ARABIA MONITOR ENERGY

Q3 2021

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ARABIA MONITOR ENERGY Q3 2021 HIGHLIGHTS

- A coordinated SPR release between world consumers has not made much of an impact to **oil prices** as has the new Omicron variant of the CoVid-19 disease. Still, the timing of the US' announcement is odd, as cases have picked up once again in Europe, with Austria going into full lockdown, and other countries reimposing restrictions on mobility and gatherings.

- A new gas pipeline traversing political fault lines could provide an energy lifeline to **Gaza**. Talks to this end have moved from the abstract to the concrete this year, which had become a distant prospect previously because of the Israeli-Palestinian conflict that suspended peace talks between both sides in 2014.

- Gas is being regarded by MENA producers as a destination fuel for a low-carbon future. For example, **ADNOC**'s expansion at Dalma and plans for new LNG capacity combine with emerging hydrogen initiatives, **Saudi Arabia** will target Jafurah unconventional gas at oil replacement and hydrogen, while **Qatari** LNG expansions will incorporate crucial emission-mitigation measures like renewables and CCUS.

- With Joint Comprehensive Plan of Action (JCPOA) negotiations set to begin on 29 November, all eyes are on Vienna as diplomatic teams return to the Austrian capital. Discussions with **Iran** will be neither quick nor easy. We believe that a resolution will be reached no sooner than H2 2022.

- Electoral confidence is waning ahead of **Libya**'s upcoming presidential election. With no clear lead candidate, the country's political transition looks set for a bumpy ride. This spells trouble for the country's oil sector, which is targeting a 1.45 Mb/d production capacity by end-2021, and 2.5 Mb/d in the medium-term.

- **Kuwait**'s economy is expected to post a tepid 0.9% growth this year. The government wants to enact a debt law through parliament which would allow bonds to be issued in order to boost state finances and tackle perennial budget deficits. A further increase in the price of oil could delay policy reform significantly further.

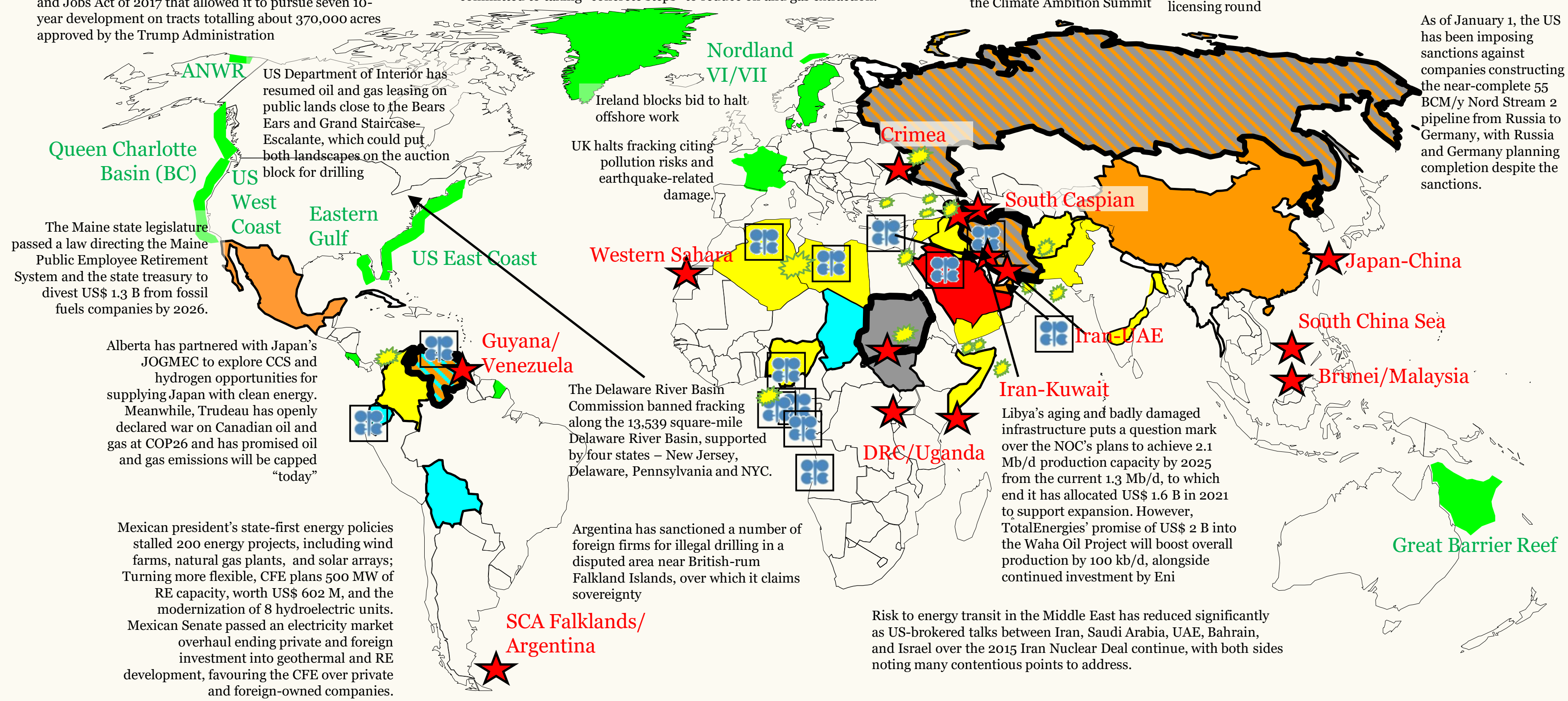
OIL & GAS PROJECTS CONTINUE TO FACE BARRIERS WORLDWIDE

Led by Denmark and Costa Rica, an international coalition of countries has committed to ending oil and gas extraction launched at COP26. These include, aside from Costa Rica and Denmark, France, Greenland, Ireland, Sweden, Wales, and Quebec. California and New Zealand have signed on as associate members, committed to taking "concrete steps" to reduce oil and gas extraction.

UK ended direct government support for fossil fuel energy projects overseas, in line with the Climate Ambition Summit

Denmark will end all new oil and gas exploration in the North Sea, in line with its plan to stop fossil fuel extraction by 2050, canceling its latest licensing round

Alaska Industrial Development and Export Authority is suing the Biden Administration for violating the Tax Cuts and Jobs Act of 2017 that allowed it to pursue seven 10-year development on tracts totalling about 370,000 acres approved by the Trump Administration



US Department of Interior has resumed oil and gas leasing on public lands close to the Bears Ears and Grand Staircase-Escalante, which could put both landscapes on the auction block for drilling

Ireland blocks bid to halt offshore work

UK halts fracking citing pollution risks and earthquake-related damage.

As of January 1, the US has been imposing sanctions against companies constructing the near-complete 55 BCM/y Nord Stream 2 pipeline from Russia to Germany, with Russia and Germany planning completion despite the sanctions.

The Maine state legislature passed a law directing the Maine Public Employee Retirement System and the state treasury to divest US$ 1.3 B from fossil fuels companies by 2026.

Alberta has partnered with Japan's JOGMEC to explore CCS and hydrogen opportunities for supplying Japan with clean energy. Meanwhile, Trudeau has openly declared war on Canadian oil and gas at COP26 and has promised oil and gas emissions will be capped "today"

The Delaware River Basin Commission banned fracking along the 13,539 square-mile Delaware River Basin, supported by four states – New Jersey, Delaware, Pennsylvania and NYC.

Libya's aging and badly damaged infrastructure puts a question mark over the NOC's plans to achieve 2.1 Mb/d production capacity by 2025 from the current 1.3 Mb/d, to which end it has allocated US$ 1.6 B in 2021 to support expansion. However, TotalEnergies' promise of US$ 2 B into the Waha Oil Project will boost overall production by 100 kb/d, alongside continued investment by Eni

Mexican president's state-first energy policies stalled 200 energy projects, including wind farms, natural gas plants, and solar arrays; Turning more flexible, CFE plans 500 MW of RE capacity, worth US$ 602 M, and the modernization of 8 hydroelectric units. Mexican Senate passed an electricity market overhaul ending private and foreign investment into geothermal and RE development, favouring the CFE over private and foreign-owned companies.

Argentina has sanctioned a number of foreign firms for illegal drilling in a disputed area near British-rum Falkland Islands, over which it claims sovereignty

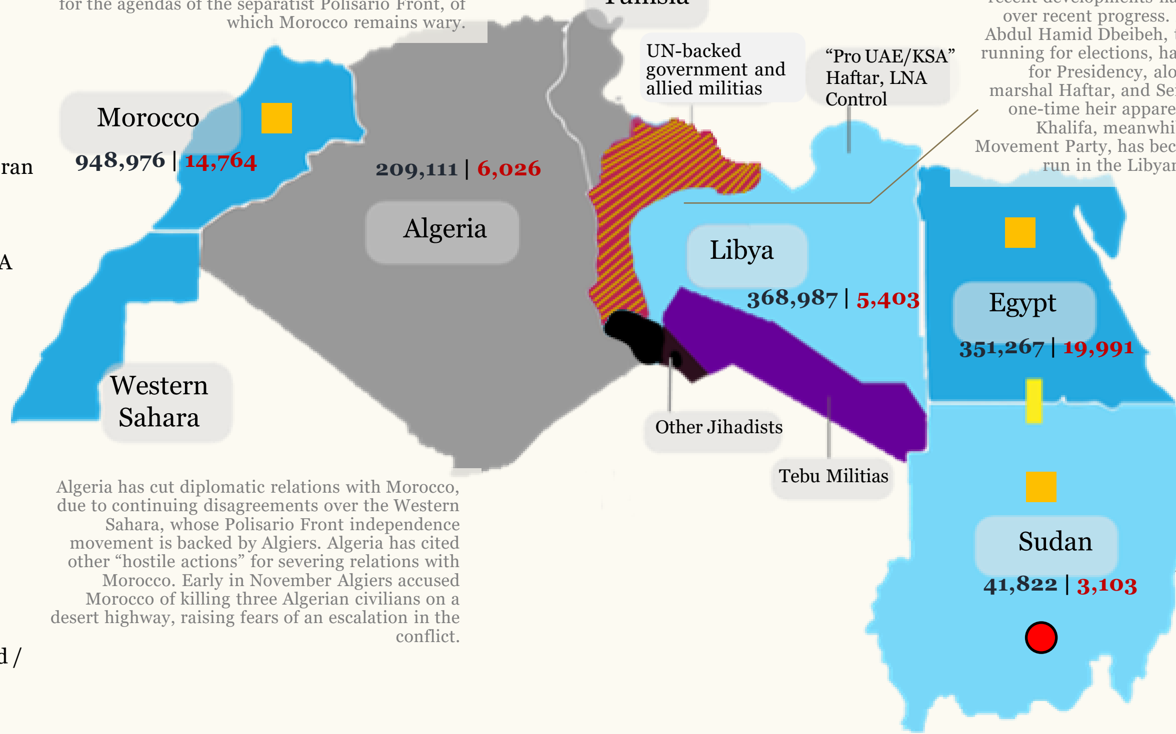
Risk to energy transit in the Middle East has reduced significantly as US-brokered talks between Iran, Saudi Arabia, UAE, Bahrain, and Israel over the 2015 Iran Nuclear Deal continue, with both sides noting many contentious points to address.

- No foreign involvement
- Limited foreign involvement
- Territorial disputes
- Weak legal/commercial exploration system
- Active OPEC member
- Closed for environmental reasons
- Limited entry due to sanctions
- Local threat to energy infrastructure
- Nationalisation/expropriation issues
- Threat to energy transit

POLITICAL MAP OF NORTH AFRICA TODAY

- Close alliance with KSA
- Close alliance with Iran
- Major Sunni Powers, no significant ties with KSA/Iran
- Moderate alliance with KSA
- Muslim Brotherhood ties, other Islamists
- Broadly factionalised, contested
- Leaning towards KSA, but contested
- Ties with Israel normalised / existing ties with Israel

Relations between Morocco and Saudi Arabia have regained momentum since early this year, with agreement over areas of common interest. A key area is Iran's ambitions in North Africa due to Tehran's support for the agendas of the separatist Polisario Front, of which Morocco remains wary.



International powers continue pressuring Libya to move ahead with its national elections scheduled for December 24, 2021, although recent developments have put a question mark over recent progress. Interim Prime Minister Abdul Hamid Dbeibeh, technically barred from running for elections, has put his name forward for Presidency, alongside the likes of field marshal Haftar, and Seif Al-Islam, the son and one-time heir apparent of Qaddafi. Leila bin Khalifa, meanwhile, head of the National Movement Party, has become the first woman to run in the Libyan presidential elections.

Algeria has cut diplomatic relations with Morocco, due to continuing disagreements over the Western Sahara, whose Polisario Front independence movement is backed by Algiers. Algeria has cited other "hostile actions" for severing relations with Morocco. Early in November Algiers accused Morocco of killing three Algerian civilians on a desert highway, raising fears of an escalation in the conflict.

