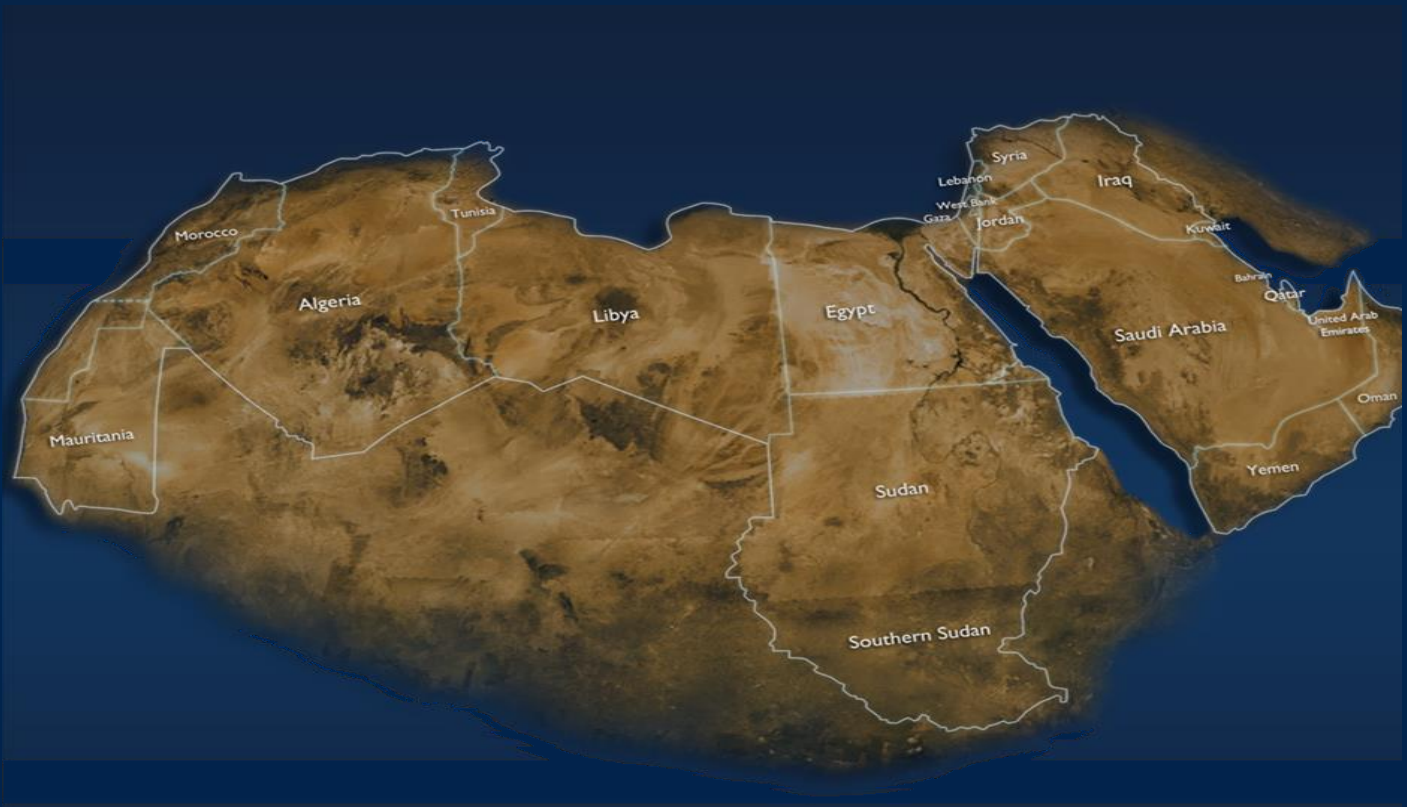
ARABIA MONITOR ENERGY

Arabia Monitor in collaboration with Qamar Energy

Sample 2018



Florence Eid-Oakden, Ph.D.

info@arabiamonitor.com
Tel: +44 203 239 4518

With Charlene Rahall

Robin Mills

info@qamarenergy.com
Tel: +971 4 364 1232

With Roa Ibrahim

Table of contents

Main Highlights

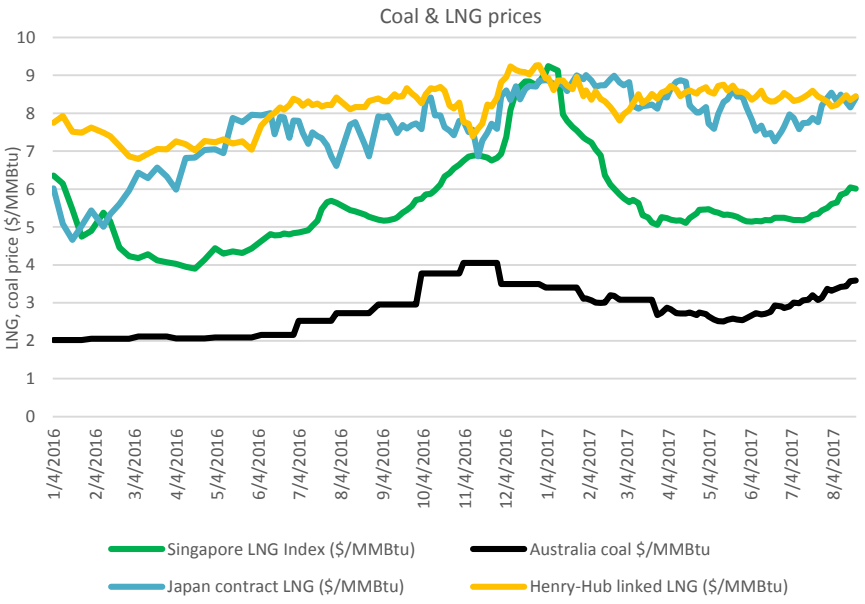
- Oil prices rose, lifted by indications that supply is gradually tightening, especially in the United States. The Brent crude contract for October fell USD 1.06 to USD 51.66/bbl. The November contract dropped USD 1.13 to USD 51.28/bbl.
- Saudi Arabia's OPEC compliance was the lowest since January 2017 (98% in July) due to rising domestic demand in the summer, and raising concerns over a further extension to the OPEC production cut deal beyond March 2018.
- Iraq named 9 new oil and gas blocks available for investors, offering potential for new production. However, the country's expansion strategy remains unclear.
- Sharjah National Oil Corp. (SNOC) is reviving oil and gas exploration in the emirate with a new 3D seismic survey, hoping to replace declining gas production that is requiring LNG imports.
- Electric vehicles have been advancing, continuing concerns over future oil demand. By the end of 2016 in the US, there were about 30 different EV offerings, with total sales of 158,614 vehicles. Despite the decline in 2015, EVs in the US increased by 32% compound annual growth rate (CAGR) since 2011.
- The Qatar rift with the Saudi-led countries -- now into its fourth month -- shows no sign of ending but set to escalate, with the restoration of ties with Iran.
- Iran's new cabinet features little change at the top but faces significant challenges, particularly mounting pressure after missile tests were carried out and resulted in new sanctions by the US, with each accusing the other of violating the spirit of the agreement.

OIL PRICE SCORING (Rated Based on Impact on Oil Price)			
OPEC Agreement	●	⬇	OPEC July compliance slightly up from June, but many countries are barely complying (Iraq), some not at all (Gabon), some overcompensating (Angola & Venezuela due to crisis).
OPEC supply outlook	●	⬇	Production hit highest level in Nigeria since April 2016 and highest level in Libya since 2014 (reached 1 mb/d).
Non-OPEC supply outlook	●	⬆	OPEC revised its supply changes: US output to increase by 700 kb/d (down from 800 kb/d) in 2017; OPEC predicts Canada (170 kb/d) and Brazil (240 kb/d) to raise supply growth this year, while Chinese output declines (by 120 kb/d).
Global demand	●	⇔	Higher demand from South Korea is expected to alleviate lower demand from Japan; OECD oil demand declining from slower-than-expected industrial activity.
Progress of non-oil technologies	●	⇔	Strong demand for UK electric vehicles; Prices of solar and wind power are at record lows

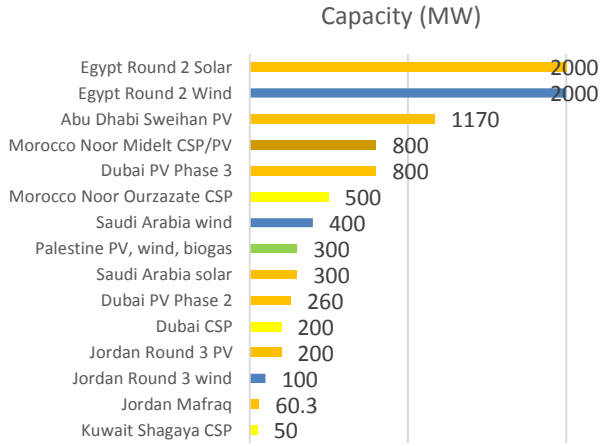
● Very positive; ● Positive; ● Neutral; ● Negative; ● Vey negative
⬆ Improvement in last month; ⇔No change ⬇ Deterioration in last month

