THE QAMAR NEWSLETTER

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The US assassination of Qassem Soleimani has put several question marks on the region's energy landscape. Cover story by Robin Mills.

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Qamar Energy, headquartered in Dubai, is the leading regionally-based energy consultancy on the Middle East and North Africa (MENA).

The QAMAR NEWSLETTER is a monthly publication that provides critical appraisal and focussed assessments of the month's energy developments across the MENA region

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QAMAR ENERGY

IRAN, IRAQ AND SULEIMANI: HOW WILL THINGS PLAY OUT FOR ENERGY MARKET?

Robin Mills • *A version of this article appeared in The National, Jan. 5, '20* • **COVER STORY**


© Reuters/Thaier al-Sudani

It's winter in Baghdad, but the US killing of Iranian major general Qassem Soleimani and Iraqi militia leader Abu Mahdi Al Muhandis has raised the already heated political temperature. The complex crisis in OPEC's second-largest producer has not affected oil output yet, and the market continues to have reasons for complacency. But if Iraq becomes a battleground, this will not sustain. As Charles de Gaulle is supposed to have said, the world's cemeteries are full of indispensable men. Soleimani, however influential and able, will be replaced, and Iran's policy and capabilities will not change much. With Soleimani alive or dead, Tehran has to escape the noose of sanctions. It has repeatedly kept the US off-balance, the American response swinging between uncalibrated hostility, bluster and timidity.

Washington's campaign against Iran has hinged on economic pressure, without a diplomatic strategy backed by measured force, whether in Iraq, Syria, Yemen or Lebanon, where Soleimani operated with such deadly effectiveness. The past decade's flood of shale oil has encouraged the US to target not only Iran's oil exports but also Venezuela's, confident that it can cover any shortfall. But this approach floats unspoken on the oil of the Arabian Gulf, including Iraq's. Between the 2014 and 2019 price slump, Iraq increased oil production more than any country in the world except the US, about 1.4 million barrels per day. Meanwhile, Iran's output slumped under the pressure of sanctions, but the market remained oversupplied.

Oil prices did not escalate to levels that would have made Donald Trump politically uncomfortable. The massive protests against sectarianism, foreign influence, corruption, unemployment and misgovernment that have swept Iraq since October have not interrupted its oil industry, apart from a brief shutdown of the Nassiriya field and refinery, and minor output from the northern Qayyarah field.

Exxon Mobil, the only US oil company operating outside the Kurdistan region, had already evacuated most of its expatriate staff, and withdrew the remaining 18 on Saturday. Its protracted negotiations for the crucial water injection project to support reservoir pressure at the southern Iraqi fields will probably now come to a final halt.

Other companies are also removing their American personnel, but the Iraqi workforce will continue operations. Even though the Iranian retaliation so far has been limited to the missile attack on the Al Asad airbase in the Iraq, with no casualties, Tehran will seek to gain advantage from the American action. Imagine how things could unfold from here. A scenario that could play out is that the killing of Muhandis, more than of Soleimani, makes it impossible for the Iraqi prime minister, either Adel Abdel Mahdi or his successor, to resist demands for the 5,000 US military in the country to leave. Americans could then attempt to retain a presence in the Kurdistan region, but Baghdad cuts off Erbil's budget allocation, and in response the Kurds stop transferring 91,000 bpd of federal oil from Kirkuk. The remnant US presence in north-eastern Syria, dependent on logistical support from Iraqi Kurdistan, also becomes untenable.

The OPEC+ coalition is slow to move on relaxing its deeper production cuts, preferring to reap the rewards of higher prices, though Russia and Saudi Arabia do put more oil on the market. The Saudi-Kuwaiti Neutral Zone is restoring its 0.5 million bpd capacity only gradually towards the year-end, after the deal between the two countries.

Iran uses sabotage and protestors to harass western-run oil operations in southern Iraq. It casts off all limits on its uranium enrichment. The US responds with further strikes against Iran-allied forces in Syria and Iraq, but escalates to attack Iranian Revolutionary Guard targets within Iran, and uses its navy to interdict all oil and petrochemicals shipments out of the country.

As they did at Abqaiq in Saudi Arabia in September, the Iranians launch drones and missiles at key energy infrastructure and tankers in the Gulf and Red Sea. The vulnerable Iraqi export infrastructure, with leaky pipelines adjacent to Iranian waters, is easily shut down by an apparent technical failure. These actions are more consequential and harder to counter than the long-feared but simplistic idea of a blockade of the Strait of Hormuz.

Shale was expected to ride to the rescue in the event of a major disruption. But American drillers are newly cautious, preferring to use higher prices to reduce debt and pay dividends to impatient shareholders. The increasingly dominant supermajors do not adjust their budgets swiftly. After several months of elevated prices, shale producers do increase activity, but take months to yield significant new production. Electric vehicles suddenly look a much better choice.

In such a situation, the US would normally release oil from its strategic reserve. But at first, Mr Trump holds this back, touting US "energy dominance" and "freedom molecules", and demanding others pay up before it will unilaterally protect Gulf oil shipments. The spike in oil prices takes its toll on already shaky world demand. China, which gets 43 percent of its petroleum imports from the Gulf, has to act, dispatching tanker escorts from its base at Djibouti, and attempting to establish another at Gwadar in Pakistan. In return for its not entirely altruistic support, Mr Trump eases trade pressure.

Following the encouragement of December's joint Iran-Russia-China naval exercises in the Gulf of Oman, Moscow also sees an opportunity to insert itself further into Middle East affairs. As US pump prices escalate towards a November election marked by mysterious cyber-interference, and the fighting undermines his promise to bring the troops home, Mr Trump jumps at a Sergey Lavrov-mediated ceasefire. Relative peace returns to the region, and oil facilities are repaired over the next couple of years. The US does not leave the Gulf, but it is no longer an American lake, while the regime in Tehran gains prestige just from surviving. The 2020 sun sets on a very different and contested political and energy landscape.

ECONOMIC CHALLENGES A PRIORITY FOR OMAN AFTER SULTAN QABOOS

Robin Mills • *A version of this article appeared in The National, Jan. 12, '20*

The passing of a ruler after fifty years on the throne is inevitably a momentous occasion. The departure of the man who built modern Oman comes at a time of political and economic uncertainty. The new sultan, Haitham bin Tariq, expressed his desire to build on the legacy of Sultan Qaboos bin Said. He will need to press on with the country's economic reform agenda and lessen its reliance on oil.

The late Sultan Qaboos came to power in 1970, with the intent of spending fast-rising petroleum revenues on national infrastructure, citizens' welfare, defence and a modern state. Oil, found at Fahud just south of the Oman mountains in 1964, had begun to flow by 1967. After the Arab-Israeli October War of 1973, world oil prices escalated hugely. The defeat of the Marxist-backed separatists in Oman's southern Dhofar region by 1976 allowed development of Marmul and other big fields, and national output ramped up quickly from the mid-1980s.

Still, despite its oil wealth Oman had to spend carefully. In light of declining oil output, stagnant gas, and the downgrade of its reserves by Shell in 2004, the Sultanate understood it had to realise more value than simply exporting crude, setting up an oil-trading venture and the Dubai Mercantile Exchange, and reducing subsidies on domestic gas and fuels.

Petroleum Development Oman (PDO), the state-led oil firm with participation by Shell and others, undertook large enhanced oil recovery projects, along with the development of heavy oil at Mukhaizna by Occidental and Mubadala. This took production above the aspired 1 million barrels per day for the first time in 2016, though adherence to the OPEC+ pact has kept output slightly below this level since.

The country also began investing heavily in a new industrial port, refinery and oil storage hub at Duqm on the south-east coast. BP's development of the giant tight Khazzan gas field ended gas shortages and has even led to a surplus.

The smooth succession process is a reassurance to international investors. With its exclave of Musandam overlooking the Strait of Hormuz, Oman has a key strategic position.

