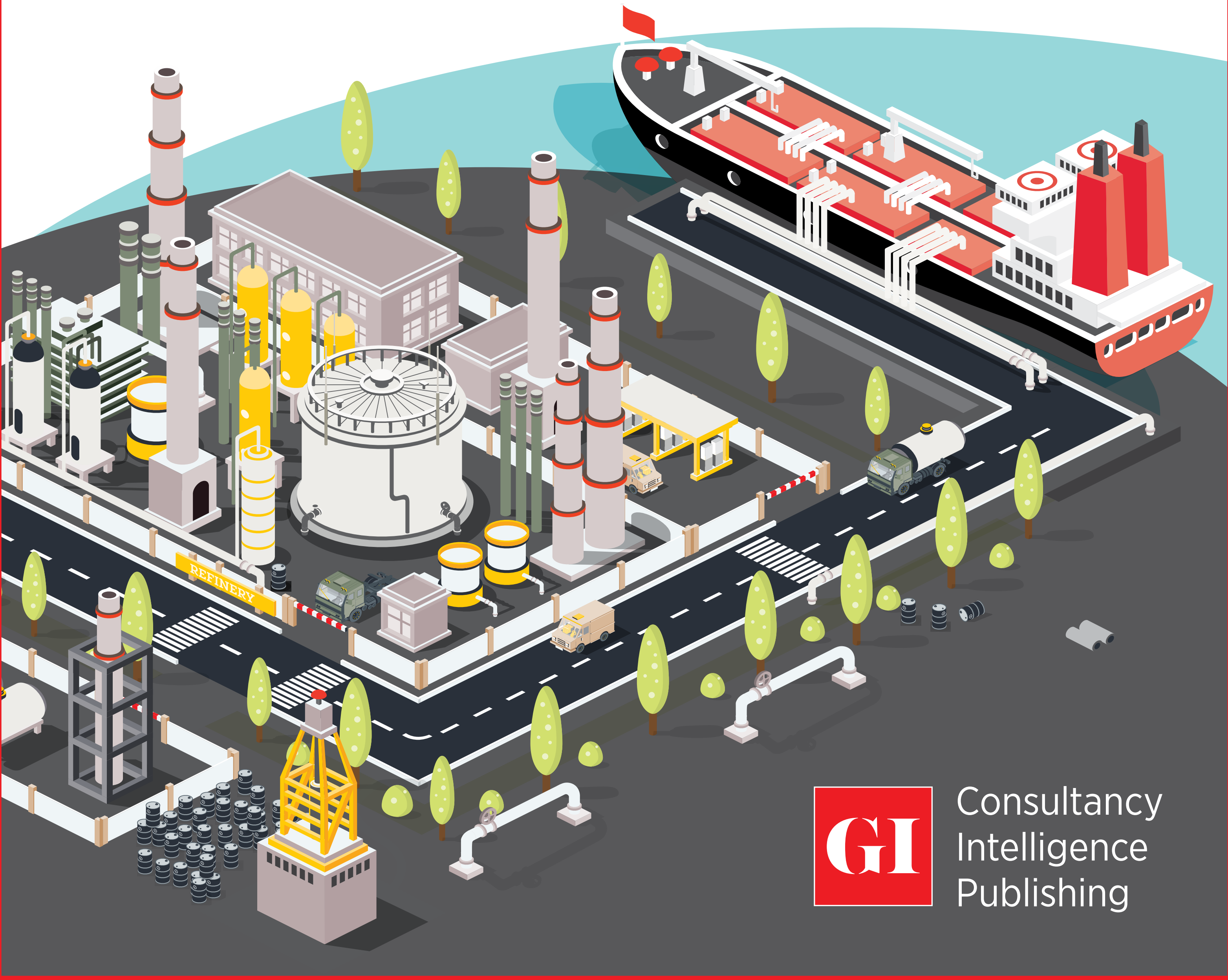
Port of Fujairah
ميناء الفجيرة
Port of Fujairah
United Arab Emirates

Whitepaper

Q4, 2021

OUTLOOK FOR FUJAIRAH IN POST-PANDEMIC CYCLE

Trading – Storage – Shipping?



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Fujairah Stepping Up After Covid Pandemic

Since opening its first oil storage facilities nearly three decades ago, Fujairah has grown into the world's No. 3 bunkering center, capitalizing on its location 70 nautical miles outside the Strait of Hormuz shipping chokepoint. As one of the seven emirates that make up the UAE, Fujairah hosts the only VLCC jetty on the Indian Ocean coastline of the Arabian peninsula, and will soon be home to the world's largest underground crude oil storage cavern. Earlier this year ICE Futures Abu Dhabi (IFAD), in partnership with the Abu Dhabi National Oil Company, launched the Murban oil futures contract that could help build on Fujairah's success to create a major oil trading hub in the East-of-Suez physical oil market. ADNOC has stated that Fujairah is at the center of the national oil company's strategy to go beyond the border of the UAE - "Fujairah is becoming a tipping point between the producers, exporters and traders, where basically supply meets demand."

