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Shipyards & marine technology
Leading the race towards shipping’s decarbonization
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COP26: Shipping under the spotlight

Around 120 leaders came together in Glasgow on Monday 1 November, at the start of COP26, launching two weeks of global negotiations to help determine whether humanity can drive forward the urgent action needed to avoid catastrophic climate change.

As the world experiences record temperatures and extreme weather pushing the planet dangerously close to climate catastrophe, the need for urgent action at COP26 has never been more apparent.

Addressing leaders at the first major global gathering since the COVID-19 pandemic, COP President Alok Sharma said: “The science is clear that the window of time we have to keep the goal of 1.5 alive and to avoid the worst effects of climate change, is closing fast. But with political will and commitment, we can, and must, deliver an outcome in Glasgow of which the the world can be proud.”

COP26 brings the major emitting countries face to face with the countries most vulnerable to climate change. The World Leaders Summit will send a clear signal to negotiators to be as ambitious as possible and agree to a negotiated outcome that accelerates action this decade.

The Summit also underscored that the Paris Agreement is working, with increased commitments on finance, emissions, and adaptation as we see the first crank of the Paris Agreement ratchet.

Moving from the promise of Paris, announcements in key sectors will start to show how Glasgow will deliver. This includes new commitments on consigning coal to history, electric cars, reducing deforestation, and addressing methane emissions.

Building on the publication of the $100 billion delivery plan, which the Presidency requested the
Canadian and German governments lead, finance will remain a key priority. Discussions centred on how countries most vulnerable to climate change can access the finance needed to deliver climate adaptation and boost green recovery from the pandemic.

Further to the commitment to mobilise finance, the opening of COP26 saw several new finance announcements to progress action on the $100 billion and address adaptation finance.

The UK Prime Minister Boris Johnson announced a funding package, as part of the UK’s Clean Green Initiative, to support the rollout of sustainable infrastructure and revolutionary green technology in developing countries. As far as international shipping is concerned, Denmark, the United States, and 12 other countries backed a goal to reduce emissions by the global maritime sector to zero by 2050, a target to be fleshed out in negotiations at the IMO.

“Decarbonising international shipping is a key element of keeping the goal to limit warming to 1.5°C alive. Proud to support today’s declaration to help achieve zero emissions from the sector by 2050”, stated Special Presidential Envoy John Kerry.

“We urge the IMO to take action to set ambitious targets to achieve zero-emission shipping by 2050,” Danish prime minister Mette Frederiksen told reporters at COP26.

Optimism for the bulkers market

Market circles and analysts remain highly optimistic about the course of the dry freight market, a fact confirmed during the 23rd Marine Money Greek Forum held on 20 October 2021 in Athens. More specifically, Mr. Stamatis Tsantanis, CEO of Seanergy Maritime Holdings Corp., George Delaportas, Managing Director of Meadway Bulk Carriers, and Simos Pariaros, Chief Administration Officer of Euroseas Ltd. and Eurodry Ltd., participated in a panel discussing the prospects of the freight market and the conditions that shape it. The discussion was moderated by Eva Tzima, Head of Research & Valuations of Seaborne Shipbrokers SA.

In his initial statement, Mr. Tsantanis said that the post-pandemic economic reconstruction of countries and substantial electricity needs are
the key drivers of the demand for dry cargo ships. Another driving factor for the freight rate increases is that the market’s supply side cannot absorb the high demand for vessels. Searenergy CEO seemed optimistic about the supply side since, as he mentioned, the expected life cycle of ships has decreased, while the fact that “there is no future fuel” keeps orders low. Asked about possible investments in newbuilt assets, Mr. Tsantinis pointed out that at the moment, they are not financially profitable, thus clearly showing his preference for modern second-hand bulkers.

Asked about China’s future role in the dry sector, he said that Capesizes would not be affected by whether China’s construction industry will grow or not. He added that “the whole game is evolving in a perfect way for China,” given that the price of iron ore have declined by half compared to summer and that of steel has increased. “For a country that accounts for 54% of world steel production, that’s a perfect scenario.”

For his part, Mr. Reskos also stressed that supply and demand favor freight rates. He did not appear to be worried about China’s moves as Europe and the US continue to import iron ore, and rising energy prices push Asia’s largest economy to import coal. He also thinks that China will continue to reduce steel output to meet its environmental goals until the end of the Winter Olympics, i.e., February-March 2022. Overall, he predicted a bullish freight market in the first quarter of 2022.

Mr. Pariaros initially reminded the audience that the dry market conditions were favorable even before Covid. He said that, with the exception of the first half of 2020, this trend has been strengthening, giving wings to freight rates. In his opinion, Beijing’s ban on Australian coal imports has, in reality, helped the market, as China has turned to more distant import destinations, increasing the demand for ton-miles. However, given that China’s power plants are operating marginally due to reduced coal reserves, Mr. Pariaros predicted that, sooner or later, Australian coal will return to the Asian country’s energy mix.

When he took the floor, Mr. Delaportas spoke of a “miracle” in the market of dry cargo ships. He noted that the key word for the current situation is ‘shortage.’ “Initially, there was a shortage in containers, and now the market is facing a shortage in energy and manpower,” he said. In this environment, bulkers are trying to meet global needs, with the industry’s prospects for the coming years looking optimistic.” Referring to the environmental regulations, Mr. Delaportas stressed that “they are something that scares shipowners.” Still, the shipping market will adapt, as it always does with any major change; therefore, patience is required until the conditions under which these regulations will apply become known. Concluding, the head of Meadway Bulkers pointed out that the question remains how energy prices will affect global production and how consumers worldwide will be able to meet the higher costs due to inflation.

Positive outlook for the LNG freight market

GasLog Partners LP’s financial report presented interesting data related to the prospects of the LNG carrier spot rates market.

Global LNG demand was 92 million tonnes (“mt”) in the third quarter of 2021, according to Poten & Partners Group, Inc. (“Poten”), compared to 85 mt in the third quarter of 2020, an increase of approximately 8%, primarily led by increased demand in Asia and South America. Asian demand in the third quarter was mainly in response to seasonal cooling demand, inventory re-stocking, and continued economic recovery, while South American demand was due to lower hydroelectric output in the region and a colder than average winter. This growth was offset by declines in Europe as it was outcompeted for gas from buyers in Asia and South America, which was reflected in the strong regional gas price differentials between these regions.

Global LNG supply was approximately 92 mt in the third quarter of 2021, growing by 8 mt (or 11%)
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year-over-year, according to Poten. Supply growth in the third quarter was dominated by output from the United States (“US”), which increased by 11 mt, or 157% year-over-year, primarily due to increased utilization of existing liquefaction terminals, but also due to the start up of new trains in the second half of 2020. Growth in US production offset declines from many other supply sources in the Atlantic basin, including Trinidad, Norway, Angola, Nigeria, and Algeria, either due to feedstock issues or unplanned downtime. Looking ahead, approximately 125 mt of new LNG capacity is currently under construction and scheduled to come online between 2021 and 2026.

Headline spot rates for TFDE LNG carriers, as reported by Clarkson Research Services Limited (“Clarksons”), averaged $58,000 per day in the third quarter of 2021, a 38% increase over the $42,000 per day average in the third quarter of 2020. Headline spot rates for steam turbine propulsion (“Steam”) vessels averaged $41,000 per day in the third quarter of 2021, 46% higher than the average of $28,000 per day in the third quarter of 2020. Headline spot rates in the third quarter benefited from LNG demand growth from Asia combined with LNG supply growth in the US as detailed above and longer than average waiting times at the Panama Canal.

**Chinese shipbuilders outstrip S. Korea in September orders**

According to South Korean news agency Yonhap, in September, South Korean shipyards lost the top position they had maintained in the last four months in terms of new orders. Based on Clarksons data, South Korean shipyards, led by Hyundai Heavy Industries Co., secured a combined 910,000 compensated gross tons (CGTs) in new orders, accounting for 28% of the orders placed worldwide. During the same period, Chinese shipyards won 1.95 million CGTs in new orders, representing 60% of the total, while Japanese won orders totaling 260,000 CGTs, representing 8% of the total. It is worth noting that the average order price secured by the South Korean shipyards was $170 million per ship, almost three times higher than that of the orders won by Chinese shipbuilders, which stood at $60 million per ship. Finally, global order backlogs amounted to 87.63 million CGTs at the end of September. South Korea’s order backlog stood at 28.56 million CGTs, China’s 35.37 million CGTs, and Japan’s 9.40 million CGTs.

**Short-term impact of China’s dual-control policy and ports’ congestion on chemical shipping**

On 17 August 20, China issued the “Barometer of 2021 Half-Year Regional Energy Consumption Intensity & Total Amount,” also known as dual-control policy, which targets industries with high energy consumption and high emissions. The strict control introduced by this policy has reduced operation rates of upstream and downstream plants in the country. Drewry projects reduced consumption and lower imports of chemicals by China in 4Q21 as, due to the energy crisis, the country will not realize its winter demand. This reduced demand will put pressure on freight rates, specifically on Middle East-China and Southeast Asia-China routes, which have been rising due to port congestion in mid-China river ports, says Drewry in a recent analysis.

Drewry expects the Chinese methanol supply to drop in 4Q21 as methanol plants based on coal as feedstock are adjusting run rates due to stringent emission restrictions. LNG plants are reducing production due to the rise in LNG prices. For instance, methanol plants in the city of Yulin will cut operation rates by at least 50% in the last quarter, likely reducing supply by a minimum of 1.3 million tonnes. However, this reduced supply is unlikely to result in higher imports as the downstream plants are also facing similar issues. For instance, Jiangsu Sopo has shut its acetic acid plant to reduce coal consumption, and many other plant owners will follow suit. Furthermore, MTO (methanol-to-olefins) plants have also reduced operation rates in many regions of China due to power shortages coupled with high prices of methanol (feedstock). Therefore, Drewry forecasts China’s methanol imports to fall to 12.8 million tonnes in 2021 against 13.0 million tonnes in 2020. This fall is significant considering China has already imported 11.1 million tonnes of methanol until 3Q21, and imports in 4Q21 are expected to fall below 3.0 million tonnes.

The production of paraxylene (PX) in the first nine months of 2021 by Chinese plants was lower than previously anticipated as the low spread between PX and feedstock naphtha reduced the profit margin of plant operators, forcing them to lower the operation rates. According to Drewry,
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downstream PTA plants have reduced operation rates due to energy control and a weak polyester market, further reducing production and imports of PX by China in 4Q21. China is expected to import 13.5 million tonnes of PX in 2021 compared to 14.0 million tonnes in 2020. However, Drewry expects the vegoils market to remain unaffected due to high seasonal demand in winter. It is estimated that the impact of power outages will be limited to 4Q21, with China’s chemical shipping demand picking up and plant running at average operation rates from 2022. China imported 67.1 million tonnes of liquid chemicals/vegoils in 2020. Drewry expects the country’s import volume to decline by 5% in 2021 due to the combination of rapid domestic capacity expansion, power outages, and the dual-control policy.

Concluding, the bleak picture of chemical shipping demand in 4Q21 will lower trade activity on the Middle East to China, Southeast Asia to China, and intra-Northeast Asia routes and cap further gains on freight rates caused by port congestions between October and December. Furthermore, this demand reduction will likely ease supply tightness in the chemical shipping market, with vessels becoming available to trade on different routes. Available tonnage will likely swing to the CPP market, where refined products demand will rise in winter.

The Union of Greek Shipowners (UGS) supports the Greek Prime Minister’s call for an EU Research Centre for Alternative Marine Fuels and Technologies

The Union of Greek Shipowners (UGS) supports the Greek Prime Minister’s call for an EU Research Centre for Alternative Marine Fuels and Technologies and stands ready to engage with all relevant stakeholders in the EU to support the significant effort required to deliver real environmental benefits and a sustainable shipping sector. “We support the Prime Minister’s proposal for the creation of a Research Centre for Alternative Marine Fuels and Technologies in the EU. With its proven maritime know-how, long-standing experience, and scientific expertise Greece, the world’s leading maritime nation, can contribute substantially to this end. We look forward to working with the European institutions and all stakeholders to promote the Greek initiative to support the great effort required to deliver concrete environmental benefits alongside a sustainable European shipping sector”, stated the President of the UGS, Mr. Theodore Veniamis.

UGS has pointed out from the outset the lack of widely available technology that can offer a substantial reduction in greenhouse gas (GHG) emissions from ships. Without new marine fuels and related technologies available worldwide, carbon-free shipping will not be possible within the specific time frame. In addition, it is absolutely necessary that the Commission’s proposal to extend the EU Emissions Trading Scheme (EU ETS) to international shipping be in line with the ‘polluter pays’ principle, which implies the commercial operator’s compliance with the requirements. This principle is recognized in the proposal of the Greek Prime Minister to the European Commission.

“We value the acknowledgment of the role of maritime transport to the EU and the world at large and the recognition of the responsibility of out-of-sector stakeholders, such as fuel producers and suppliers, commercial operators/charterers, shipyards, and engine manufacturers, in providing the shipping industry with the appropriate means for decarbonization. Without their instrumental contribution, the shipping sector will remain carbon captive, and its long-term sustainability will be seriously threatened”, Mr. Veniamis continued.

