated project for PDO in the southern Omani desert is expected to be completed in 2019, adding 6 MMscf/d of sweet gas, and another 60 kb/d of oil.	Petrofac. PDO carrying out exploration & appraisal. ENI and BP signed a gas deal for the acquisition of the onshore exploration Block 77 onshore, east of the BP-operated Khazzan Field, which could offer synergies.	Development, started partial operations in August and will be fully operational by the end of 2019. Oman's state-owned Rural Areas Electricity Company (Tanweer) is inviting bids for the development and construction of hybrid projects combining solar power (48 MWp), diesel generators (70 MW) and storage capacity (28 MW/14 MWh). Petroleum Development Oman (PDO) awarded 105 MW solar PV project (Amin Solar PV IPP) to a consortium led by Japan's Marubeni Corp. The project will start early generation in December and operate at full capacity in May 2020. It will produce power for PDO. Qatar-based energy company Nebras Power QPSC has bought a 9.9% stake in Amin Renewable Energy Company SAOC (AREC)[20] which is responsible for the project under construction in Oman.	Rouhani, as facilitators and not mediators, on its Persian Gulf security plan, the "Hormuz Peace Endeavour" (HOPE), if it is based on stability.
Qatar	Oil production decline continues, encouraging more investments by QP in international oil upstream. QP took stakes in three deepwater blocks in Kenya from ENI/Total and made a significant oil discovery with its first well in Guyana (operated by Tullow) although this has later proved to be heavy oil of lower value. NGL capacity is expected to rise from Qatar's Barzan project adding some 80	QP and Qatargas are not sure if they would need IOC experience for the North Expansion Project; To cement relations, majors are transferring international assets to QP mostly in Africa and South America. However, QP will require IOCs' trading portfolios to access new geographies. Qatargas increasing energy links with Turkey, delivering the largest	Siraj Power started the construction of 200 MW solar plant expected to be ready by 2020. Pre-qualification of 16 bidders for the 500 MW solar power was completed in October 2018. No new progress since then.	Qatar has reportedly restricted trade with Iran to only include food and medicine to comply with US sanctions. Qatar's foreign minister has made a trip to Riyadh to discuss the GCC rift, offering to cut links with the Muslim Brotherhood. Saudi Arabia will try to get Qatar to agree on other terms, but the start of negotiations, mostly mediated by Kuwait, are positive signs, especially

[20] Amin Renewable Energy Company SAOC is a Japanese-Omani consortium consisting of Marubeni Corporation, Oman Gas Company SAOC and Bahwan Renewable Energy Company LLC.

	kb/d of condensate and NGLs by 2019. QP's Mexico Area 1 asset (35%) with Eni is expected to start initial production this year before reaching plateau of 91 kb/d in 2021.	single cargo of LNG to the Marmara LNG terminal.		that it started off with a key issue: cutting ties with an organisation labelled as a terrorist group by the US and Saudi Arabia.
Saudi Arabia	Oil production capacity will return to the pre-attack level of 12 mb/d by the end of November. To strengthen its rank as China's top crude supplier (Saudi oil exports to China rose to 2 Mb/d in October 2019), Aramco signed crude oil contracts for 2020 with five customers, raising total volume by 151 kb/d versus 2019. Kuwait and Saudi Arabia have agreed to restart oil production in the Neutral Zone (NZ), according to the speaker of Kuwait's National Assembly and are seeking to finalise the deal by 5 December 2020 (45 days from the announcement on October 21). The NZ fields have a combined capacity of 500 kb/d, but will not raise the countries' overall output due to OPEC limits. The 400 kb/d Jazan refinery to be ready by the end of 2019. Consequently, refinery runs will increase by 260 kb/d[21]. The PrefChem refinery, a JV with Malaysian Petronas, will commission in H2 2020, after a technical setback during testing. Aramco will supply 210 kb/d of crude to the refinery (70% of required crude).	The attacks on Abqaiq facilities cut off 2 bcf/d of natural gas and 700 kb/d of natural gas liquids. This impacted petrochemical activity with some plants raising concerns of 40% cut in output due to lack of feedstock. Progress on smaller gas projects after Wasit, and Fadhili, insufficient to prevent rising oil burn for power. The Northwest region is the most advanced in shale developments, currently producing around 55 MMscf/d of gas, supplying a local industrial user for onsite power. Aramco inked an LNG deal with US Sempra. There is still no confirmation if the LNG will be used for Saudi's domestic needs or will be sold to international buyers which underscores the uncertainty of its gas outlook.	ACWA Power announced it has connected to the grid the 300 MW Sakaka solar PV plant. The facility will achieve full commercial operation by end-2019. This is the first utility scale renewables project in the kingdom. The National Agricultural Development Company of Saudi Arabia awarded ENGIE the development of 30 MW of captive solar PV. Faisal Abdullah Al-Yemni was appointed as the new head of the Renewable Energy Project Development Office (REPDO). He is tasked with overseeing the National Renewable Energy Program (NREP), including completing the tendering of Round-2 projects (1.58 GW remain to be tendered) by December this year – a very tight deadline. REPDO already awarded six projects totalling 1.47 GW. The 400 MW Dumat Al Jandal wind project, which will supply electricity for USD¢ 2.3/kWh, will be completed by 2021. Saudi Arabia changed plans repeatedly on nuclear power but has now short-listed two sites and begun design of a 2800 MW, 2-reactor plant.	The Aramco IPO kicks off domestically, and to be launched in December 2019. The idea of an international IPO is not completely off the table, but definitely shelved to after 2021. Increased tensions between Saudi Arabia and Iran means Aramco's oil assets will continue to be vulnerable by strikes from Iranian-backed Houthi rebels in Yemen, or Iranian backed PMU militia in Iraq. It is also at risk of cyber-attacks by Iran which were attempted in the past, targeting energy infrastructure.