Looking ahead Sultan Haitham needs to address existing economic challenges. Debt has ballooned since the 2014 oil price crash, and economic growth has been slow. The share of the budget devoted to investment is about 22 per cent, with most going on wages, subsidies and welfare. Big business oligopolies have too much of a grip on the economy.

The new sultan has a business background, which could be vital. The government will have to spend intelligently and selectively in infrastructure and seeding new businesses, while relying on international investment and privatisation. It has to streamline bureaucracy, build a more commercial mindset in state companies, and find the sectors where it has a competitive advantage and does not duplicate what neighbours have already done.

In December, the first major privatisation outside the hydrocarbon sector went ahead, when 49 per cent of the electricity transmission system was sold to China's State Grid. Also slated is a sale of electricity distribution firms, and a public offering of Oman Oil, which has assets in oil and gas fields, refineries, petrochemicals and mining. Oman has a range of minerals, including chromite, copper, manganese and rare earths, and last year's new mining law may encourage more activity.

Despite a wealth of resources, renewable energy has only recently started to take off, with the award of solar and wind power projects. The sultanate also has the world's largest system to generate steam from solar heat for enhanced oil recovery. PDO aspires to become Energy Development Oman, including renewable and other energy sources.

A common gas grid with its GCC neighbours would help make best use of its current surplus while covering for potential future renewed deficits. If its renewables plans grow, excess cheap electricity could also be shared with other Gulf states or even exported to south Asia via undersea cables.

In the 19th century, the sultan's writ stretched from Gwadar in Pakistan to Zanzibar in modern Tanzania. Today its strategic maritime location could attract Chinese investment into infrastructure, logistics and heavy industry as part of its 'Belt and Road' initiative.

Oman has a number of things on its side: political goodwill, a new leader potentially with fresh ideas, advanced oil industry skills, natural resources, attractive and strategic geography. Perhaps even more importantly, it has the economic urgency to drive change. Sultan Haitham has a challenging job to grasp these opportunities to bring Oman's economy into a new era.

WHY SAUDI ARABIA REMAINS THE LINCHPIN OF OPEC

Robin Mills • *A version of this article appeared in The National, Dec. 8, '19*

Three interesting things came out of Friday's OPEC meeting. Saudi Arabia bared its teeth, and compelled other members to agree to deeper production cuts. Russia took up a greater share of the burden, though winning a concession. And most importantly, the organisation has laid out that a relatively gloomy near-term outlook overshadows a rosier medium term.

Saudi Arabia's production has consistently been below the amount it has been allowed under the November 2016 OPEC+ pact, even ignoring the effect of the attack on the Abqaiq processing facility in September. Now, it has accepted a further 1.6 per cent cut from its previous target, but the kingdom stated it will produce even less, an effective 5.8 per cent below target, as long as other members comply.

In return, the serial under-compliers Iraq and Nigeria have accepted slightly smaller cuts, around 1.1-1.2 per cent each, but with the clear demand that they do not exceed their limits. Iraq even says that the autonomous Kurdistan region has agreed to cap its production.

It will be interesting to see how this is enforced, given that the Kurdish region has new fields expanding output. Kuwait and the UAE have agreed to targets lower by about 2-2.1 per cent each, a relatively easy task for Kuwait which was barely above this level in October anyway.

So instead of continuing its unilateral overcompliance, Riyadh has put the other members on notice that they have to live up their commitments. As opposed to the 1990s, when "good" compliance was in the range of 60-70 per cent, the current pact has generally achieved adherence close to 100 per cent or even better, with losses from members Iran and Venezuela and good compliance from leading members such as the UAE and Kuwait offsetting some lapses from others.

Yet Saudi Arabia does not want to run the risk of continuing to be taken advantage of. This is even more important given the departure of small OPEC producers who are now unconstrained.

In the initial round of target-setting for the OPEC+ alliance, all the non-exempt OPEC countries committed to cut almost the same, around 3.5 per cent, from their baseline. The non-OPEC adherents, including Russia, Oman and some others, agreed to much smaller curbs.

Compared to the past, Russia has now agreed to a more significant cut for its crude output, but the impact of this is softened by an important concession. Russia produces about 833 000 barrels daily of condensate, a by-product of its massive gas output.

Condensate was included in the previous deal but is now exempt – as it always has been for OPEC members. The new arrangement is more sensible, though there is always a loophole – much used by Nigeria – for reclassifying light oil as "condensate".

The third aspect of this agreement is what it says about the organisation's short and medium-term views. Before the meeting, the market consensus was that production cuts would not be deepened but might be extended beyond the next meeting in March. Instead, the opposite has happened. The market responded positively, with Brent crude rising 1.6 per cent.

The near-term outlook is gloomy, with a further wave of non-OPEC supply forecast from Brazil, Norway, Guyana and continuing in the US. The demand forecast has perhaps improved a little recently but is influenced by Chinese economic fortunes and the roller-coaster of presidential trade war tweets.

If the world economy dodges a recession in 2020, the situation may be brighter in the second half of the year. A price of $60 or so per barrel is still healthy. The physical market appears quite tight, and global inventories have fallen back to around the five-year average. After 2020, the wave of megaprojects that sustained output outside shale and OPEC will ebb.

OPEC is betting that this time, it has killed off shale as a serious competitor. In 2016, American output fell under the strain of low oil prices, then rebounded as the OPEC+ pact took effect. Now, the shale sector is unloved by financiers, independent firms are struggling to raise capital, productivity gains have slowed, the number of rigs drilling has dropped consistently since the start of the year, and shareholders are demanding dividends instead of growth. Predictions for output gains next year that rival this year's look increasingly over-optimistic.

But the producers' organisation is still treading a fine line. It has not usually been adept at changing course quickly.

Significantly higher prices could rekindle investors' interest in oil, change the narrative back to growth, and reward the major oil firms such as ExxonMobil, Chevron and Occidental that have bet heavily on shale.

They would also represent a negative shock for the global economy. And over the next few years, the expansion of electric vehicles will start having a material effect in reducing oil demand.

For now, other OPEC+ members have been pressed to come into line. After March, OPEC as a whole may have to execute a volte face. Riyadh's growing command may be required to shift gears up as well as down.

WHY THE WORLD CAN'T GIVE IN TO CLIMATE CHANGE OBSTRUCTIONISTS

Robin Mills • *A version of this article appeared in The National, Dec. 15, '19*

California, Australia and the Amazon have literally been on fire in recent months, and Venice underwater. Climate change campaigners such as Sweden's Greta Thunberg have galvanised a growing shift in world public opinion. Yet last week's United Nations Framework Convention on Climate Change (COP25) negotiations in Madrid faced the usual deadlock, late-night negotiations, and lack of sufficient and believable commitment from the assembled nations.

COP25 was intended to advance important issues from the 2015 Paris Agreement. On the agenda are a global carbon market, and compensation payments by the developed countries for past climate damage. Next November, at COP26 in the Scottish city of Glasgow, nations will meet again, this time to submit new, more ambitious and binding climate plans.

The countries that are suffering from fire and flood refuse to even take the problem seriously. The US, which will exit the Paris Agreement in November 2020, the day after the presidential election, still thinks it is entitled to behave disruptively and frustrate other nations' attempts to reach an agreement. Costa Rica, Brazil and Australia blamed the US for preventing a deal. Meanwhile China, India and Japan have been unwilling to raise their ambitions next year.

The EU has pledged to be carbon-neutral by 2050, a good commitment but which seems far enough not to be urgent. It did not agree on an intermediate target of cutting emissions 55 per cent by 2030, just a decade away and which would require major policy changes. International cooperation is currently struggling on many fronts. Even on trade, in principle a win-win for all, countries are retreating from global approaches and opting for withdrawal, self-harming disputes, or at best grudging, limited and transactional deals.