“We also stand ready to cooperate with the international community and all stakeholders at the International Maritime Organization with which Greece maintains strong ties. Greek shipowners are committed to contributing to the
shipping industry’s decarbonization as soon as possible and are working proactively in this direction”, Mr. Veniamis concluded.

**Ship demolition review**

Since the end of H1, there have been 163 cargo vessels sold for demolition, a 4.5% increase on the same period in 2020 when 145 vessels were scrapped, and a 63% increase from 2019 when only 100 vessels were scrapped, according to a VesselsValue’s report. These vessels had a combined DWT of 6.3 mil and a minimum combined scrap value of over USD 825 mil.

57 of these vessels were acquired by buyers in Bangladesh, constituting over a third (35%) of all vessels sold. A total of 49 vessels were sent for demolition in India, comprising 30% of the sales. Both countries harbour strong buying appetites as their construction industries bounce back from Covid-19 lockdowns. Pakistan trailed behind, accounting for only 14% of demolition deals, with a total of 23 vessels sent for scrap. This was likely due to the Pakistani rupee reaching all-time lows against the dollar, decreasing the buying power of Pakistani shipbreaking yards. VesselsValue says that between the end of June and the end of October 2021, the average Indian Subcontinent scrap price across Bulkers, Tankers, and Containers rose by around 5%, from 590 USD/lt to 620 USD/lt. Scrap prices peaked around the end of August and have since stabilised, marking the end of a period of significant and robust growth.

At the end of October 2021, the scrap price for a Tanker was 620 USD/lt. By contrast, prices in October 2019 were 390 USD/lt. Applying these scrap prices to a typical VLCC of 44,000lt produces two very different residual asset values. Today the residual price of a VLCC is USD 27.7 mil, compared to October 2019, when the same vessel would achieve a price of USD 19.8 mil. Although the difference is significant, at about USD 8 mil, levels have not quite reached the all-time highs seen back in 2008, when scrap prices almost reached 760 USD/lt.

**Bulkers**

31% of the vessels scrapped between the end of June 2020 and the end of October 2020 were Bulkers, accounting for a total of 48 ships. Today, due to the booming charter market, this number has fallen to only 8 Bulkers, a drop of 83%.

**Containerships**

The percentage of Containerships scrapped between June and October 2021 has dropped dramatically since last year as shipowners have been holding onto their tonnage. There were only 2 Containerships scrapped between 30 June and 25 October 2021, representing a 94% decrease from 2020, where 34 Container vessels were sent for demolition.

**Tankers**

112 Tankers have been scrapped between the end of H1 2021 and today, making up 69% of all cargo vessels scrapped in the same period. For comparison, in 2020, only 26 vessels were scrapped.

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Piracy and armed robbery incidents at their lowest level in decades, but IMB cautions against complacency

The ICC International Maritime Bureau (IMB) has reported the lowest number of reported piracy and armed robbery incidents for the first nine months of any year since 1994. IMB’s latest global piracy report recorded 97 incidents of piracy and armed robbery for the first nine months of 2021 – the lowest level of reported incidents since 1994. In 2021, IMB’s Piracy Reporting Centre (PRC) reported 85 vessels boarded, two fired upon, one hijacked, and nine attempted attacks. Reported incidents are down to their lowest level in decades, but violence against seafarers has continued with 51 crew kidnapped, eight taken hostage, five threatened, three injured, two assaulted, and one killed, according to the latest IMB statistics. While the reduction in reported incidents is welcome, IMB PRC warns that seafarers must remain vigilant as violence against crews remains high in many areas of the world.

Incidents in the Gulf of Guinea on the decrease

The Gulf of Guinea region recorded 28 piracy and armed robbery incidents in the first nine months of 2021, compared to 46 for the same period in 2020. Most notably, Nigeria, reported only four incidents in the first nine months of 2021 compared to 17 in 2020 and 41 in 2018. Crew kidnappings in the region have dropped, with only one crew member kidnapped in Q3 2021, compared to the 31 crew members taken in five separate incidents during Q3 2020. All Q3 2021 incidents were also against vessels at port anchorages, while the average successful kidnapping location in Q3 2020 was approximately 100NM from land. The overall reduction of piracy and armed robbery incidents in the region is a testament to the enhanced maritime security and response coordination measures adopted by regional and national authorities, according to the IMB. Despite these gains, the IMB warns that the risk to crews in the region remains high; therefore, such efforts must be sustained.

Indonesia turns its back on commodity exports

The Indonesian President Joko Widodo announced that Indonesia is planning to “hit the brakes” on commodity exports to focus on other sectors of the economy that will create new jobs. Indonesia has already banned unprocessed ore exports, including nickel, tin, and copper, to encourage downstream industries, including those producing batteries for electric vehicles and the aluminum industry, among others. “Don’t be surprised. We have imposed a nickel export ban. Next year, we may stop bauxite, the next year something else. Exporting raw materials does not add value and does not create new jobs,” Widodo said, adding that the policy would affect all commodities. The Indonesian President said that stopping exports of unprocessed palm oil was also being considered, although he declined to provide an estimate of when such policy would be issued.
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Key developments in global shipping finance

The Petrofin Global Index continued its decline through 2020 for the 12th consecutive year. The index stood at its lowest point since first published in 2008. Last year we remarked that the departure of some traditional European ship finance banks would leave more committed participants.

According to Petrofin Research, the growth of the global fleet continued to be funded by non-banking sources, such as leasing, alternative lending, private equity from Funds and investors. Lending to shipping by the top 40 Banks fell from $294.4bn in 2019 to $286.9bn in 2020. This minor decrease of 3% came after the departure of DVB and Nord LB from ship finance. The decrease, however, was not as significant as would have been expected with the withdrawal, especially of DVB, a very prominent ship financier. US banks showed a minimal decline in overall portfolio numbers, but Asian banks were active in 2020 and increased their lending. The European share of the global portfolio declined from 60.34% in 2019 to 58.29% in 2020. US banks slightly increased their share, and Asian banks increased their presence to 2017 levels, Petrofin Research says.

At the same time, capital market activity in 2020 picked up substantially, mostly in shipping bonds new issues from $6.87 billion in 2019 to $24.79 billion in 2020. Shipping follow-ons, too, showed growth from $2.66 billion to $10.73 billion, and there were some shipping IPOs, as market confidence returned.

Banks continued to focus on the incoming regulations regarding lower emissions and how these might affect their loan portfolios and client/project selection. Many lenders joined the Poseidon Principles, and, in general, banks became aware of the changing outlook for shipping up to 2030 and 2050, when the industry is due to show zero net emissions, as a stated objective. In terms of lending, ‘green lending’ had not manifested itself in earnest, as most owners were (and still are) searching for the right technology and assessing its likely cost/benefit. According to the Institute of International Finance, in the last 18 months, there have been 30 – 35 sustainability loans. Recent examples include MOL, KIWI-rail, Khine, Safe Bulkers, Diana Shipping, and others.

The sentiment, confirmed by Petrofin, was that bank lending would grow in 2021. The same and arguably more applied to leasing, which continued to provide attractive alternatives to bank finance.

The good shipping markets and the capital markets’ support across all shipping sectors increased the appetite for IPOs but also follow-ons and shipping bonds - with 2021 totals expected to be similar to 2020 but with a much more significant number of transactions in the pipeline.

19 countries sign Clydebank Declaration to create green shipping corridors

The UK announced the launch of the Clydebank Declaration at COP26 in Glasgow. The naming of the Clydebank Declaration pays tribute to the heritage of the City of Glasgow and the River Clyde where the Declaration was signed on 10 November 2021.

The signatories of the Declaration are to support the establishment of green shipping corridors – zero-emission maritime routes between 2 (or more) ports.

The aim is to support the establishment of at least 6 green corridors by the middle of this decade, while aiming to scale activity up in the following years, by inter alia supporting the establishment of more routes, longer routes and/or
having more ships on the same routes. The signatories will assess these goals by the middle of this decade, with a view to increasing the number of green corridors.

In the pursuit of these goals signatories pledge to:
- facilitate the establishment of partnerships, with participation from ports, operators and others along the value chain, to accelerate the decarbonisation of the shipping sector and its fuel supply through green shipping corridor projects
- identify and explore actions to address barriers to the formation of green corridors. This could cover, for example, regulatory frameworks, incentives, information sharing or infrastructure
- consider the inclusion of provisions for green corridors in the development or review of National Action Plans
- work to ensure that wider consideration is taken for environmental impacts and sustainability when pursuing green shipping corridors.

Moreover, the Clydebank Declaration signatories recalled the long-term temperature goal of the Paris Agreement to hold the increase in the global average temperature to well below 2°C above pre-industrial levels and pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels. They also noted the International Maritime Organization (IMO)'s adoption of the Initial IMO Strategy on Reduction of Greenhouse Gas Emissions from Ships, Resolution MEPC.304(72), which aims to align international shipping with the aforementioned temperature target. The signatories of this Declaration emphasised the importance of pursing efforts to limit the increase in the global average temperature to 1.5°C above pre-industrial levels, to have a greater chance of significantly reducing the risks and impacts of climate change on countries, in particular least developed countries and small island developing states. Finally, they equally recognise that a rapid transition in the coming decade to clean maritime fuels, zero-emission vessels, alternative propulsion systems, and the global availability of landside infrastructure to support these, is imperative for the transition to clean shipping.

Signatories to the Clydebank Declaration include Australia, Belgium, Canada, Chile, Costa Rica, Denmark, Fiji, Finland, France, Germany, Ireland, Italy, Japan, Morocco, Netherlands, New Zealand, Norway, Spain, Sweden, the UK and the US.

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LALIZAS has appointed Malcolm Barratt as F&I Liferaft Network Development Manager. Mr. Barratt will be working closely with the Maritime Companies Commercial Department developing new business opportunities in the frame of the F&I.

He has been working within the maritime industry for more than 15 years, being actively involved in the liferafts’ market, having experienced pivotal moments & changes.

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In his interview with *Naftika Chronika*, Mr. Pantelis (Lou) Kollakis talks about the prospects of the dry and wet markets and the relations between shipowners and charterers. He also comments on the new regulatory framework in Greece and the EU and, finally, the need to develop local communities through collective effort and contribution.

We are going through a period of robust growth in the bulkers and containerships freight market. What do you think are the best strategic choices for shipping companies during such periods, given the significant and abrupt changes in this market over the years?

I think the dry bulk market still has strength ahead. I believe we have at least another 18 months of good, if not excellent, earnings ahead. So, fundamentally I don’t see any problem in the dry cargo market unless some extraordinary disruption similar to the pandemic or something new occurs, although I do expect some turbulence due to market corrections. On the container side, high rates are clearly going to carry on through 2022. There are concerns about whether shipowners are overbuilding for the future. I am not concerned about that because there is still a lot of old tonnage out there that needs to be replaced, especially by the liner companies. We need to move on with new issues like the environment. I think that we are going to have a totally different market in two-three years. Yes, the market may be overordered but not to the extent it will dramatically affect the companies’ business plans. I think the stability is there.

Your company’s vessels are chartered by the world’s leading companies. Do you think that when it comes to purely industry-related matters, the bargaining power of charterers has increased vis-à-vis that of shipowners? How much has the landscape changed in the 40 years you have been active in the shipping industry?

Today everything is computerized. The only disadvantage we have is that we only know about the ships’ position. The charterers know about both the ships and the cargoes. So, they have a definite advantage.
According to shipping brokers, you are looking to diversify your fleet further by investing in tankers. Given the low freight rates, what do you think are this market’s prospects?

Judging by the prices, the whole industry believes that the market is picking up. Therefore, prices are going to go up even though the market is sluggish. It is true that we have been involved in the tanker market on and off for 45 years and actively involved for the last 10-15 years. So, this is not new. We feel that the signs are there for a far better 2022. Everybody believed 2021 would be better, but that didn’t eventually happen. The pandemic is still around, it is still creating trouble for the airlines, and the lock-down effects are still devastating. But the reality is that we all still believe the market will recover, and tanker asset prices are going up because of our optimism. I think there are indications, and sooner or later, we will be proven right. Nobody knows if the recovery will be before mid-2022 or later, towards the end of 2022. It is anyone’s guess.

New orders will not disrupt the market. The ships coming out now are far more efficient. Compared to existing vessels, the newbuildings entering the market in a couple of years will be at least $20,000/day more efficient on fuel alone, so that’s a buffer. We assume that old ships will be scrapped and replaced by new ships, which will be chartered, if not at today’s high freight rates, then at least at reasonable rates in the near future.

We see young and often inexperienced players entering the shipping industry in times of prosperity, and then when things are not going well, they are forced out of the market. Do you think this phenomenon increases the uncertainty in the industry?

Not really. It is very healthy for new players to enter the industry. A lot of them are actually related to the industry. And it is good that new people enter the market even if they are not experienced or eventually successful. Many generations of Greeks have followed this strategy. They enter the industry, try it out, and either like it and progress or get out. I see it as a healthy development.

"I think that we are going to have a totally different market in two-three years."

There has been a significant increase in containership and bulker orders in 2021. Haven’t shipowners drawn a lesson from the oversupply of previous years that kept freight rates at a low level? Do you think that the demand will absorb the surplus of ships in the next two or three years and that freight rates will reach good levels?
Are there opportunities for newcomers to enter the market?