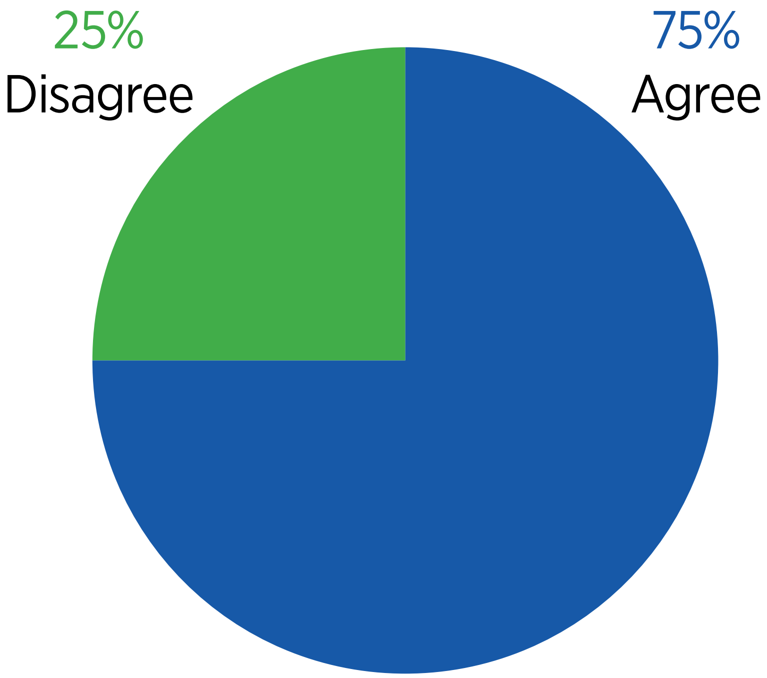
A robust track record

The combination of IFAD and Fujairah's infrastructure open the prospect for the emirate to become a major crude oil storage facility for crude produced in the Middle East, adding to its foundational reputation thus far, as a very large storage hub for bunker fuel. Fujairah is already one of the largest crude oil storage locations east of Suez, which is not exclusively tied to a crude oil production facility. It stands now with the unique ability to import and export, and handle multiple grades.

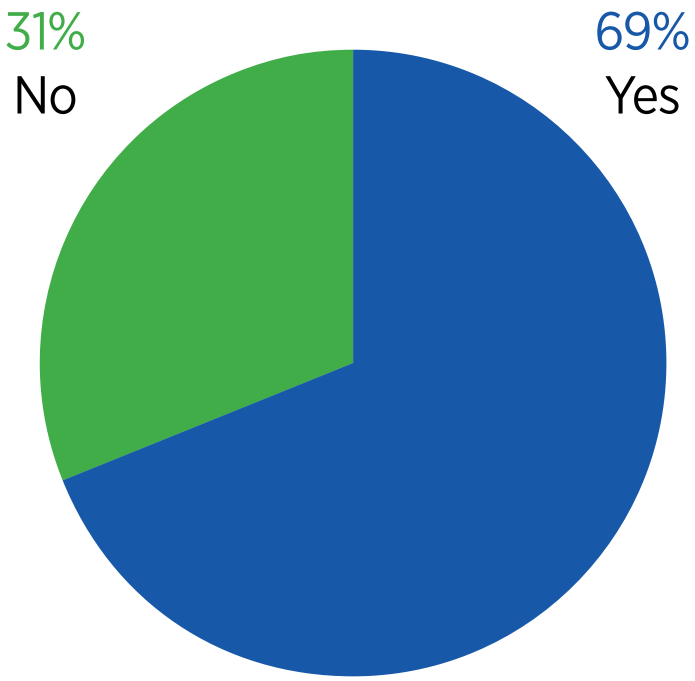
Whitepaper Report - Source:
Ten esteemed international speakers joined 65 participants at the virtual Fujairah APPEC event on September 28th, 2021. Forward-looking insights from each speaker on the Port of Fujairah's key developments and plans in 2022 and beyond are detailed in this Whitepaper. Please note that speakers' comments are not all verbatim. Please cite this Whitepaper, Gulf Intelligence, and the name of the event when reusing or sharing this material.