Sudan's progress on normalising ties with Israel have been pushed to the backburner in the wake of the October 2021 coup d'état, which saw Prime Minister Abdalla Hamdok ousted, only to be re-instated once again following a new deal with the military in November

Protests continue in Sudan even as Prime Minister Abdalla Hamdok was re-instated as Head of State in a deal with the military which has promised to release all political detainees after weeks of deadly unrest triggered by the October 2021 coup. Sudanese continue taking to the streets, with pro-democracy activists denouncing the deal with the military, putting a question mark over the country's fragile transition to democracy.

Previously strained relations between Egypt and Sudan appear to be improving after the announcement of the first Egypt-Sudan railway connection to support bilateral trade. After Ethiopia's GERD reservoir's filling, without obtaining a legally binding agreement, Egypt and Sudan urged the UN Security Council to undertake preventive diplomacy to resolve the conflict calling it "an existential threat", but Ethiopia insisted that the matter can be resolved by the African Union.

Note: International borders and areas of control shown on the map are all indicative.

Reported Covid-19 Cases | Deaths

POLITICAL MAP OF THE MIDDLE EAST TODAY

- Close alliance with KSA
- Close alliance with Iran
- Major Sunni Powers, no significant ties with KSA/Iran
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UAE and Turkey have signed several investment accords that will be supported by a US$ 10 B fund in a rapprochement of relations for the first time in a decade.

Mainly factionalised between pro-KSA Future Movement and Iran-backed Hezbollah. Widespread anti-government protests compelled PM Hariri to resign, but protestors continue demanding a change to the entire political system, with some also demanding an end to Iranian influence. Social distancing measures because of the coronavirus have amplified the country's economic and liquidity crisis.

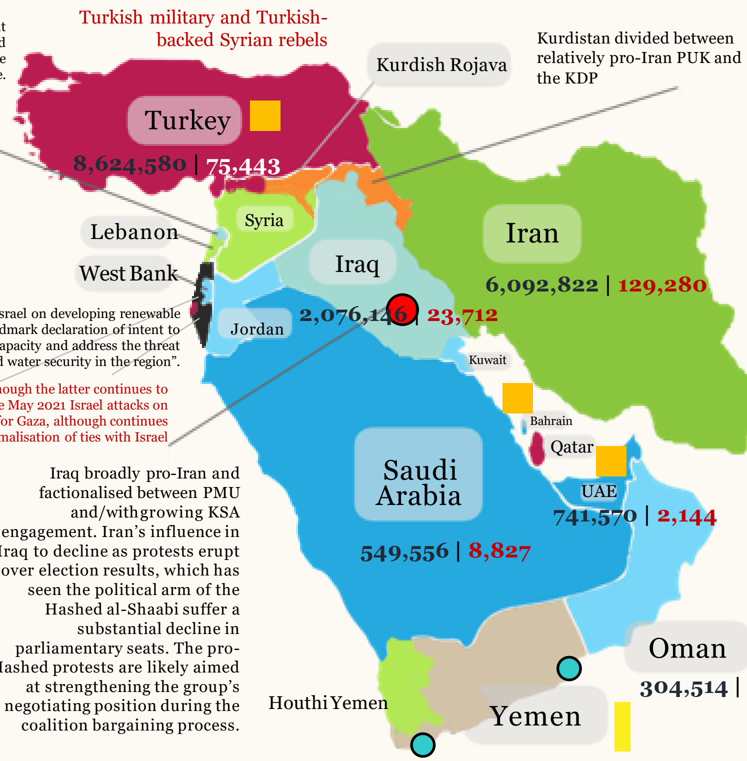
Jordan is planning to collaborate with the UAE and Israel on developing renewable power projects. The 3 countries have signed "a landmark declaration of intent to build renewable electricity and water desalination capacity and address the threat posed by climate change on energy and water security in the region".

Gaza remains aligned with Saudi Arabia although the latter continues to maintain a hard stance against Hamas. Post the May 2021 Israel attacks on Palestine, Saudi Arabia has reiterated its support for Gaza, although continues working behind the scenes on potential normalisation of ties with Israel

After 11 days of fighting in May, leaving 260 dead, mostly Palestinians including women and children, a ceasefire deal was reached between Israel and Hamas, both claiming victory in the latest conflict

Iraq broadly pro-Iran and factionalised between PMU and/withgrowing KSA engagement. Iran's influence in Iraq to decline as protests erupt over election results, which has seen the political arm of the Hashed al-Shaabi suffer a substantial decline in parliamentary seats. The pro-Hashed protests are likely aimed at strengthening the group's negotiating position during the coalition bargaining process.

Kurdistan divided between relatively pro-Iran PUK and the KDP



Hardliner Ebrahim Raisi continues maintaining a hard-line position, negotiating on nuclear/sanctions but rejecting the possibility to meet US President Biden, or to negotiate Tehran's ballistic missile program and support of regional militias. However, top Iranian nuclear negotiator Ali Bagheri Kani, met with senior Emirati officials in a rare visit to the UAE as both countries develop better bilateral relations.

Kuwait's Emir Sheikh Nawaf al-Ahmed al-Sabah has accepted the government's resignation and has appointed former Foreign and Deputy Prime Minister Sheikh Sabah Al Khaled Al Sabah as the new PM in charge of forming a new cabinet.

Diplomatic relations between Qatar and Saudi Arabia have been restored, with the Kingdom opening its borders to end the dispute of more than 3 years. The UAE, Bahrain and Egypt followed suit, with all the six GCC member states meeting at al-Ula summit to sign an agreement affirming the restored ties.

Qatar held its first general elections on October 02, 2021, with a 63.5% voter turnout. No women were elected to the 30 openings for the Shura Council. The remaining 15 will be direct appointments by the Emir.

Oman's Sultan Haitham bin Tariq al-Said announced a constitutional shakeup that includes the appointment of the first ever crown prince along with new rules on how parliament will work.

Ongoing protests against the election results have turned violent as police fire tear gas and live ammunition to deter PMU supporters from advancing towards Baghdad's fortified Green Zone, which houses government buildings and foreign embassies. At least one protestor, 27 civilians, and 98 members of the security forces have been injured so far.

Yemen's situation remains complicated; Aden and Mukalla are under control of the UAE-backed STC, as is Socotra island

Reported Covid-19 Cases | Deaths

Note: International borders and areas of control shown on the map are all indicative.

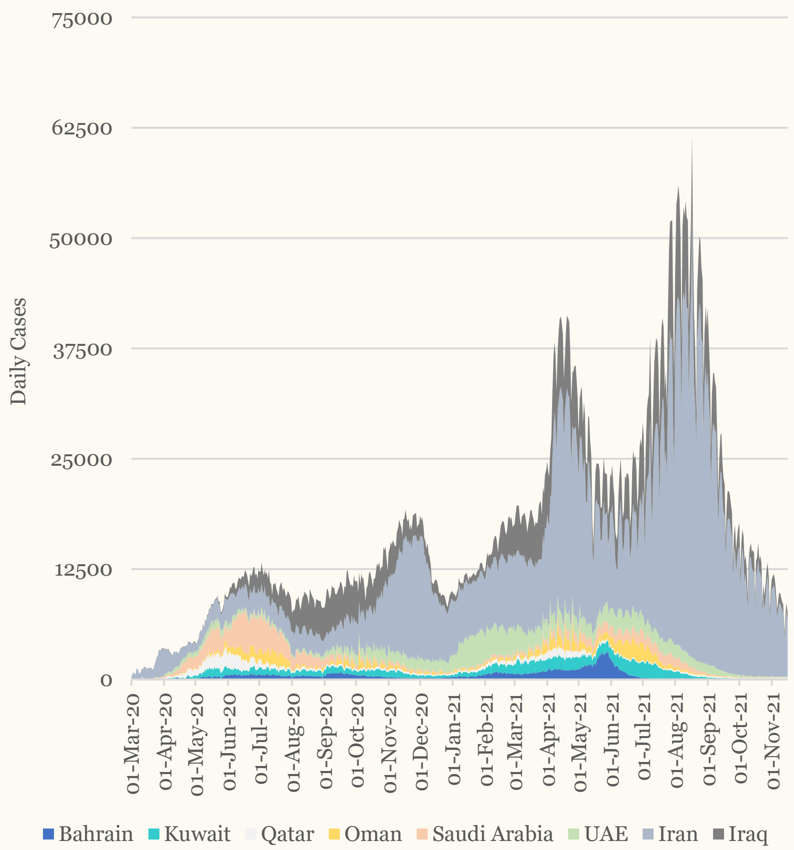
GEOPOLITICAL OUTLOOK

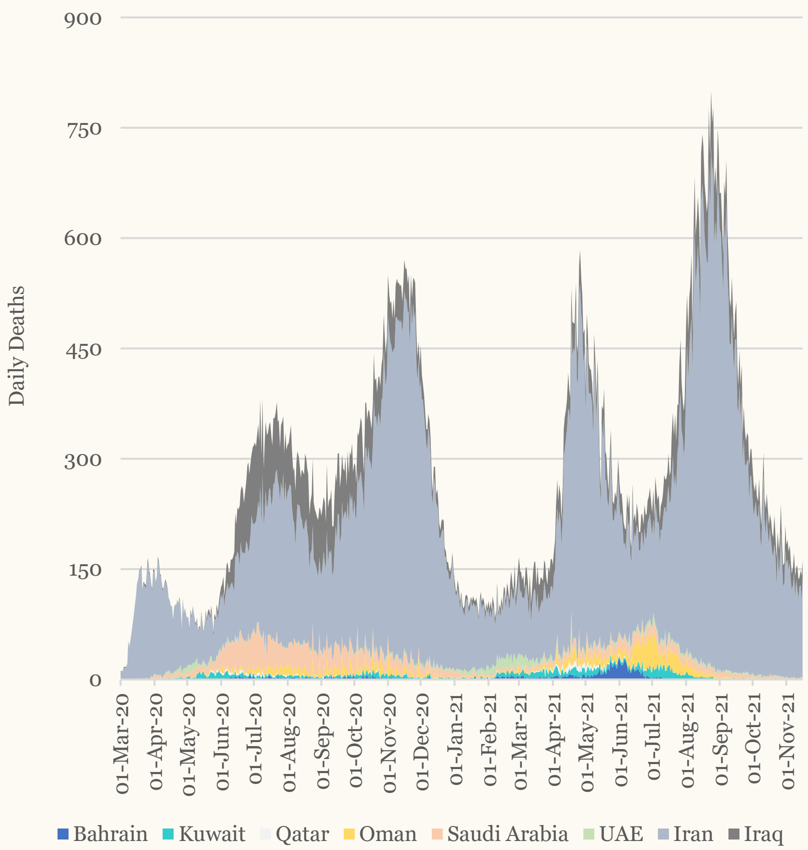
Country Politics / Geopolitics	
Iran	With Joint Comprehensive Plan of Action (JCPOA) negotiations set to begin on 29 November, all eyes are on Vienna as diplomatic teams return to the Austrian capital. Discussions will be neither quick nor easy. We believe that a resolution will be reached no sooner than H2 2022. Iran hurriedly agreed for negotiators to return to Vienna ahead of an International Atomic Energy Agency (IAEA) board of governors meeting next week. It is likely that Iran wants to appease China and Russia (both are IAEA member states), both of which have long called for Iran to return to the negotiating table ahead of the meeting. Iran, Russia and China want to present a unified front ahead of nuclear negotiations. Indeed, Iran's announcement follows a statement issued by China during which it commented on the broad consensus between the three nations. Iran may seek a resolution, but there are several sticking points which will make reaching a compromise difficult. Conditions which Iran deems to be non-negotiable but are impossible to grant in their literal form include the removal of both Trump- and Obama-era sanctions, as well as a guarantee by the US that any new deal will be irreversible.
Syria	After more than a decade of conflict, there is little doubt that Bashar al Assad has emerged from the Syrian Civil War as the undisputed victor. Lured by the potential for increased business activity, neighbouring governments are now gradually re-establishing diplomatic ties with Assad and his war-ravaged state. Jordan and the UAE are starting to engage diplomatically with Syria, suggesting that trade levels are likely to increase. The UAE's foreign minister, Sheikh Abdullah bin Zayed, visited Syria's capital Damascus to meet with Assad earlier this month. Zayed is the most senior Emirati official to have visited Syria since the beginning of the conflict. The two men agreed to bolster trade ties, while Zayed also promised that the UAE will help Assad to overcome Syria's war-related challenges. An agreement was also signed between Syria's Ministry of Electricity and a consortium of Emirati companies to establish a photovoltaic power plant near Damascus with a 300 MW capacity. This deal is the first of its kind in over a decade.
Libya	Electoral confidence is waning ahead of Libya's upcoming presidential election. With no clear victor in sight, the country's political transition looks set for a bumpy ride. Saif al Islam Gaddafi, the son of Libya's former president Muammar Gaddafi (in office 1969-2011), has recently submitted his candidature for the presidency. He registered to run in Sebha (Sebha district). This is no coincidence; Sebha has been an established pro-Gaddafi support base throughout the civil war. His registration clearly signals that he wishes to follow in his father's footsteps. Importantly, he has succeeded in gaining the trust of Gaddafi loyalists. The sitting prime minister, Abdul Hamid Dbeibeh, is the latest candidate to register for the presidency. Unofficial polling puts him as the favourite to secure the leadership. Gaddafi, Dbeibeh and Field Marshal Haftar of the 'Libyan National Army' in the east have all been declared ineligible to run, but Gaddafi and Dbeibeh have so far been reinstated on appeal.