I think there are. Any newcomer who entered the industry in the last 18 months has suddenly become a hero. If one had entered it four years ago, one would have fallen flat on their face within a year. In reality, the market shapes the future of these people, and as we have seen, no one can control the market. External factors like the pandemic completely change the fundamentals, whether you are an expert or a newcomer.

You have seen a lot of opportunists entering the market these 40 years. Why do opportunistic players fail to succeed in the shipping arena?

Generally, you fail when you order expensively. That’s the main criterion of failure. If you pay too much, that alone leads to a bigger chance of failure. If you buy a vessel anywhere near the bottom, then you rarely fail.

Is it also a question of intuition or a matter of knowledge and networking?

I don’t think it is merely a matter of knowledge or networking. You need a certain degree of intuition and experience to know when markets are at historically low levels. But you can only buy in a bad market if you can afford to wait it out in order to survive. Who in his right mind would say that luck was not involved when the entire container world took off and no one in this industry had a clue about what was going on? Just like in 2007, when the market suddenly took off, and Capesizes were making $250,000 per day. As you remember, the Chinese stepped at that time and decided to buy everything. It did not last, but the market took off. It was a very good return in the short term, but after a bad period.

How do you respond to the new initiatives by the Ministry of Shipping & Insular Policy to attract more ships to the Greek flag?

The State needs to be flexible and cost-conscious and implement policies that facilitate companies to crew their ships. Today, one of the biggest problems for shipowners is crewing, which has undoubtedly become worse due to the pandemic. We are trying to perform crew changes - to get people on the ships and repatriate them after a reasonable amount of time, which is very difficult because governments are not helping. That is a shame. The ministry’s initiatives are welcome, but they need to be flexible, economically viable, and we need to have the crews to implement them.

Before the Covid-19 outbreak, the outlook for the cruise industry was encouraging. Two years down the line, what are your thoughts on the industry’s course in the coming years?

From what we can see, there has been limited activity in cruises. The cruise market should make a come-back in 2023-2024, just like the airlines. I think that people like cruises, especially to unusual destinations. During the 2021 pandemic there are many three- or four-day cruises out of the UK, and although they are booked to 25% capacity, they put on entertainers, and passengers have a great time. So, the demand is there; people definitely go on cruises. The difference is that today passengers are worried. There are still Covid-related problems, and we may need at least another year to solve these problems and reach full capacity. I am not sure cruise ships worldwide will be booked to full capacity next year.

The Greek Prime Minister continues to call on investors to take initiatives in the sustainable development of Greece. What are your investment priorities in your hometown of Chios and Greece in general?
We are currently involved in quite a few projects, but excessive bureaucracy is really killing us. The Greek government is trying a fast-track system, which is good. But we need a single government body that will provide fast-track solutions and get rid of the bureaucracy. You can’t have certain bureaucrats delaying a project for six months just because they don’t want to sign a piece of paper. It doesn’t make sense, but that is what is happening today. It is vital that the government create a single body, a one-stop shop, to expedite projects like ours.

The Kollakis family has been undertaking important social responsibility initiatives. On what social areas would you like to focus?

From my point of view, we need to help society, but there are other problems we need to deal with for the sake of our children and grandchildren. The most critical is the environment. We need to help people but also help address the climate crisis. Your generation, the next generation, has a role to play in this. We want our grandchildren to enjoy the same life we had, but I am not sure they will unless we all get together. It is the responsibility of the younger generation to take the lead in environmental matters.

How do you respond to all the environmental regulations adopted by the IMO or EU? Are they in the right direction?

Ships have undoubtedly improved tremendously safety-wise. From a P&I Club perspective, I can see that things have improved considerably. So, yes, I feel that regulations are in the right direction, although there is more to be done. But overall, I think there is an improvement.

The modernization and upgrading of the Merchant Navy Academy, the boarding school, and the Naval High School in Oinousses are issues that concern the local community. To what extent do you think such institutions are currently being supported by shipping and maritime families?

I think the shipping families do support these projects. However, I don’t believe it should be the shipowners’ responsibility alone. It doesn’t benefit society to think that just one group of people should pay the bill. In a community such as Oinousses, everybody should help proportionally. Of course, an owner of a big villa should contribute more financially, but I suggest that everybody participate and contribute as much as possible. All community members should participate, contribute, support, and find solutions. Societies should evolve and deal with their problems collectively and in unity.
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There are reasons to be optimistic

Nicolas Hadjioannou,
Group CEO, CYMONA Shipping Management SAM,
talks with Charis Pappas

In his interview with Naftika Chronika, Mr. Hadjioannou comments on the dry market’s prospects, the Cypriot government’s initiatives to strengthen the national register, and the dynamics of Athens/Piraeus as a ship management center. He also discusses the significant challenge of not being able to perform crew changes.

In recent months, there has been increased activity in the purchase and sale of vessels. What are the reasons for this over-optimism among shipowners and managers?

I do not believe there is over-optimism but rather a market opportunity. First of all, for many years, there was little activity longer charter periods. In the last few months, we have seen more extended charter periods, starting from 1-year charters and, in some cases, moving towards 2- and 3-year deals, which enabled some shipowners to book cash flows and, on the back of this income, reinvest in shipping.

Secondly, some shipowners have been sitting on the sidelines waiting for the right opportunity to sell their older tonnage and perhaps replace it with newer, more efficient ships.

Of course, there are reasons to be optimistic as well. The supply side seems to be supporting this hypothesis. The orderbook has reached very low levels as a percentage of the existing fleet, and there are many upcoming environmental regulations, which make ordering a newbuilding more complicated than usual. The same regulations may lead less efficient tonnage to the scrapyard, and it looks like shipyards are concentrating on other sectors. In addition, while predictions on the demand side are always hard to make, one thing that differentiates this cycle from previous ones is that smaller ships are performing as well as bigger ships, making it more difficult for cargoes to be shifted from one sector to another.

Are you concerned that Beijing’s environmental agenda will negatively impact the demand for dry cargo, namely coal and iron ore? What are the short and medium-term prospects for dry bulk carriers?

Generally speaking, any intervention can potentially be problematic for the market; however, in the long run, I do not think shipowners who are committed to this business are overly concerned about this. If overall world trade decreases because of any intervention, the fleet will adjust to the new norm accordingly (starting from the older ships). That, of course, might take some time, but usually, the market can adjust to the new norm within 2-3 years. But in any case, environmental initiatives, when implemented sensibly, are generally good for the shipping market as a whole, as moving to more sustainable targets benefits long-term players.

Now, regarding the short to medium-term prospects, I would like to avoid making any predictions, given the fact that there are currently many one-off external factors (like Covid-19-related delays or governmental stimuli). What is certain, as explained above, is that supply seems to be under control for the time being; therefore, as long as these disruptions remain in place, we expect some volatility, but with an optimistic outlook for the next period.
How do you view the new maritime strategy that the Cypriot government has announced concerning the competitive development of its ship register?

Due to its stable legal framework, Cyprus offers an excellent base for maritime companies to set up their headquarters. In addition, the services provided by the Cyprus Maritime Administration have always focused on professional, flexible, effective, and efficient cooperation with shipping companies; in an increasingly demanding environment, this is one of the most critical requirements, both a regulatory and a commercial point of view. A clear example of this attitude is the responsiveness of the Cypriot Administration to the Covid-19 pandemic, during which it provided vaccines to all seafarers of Cypriot-flagged vessels. In my view, the new SEA (Sustainable, Extrovert, Adaptable) approach is a very positive strategy and the way forward as it will strengthen our cooperation with shipping companies. For example, the digitalization of all services provided by the Maritime Administration, i.e., creating an e-helpdesk (in addition to the existing 24/7 service), e-Maritime Library, and e-Integrated Management of Seafarers System, will facilitate a more efficient interaction between shipping companies and the Administration.

Despite the Cypriot government’s efforts, Alassia has strengthened its presence in Greece. What still makes Athens a competitive shipping hub for shipping and ship management companies in relation to other shipping hubs in Europe and the Mediterranean?

Generally speaking, I do not see the two governments competing for the same business. Both nations are shipping nations, and both governments have understood the strategic importance of shipping and do what they deem necessary to support the industry. Now, regarding our presence in Greece, Greece provides a stable and reliable shipping environment.
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Furthermore, the Greek maritime cluster offers an advantage because it enables the exchange of ideas and information in a constantly changing business environment. Talent recruitment is another crucial factor in our decision to be in Greece. However, I also wish to point out that we are strong supporters of the Cypriot flag, which maintains a very high level of competitiveness and service and it is also our national flag.

Has your company’s HR strategy been affected by the difficulties with crew changes experienced by many ship managing companies in Europe? Do you believe that companies will have to maintain pools of mariners from various geographical areas in the near future?

Crewing has always been at the top of our agenda, regardless of Covid. For example, we have always supported the professional development of our seafarers, offering them additional training over and above STCW requirements, both before embarkation and through customized computer-based training onboard. We support their physical and mental health and promote inclusiveness. Making our crewing strategy more efficient is something in which we have always been interested. The recent disruption caused by the Covid pandemic has sped up developments and pushed us to think more creatively about crew changes. Shipping companies are generally good at adapting to changes. At some point, as the Covid situation hopefully improves, we will have a clearer understanding of whether these changes are here to stay or not.

The Hadjioannou family has a long established tradition in the bulk carriers’ management. What are the main characteristics that you consider crucial in the dry cargo market? What are the reasons behind the strategy of investing in bulk carriers instead of differentiating Alassia’s fleet?

Our family has been in shipping for many years, and we have always been in the dry bulk market. That has offered us the opportunity to gain expertise and specialization in this segment and in-depth and detailed knowledge on the various aspects of carrying dry bulk commodities. That allows us to offer our charterers high-quality, trouble-free services. This, in turn, reinforce our strategy, which is based on the basic principle of building long-term relationships with highly trusted partners in all aspects of our business, following a transparent and collaborative business approach. This does not necessarily mean that diversification is bad. On the contrary, it may smoothen the cyclicality of each separate shipping segment. However, we believe that for us and the way we operate our fleet, specialization is the best strategy for the time being.
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Mr. Chris Theofilidis presents his thoughts to Naftika Chronika about the resumption of Celestyal’s cruises, the company’s strategic ambitions for the coming years, and how the geopolitical situation in the Eastern Mediterranean impacts the industry. He also discusses the experiences the modern traveler seeks when choosing a cruise trip.
How has Celestyal performed this year, given the difficulties and challenges after the extended hiatus?

Sixteen difficult months passed before the cruise resumed in Greece in May this year, which was actually ahead of other countries, making good on our bet to safely restart cruises by successfully implementing the hygiene protocols developed in close cooperation with the European and Greek authorities. I think it is worth emphasizing that there has been excellent cooperation between the competent state and local bodies and Celestyal’s experienced team in order to create a climate of trust for the Greek cruise in the international markets again. We decided to renew our itineraries and include new tourist destinations in our program for this summer season. We wanted to be more flexible, given the constantly changing conditions. In addition, this year, we have given great emphasis to homeporting, i.e., the possibility of boarding and disembarking travelers from other major ports besides Piraeus, which has made it easier for our travelers and offered the cruise greater mobility. Compared to other cruise companies, we managed to record a fairly high occupancy, which reached around 57% on average, making us very optimistic about the future.

It would be an illusion to expect spectacular results or a record performance under these unprecedented and unpredictable conditions in a relatively short season. However, compared to 2019, which has become a reference point for the cruise, our 2021 performance was as expected. Having more experience, confidence, and optimism, we are focusing on a better 2022.

To what extent has the geopolitical situation in the Eastern Mediterranean affected the cruise market? Are you worried about the current developments in our neighboring countries?

At the moment, the pandemic and consolidating a sense of health safety are the decisive factors in the course of the cruise industry and not the region’s geopolitical developments. Still, we closely monitor the situation to keep updated and are always prepared to make the necessary adjustments to ensure our travelers enjoy a seamless experience both onboard and at their destinations.

This year, ports in neighboring Turkey were inaccessible to cruise ships due to the European Union’s decision aimed at curbing the spread of the pandemic. Similarly, the Israeli government authorities did not allow access to their ports, a decision that obviously affected cruise line itineraries and bookings.

Celestyal Cruises, which essentially represents the Greek cruise, maintained its interest in attracting nearby markets - unlike other cruise companies that were “forced” to turn to the Mediterranean this year but will return to their primary markets once travel restrictions have been lifted. In this context, our company organized seven-day cruises to unique Greek destinations, such as Thessaloniki and Limassol, on the cruise ship “Celestyal Olympia,” combined with three, four, or seven-night getaways on the “Celestyal Crystal.” The result was that as far as the Balkans are concerned, this year we hosted mainly Greeks, Cypriots, Bulgarians, Romanians, and Serbs, but also American, Spanish, and French travelers.

We hope that all travel restrictions will be lifted next year, allowing us to reach ports in neighboring countries that offer our passengers unique scenic views but also a wide airline network and direct connections, thus giving us access to remote markets.

What experiences do modern travelers who prefer cruises seek? What obstacles prevent them from enjoying these experiences when taking a cruise around the Greek seas?
Modern travelers are no longer content with just visiting a single destination. They want to live authentic experiences in the places they visit and look for the best value for money.