Exclusive Survey Results

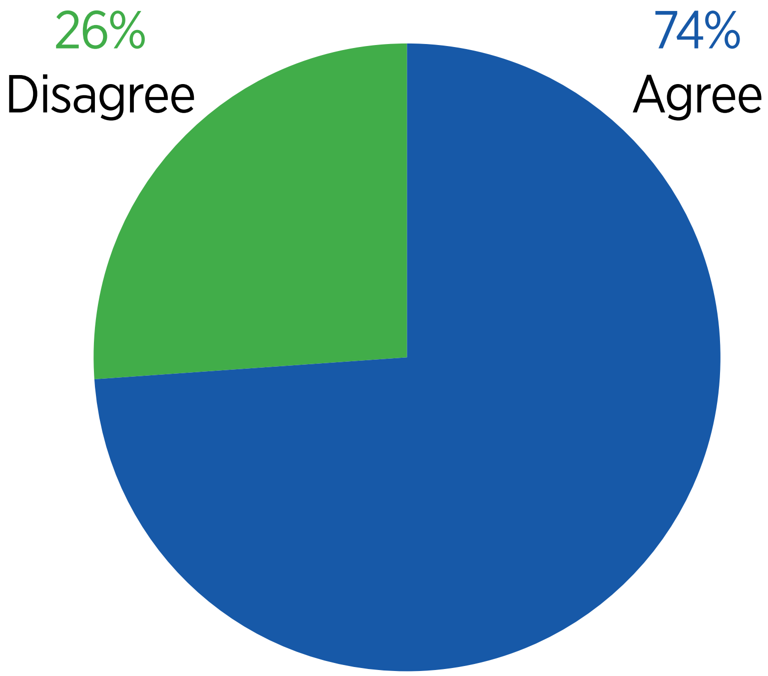
Despite the volatility, the Covid-19 pandemic has not fundamentally altered the course of established trends in the physical oil markets East of Suez.



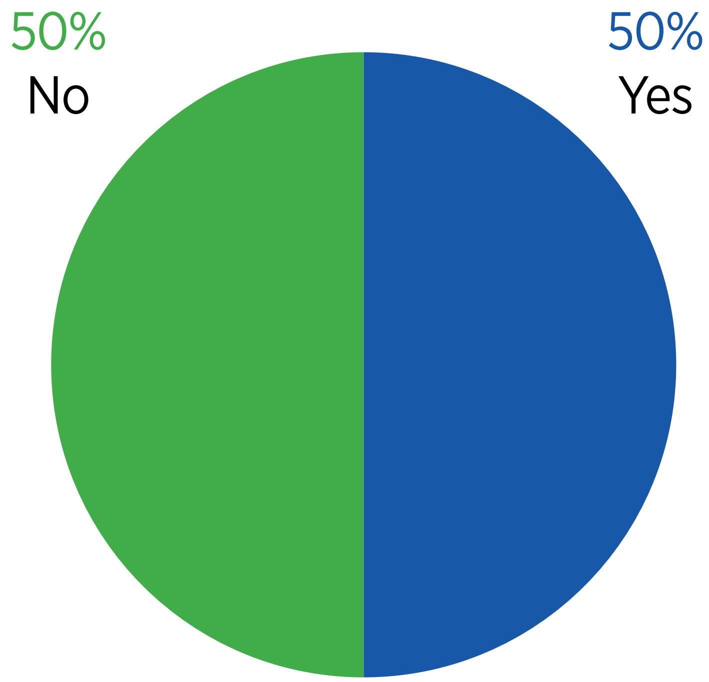
ADNOC is expected to connect its crude oil storage facility to the Port of Fujairah manifold in Q4. This will be a gamechanger for onshore oil trading in Fujairah.



Current energy supply shortages in Europe and Asia will trigger massive investment in building more strategic storage capacity.



Ports like Fujairah and Singapore will retain their position as world's leading bunkering ports without offering zero-carbon fuel within coming years.



CHAPTER 1 Trading

Trading

Chris Bake
Member of the Executive Committee
Vitol

Oil pundits were saying just a few weeks ago that we are still seeing an overhang from Covid-19, with further curtailment of demand going into the winter. Now, we are well below the five-year average – we are approaching lows over the last 15 years of data. If you look at the amount of petroleum stored, it has obviously grown as demand has increased.

Iran's oil move?

Discussions within the Joint Comprehensive Plan of Action (JCPOA) with Iran have stalled, despite recent efforts by the UN in New York. It appears that both sides are fairly entrenched – it will be quite difficult to break the deadlock. There probably will not be Iranian oil. So, one of the big questions is how will OPEC react [to general market movements]? It is a very dynamic time in the energy business.

"While we support the energy transition, the viability of change is complicated. We must maintain an adequate supply chain and adequate inventories to absorb the shocks."

"Covid-19 has not fundamentally changed the trajectory of the energy transition – that is going to take much longer. Meanwhile, Fujairah has strengthened its position and infrastructure capacity, which is good to see."

Carving out Fujairah's next chapter?