ECONOMIC OUTLOOK

Country Economic Outlook – MENA Oil Exporters	
Saudi Arabia	Quarterly data recently released by the General Authority for Statistics (GaStat) suggests that the kingdom's economy has grown at its fastest rate since 2012. In Q3 2021, real GDP expanded by 6.8% YoY and 5.8% QoQ. Strong growth numbers stem from the highest oil prices in seven years and represent a 60% YoY increase. The rise in global demand for crude oil has compounded the gradual tapering of OPEC+ cuts, enabling the kingdom's Q3 oil GDP to grow by 9% YoY and 12.9% QoQ. Looking forward, we see no indication of a significant cooling in this momentum given the current global energy crunch. However, in what could be a signal of Saudi Arabia's shifting economic diversity, current growth figures have been catalysed by the non-oil economy. Last quarter, non-oil GDP expanded by 6.2% YoY and 1.6% QoQ. This suggests that the kingdom has experienced a 14-month run of non-oil private sector growth. We are therefore witnessing the kingdom's fastest non-oil sector growth since the end of 2017. This could be a sign that Saudi Arabia is becoming more resilient, and that it seeks to de-anchor itself from volatile crude oil prices. This is one of the main objectives of Saudi Vision 2030.
Kuwait	Kuwait's economy is expected to post a tepid 0.9% growth this year. The government wants to enact a debt law through parliament which would allow bonds to be issued in order to boost state finances and tackle perennial budget deficits. In the pandemic-ridden FY20/21, Kuwait posted a deficit of USD 35.5B (15.4% of GDP), the highest in its history. Until now, deficits have been financed by the General Reserve Fund (GRF) in order to relieve unsustainable fiscal strain. The GRF is expected to finance future generations of Kuwaitis. Acknowledging the severity of a depleting GRF, government agencies have so far managed to save 25% of the reduction target for their expenditures (around USD 7.6B) in the FY21/22 budget. In order to end a months-long standoff that has blocked desperately needed fiscal reforms, two major opposition-backed conditions have been satisfied. Firstly, the government resigned earlier this month for the second time in 2021. Additionally, the Emir pardoned and declared amnesty for exiled politicians. We assess this to be a turning point for Kuwait's long-term fiscal health, as opposition demands have now been satisfied and the debt law may now finally see the light of day.
UAE	Private sector activity in the UAE is on the rise. Last month, the second-largest Arab economy experienced its fastest expansion in private sector activity since June 2019. After being in (50+) growth territory for 11 consecutive months, the UAE's PMI hit 55.7 in October 2021, up from September's 53.3. This increase was driven by strong numbers in the output and new-orders sub-indices. The output sub-index rose sharply from 57.1 in September 2021 to 61.1 in October 2021, the highest figure since July 2019. We assess that this buoyant performance comes on the back of higher consumption spending and tourism. The UAE's considerable increase in demand momentum is partly underscored by the influx of tourists visiting Expo 2020. The event is expected to draw more than 20M visitors during a six-month period. Although early statistics suggest that initial visitor numbers are lower than expected, we anticipate these figures to rise in the coming months amid the gradual return to normality in international travel. We therefore believe that the private sector will remain steadfast, even if we do not witness a further uptick in momentum.

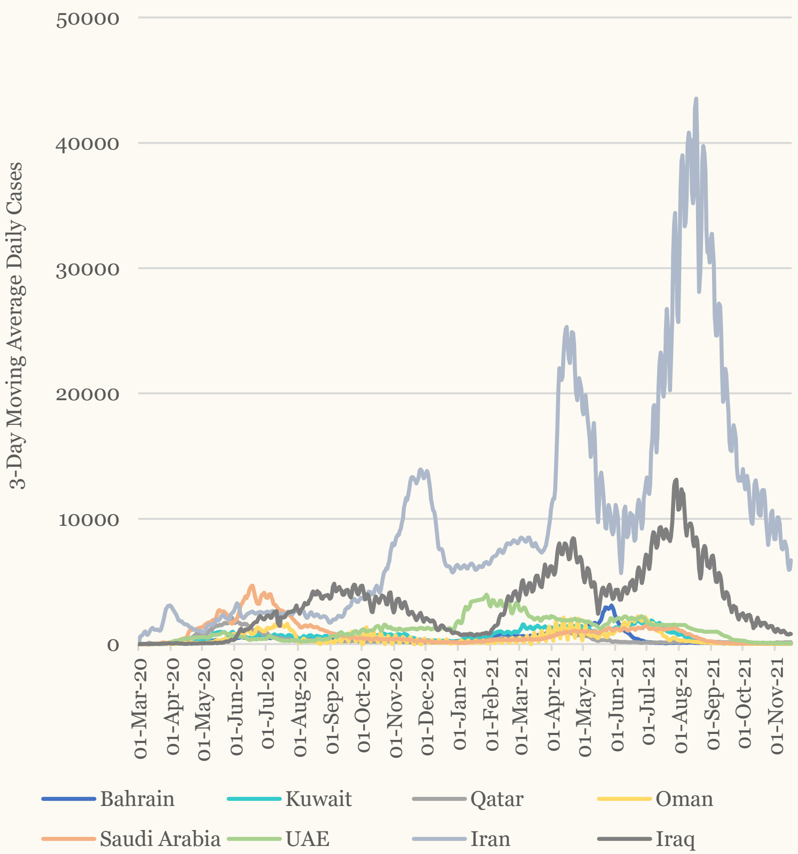
COVID-19 WATCH: MENA DAILY REPORTED CASES & DEATHS