For its part, Greece is recommended because the small size and diversity of its islands allow the visitor to discover the Greek way of life and the meaning of Greek hospitality, which is a strategic priority for Celestyal Cruises during its cruises.

For a traveler’s experience to be special and memorable, it is essential to emphasize each destination’s unique features. It is also necessary to upgrade the country’s infrastructure to ensure that all visitors have easy access to popular tourist destinations and reduce overcrowding at some of them, which burdens local communities and threatens to erode the character of some of these places.

Finally, over time, sustainable development, a primary goal for the European Union, is gaining ground in our country as it results in a better economic footprint and long-term prosperity for local communities. At the same time, ensuring the protection of the environment and preserving the unique cultural character and beauty is, in fact, an additional attraction for many travelers.

Do you think that emphasis should be given to specific ship sizes or cruise categories in our country due to its infrastructure and special features (small islands, etc.)?

What is of paramount importance for us and the national economy is how cruise companies operate and not so much the size of their ships or the country’s infrastructure, which undoubtedly leaves much room for improvement. And achieving this requires central national planning and targeting.

Therefore, I think it is crucial to strengthen the sustainable and multidimensional model of cruise development. Take, for example, the unique way Celestyal Cruises operates in Greece compared to other companies. Besides homeporting in Greek ports, it has to do with the product itself and the company’s philosophy and development strategy. That means that it has its offices and business headquarters here, so it has high operating costs, repairs its ships here, and cooperates with local food and beverage companies. At the same time, the company employs people of various specialties both in its offices and on its ships who have the expertise to continue the cruise tradition. In addition, we offer the option of short three or four-day cruises compared to the traditional multi-day cruises available on the market, thus enabling our passengers to visit Athens and other inland destinations and stay there before and after their sea voyages. That creates a significant economic footprint, which spreads across many sectors of the economy, such as the hospitality industry, transportation, archeological sites, etc.

Therefore, to answer your question, small and medium-sized cruise ships have an obvious advantage, as they are more flexible to visit destinations with Greece’s unique features. However, we cannot rule out the operation of larger cruise ships, provided these ships do not negatively impact popular tourist destinations. There should also be national strategic planning on how cruise companies operate to ensure maximum revenues and benefits.
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Panos Xenokostas,
President & CEO of ONEX Group,
talks to Giannis Theodoropoulos
Mr. Xenokostas discusses his vision for the Neorio and Elefsina shipyards, the prospects of Greek shipyards as compared to Turkish, Croatian, or Romanian shipyards. He also comments on American investments in Greece, and the state’s role in foreign investment today.

In the past few years, the Neorio Shipyard in Syros has emerged from its complete decline as a success story thanks to its acquisition by ONEX Shipyards and the ambitious development plan it has implemented. What is your vision for the shipyard but also our country’s shipbuilding industry as a whole?

Our vision is that Neorio remains the first choice of excellence for Greek and international shipowners’ fleets. After a 25-year cycle of continuous loss of competitiveness leading to their total decline, our country’s shipyards are facing a new reality following the reopening of Neorio: they can once again compete in the international market by adopting a fresh perspective and an operational model that makes the employees the protagonists through goal achievement and a vision of excellence. My vision is to create a shipbuilding and technological hub in Greece, a protagonist in the Southeastern Mediterranean. Through all this, the entire industry will emerge as the big beneficiary, the employees as the big winners, and the Greek economy with an inflow of real money, which will lead to exponential production and consumption growth.

Greece is the leading shipping power globally in terms of ship ownership. However, the country has not managed to develop its shipbuilding industry significantly. Do you believe it has the potential to become a reference point for shipbuilding and ship repairs? Could Greek shipyards compete with those of Turkey, Croatia, or Romania?

The example of Neorio has shown that this can happen with great success if a specific plan and methodology are followed with dedication and perseverance. It is a success of Greece that has a Greek signature. This success can continue and be repeated to a
greater degree in Elefsina, and that is our plan. We have the know-how to do it. The other countries you mentioned have comparative advantages, elements that their countries generously offer to the industry because they realize the economic, productive, and geostrategic benefits of a strong shipbuilding industry. Our country has a great opportunity ahead to revive the industry from scratch through three main pillars:

- A business model whose implementation increases our shipyards’ international competitiveness
- A workforce that has the know-how and culture of synergies and identifies with the organization’s vision
- A simplified institutional framework allowing shipyards to become part of shipping instead of part of the classic domestic industry

As far as the first two are concerned, Neorio and Elefsina’s employees, administration, and owners have shaken hands and made a lifelong commitment to our vision. As for the third pillar, it is high time for a national cross-party consensus in order to change the institutional framework in which we operate. We serve ships, shipping. We need to break free from our decades-long inertia that has closed shipyards and move forward by creating a framework that protects workers and safeguards their sacred right to work, fair compensation, and competitiveness in an internationalized industry. We must become a part of the shipping industry again, just like when Goulandris, Niarchos, and Andreadis started the shipyards in Greece. Not as the fifth wheel of an industry distorted by unions and petty interests – an approach that destroyed it, squandered its competitive advantages, and worked for the benefit of neighboring countries that became great because of the destruction of Greece.

In the past, many of the country’s shipyards have faced the extreme attitudes of trade unions representing shipyard workers. How did you manage to smooth out your relations with them in order to create a calm working environment?

We did it by embracing a victory culture and life philosophy of truth, justice, and realism. The shipyard is an extension of the ship on land, where it “redisCOVERs itself,” which it is deprived of while at sea transporting goods and serving the supply chain. The supply chain’s rules are relentless and
imposed by other countries’ shipyards - those that offer ships “competitive packages” and they get to choose. Every day, you are either competitive and “win the ships,” or you are not, so you “go home” … as simple, true, and fair as that. We designed the yard’s entire operation around the satisfaction of the shipowner. We discussed it, understood it, and together with my employees, we gave our word of honor to achieve it by each doing our part. It worked. We succeeded. Because it was based on truth and love for what we do.

There has been much talk recently about the need to build more eco-friendly ships. What can the role of Greek shipyards be in this new order of things? Do you think it is possible to build a Greek electric passenger ship at Neorio or Elefsina Shipyard?

Greek shipyards can and do play a catalytic role in this new era. First of all, let us not forget that almost all IMO provisions concerning the ship’s maintenance and new systems focus directly or indirectly on decarbonization and the ship’s most environmentally friendlier operation. In addition, there have been several adjustments to the mode of operation and the use of the energy we consume. On the other hand, recycling and new materials and technologies are fields that can be developed within a shipbuilding ecosystem.

Developing an electric or hybrid ship - a “green ship” - in our shipyards in Greece is my dream. We are already in contact with the competent state bodies; this goal will be presented at the top government level so that a decision is made and applied research and prototype development can proceed. Yes, it can be done.

Are American investments in Greece an arrow in the quiver of Greek foreign policy, especially in the face of Ankara’s provocations?

American investments in Greece are primarily a strategic weapon of the Greek economy. They are a catalyst that creates economic diplomacy surpluses for Greek governments. The strengthening of the domestic shipbuilding industry and developing an American shipbuilding & technological hub in Greece upgrade the country into a regional leader. The western world wants a democratic country like Greece, a strong regional power, and American investments offer a huge service in this direction.

What are the short-term business plans of ONEX Shipyards? At what stage are the negotiations for the Elefsina Shipyards? What common goals have you set with the Development Finance Corporation for the development of the yards?
As announced a few days ago, Fincantieri will be joining us as a strategic partner in our consolidation project, a scheme whose financial requirements will be assisted by both DFC and Fincantieri. My goal with this challenging multi-year restructuring and regeneration plan was to create the powerful pillars that will help fill the gaps of the last eleven years that led to the deterioration and utter decline of the Elefsina shipyards. By the end of December, we intend to submit the consolidation file to the competent courts, and from there on, things will take their course. Our vision is to make the Elefsina and Neorio shipyards the leading shipbuilding hubs in the Southeastern Mediterranean. We are working hard towards this end.

What is the role of the state in foreign investment today? Do you think the investment profile of Greece has changed in recent years?

In recent years, or at least since we started in Neorio in 2017, the investment environment has been friendly and encouraging and has become even more so with every passing year. It is good to see the political leadership of the ministries making sincere efforts on a daily basis to overcome all kinds of obstacles at the institutional level. The current Ministry of Development leadership, namely Minister Georgiadis and Deputy Minister Papathanasis, and their staff, are an example of dedication to the goal; they act as catalysts for investment plans, so we owe them a big thank you. The goal to revive the shipyards, i.e., domestic shipbuilding, has a supra-partisan character and national dimension. We started participating after 2017, with the substantial support of the country’s democratic forces, the government, official opposition, and minor opposition parties. This fills us with a sense of responsibility but also the confidence and commitment to do whatever it takes to carry out this mission. We thank them all.
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Shipyards & marine technology
Leading the race towards shipping’s decarbonization
The pandemic has left its indelible mark on both the shipbuilding industry and the marine technology industry. However, at the same time, the efforts to reduce shipping’s environmental footprint are a prime opportunity for the industry to develop and play a leading role. Moreover, the shipping community argues that the decarbonization of shipping requires significant investments in research and development and the cooperation of shipping companies, shipyards, engine manufacturers, fuel producers, etc.

In this feature, Naftika Chronika presents a fruitful dialogue between regulators and representatives of the shipbuilding and shipping industries on the prospects and challenges in the shipbuilding and marine equipment and technology industries going forward.

This feature was written with the collaboration of the Shipyards’ & Maritime Equipment Association of Europe - SEA Europe

Some of the following views were expressed during the recent webinar organized by Isalos.net on “Green Shipping & New Technologies: Innovation and Sustainability for the European Maritime Industry.”
Decarbonization is a necessity that must be achieved rapidly, efficiently, and safely

Shipping is an efficient industry that accounts for the lion’s share of global trade. In view of this, the fact that pollution deriving from shipping has been steadily diminishing as new related technologies are becoming available should be appreciated. Be that as it may, shipping must continue to decarbonize, but this is not a task it can or should face alone. All stakeholders, including shipyards, engine manufacturers, and equipment suppliers, must do their part in providing the maritime industry with the necessary tools to expedite its decarbonization. The path to decarbonization comprises three routes: vessel and machinery efficiency, alternative fuels, and operational efficiency. When it comes to alternative fuels, uncertainty prevails.

by Dimitris Fafalios,
Chairman of INTERCARGO
& Director of Fafalios Shipping S.A.
On the other hand, operational efficiency resides with the operator’s decisions, meaning that major operational decisions, especially in Greek shipping where tramp/bulk shipping prevails, are dictated by the charterers. This is highly important and should be taken into consideration when examining the development of legislation such as the EU Fit-for-55 package, which needs to be clear and transparent. Indeed, one of the major emerging issues is that regulatory forces do not fully understand the maritime industry’s dynamics. To a great extent, it is almost exclusively the shipping companies that are being regulated. The regulators often neglect the importance of the charterers when it comes to a vessel’s operation. However, the fact that the vessel’s commercial operator is mentioned in the Fit-for-55 package offers a ray of hope for the upcoming regulations. Perhaps, regulations should focus on the commercial management of the vessel rather than its owner.

Technology plays a vital role in the shipping industry’s decarbonization and should therefore be supported by a strong R&D program. On this note, the fact that the Greek Prime Minister, Mr. Mitsotakis, is keen on strengthening R&D within Europe and Greece - hopefully to the benefit of European companies and shipyards - is a positive development. R&D will strengthen the companies focusing on maritime technology.

As for small and medium-sized shipowning companies which make up the backbone of the tramp/bulk sector and the challenges they may face, it is crucial to ensure that regulations are unambiguous. There have been instances where that was not the case, such as the two different types of data collection employed by the European Union (MRV) and the IMO (DCS). Indeed, it is likely that two types of EUR MRV may be necessary, the existing system and a new one necessitated by the Fuel EU Maritime regulations! Small companies need clear regulations that allow their employees to focus on the vessels’ operation, safety, and efficiency and not waste valuable time dealing with unnecessary bureaucracy.

Another disadvantage of small companies is that they are often presented with fewer options in contrast to larger entities. In this respect, a small company making a limited order at a shipyard will depend on the current series produced by the shipyard. Even though the small company may request upgrades which will improve the vessel’s energy efficiency, the yard will be extremely reluctant to satisfy the customer’s demand. Based on that, when developing regulations, the legislators must ensure that all companies (be they small or larger ones) have equal access to technology, machinery, equipment, etc. Taking the first step forward is challenging, if not frightening, especially for small and medium-sized companies. Fear constitutes a burden that can only be lifted through transparency. Unfortunately, at the moment, there isn’t enough transparency. The regulatory bodies in the European Union should provide all program applicants with clear instructions to allow those keen on taking early steps towards decarbonization to do so. One such example is the easy access to the Waterborne Technology Platform. In this respect, it is of utmost importance that regulators understand that the different shipping industry segments cannot be grouped together. Each of these segments operates in different ways and, as such, should be treated differently.