Fujairah has the energy ecosystem that works and it has expanded exponentially. You can always do it faster, but if you look at what has changed over the last five years, it is still phenomenal. There have been many incremental wins. Looking ahead, the dialogue should focus on what is next in the strategic function of the Port, rather than just accelerating what is already there. Obviously, IFAD and the delivery of physical crude is critical and it will continue to evolve. But what is the next critical push for Fujairah? How does that work amid the new, renewable side of the energy equation? And what is the function for gas, something there has long been conversations on? These sorts of questions start to address what Fujairah will look like in 25 years.

1.9mn b/d
is the average draw on global oil inventories during the first three quarters of 2021, supporting oil prices.[1]

$81/b
is the anticipated average price during Q4 for Brent prices, which is just over 10% higher on previous forecasts for the end of 2021.[2]

1 Energy Information Administration, October
2 Energy Information Administration, October

Trading

Adi Imsirovic, Senior Research Fellow
The Oxford Institute for Energy Studies

The launch of the Murban contract has been a key benchmark development this year. For the first time, it provides the light, medium sweet regional market with official selling prices that are actually determined by the market, rather than the producer – a very important point for Fujairah and the wider Middle East.

The ICE Futures Abu Dhabi (IFAD) contract has certainly met my expectations. There were some exaggerated and unrealistic views that it would take over the WTI overnight, but it has undeniably done well. Volumes are good and September's delivery reached a record high of 11.5mn b/d. Of course, it is difficult to judge the success of contracts after just six months, but I believe it will keep improving, provided that the contract is worked on.

Murban's next steps?

Some say that it took the Dubai Mercantile Exchange (DME) a decade to build relevance and that, with the broader energy landscape, the Murban contract does not have that time. In theory, the contract, which was launched in April, does have that time. Perhaps the real point is: do you want to wait ten years? Certainly not.

In that respect, particularly around the Murban contract, some changes must be done very quickly. All the elements of infrastructure are essential, but what is most important is significantly dropping the delivery costs of Murban. They are currently very high, up to 25 cents a barrel. If you go physical with a Murban cargo, it can still support the Murban contract, but the price of Murban then gets automatically discounted in the marketplace. This is definitely not good for ADNOC.

My understanding is that a lot of operational issues regarding the physical delivery are being pushed down to the clearing members, who are not properly equipped to do that. So, having a clearing group like DME did, is not a bad idea. And that leads to nomination schedules. For example, DME's is ten days, while Murban's is five days – this makes it harder for people to trade it. All these seemingly little operational factors need a lot of work to make it a success.

"For Murban alone, ADNOC recently said they expect almost 1.5mn b/d of exports. Such volumes means there could be a clash with OPEC in the immediate future."

Green speed-o-meter?

We expected the energy transition to a lower carbon future to happen over a decade – and it is clearly happening now. I doubt Covid-19 directly accelerated the energy transition, but it certainly serves as a very real wake-up call and as an indicator of what could happen in terms of disrupted oil demand-supply dynamics in the future. Still, the energy transition will not happen overnight and oil will be around for a long time. We just need to look at the long queues outside petrol stations in the UK to see its relevance. Arab Gulf producers are in a very good position to manage this transition and we will see more of a reliance on gas production going forward.

30%
of the UAE's gross domestic product (GDP) is directly based on its oil and gas output.[1]

50%+
of ADNOC's oil production is its flagship Murban blend, now represented by the Murban contract following the launch in April. The Murban contract offers an alternative benchmark to Dubai, operated by S&P Global Platts, and Oman crude futures, traded on the DME.[2]

PRICE DISCOVERY...?

Fujairah already has a vibrant price discovery role to play in bunkers and in fuel trading. It follows that Exchanges – IFAD in pole position – may wish to launch products' contracts, and therefore crack spreads trading opportunities, which could serve as instruments to hedge margins for refineries, not just in the Emirates, but in the region.

1 OPEC 2 Thomson Reuters, ADNOC

Trading

Martijn Heijboer
Business Development Manager
Port of Fujairah

This year has proven to be a good year for the Port of Fujairah, despite the world's broader disruptions. Our two main segments are liquid bulk and dry bulk. Liquid bulk is outperforming our expectations, which is good news for us and the market. We started seeing that recovery quite early – from the third quarter of 2020 onwards. Depending on the final numbers in this year's last quarter, we may see a record high annual total by year-end in terms of the throughput handled. When it comes to dry bulk, we started a little slower than expected. But this has started to pick up in the last two months and we are seeing the type of numbers for Q4 that we would expect. That marks a good recovery, especially for what has been more of a challenging segment.

Pricing ambitions take shape

We are progressing with plans to use Fujairah as a pricing benchmark. Now, we must see if national oil companies (NOCs) and international oil companies (IOCs) use it. Recent developments include ADNOC and their newly established trading arm, which is just getting started in Fujairah. In terms of our broader services, are looking at improving the efficiency of our infrastructure and whether we need to add more. We are planning to carry out a review on that and we are running a few scenarios to see what we should do to capture growth while sustaining high quality services for terminals.

