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ROTTERDAM COMMITS TO EU SUSTAINABLE FUEL PROJECT



"The Port of Rotterdam Authority will support the European Commission's efforts to promote the use of sustainable fuels in the maritime sector and will consequently accelerate its own eco-friendly initiative."

In a statement, the Port said it strongly supports the 'Fuel EU Maritime – Green European Maritime Space' and actively encourages the use of alternative fuels, partly through its Incentive Scheme Climate-Friendly Shipping.

In addition, the Port said said fuels are exempt from energy tax at a national and European level, in order to encourage their use.

The Port of Rotterdam Authority takes into account the diversity and complexity of the future fuel mix in shipping and advocates clear objectives, as well as a roadmap with the possibilities for alternative fuels and shore power solutions per ship type and a clear timeline," it said.

Furthermore, it continues to support use of liquefied natural gas (LNG) as a "transition path" for the use of bio-LNG in the future.

"Together with our customers," it said, "we continue to scale up the production of sustainable alternative fuels.

porttechnology.org

MAERSK WARNS OF 20 – 25% DROP IN VOLUMES IN Q2



In the Maersk Q1 results statement ceo Soren Skou said: "Looking into Q2 2020, visibility remains low as a result of the COVID-19 pandemic. We continue to support our customers in keeping their supply chains running, however as global demand continues to be significantly affected, we expect volumes in Q2 to decrease across all businesses, possibly by as much as 20-25%."

Due to the impact of demand on the mainline east – west trades Maersk blanked 90 sailings in Q1 leading to a 3.5% reduction deployed capacity due to idle vessel. In Q1 volumes declined 5.7% China by the almost complete halt in Chinese exports in February. The Asia – Europe trade saw a 16% drop in volumes as a result.

As lockdowns due to the pandemic spread from China across the globe in Q2 the container line expects to blank close to 140 sailings.

Looking ahead Mearsk said: "While the outlook is very uncertain, it is expected that container demand will decline in 2020 compared to 2019. At present, it is difficult to predict the timing and the shape of the recovery in global trade volumes with confidence, as it will be determined by the interplay between the path of the virus and government policies in relation to the economy.

"As a reference point, WTO projects global merchandised trade to decline by between 13-32% in 2020, and the IMF expects a decrease of 11% (goods and services) but with a significant downside risk."

Despite the impact of COVID-19 in the first quarter Maersk reported 23% increase in EBITDA to $1.5bn compared to the same period a year earlier, and a slight increase in revenues in Q1 this year to $9.57bn compared $9.54bn in the same period in 2019.

seatrade-maritime.com

SPIKE IN ASIA-EUROPE SPOT RATES AS SPACE TIGHTENS AND ROLLOVERS INCREASE



There has been a significant spike in carrier short-term container rate quotes from Asia to North Europe this week, as rollovers become the norm.

According to eeSea data, ocean carriers on the route have withdrawn 28% of their headhaul sailings this month and reports from local agents suggest ships from China are sailing full, resulting in rollovers of non-VIP cargo.

Indeed, a local agent source told The Loadstar MSC had hiked its Shanghai to Felixstowe rate, valid until 30 May, by 20%, to $1,660 per 40ft.

"Space is extremely tight," said the agent. "There are cheaper rates in the market from HMM and Yang Ming, but in most cases they don't have the space allocation and containers just get rolled from one ship to the next."

This tightening supply situation was confirmed by UK-based forwarder Westbound Logistics. It said: "A surge in recent bookings, believed to be due to the lifting of restrictions in some parts of Europe, the flood of PPE volume and air freight volumes switching to ocean, has led to more demand than the available capacity."

Westbound co-owner and director Ryan Clark told The Loadstar today air freight capacity issues and sea freight rollovers were a "nightmare", and despite "working incredibly hard to ensure bookings are shipped on time", Westbound was recommending to customers that they may need contingency plans to cover the risk of delays.

According to eeSea data, the blanked sailings mean that, collectively, carriers are offering shippers and forwarders just 72% of advertised capacity, with total Asia-North Europe capacity for May at 979,000 teu against 1.35m teu originally scheduled.

However, today's Shanghai Containerized Freight Index (SCFI) was flat for North Europe, at $827 per teu, while rates for Mediterranean ports were also virtually unchanged, at $879 per teu.

However, it was suggested to The Loadstar by one industry source this week that the lack of movement in the SCFI spot average could be due to a rate gap starting to emerge between "premier and lower division" lines.

Meanwhile, on the transpacific carriers have started to "unblank" some cancelled sailings to meet a spike in demand.

OOCL told customers today that, "in response to the demand change in the market", it was reinstating the Pacific China South 1's 9 June sailing from China to the US west coast and the 28 June Gulf Coast China 2 sailing to the US Gulf .

Earlier this week, The Loadstar reported that THE Alliance was also to "reinsert" two transpacific sailings next month.

Mirroring the Asia-Europe trades, the US components of the SCFI were almost unchanged on the week, at $1,678 per 40ft for the west coast and $2,543 per 40ft for east coast ports.

Carriers on both tradelanes have shown judicious capacity management discipline and appear to be seeing better-than-expected demand and improved booking visibility.

Nevertheless, nobody is suggesting that there will be a peak season this year.

"We are still in survival mode," a carrier source told The Loadstar. "Hopefully, the industry can continue to manage what looks like quite a sustained period of soft demand as economies start to recover slowly from the pandemic."

theloadstar.com

WAN HAI STAYS IN THE BLACK, BUT EVERGREEN AND YANG MING'S RED INK RAISES MERGER SPECULATION



Niche carrier Wan Hai was the only Taiwanese container line to post a net profit in the first quarter of this year as its larger compatriots, Evergreen and Yang Ming, traded in the red.

The parlous position of the liner industry has renewed speculation of a merger of these two into one state-sponsored container line, a development that would be strongly resisted by their individual managements.

Following a $27m loss recorded by Yang Ming in Q1, Evergreen reported a net loss of $15m. But Wan Hai managed to stay in the black, with a profit of $3m, significantly below its $35m profit for the first three months of last year.

The trio's results were impacted by weak demand in the latter weeks of the quarter, due to the coronavirus outbreak in China, and it is expected that Q2 will be far worse for the liner industry.

Taiwan's Ministry of Transport and Communications announced on Tuesday it had launched a $1bn funding package targeting its distressed shipping sector.

Transport and communications minister Lin Chia-lung is said to have met with the heads of Evergreen and Yang Ming regarding the funding package, but there is no evidence that merger talks were on the agenda.

There is, however, precedence for the consolidation of stoutly independent compatriot carriers in the merger of Cosco and China Shipping Container Line in January 2016, and the joining of the container businesses of K Line, MOL and NYK into ONE, two years later.

Mr Lin said the ministry would "fully support" the shipping industry through the pandemic, "to stabilise the confidence" of customers and meet the need for working capital.

A statement from Evergreen welcome the government's approach but stressed that the commitment was to act as reassurance for the country's banks in lending to the shipping industry, rather than as a handout.

"Evergreen appreciates the government's initiative, which is evidence of a forward-looking and precautionary policy. This government assurance to financial institutions will enable them to provide soft loans to the local shipping industry. In the face of the epidemic's impact, the more abundant sourcing of finances will, if required, strengthen the industry's credit position and ensure smooth operation of shipping services."

Last time Taiwan's government stepped in to support its two largest carriers was in 2016, in the wake of the Hanjin Shipping bankruptcy, when it approved a $1.9bn credit line relief package with preferential terms to prop up Evergreen and Yang Ming's balance sheets and boost market confidence.

Subsequently, the state has built up a 48% shareholding in Yang Ming, but the carrier has struggled to achieve sustained profitability, in contrast to its larger rival. Indeed, Yang Ming's board recently approved a private placement for 300 million preferred shares, expected to be mostly taken up by the state.

Evergreen, ranked seventh in the league of global carriers, is twice the size of Yang Ming in terms of capacity with a fleet of 1.2m teu. Both have large orderbooks, although Evergreen has 540,000 teu of newbuild ships on order, compared with the 200,000 teu Yang Ming has under construction.

Unless they can defer the vessel deliveries, the Taiwanese lines will need to fund high levels of capex in the next two years, exerting additional pressure on their balance sheets.

Moreover, Evergreen has the biggest commitment to scrubber technology of all of its peers, with a reported 75% of its 190-ship fleet earmarked for installations.

Although it is likely to have cancelled some, due to the substantial narrowing of the price of IMO 2020-compliant low-sulphur fuel with traditional heavy fuel, the circa-$5m price of installation and the indirect cost of vessels being out of service for weeks will have dented its results.

theloadstar.com

GROWING DEMAND FOR SPACE PUSHES CARRIERS TO REINSTATE BLANKED VOYAGES



As demand for container shipping appears set to increase, the top priority for shippers is securing space on vessels and container equipment, according to a new survey of European Shippers' Council members.

The survey, conducted in conjunction with Drewry Supply Chain Advisors, also found shippers were becoming increasing nervous about the financial position of their transport providers.

Philip Damas, head of the logistics practice at Drewry, said: "These are key factors of carrier and forwarder selection, particularly in today's disrupted market, but also in the next year as, and when, ocean-borne volumes recover."

Clearly, part of the concern is the dramatic cuts in capacity since the onset of the coronavirus pandemic, with hundreds of sailings across the main east-west and larger north-south trades blanked, often at short notice of four-to-six weeks.

Despite the drop in volumes, blanked sailings meant utilisation remained high on the vessels that did load – and, according to SeaIntelligence Consulting, this has meant freight rates on the major trades are well above last year's levels.

"Carriers have been particularly good at maintaining freight rates and, net of fuel, spot rates are actually up 25-40% in some trades compared with 2019. Carriers achieved this through rapid and hard capacity cuts," SeaIntelligence chief executive Alan Murphy said earlier this year.

Godfried Smit, secretary general of the European Shippers' Council, added that the uncertainty short-notice blankings created was also driving demand for shorter contracts.

"This is a market with volatile capacity, where liners remain price-setters and keep freight rates high despite very low fuel indices, while they can only plan in the short term themselves.

"Our view is that shippers will benefit from shorter-term contracts and either by diversifying their carriers' selection pool or by concentrating more on financially healthier or government-supported carriers."

There have been fledgling signs this week of a recovery in demand on its way, with small capacity additions set for the transpacific headhaul eastbound trade.

"Unexpectedly strong demand for cargo space on the route from Asia to the US west coast has prompted carriers to rethink capacity deployment plans," Alphaliner wrote today. "These recent reconsiderations follow rationalisation moves that resulted in a record number of void transpacific sailings in May," it added.

It said APL was set to increase vessel capacity on its transpacific EXX service next week, when the 5,100 teu CMA CGM Georgia will replace a 3,500 teu vessel – last month, the company phased-in sister vessel CMA CGM Florida on the same service.

Meanwhile, THE Alliance will "reinsert" two sailings on the transpacific next month with the departure of the PS4 service, linking South China, Taiwan and Los Angeles, now scheduled for week 24. The service is operated by six Yang Ming vessels of 6,500 teu, according to eeSea data.

The PS5 service, which runs between Shanghai, South Korea and Los Angeles, will operate a sailing on week 23, with the 8,100 teu One Competence newly assigned to the string..

theloadstar.com

TOP TIME SUCKS IN OCEAN SHIPPING



Bill Rooney, the vice president of strategic development for Kuehne + Nagel, told the Agriculture Transportation Coalition (AgTC) this week that requests for quotes (RFQs) are "a good idea gone bad."