Exactly 27 years after the Rio Summit that birthed the Kyoto Protocol, it's evident that multilateral climate diplomacy, though important, is not going to deliver a grand bargain big and fast enough to halt climate catastrophe. But this is not a counsel of despair. We have made major progress over the past decade in assembling the toolkit for tackling climate change. Low-carbon technologies have advanced to the point of being serious competitors to their fossil-fuelled alternatives.

Solar and wind are the cheapest sources of new electricity in many places, including the Middle East, Australia, south-western US and north-east Europe. Audi, BMW, Tesla, Mercedes, Volkswagen and other car makers are launching new electric models in 2020. Lithium-ion battery costs keep dropping and battery vehicles might reach cost-parity with petrol and diesel in the mid-2020s. An advanced gas-fired plant that captures all its carbon dioxide emissions is being piloted by NET Power in Texas; Oklo's small modular nuclear reactor is moving ahead in Idaho.

Today's oil business has about $2.2 trillion (Dh8tn) of annual revenues; natural gas about $0.4tn; coal perhaps $0.5tn. The solutions to climate change will create businesses on an even larger scale.

On very rough figures, by 2050, electric vehicle sales could be $3tn per year, hydrogen equipment and production an annual $2.5tn, "clean" non-animal meat $1.7tn, direct atmospheric removal of carbon dioxide $1.1tn, carbon capture, use and storage $0.2tn, electricity from wind $0.4tn, solar generation $0.13tn and lithium mining for batteries $0.08tn. There are further trillion-dollar businesses yet to be imagined, let alone created, in clean steel, buildings, plastics, aviation and others.

The dominant emotion should be excitement at such tantalising opportunities, not fear of climate chaos. The challenge is to find the right tools to make these businesses profitable and accelerate their growth.

Leading climate policy thinker David Victor, writing in the New York Times, suggested that the focus for COP25 onwards should be on creating decarbonised global industries – such as automobiles or steel – rather than decarbonising within national borders.

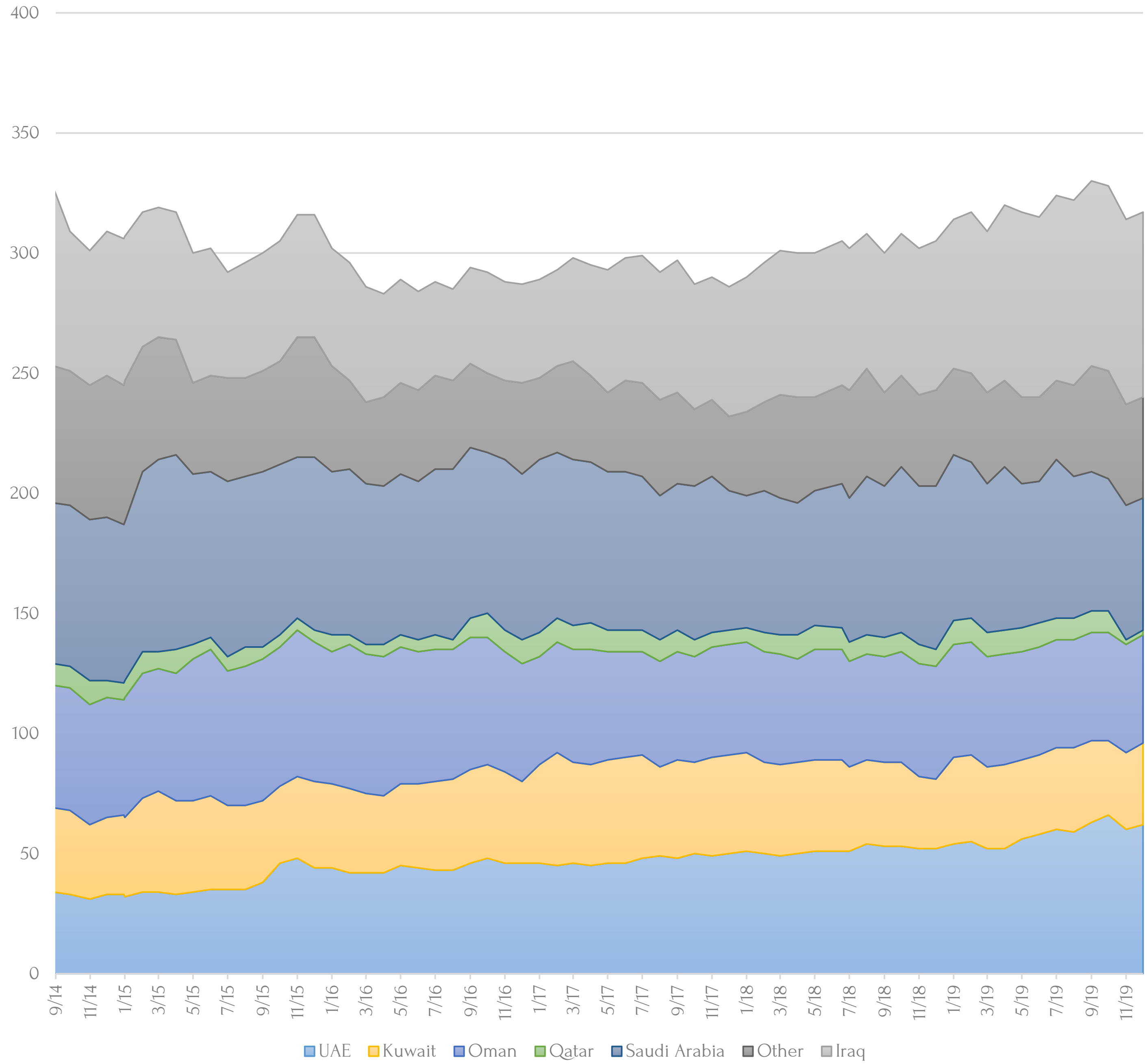
EU emissions were 20 per cent of the global total in 1990, have now fallen to 10 per cent and will drop further as other countries' emissions continue rising.

The paradox is that the more successful domestic climate policy in Europe or Japan is, the less it matters in the global balance. Instead, the key becomes the creation and worldwide dissemination of climate-friendly technologies.

This is not necessarily bad news for the Middle East, despite its current dependence on oil and gas rents. Its ability to muster state-directed investment, its abundant solar potential, its natural gas for creating clean hydrogen, its geological reservoirs for storing carbon dioxide, and its central geography in global trade, are all advantages in the new energy world.

As COP25 is derailed by the obstructionists from America and elsewhere, global citizens should not lose hope for environmental salvation. Corporations and nations should worry less about the costs of climate compliance, and more about the costs of non-compliance and missing the future. New industries will not spring up magically. They require innovation, risk-taking investments, engagement with governments and society, and the creation of markets.