Decarbonization is a necessity that must be achieved not only rapidly but also efficiently and safely. Safety should be at the forefront of regulations and include the safety of seafarers, vessels, and fuel suppliers. Technological breakthroughs are of utmost importance and can be achieved through funding R&D and enriching the maritime industry with new jobs. Funds could also be allocated for retrofitting existing and efficient vessels.
European equipment manufacturers maintain a strong global position

SEA Europe’s Chair and Vice President of Damen Holding shares his views on the main challenges facing Europe’s shipyards and equipment manufacturers in the coming years and the EU policy to safeguard the future of the maritime equipment sector.
How has Covid-19 affected Damen Holding’s activities, and what lessons have you learned from this pandemic crisis for the future?

Damen Shipyards is made up of some seven divisions that all reacted differently to the Covid pandemic. Naval shipbuilding and yachting divisions were primarily affected in their supply chain, but workboats, particularly ship repair & conversion, were hit by lockdowns and a sharp decline in orders. We learned a lot about how to work safely and how to work remotely. However, what has been most difficult was maintaining proper contact with customers without being able to see them. Other than that, I am afraid the next crisis will again be different.

In your opinion, what will be the main challenges for Europe’s shipyards and equipment manufacturers in the next 5 to 20 years?

European shipyards are under enormous pressure from Asian competitors. Although they hold a strong position in specific niche markets such as cruise, ferry, naval, yachting, and offshore support vessels, maintaining a dominant role in these niches will be challenging. European equipment manufacturers maintain a leading global position as suppliers of modern and innovative equipment and services. To defend this position, they must invest in development; however, they also need nearby shipyards and customers to develop these innovations.

Do you believe that EU plans for foreign subsidies, the European Green Deal, Fit-for-55 package, and digitization will create business and jobs opportunities for European shipyard and equipment manufacturers, European/Greek shipowners, and other maritime stakeholders?

We hope that the EU will defend its industry in general, and thus the maritime sector, against unfair subsidies. There are clear opportunities for the European maritime industry (equipment manufacturers/shipbuilders/shipping companies) in the Fit-for-55 program. Europe is still the most innovative part of the shipbuilding and shipping world. There are ample opportunities for businesses to capitalize on these opportunities. Research and innovation programs funded by the EU and European nations should lead to new products and innovations that support the Green Deal. These developments will definitely lead to employment opportunities in European maritime industry companies.

If EU policymakers asked you what you need from them to protect the maritime (technology) sector’s future and stimulate business and jobs in Europe’s shipyards and equipment manufacturing industry, what would you request in terms of policy/actions/finance for your company and the entire sector?

After decades of neglect, it would be very useful if policymakers finally pursued a level playing field for the European shipping industry, which would allow us to compete fairly in markets inside and outside Europe. We hope that in pursuing the Green Deal, European policymakers will make regulatory and economic decisions that stimulate research and development in sustainable equipment, support the development and distribution of all alternative fuels, and help bridge the gap between the older, less clean ships and new “green” ships and alternatives.

In your view, what can Europe’s shipyards and equipment manufacturers offer the Greek maritime community to enable Greece to maintain its global leadership in shipping and comply with forthcoming requirements related to the European Green Deal and digitalization?

European shipyards and maritime equipment manufacturers can provide all coastal trading and passenger ships of the highest standard and within the requirements of the Green Deal. It is unlikely that European shipyards will be involved again in building larger tonnage, an area in which Greek shipping companies are particularly strong. However, European equipment manufacturers will be best positioned to support their Greek customers in their endeavors to develop the proper tonnage for their future requirements in line with the energy transformation.
In her interview with *Naftika Chronika*, Ms. Kopczynska discusses the shipping industry’s main challenges in its transition to zero-carbon and the significance of a robust R&D program for the European maritime industry. Ms. Kopczynska also talks about the impact of the forthcoming EU regulations on global trade and goods prices.

**Decarbonization is the only option moving forward**

*Magda Kopczynska,*
Director- Waterborne Transport, DG MOVE, European Commission, talks to Ilias Bissias
What are the main challenges for the maritime industry in the transition to zero-carbon? Will small and medium-sized shipping companies possibly face more challenges during this transition?

The transition of the shipping industry to zero carbon is indeed challenging if we consider that nowadays shipping relies almost entirely on highly polluting fossil fuels. The main challenge is to develop an entirely new fuel eco-system in which renewable and low-carbon fuels are being produced, distributed and actually used by maritime operators.

The calls to decarbonize the maritime industry are increasing not only within the European Union but globally. Since these calls will not abate in the near future, the pressure they exert on the shipping industry will not ease off either. Focusing exclusively on production or distribution will not provide the desirable results. The EU therefore has proposed a tailor-made legislative initiative for the entire value chain, including producers, infrastructure providers and shipowners. We do not think that small and medium shipping companies are at a disadvantage regarding the industry’s decarbonization. The FuelEU Maritime initiative, the European Commission’s proposal aiming to increase the demand for alternative fuels, puts forward gradual and affordable requirements. We also ought to remember that small and medium-sized companies already operate in a highly competitive environment. The technological transition, which is already underway, will be diversified since different needs and business models require different approaches. This might actually provide a competitive advantage for small and medium-sized shipping companies, as they are more adaptable to change. Thus, they might be better positioned for rapid changes, a valuable asset in the ever-changing technological landscape.

How important is it for Europe to develop a robust technology R&D program?

Decarbonization is the only option moving forward. It is not a matter of will but rather a necessity. In this respect, it is extremely positive that the maritime industry agrees with this vision, especially since not all stakeholders shared this mindset a few years ago. However, this transition cannot take place overnight. Not only is the procedure itself challenging and complex, but the maritime industry is also complex and consists of different sectors, which renders its decarbonization an even more challenging endeavor. The European Commission recognizes that even if some technology solutions can propel the industry’s decarbonization, not all of them are mature and applicable. Hence, it has created the Zero Emission Waterborne Transport partnership (with industry’s Waterborne Technology Platform), which constitutes a collective representation of the industry’s participants, tasked with examining new technologies and proposing solutions that will allow forward movement. The partnership has already submitted an R&D-focused program, including the pilot testing of these technologies to support their application. By 2030, the objective is to develop and demonstrate deployable zero-emission solutions which are applicable for all main ship types and services, to enable the achievement of zero-emission waterborne transport by 2050.

What are the obstacles for first movers? Can some companies profit from the challenges of decarbonization?

By supporting first movers, the Commission aims to support European shipyards and equipment manufacturers, thus accelerating decarbonization and strengthening the European maritime cluster. In this respect, based on the FuelEU Maritime proposal, first movers will be able to profit from the fact that they are the frontrunners in the race to decarbonization.
Could the upcoming EU regulations affect global trade cost-wise? How will the European Commission react to the fact that there might be limited fuel availability in ports with poor infrastructure worldwide?

The European Commission has proposed an alternative fuel infrastructure framework introducing a mandatory provision for such infrastructure. As for shipping, for the time being, the EU is focusing on the availability of Onshore Power Supply (OPS) in ports. In addition, the EU has submitted a Renewable Energy Directive revision that concerns renewable fuels certification in July.

On another note, we have been receiving concerns about how the Commission will ensure that vessels bunkering outside the European Union will be compliant with the fuel regulations. There are some misconceptions on this matter, which need to be clarified. First of all, regulations such as FuelEU Maritime will only apply to vessels calling at EU ports; therefore, they can always bunker in the EU. The regulation is structured to include annual reporting. That means that ships calling at the EU will be supplied with fuels that are 100% in line with the requirements. We did not want to introduce a mandatory requirement to bunker in the EU because we thought it would be unfair. But at the same time, fuel can be bunkered in the EU, and if it is, it will be in line with the regulatory framework.

Moreover, at the Glasgow COP 26 climate conference, 19 countries – including the US, Japan, Norway, the UK and Australia, as well as 10 EU Member States – joined a framework to create zero-emission ocean shipping corridors. By creating zero-emission maritime corridors, major trade partners can incentivize landside investments needed in clean energy and zero-emission fuel infrastructure at ports.

And finally, again referring to COP26 discussions, quite an impressive number of developing countries are looking at opportunities stemming from becoming energy hubs for zero or low emissions fuels. They have long term strategies to boost the production of hydrogen and countries like Chile, South Africa, Panama or Kenya look to shipping as one of the key recipients of those new fuels of the future.

Will the upcoming regulations significantly affect the prices of goods, burdening the European consumer?

This is indeed an important issue, which the Commission has taken into consideration. The final price of goods can be impacted by transportation costs, but the effect will differ depending on the product itself. For many of them, the changes will be close to unnoticeable.
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The main challenge in the shipping industry’s decarbonization is, naturally, technology. One of the most vital issues with technology is that the current approach is too broad; instead of focusing on a limited number of innovative ideas, following shipping’s traditional approach, recent research has been examining many different technologies simultaneously.

by Stavros Hatzigrigoris, Director- MARTECMA & Zodiac Maritime Ltd.
Shipping is a complex sector whose different segments require different approaches. Not all technologies can be implemented in all shipping segments. A case in point is the use of batteries in shipping. The successful application of this technology in Norway does not mean that batteries can currently be employed in ocean-going transportation. We cannot expect to have ammonia or biofuels infrastructures in the near future when LNG infrastructure is not broadly available today. This approach will not provide results within the expected time frame. The lack of specific focus in research will inevitably cause delays and obstacles in the path to decarbonization. There should be a focus on a specific, if not limited, number of new technologies, thus allowing for faster and more efficient results.

In the short term, this technological transition will affect small and medium-sized companies. Acquiring a new vessel is no small endeavor as it is costly, especially for small firms whose available funds are limited compared to larger entities. Technological breakthroughs will push newbuilding prices up, which can evolve into a major issue for small companies. An example is the price of a Supramax vessel that would comply with the 2030 goals. Its price has been estimated at 2.2 times higher than that of a conventional Supramax vessel. We should also point out that profit margins had declined in recent years and that this holds true to this day for some industry segments. Small companies will not be able to proceed with extensive investments if their profit margins keep declining. They should focus on new management techniques, developing business models that will allow them to comply and adapt to regulations. They should worry about their own efficiency rather than the efficiency of the whole maritime industry.

It goes without saying that the goal of decarbonization should be a common goal all parties involved in the transportation chain equally; they should all participate in this effort to the same extent. Shipowners, charterers, shipbuilders, equipment manufacturers, fuel suppliers, port authorities, and regulatory bodies need to work together to achieve the ambitious goal of decarbonizing the maritime industry. A robust, collective view is paramount to accelerating the efforts made. Individualism can no longer lead to prosperity and the future we have envisioned.

The European Union should also play its part in this new order of things. Subsidies should be revisited. Since we are discussing environmental problems and, in essence, the long-term survival of the entire ecosystem, subsidies could be a solution.
The challenge of decarbonization is indeed a complex and demanding task, mainly because, at the moment, there are so many unknown factors. In addition to this, the focus keeps changing, so there is neither a straightforward path to the sector’s transition nor a specific target within a specific time frame.

Shipyards, engine manufacturers, and marine equipment manufacturers can benefit from the challenge of decarbonization.

by Eleni Polychronopoulou,
President of HEMEXPO, Vice-Chair of SEA Europe, and Business Development Manager of ERMA FIRST ESK Engineering Solutions S.A.
From a technical point of view, what should happen is not an unknown factor. However, the means that need to be employed to achieve this change remain unknown. This has led to the current situation, namely, the exploration of different possibilities, among which are alternative fuels. Another factor that renders the transition of the industry even more difficult is its scale. Vessels are extremely valuable and complex assets, and many parameters must be taken into consideration. Applying existing inland technologies on vessels is not an easy endeavour. Moreover, the lack of support for those willing to move forward and make changes creates uncertainty. For “first movers” to exist, there must also be incentives that will enable them to step forward and, embrace the opportunities available to those who change first and take the risks that come with such a decision. All this requires a clear framework that welcomes small and medium-sized companies. Their inclusion is essential as, precisely because of their size, these companies monitor the day-to-day operation of their vessels extremely carefully, immediately understanding even the smallest changes that take place and responding to them promptly and efficiently.

In my view, the central issue that needs to be addressed is developing a framework that a) rewards first movers and b) supports and strengthens R&D programs. Regarding the second point, the recent proposal for a European R&D Center for Maritime Fuels by the Greek Prime Minister, Mr. Mitsotakis, is a positive step in this direction. The European Union should follow suit and strengthen R&D at a European level. It should also support European shipyards and marine equipment manufacturers, especially since they constitute a small part of their respective sectors. Initiatives such as the Waterborne Technology Platform are great. However, such initiatives do not have the power and scope needed to bring about real change. Only a handful of projects are active on the platform, whereas technology for the ocean-going fleet keeps developing rapidly. Technology should be tested on the current ocean-going European fleet to differentiate it from Asian technology, which is being tested on newly built vessels. That would also ensure that existing vessels remain competitive for the rest of their economic life.

The challenge of decarbonization should be an opportunity as it will benefit the industry, while shipyards, engine manufacturers, and shipping equipment manufacturers can also profit. As the landscape continues to change, new competition will emerge going forward, propelling the industry into a new era.

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Difficult times for Europe’s maritime technology sector

COVID-19 has hit Europe’s shipyards and maritime equipment industry (“maritime technology sector”) very hard. Especially cruise shipbuilding and its supply chain have been heavily impacted. Recent figures speak for themselves, i.e., orders for newbuildings in Europe decreased by 64% in the period 2019-2020 and by another 53% in the first quarter of 2021 compared to the same period in 2020, while in contrast, global orders for newbuildings decreased only by 12%.