"Number 2 on my list of things that suck up more time without adequate payoff are RFQs," Rooney said. "Many of them are way too complicated. … It's in many cases a process that's really pretty bad. As they're conducted today, many RFQs lead to faulty and suboptimal business decisions."

Rooney said he tells customers that "simplicity and human interaction are important parts of a successful RFQ and they need to be a bigger part in the future because we see too much of this in our business, where complexity ends up driving suboptimal decisions by people who are reading the RFQs."

"Bill Rooney, the vice president of strategic development for Kuehne + Nagel, told the Agriculture Transportation Coalition (AgTC) this week that requests for quotes (RFQs) are "a good idea gone bad."

In his role with Kuehne + Nagel, Rooney is a customer of the ocean container carriers. Previously he was a carrier, as the senior vice president of CMA CGM (America) and then as the North American president of Hanjin Shipping prior to its 2016 bankruptcy.

"Number 1 on my list of things that suck up more time without an adequate payoff are bunker surcharges. They are a confusing mess. They don't work at very high and very low fuel prices, as we've seen more recently," he said.

He referred to expected fuel cost increases after the International Maritime Organization's low-sulfur fuel regulation went into effect at the start of the year. But then the coronavirus pandemic hit and oil prices plummeted.

"It was another example of where bunker surcharges don't work — at very low prices and very high prices," Rooney said. "Bunker surcharges, regardless of the complexity, distract buyers from focusing on the important thing. What's important is what's on the bottom line of my invoice. It's like checking out of a hotel in New York. You think you're going to pay $250 and you leave the hotel in Manhattan and the bill says $400 and you wonder how you got from $250 to $400. Well, you got to $400 with the other six charges they add to the bill. Focus on the $400.

"In this case, you've got to focus on the bottom-line number, the bottom line on your invoice. After you've agreed to a rate in this conversation with your provider, then have the adult conversation about what the bunker surcharge is going to look like, etc. I think that's the way to do it. And when you do that, you really need to test … that surcharge to determine what happens at this price, that price, etc.," Rooney said. "I think we can save a lot of time and wringing of hands over this thing. Don't ignore it, just put it where it's supposed to be."

Asked about the possibility of a standard surcharge among all carriers, Rooney responded, "The carriers are just now coming to agreement on things like what is vessel arrival. They have great difficulty doing anything in common. To expect them to be able to do bunker surcharges in common, don't hold your breath."

Rooney called the current rash of canceled sailings as a result of the coronavirus pandemic a "watershed moment" for the ocean carriers.

"The carriers have been very good at matching supply and demand [during the COVID-19 crisis]. This is something they have never done a good job at. This industry for almost its entire existence, from 1956, has had oversupply except for a few distinct number of times," he said.

Rooney said the voided sailings have affected spot rates globally.

"If you look at import rates in '09, import spot rates to the West Coast were $800. They are double that now in conditions that are worse than we had in 2009. Blank sailings have had a clear impact on spot rates," he said.

"I think the thing to watch out for is this could be the beginning of generally higher rates and higher returns to carrier capital. Now I don't think these are going to make rates spike up, but I do think blank sailings have proved to be a really effective measure against rates taking a dive," Rooney said. "I don't think carriers colluded on this but they found by matching supply and demand, they kept rates in one trade at $1,640 instead of $840."

Rooney does not expect any ocean carriers to go out of business anytime soon.

"I also don't think consolidation necessarily is going to happen. We use all carriers to a great extent," he said. "I think we're looking at political issues, not so much financial issues."

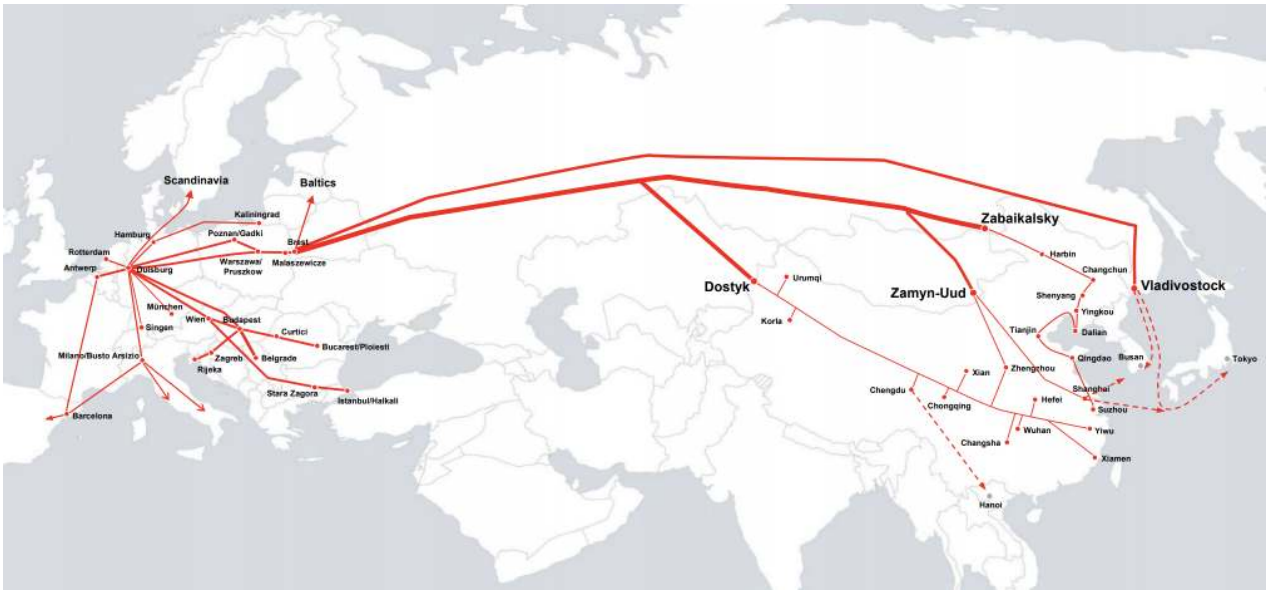
Rooney also doesn't expect any quick resolution to what he called "the chassis issue."

"It's been 10 years … and still, as far as I can tell, [there's] no optimal solution. It's still a problematic part of supply chains. There are still many users abandoning the current business model. When you look at that and you look at some markets, in some markets you can see 30 to 50% of the chassis now being owned by shippers and truckers as opposed to the three leasing companies," he said.

"To me, people are voting with their feet and they're going to a new solution because they're dissatisfied with what they were getting in the marketplace. I still feel — and I know there are arguments for and against this — chassis utilities with a neutral manager are a better way to go to extract more of the money that's still on the table for chassis. It still doesn't work the way it should. I think we can still do some things that will make it work better."

hellenicshippingnews.com

HUPAC LAUNCHES NEW CHINA-EUROPE ROUTE: XI'AN-WARSAW



"Hupac has started a new rail freight connection between the Chinese hub of Xi'an and Warsaw, the capital of Poland. The first train arrived in the Polish city on 18 April, while the next train will depart in the couple of weeks from now. The transit time of the new service is 13 days."

The service Xian-Poland is planned on a weekly basis, the intermodal operator said. It has chosen Warsaw as a destination, as it already offers daily connections from there to other European hubs, such as Duisburg, Antwerp, Rotterdam, but also to markets in Spain, Italy and Switzerland.

Polish market

The first Hupac train left Xi'an on 5 April, carrying 48 loading units containing mainly consumer goods. Most of the containers were destined for customers in Poland, but some containers also to Germany, Spain and other destinations in Europe, explained Zhanna Kargl, head of Shuttle Net North-East Europe. The cargo was picked up by truck as also send by rail from the terminal in Warsaw."

The company is anticipating cargo destined for different European markets via Warsaw hub by using the Hupac Group network. The opening of factories in Italy and Spain could play a role in demand, Kargl explained. "The closure of these factories has impacted rail freight volumes over the past weeks. This may now be revived."

China link

Hupac maintains close cooperation with the Xian City Platform. In 2019 it successfully launched a train between Xian and Milan (Busto Arsizio). The centrally-located Chinese city is not the only one on the Hupac map. "We also cooperate with other Chinese platforms", said Kargl.

In total, the intermodal operator in the period January-May 2020 moved between 300-400 containers coming from China to Europe, including the 48 x 40'ft containers of the train from Xian to Warsaw.

railfreight.com

FEWER TRUCKS CROSSING SWISS ALPS



transportjournal.com

Last year, the volume of goods transported across the Swiss Alps by truck and rail was 4.6% down from the levels of 2018. This drop is mainly due to the economic downturn, particularly in Italy. In nominal terms, the amount of truck journeys fell by 500,000 to 900,000.

The share of heavy goods vehicles at the two most important border crossings – Gotthard and San Bernardino – decreased, while traffic at the Simplon and Great St. Bernhard passes inched up slightly compared to the previous year.

More than a third of the goods are shipped through the Alps with containers, swap bodies and semitrailers in unaccompanied combined traffic (UKV), the Swiss federal transport authority reported. (ben).

TIA REPORT: BROKER GROSS MARGIN WAY DOWN IN Q1 FROM A YEAR EARLIER

While brokers are under attack from some quarters of the network of drivers who are dealing with low truck rates, a quarterly report spells out how the 3PLs took a hit in the first quarter.

The recently released report from the Transportation Intermediaries Association shows a decline in most margins in the first three months of this year compared to both the fourth quarter of 2019 and the first quarter of last year.

The comparisons to Q12019 are particularly stark. Focusing on truckload, the largest and most volatile of the three modes and the one that has been the focus of driver protests, the TIA report said the gross margins for truckload activity managed by 3PLs declined 210 basis points in 1Q2020 compared to a year ago. Intermodal margins were down 140 basis points while LTL margins dropped 10.

The total truckload business in the TIA report — all 3PLs aggregated — showed the gross 1Q2020 margin declining to 15.1% from 17.2%, though total shipments dropped just 2.7%. The average invoice amount/load declined 8.4% to $1,628 from $1,778, the lowest point in over two years. Overall total truckload revenue declined 10% in the quarter.

The drop in the gross margin percentage for all truckload business at 210 bps was bigger on an absolute basis than the individual bps declines in the various size categories that TIA reported. For example, 3PLs with less than $16 million in revenue saw their gross margin percentage drop to 16.7% from a year ago, down 80 bps, though the drop dollar-wise was more than $80 off a smaller invoice amount per load than the aggregate.

For the wide $16 million to $100 million category, gross margin percentage declined 160 bps, to 14.8% from 16.4%, with an 18.3% drop in the gross margin. For companies in excess of $100 million, the gross margin percentage dropped to 15.2% from 16.4%.

Although markets started to deteriorate in the first quarter, it wasn't all that bad compared to the fourth quarter. The total gross margin in that comparison was down just 20 bps, to 15.1% from 15.3%.

In the smallest category of 3PLs, less than $16 million in size, the gross margin percentage declined to 16.7% from 17.9%. The $16 million to $100 million category rose 70 bps, to 14.8% from



14.1%. The category with the largest revenues , more than $100 million, saw a decline of 60 basis points, to 15.2% from 15.8%,

Noël Perry, the TIA's chief economist, said in his introduction to the report that the decline in margin percentage across all modes was surprising. "One disappointment is the drop in margin percent, something that has not happened on the approach to recession before," he wrote. "I suspect it results from the flood of new brokerage and truckload capacity that entered the market in response to the very good times of 2017-2018. Such a precedent is disturbing given the deterioration in market prospects attendant to the COVID-19 pandemic."

The total activity summary for all modes — truckload, intermodal, LTL and some other small categories — showed a gross margin percentage of 15.8%, down from 15.9% in the fourth quarter of last year. But compared to the first quarter of last year, the drop in gross margin percentage was far bigger, to 15.8% from 17.5%.