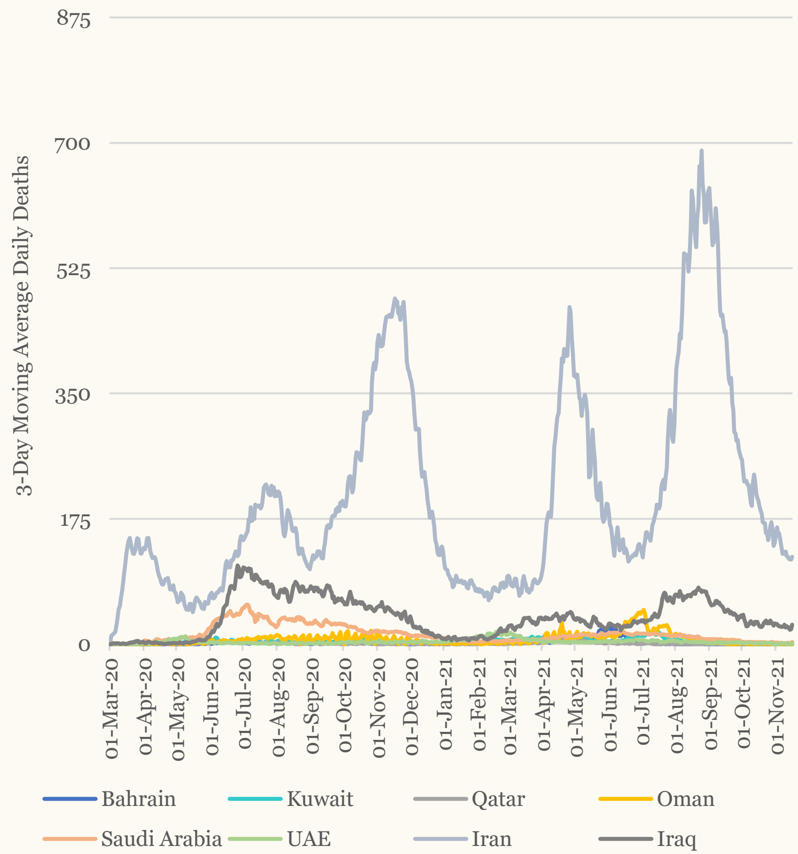




Source: Worldometer

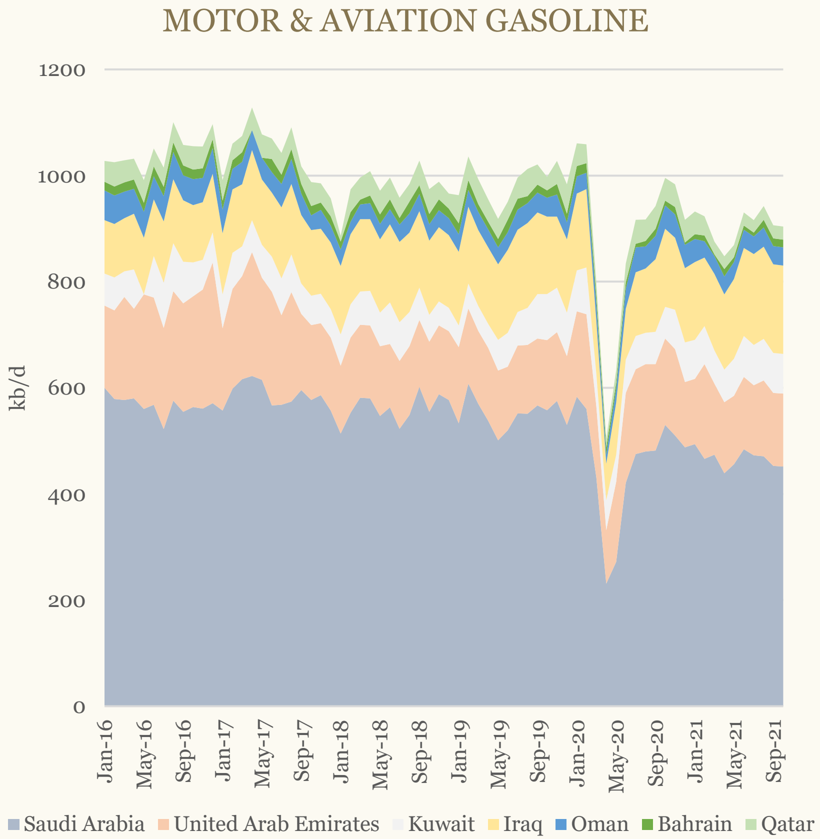
COVID-19 WATCH: MENA DAILY REPORTED CASES & DEATHS 3-DAY MOVING AVERAGE

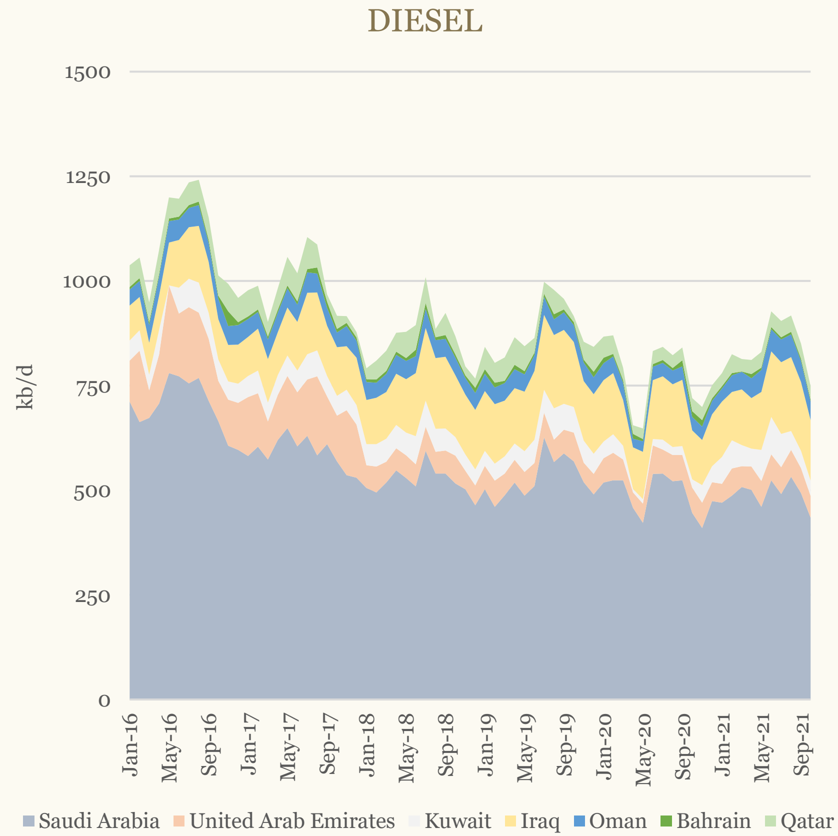




Source: Qamar Energy Research

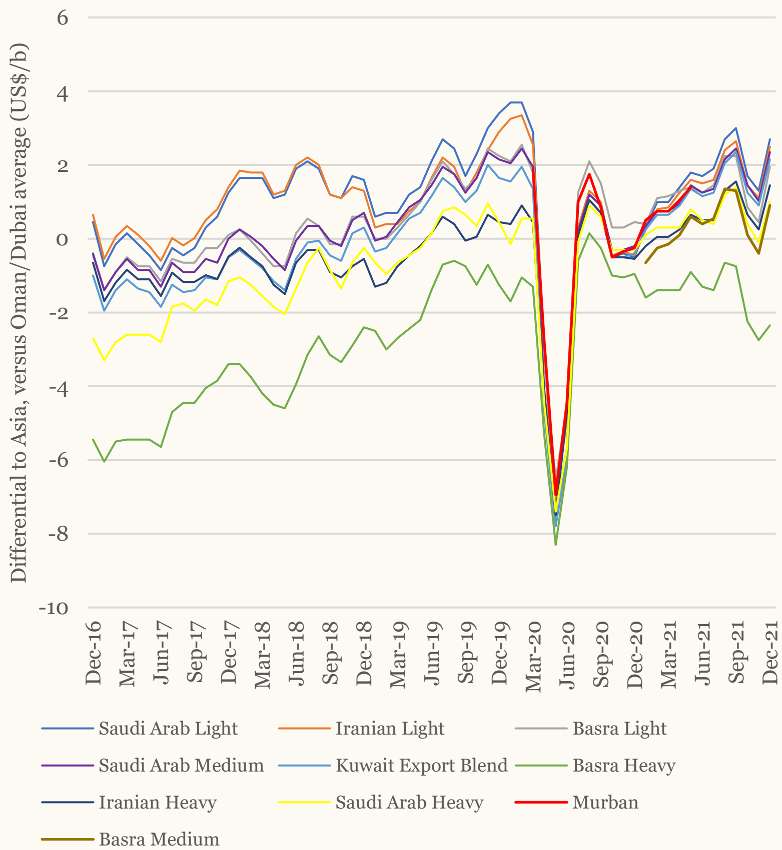
MENA TRANSPORTATION FUELS DEMAND RECOVERING, BUT STILL BELOW PRE-2020 LEVELS

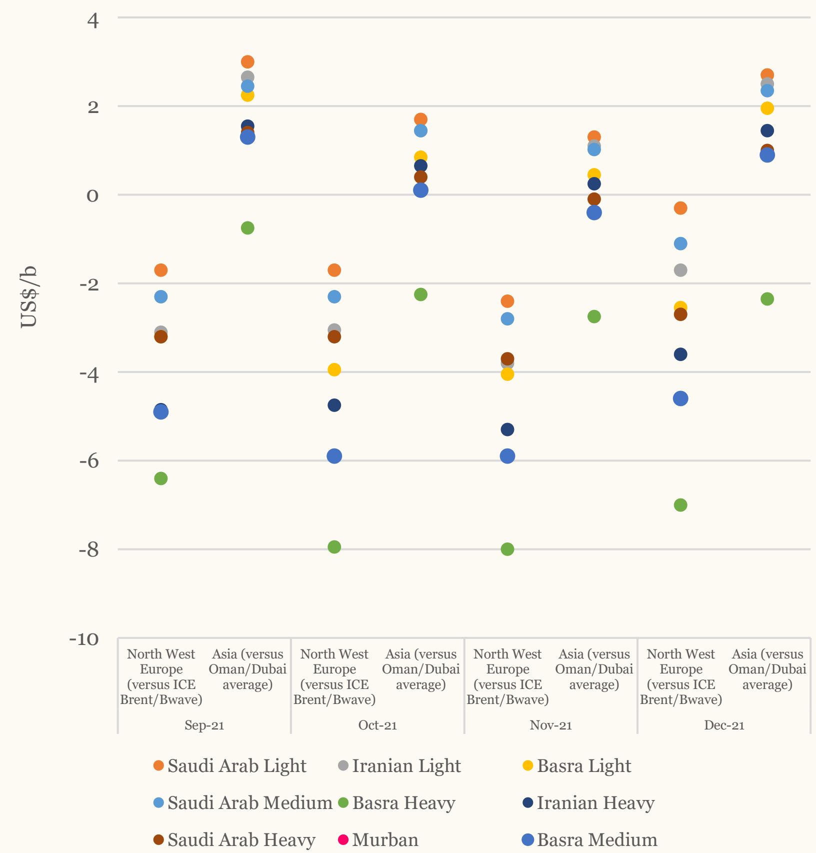




Source: JODI; Qamar Energy Research

MENA DECEMBER OSPs HIGHLIGHT STRONG ASIAN WINTER DEMAND, WIDENING BRENT/DUBAI SPREAD

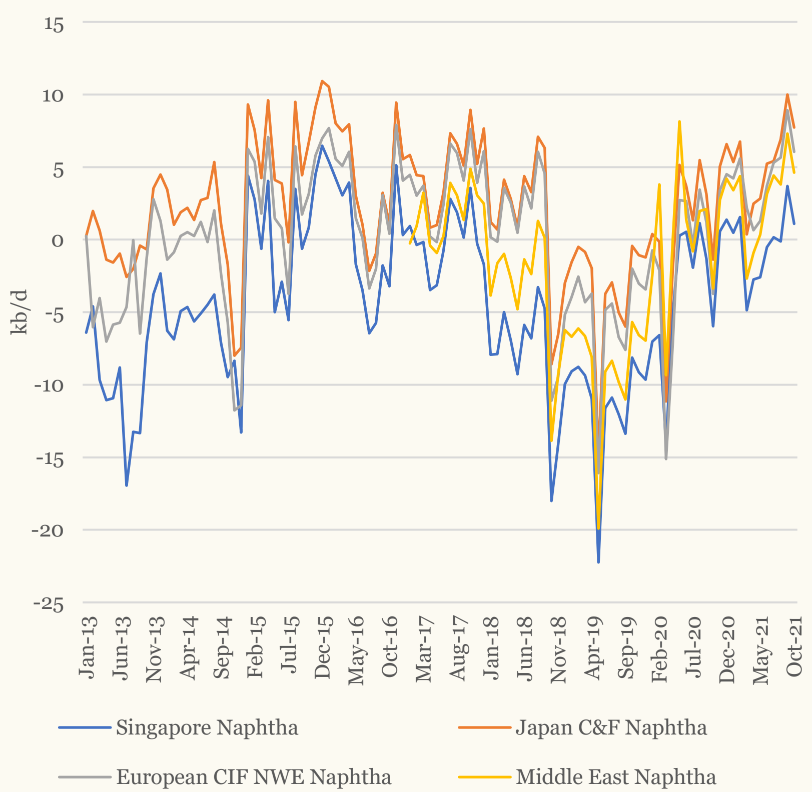




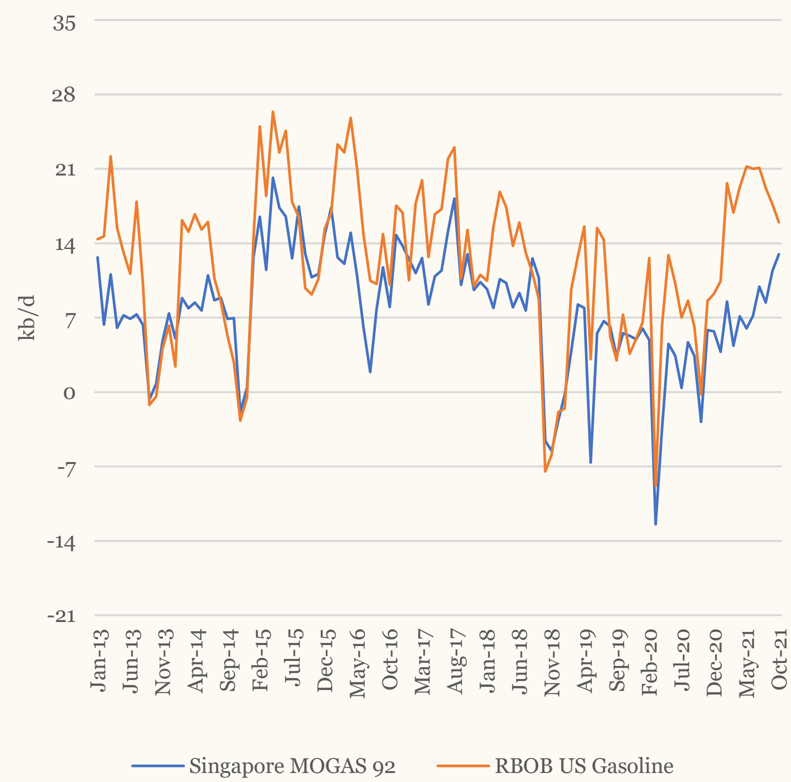
Source: MEES; Qamar Energy Research

LIGHT DISTILLATE MARGINS WEAKEN SLIGHTLY BUT STILL NEAR RECENT HIGHS DUE TO PETCHEM DEMAND

NAPHTHA CRACK SPREAD TO BRENT

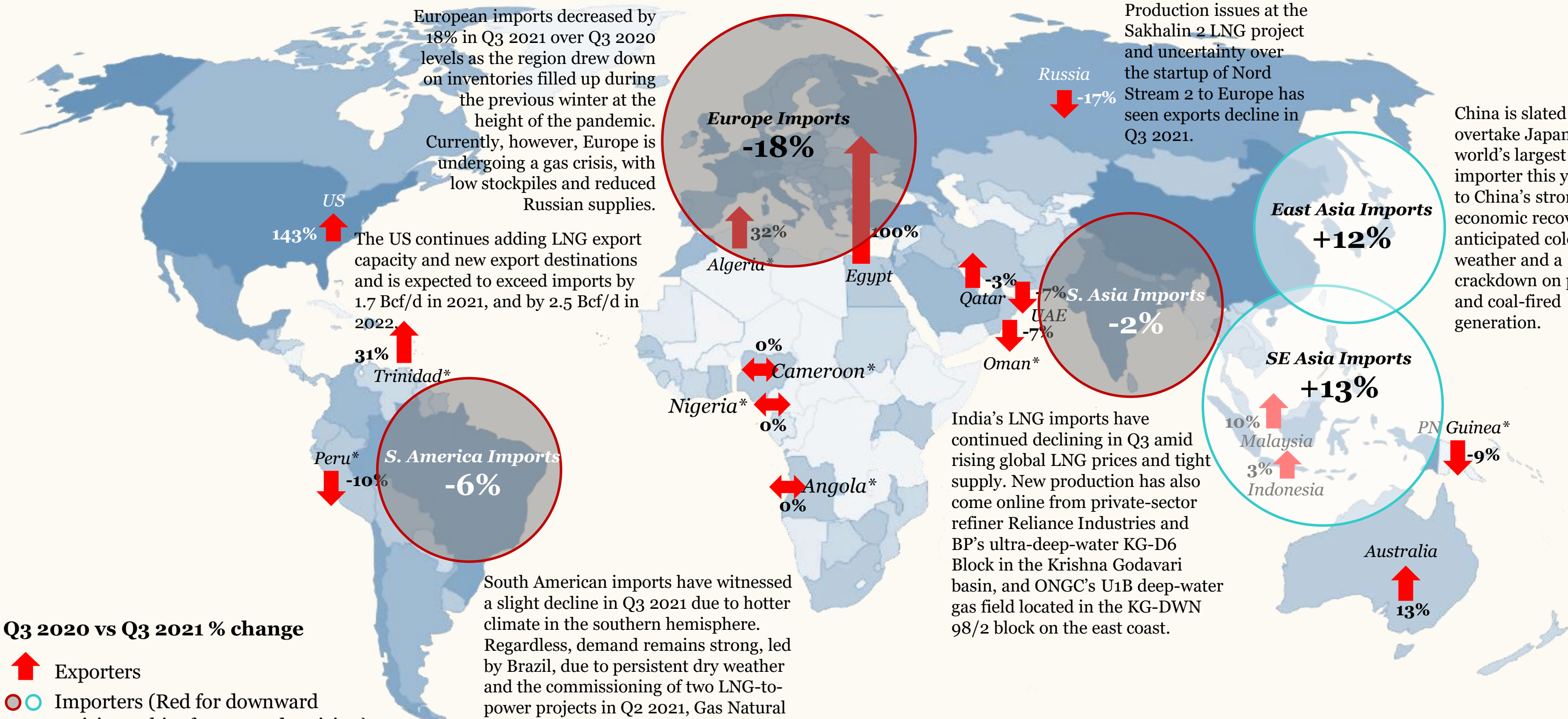


GASOLINE CRACK SPREAD TO BRENT



Source: Qamar Energy Research

GLOBAL LNG SUPPLY UP 15.8 MT IN Q1-Q3 '21 COMPARED TO Q1-Q3 '20 DUE TO INCREASES FROM US, AUSTRALIA



European imports decreased by 18% in Q3 2021 over Q3 2020 levels as the region drew down on inventories filled up during the previous winter at the height of the pandemic. Currently, however, Europe is undergoing a gas crisis, with low stockpiles and reduced Russian supplies.

The US continues adding LNG export capacity and new export destinations and is expected to exceed imports by 1.7 Bcf/d in 2021, and by 2.5 Bcf/d in 2022.

Production issues at the Sakhalin 2 LNG project and uncertainty over the startup of Nord Stream 2 to Europe has seen exports decline in Q3 2021.