While Europe’s maritime technology sector is in decline, Asia is doing very well on many fronts. Firstly, Asian shipbuilding nations have introduced sectoral COVID-19 support measures, including financial support, to help local shipyards and maritime equipment manufacturers survive the pandemic crisis. Secondly, all recent orders for green ships, especially

by Christophe Tytgat,
Secretary General, SEA Europe
containerships, are placed either in South Korean or Chinese shipyards. In contrast, Europe is still discussing how to achieve a zero-emissions waterborne transport sector by 2050. Europe’s current Covid-19-related problems have come on top of those already confronting the sector since before the pandemic crisis, notably severe competitive distortions from Asia for more than four decades and other trade protectionist measures, all resulting in Europe losing one shipbuilding market after another. Interestingly, the European Commission has already acknowledged these problems, their potential adverse effects, and the urgent need for action at an international and European level since 1988. Regrettably, to this day, the situation has remained the same or become even worse due to Covid-19, and the maritime technology sector is still desperately waiting for adequate sectoral policies delivering tangible results.

**Well-known Asian competitive distortions**

Unlike Asia, the European Commission does not apply any sectoral industrial (shipbuilding) policies. Instead, Europe’s maritime technology sector is governed by so-called “horizontal policies,” i.e., policies that apply to any economic sector regardless of that sector’s specific needs, challenges, and features.

In the 1990s, the European Commission decided to repeal its then-applicable shipbuilding policies with the firm but naïve belief that other foreign shipbuilding nations would follow Europe’s example. Unfortunately, none of Europe’s direct competitors in Asia did so, with the well-known devastating effects for Europe’s shipbuilding leadership in the world. Only for the shipping industry did the European Commission introduce sectoral measures through the Community Guidelines on State Aid to Maritime Transport, with positive results for the competitiveness of EU shipping. But why did the European Commission never consider doing anything similar for shipbuilding and maritime equipment as it did for shipping?

With Covid-19, competitive distortions have worsened for Europe as Asia introduced additional Covid-19-related support. In contrast, the European Commission has left it to the Member States to decide whether to grant money from the EU Recovery and Resilience Fund to the maritime (technology) sector. As expected, only very few Member States did so. Hence, Europe’s answer to the pandemic crisis in the shipyards and maritime equipment industry is suboptimal and far from enough. Consequently, the sector seems to be sinking further into the economic swamp, whereas South Korea and China are taking all orders for newbuilds (green ships) to the extent that their shipyards are having difficulties managing the current order intake.

**The industry is still waiting for adequate solutions**

Even though the European Commission has acknowledged the seriousness of Asia’s competitive distortions for European shipyards, none of the legislative initiatives it had announced in 1988 materialized into tangible results, neither internationally nor in Europe. As a result, European shipyards lost one shipbuilding market after another and only managed to maintain global leadership in complex shipbuilding and advanced maritime equipment manufacturing.

So far, the European Commission has not been found prepared to consider adopting sectoral measures in support of

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1. The China Association of the National Shipbuilding Industry (CANSI) has recently reported that new orders are up more than 200% on a tonnage basis in 2021, of which nearly 90% are destined for export to the international market. This strong growth in orders has helped China to maintain 50% of the global shipbuilding industry’s share.
the specific needs and challenges of the maritime technology sector, despite many requests from SEA Europe and its members. This attitude is quite strange as the European Commission has put in place a sector-specific regime to boost the competitiveness of European shipping since 1997, i.e., the Community Guidelines on State Aid to Maritime Transport. This regime provides specific fiscal and financial incentives to EU shipowners based on a rationale that is also valid for shipyards in Europe, i.e., fierce competition from third countries and the acknowledgment of the strategic nature of the sector.

In contrast to European shipping, the European Commission decided to repeal the sectoral benefits of EU shipyards, including Operating Aid, in the 1990s. At the same time, none of the initiatives announced in 1988 have been adopted or produced any positive effects.

Even today – and despite the clear statistical evidence – the European Commission remains of the view that its current horizontal policies and financial instruments are sufficient for the maritime technology sector. However, a tiny positive element is the recent recognition – both by the European Commission and several EU Member States – that shipyards and maritime equipment manufacturers are also strategic for Europe.

**Some promising prospects**

Besides recognizing the strategic dimension of the maritime technology sector for Europe, the European Commission has recently also published several documents with explicit references to the needs and challenges of Europe’s shipyards and maritime equipment industry.

Firstly, the European Commission has acknowledged the need for fleet renewal and retrofitting schemes to achieve the ambitions of the European Green Deal in the waterborne transport sector. However, adopting such schemes needs to be done nationally, and thus their introduction will depend on the discretion of individual Member States. This situation is suboptimal and may even lead to distorted competition in the internal market between the Member States applying such a scheme and those that do not. Instead, an EU-wide fleet renewal and retrofitting scheme would be a better way forward and become an actual tool for bridging the anticipated gap in the demand for new orders in Europe in the period 2021-2023/2024. It would also enable European maritime equipment manufacturers to produce and sell green shipping technologies and European shipowners to transform their fleets into climate-friendly vessels in line with the European Green Deal and the “Fit-For-55” Package.

Secondly, in contrast to previous EU Framework Programs for Research and Development, the European Commission and the Member States have recently granted the “Waterborne Technology Platform” a financial envelope of €530 million in the context of “Horizon Europe” to speed up investment in research and development in zero-emission waterborne transport.

Thirdly, the European Commission has launched public procurement and defense initiatives, enabling commercial and naval shipyards to build research, public service, or navy vessels. Such
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initiatives will also help the maritime technology sector bridge the anticipated gap in demand for newbuild vessels.

Fourthly, the European Commission’s €750 billion budget for the Member States’ Recovery and Resilience Plans explicitly referred to zero-emission and digital waterborne transport. Regrettably, in practice, only very few Member States have used these funds for the maritime technology sector. Interestingly – and rightly so – Greece has been amongst the Member States dedicating a financial envelope for the greening of its fleet.

Finally, the European Commission’s proposed regulation on foreign subsidies offers a promising solution to the above-mentioned longstanding legal gap in trade defense instruments from which European shipyards have suffered for more than four decades.

Still a long way to go

Despite these recent developments and promising legislative initiatives, there is still a long way to go before Europe’s maritime technology sector can possibly regain competitiveness versus Asia.

Firstly, Europe should adopt at the soonest a sectoral policy for the entire maritime sector, including its shipyards and maritime equipment industry, as an alternative – or at least in complement to – its current horizontal policies. These horizontal policies have not been successful for the maritime technology sector, nor have they stopped the loss of many shipbuilding markets in Europe.

Secondly, the EU’s ambitions on digitalization, foreign subsidies, and the European Green Deal will only be successful and offer real business opportunities to the maritime technology sector if they are supported by sectoral, holistic, and adequate regulatory and financial framework conditions.

Thirdly, the European Green Deal and the Fit-for-55 Package will require significant fleet renewal and retrofitting investments. To that end, the European Commission needs to go beyond an acknowledgment in policy documents and translate such schemes into practice, preferably at an EU level as opposed to individual Member State implementation, for instance, through the EU Emission Trading Scheme for Shipping.

Finally, the recognition of the shipyards and maritime equipment industry’s strategic dimension for Europe is much welcomed. But this recognition needs to be reflected through concrete actions, including in the context of the current discussions on Europe’s strategic autonomy. Without control over and leadership in its own maritime technology sector, Europe will become entirely dependent on foreign nations to build or retrofit its own fleet and produce its own maritime equipment, systems, and technologies, for, among other things, zero-emission purposes. Such foreign dependence would be devastating for Europe’s maritime autonomy but also for its defense and security, its access to trade and the blue economy, its ability to connect (remote) maritime regions, and, ultimately, its ability to create added value and jobs in (remote) maritime regions.

Now more than ever, the European Commission, the European Parliament, and the Council need to realize that if no concrete and adequate sectoral policies are put in place, Europe’s rich history, strong maritime tradition, and global maritime leadership are at stake. As early in 2017, a study for the European Commission had concluded that “the next decade will be decisive for the survival of Europe's shipbuilding sector.” With Covid-19, complacency is no longer an option. The time for political action is now. And let’s never forget Themistocles’ (524 – 459 BC) prophetic words: “Whoever controls the sea, controls everything.”
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In 2021 the shipping market, particularly the containership and bulker segments, have recovered significantly from the impact of the pandemic. The reasons for this recovery have been analyzed in detail in the past issues of *Naftika Chronika*. Moreover, the currently high freight rates have sparked investment interest, mainly for second-hand ships but also newbuilds.

As part of this year’s feature dedicated to the shipbuilding industry’s trends, challenges, and opportunities, *Naftika Chronika*, in collaboration with VesselsValue, has compiled some very interesting information and data on the value of new orders and their distribution among European and Asian shipyards.

**Ship orders:**
The overall picture for 2021
As can be seen in the graph below, Asia was once more in the lead in 2021, with the shipyards of China, South Korea, and Japan at the top of the newbuild order list. Chinese shipyards booked orders for 563 ships worth a total of $33.45 billion. Although South Korean shipyards secured fewer orders (348), their total value, amounting to $34.77 billion, was similar to that of the Chinese shipyards. Japanese Shipyards secured 118 orders totaling $6.83 billion.

Therefore, these three countries accounted for 96.44% of all orders placed so far in 2021, which means that only 38 of the 1,067 ships ordered in Asia and Europe until the end of October were built outside the top three shipbuilding countries.
The distribution of orders in Asian shipyards is of particular interest. At 46%, containerships accounted for almost half of the new orders, while the value of the containerships under construction amounts to $38.7 billion, corresponding to 50.44% of the total value of ships under construction.

At the same time, bulk carrier orders fluctuated at levels similar to those of tankers, although the former went through a period of excellent freight rates. It is worth noting that there have been 148 LPG and LNG orders, just 23 fewer than the tankers ordered so far in 2021. Thus, we see an emerging shift in the balance of the energy goods market, a harbinger of impending disruptions that may lead to new developments on the environmental front.
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On the contrary, there has been no significant mobility in the European shipyards, as they secured only 5 orders. The funds allocated for the construction of ships within Europe amounted to just $150 million. According to VesselsValue’s data, the five orders (two small-sized dry bulk carriers, one cruise ship, one Ro-Ro, and one tanker) in Europe are distributed as follows: two to German and three to Dutch shipyards.

**Newbuild Orders Placed at European Shipyards in 2021**

<table>
<thead>
<tr>
<th>Ship Types Ordered at European Shipyards in 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cruise; 1</td>
</tr>
<tr>
<td>Small Dry; 2</td>
</tr>
<tr>
<td>Ro-Ro; 1</td>
</tr>
<tr>
<td>Tanker; 1</td>
</tr>
</tbody>
</table>

**Source:** VesselsValue November 2021
All about the Deck

Seascape proudly collaborates with a large number of manufacturers of deck equipment and machinery to offer you competitive prices for synthetic mooring ropes; steel wire ropes; deck fittings like panama chocks and more; anchors and chains, as well as other accessories including mooring rope protector sleeves and wire rope slings.

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Our reasonable prices are coupled with Seascape’s internationally recognised, reliable and excellent service.
How important is R & D for the testing process of the filterless BWMS by EcoOne™?

The first phase of our R & D was researching the request by shipowners to eliminate one of their biggest issues in the operation of BWMSs - the filter clogging or breaking down, because it stops the ballast operation altogether and interferes with the vessel’s operation causing costly downtime. Secondly, we needed to ensure that our new components and engineering used in the EcoOne™ held up to our very high standards of operation. Once these phases were completed and we were confident in the quality and reliability of the EcoOne™, the final phase of testing was more straightforward, even though it was based on guidelines set in place by the IMO and USCG which have some of the toughest requirements in the industry (plus, the challenge of shipboard testing through a pandemic).

To be more specific regarding testing, DNV was responsible for the entire process of evaluation, inspection, testing and submission of type approval applications for the Ecochlor EcoOne™ BWMS in compliance with the recent, more stringent standards for IMO BWMS Code and USCG Type Approval. This is in accordance with the USCG, Standards for Living organisms in Ship’s Ballast Discharged Waters, Final Rule (Final Rule) and the IMO Resolution MEPC.300 (72), Code for Approval of Ballast Water Management Systems (BWMS Code).

The Land-based biological efficacy tests, were undertaken by the Golden Bear Research Center (GBRC) in California, USA. GBRC performed the tests, analyzed samples, and managed test results in the required format by the IL. Whole effluent toxicity tests were also performed successfully as part of the land-based tests.
The Shipboard tests, undertaken by DHI as sub-laboratory, were completed to test the biological efficacy and related shipboard operational performance of the EcoOne™ BWMS on board a commercial vessel. DHI performed the shipboard tests, analyzed samples, managed test results in the required format by the IL. As stated previously, due to global pandemic restrictions, shipboard testing was allowed to be performed on two vessels owned by Maran Tankers, a VLCC and an Aframax, during their typical vessel voyage routes within the minimum 6-month testing period.

What are the benefits of EcoOne™ and EcoOne™ Hybrid for shipowners and their crew?