Although the full report is for the first quarter, TIA just completed a special survey for April 2020 comparing total revenue to April 2019. The impact of COVID started hitting all modes of transportation by mid-March. Total revenue in April declined over 18.3%, a sharp decline from Q12020 performance and down 16.7% compared to March 2020.

freightwaves.com

INTERMODAL VOLUMES WILL TAKE MONTHS TO IMPROVE, PANEL PREDICTS



Intermodal volumes could start to improve around the fourth quarter of 2020 or the first quarter of 2021, but uncertainty surrounding the coronavirus pandemic makes any volume forecast dicey, said a trio of panelists at Wolfe Research's Global Transportation and Industrials conference on Tuesday.

"You have some really big factors that aren't normal items," and it's not just an economic issue but a biological one, said Jim Filter, Schneider National (NYSE: SNDR) senior vice president and general manager of intermodal.

Filter was part of the panel, along with Phil Yeager, president and CEO of the Hub Group (NASDAQ: HUBG), and Darren Field, president of intermodal of J.B. Hunt Transport Services (NASDAQ: JBHT).

Forecasting intermodal demand is challenging under existing conditions; in the near term, intermodal volume growth will largely depend on how consumer demand affects economic activity, panelists said. Although volumes at key ports on the East and West coasts are anticipated to be lower in May and June because of canceled sailings, some in the intermodal sector are using consumer confidence and retailer demand as gauges for how intermodal activity might fare the remainder of the second quarter.

"I don't anticipate [imports] becoming any worse but I'm also moving on assumptions and forecasts we're getting from our customers," Field said.

There are three to four conditions needed to grow intermodal volumes, according to Field: tightening truckload capacity, competitive fuel pricing and reliable rail service. A fourth factor that some customers care about is the intermodal sector's carbon footprint, Field said.

With the truckload market facing pricing pressure from loose capacity and low fuel prices reducing transportation costs, the bid season has been "going as expected," panelists said. Truckload prices are at a 15% discount in most lanes, with longer lanes experiencing even steeper discounts.

But while this pricing might seem attractive to shippers, shippers are also considering what their long-term capacity needs are as they navigate pricing discussions with intermodal partners, panelists said.

Although the railroads have said they won't come down on pricing for intermodal, the railroads also don't want to lose market share, panelists said.

"At the end of the day, we are in a competitive business. … [I]n order to bring in new opportunities, I think the railroads have to participate somehow," Field said.

As the COVID-19 pandemic eventually abates and the U.S. considers nearshoring and onshoring as a means to diversify supply chains, intermodal stakeholders stand to benefit from increased manufacturing and production coming from Mexico, panelists said.

Manufacturing costs will be a factor in whether companies pursue nearshoring or onshoring opportunities, and shifting manufacturing to Southeast Asia from China could affect which U.S. ports will see increased activity, Yeager said. But intermodal stakeholders stand to benefit should more production move to Mexico, he said.

E-commerce is also a significant growth opportunity for intermodal because intermodal partners will still be needed to bring inventories close to population centers, according to panelists..

freightwaves.com

SHIPPING CONTAINERS PROVE VERSATILE IN COVID-19 FIGHT



"While we are used to seeing shipping containers at ports and on ships, and sometimes even converted into tiny homes, it is worth noting that they can also be useful in the fight against COVID-19."

https://youtu.be/rh34bldQBCg

Shippers have been left with thousands of empty containers to move because of the slow down of the logistics supply chain.

Containers are themselves versatile offering a larger footprint of up to 40ft (12.2m) in length and are typically are a water-tight space.

In a recent article, Johnathan Bulmer, managing director at Cleveland Containers, has highlighted three uses for shipping containers.

First, makeshift hospitals can be built using shipping containers as the demand for health care rises exponentially.

A video from the World Economic Forum provides an example of how shipping containers can be used to provide extra hospital space.

Another design which has received funding to develop its first prototype is the Connected Units for Respiratory Ailments (CURA), notes Bulmer in his piece.

In the same way in which pop-up shops and co-working spaces can be turned around quickly, the CURA fits all equipment and features of an intensive care unit placed inside a 20ft container.

Hospital housing and temporary accommodation is yet another use for containers.

Detroit-based cargo architecture firm Three Squared has turned its "state-of-the-art cargo container dwellings" as relief units for hospitals, but also as appropriately appointed and climate-controlled housing units for doctors and nurses needing to stay close to those patients.

The company also notes that the dwellings have also been turned over as relief units for morgue/mortuary overflow. As is the reality of the COVID-19 pandemic.

Finally, Bulmer notes that in the UK, 500 temporary prison cells are being made from steel shipping containers, with more expected to be built if demand continues.

They will be built in a prefabricated manner into the grounds of seven prisons, in an effort to prevent the spread of the virus in these locations where it's harder to maintain social distancing. Work has begun on HMP North Sea Camp along with others in Moorland, Lindholme and Huber, according to the Ministry of Justice.

"Shipping containers have been used as temporary measures for years, but never in such a capacity for healthcare as they are today. What the landscape will look like after the pandemic passes – which it will, eventually – is unclear.

"But temporary changes to tackle the crisis now may endure into the future, and create a new normal for reactive relief efforts, with design ready-made," Bulmer noted.

Finally, as a minor distraction for those working from home full-time and schools being closed, shipping line Hapag-Lloyd has offered a fold your own Hapag-Lloyd container that can be printed out, coloured in and assembled at home.

porttechnology.org

THREE ALTERNATIVE POWER SOURCES ENABLING GREEN SHIPPING



"With the IMO committing to cut the industry's greenhouse gas emissions by 50% from the 2008 levels by 2050, and a cross-industry coalition attempting to have net zero-emission vessels sailing by 2030, the race is on the find alternative power sources for the 50,000 ships sailing the world's oceans. While operational efficiencies and waste reduction can make a big dent in the emission reduction targets, the industry needs to find completely new ways of meeting its energy requirements if it is to have any chance of hitting them. "

Here we take a brief look at three of those alternatives; wind, batteries, and hydrogen.

Wind

Wind energy has powered the world's fleet for centuries, it is only in the last 200 years that fossil fuels have taken over as the dominant propulsion system for ships. The problem is, in that time we have become used to the reliability of combustion propelled ships; they don't get stuck in the doldrums, and they can power through oncoming wind much more quickly than a sailing ship can beat into it. But it would be foolhardy not to realise the benefits of harnessing this ancient source of energy in modern shipping.

When combined with forecasting and routing systems and with other forms of propulsion, wind becomes a reliable power source. There are a number of companies working on bringing wind back into shipping. Some, like Timbercoast, are operating small scale 100% wind energy powered vessels, others like Wind+Wing Technologies are developing solid polymer wings that act like sails and operate autonomously to provide extra propulsion whenever possible.

In addition to more traditional sail and wing ideas, we are also seeing a resurgence of Flettner rotors. In 1926, German aviation engineer Anton Flettner set sail across the Atlantic. Instead of using traditional sails, his ship was powered by large rotating cylinders on deck. The cylinders made use of the 'Magnus effect' which applies a force to rotating balls and cylinders perpendicular to the spin. It is the same reason backspin on a tennis ball will lift the ball, making it harder to hit. The rotors were more efficient than sails, able to function closer into the wind, and by producing more thrust, they also required less crew to operate.

Until recently, however, they were never deployed commercially at sea because the price and availability of fossil fuels meant they weren't an economically viable alternative. Today though, Finish technology company Norsepower has deployed rotor sails to three vessels, a RoRo, a cruise ferry, and a product tanker. After 45,000 hours of operation, their solution has saved an estimated 1,700 tons of fuel and stopped 5,000 tons of CO2 entering



the atmosphere. Norsepower claims that with rotors installed to a ship, it is possible to reduce fuel consumption by 5%-20% without reducing speed.

Another innovator operating in this space is Magnuss. Recognising that bulk carriers need to make their decks free from obstructions when they are loading and discharging cargo, Magnuss has developed a retractable Flettner rotor. When a ship is in port, the rotors retract into the deck making it easier for cranes to access the cargo for loading and discharge.

Batteries



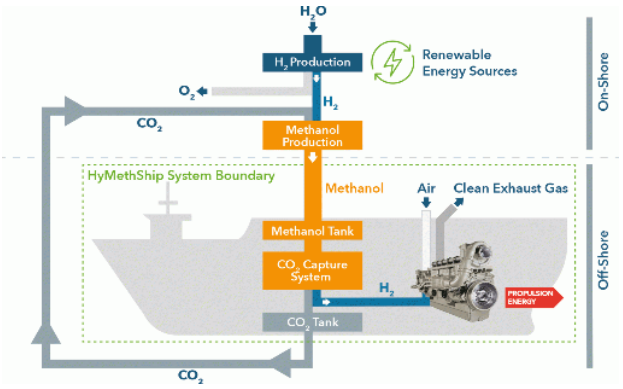
Electric propulsion has existed at sea for many years. Usually, this takes the form of diesel generators powering an electric drive train. Diesel-electric ships are often used when a vessel needs to be able to quickly increase power consumption for manoeuvring, this is how most ferries and offshore support vessels operate.
If the diesel generator was swapped out for a large enough battery pack, it would be theoretically possible to power the ship with no emissions. There are a number of limitations to this, however, including the size and weight of a battery pack with enough power to reliably support the ship's propulsion, and the ability to quickly charge the battery while the vessel is in port. A final point is that the battery would need to be charged by a renewable power source ashore, otherwise the emissions problem is being moved rather than solved.

In December 2019, Maersk will be installing a 600kwh battery housed inside a 40ft container to one of their ships; the Maersk Cape Town. This is the equivalent of having the power from six Tesla Model S cars available for use onboard. Rather than for propulsion, the battery pack will be used to improve the efficiency of the generators that power the onboard support systems. Additionally, it will be used to support rapid changes in electrical load such as using bow thrusters and to provide additional redundancy in case of power failure.

Taking this concept one step further is Dutch startup Skoon. They offer containerised large battery packs to act as a sustainable alternative to diesel generators on land and at sea. Users can buy Skoon batteries for use in their own operations, and rent them out to other users as part of a power-sharing service. The logistical flexibility that comes with housing batteries in containers, means they can supply power anywhere a container can be delivered and offer power on demand to ships in port and at sea as an alternative to using diesel generators.

One company working to make batteries a viable source of power for propulsion is Phinergy Marine. Rather than Lithium, which powers most batteries in existence. Phinergy Marine builds aluminium air batteries. Up to 70% of the weight of a traditional battery is made up of a cathode that bounds the oxygen required to release energy in a metal anode. Metal air batteries use oxygen from ambient air rather than requiring it to be bound in another element (ie lithium). This makes it possible to build batteries that are significantly smaller and more powerful than current battery systems. Phinergy Marine has developed a battery system that offers 7.2MWh of power stored in two twenty-foot equivalent shipping containers. One container contains the metal-air battery system, and the second is a tank container containing electrolyte. That's the equivalent of having the power from 75 Tesla Model S cars in the space of a 40ft container. To scale the solution, they propose storing electrolyte in bunker tanks and swapping out container-based batteries for charging whenever a ship is in port.

Hydrogen Methanol and Ammonia



Hydrogen is an abundant source of energy and the waste product from its combustion is water. That said, it is dangerous to handle and 95% of the world's industrial hydrogen supply is created through a process that requires fossil fuel inputs and emits CO2. Renewable sources of hydrogen are in development, though we are yet to see production at the scale that would be required to make it a viable alternative for vessel propulsion.