Section Snapshot

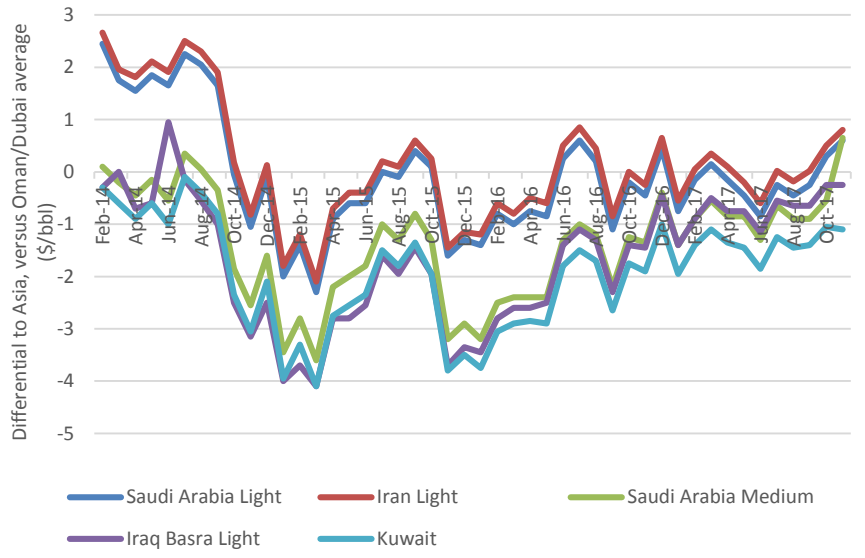
- Saudi Arabia cut August pricing for most of its crude grades to Asia as it sought to stay competitive with Iran and Iraq.
- Fujairah's commercial stocks of heavy distillates and residues were at a 9-week low attributable to several fuel oil shipments to Pakistan.
- Stocks of middle distillates are at a 10-week low due to strong Gulf demand in the summer.
- Saudi Arabia is delaying subsidy cuts. Plans to raise gasoline and other energy prices, with gasoline being linked to international prices, will be delayed to late 2017 or early 2018, raising concerns over commitment to reform and reducing the budget deficit.
- Renewable energy is set to grow fast in the MENA region. The International Energy Agency has forecast that MENA renewable energy capacity will grow 78% by 2021, led by the UAE, Egypt and Morocco. This is primarily solar power, and in the right locations (Egypt, western Saudi Arabia, Jordan, Morocco, Iran) wind.



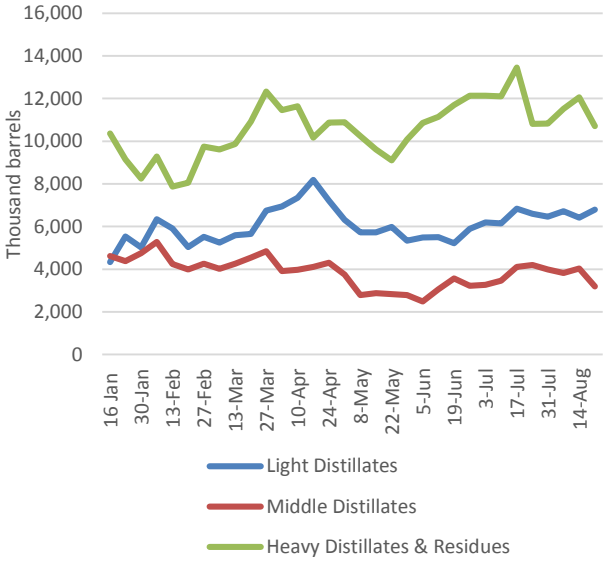
Source: SPLNG; EIA; Qamar Energy



Selected 2016-17 renewable energy projects in MENA. Source: Official & media reports



Source: News sources; NIOC; SOMO; Qamar Energy.



Source: FEDCom/Platts Fujairah Inventory Data; Qamar Energy

Headline Developments

Established Producers Supply: **Saudi Aramco** is tendering large contracts for its offshore fields. A USD 1B contract for the Safaniya field, the world's largest offshore oil field is intended to maintain capacity at 1.2-1.3 mb/d, covering the installation of several new platforms, pipeline facilities, well head jackets and other work. Aramco is investing heavily in this field to maintain and increase its production capacity because it still has large remaining oil reserves of around 16B barrels. This 6th redevelopment phase is likely to go to one of the companies with which Aramco has a Long Term Agreement (LTA). Saipem won the 4th phase and McDermott the 5th last year. New companies on the LTA list include a JV of Larsen & Toubro, EMAS Chiyoda and Dynamic Industries; and NPCC of Abu Dhabi. These companies are expected to be contenders for contracts to expand capacity at the offshore Berri and Marjan fields too. These awards show that spending is gearing up again.

Sharjah, UAE is relaunching oil and gas exploration. Onshore gas production has dropped sharply from more than 300 MMscf/d in 2006 to less than 50 MMscf/d today, requiring LNG imports (to start next year) to meet utility SEWA's fuel demand. Crescent/Rosneft drilled a dry well in the southeast of the emirate in 2010 (Sharjah Onshore Concession), using only 2D seismic. A new 3D survey has now been acquired (completed in February 2017) covering most of the emirate. The most promising area identified is 40 km SE of Sharjah city, between Al Madan and Al Seyouh, and the survey interpretation is to be finished in early 2018. Any discovery could quickly be tied into existing spare processing capacity and would help reduce the need for LNG and/or Dolphin pipeline imports.

Abu Dhabi is planning to split the ADMA concession which expires in March 2018. ADMA groups ADNOC (60%), BP (14.66%), Total (13.34%), and Japan's Inpex (JODCO) (12%). It produces 675 kbpd, and is currently in the process of being merged operationally with the other main offshore operator Zadco (while the existing shareholders retain their different interests in the field assets). Abu Dhabi is now proposing to split ADMA into two or more parts when it is renewed, and says over 12 companies have shown interest. The Lower Zakum field (345 kbpd) could be combined with ExxonMobil/Inpex's Upper Zakum to realise operational synergies, Umm Shaif (300 kbpd) could be split as a separate asset, and Nasr, Umm Lulu and Satah Al Razboot, which produce 30 kbpd and are being developed/expanded to 275 kbpd, as a third group. Alongside the existing shareholders, CNPC, Shell, Rosneft and Statoil are possible bidders. ADNOC favours bidders who bring something additional in terms of partnerships, markets or participation in other parts of the value chain.

Table 1 Production of ADMA & ZADCO contract areas[1]

Field	Operator	Current production	Planned production
Umm Shaif	ADMA	675 kbpd	970 kbpd by 2020
Lower Zakum	ADMA		
Nasr	ADMA		
Umm Lulu	ADMA		
Satah Al Razboot	ADMA		
Upper Zakum	ZADCO	630 kbpd	750 kbpd by 2018 → 1 Mbpd by 2024
Satah	ZADCO	19 kbpd	
Umm al-Dalkh	ZADCO	14 kbpd	
Total		***1,338 kbpd***	

Duqm Refinery & Petrochemical Industries Co. LLC (DRPIC), a joint venture of state-owned Oman Oil Co. and Kuwait Petroleum International Ltd., has awarded the final two of three main contract packages for engineering, procurement, and construction of its long-planned USD 7B, 230 kbpd refinery and petrochemical complex to be built in the Duqm Special Economic Zone (SEZAD), **Oman**. EPC 1 went to the consortium of Tecnicas Reunidas and Daewoo Engineering & Construction. EPC 2 was awarded to the joint venture of Petrofac and Samsung Engineering while EPC 3 was awarded to Saipem. The refinery will be the third in the Sultanate after the Mina Al Fahal refinery (106 kbpd) and the Sohar refinery (116 kbpd, being expanded to 198 kbpd). Separately, a port also has been planned at Duqm to support the infrastructure. Crude oil and liquid products naphtha, jet A-1, diesel, refrigerated LPG, sulphur pellets and coke would be imported/exported at the adjacent Port of Duqm. The refinery is expected to be completed in 2023[2]. It is a key part of the development of Duqm as a refining, oil storage and petrochemical hub, to develop the relatively remote and politically sensitive Dhofar area.