Boosting visibility

To help build transparency, we are looking into whether there is value in doing more conditional data, in addition to our monthly bunkering data. We are reviewing what kind of data that could be and whether it could be part of our monthly or weekly publication. We also plan to increase our engagement with traders in the market, especially ADNOC. We are doing a comprehensive study on Fujairah with others to see what the current market looks like and what it will look like in coming decades. Of course, within this conversation, we are touching on the future role of gas and renewables and asking: what role Fujairah can play in this new energy landscape? I expect we will develop a roadmap to address these points in the coming months.

16
storage terminals currently operate out of the Port and storage capacity is set to exceed 11mn cubic meters by the end of this year. The port may also add a tenth oil berth to the nine existing ones and boost interconnectivity with the storage terminals as part of expansion plans.[1]

Steady does it

If we look back at 2019 when we started to really increase volumes, then 2020 with the global disruptions, and now in 2021, it is almost the same from the Port's perspective. We still serve the same markets and we still have the same fuel portfolio: East Africa, Pakistan, Asia, with fuel oil accounting for the majority. Overall, we have not seen much of a difference in our established refined products over the last three years. We are very much looking forward to seeing what will happen with crude volumes – that will hopefully be a gamechanger.

120mn t/yr
was the total crude and product volumes handled at the Port of Fujairah in 2020, rising by 9% on 2019 figures. This total figure includes volumes at the port's own Fujairah Oil Tanker Terminals (FOTT), ADNOC's three single point moorings, VOPAK Horizon's jetty, as well as ship-to-ship transactions, floating storage, and bunkering at the anchorage.[2]

1 S&P Global Platts
2 S&P Global Platts

CHAPTER 2 Storage

Storage

Hari Dattatreya
Global Oil Director
Royal Vopak

This has been an amazing year. A rapid building of stock drove the narrative in 2020, while this year's supply of crude and products has been characterized by volatility. There are still questions surrounding Covid-19 and how it affects crude and products. Is the impact of the pandemic fading? Will the vaccinations work? What should be the response? Regional imbalances are driving storage needs. What is the need to blend products, for example? Other exceptional factors to consider include the tremendous drop in oil consumption in such a short time and the oil price heading into negative territory for the first time on record (April 2020).

"There are still questions surrounding Covid-19 and how it affects crude and products. Is the impact of the pandemic fading? Will the vaccinations work? What should be the response?"

1983

saw operations at the Port of Fujairah commence. This highlights the ambition of what is the world's third largest bunkering hub; Singapore, the world's biggest bunkering hub, has a 202-year head start.

Long-term crude play?

Both the physical delivery of Murban and the construction of an oil storage cavern in Fujairah – the largest east of Suez – will be central in supporting the Port's crude activities. Generally, when we look at crude storage, having industrial activities, refineries and so on nearby is a good catalyst. For example, most of the crude at Rotterdam is linked to industrial activities. How things will develop at the Port of Fujairah is something to closely monitor.

Storage

Malek Azizeh
Operating Partner
Prostar Capital

This year looks promising and lucrative for storage versus 2020 – a terrible year. Last year, nothing was moving and people were looking for tanks to store their oil, which was floating around. There was so much of it not being consumed. Terminals played a huge role in stopping oil from overflowing – literally. This year, we see a different demand picture – countries' consumption is rising, including countries where Fujairah plays a big role in supplying fuels. It has not been overnight, but it is climbing, So, liquidity and traffic is growing – good news for us and the Port.

"We cannot just rely on Ice Futures Abu Dhabi (IFAD) to create throughput for crude at the Port – it does not work that way. We need more industrialization."

Crude: Industrialization is key

We cannot just rely on Ice Futures Abu Dhabi (IFAD) to create throughput for crude at the Port – it does not work that way. We need more industrialization in terms of refineries and perhaps petrochemicals. This is coming, with talks around some major refinery developments, for example. Blending is another key area. Different refineries have different needs, so one role the terminals can play is creating different blends. We can put this recipe together to create a perfect match for different refineries worldwide. For example, there is low sulfur fuel oil (LSFO) blending, which we have done quite a bit of, and we are seeing rising appetite for high sulfur fuel oil (HSFO) as more VLCCs and ships install scrubbers.

"Fujairah's big investment in its matrix manifold is quite unique in global terms."

Manifold pays green dividends

Demand for oil is still there – but now it is coupled with investments in green energy to make it more appealing. Fujairah is a very environmentally friendly port. One key reason is that all the terminals are linked to a manifold system, which reduces the need for oil tankers to come in and out for individual terminals. In turn, this reduces movement and subsequently, CO_2 emissions. Fujairah's big investment in its matrix manifold is quite unique in global terms.

11mn cbm

of oil storage capacity will be reached by year end at Fujairah – up from 550,000 cbm in 1994.