There are so many benefits, but I’ll start with some of the simplest reasons that pertain to any vessel:

- It’s easier to operate and even more reliable
- It’s easier to maintain because there is less equipment
- Lower CAPEX
- Lower installation costs (approx. 40% less piping and cabling on EcoOne™)
- No TRO sensors, as always with our technology
- No need to connect the Top Side Tanks with Double Bottom Tanks in the case of BCs
- AND the very low power requirement (typically 2-4kW) brings a NEW level of advantages to our clients in view of the upcoming carbon footprint reductions, cold ironing requirements etc.

Each of Ecochlor’s BWMSs rely on the same powerful, core ClO2 technology, which has distinct advantages over other disinfection methods and techniques; it is effective on all aquatic organisms, including bacteria and other pathogens, and can be used anywhere in the world with no limitations when it comes to temperature, salinity or turbidity.

The new EcoOne™ BWMS offers other benefits, which include fewer operational obstacles and less maintenance with even lower power needs and less CAPEX and OPEX expenses. As I said before there are no TRO sensors which can interrupt ballasting and de-ballasting operations, and no electrodes or complex power supplies. This new system also offers owners the options of gravity ballasting and deballasting.

A traditional filtered Ecochlor BWMS can convert to a no-filter EcoOne™ or EcoOne Hybrid™ by installing only a few additional minor components.

How will the launch of EcoOne™ impact the ballast water management industry?

It’s going to change the way shipowners look to manufacturers for their BWMS solutions. Instead of one-off decisions ship by ship, Owners will look to one manufacturer to outfit their remaining fleet. Why? Because, it makes it easier for the crew, plus allows for the company to order BWMS parts in bulk, as well as the allow for easier servicing of the BWMS by their engineers and our global service team.

A description of our three system models includes:

- Ecochlor® BWMS (Filtration & ClO2): Vessels operating this system can operate anywhere in the world with no restrictions when it comes to temperature, salinity, or turbidity.
- EcoOne™ BWMS (ClO2 alone): Vessels operating this system can operate anywhere in marine and brackish waters (i.e., ≥ 1PSU) and with no restrictions on temperature or turbidity.
- EcoOne Hybrid™ BWMS (Dual mode filtration & ClO2 or ClO2 alone): This system will allow shipowners the option to operate their BWMS either with or without a filter. This system model will be suited for shipowners who wish to have the flexibility of unrestricted operation globally, with the convenience of a no-filter system. Vessels that already have an Ecochlor® BWMS with filters installed can upgrade to the Hybrid option with minimal cost. Operation in the Filtration + ClO2 mode will allow for Freshwater treatment operation.

What are the main challenges and opportunities regarding the installation of ballast water management systems?

One of the biggest undertakings in a BWMS installation is the filter, when you take that out - from the engineering, finding suitable space, loading it, and then all the piping required - you eliminate one of the hardest challenges.
ArgoNavis engineers in Athens, Greece are presently involved with two engineering studies for the filterless EcoOne™ BWMS. Through this study they concluded that an EcoOne™ retrofit could be “completed roughly 25% faster when compared to a standard BWMS with filter.” It could also eliminate as much as a week in the time needed for the installation of a BWMS during drydocking. Also, they said to “expect smaller bill of materials and final costs with 40% savings in piping and between 30 to 50% for cabling, in addition to any owner’s supplied equipment.”

In regard to other opportunities for the shipowner regarding installation, shipowners are looking a better streamlined, worry-free installation process. Ecochlor offers a range of services to assist the shipowner in overcoming any of the challenges in the implementation of a BWMS installation. Through a network of partners, Ecochlor offers a full range of installation options to provide shipowners turnkey logistic solutions for system installations. These services include:

- Integration engineering
- Door to door shipping including assistance with ocean or air shipping, customs clearance and storage
- Installation supervision and commissioning testing attendance (with Class approval)
- Purchase and shipment of high-grade steel and plastic pipe materials to support the installation
- Spare parts for redundancy on board the vessel

Could you please elaborate referring to the new level of advantages in connection to the very low electric power needed by your EcoOne™ system versions?

Certainly – There are some fresh considerations that were discussed in early November at the Tanker, Shipping & Trade Conference and at the Greener Shipping Summit respectively, both in Athens (latter at the auspices of Martecma, the Greek Technical Managers association):

- EEXI, CII and practically carbon footprint matters + cold ironing were discussed further at the above events. Referring to the cold ironing, it will be even more positive especially after several years that the shore power will be using more and more renewables.
- TODAY though, it is obvious that the less fuel burnt onboard also for the electric power for the BWMS, the lower vessel’s carbon footprint will be, referring to existing tonnage and newbuildings
- It is also obvious that even when there will be facilities for cold ironing, the lower power demand a vessel will have while at the port during ballasting and/or de-ballasting, the easier it will be for this vessel to be supported by the ports/terminals, concerning the overall load for the port or terminal.

Referring to the above, as I said, we only need 2-4kW for our filterless EcoOne™ BWMS and the vessels can always ballast and de-ballast by gravity too, so more electric power saving!

This is why the North American Marine Environment Protection Association (NAMEPA) has chosen Ecochlor Inc. as the recipient of the “2021 Marine Environmental Innovation” award for our EcoOne filterless and hybrid BWMSs.

Mark Pearson,
Managing Director of Maran Tankers Management Inc.
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Shipping entrepreneurship developments

Capital Product Partners L.P.’s listing on the Athens Exchange


Mr. Gerasimos (Jerry) Kalogiratos, the CEO of Capital Product Partners LP, rang the traditional bell. The event was attended by the Founder and President of Capital Maritime & Trading Corp, Mr. Vangelis Marinakis, Mr. Miltiadis Marinakis of Capital Ship Management Corp., and executives of the Group.

On his part, the CEO of CPLP, Mr. Gerasimos Kalogiratos, after thanking those who contributed to the issuance of the bonds, stressed: “We are satisfied with the CPLP bond oversubscription and our listing on the Greek Stock Exchange. We thank the Greek investing public for the trust they have shown us. The transaction’s success is an important legacy for our company but also other future issuers. It attests to the efficiency of the Greek capital market and the lively interest of Greek investors in notable companies. “CPLP has a long-term development plan that focuses on investing in modern vessels with innovative technological applications contributing to green growth.”

Euroseas and EuroDry first joiners in the 10% Initiative

DeepSea Technologies announced that Euroseas Ltd. and EuroDry Ltd were the first to join the 10% Initiative. The two companies have already signed up their entire fleets to the initiative. They are currently working closely with DeepSea’s experts to reduce their emissions by adopting its
platforms.

“Energy-efficient technologies will continue to play a crucial role in the decarbonization of shipping, and we believe that collaborating more closely with DeepSea will bring not only fuel savings and emissions reduction to our fleet but also additional value to our stakeholders in the mid and long term as a result of the sustainable growth that energy efficiency it will allow.” said Symeon Pariaros, Chief Administrative Officer of Euroseas and EuroDry.

The 10% initiative is a commitment by DeepSea and other initiative members to work collaboratively to do something concrete, measurable, and impactful – with tangible benefits for everyone.

Maersk Tankers extends its partnerships in Greece

Maersk Tankers announced the expansion of its partnerships in Greece, welcoming Velos’ tankers to its pool. Velos Tankers joined the Maersk Tanker pool in October with the Velos Fortuna vessel. With Velos Tankers as its newest partner, the number of Maersk’s pool partners from Greece has jumped from two at the start of the year to seven today. Maersk Tankers is now managing a total of 16 vessels owned by Greek shipowners.

Diana Shipping to effect a spin-off

Diana Shipping Inc. recently announced that, through a wholly-owned subsidiary, it had filed a registration statement on Form 20-F under the Securities Exchange Act of 1934 to effect a spin-off of three of the company’s older dry bulk vessels. OceanPal Inc., the newly formed subsidiary that will act as the holding company for the three dry bulk vessels, has applied to have its common shares listed on the Nasdaq Capital Market.

In connection with the spin-off transaction, the company will contribute the three vessel-owning subsidiaries, together with initial working capital in the amount of US$1.0 million, to OceanPal Inc. shares of OceanPal Inc.

Commenting on the spin-off transaction, the Company’s Chief Executive Officer, Mrs. Semiramis Paliou, stated: “The spin-off of 100% of the common shares of OceanPal Inc., represents a significant return of value to our shareholders reflective of the Company’s capability to capitalize on the strong dry bulk market”.

Amazon charters general cargo ships to meet its transportation needs

According to international media, the disruptions in the supply chain and the lack of containers and vessels are expected to last through the holiday season this year and perhaps into 2022, so retail businesses are constantly looking for new ways to keep goods flowing from Asia. Although the concept of chartering ships was suggested in jest a little while ago, retail chains like Home Depot, Walmart, IKEA, and Costco, turned this crazy idea into reality.

Last week, the Port of Houston tweeted about this new market trend posting images of a general cargo ship unloading. “E-commerce freight is growing and flowing through Port Houston!” the port stated.

The STAR LYGRA, a 50,700-dwt general cargo ship that docked at Turning Basin terminal, exemplified many current shipping industry trends. The freighter had departed China in late August carrying containers bound for Amazon, the world’s largest online store. Since its Chinese logistics firm began booking ocean freight services for its suppliers over five years ago, the retailer has increased its seaborne exports. The inability to find available tonnage in the regular lines market has led many retailers to charter general cargo ships to transport their containers, bypassing the congestion of US West Coast ports on their way to other destinations.

As the efforts and initiatives taken by the Biden government a few weeks ago to smooth over supply chain disruptions in the US are expected to take months, an increasing number of leading retailers and shippers seem to be resorting to such alternatives.
Blue Economy

Ports are improving their environmental management

The European Sea Ports Organisation (ESPO) presented the 2021 Annual ESPO Environmental Report. The ESPO Environmental Report is part of EcoPorts, the European Sea Ports Organisation’s environmental flagship initiative. This 6th edition is based on data from 99 European ports in 21 European countries that filled in the EcoPorts Self-Diagnosis Method (SDM). The SDM is a checklist of good practices and provides the database for this report.

With climate change and environmental issues at the top of the ports and the policy makers’ agendas, the 2021 Report has become an essential tool to monitor performance and see where problems arise. It provides ESPO and European policymakers with insights on the environmental issues that European ports are working on and informs the priorities of ESPO.

For 2021, the report shows a number of positive trends amongst key indicators. Although it is based on a slightly larger sample compared to 2020, the Top 10 environmental priorities of European ports are almost the same. The five top priorities are the same as in 2020, with air quality, climate change, and energy efficiency as the top three priorities.

The 2021 Report also finds that ports are demonstrably improving their environmental management, addressing their priorities through bottom-up initiatives. In 2021, a growing number of ports have provided environmental training programs and training. Close to 40% of ports are certified with EcoPorts PERS, the only port-specific certification on the market.
The Estonian energy company Elenger has taken delivery of the first of Damen’s new class of Liquified Gas Carrier (LGC) 6000 LNG bunkering vessels. Named Optimus, the 100-meter vessel will carry up to 6,000m³ of LNG in two type-C tanks at -163° C. The vessel was delivered in the port of Rotterdam and will be the first LNG bunkering vessel in the Gulf of Finland, serving both LNG-powered vessels and smaller shoreside customers. Its introduction is expected to accelerate the broader adoption of LNG as a cleaner alternative fuel in the Baltic Sea by providing a mobile and efficient ship-to-ship distribution service for the first time.

The vessel was built at Damen Shipyards Yichang and completed its gas trials in Damen Verolme Rotterdam shipyard before being delivered to its owner Infortar for charter by Elenger – the new trademark recently introduced by Eesti Gaas for its export markets.

Optimus is designed to meet the requirements of ICE class 1A certification and achieve green ship notation. A dual-fuel propulsion system is used to manage the Boil-Off Gas (BOG) in combination with a gas boiler system. The interior of the vessel features high-quality accommodation for her crew. The LGC range is also designed for fast and safe bunkering operations in ports and offshore and in all weather conditions. They are highly maneuverable for in-harbor operations thanks to dual propeller lines and a very efficient hull design. A modern cargo handling system and redundant manifold arrangements allow them to perform reliable and flexible fuel transfers according to the highest industry requirements.

Transforming the Port of Thessaloniki: Focus on upgrading infrastructure and developing tourism

The Thessaloniki Port Users’ Council met via teleconference for the second time this year on Thursday, 21 October 2021. It was chaired by the Executive Chairman of ThPA S. A’s BoD, Athanasios Liagkos, and attended by the ThPA’s Managing Director/Chief Executive Officer Franco Nicola Cupolo and company executives. During the meeting, the members of the Port Community discussed the progress of the infrastructure development projects, the equipment modernization program, the services provided, the improvement of connectivity, as well as the excellent tourist development prospects thanks to this year’s dynamic Cruise and Ferry growth in the Port of Thessaloniki.

The teleconference was attended by 18 representatives from 17 bodies (users and members of the wider port community) who exchanged views on various issues related to the exceptional operation of the Port of Thessaloniki as the main gateway to South East, Central, and Eastern Europe.

Closing the discussion, BoD Chairman Athanasios Liagkos stated: “With a common vision and open channels of communication, we are moving forward together with the users and members of the wider port community, transforming the port of Thessaloniki into a state-of-the-art port and constantly improving its competitiveness.”