Emerging Producers Supply: **Libya's** largest oil field has been shut down numerous times over the past several weeks due to protests by oil workers and armed guards. The Sharara oil field operated by Libya's NOC (50%), Repsol (20%), OMV (15%) and Total (15%) is currently producing 280 kb/d. Optimism on Libya's ability to maintain oil production above 1 mb/d is wishful thinking given that the location of the blockade, as well

[1] Approximate figures. Source: Wood Makenzie; Qamar Energy

[2] MEED Projects

as the demands of the protesters continue to remain unknown. Even though the domestic oil market situation has improved slightly, owing to oil minister Sanallah's efforts in restarting fields, and physically visiting sites of blockades to strike deals with protestors, the political tensions between the two opposing governments, the government of Tripoli led by Fayez al-Sarraj and Tobruk-based Libyan National Army (LNA) led by General Khalifa Haftar in the east, are volatile. This is further complicated by smaller factions operating between the two main governments, including ISIS notably around Sirte. Resolution between the two governments remains doubtful. For it to happen, Haftar would have to accept weakening his position and even his army (LNA) to al-Sarraj's government, which is unlikely. Haftar is under no immediate pressure to compromise, especially with the strong backing of Russia, Egypt and the UAE.

Egypt is investing in fuel oil upgrading but diesel demand remains high. Egyptian Refining Company (ERC), a private company, is building a 107.2 kbpd hydrocracker refinery which will upgrade residual fuel oil from the Cairo refinery; Alexandria Mineral Oils Company (Amoc), 80% state-owned, is planning to build a hydrocracker of about 20 kbpd at its 35 kbpd refinery; and the Midor, Assiut and Suez refineries have various units under design. These projects total USD 8.6B with another USD 10.95B of projects under study. But with diesel demand at 303 kbpd and rising sharply since 2014, refining output is only 140 kbpd and has been almost flat since 2002. Both Midor and Amoc are set for part-privatisation.

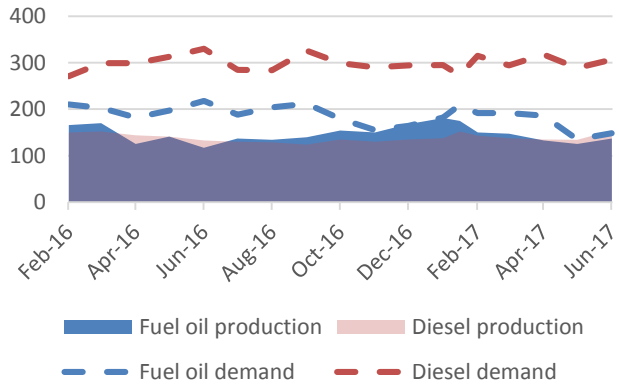


Figure 1: Egyptian Fuel Oil & Diesel Production & Demand (kbpd)[3]

Demand: OPEC increased its forecast for electric vehicles (EV) adoption, anticipating 266 million cars by 2040 instead of the 46 million it predicted in last year's forecast. The five-fold increase comes after several oil majors and consultancies also raised their expectations of EV fleet capacity. BP for example expects EVs to reduce oil demand 8M barrels by 2040 (25% of OPEC's current output). The trend is underpinned by falling battery costs, the recognition that automakers will introduce more EV models in the near future, and new energy efficiency strategies by countries. Volvo announced that it is phasing out cars that rely on internal combustion engines and France plans to end the sale of fossil fuel powered vehicles by 2040, though such targets remain political aspirations that could easily be reversed.

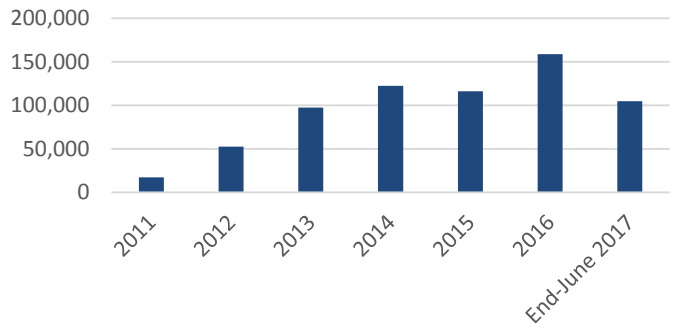


Figure 2: US Electric Car Sales (Number of Cars Sold)[4]

Exports: The State Oil Marketing Company in Iraq (SOMO) is thinking about changing pricing strategy for its Basra crude to Asia (only to Asia and not US or Europe). That would mean dropping the average of Oman and Dubai quotes by S&P Global Platts and change to Dubai Mercantile Exchange (DME) Oman futures. It would continue using the Dated Brent and the Argus Sour Crude Index for Europe and US, respectively. The advantages of developing an approach based on DME pricing include increasing the attractiveness of Iraqi crude to buyers, hence building market share. Middle Eastern crude benchmarks currently do not include Iraqi crude grades. Moreover, it is a strategy to move away from Saudi Arabia whose official selling prices (OSP) of using S&P price assessments are usually followed by the other main producers in the region. If implemented, the change would involve the pricing of around 2 mb/d of Iraq's exports to Asia from Basra.

The federal Iraq government exported 3.230 mb/d, of crude oil, down slightly from 3.273 mb/d in June. Independent exports by Iraqi Kurdistan rose slightly, from 538 kb/d in June to 571 kb/d in July.

Saudi Aramco's trading unit plans to trade 3rd-party crude mainly to Asia and Africa. Its trading unit was set up 5 years ago, predominantly to trade products, anticipating the start-up of Aramco's large new export-oriented refineries and also the kingdom's own import needs. Of its 1.5 Mbpd of traded products, about 0.5 Mbpd is from third parties. Aramco will continue to sell its own crude under long-term contracts to refiners and there is no sign that it plans to change that, although such a shift may be inevitable with the development of its competitors' strategies, such as Iraq. Iraq formed a joint

[3] JODI; Qamar Energy
[4] InsideEVs

venture with Litasco SA, the trading arm of Lukoil PJSC and is considering selling crude on the Dubai Mercantile Exchange. Saudi Aramco's move will probably not have a significant impact on the planned IPO. Aramco Trading will set-up an office in Singapore by the end of September and will consider expansion offices in London.

Iran exports to India dropped by 25% from July to 310 kbpd in August, the lowest since February 2016. Although blamed on the dispute over the development of the Farzad-B gas field by an Indian consortium, it is more related to the end of the favourable payment terms Iran had been granting India during the sanctions period (with credit period falling from 90 days to 60), and to competition from cheaper Russian crude. In June, Essar, one of the largest Indian refiners, cut its purchases from Iran by 32% to 122.5 kb/d, with Venezuela and Iraq picking up the difference.

Saudi Arabia's August exports are expected to be the lowest this year, 600 kb/d below July, at around 6.6 mb/d, with Asian allocations falling about 200 kb/d to 3.5 mb/d, US below 800 kb/d, Europe down 70 kb/d to 520 kb/d, and oil major lifters 200 kb/d down to 780 kb/d. Shipments to the US will be the lowest in summer for almost 30 years. Meanwhile, although Saudi Arabia gained market share in Japan, it has lost it in China, including to US oil exports. China and India may increase their imports from the US, Iraq and Iran if Saudi Arabia continues to decrease its supplies. The rise in domestic consumption due to the summer season led to the fall in inventories and cut in exports this summer. Stockpiles declined to just 257M barrels, the lowest since 2012.

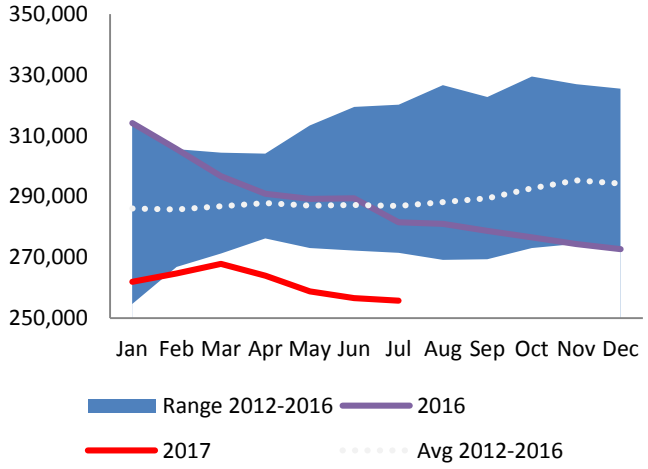


Figure 3: Saudi Arabia's Crude Oil Inventories (K, Barrels)[5]

OPEC: OPEC will discuss at a meeting in November whether to extend production cuts beyond March 2018 or end the production cuts on the agreed end of Q1 2018. The cuts could be extended to keep prices in the USD 50s range, but not deepened. In general, deeper cuts are unlikely because of: a) weakening compliance generally amid frustration over the slow pace of the deal's results; b) higher domestic demand in Saudi Arabia in summer; c) the trend for Russian production to rise in the second half of each year; d) a likely return to Iraqi production growth as investment picks up; e) Iranian ambitions for production growth, even if, as argued above, these are unlikely to materialise in the short term.

The Kuwaiti Oil Minister stated that the impact of OPEC cuts is observed with the reduction of US inventories falling more than expected (which was true after Saudi Arabia held back exports to the US in July to manufacture a drop in the US inventories as they are closely watched). As shown in Figure 4, US commercial crude inventories have fallen by almost 13% from their March peaks, to 466.5M barrels by 11 August 2017. The US Department of Energy plans to sell around 270M barrels of crude oil from the US Strategic Petroleum Reserve (SPR) and leave 260M in reserve (half of the reserves) over 10 years beginning in fiscal 2018.