China is slated to overtake Japan as the world's largest LNG importer this year, due to China's strong economic recovery, anticipated cold weather and a crackdown on pollution and coal-fired generation.

India's LNG imports have continued declining in Q3 amid rising global LNG prices and tight supply. New production has also come online from private-sector refiner Reliance Industries and BP's ultra-deep-water KG-D6 Block in the Krishna Godavari basin, and ONGC's U1B deep-water gas field located in the KG-DWN 98/2 block on the east coast.

South American imports have witnessed a slight decline in Q3 2021 due to hotter climate in the southern hemisphere. Regardless, demand remains strong, led by Brazil, due to persistent dry weather and the commissioning of two LNG-to-power projects in Q2 2021, Gas Natural Acu's 1.33 GW GNA1 LNG-to-power project, and the 1.5 GW Porto de Sergipe LNG-to-power project.

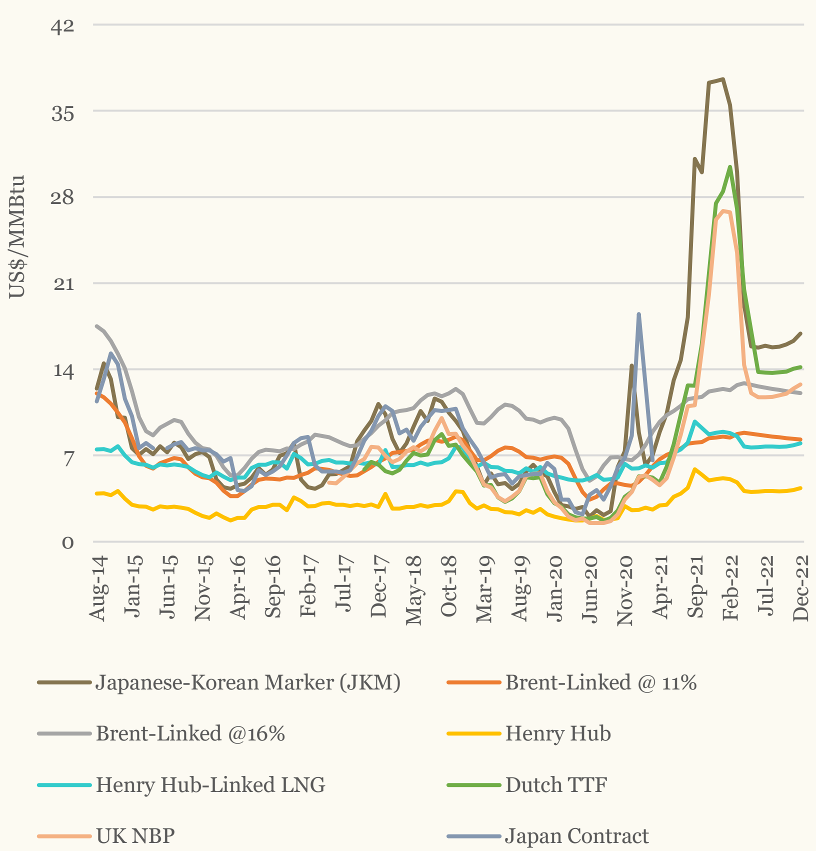
Q3 2020 vs Q3 2021 % change

- Exporters
- Importers (Red for downward revision, white for upward revision)
- * Data unavailable for Q3 2021

Global CoVid-19 vaccinations: No data | 0 | 100 | 1,000 | 10,000 | 100,000 | 1 million | 10 million | 100 million | 1 billion

Source: McKinsey; Qamar Energy Research

LNG PRICES REMAIN STRONG DUE TO TIGHT MARKET AND BULLISHNESS ON DEMAND



Per MMBtu	JKM	Dutch TTF	UK NBP	Henry Hub
December 2021 Future	US$ 37.43	US$ 27.47	US$ 26.14	US$ 5.08

Major global spot LNG indices remain strong, with Asia-Pacific spot LNG prices hitting record highs; JKM surpassed US$ 50/MMBtu on October 06

The gas crisis in Europe has contributed to the spike in prices, increasing global competition for LNG cargoes

Market participants are still paying a premium for JKM for winter deliveries, adding to the bullish sentiment. Buyers in Asia are paying more for cargoes to compete with gas-starved Europe

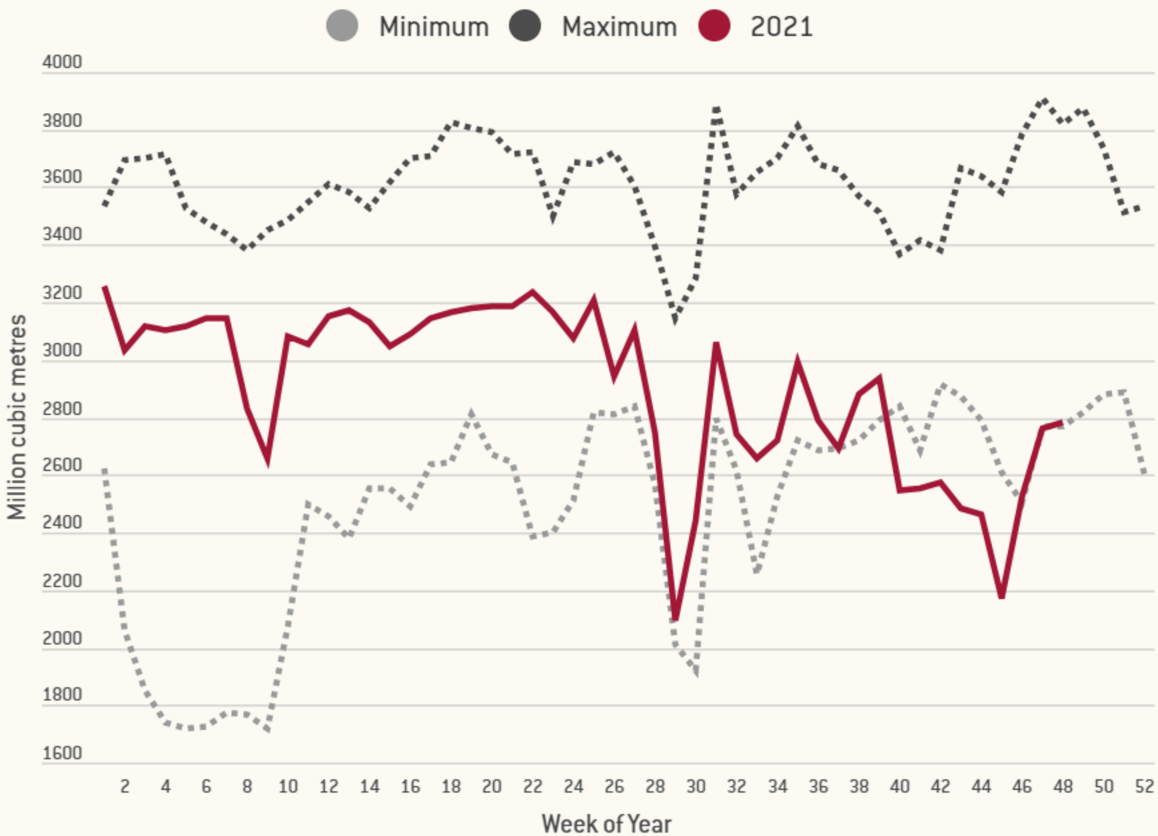
Surging European gas prices are exerting significant upward pressure on Asia-Pacific LNG cargo prices as trading houses raise bids to attract volumes into the region

Russia's failure to book additional pipeline transportation capacity at the Ukrainian border (Sudzha), the uncertainty over the startup of Nord Stream 2, and production issues at Sakhalin 2 continue weighing on the forward curve.

Meanwhile LNG exports are ramping up in the US, with supplies expected to exceed imports by 1.7 Bcf/d in 2021.

*12-month strip: July 2021 to June 2022; Source: CME; ICE; Qamar Energy Research

RUSSIAN GAS FLOWS TO EUROPE HAVE BEEN AT 5-YEAR LOWS IN H2 2021 – SUPPORTING GAS & LNG PRICES



Russian gas flows to EU+UK in 2H 2021 have been at or near 5-year lows (2015-20)

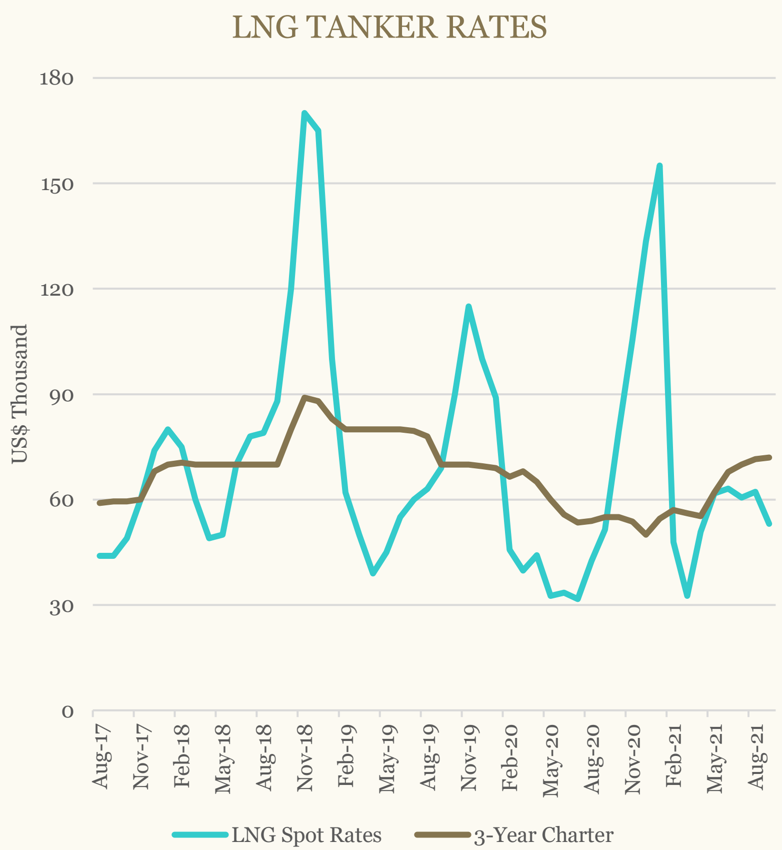
Nord Stream I is operating near-capacity, TurkStream (to Turkey) is ramping up to full operations, but Ukraine transit is at or below 5-year lows, and Yamal (via Poland) fell to near-zero in October, coincident with the EU-Belarus crisis

Meanwhile Algerian supplies have been running around 90-100 Mcm/day, but slipping in 2H 2021, possibly partly due to the Algeria-Morocco dispute and shutdown of GME pipeline

The lack of Russian pipeline supplies to EU+UK is supporting global LNG prices

* https://www.bruegel.org/publications/datasets/european-natural-gas-imports/

LNG TANKER SPOT RATES REMAIN FLAT IN Q3 BUT EXPECTED TO STRENGTHEN IN Q4 AS DEMAND GROWS



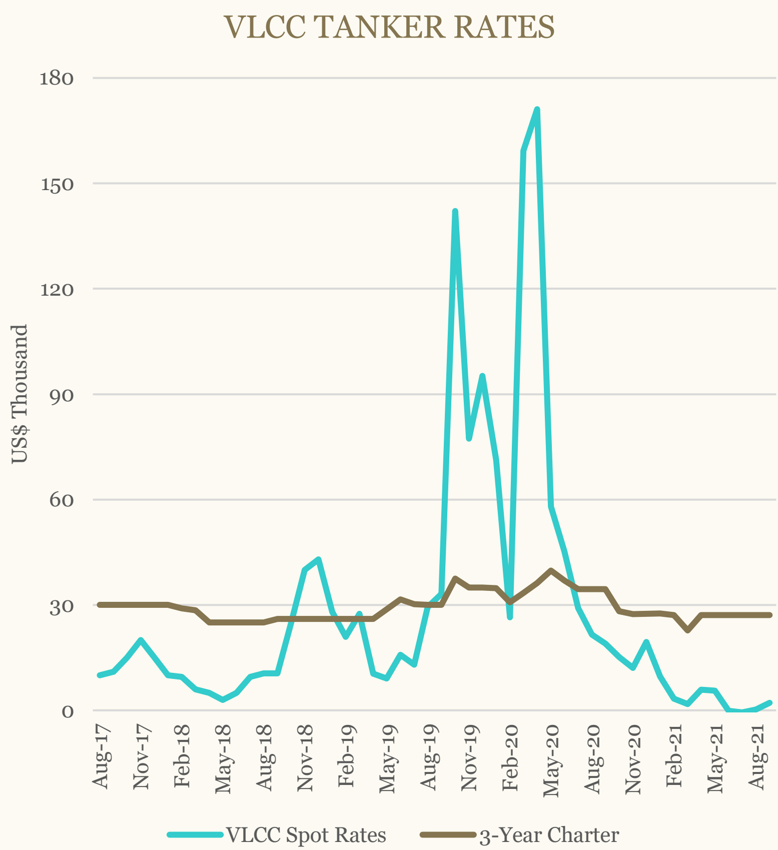
LNG Rates, US$	Spot Rates	1-Year Charter	3-Year Charter
September 2021	53,063	82,125	72,000
August 2021	62,250	92,375	71,500
Monthly Change %	-14.8%	-11.1%	0.7%
2021 Average	47,411	43,669	34,506
2020 Average	41,385	35,435	35,506
2019 Average	47,688	53,720	50,719

Despite soaring gas prices in Asia and Europe, LNG trade volumes remained flat in September, with US LNG exports declining, reducing a key driver of shipping demand due to the distance towards major demand centres.