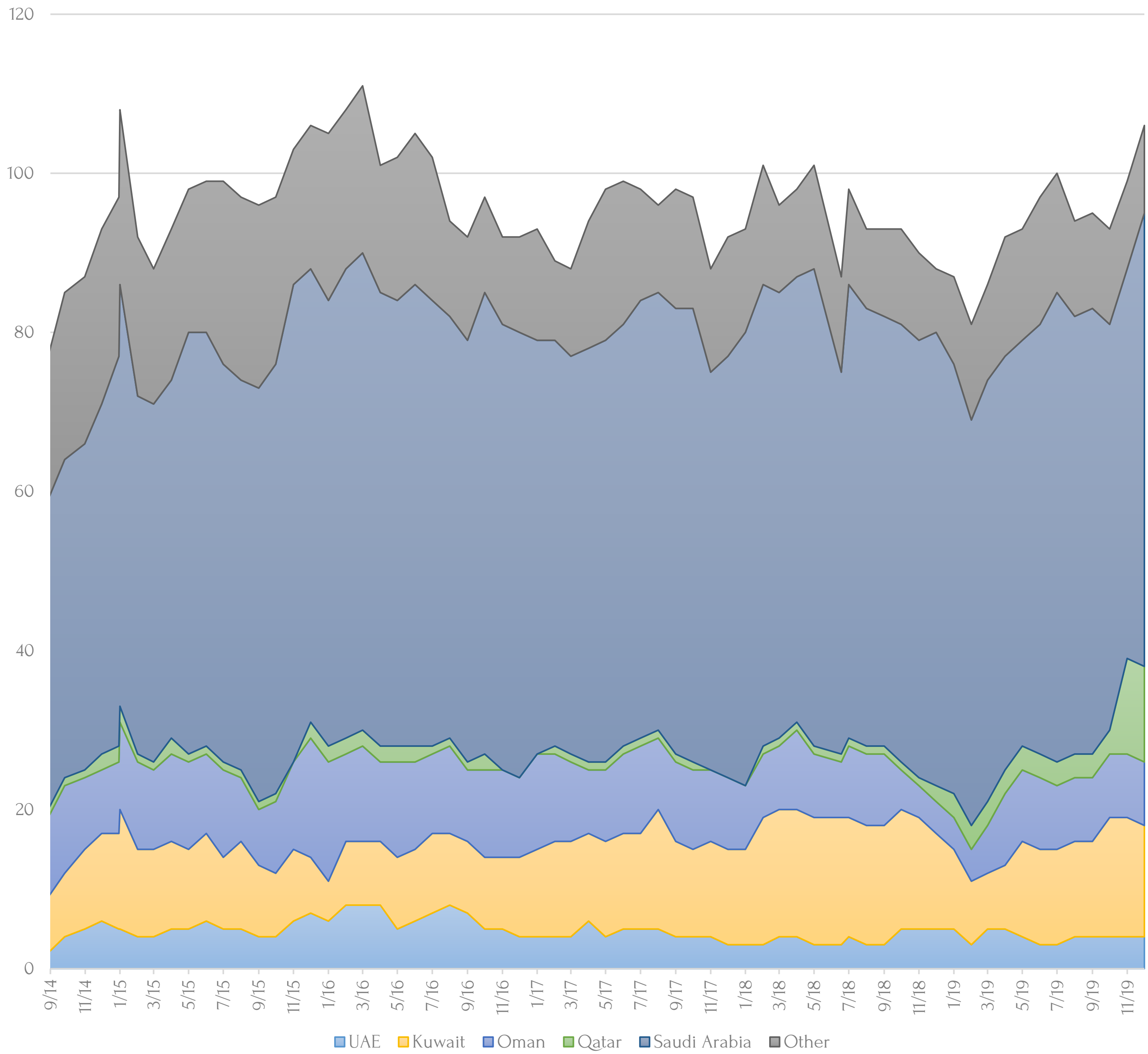
RIG COUNT SNAPSHOT: OIL



- The Middle East's overall oil rig count in December increased by +4 excluding Iran.
- Iran's rig count is not included by Baker Hughes; OPEC estimates total (oil and gas) rig count in Iran at 157 in 2018, remaining the same till December 2019, which is doubtful, due to falling production and deteriorating exports in the face of sanctions.
- Iraq's oil rig count reached a 5-year high of 77 in July, and has remained unchanged till December, which has cast doubt over its OPEC compliance. Iraq had promised higher compliance in early September, but after the Abqaiq attacks in Saudi Arabia, has averaged barely above 10% (as of November, which is still an improvement from September's -32%).
- The UAE's rig count increased by +2 to reach 62, exceeding August's record of 59, following the start of operations at the 40 kbpd, Al Dhafra Petroleum-operated Haliba oilfield on the southeast border of Abu Dhabi, in line with the country's plans to increase capacity to 4 Mbpd by end-2020.
- Kuwait's rig count has stayed steady at 34 throughout H2 2019, ~2% lower than its H2 2018 average. Production increased by a mere 10 kbpd in December (from November's 2.70 Mbpd), but is expected to soar once production from the Neutral Zone (over which Saudi Arabia and Kuwait had a long-standing dispute, recently resolved) commences. The zone's Khafji oil field is expected to produce 320 kbpd by year-end, while ramp-up from Wafra will be more gradual.
- Saudi Arabia's rig count fell by -1, with output declining to 9.79 Mbpd in December, 0.11 Mbpd lower than its November output, as it tries to over-compensate for other members' under-compliance and adjust to the market's low demand.