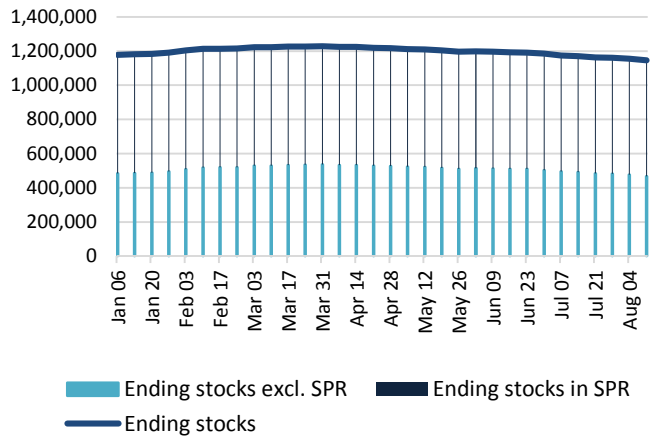


Figure 4: US Weekly Crude Oil Inventories in 2017 (K, Barrels)[6]

If the Trump administration decides to levy sanctions on **Venezuelan** crude in the US, the refineries that were importing the crude would have to source it from somewhere else, probably Canada, Mexico and the Middle East. So far, the US has exempted PDVSA's US subsidiary Citgo from sanctions. The US imported 741 kb/d of crude oil and 55 kb/d of oil products from Venezuela in 2016. If imposed, Venezuela would probably not be able to find Asian markets immediately for all its exports. The US, of course, does not import Iranian crude, and therefore in this case we could expect Iran's market share in Asia to jump markedly.

Qatar's compliance has been high despite the decision of Saudi Arabia and UAE to sever diplomatic and transport links with Qatar in June. The UAE's compliance, however, has not been more than 82% since the start of the cuts. In July, the UAE

[5] JODI; Qamar Energy.

[6] EIA; Qamar Energy.

pledged further OPEC cuts after Saudi Minister of Energy and Industry, Khalid Al-Falih, announced that they would escalate the matter of low compliance to the highest levels of government if it does not improve, which would probably be the Crown Prince of Saudi Arabia speaking to HH Mohammed Bin Zayed Al Nahyan.

Table 2: OPEC Compliance to Production Cuts[7]

Country	June Compliance %	July Compliance %
Algeria	58	60
Angola	110	135
Ecuador	77	46
Gabon	44	-33
Iraq	29	44
Kuwait	97	103
Qatar	110	97
Saudi Arabia	105	98
UAE	73	78
Venezuela	125	142
OPEC	***83***	***85***

Major New Oil Supplies/Discoveries: **Iraq's** Ministry of Oil (MoO) has named nine oil and gas projects along the borders with Iran (Naft Khana, Zarbatiya, Shihabi, Huwaiza and Sindibad) and Kuwait (Khidr Al Maa, Jabal Sanam and Umm Qasr) for foreign investment by the end of the year. This is part of the Oil Minister's plan to increase oil production to 6 mb/d by 2020. **Iraq** also entered negotiations with PetroChina and China National Offshore Oil Corporation (CNOOC) for the long-delayed Nassiriya refinery and oil field development project to build a USD 9B refinery, but the MoO has rejected that proposal as too costly. The Nassiriya oil field is estimated to hold more than the previously-estimated proven 4.4B barrels.[8]

Geopolitics: There was a gunfire attack near a gas-oil separation station at the Garraf oil field (operated by Petronas) in southern Dhi Qar province **Iraq** by residents of a nearby village claiming that oil operations are causing a series of earthquakes in their area. Workers were evacuated from the oil field, but the 100 kb/d production from the field was not affected. The provincial council in Dhi Qar has promised to intervene to identify the reason behind the earthquakes.

Iraqi Kurdistan is receiving pressure from Federal Iraq officials to delay the referendum on independence on 25 September 2017. Iran, Turkey and the US have also voiced their disapproval. According to Kurdish leaders, the condition for postponement is the re-start of budget transfers from the Federal government in Baghdad and the commencement of legal discussions to settle the country's disputed territory. It is unlikely that Baghdad would agree to these terms in return for the postponing of the referendum. If it is to be delayed, it would be because of internal mismanagement within the Kurdish government.

French president Macron convened a discussion between Fayez al-Sarraj and Khalifa Haftar of rival **Libyan** factions to attempt reunite the country's two power sharing sides, however, they failed to come to a signed agreement. There has been little sign of the Trump administration taking any direct role in the conflict, leaving Europe, particularly Italy, largely responsible. Italy and France are keen to stop the influx of Libyan migrants to Europe. France and Italy may officially be on the side of Tripoli (UN-backed), but they did show support for General Haftar as his forces were instrumental in liberating the coastal city of Benghazi from Islamists.

With regards to the **Iran** nuclear deal compliance, the US is demanding that the UN's international investigators check military sites in Iran, which Iran refused. Tensions between both countries remain high especially after Trump's recent visit to the Middle East – after which the Qatar crisis also began. Due to the severe scrutiny of the nuclear deal, Iran's President has declared that the country could quit the deal in 'hours' if the US imposed any new sanctions. A US refusal to continue the deal, and an attempt to reimpose sanctions, would be met with opposition from the EU, Russia and China. However, European companies at least, including investors in the oil sector, may be deterred by extraterritorial sanctions. The outcome of a breakdown of the deal would depend on what kind of sanctions the US attempted to reimpose, how successful it was in coercing other countries to comply, and whether the likely resumption of Iranian nuclear activities led eventually to US military action.

The fears of Iranian influence proliferating in **Iraq** with its present Shi'a-dominated government are increasing in the Gulf and West. Iran's role in helping Iraq's Popular Mobilisation Forces (PMF) (coalition of paramilitary groups) against ISIS by providing military supplies has led to a deepening of Iranian influence in the country. Many units of the PMF currently are extremely pro-Iran and have stated that it will remain regardless of what the Iraqi government says. Nevertheless, Iraqi people and political parties, although majority Shiites, are generally opposed to increased Iranian influence. Only the former Prime Minister, Nouri Al Maliki and his party, have adopted a pro-Iranian political platform for the upcoming general elections in the country, while other major parties have kept their distance from Iran. Saudi Arabia has been vocal about the Iranians making gains in Iraq. In response, Saudi has met Iraqi Prime Minster Abadi and an influential Iraqi Shiite leader, Moqtada Al Sadr. In the wake of these visits, Saudi Arabia has flexed its soft power muscles and has promised the opening of a consulate in Najaf and other humanitarian and economic projects – for example the building of a hospital in

[7] OPEC secondary sources; Qamar Energy.

[8] Iraq Oil Report

Baghdad and Basra and to open border crossings between both countries.

Spotlight this Month: Qatar the LNG Hawk?

Qatar is one of the world's leading gas producers, and holds recoverable reserves of more than 900 Tcf – approximately 10% of all the world's known reserves – over an area of 6,000 square kilometres of the North Dome/South Pars Field it shares with Iran (Iran holds the remaining 3,700 km^2). Qatar's gas reserves are rich in liquids, featuring considerable reserves of condensate and LPGs, as well as ethane, sulphur, and helium. In a bid to boost the country's finances following the Saudi-UAE led economic embargo, Qatar Petroleum (QP), state oil and gas giant, has decided to shift its investment focus mainly to natural gas in the medium-term. Qatar's oil strategy in the face of increasing development of the North Dome is to maintain current capacity for the immediate future, and is likely to remain in the shadow of the country's gas ventures. Qatar supplies almost a third of the world's LNG – 77.2 metric tonnes per annum (Mtpa)- under QatarGas and RasGas, which were announced to be merged into a single entity known as QatarGas in December 2016 (Figure 6). QP shall be unveiling the new merger in January 2018. Currently, the North Field accounts for about 60% of Qatar's total export revenues.

Qatar announced the end of its self-imposed North Field moratorium in April 2017 that had been in place since 2005. The moratorium was justified on the grounds that Qatar's gas development was moving too fast and needed to slow down, in order to conduct more detailed studies of the North Field's reservoirs and the impact of rapid output growth. After the moratorium was lifted in April 2017, the planned increase announced was an additional 10%, meaning the country would produce an extra 2 Bcf/d of natural gas from a new site in the southern sector of the North Field. However, in July, QP increased its planned LNG expansion by double to target 100 Mtpa by 2024, raising the country's LNG capacity by 30%.