However, an unprecedented surge in European natural gas prices and tight global supply has propelled Asian spot LNG prices to record highs in Q4 2021.

Source: MISC Monthly; Qamar Energy Research

VLCC SPOT RATES REMAIN LACKLUSTRE DUE TO OPEC+ CUTS AND LOW ATLANTIC SHIPMENTS



VLCC Rates, US$	Spot Rates	1-Year Charter	3-Year Charter
September 2021	2,172	18,875	27,125
August 2021	210	19,000	27,125
Monthly Change %	934.3%	-0.7%	0%
2021 Average	2,303	21,474	27,181
2020 Average	53,995	39,607	33,220
2019 Average	41,827	36,388	30,094

VLCC average spot earnings increased almost tenfold, though from a very low baseline and remain near historical lows. Tanker demand continues to be weak with oil exports remaining relatively unchanged in September.

Crude oil tanker demand is weak, however increased enquiries and activity in the Atlantic Basin can help improve sentiment and drive rates higher.

Source: MISC Monthly; Qamar Energy Research

OIL PRICE OUTLOOK: WILL THE US SPR RELEASE STEM THE RALLY IN OIL PRICES?

- **Crude oil markets rallied further after Joe Biden announced the release of 50 Mbbl from the SPR**

    - For example, WTI futures rallied all the way to a 50 day exponential moving average (EMA) at US$ 75/b, while Brent inched up US$ 2/b to US$ 82/b, making the announcement more of a "nonstory". Demand continues to be strong, with more buyers jumping into the market than out, and even though the US coordinated the release with other oil consuming nations, such a move had already been coordinated into OPEC+ planning, diluting its impact.

    - **The timing of the release is odd, as it comes just before the market looks ready to loosen at the start of 2022**

    - Along with the US, the UK, Japan, South Korea, and India have pledged to release a total of 65 Mbbl from their reserves, although not all have issued directives on when and how the release will take place. China too has pledged a release, although no volumes have been specified. In the end, less than 30 Mbbl might be released from the 65 Mbbl on offer, much of which will have to replenished in the future.

    - The timing of the release is odd. CoVid-19 cases have picked up once again in Europe, with Austria going into full lockdown, and other countries reimposing restrictions on mobility and gatherings. This suggests a slow down in demand growth, also in China and India, due to weaker manufacturing output and some power sector challenges.

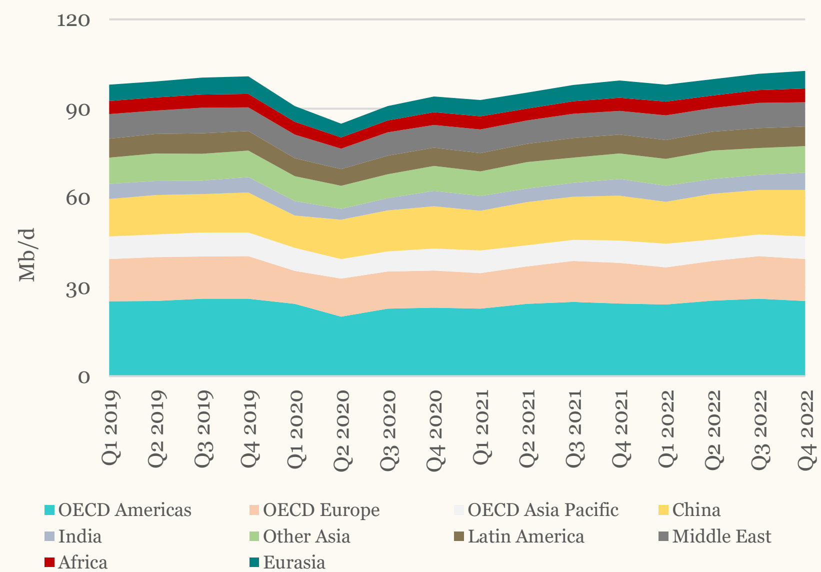
    - **The US' announced volume is the largest, but 32 Mbbl is available only if producers replace it between 2022-204**

    - The sale is open from December 16, 2021 through April 30, 2022. An 18 Mbbl Congress-mandated sale makes up the remainder of the release. India and Japan are each releasing about 5 Mbbl, and the UK 1.5 Mbbl. China has not specified volumes for release, although its siding with the US could add some diplomatic pressure on OPEC+ ahead of its next meeting in December.

    - **The inclusion of India and China into the coordinated release could sound some alarm bells at the OPEC+ camp**

    - After all, both nations are the key drivers for oil demand growth and an important outlet for OPEC+ exports. India has already stated that oil prices should be "reasonable, responsible, and determined by market forces", and says that its decision to join the SPR action was because supply was "artificially adjusted" by producers below demand levels.

Figure 02: Global oil demand till 2022[2]



[2] Qamar Energy Research; OPEC

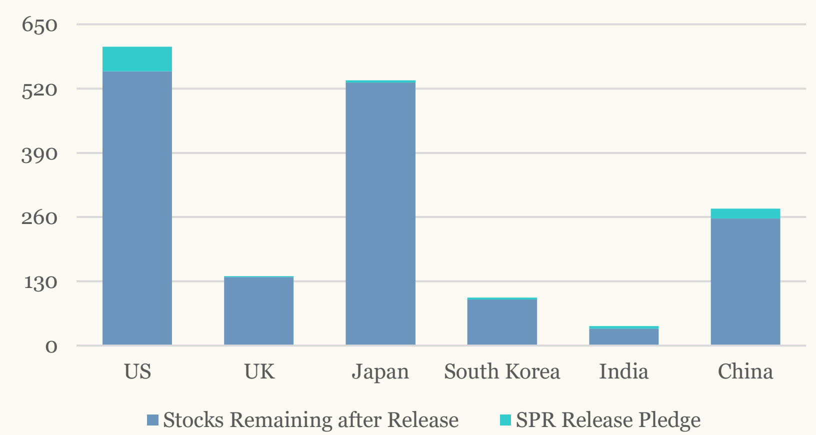
OIL PRICE OUTLOOK: WILL THE US SPR RELEASE STEM THE RALLY IN OIL PRICES?

- **Alongside the US, this creates significant tripartite pressure, till at least the next OPEC+ meeting**
- The US is concerned about ongoing high gasoline prices and inflation, while OECD Asia Pacific countries remain concerned that too high prices could dent the global economic recovery. The US has been asking OPEC+ to release more into world markets since August, followed by India and Japan. Now with China in the SPR mix, it remains to be seen what action OPEC+ takes in December.
- **Still, it's unlikely that the group will change its plan to continue increasing production by 400 kb/d each month.**
- The amount of the release is still relatively small, and part of it is to be returned later. Coordinated releases, while on paper could indicate the formation of a consumers' alliance, cannot be continued over a long time, because SPRs are reserved for emergencies.
- Moreover, OPEC+ is already struggling to raise production by the agreed amount each month due to declining production from some members (such as Algeria). Therefore oil stocks are likely to draw down more quickly than OPEC+ projects, even as concerns over the new Omicron variant of the CoVid-19 disease has caused some countries to implement travel bans to and from African countries.
- **Oil prices are more sensitive to recent CoVid-19 variants, and have largely ignored the news of the SPR release**
- Brent recorded its largest drop since the start of the pandemic on 26 November, falling 10% to US$ 73/b after countries across Europe and Asia brought in immediate travel restrictions to guard against the spread of the Omicron variant. On the contrary, the benchmark rallied upwards after the news of the SPR release, indicating a much more limited impact.

Table 01: SPR Pledges by non-OPEC countries[3]

Country	Current Petroleum Stocks in State Reserve	SPR Release Volume	Timeline of Release
US	605 Mbbl	50 Mbbl	December 2021 – April 2022
UK	~140 Mbbl	1.5 Mbbl	*~ Coming weeks ~*
Japan	~537 Mbbl	5 Mbbl	*~ Not specified ~*
South Korea	~97 Mbbl	~3.8 Mbbl, *unconfirmed*	*~ Not specified ~*
India	~39 Mbbl	5 Mbbl	*~ Coming days ~*
China	~277 Mbbl	~ 20 Mbbl, *unconfirmed ~*	*~ Not specified ~*

Figure 03: Stocks Remaining after pledged SPR Release[4]



[3] Qamar Energy Analysis; Media Reports

[4] Qamar Energy Research

DEEP DIVE OPEC: LIBYAN PRODUCTION AIMS HIGH WITH TOTALENERGIES-LED BILLION DOLLAR PROJECT

- **Libya's 2.5 Mb/d production capacity target has gotten a new ray of hope with TotalEnergies pledged US$ 2 B investment**

  - The French major will put US$ 2 B into the Waha Oil Project, to boost production by 100 kb/d, alongside raising production at the Mabrouk field. This should bring production from the Waha concessions to 400 kb/d by the end of the decade, production from which has remained patchy since 2018, owing to force majeures and outages at the Es-Sider terminal which loads oil from the project for processing and export.

  - **TotalEnergies entered Waha in 2018, but the Paris-based firm will initiate new development only now**

  - After Marathon Oil sold its 16.33% stake to TotalEnergies in 2018, the French major ran into security concerns and delays on promised remedial work on the oilfields. Moreover the NOC approved the firm's acquisition of Marathon's assets only in November of 2019, which prevented Total from receiving its share of crude from the Waha concessions till then.

  - Now with production relatively stable over the last 10 months, and recovered to >1 Mb/d, foreign investors seem to be warming up to the idea of contributing to Libya's comeback into the oil markets as a vital source of supply for global petroleum markets over the next decade as the world largely transitions to a lower-carbon future, thanks to the country's largely sweet, low-sulphur deposits.

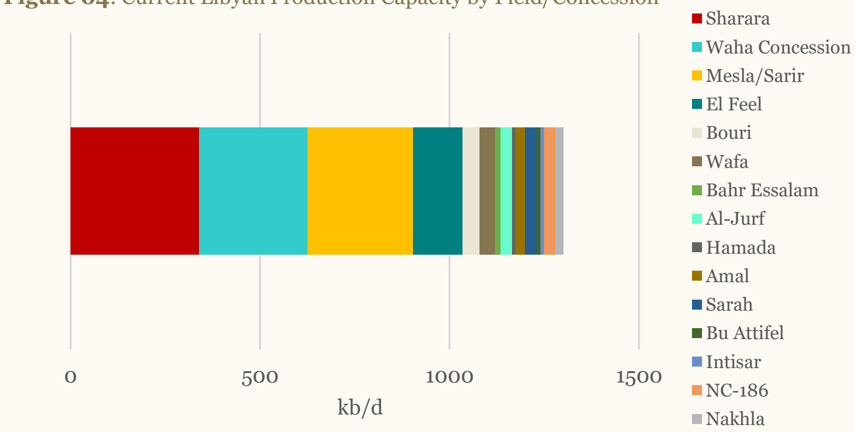
  - **Libya is targeting a near 2x capacity expansion target by 2027**

  - This will bring production to 2.5 Mb/d, for which the NOC needs plenty of foreign investment, to not only reach the target, but to also sustain output. 0.2 Mb/d of the target is to be met by end-2021, with the start of production from oilfields in the eastern Sirte Basin and the western Ghadames Basin being key drivers. These include fields like the 30-60 kb/d Nafoura-Aguila oilfield, situated next to the AGOCO-operated Mesla and Sarir oilfields in the east, and in the west the 12 kb/d Hamada or 5-10 kb/d Raguba oilfield, among some others.

  - **However, an uncertain political climate, particularly in the lead-up to national elections, could dampen development efforts**

  - PM Dbeibeh's entry into the presidential race has caused consternation in Libyan political camps, as he is technically barred from running for elections. This puts a question mark over how quickly and smoothly a new president can be elected, which has candidates such as field marshal Haftar, and Seif Al-Islam, the son and one-time heir apparent of Qaddafi, though both have also been disqualified (and Gaddafi now reinstated on appeal). Continued tiffs between tribal militias and LNA-aligned camps over control of the country's oil infrastructure could further dampen development efforts to expand the Libyan oil sector, particularly in the east, where Es-Sider and Waha are located, and the LNA has its stronghold.