370

meters was the total quay length at the Port of Fujairah when it started operations. The total now stretches to more than 6.6km.

Storage

Captain Ali Al Abdouli
Deputy Manager
Fujairah Oil Tanker Terminal

Crude storage and blending: these lie at the core of our next evolution. The availability of Murban and other brands of crude in Fujairah will definitely benefit the entire market, as well as our position as a leading global energy hub. This year has been exceptional for us and the Port of Fujairah, despite fluctuating crude prices. We have seen an upward trend in oil movement, which is expected to make this year the most successful year ever in terms of volume throughput.

"This year has been exceptional for us and the Port of Fujairah, despite fluctuating crude prices. We have seen an upward trend in oil movement – we expect 2021 to be the most successful year ever in terms of volume throughput."

Going strong

The oil market will definitely be around for at least the next 40 years as we see the global population continue to rise and subsequently, energy demand will grow. In that vein, Fujairah is committed to continually developing its potential to cater for this growing demand. The Port will work closely with our partners to ensure sufficient infrastructure is always available, including another VLCC when required. We are also progressing environmentally. For example, we have an electronic emissions detection system, which consists of approximately 90 portable and fixed sensors. We rarely have complaints regarding harmful emissions, which is very good news for us in Fujairah.

"Covid-19 has given the world a great lesson: it must be ready. It has taught us the importance of having feasible strategic storage in order to deal with major market disruptions and price fluctuations."

Crude's impact?

Being home to one of the biggest crude storage hubs (including ADNOC's plans for an underground storage cavern for 42mn barrels) is going to be a game changer for Fujairah. It will mean greater utilization of port duties and infrastructure. It also means more product liquidity and movement, which ultimately means more bunkering activities, services, and logistics. Overall, this strengthens our pricing ambition and it supports plans for downstream investments, such as refineries and chemical products. Most importantly, it will attract more oil players to Fujairah – a win-win for all.

31%

of global oil production originated in the Middle East in 2020, as well as 18% of the world's gas production. The region is home to 48% of the planet's proved oil reserves and 40% of its proven gas reserves.[1]

133

anchor positions are accommodated at the Port of Fujairah.

100+

privately owned supply vessels operate on a 24-hour basis from the Port's dedicated Supply Boat Berths. The one-stop-shop service for calling vessels also includes bunkering, ship supply, ship repair, spare parts, inspection, and crew change.