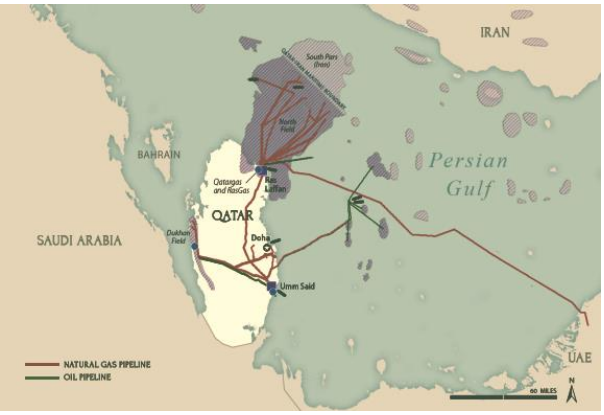


Figure 5 The North Dome Oil and Gas Pipelines[9]

QP will debottleneck its existing LNG trains, and is expected to build another two. Qatar currently has 14 liquefaction trains, all located at Ras Laffan, with a total capacity of 77.2 Mtpa. Towards mid-2017, around the end of May, QP awarded Japan's Chiyoda a contract to identify the modifications needed to raise the capacities of the Ras Laffan LNG plants, which are now set to launch according to Saad Sherida al-Kaabi, CEO of QP. Chiyoda will also be studying adding two new trains at Ras Laffan with a capacity of 7.5 Mtpa each.

To kick off its North Field expansion, the country is in the process of lining up a major upstream and downstream gas project that is estimated to be worth around USD 30B. The project shall involve well drilling, the construction of an offshore receiving platform, and the establishment of a new gas treatment plant. In a first for the country, the LNG plant will extract ethane before liquefaction. The ethylene cracker is set to have a capacity of 1.6 Mtpa and shall be ready by 2024. Earlier predictions for Qatar's North Field gas production were set at a plateau of 21-22 Bcf/d, given that existing projects reached full capacity. This figure is inclusive of the Barzan project which was the last to be granted approval before the imposition of the moratorium; however, it has faced continual production delays due to technical difficulties and gas leakages from an upstream pipeline. On a strategic and commercial level, Qatar has planned to claim 20 Bcm/y of the anticipated 'gap' in LNG supply that is timed to occur in the mid-2020s (the market is predicted to tighten), one of the many reasons for Qatar lifting the moratorium. Also, the Jetty Boil-Off Gas (JBOG) Project is set to recover 29 Bcf/y of gas, translating into 1 Tcf of gas in the long-term for the country (about 0.57 Mtpa of LNG).

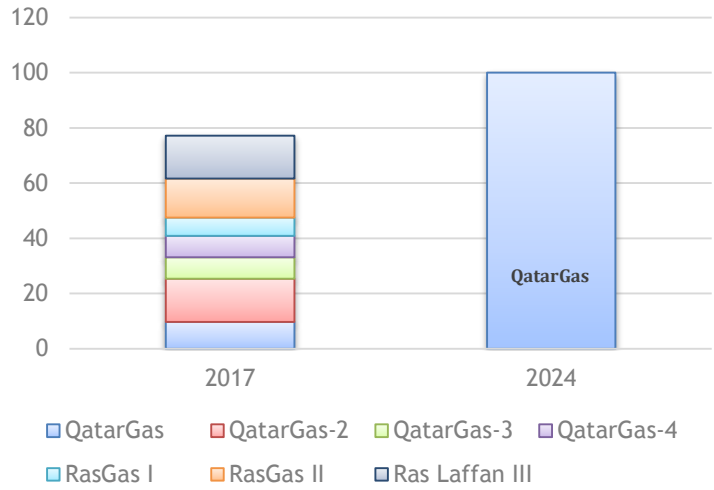


Figure 6 Qatar's LNG production in 2017 and 2024, MTPA

Debottlenecking is expected to add 10% to current LNG capacity, taking it from 77.2 Mtpa to 85 Mtpa, and with the

[9] Qamar Energy

introduction of two new trains at Ras Laffan, capacity will touch 100 Mtpa in the next 5-7 years. We assume the cost would be would be about USD 11.4B allowing USD 500/tonne for liquefaction, but this does not cover new upstream production required to feed the trains. QP believes its finances are stable enough to repeat a similar North Field expansion production plan "ten times over"; however, our prediction is that the company will be seeking an IOC partner by the second half of 2018 to carry the maximum share of CAPEX for this new venture. QP has said that the new venture will not be an open bid and is selectively entertaining a number of companies. Our research indicates that there is a strong possibility that any one of the IOCs already involved with QatarGas and RasGas shall be taken up as a favourite. These include Shell, Total, ConocoPhillips, and ExxonMobil. After the establishment of the North Oil Company, a joint venture between Qatar Petroleum and Total that took over the al-Shaheen field 80 km north of Ras Laffan from Maersk earlier this year, the French IOC is being sized up as a favourite, especially following speculations of it withdrawing from Iran's Phase 11 South Pars. But a new entrant IOC could also be chosen, including Chinese and Japanese companies, probably as partner to a major IOC. And ownership could also be different between the debottlenecked trains (which Qatargas might undertake itself) and between each of the two new trains.

Qatar is hedging bets on a looming LNG supply crunch in the early 2020s to regain its market share. The country's pre-emptive step of doubling its planned capacity from 2 bcf/d to 4 bcf/d could be a warning to competitors – mainly the US, Australia, and Russia – to deter buyers (majority Asian: Qatar has been showing keen awareness of future plans in China, India, and elsewhere that rely heavily on growing gas in their energy mix) from agreeing to required breakeven prices in the anticipation of getting better prices from a low-cost player like Qatar. The North Field expansion venture may also add about 200 kb/d of condensate to production levels, overall increasing the current 5 Mboe/d of output to 6 Mboe/d. At an oil price of USD 60/bbl and LNG price of USD 7/MMBtu, the expansion could generate gross revenues of about USD 12.5B annually, thus paying for itself in little over a year.

Our research shows that LNG market dynamics are increasingly favouring the buyer, and the availability of shorter-term contracts may impede Qatar's plans for regaining longer-term market share. Our prediction based on the current trajectory of the LNG market up to the 2020s also does not show a significant rebalancing occurring, with relatively low prices still being required to create new markets to absorb the growing volumes of new LNG. Chinese winter demand has tightened the market but it still has to be reasonably competitive against coal here and in India. If the market comes to a balance in the mid-2020s, the opportunities to sell LNG on an oil-linked basis, especially for longer-term contracts will be significantly fewer. In such a scenario, Qatar's base cost for LNG alongside other suppliers shall be crucial for the market.

Qatar's current LNG delivery cost – USD5.20/MMBtu – is USD 2.5 lower than the USA's full-cycle price, which could potentially make it the most profitable LNG seller to Asia (Asia consumes 70% of all world LNG). The country is also the lowest cost LNG producer, a title that can be competed for by Iran, but which will take about a decade to transpire, given Iran's lack of appropriate upstream investment. Given its domestic demand and pipeline export options, Iran will anyway not rival Qatar in LNG volume.

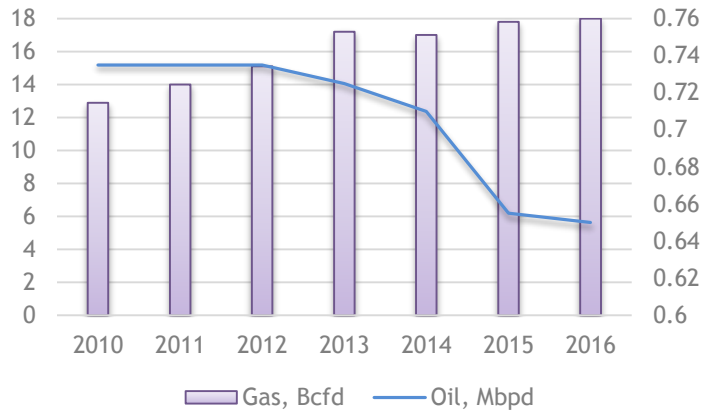


Figure 7 Qatar's Gas vs Oil production, 2010-2016[10]

Figure 7 shows Qatar's declining oil output in comparison to natural gas production levels that have stayed above 15 bcf/d over the last 4 years. For Qatar to maintain its current oil production levels of above 0.6 Mb/d requires significant effort. Most of Qatar's oil output (nearly 50%) comes from the Al Shaheen field which began production in 1994 and features a total of 300 wells and 30 platforms. Now that Total and QP have taken over the field jointly as the North Oil Company, Total is looking to embark on its plan of drilling 56 new wells, in order to keep Al Shaheen's production at a 0.3 Mb/d plateau.

Qatar has also recently invested in a new study for possible EOR methods, mostly for the onshore Dukhan field that has been producing since 1949. The plan is set to be implemented by 2019-2020. A tentative plateau of 0.2 Mb/d for the field is another goal for the country; the field is currently operating at under 0.175 Mb/d. Much of this depends on Qatar Petroleum's budget, but with the country's natural gas output all set to rise further with the North Field expansion, and an alleged supply crunch on the horizon, Qatar's plans could well see the light of day.