Source: Baker Hughes; OPEC

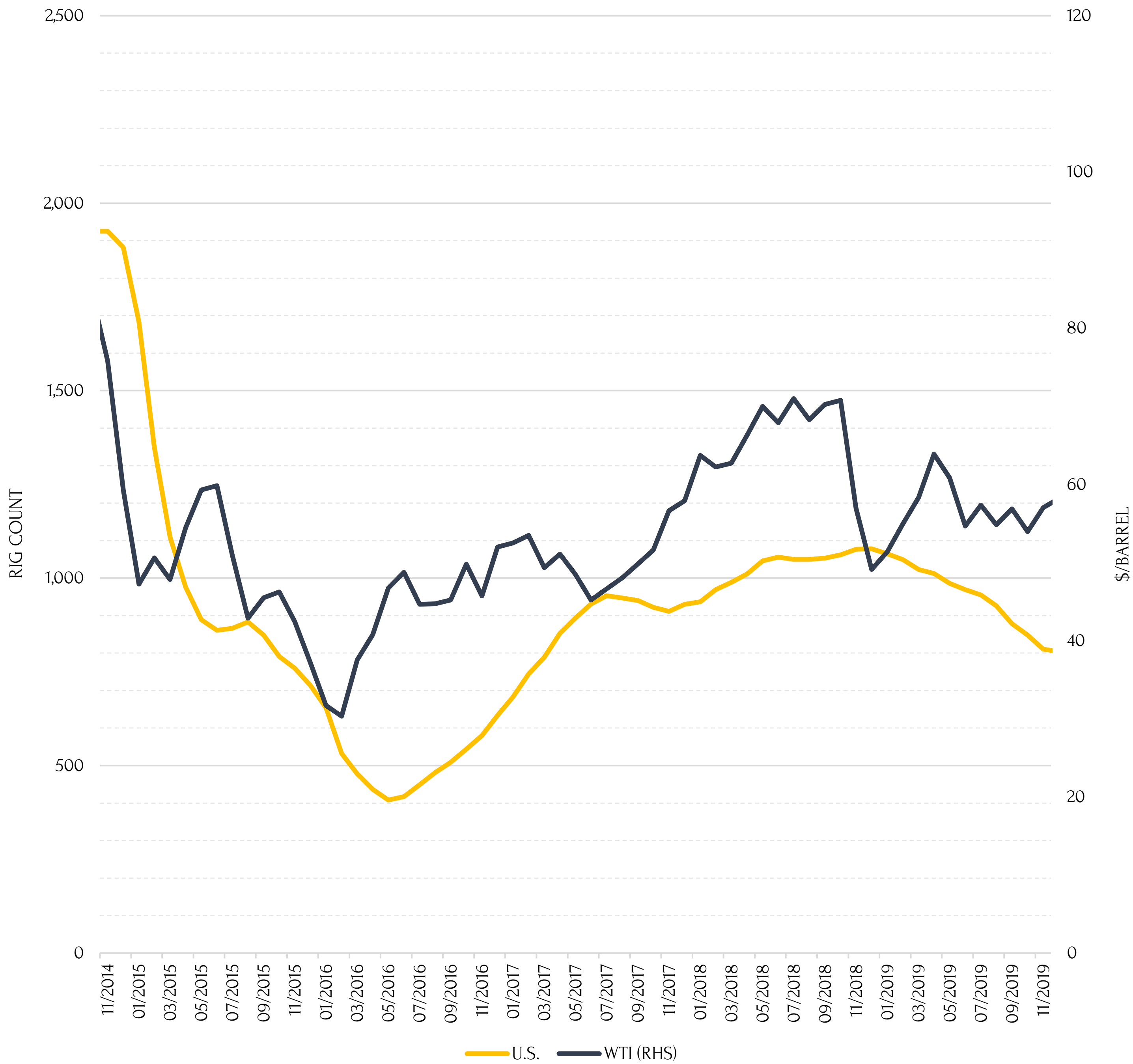
RIG COUNT SNAPSHOT: **GAS**



- The Middle East's overall gas rig count gained by +7 in December to reach 106, exceeding July's record of 100. The region reached an overall-high of 123 gas rigs in January 2014, but has since declined, averaging 96 in the last four years. We could see this trend reverse as major gas expansion plans get underway in the UAE, Saudi Arabia, Oman, Kuwait, and Qatar.
- Oman's rig count remained unchanged in Q4 2019, after gaining +3 in Q2 2019, -1 rig below its April 2018 high of 10. This might increase with the expansion of the country's 932 km gas pipeline system from 64 mcm/d to 80 mcm/d (connecting Nimr with Salalah and the central gas network from Rawl to Sur), and Petronas's ongoing discussions with the Ministry of Oil & Gas to expand the country's gas sector. Petronas holds a 10% stake in Khazzan, awarded to it last year.
- Kuwait's rig count increased by ~18.2% in Q4 2019 (from Q3) averaging at 15, as it targets increased non-associated gas production to meet soaring gas demand. With the end of the Kuwaiti and Saudi dispute over the Natural Zone, Kuwait can finally develop its share of the 500 Mscf/d Dorra gas field.
- The UAE's rig count witnessed no change from its Q1 2019 average, remaining steady at 4. We expect rig count to increase as large sour gas projects pick up momentum, exploration begins on the Bid Round-1 blocks, and ADNOC awards exploration licenses from Bid Round-2. First awards are expected in Q1 2020. A 5% stake was recently awarded to Lukoil by ADNOC in the Ghasha ultra sour gas concession, comprising Hail, Dalma and Ghasha, with a planned daily combined capacity of 1 bcf.
- Qatar's rig count increased by +9 in November, as the country sets a target of 110 Mtpa of LNG by 2024 under the North Field Expansion project. It also announced plans to increase its current 77mn t/y LNG capacity to 126mn t/y by 2027, up 64%.

Source: Baker Hughes; OPEC

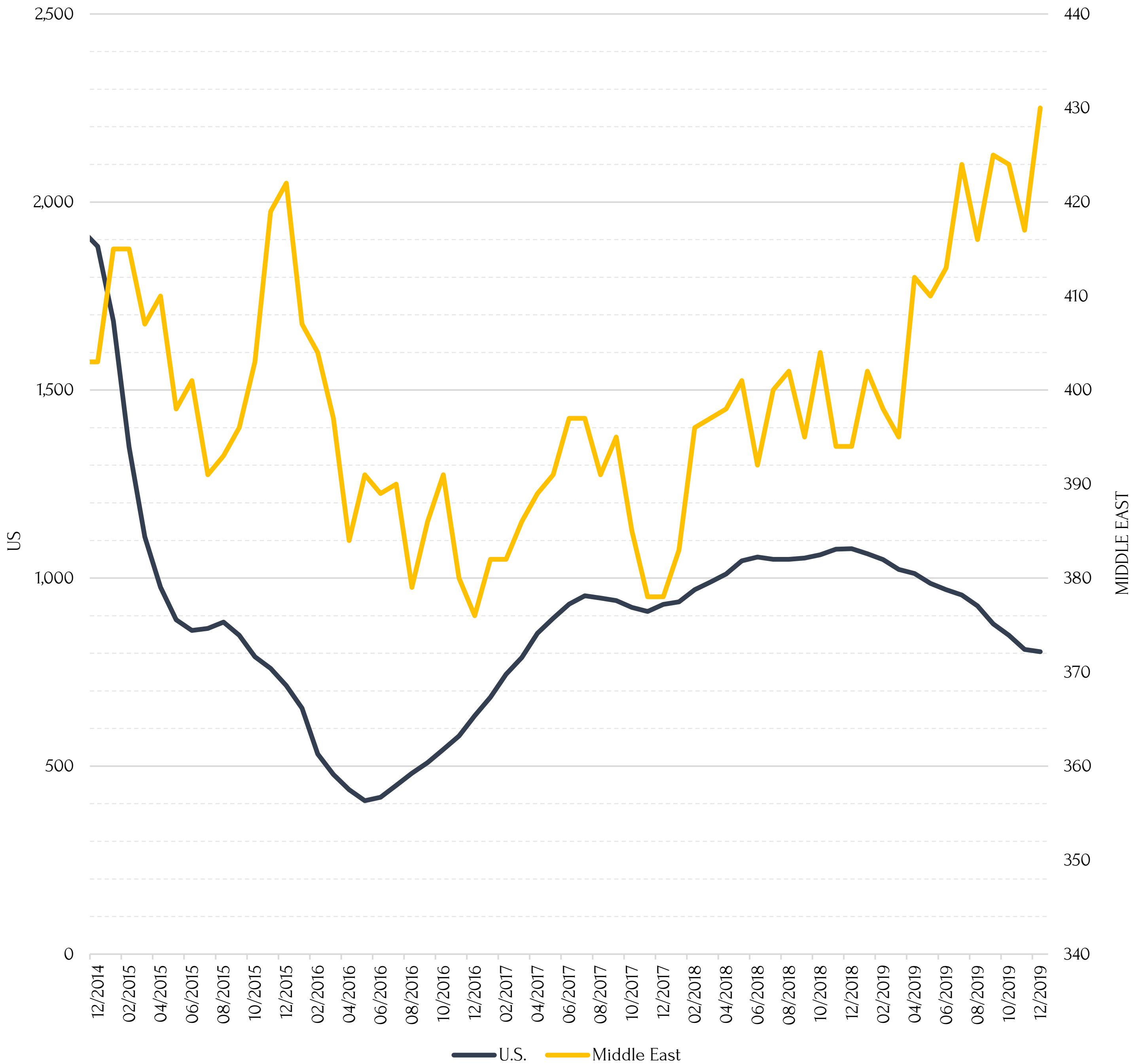
RIGS VERSUS OIL PRICES: US RIGS & WTI



- US rig count for December fell by -6 from November's 810, a y-o-y drop of 25.41% from December 2018 (-274 rigs), the biggest drop since March 2017.
- The major fall in rig count is at the Permian Basin, where rigs have fallen by -18 in the last 3 months. Overall rig count has dropped -86 (y-o-y) in Q4 2019. This is indicative of producers trimming spending plans due to rising debts and pressure for shareholder returns, even though oil prices have remained stable recently. Operating costs in the Permian Basin have not reduced, even though it has better economics than other basins. The fall in number of rigs reveals higher productivity per rig and fracking crew, but also the need for higher prices to encourage more capital investment. Onlookers have also blamed the current US-China trade tensions as a deterrent for upstream investment in the US.
- The EIA expects US crude production to average 12.2 Mbpd in 2019, up from an estimated 10.96 Mbpd in 2018.

Source: Baker Hughes

RIG COUNT: US & MIDDLE EAST



- The US' offshore rig count fell by -1 in early January 2020, to return to its 2018's average of 21, even though Tropical Storm Jerry raised concerns (as did Hurricane Florence) of a similar fall in rig count as was observed during Hurricane Harvey and other natural disasters. Onshore drilling declines are expected to continue into Q1 2020, as E&P companies focus on disciplined capital spending and prioritisation of cash flows with less focus on growth. The drone attacks against Saudi Arabia's Abqaiq and Khurais oil processing facilities, and subsequent tensions, are not expected to result in a major surge of output from the US. The IEA maintains that markets are "well supplied".
- Total Middle East rig count gained +36 from 2018's 394 rigs to reach 430 rigs in December, even though major MENA producers reported only slight-to-no gains in production (Saudi Arabia's output was down by 1.3 Mbpd).