1 BP Energy Outlook 2021

CHAPTER 3 Shipping

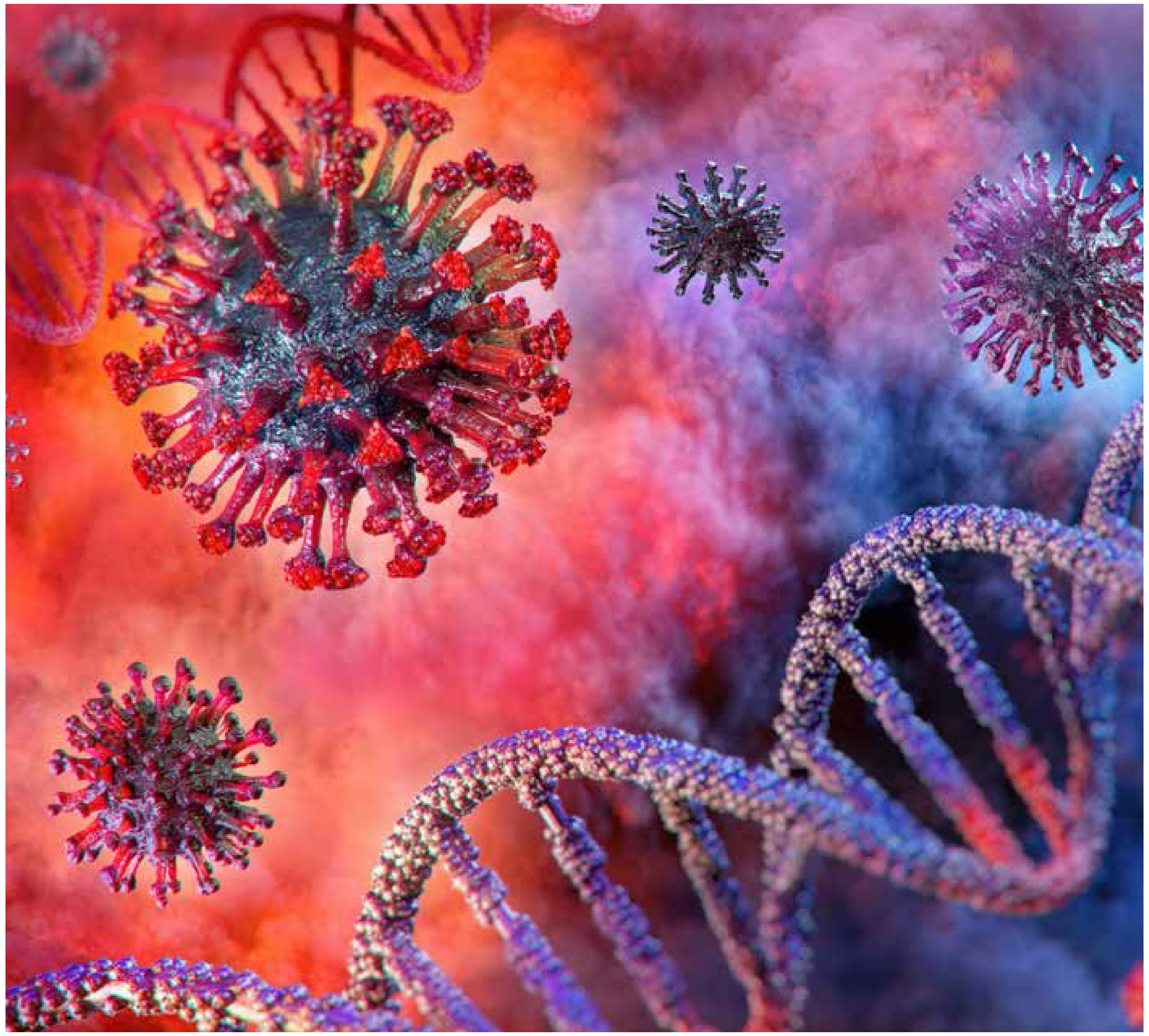
Shipping

Capt. Mayed Alameiry
Harbour Master
Port of Fujairah

We expect the total number of vessels calling at the Fujairah offshore anchorage area by year end to near 13,000 – similar to last year. We have also seen an increase in vessel movements within the Port. In the first three quarters of 2019, we had more than 2,600 vessels call inside the port – that number has climbed 6% in 2021. Overall, the vessels calling for cargo operations exceed the vessels calling for marine services at the anchorage area. This is largely due to restrictions on crew changes, which is an area hard hit by the pandemic. We had an average of 4,000 crew change activities in a month, but that number has been declining since May due to movement restrictions on some nationalities. Still, some restrictions have been lifted in recent weeks, so crew change activity could rise by year-end.

Alternative fuels ahoy?
We welcome any new alternative fuels that want to be part of the Port of Fujairah's mix. We have received many companies that are interested in LNG, but the infrastructure is currently not there. But so far, we have not been approached by any organizations wanting to have methanol, ammonia, or hydrogen as alternative fuel options at the Port. Some conversations about these new fuels are premature. For one, they carry their own risks and safety issues. I see such markets happening later on, as the majority of the world is still either burning heavy fuel oil or shifting towards LNG.

"We welcome alternative fuels – but we have yet to be approached by any organizations wanting to have methanol, ammonia, or hydrogen."



Covid-19: Fujairah's management?

Generally speaking, the UAE has tried to significantly help improve the issue of crew changes. We have our protocol at the Port of Fujairah that if a vessel has staff testing positive for Covid-19 on board, we allow the vessel to go to the anchorage area and we send the crew to isolation rooms in the Fujairah Port Medical Center. If it is a mild or asymptomatic case, the individual is treated in the clinic. If the case is moderate or severe, they will be transferred to medical facilities under the Ministry of Health until they recover.

4,000
crew change activities per month were reported at the Port of Fujairah earlier this year, though this number fluctuates depending on nations' lockdown and movement protocols.

Shipping

**Pradeep Rajan, Senior Managing Editor, APAC Freight Markets
S&P Global Platts**

It has been an unprecedented and phenomenal year for shipping. Containers are making around $10,000 to $12,000 for shipping a 40 foot-foot equivalent unit (FEU) from the Far East to North America. Dry bulk markets across every sector are above the $35,000/day range. In contrast, tanker markets is where the grief is. After the contango market that we had in 2020 with oil demand destruction happening, a lot of the tankers went into floating storage. Now, with crude in backwardation, those ships are being redelivered back to the market and adding to spot supply. To move one metric ton of crude from the Persian Gulf into a port in China on a VLCC today, you are only paying between $6 to $7 a metric ton. Some vessels are operating below OpEx levels and not making enough money to run even day-to-day activities.

Brighter outlook ahead?

But with oil demand recovering now, we are starting to see signs of tanker markets coming back to life. We are starting to see more oil from the Atlantic basin coming into the Far East. There and back is a 90-day employment for a ship. A trip from the Persian Gulf to the Far East by contrast completes a return trip after 30 or 40 days. So, we are seeing slightly better freight rates in the VLCC markets and across the dirty tanker markets. We could also expect the same story in the clean tanker markets given that a lot of refineries are not carbon compliant and will have to slow down their operations. As a result, clean products could be in short supply in particular areas, so we will start to see clean tankers making longer hauls to supply those areas. By Q1 or Q2 of next year, tanker markets should have recovered.