Figure 04: Current Libyan Production Capacity by Field/Concession[5]



[5] Qamar Energy Research

DEEP DIVE NON-OPEC: A GAS LIFELINE FOR THE GAZA STRIP

- **A new gas pipeline traversing political fault lines could provide an energy lifeline to Gaza**
  - Talks to this end have moved from abstract to concrete this year, which had become a distant prospect previously because of the Israeli-Palestinian conflict that suspended peace talks between both sides in 2014. However, Israeli, Palestinian, Qatari, and European interests are now converging with the aim of getting gas flowing into Gaza by 2023.
  - So far, the plan sees natural gas flowing from the Chevron-operated deepwater Leviathan field in the eastern Mediterranean through an existing pipeline into Israel, and from there into Gaza through a proposed new extension.
  - Qatar has proposed to fund the Israeli side of the planned pipeline, while the section in Gaza will be paid for by the European Union. If successful, this project would for the first time in years provide a steady energy source to Gaza, ending rolling blackouts that have crippled the Palestinian economy, exacerbating social tensions and violence.
- **The Gaza portion of the pipeline will run about 4 kilometres and will have a cost of around US$ 22.8 M**
  - Of this, US$ 5.7 M will be initially provided by the EU to fund the Gaza portion of the pipeline. The Israeli segment of the pipeline meanwhile will stretch 45 kilometres and will have a cost of US$ 79.6 M, provided by Qatar.
  - The joining of international forces to put together a solution for energy-starved Gaza comes at a crucial point in Israeli-Palestinian ties which were further marred by strikes in May 2021. Gaza currently has no access to the outside world except through Israel, which controls 90% of its land and sea boundaries, and Egypt, which has a narrow land border to the south. Gaza's only power station produces electricity for 12 hours a day on diesel, which is extremely polluting. Gaza has a demand of over 450 MW, but the power plant struggles to supply even 100 MW.
- **The pipeline can enable the Gaza Power Plant to double its generation capacity**
  - If the proposed pipeline solution receives backing from all stakeholders, it could enable the Gaza Power Plant to operate at 2 or even 4 times its current capacity, making a significant contribution to the PIA's economy. The Palestinian Electric Company (PEC) has been in talks with Delek Drilling, Chevron's Israeli partner in Leviathan for a minimum 5-year deal.
- **Past efforts to develop Gaza's natural gas sector hit a roadblock in 2016 after Shell bought out BG Group**
  - Talks about developing Gaza's natural gas sector have all but closed since 2016, when the BG Group's interest in the 32 BCM Gaza Marine Asset was acquired by Shell after it absorbed the company. In 2018, Shell announced that it would relinquish its stake in the asset, leaving the Palestinian Investment Authority as the sole operator for the field. If the field had been developed, it could have resulted in savings of just over US$ 1 B for Gaza's electricity bill.
  - BG Group had wanted to produce up to 1.6 BCM/y from the field through a 50 kilometre pipeline to Ashkelon but the Israeli Electricity Corporation had refused a deal with Shell to import natural gas from Gaza Marine and export electricity to Gaza over fears that revenues generated would be sent to Hamas.
  - Continuing security risks and political barriers could end up trumping plans for the pipeline to alleviate the Gazan crisis. Israel has said that the project will go ahead "in full coordination with us", which might limit the benefits the PIA can derive from it.

[5] Qamar Energy Research

LNG OUTLOOK: UAE AMBITION TO BECOME LEADING GAS PLAYER SEES HOPE IN NEW LNG TERMINAL

- **ADNOC is planning to construct a new LNG export facility at Fujairah**
  - ADNOC LNG is planning to double its capacity to 12 Mtpa through a new facility (6 Mtpa) that will cater to the markets of several Asian countries, including giants like China and Japan, and rapidly growing ones like India, Pakistan, Bangladesh and others. Fujairah enjoys a strategic location just outside the Strait of Hormuz, an often contentious chokepoint leading into the Arabian Gulf.
  - The plan is line with the UAE's overall aim of accelerating US$ 20 B of natural gas projects, led in particular by the Dalma gas field in the Arabian Gulf, the Shah gas project, and the Umm Shaif gas cap, all of which will help the country in its bid to become self-sufficient in gas by 2030, with surplus to be exported as LNG.
  - Other large sour gas fields like Hail and Ghasha are yet to commence development after the CoVid-19 pandemic delayed work. Eni, OMV and Wintershall hold a joint 40% stake in Dalma. Eni also holds stakes in Hail and Ghasha. ADNOC had also cancelled a US$ 1.5 B contract for work on Dalma last year, saying that it would be re-tendered.
  - Currently WorleyParsons, Fluor and Technip Energies are in the frame for a revised FEED work programme for Hail and Ghasha, expected to be awarded before the end of the year.
  - **ADNOC has sought EoIs from several international engineering contractors for the terminal**
  - These are for initial conceptual studies and for FEED work on the surface facilities required to establish the facility. The terminal will involve LNG processing trains, storage tanks, a jetty, and other associated facilities, although ADNOC is yet to confirm these details.
  - Firms to have received EoIs from ADNOC so far include JGC, Technip Energies, McDermott International, KBR, Chiyoda, Bechtel, Fluor.
  - Samsung, Saipem, Wood and WorleyParsons.
  - The scope also includes laying a new 52-inch gas pipeline from Habshan to Fujairah with capacity to handle up to 2 Bcf/d. ADNOC currently has capacity to produce 11 Bcf/d of natural gas and 1.3 Bcf/d of sour gas. The facility will also have an option for bunkering in addition to an export jetty and storage tanks.
  - **The LNG industry is being regarded by MENA producers as destination fuel for a low-carbon future**
  - Sustained higher oil and gas prices (although slightly softer currently due to concerns over the new Omicron variant) and record high spot LNG prices are encouraging several MENA producers to step up their plans to boost gas producing capacity. However with a start date around 2026 at the earliest, the UAE project will have to compete directly with Qatar's much larger expansion (2026-27).
  - Apart from the UAE, Saudi Arabia is undertaking a US$ 110 B project to develop the Jafurah unconventional gas, while Qatar has just ordered 6 new LNG carriers from South Korea as part of a massive shipbuilding programme aimed at growing its fleet to handle its upcoming LNG expansion to 110 Mtpa before 2025.
  - ADNOC's expansion at Dalma, and development at other fields places it at the forefront of hydrogen initiatives, particularly blue, which can be derived from natural gas with by-product CO_2 captured. The firm has already signed a flurry of agreements over the last 12 months aimed at building hydrogen infrastructure in the country, and a new LNG terminal could simultaneously support the development of an associated hydrogen and other low-carbon fuels' hub.
  - Aramco will use half of the gas produced from Jafurah to also produce blue hydrogen, while Qatar's expansion will incorporate emission-mitigation measures such as power from renewables and a large CCUS facility.

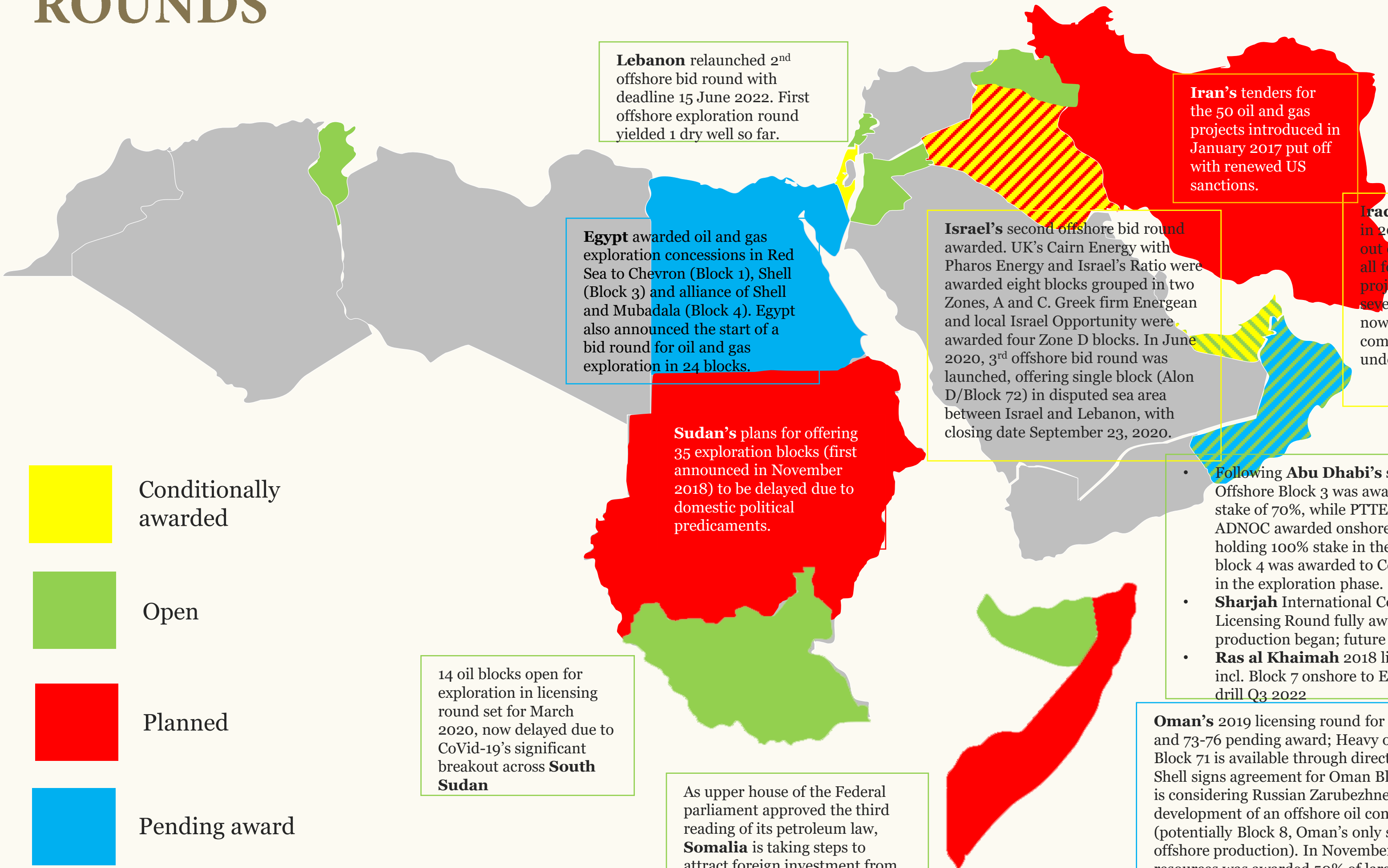
Source: Qamar Energy Research; https://www.adnoc.ae/en/news-and-media/press-releases/2021/adnoc-enables-uae-industry-through-long-term-and-reliable-natural-gas-supply

ENERGY INVESTMENTS: MENA PROJECTS ADVANCE AS ECONOMIC MOMENTUM REBOUNDS

SECTOR	SUMMARY
Renewables & Alternative Energy	1. The **Oman** Power & Water Procurement Company (OPWP) will award the 500 MW Manah I and 500 MW Manah II solar plants project to international developers for commercial operations in Q4 2024. Solar has been slow to kick off in the Sultanate, but the country intends for renewables to contribute to 20% of electricity generation by 2030 – to this end, it started up the 500 MW Ibri-2 solar PV plant developed by Acwa in August this year. 2. **Egypt**'s Electricity Transmission Company (EETC) has signed an agreement with the Red Sea Wind Energy Company to build a 500 MW wind farm in the Gulf of Suez, with commercial operations to commence in 2024. The farm is line with Egypt's plans to increase renewables capacity in the country from 3.51 GW in 2020 to 13.7 GW in 2030. 3. **Iraq** has signed an implementation agreement with Masdar under which Masdar will develop 5 solar PV plants (1 GW combined capacity) for the provinces of Dhi Qar, Missan, Anbar, and Nineveh. The plants will help alleviate Iraq's power shortages and also reduce its reliance on costly gas and power imports from Iran to meet demand. 4. **ADNOC** has announced a new JV with fellow state firm Taqa to develop 30 GW of renewables as part of a dual strategy to decarbonise its traditional operations while securing a dominant position in emerging energy sources. The JV is intended to help catalyse development of a green hydrogen market, which will be preceded by blue hydrogen and ammonia facilities. ADNOC will purchase nuclear and renewables generated power from EWEC to power its facilities starting January 2022.
Oil & Gas	1. Eni has made 3 oil and gas discoveries in **Egypt**'s Western Desert, with potential for up to 50 Mbbl of oil equivalent reserves. The finds include oil, gas and condensate reserves in the Mleiha development concession. The discoveries are associated with fields where initial well testing showed stale oil flows of up to 2.5 kb/d. Eni plans to bring in "a quick return on investment by linking the discoveries with existing production facilities to exploit these new discoveries." 2. The **Kuwait Oil Company** (KOC) is planning to invest US$ 6.1 B in E&P over the next 5 years to reach a production capacity of 4 Mb/d by 2040 (from the current 2.43 Mb/d), for which it will drill 700 wells per year. However technical challenges associated with extracting heavy crude from its northern fields remains a downside risk to the forecast. The northern fields produce ~30% of Kuwait's oil, a significant amount which is entering rapid decline due to field maturity. Kuwait first aims to reach a sustainable production capacity of 3.2 Mb/d by 2025. 3. Saudi **Aramco** is planning to increase production capacity to 13 Mb/d by 2027. The firm is relying on strong global demand for its crude capacity, with the bulk of the increase to come from three offshore fields. Marjan will raise output to 700 kb/d, Berri to 550 kb/d, and Zuluf to 1.43 Mb/d.
Petrochemicals	1. **ADNOC** has shelved plans to build the new 400 kb/d refinery near Ruwais to unattractive market conditions. The firm had initially planned for a 600 kb/d newbuild, later scaling it down to 400 kb/d, to be completed by 2026 alongside expanding existing plants by 200 kb/d by 2024, and revamping Ruwais' existing refining complex. This would leave ADNOC with a total refining capacity of just over 1 Mb/d. The deteriorating long-term outlook for refining margins amid the ongoing energy transition seems to have informed ADNOC's decision, as does its new dual strategy to decarbonize and secure a major position in emerging energy sources, which might receive favourable backing from investors.