One initiative looking at exploring the use of hydrogen as a ship's fuel is Hymethship. This EU funded project is working towards building a system that uses a carbon capture to turn hydrogen into methanol, making it safer to transport and handle. Before combustion, the methanol is reformed into hydrogen and CO2. Waste CO2 is captured and stored in tanks onboard the vessel which can then be discharged ashore to be used to create more methanol. Though not suitable for all ship types, Hymethsip claims that by using CO2 in a closed-loop, this system makes the most of the current combustion engine technology that exists in the world's fleet and creates an economically viable way for ships to undertake long ocean passages with 97% less greenhouse gas emissions.

Hydrogen ammonia is another promising method for fuelling ships on long distance voyages. Ammonia can be created by fusing nitrogen and hydrogen using renewable energy sources. The fertiliser industry has been using the compound for well over a century so we have a good understanding of how to handle and transport it. It can be stored in a liquid state under pressure or at a relatively straightforward -33.4°C. When it needs to be used as a fuel it can be split by a catalyst into nitrogen and hydrogen before combustion, with the resultant emissions are nitrogen and water. This again makes the most of existing combustion technology, and the world's ammonia supply chain already exists because of the fertiliser industry.

Conclusion

We are a long way off having access to clean energy at sea, but with the Poseidon Principles gaining traction we are likely to see significant investment made in alternative energy sources for the industry in the next five years. Wind is an obvious example of a clean and renewable energy source, but it is not reliable enough to support the industry alone. The likely answer will be a combination of all of the above and more, with hybrid vessels becoming a common sight in the coming years.

As we begin to prove and disprove the viability of particular technologies, a critical question will become how we go about quickly scaling them to the world fleet. Developing the infrastructure to support changing the industry's energy supply will likely be a greater challenge than developing the energy sources themselves.

This content has been provided to Maritime Marketplace by Thetius founder: Nick Chubb.

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UNINTENDED CONSEQUENCES



Less than a month into 2020, VLSFO came under attack by environmental groups. In this feature article for the first 2020 issue of World Bunkering, IBIA's Director Unni Einemo examines potential undesirable side-effects of the 0.50% sulphur limit.

Few involved in the bunker and shipping industries will have failed to notice the controversy surrounding the use of very low sulphur fuel oil (VLSFO) blends to comply with the 0.50% sulphur limit imposed on fuel for ships since the start of 2020. Throughout 2019 debate was raging around the potential safety implications of such fuel, both regarding the inherent quality of new blend recipes and incompatibility risk associated with co-mingling VLSFOs from different sources onboard ships. Those concerns remain with us but at least they are well understood by now. IBIA, among others, worked hard to provide the supply and shipping industries with the tools to produce, handle and use compliant fuels safely.

But in January 2020, VLSFO came under attack amid claims these blends would cause an increase in emissions of black carbon because they are more aromatic than the high sulphur fuel oil (HSFO) they have been made to replace. If that's true, this will be one of several examples of unintended consequences associated with MARPOL Annex VI, the International Maritime Organization (IMO) regulation dealing with air emissions from shipping.

The main goal of reducing the sulphur limit for marine fuels to 0.50% sulphur is to improve air quality to reduce shipping's negative impact on human health. Several studies have told us so, and while estimates vary hugely regarding just how many premature deaths will be avoided thanks to the new global low-sulphur regime, the positive impact of the MARPOL Annex VI regulation is not in dispute.

IBIA has for some time, however, been pointing out the "MARPOL Annex VI paradox": almost everything we do to improve air quality has a negative impact on efforts to stem global warming, either directly linked to what happens on ships or indirectly due increasing emissions from other sources to provide ships with cleaner, less polluting fuels. The latter forms part of the debate around lifecycle, or well to emissions of gases that contribute to global warming, such as increased CO2 emissions from refineries to produce lower sulphur fuels and methane slip during the production and distribution of LNG. I'm not going into detail on that here. Suffice it to say it's hard to get a handle on it because numbers presented by various studies vary a lot.

Direct impacts from ships relate to how much CO2 or other greenhouse gases (GHG) they emit. On the positive side, IMO has introduced mandatory energy efficiency measures under MARPOL Annex VI aimed at making ships technically and operationally more efficient, consequently reducing CO2 emissions per tonne of cargo carried by ships. The reduction in the sulphur limit outside emission control areas (ECAs) from 3.50% to 0.50% at the start of 2020 may have a positive side effect because low sulphur fuels cost more, incentivising more efficient ships. Ships using exhaust gas cleaning systems (EGCS), or scrubbers, however, will emit slightly more CO2 due to the extra energy required to run the scrubber. They may even sail faster and hence burn even more fuel because they can continue to use cheaper high sulphur fuel oil (HSFO). These are among the most obvious direct impacts that few would dispute, although actually quantifying them is less straightforward. There are other, less obvious and even harder to quantify direct GHG impacts from ships associated with meeting sulphur emission limits. These include methane slip from ships using LNG (which depends on what type of engines and fuel systems they use), how much black carbon they emit, and just how big the impact will be from the huge reduction in shipping's sulphate emissions, which have a cooling effect.

Black carbon – facts or speculation?

The IMO begun concrete work on how to address black carbon (BC) emissions from shipping almost a decade ago. It is not an easy subject and many aspects of it are difficult to understand, including for example how to measure it most effectively and the exact relationship between fuel types and BC emissions. Among the many studies submitted to the IMO on the subject over the years, it has been asserted that fuel type has a significant impact with HSFO generally singled out as the worst offender. It hasn't always been clear-cut however, as some studies pointed to engine load as a bigger factor than the fuel type and the fuel sulphur content, at least when talking about petroleum-based fuels ranging from low sulphur marine gasoil (MGO) to HSFO, and everything in between.

Like all particulate matter resulting from burning stuff, including fuels, BC is bad for human health. It has one other key attribute; it is light-absorbing and therefore BC, or soot in layman's terms, is associated with global warning. Suspended in the atmosphere it warms by absorbing sunlight, while soot deposits make ice and snow melt faster. This is why IMO's work has been focusing on reducing BC emission from shipping in the Arctic, where its impact is most severe. LNG is a clear winner for reducing all PM, including BC, but there's no near-term plan to require ships in the Arctic to stop using oil-based fuels. There is, however, parallel work underway at the IMO to develop measures to reduce risks of use and carriage of heavy fuel oil (HFO) as fuel by ships in Arctic waters. The outcome will likely be a ban on carrying and using HFO in the Arctic, subject to an assessment of the impacts on the region to ensure the positives (reduced pollution risk) outweigh the negatives (increasing cost of shipping activities in the region).

Work relating to BC emissions, and the development of an HFO ban in the Arctic, are both on the agenda at the 7th session of the IMO's Sub-Committee on Pollution Prevention and Response in mid-February. Among the papers submitted to PPR 7 is a study which claims new blends of marine fuels with 0.50% sulphur content increase BC emissions by 10% to 85% compared to HFO with a 2.5% sulphur content and by 67% to 145% compared to DMA-grade MGO with 0.1% sulphur. The reason for this increase is that fuels with 0.5% sulphur content used in the study contained a high proportion of aromatic compounds in a range of 70% to 95%, compared to 50% in the 2.5% sulphur HFO reference sample and 20% in the DMA reference sample. The study, submitted to the IMO on 15 November 2019, was followed by submissions from FOEI, WWF, Pacific Environment and CSC calling for urgent action to prevent the use of 0.50% sulphur fuel blends in the Arctic and ensure only distillates are used.

In January, the Clean Arctic Alliance sent a letter addressed to the co-authors of the Joint Industry Guidance (JIG) on "The supply and use of 0.50%-sulphur marine fuel", including IBIA. In the letter, which was widely publicised, the Joint Industry Guidance (JIG) was criticised for making "no mention of low sulphur fuel blends containing high levels of aromatic compounds nor of an increase of black carbon emissions of potentially up to 2.45 times that of the distillate DMA." The letter also insinuated that the industry associations behind the JIG should have been aware of this and should have immediately sought to halt the production of these fuels and alert the IMO.

IBIA was surprised by the study's assertion that the 0.50% sulphur fuel oil blends are expected to have higher aromatic content than traditional HSFO, especially as the expectation prior to 2020 was that many of the new marine fuel blends would be more paraffinic in nature.



The shift to 0.50% sulphur fuels is still in its early days but early indications from several fuel testing agencies have indicated that 0.50% sulphur fuels seen so far tend to be more paraffinic and less aromatic than the HSFOs they have replaced. As such, it seems premature to draw any valid and meaningful conclusions on the level of black carbon emissions associated with the use of 0.50% sulphur fuels.

When the IMO's Marine Environment Protection Committee decided, at its 70th session (MEPC 70) in October 2016, to implement the 0.50% sulphur limit in 2020, the availability study used as the basis for the decision said blended fuels with between 0.10% and 0.50% sulphur would account for 73% of global consumption from international shipping. As industry prepared, fuel producers began formulating VLSFO blends intended to replace HSFO as economically as possible for use by the global fleet. The focus was not on producing fuels specifically for use in the Arctic, although concerns about the cold flow properties of distillates for use in cold regions was taken into account to ensure ships don't end up with solidified fuel, like candlewax, in their tanks. The primary focus during 2018 and 2019 was on whether the VLSFO blends would be safe, with a particular focus on stability and compatibility because more paraffinic blend components were expected to be used and might create issues when mixed with fuel components that have traditionally been more aromatic in nature. The JIG, which was published in August 2019, was developed to support suppliers, ship managers and seafarers prepare and implement the use of 0.50% sulphur fuels as safely as possible. The document was entirely focused on the safe handling and use of compliant fuels and did not investigate or comment on any other issue.

IBIA, along with co-authors of the JIG, supports a thorough scientific debate of the black carbon issue at the IMO. Furthermore, IBIA believes IMO decisions should be based on solid evidence and science that stands up to scrutiny, and it is important that all interested parties retain open and inquisitive minds when examining potentially conflicting information.

The work underway to develop a ban on the use and carriage of HFO in the Arctic could offer a way forward. PPR has been tasked with developing a definition of HFO, taking into account regulation 43 of MARPOL Annex I which gives a definition of heavy grade oil (HGO). All carriage of HGO, as fuel and as cargo, is banned in the Antarctic. HGO is defined as all oil with a density at 15°C higher than 900 kg/m3 or a kinematic viscosity at 50°C higher than 180 mm2/s. This definition means all the marine fuel grades meeting current ISO 8217 marine distillate (DM) specifications would be allowed for carriage and use in the Antarctic. Residual grades (RM), although several of them have a kinematic viscosity at 50°C below 180 cSt, all have a maximum density limit in excess of 900 kg/m3, which would not be allowed. Although many of the VLSFO blends seen so far have viscosity below 180 cSt, most have tested above 900 kg/m3 threshold used in the HGO definition and as such would be eliminated by using this definition. To help reduce BC emissions in the Arctic further in the future, investigations could be made into including a limit on aromatic content in HFO. If so, we need to understand how it can be measured and tested by a recognised test method, and whether we need a new ISO 8217 specification parameter to do so.

The SOx paradox

Sulphur oxide (SOx) emissions form sulphate aerosols and while these increase human health risks, they have another less discussed side-effect: sulphates formed by ships burning HSFO contribute a cooling effect, both directly by reflecting energy back into space, and indirectly by interacting with clouds and making them brighter so they reflect more sunlight away from the Earth. A paper published in the journal Nature in February 2018 estimated that implementation of the 2020 sulphur limit for ships would result in approximately 75% reduction in shipping SOx emissions globally. This meant policymakers "face trade-offs whereby achieving human health benefits may be associated with climate change," the paper said. Its authors included several renowned academics from the US and the Finnish Meteorological Institute.