[10] BP Statistical Review 2016, Petroleum Economist

Summary of Major Geopolitical Risks for Qatar's North Dome Development

1. **The Unresolved Embargo**: The Saudi-UAE led economic embargo along with perpetual low oil prices will force Qatar Petroleum to engage a major IOC to carry the lion's share of capital expenditure for the North Dome expansion.

2. **The Iranian LNG Train**: Iran's increasing gas production and export capacity from its half of the North Dome/South Pars field are ruffling quite a few feathers in Qatar (and Saudi Arabia) who maintains that it respects Tehran's gas output plans. Iran exported 50 million cubic metres of gas per day from March-August 2017.

3. **UAE, Qatar, and Price Volatility**: LNG prices could be impacted adversely if the UAE decides to replace the 1.8 Bcf/d of gas it currently imports from Qatar via the Dolphin pipeline; we think this to be unlikely. However, plans to increase the flow to 3 Bcf/d are on hold.

4. **Lack of Regional Support**: Political relations are likely to remain strained even if the blockade is called off; Qatar's diversification of its supply chain and announcement of the North Field expansion has been met with stony silence from its GCC counterparts.

[11]

[11] SAMBA August 2017 report

Scenarios to Watch

LONG-TERM SLUMP IN OIL AND GAS PRICES AS RENEWABLE ENERGY AND ELECTRIC VEHICLES TAKE OVER

Timing: 2040+

Event Oil prices, which had been recovering from the 2014 crash, fall sharply again as oil demand appears set to enter a long decline from increasing renewable energy power generation and electric car sales in the MENA region and globally. This hits government budgets and economies of oil-exporting countries, and diminishes their political importance. Several major oil companies end up filing for bankruptcy. Demand for electric cars grows substantially in major GCC energy trade partners - USA, China, and Japan.

Mitigation: Oil exporting countries in MENA shift attention from China and Japan as demand hubs to Africa and Latin America who are lagging on adapting to new energy efficiency technology. Asian consumers Pakistan and India are still however heavily reliant on Middle East oil for their manufacturing sectors. India and Pakistan are growing consumers for compressed natural gas for transportation. To remain agile, GCC invests more in renewable energy and shelves planned projects in refineries and storage facilities domestically and internationally. The GCC expands its renewable energy capacity to meet domestic peak demand in summer and starts international exports of electricity. The countries shift and adapt to exporting solar power to neighbouring countries during the cold winters, such as India and Pakistan. SWFS, NOCs and other government entities invest in EV technology or even JV with EV automakers to benefit from the boom.

Impact: Oil revenue for the GCC countries drops drastically resulting in sharp trimming of public spending. The governments focus on diversifying their economies to increase non-oil revenues, mainly through additional fees and higher taxes (VAT and excise taxes). MENA oil exporters, mainly GCC countries, Iran and Iraq fight for market share in India, Pakistan and Africa. Saudi Arabia, Iraq and Iran start awarding upstream and energy EPC contracts to India and African firms to get priority oil exports.

Scenario Probability: 30%

Alternative Futures

1) 30%: The electric car and renewable energy market is adopted more slowly than expected.

2) 25%: The impact of EV on the oil markets is not as hard as expected. No technological breakthrough was invented by 2040 to recharge batteries faster and EV adaptation is not extended to heavy duty vehicles.

3) 25%: Demand in India, Africa, etc., for petrol/diesel vehicles remains strong, making up for the lower oil demand.

MUBADALA BUYS BHP BILLITON SHALE OIL BUSINESS

Timing: 2018

Event: Mubadala sees the opportunity of investing in US shale oil assets to learn and profit from the business which the GCC OPEC members once disregarded as a real threat to oil prices. In the GCC, Saudi Arabia and Abu Dhabi both have unconventional resources which they have not yet developed.

Opportunity: A Mubadala joint venture (JV) with ADNOC diversifies their international upstream portfolio and invests in US shale oil to learn and apply the drilling methods in US shale to ADNOC's unconventional resources in the Shilaif Formation which also require long horizontal wells and hydraulic fracturing. The JV profits greatly from the BHP investment by hedging prices on future shale output.

Impact: Shale output in the US rises rapidly in line with EIA forecasts benefiting the producers. The JV maintains the investment for at least 5-10 years before the asset start depleting, then sells it off to another player. After that, the JV starts development of UAE unconventionals by applying technology efficiencies and drilling techniques on the Shilaif Formation.

Scenario Probability: 10%

Alternative Futures

1) 60%: Abu Dhabi does not make the investment.

2) 10%: The investment is badly managed and is proved a failure so Abu Dhabi decides to sell it off.

3) 10%: Another competitor (Qatar) makes the investment.

4) 5%: ADNOC makes the investment in partnership with another GCC state (Saudi Arabia, Kuwait or Oman).

5) 5%: BHP decides not to sell off its US assets.

Top Projects in the News

Project	Summary	Timeline	Client	Contractor	Implications
205 kWp solar PV plant in Dubai	YDE will manage the construction, operation and maintenance of the solar PV plant for the next 15 years.	4 months	Dubai Electricity and Water Authority (DEWA)	Yellow Door Energy	As part of Middle East Insulation's commitment to transfer to green manufacturing activities, the new plant will provide 347,000 kWh of electricity per year.YDE is a leading player in the UAE's cladding and roof industry. So far, under the Shams Dubai programme, 15.6 MW of rooftop solar has been installed.
Construction of two substations in Egypt	Siemens will be responsible for the design, engineering, construction, supply, installation and commissioning of the two 500/220-kV substations. To date, 50% cent of the substations in Egypt are built by Siemens technology.	15 months	The Egyptian Electricity Transmission Company (EETC)	Siemens	The two new substations at Samanoud and Aboul Matameer will enable power delivery to Egyptian homes as well as various industries in the Delta region. They will also help increase the capacity of the national grid, which is a key requirement to foster economic growth as defined by the goals of Egypt's vision 2030.
Upgrading the 110 bp/d Tebriz Oil Company refinery in Iran	The project, worth USD 1.6B, will renovate the Iranian company's refinery facility which opened in 1976.	36 months	Oil Design and Construction Company (ODCC)	SK Engineering & Construction	Tabriz Refinery operates with a capacity of 110 kb/d, turning crude oil to liquefied petroleum gas, gasoline and diesel.
Expansion of Jebel Ali refinery in UAE	This contract is the last of three for Enoc's USD 1B refinery expansion project.	24 months	Emirates National Oil Company (Enoc) Group	Overseas-AST	Once the expansion project is completed, the production capacity of the refinery will go up to 210 kb/d from the current 140 kb/d.

Table 2: Macro Dashboard – MENA Oil Exporters[12]

	Real GDP (%)		Fiscal Balance (% of GDP)	
	2016e	2017f	2016e	2017f
Algeria	3.4	2.9	-15.6	-12.2
Bahrain	2.1	1.8	-11.3	-11.7
Iraq	10.3	1.1	-14.4	-14.7
KSA	1.8	0.1	-13.0	-9.5
Kuwait	2.5	2.6	-30.2	...
Libya	-3.3	13.7*	-56.6	-43.8
Oman	1.8	2.6	-13.0	-10.3
Qatar	3.2	3.4	-8.2	-4.5
UAE	2.3	2.5*	-4.0	-1.9
Yemen	-4.2	12.6*	-11.3	-5.5
Average Ex-Libya & Yemen	**3.4**	**2.1**	**-13.7**	**-9.3**

Table 3: Macro Dashboard – MENA Oil Importers

	Real GDP (%)		Fiscal Balance (% of GDP)	
	2016e	2017f	2016e	2017f
Egypt	4.0	3.5	-9.4	-9.7
Jordan	2.8	3.3	-3.8	-2.6
Lebanon	2.5	2.0	-8.0	-9.5
Mauritania	4.1	3.9	-3.2	-3.5
Morocco	1.3	4.4	-3.5	-3.0
Sudan	3.0	3.5	-2.0	-2.1
Syria	...	...	...	...
Tunisia	1.5	2.8	-4.5	-3.6
Palestine	2.5	4.2	-14.7	-13.6
Average	**2.7**	**3.5**	**-6.1**	**-6.0**

Macro Dashboard

[12] Arabia Monitor; IMF. *Subject to revision.