Source: Qamar Energy Research

MENA ENERGY INVESTMENTS: UPSTREAM BIDDING ROUNDS



Lebanon relaunched 2nd offshore bid round with deadline 15 June 2022. First offshore exploration round yielded 1 dry well so far.

Iran's tenders for the 50 oil and gas projects introduced in January 2017 put off with renewed US sanctions.

Egypt awarded oil and gas exploration concessions in Red Sea to Chevron (Block 1), Shell (Block 3) and alliance of Shell and Mubadala (Block 4). Egypt also announced the start of a bid round for oil and gas exploration in 24 blocks.

Israel's second offshore bid round awarded. UK's Cairn Energy with Pharos Energy and Israel's Ratio were awarded eight blocks grouped in two Zones, A and C. Greek firm Energean and local Israel Opportunity were awarded four Zone D blocks. In June 2020, 3rd offshore bid round was launched, offering single block (Alon D/Block 72) in disputed sea area between Israel and Lebanon, with closing date September 23, 2020.

Iraq's 5th licensing round in 2018, which awarded 6 out of 11 blocks, including all four development projects and two out of seven exploration blocks, now signed with all 6 companies. 6th round under consideration

Sudan's plans for offering 35 exploration blocks (first announced in November 2018) to be delayed due to domestic political predicaments.

- Following **Abu Dhabi's** second licensing round, Offshore Block 3 was awarded to Eni with an expanded stake of 70%, while PTTEP holds the remaining 30%; ADNOC awarded onshore block 5 to Occidental, holding 100% stake in the exploration phase; Offshore block 4 was awarded to Cosmo E&P, with 100% stake in the exploration phase.
- **Sharjah** International Competitive Exploration Licensing Round fully awarded and first gas production began; future round possible.
- **Ras al Khaimah** 2018 licensing rounds awarded, incl. Block 7 onshore to ENI in April 2021. PGNiG to drill Q3 2022

Conditionally awarded

Open

Planned

Pending award

14 oil blocks open for exploration in licensing round set for March 2020, now delayed due to CoVid-19's significant breakout across **South Sudan**

As upper house of the Federal parliament approved the third reading of its petroleum law, **Somalia** is taking steps to attract foreign investment from IOCs by opening its first ever licensing round.

Oman's 2019 licensing round for blocks 58, 70 and 73-76 pending award; Heavy oil (Bitumen) Block 71 is available through direct negotiation; Shell signs agreement for Oman Block 55. Oman is considering Russian Zarubezhneft for the development of an offshore oil concession (potentially Block 8, Oman's only source of offshore production). In November 2020, EOG resources was awarded 50% of large onshore Block 49 following a farm-in deal with Swedish player Tethys Oil.

OIL PRICE SCORECARD: SCENARIOS WITH PROBABILITIES – SUPPLY

BEARISH		BULLISH	
Stronger US Dollar (US$), 20%	Oil futures could be hit by a rising US currency, bolstered by an improving labour market in the US, while other geographies, mainly Europe and OECD Asia Pacific, struggle to gain pace due to renewed lockdowns following the Omicron variant, contributing to a more pessimistic investor sentiment, and making crude expensive for buyers with other currencies	**Strait of Hormuz uncertainty, 05%**	Iranian fast boats continue to harass foreign vessels in the Strait of Hormuz, in addition to Zolfaghaar-1400 military drills ahead of a planned return to talks with the EU and the US, disrupting oil supply.
US shale recovery accelerates, 35%	US tight oil output, which surged to its highest in November since the early days of the pandemic, accelerates further as robust prices add momentum to small and medium-sized private E&P firms (who make up 60% of the US' drilling activity), reversing expected declines this year of 210 kb/d from 2020. Robust growth in 2022 will outpace growth in global consumption, contributing to softer oil prices.	**Libyan output falters, 35%**	Confusion over the approval of TotalEnergies deal with the NOC to invest US$ 2 B into Libya's oil sector results in delayed development, and lack of repairs on infrastructure takes a toll on production. Constrained finances and the risk of warring between local militias in the lead up to national elections stalls Libya's plans of a 1.45 Mb/d capacity target by end-2021. Overall production falls by 30%, tightening markets.
Iran raises production, 25%	Iran has announced plans for doubling production in 2021 on the expectation of a nuclear deal with the US, which will clash with OPEC+ efforts to gradually increase supply without flooding markets. Iran could unleash at least 500 kb/d of immediate output if it has willing buyers. However, a deal is yet to take place, and consumers are well supplied by other competitive producers.	**No progress on Iran nuclear deal, 30%**	Biden's proposed negotiations on the JCPOA will face opposition in Congress, and Raisi continues refusing to engage unless all sanctions are removed. This pushes back timing for the deal further, and ultimately sanctions removal, lessening the impact of Iran's exports on oil prices.
US decides to double SPR release, 05%	Surging gasoline prices see no respite from the promised SPR release of 50 Mbbl, so Congress decides to up the ante and release an additional 50 Mbbl to provide relief. News of the additional release immediately dampens market sentiment, softening prices, and rising shale production just adds more to the new supply from the US.	**Extended OPEC voluntary cuts, 30%**	Saudi Arabia decides to implement a new 500 kb/d voluntary cut to limit the impact of coordinated SPR releases worldwide, and uncertain supplies, from Iran and Libya. Other Gulf allies may follow Saudi's example, but if not, shall try and maintain perfect compliance with the pact.

OIL PRICE SCORECARD: SCENARIOS WITH PROBABILITIES – DEMAND

BEARISH		BULLISH	
Oil demand stagnates in China, 25%	Surging CoVid-19 Omicron cases in China result in a stagnation in economy recovery, due to lockdowns and a potential postponement of the February Olympics. Crude runs are scaled back, and limited air travel, particularly to Africa and Europe causes oil demand to fall by 1.5 Mb/d.	**Successful vaccination rollouts, 35%**	Successful vaccination rollout programmes across the US and Canada, UAE and Bahrain in MENA, and in China has resulted in sustained bullish sentiment in Q3, and will continue driving a stronger market as economic momentum returns on the back of increased consumer spending for the holiday season.
Demand slow down due to rising prices, 10%	Demand slows down in emerging economies as rising interest rates to contain emerging inflation dampens economic activity, as does the prospect of premature withdrawal of fiscal support. South Asia, Brazil, and Russia are most affected, as food and energy make up a higher proportion of consumer spending. Lower manufacturing and freight demand further softens the demand outlook	**MENA demand returns, 35%**	Overall MENA demand increases by 500 kb/d from 2020 levels, with the highest growth witnessed in the second half of the year, as the Expo 2020 kicks off in Dubai, drawing visitors from 190 countries, and construction activity improves; in Saudi Arabia and Kuwait, stable PMIs drive upward demand for oil.
Poor road and aviation fuel demand in OECD Asia-Pacific, 20%	OECD Asia-Pacific countries like Japan remain on high alert as new CoVid-19 variant cases begin increasing, resulting in sustained bearishness on the return of road and transportation fuel demand. Slow vaccination rollout, which has so far made no noticeable difference to the number of new cases, carries into Q4 2021, weighing on economic growth expectations.	**Strong oil, kerosene, and LPG demand in Asia, 15%**	Stockpiling for the winter season boosts end-user demand for oil, kerosene, and LPG in Asian markets due to transportation constraints, logistical bottlenecks, and outage uncertainties still clouding some LNG terminals, such as Freeport in Texas, and resulting in a tight LNG market.
Market structure in contango, 25%	Oil futures flip into contango as concerns re-emerge over the new highly transmissible Omicron variant, clouding prospects for a speedy rebound in oil consumption. Considerable uncertainties remain skewed to the downside, particularly due to healthcare crises in emerging markets and patchy vaccination programmes in Africa.	**Latin America demand improves, 15%**	Oil demand begins improving in earnest from Q3 2021 and a substantial recovery is projected to take place by early 2022, as transportation fuels begin rebounding as vaccination programmes gain pace, and policy measures encouraging growth in investments to counter the CoVid-slump are passed.

INVESTOR SCENARIOS: BEAR CASE, BASE CASE, BULL CASE (1/2)

	BEAR CASE	BASE CASE	BULL CASE
OPEC+	OPEC+ decides to add an additional 200 kb/d of oil into the market on top of its 400 kb/d commitment in December and January due to growing pressure from the US where gasoline prices skyrocket and tensions between cartel members who want to expand production quicker to aid their ailing economies. The decision backfires as a coordinated SPR release by the US, UK, Japan, China, and India is met with high shale output from the US. The additional OPEC+ oil depresses oil prices to below US$ 50/b	OPEC+ continues with its planned 400 kb/d output hike in December. Saudi decides on an additional 500 kb/d cuts to keep a tight market due to perceived risks from SPR releases and wildcards like Iran; US production remains strong yet stable even though Biden policies slow drilling,; drillers still focus on shareholder returns; prices rise to >US$ 90/b momentarily before seasonality and uncertainty over the new CoVid-19 variants returns them to ~US$ 70/b	Libyan production dips to 500 kb/d as warring breaks out in the run-up to elections; talks between Iran and the US collapse as Congress blocks a deal with new Iranian hardliner Raisi and due to Iran's continued military drills in the Strait of Hormuz; OPEC+ continues cuts with gradual increments in supply, but these are countered by higher voluntary additional Saudi cuts; Markets tighten as storage diminishes, and confidence gathers over the vaccines' ability to fight Omicron
Geopolitics	China's trade spat with the US sees no respite despite a rare moment of cooperation over SPR releases. China, already at odds over Biden's US$ 2 T American Jobs Plan, begins outcompeting the US in the manufacturing and industrial sectors. US oil exports to China are stranded, necessitating it to locate alternate buyers in an already saturated market	Biden works with China on negotiating the stalled trade deal, as well as mending relations with both Iran and Venezuela, although new Iran President Raisi still refuses engagement unless sanctions are removed. Progress on these issues is slow and time consuming however, and unlikely to impact supply or demand in a massive way in the coming quarter	CoVid-19 Omicron spreads through Africa, the last-hit geography, in major fashion, impacting output from Nigeria and Angola, already struggling with security issues that continue to shut off production; political instability and the pandemic in Iraq threaten to derail production from southern oilfields; Iranian exports stay stagnant at 650 kb/d due to lack of buyers.
Global Demand	Oil demand growth declines to 3.9 Mb/d in 2021 from previous estimates of ~6 Mb/d as the new Omicron strain of the coronavirus spreads in Africa, EU, and Japan, slowing down manufacturing output and demand for transportation fuels	Oil demand rises by 5.7 Mb/d, slightly lower than the previous estimate due to some renewed lockdowns. However, major world economies gain momentum on the back of increasing vaccinations, boosting domestic consumption of fuels; IMO boosts refining runs	Oil demand recovers in H2 2021 with total demand reaching 99 Mb/d in Q4 2021, a rise of 8.3 Mb/d on 2020 levels, due to rapid vaccine progress
Probability	20%	40%	25%

INVESTOR SCENARIOS: BEAR CASE, BASE CASE, BULL CASE (2/2)

	BEAR CASE	BASE CASE	BULL CASE
Near term impact on oil price (Brent, Q1-Q2 2022)	Q1 2022: US$ 45/b Q2 2022: US$ 50/b	Q1 2022: US$ 80/b Q2 2022: US$ 75/b	Q1 2021: US$ 95/b Q2 2022: US$ 80/b
Market reaction	Weakening global economy causes contango.	Front contango in Brent with a flattening curve as economic activity rebounds.	Brent curve stays in steep backwardation as uncertainty builds over supply.
Demand/Supply Balance (2022)	Demand: 99.1 Mb/d, Supply: 100.6 Mb/d	Demand: 100.6 Mb/d, Supply: 100.4 Mb/d	Demand: 101 Mb/d, Supply: 99.6 Mb/d
Global Inventories (2022)	+548 Mbbl	-73 Mbbl	-511 Mbbl
Potential positives	US Fed Reserve lowers interest rates below zero.	Stronger equity and bond markets support investor momentum and oil.	Strong oil demand, deeper OPEC cuts, and US shale slowdown.
Potential negatives	OPEC+ cohesion destroyed as deal proves futile against market forces; members try to gain market share by turning on the taps.	Uncertainty in global growth and thus oil demand, particularly middle distillates.	Higher oil price promotes return of production from high-cost producers and reduced OPEC+ compliance.

ABOUT US

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

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