A more recently released study into this phenomenon, led by researchers from Imperial College London, together with University College London and the University of Oxford concluded that sulphate aerosols have the most significant impact on cloud formation compared to other components of ship exhaust. The team studied more than 17,000 ship tracks from satellite observations and matched them to the movements of individual ships using their onboard GPS. The study was able to assess the impact of the introduction of the 0.10% sulphur limit in emission control areas (ECAs) where the researchers found that "ship tracks nearly completely disappeared compared to before the restrictions, under similar weather conditions."

The most publicised part of the study's finding was the observation that it might be possible to monitor compliance with the 0.50% sulphur limit because ships burning HSFO "create a measurable difference in the satellite-observed cloud properties." This could indeed be a useful tool on the high seas where compliance monitoring is tricky.

The study notes that the impact of aerosols on cloud properties "is one of the leading uncertainties in the human forcing of the climate" and the team behind it want to find out how to predict more accurately the influence of sulphur aerosols on cloud formation on a larger scale to feed into climate models.

Does this mean that the IMO will reconsider the global sulphur cap because of the climate change impact? At MEPC 70, IBIA proposed that a "global ECA" covering all countries' shores could improve coastal air quality to a similar extent as a global cap and also reduce overall global warming by allowing continued use of HSFO out on the high seas. It wasn't the first time this idea has been mooted, and it might not be the last, but it would require a major revision of MARPOL Annex VI which is complex and time-consuming. There was no time for that at MEPC 70, which was under huge political pressure to ensure the 0.50% sulphur limit would enter into force in 2020. The key concern was to improve the life expectancy of populations affected by air pollution from ships. Sometimes medicine comes with undesirable side effects, but as long as the benefits outweigh them, the prescription won't change..

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THE SHIPPING INDUSTRY MUST ADAPT IF IT IS TO SURVIVE IN THE MODERN WORLD



"A host of technological, environmental and geopolitical challenges will test the resilience of the maritime sector over the coming decades"

Cheap, clean fuel is an asset that can make or break a shipping company's balance sheet. Consequently, firms have increasingly turned to liquefied natural gas (LNG) to reduce their impact on the environment. But while LNG is less harmful than traditional alternatives, such as heavy fuel oil, the cost of installing the necessary equipment is often prohibitive. What's more, the heavy metallic tanks used to store the fuel reduce the volume of freight LNG-powered vessels can carry.

Ocean Finance, an Athens-based business development and consulting firm that operates across the maritime and energy sectors, may have a solution to the problem. In partnership with Cimarron Composites, an American advanced composite structure manufacturer, Ocean Finance is building a carbon-fibre tank that is up to 90 percent lighter than conventional tanks, borrowing technology and techniques from the aerospace industry.

"We were searching for green solutions for high-speed vessels and we came across equipment that NASA uses to launch rockets into space," Panagiotis Zacharioudakis, Director at Ocean Finance, told World Finance. "Every gram counts in this process, which is quite relevant for the shipping industry." The tank, which has already received preliminary approval from the American Bureau of Shipping, is expected to become available this spring. It can also be retrofitted to store liquefied hydrogen, a fuel considered to be the greenest solution for the shipping industry moving forward.

"The advent of autonomous technology in the shipping industry poses a series of legal and ethical questions"

Not all in the same boat

Such moves are imperative for an industry that accounted for approximately 3.1 percent of carbon dioxide emissions globally between 2007 and 2012, according to the International Maritime Organisation (IMO). The IMO wants the maritime sector to cut its greenhouse gas emissions by at least 50 percent by 2050 compared to 2008 levels. At the beginning of the year, it imposed new regulations that limit the sulphur content of marine fuel to 0.5 percent mass by mass, effectively increasing fuel costs for most shipping companies. Only ships equipped with exhaust gas cleaning systems are exempt from the regulation.

Many think the target set by the IMO is unrealistic given the relatively short time frame in which shipowners will have to adjust to the change and the disparities in regulation across different jurisdictions. In Europe, for example, regulations are deemed to be too strict, harming the competitiveness of EU-based firms.

"The target… is ambitious," Harilaos Psaraftis, a maritime logistics professor at the Technical University of Denmark, told World Finance. "The IMO process is way too slow, mainly as a result of political obstacles." In response, several organisations representing the industry submitted a proposal in December to form a collaborative research and development programme aimed at finding green solutions, with participants providing funding of around $5bn over 10 years.

The transition to greener technology poses a conundrum to shipowners, though, as they are forced to make investment decisions without having a clear picture of the industry's future needs and regulatory framework. "A ship ordered in 2025 will still need to be operating in 2050, if the owner is not to face substantial losses," Pyers Tucker, Head of Strategy at Hapag-Lloyd, a German international shipping and container company, told World Finance.

"Companies that are fortunate enough to place their bets well will survive; the rest will struggle – or go under – with assets that will have devalued much faster than their worst-case business plans. Any new ships we order in the next few years will almost certainly be LNG-capable… [But] the shipping industry will not be able to solve this [problem] on its own."

For an industry notorious for its aversion to change, ditching carbon fuel will be highly disruptive. When container shipping appeared in the late 1950s, it revolutionised the sector by creating unprecedented economies of scale. Companies transporting crude oil from the Middle East to the manufacturing powerhouses of the developed world thrived, but the demise of fossil fuels now threatens to unravel these global supply chains.

3.1%
Shipping's contribution to global CO_2 emissions (2007-12)

50%
Targeted reduction in the shipping industry's greenhouse gas emissions by 2050

11bn
Volume of goods transported by sea in 2018 (tons)

90%+
Proportion of goods transported by sea globally

$19bn
Estimated annual loss resulting from inefficiencies in the container shipping value chain

$5.3bn
Estimated value of the global smart port

The maritime sector's traditional affiliation with the energy industry makes planning a risky business for shipowners. In 2018, fossil fuels accounted for more than a third of the cargo transported by ships globally. With commentators earmarking peak oil – the hypothetical point at which global oil production hits its maximum, before falling into terminal decline – to be reached within the next two decades, a significant portion of the sector may face an existential crisis.

Steve Saxon, a partner at McKinsey & Company specialising in shipping and logistics, told World Finance: "Demand for large-scale crude tankers will taper off and ultimately may decline. More interestingly, we see the product mix shifting. With the growth in refining in the Middle East, we see more demand for product and chemical tankers, which appear bright spots for shipping."

All hands on tech

One way the industry can adjust to the new era is by embracing automation. Autonomous cargo ships have long been touted as the next big thing, combining cost-efficiency with green credentials. Two Norwegian companies, Yara International and Kongsberg Maritime, expect to launch the world's first autonomous, zero-emission container vessel this year, but many in the industry are sceptical. "We don't see autonomous cargo ships as more than a short-distance gimmick," Tucker told World Finance. "For deep-sea services, we can envisage remotely piloted cargo ships – perhaps with small maintenance crews helicoptered on/off – as… a more realistic future."

As with driverless vehicles, the advent of autonomous technology in the shipping industry poses a series of legal and ethical questions, from liability to insurance costs. The industry's presence across multiple jurisdictions adds extra complexity. Philip Damas, Head of Drewry Supply Chain Advisors, the logistics arm of UK maritime research consultancy Drewry Group, told World Finance: "The question is whether governments, regulators and insurers around the world will be willing to accept – and coordinate – such a dramatic switch in a worldwide industry like global maritime transport."

According to Stuart Neil, Communications Director at the International Chamber of Shipping, the technology is not currently advanced enough to have a significant impact on the industry: "If we look at the automotive industry, driverless technology took decades to develop and has yet to impact the job market. We see no reason as to why autonomous technology for shipping will be markedly different."

Some think that autonomous ships may fill a gap in niche markets such as short-haul services in territorial waters, where proximity to land and high labour costs could push shipowners to experiment with new solutions. However, Saxon believes the same cannot be said for ocean-going cargo ships: "Crew costs are a relatively small part of the cost base of a shipping company, maybe one to five percent… Second, the range of things [that] can go wrong and need attention is broad. The ships are often days from the nearest port; the risks of fully autonomous [vessels] are too high."

"The maritime sector has long been riddled with arcane bureaucracy and complex supply chains"

As a traditional business-to-business industry, shipping has so far evaded the dangers of 'platformisation' – a trend that has disrupted many customer-orientated industries with online marketplaces, eliminating the need for intermediaries. That said, some platforms are beginning to gain traction in niche areas such as freight forwarding. Online freight forwarder Flexport, for example, uses data to automate manual processes and integrate fragmented supply chains.

Jan van Casteren, Flexport's vice president of Europe, told World Finance: "It can take up to 18 different companies to get a single shipment from point A to point B. Today, logistics professionals have to deal with each of these challenges separately because there is no end-to-end solution to move, finance and make better decisions about freight." Another platform, Freightos, operates as an online marketplace for small exporters and importers, allowing users to compare freight quotes from several forwarders and track their orders.

In response to the emergence of new players, many container lines have created digital platforms. In February, Evergreen Line, one of Asia's largest container lines, announced the launch of GreenX, a digital platform that provides customers with seamless booking and trade services. Freight forwarders are also rushing to set up customer-facing websites: Kuehne and Nagel, the world's largest ocean freight forwarder, launched a platform that provides booking and quoting services in April 2019.

Many start-ups remain customers of incumbent shipping companies, but Saxon believes they may pose a bigger threat to established players in the future: "The question for shipping companies is whether they can innovate and reinvent themselves fast enough, or lose the customer relationship to new platforms."



A smart port in Qingdao, China

Chain reaction

The hype surrounding blockchain, the ledger technology underpinning cryptocurrencies, was not lost on the maritime sector, which has long been riddled with arcane bureaucracy and complex supply chains. According to Saxon, an estimated $19bn is wasted in the container shipping value chain every year due to a lack of communication and suboptimal use of capacity. Despite this, practical uses of blockchain in the sector remain modest.

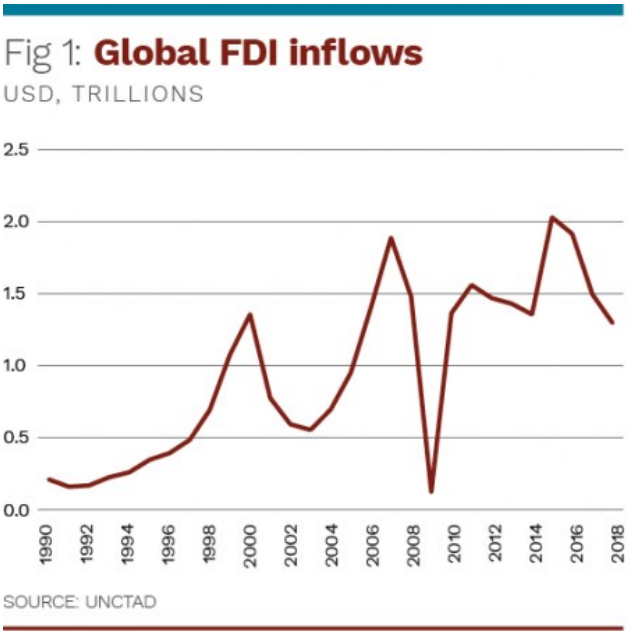
As Damas explained to World Finance: "The noise around the predictions that blockchain will… revolutionise global transport and global trade has decreased in the past three years. At present, efforts are concentrated on data standards and governance, without which blockchain cannot work."

Nearly all major shipping firms have been involved in blockchain initiatives and consortia. Maersk, the world's largest container ship and supply vessel operator, has partnered with IBM to create TradeLens, a blockchain-based digital tracking system that enables members to track freight transportation in real time. Since its launch in 2018, the platform has attracted some of the world's largest overseas shipping companies, including Hapag-Lloyd, ONE, CMA CGM and the Mediterranean Shipping Company.