	Economic Update	Comment
Inflation	- Egypt's core inflation rate jumped to 33% in July, up from 29.8% in June.	- The rise is driven by an increase in fuel prices. The authorities expect inflation to remain above 30% over the next two months, especially after an increase in electricity, transportation and drinking water prices. Egypt raised fuel prices in June by 55% for the commonly used 80-octane gasoline and diesel. It also doubled the price of the butane gas canisters, used in most Egyptian households for cooking.
Fixed Income Markets	- The government of Jordan has asked banks to submit proposals to arrange a US dollar conventional or Islamic bond issue. Jordan issued its first domestic sukuk last year, but should it opt for an Islamic bond, the planned debt sale would be the first international sukuk ever issued by the country.	- Jordan raised USD 500M in April through a tap of its existing USD 500M bond issued in November 2015 and maturing in 2026. In October 2016, it also issued a USD 1B bond maturing in January 2027, with Citi and JPMorgan leading the transaction. Jordan is rated B1 by Moody's and BB-minus by Standard & Poor's, and is receiving support from the IMF through a three-year, USD 723M Extended Fund Facility, which was approved in August 2016. Before the issue of USD 500M in bonds in November 2015 as a standalone credit, Jordan issued bonds fully guaranteed by the US government through the US Agency for International Development.
	- On 9 August, the Iraqi Government raised from the international capital markets USD 1B in a five-year bond issue with a yield of 6.75%.	- It was the first unguaranteed new Iraqi sovereign bond in more than a decade and follows a USD 1B 5-year US-guaranteed deal in January. Citibank, JP Morgan Chase and Deutche Bank were the lead managers and the Trade Bank of Iraq was the co-manager. The issue was rated as B- stable by Fitch and B- stable by S&P.
PMI	- The non-oil private sector in the UAE remained strong in July. The Emirates NBD Purchasing Managers' Index for the UAE nudged up to 56 in July from 55.8 in June and 54.3 in May 2017.	- Output increased at a faster rate with firms citing favourable economic conditions and new projects as factors driving higher output. New orders also increased sharply in July, lower new export orders for the second month in a row. Overall, the PMI data for H1 2017 shows that the non-oil sector grew at a faster pace relative to H1 2016.
	- Saudi Arabia's PMI rose to 55.7 in July from 54.3 in June, for the highest reading in three months.	- Growth in the non-oil private sector picked up on the back of sharper increases in output and new orders. The reading suggested that the non-oil economy has remained healthy with the strongest rate of job creation since August 2016.
Policy & Geopolitics	- Details have emerged of US Republican Congressman Edward Royce's proposed bill calling for broader sanctions against Hezbollah which officially includes the party's lawmakers and ministers in the list of individuals who will be subject to these penalties. The bill names Bayt al-Mal, Jihad al-Bina, the Islamic Resistance Support Association, the Foreign Relations Department of Hezbollah, the External Security Organization of Hezbollah. The list also includes Al-Manar TV, Al Nour Radio, or the Lebanese Media Group associated with the party.	- The amending legislation would further restrict Hezbollah's ability to raise funds and recruit, increase pressure on banks not to do business with Hezbollah, and punish foreign states for supporting Hezbollah. The draft bill is expected to be reviewed and endorsed in September. Following the meeting with Prime Minister Saad Hariri last month, Trump said he would be deciding on his anti-Hezbollah strategy very soon. Unsurprisingly, Hezbollah dismissed the prospect of tougher US sanctions against them. We do not expect the sanctions to have a material impact on the Lebanese banking sector and even President Trump had acknowledged the role played by Banque du Liban in cracking down on Hezbollah's illicit finances. Any impact will be mostly on the political scene

		wherein Hezbollah could get more defensive. President Aoun could also come to the defence of Hezbollah.
	- In Morocco, the situation in Al Hoceima area remains tense, as protests continue to demand the release of detained activists and meet the social and economic demands of local residents. La Fédération de la gauche démocratique (FGD), a coalition of three left-wing parties, has called for a national march on 27 August in Rabat to demand the release of detained Rif activists. The youth wings of the three parties issued a joint statement condemning the excessive use of violence against the Hirak (protest movement in Al Hoceima and its nearby towns in Rif), which led to the death of activist Imad El Attabi.	- The latest reactions from the Moroccan government have included: (1) the Prime Minister cancelled the summer vacation of 10 ministers to ensure progress on the development projects in the Rif region; (2) The King tasked Abdelouafi Laftit and Mohamed Boussaïd, Ministers of the Interior and Finance, respectively, to supervise the progression of development projects in Al Hoceima and the surrounding areas; (3) On Throne Day (30 July), the King pardoned a number of people arrested during the protests although over 200 people including the leader of the Hirak movement, Nasser Zefzafi, are still in prison.
	- On 20 July, the Iranian Parliament gave votes of confidence to 16 out of 17 ministers whom had been nominated by President Hassan Rouhani for his second term. The new cabinet whch features little change at the top faces significant challenges.	- In recent weeks, Iran has come under mounting pressure after missile tests were carried out and resulted in new sanctions by the US, with each accusing the other of violating the spirit of the agreement. On 13 August, lawmakers voted overwhelmingly to increase the country's budget for its ballistic missile programme and foreign operations by the Revolutionary Guards, a direct challenge to new US sanctions. - On 17 August, Rouhani also declared that Iran could abandon the nuclear agreement "within hours" if the US decides to impose new sanctions. The US ambassador to the UN has responded, saying Tehran must comply with the resolutions.
	- On 24 August, Qatar announced it is restoring full diplomatic relations with Iran including sending back its ambassador to Tehran, a move counter to the demands of the Saudi-led states as part of the regional dispute. Qatar seems unlikely the first to blink in this standoff. In August alone, Qatar has taken several measures to cope with sanctions imposed by Saudi Arabia, the UAE, Bahrain and Egypt:	- Qatar will allow visa-free entry for citizens of 80 countries, with immediate effect. The visa exemption scheme will make Qatar the most open country in the region. Citizens of those countries, including China, the US, South Africa, will get a multi-entry waiver at the port of entry. What is worth noting is the fact that only one Arab country was on the list (i.e., Lebanon), a further point in stark contradiction to GCC policy at this stage. - Qatar has launched a new sea route between Hamad Port and Pakistan's Port of Karachi, which will offer a fast and secure corridor for importers and exporters, with transit time of six days from Qatar to Karachi and eight days back. - Qatar Navigation (Milaha), a top Doha-based shipping and logistics group is moving its regional trans-shipment hub from Dubai to Oman's port Sohar. - With the Qatar blockade and the fact that Egypt is the main supplier of blue-collared workers to Qatar (there are up to 350,000 Egyptian workers in Qatar, about 15% of the total population), the country seems to be increasing flights to South Asian countries mainly to get more blue-collar workers from there. Qatar Airways increased its Colombo service from four to five flights per day, effective from 1 September. It also increased the Dhaka service from two to three flights per day.

Outlook for 2018

Any changes to the outlook from the previous issue are highlighted in ***bold italic font***.

	Oil	Gas	Alternative energy	Politics / Geopolitics
Algeria	- Production decline continues. - Start-up of Eni's Central Area Field Complex on Block 405b with peak production of 40 kb/d expected this year. - ***New fiscal regimes announced this year but no change in the 51%/49% foreign ownership rule.***	- Reggane Nord to reach full capacity in 2018 (280 MMscfd). - Discussions restarting on shale gas exploration. Government putting production figure up to 80 BCM/yr by 2025 (on top of their conventional production), but no progress on shale gas drilling expected this year. - ***BP and Statoil to invest a further USD 500M redeveloping In Amenas gas field, extending and increasing gas production levels.*** - ***Timimoun gas production started.***	- ***Sonatrach and ENI sign MoU to identify areas in which to build solar power production units.*** - However, actual progress to be slow and intermittent.	- Abdelaziz Bouteflika and his allies to remain in power in 2018, although uncertainty over the president's health will weigh on political stability. - Rising gas production will help support GDP growth with more gas-to-power rather than oil and thus more exports, but we expect GDP growth to be weak with political and external oil price uncertainties. - Continued protests by teachers and doctors over low pay, but government will have no choice but to continue implementing its much-needed reforms.
Egypt	- Weaker EGP provides some relief on costs. - Continuing active M&A market for smaller players.	- Gas production rises sharply with new developments but met with growing demand; ***LNG*** imports to decline modestly. - Dolphinus Holdings signed a deal to import 6.4 BCM per year (0.64 Bcf/day) from Israel. It would be impeded by USD 2B fine to be paid by Egypt's natural gas companies to Israel's electricity provider.	- Solar projects in the Benban Solar Park to start construction and make progress this year, but country to fall short of 20% target generation from renewables by 2022. - Tender for nuclear plant construction planned to be awarded this year. Delays likely.	- President Sisi likely to get re-elected this year and will increase the crackdown on jihadist infrastructure in Sinai.
Kuwait	- Continued stagnation on major project awards. - Possible revision of 2020 and 2040 oil production targets (push dates or reduce targeted capacity).	- Gas production to continue to lag behind demand; LNG import terminal to meet shortages - Target of 2.5 bcf/d by 2030 including the Dorra field (0.5 bcf/d); progress on EPC tender of Jurassic Gas Facility Phase 1; planned upcoming tenders of two new gathering centres in the Northern Kuwait production zone in March 2018.	- Clean Fuels Project making to start up in late 2018. - ***To bid tender for Dibdibah solar facility this year (1 GW).***	- Kuwait making little progress with arbitrator role in GCC fallout. - Stronger partnerships with the Chinese for funding and investments in the country. - The cabinet resigned in end-October; legislative election likely to take place in 2018.