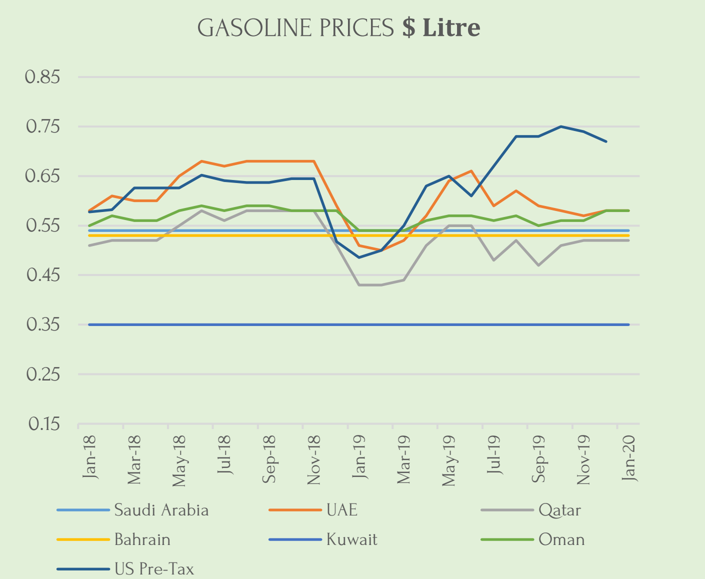
Source: Baker Hughes, EIA

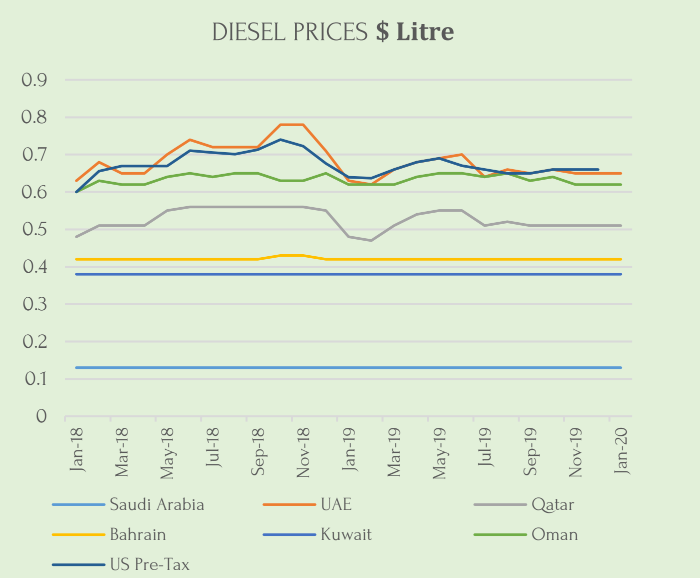
FUEL PRICES & SUBSIDY REFORMS

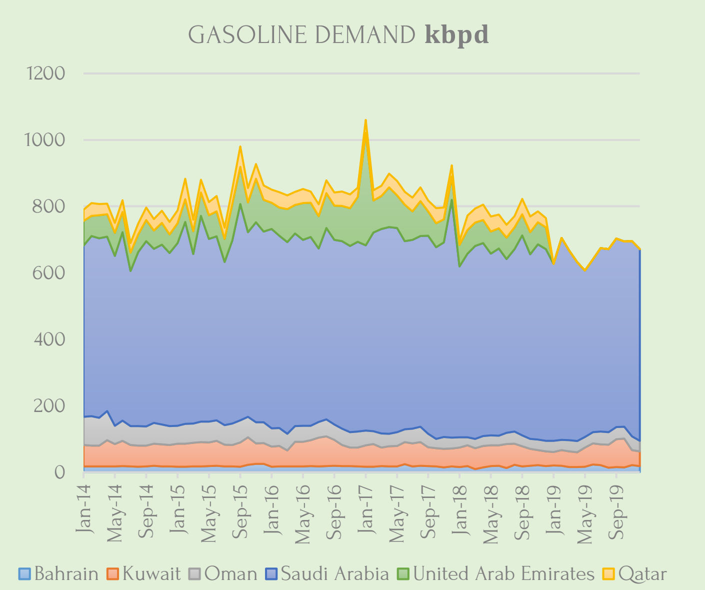
January 2020

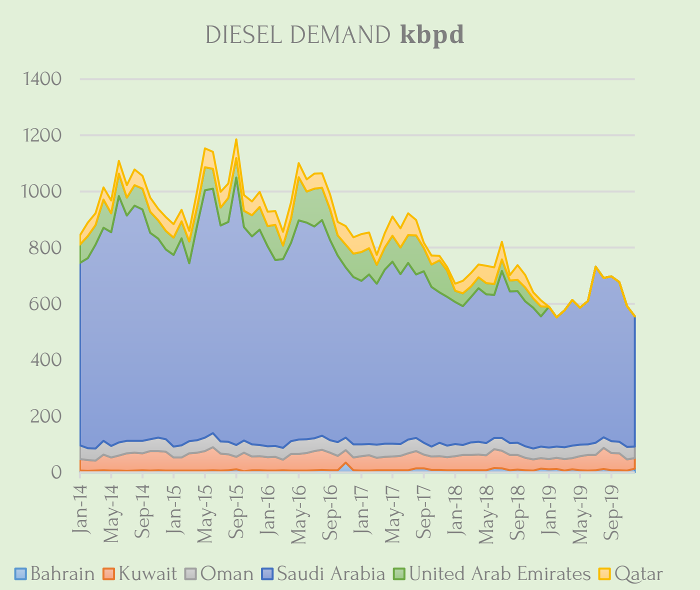
- In the UAE, gasoline and diesel January prices stabilized at an average of $0.58 and $0.56 per litre respectively since August, 6% and 1.5% lower from August's prices.
- In Qatar, prices for gasoline and diesel have stabilized since September, with gasoline at the same level as August and diesel 1.9% down from August's price.
- In Oman, the price of M95 and diesel decreased in the last three months by 3% from September's price, while M95 increased by 5% in January 2020.
- In Kuwait, the Parliament's Financial and Economic committee has approved the cancellation of the decision enforced in September 2016 to raise fuel prices to 'reduce financial burdens on citizens.' Its gasoline prices remain the lowest in the GCC.
- Similarly, in Bahrain the Council of Representatives urged the government to rethink its fuel price hike just a day after it was approved, finding the change 'too sudden'. In May 2018, the High Administrative Appeals Court dismissed the complaint, allowing the Ministry of Oil & Gas to raise fuel prices from September 2018 but this decision hasn't come into force yet.

The following charts represent the prices of gasoline 95 and diesel ($/litre) till January 2020 in the GCC countries.









Note: JODI UAE and Qatar gasoline and diesel figures are unavailable for 2019/2020.

ARABIA MONITOR ENERGY:

A Collaboration Between Arabia Monitor & Qamar Energy

ARABIA MONITOR ENERGY

Oil and gas tensions in the Middle East continue to influence the volatility of the world's energy markets. The Arabia Monitor Energy, a novel collaborative effort by Qamar Energy and Arabia Monitor, combines macroeconomics, geopolitics and energy intelligence to explain what the region's energy geo-economics mean for business.

WHAT SETS IT APART?

1. INSIDE OPEC

Focussed assessment of the month's OPEC developments, policy advancements and strategies.

2. NOC & IOC ANALYSES

Examination of factors affecting NOC and IOC policies, and their impact on regional diversification schemes.

3. SPOTLIGHT THIS MONTH

Targeted reading of the geopolitical, macroeconomic and energy landscape of a MENA country utilising our specialised energy intel.

4. SCENARIOS TO WATCH

Detailed forecast of global oil developments and their impact on the risks and opportunities for MENA's oil production.

5. STRATEGIC IMPLICATIONS

Concise summary of major oil trends and their effect on investment strategies under bearish, bullish, and wobble scenarios.