Damas believes further innovation lies ahead: "Because global maritime transport is notoriously fragmented, with numerous documents, stakeholders and hand offs, we believe that blockchain cooperation, centralisation and smart contracts could deliver enormous benefits to providers and users of international transport in the long term. Today, these activities employ thousands of employees among exporters, importers, traders, transport companies, ports and banks engaged in international trade."

The increasing use of sophisticated technology will pose significant challenges to ports, many of which lack the necessary infrastructure to accommodate blockchain-enabled solutions. Neil told World Finance: "Blockchain can help improve efficiency, but this requires all ports to have the appropriate facilities to make use of this technology, as well as regulatory changes, which will be difficult to implement."

According to Research and Markets, the global smart port market will be worth approximately $5.3bn by the end of 2024, driven by initiatives to make the transport of goods cheaper and faster.



Choppy waters

Currently, shipping is the dominant mode of transporting goods, with more than 90 percent of world trade being seaborne. According to the UN Conference on Trade and Development (UNCTAD), vessels transported 11 billion tons of goods in 2018, a 2.7 percent increase on the previous year. However, the industry is vulnerable to strong headwinds in global politics.

Populist politicians in Europe and the US often point to international trade as one of the reasons for increasing inequality, questioning the rules-based status quo that was established after the Second World War. A case in point is the US Government's attempt to undermine the World Trade Organisation by strangling its appellate body. Global foreign direct investment (FDI) dropped for a third consecutive year in 2018 (see Fig 1), while many multinationals are reportedly scaling back their global supply chains. Experts fear that fragmentation will ensue, with trade blocs becoming increasingly insular and relying on sheer power to promote their interests.

Tucker believes such a move would be catastrophic for the shipping industry, which has benefitted enormously from globalisation in the past. He told World Finance: "'Might' is becoming 'right' again. This is likely to constrain global and regional trade in unpredictable ways. It will likely dampen overall global trade growth and make shipping more risky and expensive."

Others, however, think the sector will find ways to adjust. Dr Martin Stopford, Non-Executive President at Clarkson Research Services, a provider of data and market intelligence for the shipping sector, told World Finance: "In future decades, the focus is likely to be on regional rather than global trade… China is no longer cheap, and the developing countries are no longer willing to do deals for raw materials or to import foreign goods – they want to build their own economies."

"Experts fear that trade blocs will become increasingly insular and rely on sheer power to promote their interests"

The ongoing US-China trade war is a prime example of how protectionism can negatively impact the shipping industry. Although trade between the two countries only accounts for a small fraction of global trade, the conflict has hurt the shipping industry greatly. For example, the US' decision to sanction two subsidiaries of the China Ocean Shipping Company in September 2019 affected around 130 vessels, although the sanctions have since been partially lifted. Chinese imports of soybeans and crude oil from the US have also taken a hit, impacting the shipping industry further. These two commodities are at the heart of negotiations between the superpowers, with China promising to increase imports to satisfy US sensibilities.

Peter Sand, Chief Shipping Analyst at BIMCO, a Copenhagen-based shipping association that represents shipowners, told World Finance: "BIMCO doubts that the agreed… volumes will be reached, given the huge increase, but any boost to volumes will benefit the shipping industry, especially given the long sailing distances between the US and China, boosting tonne-mile demand."

The trade war has pushed many firms in the two countries to think laterally. Some Chinese manufacturers have shifted production to nearby countries such as Vietnam to avoid sanctions, while imports from the US have been partly replaced with increasing volumes of trade from Brazil and Australia, among other nations. Chinese exporters have also turned their attention towards Northern Europe as an alternative destination market.

Simon Heaney, Senior Manager (Container Research) at Drewry, told World Finance: "The current situation is probably a blip in the long-term trend, and normality will resume once the main actors are consigned to the history books. However, the world is likely to remain volatile, so the risk of isolated trade disputes flaring up will be a constant, which will contribute to more diverse manufacturing sourcing strategies [that] spread the risk."

Chinese economic policy will play a key role in shaping the shipping industry's future. While the country's export-driven boom has enormously benefitted the sector over the past three decades, China's GDP growth rate slowed to 6.1 percent in 2019 – its lowest rate since 1990 (see Fig 2) – and trade with the rest of the world has been steadily declining. This is in line with the government's policy of transitioning from an export-driven economic model to one focused on domestic consumption and services.

"As the Chinese economy continues to mature, an increasing proportion of this GDP growth is actually due to the expansion of service industries, rather than manufacturing or infrastructure development, which does not generate the same demand for shipping," Stuart explained to World Finance. "A lot will depend on how China manages any slowdown."

The COVID-19 crisis will also test the resilience of the Chinese economy. In January, the Baltic Capesize Index, which tracks freight costs for dry bulk commodities, slipped below zero for the first time. "The current coronavirus outbreak has highlighted the danger of being overreliant on one source," Heaney said. "I believe these factors will lead to less China-centric shipping in the future."

A new course

In the long term, radical changes to industrial production may affect the role of shipping in world trade. New technology, including robotics, artificial intelligence and 3D printing, is expected to boost localised manufacturing, reducing the need for long-distance trade. A recent study by Research and Markets predicted that the global 3D printing market would more than triple in value by 2024, reaching $34.8bn.

Sand told World Finance: "Container shipping on the major trades – from manufacturing nations in the Far East to Europe and North America – relies on manufacturing continuing to take place away from the consumption regions. Anything that threatens this, including 3D printing and nearshoring, threatens container shipping. The industry is… already feeling the pain from the changing nature of economies around the world, with growth recently focused more around services, rather than the sectors of the economy that promote the physical trading of goods".

Shorter distances and lower trade volumes, combined with the push to cut gas emissions, may benefit the industry by forcing it to reinvent itself. As Stopford told World Finance: "Shipping would focus much more on local business-to-business services, using the new generation information technology to provide reliable sea transport to outlying ports. Some analysts are doubtful about this 'Uber of the seas' philosophy, but Uber's great achievement was to bring cab services to areas that previously did not have them, generating growth. Maybe ships can do the same.".

worldfinance.com

VOLATILE OIL MARKET SENDS BUNKER PRICES COLLAPSING AT 'FASTEST RATE'



"With oil market volatility at an all-time high, even exceeding the volatility of equity markets, supply and demand shocks have sent bunker prices collapsing at the fastest rate since the 2008 global financial crisis."

The current upheaval caused by the coronavirus (COVID-19) pandemic and the Opec oil price war has sent marine gas oil (MGO) prices collapsing at the fastest pace even exceeding the demise of the global financial crisis in 2008 and oil crash in 2014, Bimco noted in a recent analysis report.

Since the Singapore MGO price peaked at $744 per metric tonne (pmt) on 8 January 2020, the price has dropped by 67% in 84 workdays to settle at $243 pmt on 5 May – essentially a market breakdown in a couple of months.

In comparison, the MGO price peaked at $1,360 pmt in 2008 before starting a prolonged descent to bottom out at $354 pmt after 174 days. While it took over two years to settle at a new peak at $1,075 pmt on 11 April 2011, the prices never recovered to previous high levels.

Sand observed that past crises and price shocks serve as a reminder that the recovery is nowhere as rapid as the collapse, and any price recovery is unlikely to follow a sharp v-shaped curve.

"Marine bunker fuel prices in Singapore have collapsed at the fastest rate since the global financial crisis. If the past is anything to go by in this case, the ascent from the doldrums will be nowhere near the same rate as the descent from the peak," said Peter Sand, chief shipping analyst at Bimco.

The Singapore very low sulphur fuel oil (VLSFO) price has also dived to $246 pmt on 5 May from $736 pmt on 8 January.

The low bunker fuel prices now hold mixed implications for the shipping industry.

"From a shipowner's or charterer's perspective, the lower bunker prices provide a glimmer of hope in bleak times. Perhaps less hopeful are the bunker suppliers, who must now supply bunker fuels at a fraction of the price seen four months ago," Sand said.

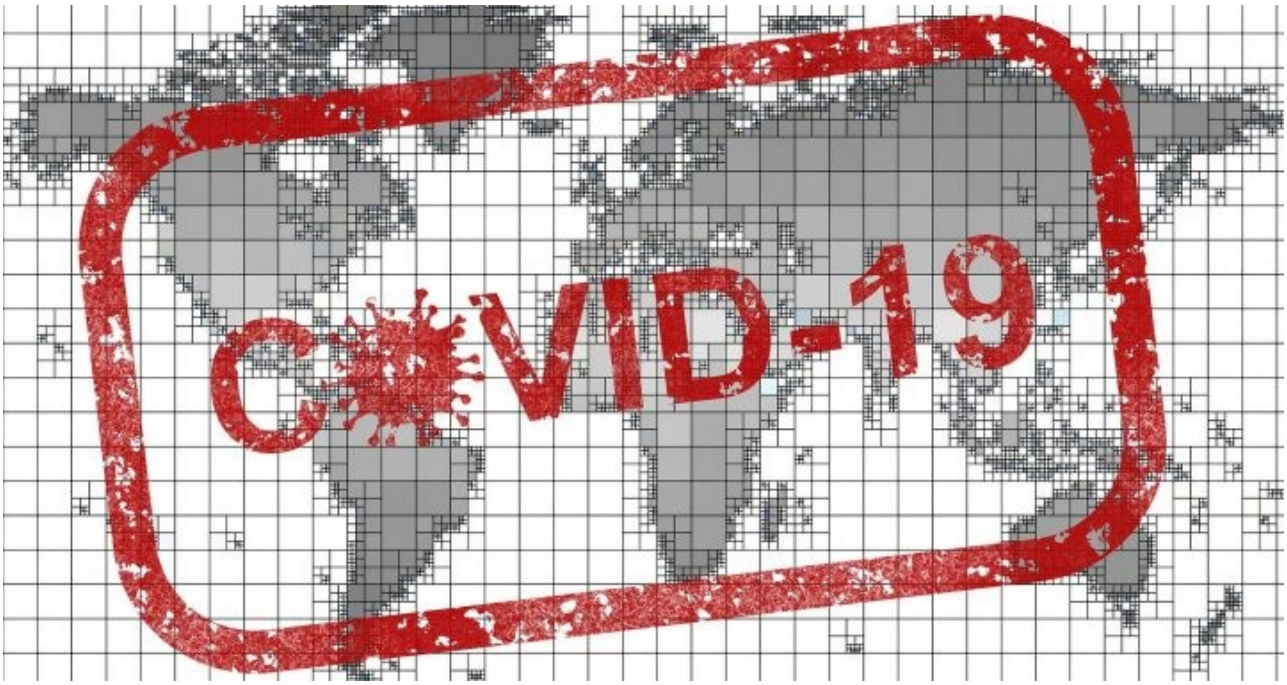
The International Energy Agency (IEA) is projecting oil demand to collapse in the second quarter of 2020 with a drop of a staggering 23.1 million barrels per day (bpd) compared to last year, and a drop of 9.3 million bpd for the full year of 2020. The huge supply-demand imbalance has led to a steep uptick in crude oil stockpiling, which is expected to continue to drag on the oil product prices in the months to come.

The Opec+ cuts amounting to 9.7 million bpd, officially in motion since 1 May 2020, have caused prices to tick upward once again. But in the short term, it will not be enough to balance out the unparalleled demand destruction, according to Sand.