[21] IEA

Syria	To continue to receive clandestine oil imports from Iran. The country is suffering a fuel shortage with the government introducing rationing for gasoline and cooking gas. Though the UN and the US are applying stringent actions on fuel tanker ships heading to Syria.	Palmyra gas fields under government control.	Homs Solar Power Plant (CSP) and wind power project cancelled and unlikely to be revived. Concerns over damage to Tabqa Dam near Raqqa.	The Syrian Democratic Forces (SDF) have initiated withdrawal of troops from the Turkish border as part of a Russian-Turkish cease-fire deal, after which Syrian government troops will take control of the border.
UAE	Umm Lulu to increase production to 60 kb/d by end-2019 and plans to upgrade Bu Hasa field from 550 kb/d to 650 kb/d in 2020. However, despite these increases, ADNOC will still fall short of the 3.5 Mb/d production capacity target this year and the 4 Mb/d target by 2020. ADNOC's second licensing round closed in November 2019. Awards for the second bidding round will be in early 2020, and could see participation from Russian companies. ADNOC will buy a 10% stake in global storage terminal owner VTTI as the NOC intends to increase oil trade and access to Asian markets. To further strengthen downstream capacity ADNOC, along with IOCs, will establish Murban as a global benchmark end-2020 to complement Dubai-Oman, Brent and WTI. This focus led to the important project award to Archirodon to maintain long-term output at the Bab field, which produces Murban crude, at 485 kb/d by about 2022.	ADNOC awarded Lukoil 5% of its stake in the sour gas Ghasha concession for USD 190M and signed a framework agreement with Russia's Gazprom Neft for sour gas and enhanced oil recovery practices, and technology. The involvement of Lukoil in Ghasha is more political, as the Russian firm has little experience in sour gas. ADNOC awards 40% stake to Total in Diyab Formation and shale gas could start production in late 2019. Sharjah LNG imports delayed to end-2019. Sharjah National Oil Company, in partnership with Eni, continues drilling the first exploration well of their partnership, encountering difficult geological conditions.	Abu Dhabi's Sweihan expanded to 1177 MW to be completed in 2019. The start of the first unit of the Barakah nuclear plant to be delayed to the end of 2021 at least. DEWA awarded a contract for 250 MW Hatta pumped hydro storage plant to Strabag Dubai, Strabag, Andritz Hydro and Ozkar. The project is expected to start up in 2024. The fourth phase of Mohammed bin Rashid Al Maktoum (MBR) Solar Park (900 MW, developed by ACWA Power)– Noor Energy 1 – is the first project in the GCC region to receive Climate Bonds Initiative (CBI) certification for Renewable Energy Project Financing. This will drive down the capex for renewable energy further in the region. The fourth phase already achieved 20% progress. DEWA awarded the 900 MW tender for the fifth phase of the MBR Solar Park to ACWA Power. DEWA will pay ACWA Power USD¢ 1.6953/kWh for power generated and the plant will become operational in stages, starting with Q2 of 2021.	Real GDP growth will pick-up in 2020 from the World Expo 2020, growing 3% next year from a modest 1.6% growth in 2019. Economic diversification efforts will be the major governmental fiscal priorities. One way the Abu Dhabi government is trying to diversify away from hydrocarbon revenue is through the establishment of Edge. Edge is Abu Dhabi Crown Prince Mohammed bin Zayed Al Nahyan's ambition to streamline the domestic defence industry trusting it will lead to in better military equipment and spur exports to regional partners. The UAE completed a full withdrawal from the Yemeni port city of Aden and from southern Yemen and handed over control to Yemeni and Saudi forces.
Yemen	OMV is resuming production at 13 kb/d and	Possible restart of LNG exports from Yemen LNG	Yemen Ministry of Electricity 60 MW solar	The Yemeni government and the separatist forces of

	could increase to 20 kb/d (the level it was producing before the unrest). Calvalley was the operator of Malik Block 9 (but the company is now defunct). Hood Oil, its local partner, to restart production around 1.2-1.5 kb/d. Oil pipeline, used by OMV among others, blown up in Shabwa province by unknown attackers.	at low levels (operated by Total), under Saudi's control/influence. State firm Safer restarted operations at Block 18 which is crucial to providing gas feedstock for Yemen LNG.	power plant on hold. Unlikely to be revived in the short-term. However, local installation of distributed solar, estimated 400 MW, has been a success to mitigate wartime power shortages.	the Southern Transitional Council (STC) signed a reconciliation agreement in Riyadh as tensions soared between the northern and southern regions. The deal also calls for increased Saudi presence after the UAE's withdrawal from Yemen. Despite the Houthis' recent hijacking of South Korean vessels near Yemen, one of which was carrying a drilling rig, they are unlikely to drastically disrupt most major commercial traffic through the Red Sea.

ABOUT US

Arabia Monitor is an independent research firm specialised in economic and market analysis, and strategy advisory on the Middle East and North African region, which it views as the new emerging market. Arabia Monitor's in-depth, locally informed analysis by Arab, Persian and Chinese speakers has placed it consistently ahead of the curve in identifying new trends within and around the region, and understanding its geopolitics.

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