6. OUTLOOK FOR THE YEAR

Cohesive outlook of the oil production, gas production, renewable energy projects, and geopolitics of key MENA countries.

WHO BENEFITS?

ENERGY TRADERS

- What factors will contribute to oil and gas price fluctuations?
- What is the outlook for oil and gas pricing?
- What is the outlook for OPEC's production and export strategy?
- How are NOCs adapting their oil marketing strategies?

INVESTMENT AND RISK ANALYSIS

- What are the operational risks and investment opportunities in MENA?
- How do economics, politics, government policy changes, production and export bottlenecks contribute to risk mitigation?

UPSTREAM FIRMS

- What are the chief economic, political and fiscal regime factors driving/limiting upstream investment decisions and progress?
- What are the oil supply outlooks for the countries by project?

DOWNSTREAM FIRMS

- What are the demand challenges, patterns, and trends for oil and oil products?

NATIONAL OIL COMPANIES

- What are future oil and gas pricing trends?
- What developments will intensify or weaken demand?
- What are IOCs' incentives and drawbacks in operating in the country?

ALTERNATIVE / RENEWABLE ENERGY ORGANISATIONS

- What are the challenges to renewable energy targets?
- What is the progress of major renewable energy projects?
- Are there opportunities for more entrants?

THE DELIVERABLES

8 MONTHLIES

- Oil Price Scorecard
- Headline Developments
- Spotlight this Month
- Scenarios to Watch
- Projects in the News
- Macro Dashboard for Oil Exporters/Importers
- Outlook for the year

4 QUARTERLIES

- MENA Map as per Political Grouping
- Map of New Licensing Rounds
- Political & Regional Security Issues
- Oil & Gas Prices Outlook
- Global Barriers to Oil & Gas Production
- Deep Dive into OPEC & NOPEC
- MENA Energy Investments
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- MENA Economic Outlook
- Probability Scorecard for Bearish & Bullish Oil Supply/Demand
- Investor Implication Scenarios (Under 3 Oil Price Dynamics)

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OPERATIONAL COST REDUCTION

IMPROVING OPERATIONS/PRODUCTIVITY

MAXIMISING REVENUE

INCREASING SUPPLY NETWORK AGILITY

DEBOTTLENECKING SHORTCOMINGS

OPEC WATCH

AVERAGE CRUDE PRODUCTION FOR DECEMBER 2019

29.44 Mbpd

- 110 kbpd

From November 2019

Non-OPEC Oil Supply*

70.84 Mbpd

+ 110 kbpd

from Nov. '19

*including OPEC NGLs

Global Crude Output

100.3 Mbpd

- 0.7 Mbpd

from Nov. '19

OPEC+ COMPLIANCE

- Overall OPEC compliance was at 151% for December, with the largest cuts coming from Saudi Arabia's overcompensation (262%) and Kuwait (116%) among key producing countries, with Saudi Arabia reducing output by 110 kbpd in December.
- Russian compliance increased to 76% in December. Several countries, including OPEC kingpin Saudi Arabia, have complained about Russia's failure to comply with the deal in full. Production increased to 11.47 Mbpd in December, up 290 kbpd from its pledged 11.18 Mbpd.
- Despite the 76 kbpd decline in output in December, Iraq remains OPEC's top non-complier, while Nigeria curved its output by 24 kbpd due to reduced exports of Bonga crude. On and off protests in Abuja, and rising output from the 200 kbpd Egina offshore oilfield continue to affect Nigeria's compliance.
- The UAE's compliance increased in December as it cut its production by 46 kpbd.

NEXT OPEC MEETING: March 2020

178th (Extraordinary) Meeting of the OPEC Conference in Vienna, Austria

LATEST ORGANISATIONAL CHANGES

- At the 177th Ordinary OPEC meeting in December, OPEC+ members decided for an additional voluntary output cut of 500 kbpd bringing the total cut to 1.7 Mbpd.
- The agreement is slated to stay in force till March 2020, and a decision on its extension will be discussed at the 178th Extraordinary OPEC meeting in March.
- On September 12, the OPEC+ monitoring committee convened in Abu Dhabi to ask over-producing members to show better commitment to the OPEC+ pact. Iraq and Nigeria, notorious for undercompliance, have agreed to trim oil output in line with their targets in the coming months.

OPEC PRODUCTION

- Libya's El Feel oil field, operated by Eni SpA and Libyan NOC, was once again interrupted due to "an unlawful valve closure", only to restart again late December. Being exempt from the voluntary output cuts, Libya aims to boost production to 1.5 Mbpd in 2020 from its current 1.25 Mbpd, which is questionable given the political instability and repeated disturbances at oil fields.
- Saudi production fell by 45 kbpd at 9.85 Mbpd in November, even though the Kingdom assured markets that its capacity reached 11.3 Mbpd in the aftermath of the Abqaiq attacks, and should reach 12 Mbpd by November.
- Iran's output has been further affected by US sanctions and dropped another 15 kbpd to average just 2.09 Mbpd in December, below Q3's 2.2 Mbpd. Overall, the country has lost 1.65 Mbpd in production from its 2018 high of 3.818 Mbpd.
- Political instability, power cuts, US sanctions and the threat of civil disturbances pushed Venezuela to secretly export 10.86 Mbbl in just the first 11 days of November, which is more than double the volume in the same period of October.
- Kuwait, facing a budget deficit of $30.25bn due to low oil prices and output cuts, raised its output by 7 kbpd in December. Oil and gas revenues are expected to decrease to $42.30bn in 2020.

KEY MENA ENERGY SCORECARD

JANUARY 2020

QATAR DEVELOPMENTS

Qatar Petroleum (QP) announced the start-up of the $4.4bn Egyptian Refining Company in Mostorod, in which QP owns 38.1%; units are expected to reach full production at the end of Q1 2020; QP signed a 10-year agreement to supply 800,000 metric t/y of LPG to China's Wanuha Chemical Group starting January 2020; It also signed a 5-year agreement to supply "900,000 metric tons of naphtha and plant condensate per day" to Shell commencing April 2020; The In-Country Value Policy of the Energy Sector was implemented to grant suppliers and contractors commercial advantage; Qatar entered a 15-year long term agreement to supply Kuwait with 3 Mtpa of LNG delivered to Kuwait's Al Zour Port's receiving terminal starting 2022.

FEDERAL IRAQ DEVELOPMENTS

Following the assassination of the Iranian Commander Qassem Soleimani by a US airstrike, The US embassy urged an immediate departure of all US citizens in Iraq, while American firm Chevron pulled all its US workers out of Iraq as a security measure, which should not affect oil production, operations or exports according to an Iraqi official; Brent prices jumped briefly above $70 a barrel as President Trump threatened to impose sanctions on Iraq; From 3.5 Mbpd in November, Iraqi oil exports fell to 3.428 Mbpd in December. Exports from Basra terminal went down from November's 3.4 Mbpd to 3.32 Mbpd in December; Due to the US-Iran intensified tensions, these numbers are expected to fall even further in the near future.

MENA ENERGY PRICE REFORM

Abu Dhabi will offer industrial companies a reduction of 40% on electricity tariffs under its Ghadan-21 Programme to support the private sector in exchange for significant contributions to the economy; the scheme is dependent on companies improving energy efficient practices; the reduction follows the Federal Electricity & Water Authority's decision to slash tariffs by 40% for residents in Northern Emirates in January 2019; Meanwhile, Egypt's domestic fuel prices remained at a steady level (92-octane fuel at $0.547) under the IMF-backed pricing mechanism; Saudi Arabia has continued the Citizen's Account Program, a cash handout scheme for low-income Saudi citizens impacted by rising fuel prices, electricity tariffs, and VAT.