"The depth of the coronavirus crisis and the shape of any potential recovery will ultimately determine how the oil and bunker prices develop in the coming months. With OPEC+ cuts implemented, oil demand must now recover to counteract the massive supply overhang," Sand said.

seatrade-maritime.com

MARITIME TECHNOLOGY INITIATIVES SUPPORTING THE INDUSTRY COVID-19 RESPONSE



"Coronavirus is causing significant problems for the maritime industry, with volatile supply and demand, port closures, and difficulties with crew changes. Despite the difficulties, the maritime technology community is fighting back against the virus, with a number of startups, tech companies, and other businesses launching services or providing data to help the industry cope with the strain."

- UK based shiptech startup Geollect has launched a Covid-19 information dashboard to make it easier to track cases and news across geographical areas.
- Wilhelmsen Ship Services has launched a Global Covid-19 Port Restriction Map, detailing active restrictions and special requirements for ships sailing to ports around the world.
- Israeli tech scaleup Windward has launched a map proving that the maritime industry is keeping the world afloat. Showing users how many ships are currently inbound to their country with supplies.
- Geophysical technology company ION is offering their Marlin SmartPort solution to ports free for three months to help them share information online and ease the strain on communications caused by remote working.
- In partnership with Inchcape World of Ports, PortXchange has launched the Stay Healthy and Connected initiative, offering ports free access to their software during the crisis.
- Guernsey based tech company Motion Ventures have launched a secure health monitoring system for ships' crews. It is being tested with the UK government and a shore-based version is in use with a Fortune 500 FMCG client. For more information make an enquiry here.
- Maritime satellite provider Inmarsat is offering a 50% discount on voice calls for seafarers plus, in partnership with Vikand and FrontM, a free video call service for seafarers wishing to speak with a trained health professional. Click here for more information.
- Crew health and wellbeing software startup Big Yellow Fish is temporarily offering free access to their human element and wellbeing monitoring software to support seafarer mental health. See more information on their website.
- Recognising that demurrage & detention fees caused by the crisis are causing difficulty for freight forwarders and cargo owners, container tracking startup Dockflow has released a free demurrage and detention fee monitoring tool. Find more information here.
- Port IoT solution provider Rombit has developed a smart bracelet that helps employees in ports maintain social distancing while maintaining user privacy. The solution is already in use in the Port of Antwerp. Find out more here.
- Smart container solution provider Traxens has launched new pricing to help their partners manage problems arising from COVID-19. It is now possible to add full smart container tracking for $35 per dry container per ship. Find out more here.
- Drewry Shipping Consultants has launched a Corona-virus hub where they are collating impact assessments, resources, and expert opinion on the evolving situation. Find out more here.
- The National Maritime Law Enforcement Academy in the USA is making its digital learning management system and seaport security curriculum available for no cost until July this year. Find out more here.
- Digital publication and solutions provider OneOcean has made a comprehensive list of national and international COVID-19 documentation available for free. Find out more here.

This content has been provided to Maritime Marketplace by Thetius founder: Nick Chubb.
The original article can be found here.."
maritime.market

HOW ARE AERIAL DRONES BEING USED IN MARITIME?



"Though still seen by many as a toy for hobbyists, aerial drones are transforming industries including defence, logistics, agriculture and construction. There are a number of groundbreaking projects and proofs of concept using drone technology currently being undertaken in the maritime sector. Though there are some regulatory hurdles yet to be overcome, the rapidly decreasing cost of this technology means it could become an indispensable part of the toolkit for everyone from ship's surveyors, to agents, to offshore supply teams."

Drones in ship surveying

One of the clearest use cases for drones is in surveying. Classification societies, ship management teams, and port/flag state surveyors often need to conduct surveys in hard to reach places to asses a vessel's condition. This can involve entering tanks and ballast spaces, working at heights to inspect masts or communication equipment, or travelling out to offshore structures. These inspections clearly fall under the four D's that act as a litmus test for jobs that should be automated; dull, dirty, dangerous, and dear (expensive).

Dutch startup RIMS BV specialises in using advanced robotics for inspection and maintenance in the maritime and offshore industries. They have now been approved by nine classification societies to carry out remote inspection work to ensure that ships are complying with class and flag state regulations. DNV GL has also invested heavily in developing a drone surveying capability. They have a team of 16 drone surveyors who fly specially adapted commercial drones to inspect vessels, offshore structures, and jack up legs.

By using drones in their operations, surveying teams are able to reduce preparation time, eliminate the need for staging or rafting, minimise the risk of damage to tanks, and maximise safety for personnel.

Drones in ships agency

In large anchorage ports like Singapore and Fujairah, ships agency service providers spend hundreds of hours each year transferring supplies, spare parts and crew members to ships anchored off the coast. Currently, the best way to make those deliveries is by launch boat, but it is costly, can be unsafe, and has a detrimental impact on the local environment.

In March 2019, a drone lifted off from Marina South Pier in Singapore and flew out to a waiting ship in the Eastern Working Anchorage. The drone was carrying parts 3D-printed in an onshore micro-factory. It dropped off its 1.5kg payload on the deck of the MV Pacific Centurion and returned to base. This was the first commercial drone delivery to a vessel at anchor and it was conducted as part of a collaborative project between aviation giant Airbus and Wilhelmsen, a leading ships agency service provider. The entire operation took just 10 minutes, less than half the time it would have taken by boat.

Wilhelmsen predicts that the delivery of light, time critical packages like spare parts, medical supplies and cash by drone could reduce costs by up to 90% when compared to launch boat.



Drones in offshore support

Currently, the offshore industry relies on helicopters for the transport of supplies, parts, and people out to rigs and installations. However, Singapore based F-Drones is working to change that. The Entrepreneur First backed startup is working on drones that have a combination of heavy payload and long-range capabilities. Their drone can take-off vertically, fly like a fixed-wing aircraft, and land on a moving target.

The drone will be theoretically able to make deliveries of up to 100kg to ships and oil rigs. It will be able to carry a 50kg payload up to 250km and land on a moving target making it a viable replacement for transporting stores to offshore rigs by helicopter or to passing ships by launch boat.

Drones for intelligence and situational awareness
The reason the bridge of a ship is usually on one of its highest decks is that the higher up you are the further you can see. Drones make it possible to massively increase the field of view for a vessel or coastal state for search and rescue, intelligence operations, or just situational awareness. Even in poor visibility, drones equipped with thermal imaging, radio detection, and other sensors can "see" well beyond the normal capability of a ship, VTS, or coastguard station.

The operational intelligence market is the most established sector for maritime drones. In January 2017, the European Maritime Safety Agency awarded the largest ever civilian maritime drone contract. The €67million contract was awarded to Martek Marine, part of the James Fisher family of companies and is aimed at using drones to track and trace vessel emissions throughout the EU.

U.S based startup Planck Aerosystems is developing the technology to make it possible to "drone enable" any ship or truck. With implications for defence, search and rescue, and situational awareness, their drones use computer vision to autonomously take off from and land on moving targets including workboats, ships, and land vehicles.

Also based in the U.S is drone scaleup Airobotics. Having raised more than $100million as of December 2018, they are well placed to push drone technology out to the wider maritime industry. They are currently focused on a number of verticals including mining, oil and gas, industrial facilities, and ports.

Airobotics' ports solution helps users to effectively monitor vessel traffic, gather intelligence for security, and conduct more effective emergency response and search and rescue. Their capability includes oil spill detection, equipment monitoring, and inventory tracking in bulk facilities.

As automation technology advances, even the most complex of drone operations could be conducted largely without human input, leaving the end-user free to concentrate on the end goal (search and rescue, inspection, delivery), rather than on flying. Currently, the cost of drone technology makes it prohibitive for many use cases, but both the costs and barriers to entry are dropping fast. If the current trend continues, it is only a matter of time before drones are commonplace on commercial ships and offshore installations. "

maritime.market

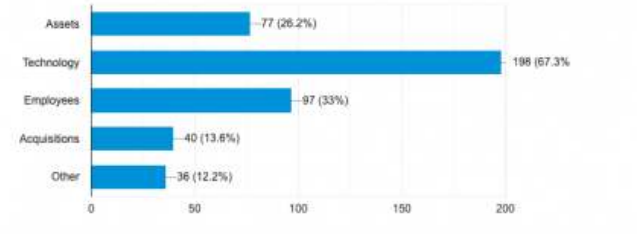
SHIPPING AND FREIGHT 'WILL BOUNCE BACK' BUT THERE WILL BE HI-TECH CHANGE



The chaos caused by Covid-19 will lead to far greater use of technology, which until now has lagged in logistics compared with other industries.

Some 67% of shipping and freight professionals plan to invest in technology following the Covid crisis, according to a survey conducted by Shipping and Freight Resource and sponsored by Ocean Insights.

One-third said investing in staff would be the first step to recovery, while a quarter opted for investing in assets.



The pandemic has heightened the need for technology, said respondents, especially in the area of supply chain visibility and the need for real-time information.

"Logistics still needs to undergo a technological transformation (long queues at the European borders this month highlighted again the lack of visibility during transport and lack of reliable ETA)," noted one.

Others suggested that, while they already operate online, they needed to enhance their IT capabilities and reduce manual processes.

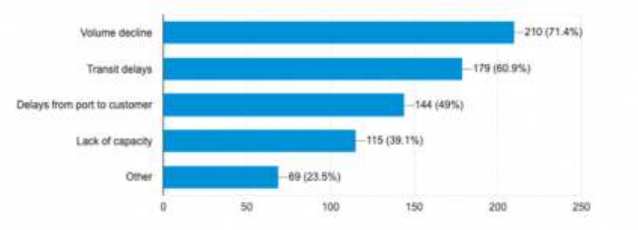
Most companies seem fairly confident in their ability to recover from the pandemic crisis, with only 2% believing they won't. However, the recovery is unlikely to be quick: 43% expect a slow recovery, 38% moderate and 19% expect a fast recovery, while 3% remain unsure.



The survey compilers noted: "While the new normal is something that we will all have to get used to, it is refreshing to see that the industry is not down and out, but accepting of the hit it has taken and ready to take the required actions to bounce back stronger and more secure than ever."

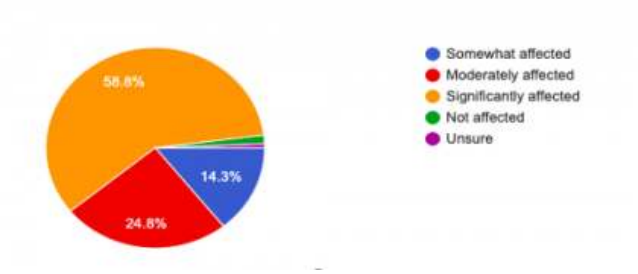
And the industry has taken a hit. Just under 60% said their operations were significantly affected, while 25% were moderately affected. A lucky – and surprising – 1% said they were unaffected.

Most, 70%, have experienced volume decline, while 61% complained of transit delays. Half saw delays from the port to customers, while 40% cited lack of capacity as a problem.



Late or non-payments, cancelled credit lines, volatility and increased costs were also noted.

More than a third, however had experienced a partial supply chain shutdown with significant delays, while roughly the same amount pointed to "glitches" that had caused a few days' worth of delays. But 14% said the supply chain had adapted without issue. Only 9% reported a complete supply chain shutdown.



And the future? It will change. Nearly half (42%) said they would change their strategy based on the experience of the Covid crisis. Just under one-third said they might change strategy, but the same number said they would not.

The survey noted: "Global supply chains and shipping as we know them will be different. Sharing information and understanding best practices will enable the industry to come together and combat this as a whole. If there was ever a time for collective efforts, it is now."