Transition underway

The IMO is coming up with new legislation for 2023 for ships to reduce carbon emissions. They will get a grading depending on the ship's efficiency and carbon emission levels. Large chartering companies such as Vitol, Trafigura or Reliance, which are members of an initiative called Sea Cargo Charter, are likely to only use complaint ship owners. The shipping sector is currently working on processes and technologies that will make them compliant once the new emission regulations kick in. Various alternative fuels are being looked into delivering the energy transition in the maritime sector. Many ports are also working on setting up infrastructure to facilitate, as well as cater, to the energy transition in the shipping markets.

Managing crew changes

Currently, the main issues still impacting crew changes are travel restrictions and closed borders, and that is still leading to delays in swapping crews in and out, as well as delaying the movement of ships. Individual port states also have their own Covid-19 protocol restrictions and quarantine rules, which causes congestion and further delays.

400,000
seafarers were left working on board vessels over their contracts with no way to get home, with a similar figure unable to join ships, at the peak of the Covid-19 pandemic, according to the International Chamber of Shipping (ICS).

200,000
seafarers were still being affected earlier this year. The rise of new variants forcing further border closures means the pressure continues, the ICS warned.

Shipping

Faidon Panagiotopoulos
Senior Trader
GMS

Bunkers and containers are both experiencing a long overdue recovery. The container sector, for one, has reported depressed rates for the last six years. I recall that around 2016-2017, we recycled a nine-year-old container – quite amazing at the time. There is definitely a surge in demand as more markets are being rebooted.

Rethinking tankers

We see this as the year of tanker recycling, which we have not seen since 2018, when 42 VLCCs were recycled in just one year. This removed around 30mn tons of dead weight on VLCCs from the market. Looking ahead, if you let things play out for the next six months and let the trend to recycle run its course, then some will be able to take advantage of higher prices later on.

"The worst is behind us with regard to the Covid-19 related issues that we faced in 2020 – but it remains a very dynamic environment."

77%
growth in the size of the world's oil tanker fleet from 1980-2020, according to Statista. The global fleet had a capacity of 601mn deadweight tonnage last year, accounting for 29% of global seaborne trade.

850+
organizations have signed up to the Neptune Declaration, which was launched in January 2021 to respond to the crew change crisis, detailed the World Economic Forum (WEF).

50%
increase during May-July this year in the proportion of seafarers onboard vessels beyond their contract expiry, revealed data from the world's ten largest ship managers via the Neptune Declaration Crew Change Indicator.

Guessing game

When you buy or schedule a crew change on a vessel in a specific location a month ahead, for example, you now no longer know if it will still be possible when you are ready to go. Vaccination rollouts are obviously an important part of dealing with this, as are efforts by shipowners to craft alternative plans as backups. We are getting towards the end of the tunnel. The worst is behind us with regard to the Covid-19 related issues that we faced in 2020 – but it remains a very dynamic environment.

Shipping

Rania Tadros
Managing Partner - Dubai
Ince

We need a global protocol for seafarers – especially seeing they operate worldwide – rather than having decisions made by local states and port control. There must be a Plan B, a Plan C, and so on at state level, not just between commercial stakeholders. Currently, seafarers' welfare is not properly addressed, with many facing great uncertainty. There does not seem to be isolation procedures in ports, so if one person is found to have Covid-19, the whole vessel tends to be put outside the port limit (OPL).

Fujairah's LNG dynamic

Ships for LNG bunkering take time to build, so the Port of Fujairah can take advantage by tracking construction rates in order to meet the market's fuel needs directly. How many ships are using LNG bunkering now and how many are planned? Do they trade in this region? These are the sorts of questions that the Port of Fujairah must ask. This enables the Port to avoid some of the hype surrounding LNG and its role in achieving net zero. When you look at the order books, there are several ships for LNG bunkering currently under construction. So, ports know they must modernize to offer more carbon efficient fuels. I would expect progress to happen over a decade.

"A commitment by industry, governments and states to seafarers' wellbeing is really important at this stage."

The green equation

Predicting the shipping industry's environmental goals is difficult. Guessing what will happen in two years is hard, let alone thirty years – something Covid-19 has reminded us of. Still, know that shipping has a role to play in reducing CO2 emissions, with the IMO's push for 0.5% low sulfur fuel oil (LSFO) from January 2020 representing a big step in that direction. Today's higher LNG prices may not be helpful in persuading those who are less sure about exploring lower carbon bunkering fuels.

2021
marks a decade of action since IMO adopted the first set of mandatory energy efficiency measures for ships.

50%
reduction in the total annual GHG emissions from international shipping must be achieved by 2050, compared to 2008 levels, according to the IMO's Initial GHG Strategy.

2023
is the deadline for revising the IMO's Initial GHG Strategy.

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