MENA NUCLEAR POWER

Saudi Arabia is assessing Umm Huwayd and Khor Duweihin for its first nuclear power plant near the UAE and Qatari borders and has shortlisted Rosatom and KEPCO, among others; Tendering is set for 2020, but will face delays due to technical plans, and ongoing negotiations with the US, who insists that it shall provide Saudi Arabia with nuclear technology only if the latter agrees to "intrusive snap inspections" by the IAEA; The UAE's Barakah plant is now closer to completion, with Unit 3 connected to the country's electricity grid on August 05; Overall completion of the plant's 4 units is now over 93% (Unit 1: 100%, Unit 2: 95%, Unit 3: 91%, Unit 4: 82%), unit 1 to operate in Q1 2020; Australian Worley will advise Egypt's Nuclear Power Plants Authority on the construction of its 1st Nuclear plant at El Dabaa (contract's value not disclosed).

No Change ⇔ | Very Positive
Deterioration in the last month ⇩ | Positive
Improvement in the last month ⇧ | Negative
Very Negative

MENA ENERGY INFRASTRUCTURE SECURITY

Libyan NOC warns that a 300 kbpd decline in oil output due to the suspension of operations at the Zawiya oil port and Zawiya refinery might take place if Haftar attacks continue near the facilities; Evacuation of the refinery might force the country into fuel imports which will drag the economy down even further; In Nigeria, theft and sabotage at the Trans Forcados pipeline and Nembe Creek truck line caused frequent shutdowns, and with the ageing dilapidated infrastructure, production disruptions are expected to increase by 400 kbpd; Concerns over the security of energy infrastructure are growing prior to the US-Iran conflict.

IRAN DEVELOPMENTS

Iran's December exports averaged just under 500 kbpd, all classified as unidentified by most tanker tracking services; Apart from Syria, most of these volumes are likely making their way to Chinese shores; Iran awarded Petropars the rights to develop the 21.7 Tcf Farzad-B field, having given up on negotiations with an Indian consortium including ONGC; President Rouhani announced the discovery of a new oilfield in the southwest of Iran with 53bn barrels of crude in place; Iran also announced the discovery of the Eram gas field, with 19 trillion cubic feet of gas (13 Tcf recoverable) and 385 million bbl of condensate, in the southern Fars province; The escalation of geopolitical tensions might result in energy disruptions (oil could reach $80 a barrel).

ABU DHABI DEVELOPMENTS

ADNOC signed a framework agreement with Indian refining and chemicals conglomerate, Reliance Industries Limited (RIL), to develop an ethylene dichloride (EDC) facility in Ruwais; The agreement includes a feasibility study of the facility next to the already established integrated refining and petrochemical site in Ruwais; ADNOC agreed to supply ethylene and provide access to its infrastructure at Ruwais, while RIL will provide operational ability and entry to the enormous Indian vinyls market; ADNOC and Aramco will build a joint-venture 1.2 Mb/d oil and petrochemical refinery in Raigad, India; The originally estimated cost of $45bn is expected to rise to $70bn after it was reviewed by a joint economic council between the UAE and Saudi Arabia; Aramco and ADNOC will take 25% each, while the other partners at Raigad will share the remaining 50%.

KUWAIT DEVELOPMENTS

Kuwait's KNPC is moving ahead with a major project to boost production from its two refineries; based on data from KNPC, the two refineries reached a growth of 692 kb/d for FY2018-19, with jet kerosene amounting to 7.2% increase in output and record annual gains; Due to the uncertain political environment of the sector, KOC's efforts to maximize production capacity have been hampered, leading it to downsize its 2020 target to 3.10mn b/d from the previous target of 3.65mn b/d. Despite the significant decline in output from 1.68mn b/d to 1.52mn b/d at the giant Burgan field, output from its Minagish reservoir increased to 30 kb/d, its highest level since 1983; On December 24, Saudi Arabia and Kuwait's dispute over the Neutral Zone has reached an end, which will put back 500 kbpd on the market by the end of 2020.

No Change ⇔ Very Positive
Positive
Deterioration in the last month ⇩ Negative
Improvement in the last month ⇧ Very Negative

MENA RENEWABLE ENERGY

Saudi ACWA Power won the bid for the two 125MW solar plants with Ethiopian Electric Power under a 20-year agreement; In Saudi Arabia, Al Rushaid Group in a joint venture with French Optimum Tracker will create a Saudi-registered company focused on the provision of design and engineering services, as well as the manufacturing and mounting of solar PV panels, with a $53.3mn initial investment; In Morocco, verification at the Ouarzazate Solar Power Station was completed and the first power was generated according to the Swedish developer Azelio; A partnership between Azelio and Oman's Al Mashani on 25 MW of storage projects was announced December 27. The initial project is a 50-kW system with 13hrs of storage capacity to be completed in 2021, followed by 5 MW installations in 2022, 7 MW in 2023, and 13 MW in 2024; The consortium created by TBEA Xinjiang New Energy Co Ltd and Dubai's AMEA Power will build a 100 MW solar plant in Tunisia, which will be sold under a 20-year power purchase agreement (PPA) with the Societe Tunisienne de l'electricite et du Gaz; UAE AMEA signed a PPA with the Egyptian Electricity Transmission Company to build, own and operate a 700 MW project (200 MW solar park and 500 MW wind farm). In a tender intended to secure 150 MW, the Algerian Electricity and Gas Regulation Commission selected only a 50 MW project at a final price of $0.069/KWh, the largest share of which is owned by Condor.

MEDITERRANEAN GAS COMMERCIALISATION

Eni and its partners in Nigeria LNG (NLNG) have made FID to expand the capacity of the 22.5 Mtpa LNG plant to 30 Mtpa, expecting start-up in 2024; Egypt awarded Chevron, Shell and Abu Dhabi's Mubadala the rights to search for oil and gas in the Red Sea, covering 10,000 km^2, with a $326 minimum investment; The agreement is to build the 1,300 mile EastMed undersea pipeline to carry natural gas from the south-eastern Mediterranean's offshore fields to Europe was signed by Israel, Greece and Cyprus on January 2. The agreement represents an opportunity for the EU to reduce its gas dependency on Russia, as it would supply an initial 10 bn cubic meters (4%) of the Union's annual gas imports but it faces major cost hurdles and political opposition from Turkey. ExxonMobil acquired 1.7 million acres for offshore exploration in Egypt, which includes acreage in the 1.2 million acres North Marakia Offshore block in the Mediterranean. With the agreement of Libya's government, Total and NOC signed an agreement to implement the participation of Total in the Waha concessions as long as Total provides the necessary technology and expertise required and develops the 180 kbpd North Gialo and NC 98 fields; Wintershall and Libyan NOC signed 2 exploration and production sharing agreements (EPSA) in the Sirte Basin, for area 91 and 107. The Libyan government ratified both EPSAs for immediate effect.

No Change ⇔ Very Positive
Deterioration in the last month ⇩ Positive
Negative
Improvement in the last month ⇧ Very Negative

ABOUT US

Qamar Energy provides leading-edge strategy, commercial and economic consulting across the energy spectrum to governments, international oil companies (IOCs), national oil companies (NOCs), investors, and oil traders.

ROBIN MILLS • CEO

Robin is an expert on Middle East energy strategy and economics, described by Foreign Policy as "one of the energy world's great minds". He is the author of two books, *The Myth of the Oil Crisis* and *Capturing Carbon*, columnist on energy and environmental issues for Bloomberg and The National, and comments widely on energy issues in the media, including the Financial Times, Foreign Policy, Atlantic, CNN, BBC, Sky News and others. He is a Senior Fellow with the Iraq Energy Institute, and a non-resident fellow at the Columbia Centre for Global Energy Policy. He holds a first-class degree in Geology from the University of Cambridge, and speaks five languages including Farsi and Arabic.

UPCOMING APPEARANCES & TALKS

World Energy Policy Summit in New Delhi; 6-7th February 2020

ME-TECH in Abu Dhabi; 18-20th February

Iraq Club at the Capital Club in DIFC, Dubai; 23rd February

QAMAR NEWSLETTER ARCHIVES

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