The survey was answered by more than 300 shipping and freight professionals across the world, 96% of which were from carriers, logistics providers, freight forwarders/NVOs, consultants and shippers/BCOs.

theloadstar.com

SWITCH TO ELECTRONIC BILLS OF LADING COULD SAVE SHIPPING BILLIONS EVERY YEAR



The container shipping industry could save itself up to $4bn a year if half of all bills of lading (B/Ls) were dealt with digitally, according to the Digital Container Shipping Association (DCSA).

The DCSA is using the coronavirus pandemic to accelerate its mission to introduce electronic B/Ls to the shipping industry.

CEO Thomas Bagge told The Loadstar yesterday the association's financial modelling had concluded that container shipping could save $4bn a year with just a 50% adoption rate of eB/Ls.

Based on the air freight industry's penetration rate of eAWBs – now at 68% after a decade-long push – the DCSA claimed: "If we start standardising eBLs now, we believe a 50% adoption rate is feasible by 2030."

Since the onset of the pandemic, which has forced the office staff of almost every carrier to work from home and presented huge difficulties in obtaining and presenting paper B/Ls, increasing numbers of carriers have resorted to issuing eB/Ls only.

Meanwhile, with airfreight capacity slashed globally after the widespread cancellation of passenger flights, remaining space is taken up largely by urgent medical shipments, and carriers have been unable to send B/Ls around the world where consignees and forwarders need to present them to ports and customs authorities before cargo can be released.

"The Covid-19 situation is bringing the core strengths of a standardised eB/L to the fore. Cargo in ports cannot be gated out because of paper that is stuck elsewhere due to airfreight delays," explained André Simha, global chief digital and innovation officer for MSC and DCSA chairman.

For example, he said, in late March, shortly after the UK government had brought in lockdown regulations, Evergreen UK sent out a customer advisory which said: "It will not be possible to issue export original bills of lading at London, and we will stop issuing paper invoices while these measures are in force."

The line urged customers to instead consider registering for eB/Ls.

However, the absence of a physical B/L could leave shipper ownership of goods vulnerable.

One forwarder said: "Some carriers are saying they will only do telex release or waybills. Either way, the consequence is that title of goods cannot be maintained by the shipper, so it's significant from an ownership and control perspective."

Mr Bagge said he hoped the DCSA would publish an initial document on eB/Ls "later this year", and revealed he had sought advice from IATA on how to manage the process.

"Tt would be crazy not to seek their advice, given the experience they've had, and they stressed two key points: firstly, involve the authorities as early as possible – we have been speaking to the World Customs Organisation and the EC, and will pick up with the US authorities when allows.

"Secondly, the B/L is only one document. Part of the challenge with introducing eB/Ls is that there is broader issue of other paper documents – import and export declarations, DG certificates and so on…"

theloadstar.com

PREMIER: DRONE DELIVERS PACKAGE TO VESSEL IN THE PORT OF ROTTERDAM FOR THE FIRST TIME



On May 22, the port of Rotterdam was able to celebrate a Dutch premier: the aerial delivery by drone of a parts consignment to Allseas' Pioneering Spirit, the biggest vessel in the world. Pioneering Spirit is currently moored at Alexiahaven in preparation of upcoming offshore activities. This is actually the first drone delivery ever made in the Netherlands to a vessel. This pilot project, which was set up by Dutch Drone Delta, Allseas and the Port of Rotterdam Authority, is intended to determine whether and how drone deliveries could increase transport efficiency in the port of Rotterdam. The airspace over the port area will be safely managed under the slogan 'Rotterdam, the safest port to fly', allowing parties to take optimal advantage of new technologies to make the port safer, smarter and more efficient.

Drone evolution
The Unmanned Aerial Vehicle (UAV) industry is going through an exciting evolution, and the sector is primed for further growth. Drone development is in full swing and this technology can have a major impact on traffic and transport. New European regulations have cleared the way for new applications. Ultimately, this may even include autonomous unmanned freight and passenger transport. To this end, the next few years will be devoted to the phased preparation of airspace and drone technology. The recent delivery constitutes a major first step in this process, since it involved the delivery of an actual package following a long-distance flight by the UAV. While in this case, the delivery was still directly monitored by human observers, in the near future, it will be handled entirely beyond the pilot's physical line of sight.

Port of the future
"Utilising new technologies allows us to make our port smarter, more streamlined, more efficient and safer. The current pilot project is a prime example: it makes a significant contribution to more efficient transport in general; and in due time, it will specifically help to reduce the pressure on our road network. We intend to safely structure our airspace under the slogan 'Rotterdam, the safest port to fly'. The results of this pilot project can also serve as input for the Ministry of Infrastructure and Water Management when it drafts the required legislation and regulations. This will enable Rotterdam's port business community to take optimal advantage of these new developments," says Port Authority adviser Ingrid Römers.

Options for drone deployment in the port area
Stephan van Vuren, one of the people behind the Dutch Drone Delta initiative: "The sky's the limit when it comes to using drones in the port area. Incident prevention and control, for instance; or water pollution; firefighting; monitoring port operations or damage. Other examples include everything from systems and bridge inspections, construction and maintenance of infrastructure, and deliveries to ships and oil rigs, to the rapid medical transport of blood and human organs. And in the longer term, we may even be seeing heavy freight deliveries and passenger transport! This pilot project in the port of Rotterdam has allowed us to directly demonstrate the added value of drone technology in a complex environment."

Offshore sector also presents opportunities for drone delivery
According to Allseas PR manager Jeroen Hagelstein, the offshore industry could also benefit from this new delivery option: "As a provider of technical services to the offshore industry, we are continuously pushing the existing technical boundaries. Pioneering Spirit is the example. With this pilot, we want to test whether drones could be an effective means to quickly and efficiently deliver materials to our vessels. Helicopter, for example, are not always available on every location. Drone delivery can be of added value when we are in urgent need of parts which we can't repair ourselves – for example network switches or computer chips."

https://youtu.be/yIqbCNEz4qs
Source: Port Of Rotterdam

hellenicshippingnews.com

NOW PROFITABLE, ONE EXPANDS REEFER FLEET



"Singapore-based container carrier digs out from $586 million fiscal-year loss to report $105 million profit and procures 5,000 40-foot units"

Ocean Network Express (ONE), which last week announced it had turned a profit, said Tuesday it was expanding its refrigerated container fleet by 5,000 40-foot units.

Two hundred of those units will be equipped with advanced controlled atmosphere technology, said Singapore-based ONE, which said it already has one of the largest state-of-the-art reefer fleets and procured 6,000 units last year.

Global refrigerated container volume grew by more than 7% in 2019, according to ONE, which said that despite challenges posed by the coronavirus pandemic, the forecast for the global reefer trade remains strong, especially for protein and fresh fruits.

ONE said it is working toward applying the latest internet of things technology to its reefer fleet to allow for real-time visibility of such critical information as temperature and humidity.

Last week ONE said it had achieved synergies of more than $1 billion since it began sailing in early 2018 through such means as reduced overhead costs and network optimization. It became the world's sixth-largest container carrier with the combination of three Japanese ocean liner companies — Mitsui O.S.K. Lines (MOL), Nippon Yusen Kabushiki Kaisha (NYK) and Kawasaki Kisen Kaisha ("K" Line). ONE reported Thursday that it had turned a fiscal-year 2019 profit of $105 million and dug out from a fiscal-year loss of $586 million in 2018.

ONE's fiscal year runs from April 1 to March 31. In April 2019, the company said it had experienced "teething problems" in its first year of operations but that the loss was better than the $594 million hole it had expected. At that time, ONE forecast turning a fiscal-year 2019 profit of $85 million.

Revenue for the 2019 fiscal year grew by $985 million, from $10.88 billion in 2018 to $11.86 billion, a 9.1% improvement.

The COVID-19 pandemic impacted post-Lunar New Year liftings more than originally forecast. ONE said a crisis management committee was set up in late January and a business continuity plan was activated country by country to maintain ship operations and container flow. More sailings also were canceled to meet declining cargo demand.

ONE said because of the pandemic, it cannot forecast the full-year 2020 performance.

ONE's chief executive officer is Jeremy Nixon, who previously was CEO of NYK Group South Asia's global liner management division. Nixon, who left Maersk Line in 2008 to join NYK, was touted at the time of his appointment to lead ONE in July 2017 as the highest-ranking non-Japanese executive to ever serve at any of the three carriers forming the joint venture.

ONE, a member of THE Alliance with HMM, Hapag-Lloyd and Yang Ming, this week is deploying the Seaspan Oceania, a vessel with a capacity of 8,468 twenty-foot equivalent units (TEUs), on the North Europe-Asia trade to retrieve empty containers. The Seaspan Oceania was expected to start loading containers at the Port of Antwerp in Belgium on Tuesday and then continue to the Port of Rotterdam. Discharge of the containers at the Port of Yantian in China was expected to take place in mid-June.

As of the end of March, ONE had a total fleet of 222 vessels with a total capacity of 1,571,294 TEUs.

freightwaves.com

DA 15/06/20 - A 20/06/20
GENOVA
Blue Economy Summit 2020 | NUOVE DATE - **» VAI AL SITO**

DA 15/06/20 - A 16/06/20
ATENE
GST 2020 - 3rd International Green Shipping and Technology Summit | NUOVE DATE - **» VAI AL SITO**

DA 16/06/20 - A 17/06/20
ONLINE
10th Annual Operating Excellence in Shipping Forum | NEW DATES - DIGITAL EVENT - **» VAI AL SITO**

DA 18/06/20 - A 21/06/20
ISTANBUL
WIN Eurasia - CeMAT 2020 - **» VAI AL SITO**

DA 23/06/20 - A 26/06/20
PARIGI
SITL | NUOVE DATE - **» VAI AL SITO**

DA 25/06/20 - A 26/06/20
PACENGO DI LAZISE (VERONA)
26^ Global Summit Logistics & Supply Chain | NUOVE DATE - **» VAI AL SITO** **» COMUNICATO STAMPA**

DA 11/08/20 - A 13/08/20
MAPUTO, MOZAMBICO
Transport Evolution Mozambique Forum & Showcase | NUOVE DATE - **» VAI AL SITO**

DA 25/08/20 - A 27/08/20
MOSCA
25th TransRussia | NUOVE DATE - **» VAI AL SITO**

DA 25/08/20 - A 27/08/20
BATAM
5th Indonesia Marine & Offshore Expo (IMOX) 2020 - **» VAI AL SITO**

DA 01/09/20 - A 30/09/20
GENOVA
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DA 15/09/20 - A 15/09/20
LONDRA
13th Annual Shipping & Marine Services Forum - **» VAI AL SITO**

DA 15/09/20 - A 17/09/20
ANVERSA
Antwerp XL | Shaping the future of breakbulk (NEW DATE) - **» VAI AL SITO**

DA 17/09/20 - A 18/09/20
MILANO
3° Automation Instrumentation Summit | NUOVE DATE! - **» VAI AL SITO** **» COMUNICATO STAMPA**

DA 22/09/20 - A 23/09/20
AMSTERDAM
Home Delivery World Europe 2020 | NUOVE DATE! - **» VAI AL SITO**

DA 24/09/20 - A 25/09/20
SHANGHAI
The 9th Annual Event Green Shiptech China Congress 2020 | NUOVE DATE - **» VAI AL SITO** **» COMUNICATO STAMPA**

DA 28/09/20 - A 03/10/20
NAPOLI
Naples Shipping Week - **» VAI AL SITO**

DA 29/09/20 - A 30/09/20
MIAMI
Envirotech for Shipping Forum USA - **» VAI AL SITO**

DA 29/09/20 - A 01/10/20
BREMA
Breakbulk Europe (NUOVE DATE) - **» VAI AL SITO**