Iran	- Production to stay below 3.9 Mb/d. - Decision on development of Changuleh, South Pars Oil and Azadegan fields likely this year.	- Exports to Iraq to increase in 2018/2019. - Increasing natural gas demand in the residential, commercial, and transport sectors to lead to lower domestic diesel demand.	- UK's Quercus signs MoU for 600 MW solar PV plant	- Europe and China to oppose any renewed sanctions on Iran with interest in LNG. - Russian presence in Iran set to rise.
Iraq	- ***Delay in Bid Round 5 from parliamentary elections likely to December 2018.*** - Oil production to reach close to target, ~4.7 Mb/d despite OPEC cuts. - OPEC compliance to remain low.	- Some continuing progress on capturing flared gas (Shell/Mitsubishi JV in Basra Gas Company) but delayed by late payments. - Iraqi imports of natural gas from Iran to ramp up this year with the start of 360 MW General Electric gas power plant at Mansuriya in July.	- Little interest in projects (e.g. 50 MW SAWA PV Power Plant Project in Al Muthanna only 2 bidders) due to inadequate legal framework.	- Haider al-Abadi in a strong position to win re-election in 2018. - More corruption crackdowns in the oil industry. - ***The establishment of the INOC will better organize oil revenues for the state and will increase welfare of the citizens with 10% of INOC's earned net profits will go to the inhabitants of the provinces that deliver their oil resources to the INOC.***
Iraq Kurd-istan	- Production to continue to decline due to lack of investment, reserves downgrade (Taq Taq), difficult geology (Halabja block), and uncertain outlook with Federal Iraq. - To continue independent oil exports, but traders wary of doing business with the KRG from Baghdad threats.	- ***Rosneft deal for 30 BCM pipeline may be revived with the new gas Sales Agreement (GSA) between the KRG and Pearl Petroleum.*** - ***Discussions of KRG to export gas to Iraq if deal in place and Pearl Petroleum increases gas production to 380 MMscfd by the end of 2018.***	- No investment in renewables (priority would be given to thermal power stations).	- ***Some agreement with Federal Iraq likely in terms of KRG's oil exports and KRG's share of the federal budget.***
Lebanon	- Oil product imports (LPG, gasoline, gasoil, fuel oil, kerosene, asphalt) to continue with rising domestic consumption.	- Progress on LNG import terminals this year. - ***Environmental oil and gas laws to be drafted.***	- Little investment in renewables other than small-scale.	- The US to mediate the Israel-Lebanon maritime dispute but Hezbollah rejects its involvement. - Hezbollah to try to gain more power in Lebanon showing weaknesses in Saad Al Hariri's Future Movement.
Libya	- ***Pipeline infrastructure remain vulnerable to attacks, but less frequent than in 2017.*** - BP and Shell signed agreements to lift Libyan crude. This will slightly boost investor	- Start-up of Bahr Essalam phase 2 in Libya this year (proximity to existing infrastructure). - LNG exports to continue to fall; pipeline exports to Europe to rise.	- No significant investments in renewable energy. - ***A 50 MW solar PV plant is being proposed, but highly subsidised energy prices will steer investment away.***	- ***The high court ruling overturned a lower court ruling blocking moves to adopt a draft constitution paving the way for the Tobruk-based House of Representatives to organize a national referendum on the draft constitution.***

	confidence in the country.			
Oman	- Crude oil production target of 1 Mb/d after OPEC deal likely to be reached. - Continued investments in EOR techniques by PDO. - PDO seeking investors in hypersaline water treatment for Qarn Alam heavy oil steam injection	- Khazzan tight gas output to increase in 2018 likely to reach 750 MMscfd. - Progress on Iran gas deal continues but price remains sticking point; Completion date by 2021 if no further delays. - ***Mabrouk gas field 4 TCF gas find to increase future exploration investments and gas output.***	- Oman launches tender for 500 MW solar plant with award planned in late 2018. - Miraah solar steam plant Phase 2 to be completed by 2019. - The Raeco/Masdar wind project (50MW) is expected to complete construction in 2019 with ILF Consulting Engineers as main consultants.	- Potential for change of leadership due to the sultan's health.
Qatar	- Oil production decline continues. - Natural declines in production assist OPEC compliance. - ***Continued investments by QP in international oil upstream investments.***	- QP decides to structure LNG expansion as 3 new trains, instead of 2 trains + debottlenecking.	- Launch of 500 MW solar project by Qatar Electricity and Water Company (QEWC) and Qatar Petroleum (QP) in 2018.	- Qatar to continue increasing economic deals with the US (in aerospace and military). - ***UAE, Saudi and Qatar to continue security & economic accusations and calling out US intervention. Recently Qatar requested the US to investigate the First Abu Dhabi Bank (NBAD), over alleged fraudulent foreign exchanges.*** - ***Any mediation attempts by the US to be seen post Q2 2018 once Pompeo asserts himself in office.***
Saudi Arabia	- New oil-field projects and drilling aimed at sustaining capacity. - Progress on Aramco IPO towards 2019; likely to settle on Tadawul + London.	- Progress on smaller gas projects after Wasit, and Fadhili, insufficient to prevent rising oil burn for power.	- Launch of 10 GW renewables programme likely to proceed, but slower than timetable. - Al Jouf & Rafha 100 MW solar PV projects under tender, Sakaka PV project 300 MW tender underway, Taiba ISCC CSP project planned. - Sakaka bids at world record 1.79 c/kWh (Masdar/EDF) but awarded to Acwa at 2.34 c/kWh.	- ***US and Saudi Arabia to remain strategically aligned when it comes to countering Iran's reach in the Middle East.*** - ***The recent diplomatic spat with Germany's ex foreign minister, Sigmar Gabriel, to cool down with new government reshuffles (Sigmar to be replaced by Heiko Maas).*** - ***The Saudi government will take a 35% stake in the Saudi Binladin Group construction company as part of a settlement from the anti-corruption crackdown. More transparency regarding the government's share in the seized funds to come out.***

				- Stronger relations with Iraq, at the expense of Iran.
Syria	- The Kurdish-led Syrian Democratic Forces (SDF) recaptured the Al Omar and Tabiyah oil fields and the Conoco gas fields from IS militants. SDF may hand over the fields to the Syrian Arab Army (SAA) as a step in the reconciliation between the two-armed groups. - Syrian Democratic Forces (Kurdish-led, US-backed) taking control of Deir Al Zor oil-fields, but uncertainty over duration of US support.	- Palmyra gas fields with 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.	- Russia and China top contenders to rebuild Syria. - Turkey increasing its military operations in Syria to remove presence of Kurdish People's Protection Units (YPG) in Afrin. - Despite ceasefire, differences over Bashar's government will resume, averting any long-term solutions.
UAE	- Award of remainder of ADMA concession this year – ***almost complete with just 20% of Umm Lulu/SARB remaining***. - Increase of crude oil production to 3.5 Mb/d by 2018 but likely to be delayed to 2019/2020. This year's production to average 3.22 Mb/d. - Any additional output to be exported to Asia. - RAK oil and gas licensing round to receive bids. - ***ADNOC to tender new exploration areas directly for the first time***	- Possible progress on Bab sour gas. - Low-profile development of offshore deep, tight gas. - Sharjah LNG imports delayed to 2019.	- Continuing launch of large solar PV projects with Abu Dhabi's Sweihan expanded to 1.18 GW. - Start of 1st nuclear reactor this year. The second could also start this year as well.	- ***Despite the boycott, the UAE and Qatar are proceeding with business in the oil sector, given its economic importance. Both countries agreed to extend the concession with a Japanese consortium for the shared Bunduq oil field.***
Yemen	- Attempts at restarting some fields in more secure areas. - Possible restart of LNG exports from Yemen LNG at low levels, under UAE control/influence.	- Yemen LNG remains shut down.	- Yemen Ministry of Electricity -- 60 MW solar power plant on hold. Unlikely to be revived in the short-term.	- ***Greater international attention on Yemen and the humanitarian crisis will increase calls for an end of the conflict, however, prospects for peace are still small, at least for this year.*** - Rising sentiment for an independent south state will provide the grounds for further conflict.

Disclaimer

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.

Arabia Advisors specialises in portfolio strategy and private placements. It works with firms, family offices and government related organisations that are looking to streamline, re-balance or diversify their asset portfolios. Based in the UAE as an off-shore company, Arabia Advisors services a regional and international client base with interest in the Arab countries.

Qamar Energy provides leading-edge energy consulting and advisory services across the spectrum of energy companies. It works with every segment of the industry: upstream, midstream, downstream, renewable energy and electricity. Qamar Energy specializes in the Middle East and North African (MENA) region, building on our close industry and government links.

Arabia Monitor
Aston House| Cornwall Avenue| London L3 1LF
Tel +44 203 239 4518
info@arabiamonitor.com
www.arabiamonitor.com

Qamar Energy
HDS Business Centre,
Cluster M | Jumeirah Lake Towers | Dubai, UAE
Tel +971 4 364 1232
info@qamarenergy.com
www.qamarenergy.com