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Geopolitics

Greek Prime Minister Mitsotakis and Chinese Foreign Affairs Minister Wang Yi discuss the further development of Greek-Chinese economic relations

On 27 October, the Greek Prime Minister Kyriakos Mitsotakis met with China’s visiting Minister of Foreign Affairs Wang Yi, at the Maximos Mansion. “We welcome you to Athens, and taking into account the fact that 2022 is also the year of the Olympic Games, we want to wish you every success in their organization. In September, the “Culture and Tourism of Greece - China 2021-2022” inauguration event took place in the Ancient Agora, which confirms the bonds of friendship between our states. We expect to strengthen further our cooperation in this area”, noted Kyriakos Mitsotakis during the meeting.

“Bilateral relations between our two countries are developing very smoothly. Our two peoples have a special bond between them. The purpose of my visit is to discuss the future development of bilateral relations with our Greek friends,” noted the Minister of Foreign Affairs of China, Wang Yi, among other things.

During the meeting, the bilateral relations and international issues were reviewed. The prospect of further developing the economic and investment relations between Greece and China was also examined following the ratification of the concession agreement for an additional 16% of the PPA shares to COSCO Shipping by Parliament. The cultural relations in the context of the Greece - China 2021-2022 Year of Culture and Tourism were also discussed.

Iran-Venezuela strengthen ties

During Venezuelan President Nicolas Maduro’s visit to Tehran on 6 November, Foreign Minister of Iran Hossein Amir-Abdollahian announced that a 20-year cooperation agreement would be signed in the coming months between Iran and Venezuela, including energy cooperation. The agreement proves the strengthening of the ties between the two countries in recent years. According to international press reports, an Iranian-flagged ship recently sailed from Venezuela carrying two million barrels of crude to Iran after having made the reverse route, transporting almost two million barrels of oil products of Iranian origin to Latin America.

This exchange agreement is an attempt by both countries to circumvent US sanctions. The US’s intention to infiltrate the two countries and damage their independence is well known, government sources said in a joint press conference. The 20-year cooperation pact follows another 25-year agreement between Iran and China while Iran is in the midst of talks on cooperation with Russia.

Russian and Chinese Warships Hold First Joint Patrols in the Pacific

According to a Reuters news agency report citing a Russian Defense Ministry statement, between October 17 and 23, Russian and Chinese warships held their first joint patrols in West Pacific waters. Moscow and Beijing, which staged naval cooperation drills in the Sea of Japan earlier in October, have cultivated closer military and diplomatic ties in recent years at a time when their relations with the West have deteriorated.

The joint naval maneuvers were closely watched by Japan, which said earlier in the week that
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a group of 10 vessels from China and Russia sailed through the Tsugaru Strait separating Japan’s main island and its northern island of Hokkaido.

A statement from the Russian Ministry of Defense said that the warships sailed a total of more than 1,700 nautical miles during the drills, During the mission, the two countries’ fleets strictly complied with international law and did not enter the territorial waters of other countries, the Chinese Ministry of Defense said. Chinese military experts have noted that the Tsugaru Strait is regarded as international waters and, therefore, is open to foreign ships, including military vessels from any country.

The Russian Defense Ministry added that the patrols aimed to demonstrate the role of Russia and China in maintaining peace and stability in the Asia-Pacific region and safeguarding the maritime economic activities of the two countries”.

Moldova receives first gas supply from Ukraine amid tensions with Russia

On 29 October, Ukraine sold its first commercial shipment of gas to neighboring Moldova, which says it is facing grave problems due to Moscow’s decision to triple its price. Russia is threatening to cut off gas supplies to Moldova due to the dispute between the two countries over Chisinau’s debts and the steep price Moscow has been asking to sign a new contract.

The EU and allies of the Moldovan government have characterized Russia’s stance as blackmailing. Moldova recently announced that Russia raised the price of the gas supplied to the country to $790 per 1,000 m³ from about $250 it charged under a deal it had signed with Chisinau, which expired in September. Moldova cannot pay this amount, and its industries have already been forced to limit their activities to have enough natural gas for households.

Moscow responded that the price increase reflects the state of the world market. Kremlin spokesman Dmitry Peskov said no agreement had been reached on Russian gas supplies to Moldova and that the country’s debt was rising.

Meanwhile, Ukrainian gas company Naftogaz announced it had won a tender to supply Moldovan company Energocom with 500,000 m³ of gas, the first agreement on natural gas for commercial use between the two countries. Naftogaz added that in the future, it would participate in other tenders.

Passenger Shipping

Interferry study reveals ferry industry’s global economic impact

A study commissioned by trade association Interferry has revealed startling statistics on the far-reaching extent of the global ferry industry’s value to the world economy.

Research into the latest pre-Covid full-year figures found that in 2019, ferries carried 4.27 billion passengers — on a par with aviation — and 373 million vehicles across a worldwide fleet of 15,400 vessels. Among other findings, the industry provided 1.1 million jobs, contributed $60 billion to the world GDP, and represented approximately 20% of shipping’s economic value to the European Union. The study was carried out by UK-based consultancy Oxford Economics, a world leader in economic impact assessment. It quantified three core chan-
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nels through which the ferry industry drives economic activity and employment, i.e., direct support generated by the industry, indirect support generated within its supply chain, and induced support from the ferry and supply-side personnel spending their pay on goods and services. Data were collected from various third-party sources and among Interferry’s membership of 260 operators and suppliers in 40 countries.

Interferry CEO Mike Corrigan commented: ‘We already knew that the ferry segment punches well above its weight – it comprises only 3-5% of the entire shipping industry, but the scale of the findings surprised even seasoned insiders.

In a keynote address, London-based LEK Consulting’s research into the post-pandemic outlook for the European passenger ferry market was reviewed by Becrom Basu, the company’s transportation and logistics practices partner. He noted that the successful vaccination roll-outs had given governments the confidence to ease strict travel restrictions gradually. This, in turn, was releasing pent-up demand that pointed to a significant uplift in European travel towards 2019 levels by next year. Stressing that the ferry market looked best placed to capture this potential, he added: “Online searches for ferries have largely returned to pre-Covid levels, while searches for flights remain significantly lower. Ferries ranked highly as a safe form of travel. Sentiment towards them has improved while aviation has suffered. The pandemic has created a much more positive view of ferries, and a large proportion of previous non-users are likely to consider this option for their next trip. Ferries have emerged as a clear winner in the battle of the modes.”

Towards zero emissions – view from the top

Ferry company CEOs from eight nations in Europe and the Americas took part in panel discussions that largely centered on plans to reduce greenhouse gas emissions over the next decade, with a notable emphasis on the need for shoreside infrastructure to support operator initiatives. Among their comments:

Niclas Mårtensson, Stena Line, Sweden: “Zero is a must – it’s a survival tool – but there is no silver bullet. We are talking about different alternatives, including hydrogen, methanol, and batteries. We don’t yet see that the public is willing to pay for this, but we can’t wait for their willingness. The industry must have the mindset to take the first step. We have to protect Mother Earth.”

Spiros Paschalis, Attica Group, Greece: “Operators can’t do it alone. We need a joint effort with port authorities and equipment manufacturers.”

Marie-Caroline Laurent the new Director General for CLIA in Europe

The Cruise Lines International Association (CLIA) has announced the appointment of Marie-Caroline Laurent as Director General for CLIA in Europe, effective as of 15 November.

Marie-Caroline Laurent is a transport policy expert who has worked in leadership roles at the International Air Transport Association (IATA) for nearly a decade, including serving as Assistant Director for EU Affairs. Previously she worked in policy development for the Association of European Airlines and served as a parliamentary adviser at the European Parliament and senior policy officer at
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SAFETY LEADERSHIP IN A CHANGING WORLD
Kelly Craighead, President and CEO, CLIA, said: “I want to thank Ukko Metsola for his leadership in Europe during a critical transitional period as cruise operations have continued a phased return to service. I’m delighted to welcome Marie-Caroline Laurent, who will draw on a wealth of experience within the European transport policy arena to showcase cruise at the heart of sustainable tourism and demonstrate its value to the wider maritime sector. With extensive experience interfacing with EU Institutions, Marie-Caroline will be well-positioned to continue to build CLIA’s engagement on European policy issues within Brussels.”

Marie-Caroline Laurent said, “I’m passionate about the positive impact of transport and tourism sectors supporting businesses and livelihoods in every European country. Transport is one of the world’s most innovative industries, and cruise shipbuilding is at the heart of the European economy. Cruise lines are at the forefront of green maritime innovation and are well-positioned to help the EU drive green growth.

I’m looking forward to working together with cruise lines, our industry partners, and policymakers to help drive Europe’s leadership in building a truly sustainable transport and tourism industry in Europe.”

**The cruise industry’s first hybrid-powered ship**

The cruise industry’s first hybrid-powered ship is set to debut in summer 2023 as part of Royal Caribbean Group’s ultra-luxury brand Silversea Cruises. The new class of ships, known as ‘Project Evolution,’ will operate using a trio of power sources, including a fuel cell system, battery technology, and dual-fuel engines using liquefied natural gas (LNG) as the main fuel. This hybrid solution, which uses fuel cell technology, allows the ship to be free of local emissions while at port - another industry first.

“Silversea’s newest ship class is a significant leap forward in our commitment to sustainable ship design and our journey to reduce our environmental footprint,” said Richard Fain, Chairman and CEO, Royal Caribbean Group. “We first announced our fuel cell ambitions several years ago. Through dedication and perseverance, we are now proud to introduce the first ship with large-scale fuel cell technology capable of achieving emission-free port operations.”

**CDC extends Conditional Sail Order through 15 January 2022**

The U.S. Centers for Disease Control and Prevention (CDC) extended the Conditional Sailing Order (CSO) framework with minor modifications. The CDC Director signed the Temporary Extension & Modification of the CSO on 25 October 2021, which became effective upon the expiration of the current CSO on 1 November 2021. The Temporary Extension & Modification of the CSO shall remain in effect until the earliest of:

- The expiration of the Secretary of Health and Human Services’ declaration that COVID-19 constitutes a public health emergency;
- The CDC Director rescinds or modifies the order based on specific public health or other considerations; or
- 15 January 2022 at 12:01 am EDT.

After the expiration of the Temporary Extension & Modification of the CSO, CDC intends to transition to a voluntary program in coordination with cruise ship operators and other stakeholders to assist the cruise ship industry in detecting, mitigating, and controlling the spread of COVID-19 onboard cruise ships.

As of 23 July 2021, the CSO and accompanying measures, such as technical instructions, are non-binding recommendations for cruise ships arriving in, located within, or departing from a port in Florida. CDC continues to operate the CSO as a voluntary program for such ships that voluntarily follow the CSO measures.
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* Source: Clarksons Research’s World Fleet Register

www.register-iri.com

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**Port State Control Detention Trends (%)**

<table>
<thead>
<tr>
<th></th>
<th>Marshall Islands</th>
<th>Liberia**</th>
<th>Panama**</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>USCG</strong></td>
<td>0.74%</td>
<td>1.11%**</td>
<td>1.03%**</td>
</tr>
<tr>
<td><strong>Tokyo MoU</strong></td>
<td>2.32%</td>
<td>3.09%</td>
<td>3.14%</td>
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<td><strong>Paris MoU</strong></td>
<td>1.52%</td>
<td>2.22%</td>
<td>4.78%</td>
</tr>
<tr>
<td><strong>AMSA</strong></td>
<td>4.23%</td>
<td>8.03%***</td>
<td>6.30%***</td>
</tr>
</tbody>
</table>

** Liberia and Panama are targeted for additional port State control (PSC) examinations by the USCG for having a detention ratio “between the overall average and up to two times the overall average.”

*** Liberia and Panama have exceeded the overall AMSA average detention rate over the three years from 2018-2020.

Poseidon Med II is a key European Action co-funded by the EU’s Connecting Europe Facility (CEF) that aims at accelerating the adoption of LNG (liquefied natural gas) for maritime transportation in the Eastern Mediterranean. Poseidon Med II (PMII) encompasses all the technical, regulatory, operational, and financial parameters required to establish a viable, efficient, and sustainable supply chain in the region and unlock the necessary investments for the realization of the small-scale LNG (ssLNG) infrastructure in the area.

Under growing pressure to follow a greener “pathway” towards a decarbonized future, with an increasing number of international and European regulations and standards limiting emissions coupled with the prospect that the maritime sector will be included in the EU Emissions Trading System (EU ETS) and the establishment of an emission control area (ECA) in the Mediterranean Sea on the horizon, the Shipping industry needs to turn climate change targets into tangible action. Towards this, LNG offers a decarbonization pathway for the shipping industry. By investing in LNG-fuelled vessels now, ship owners can realize immediate reductions of GHG emissions on a Tank-to-Wake basis, while paving the way to carbon neutral shipping with the use of liquefied biomethane (LBm) and liquefied synthetic methane (LSM). The increasing numbers of LNG bunkering vessels as well as LNG-fuelled vessels, illustrated by the nearly 20% growth in respective tonnage ordered last year, testify to the growing recognition of the environmental benefits of LNG as a marine fuel. These investments along with the expansion of shoreside LNG infrastructure, provide the critical last-mile delivery of LNG to ships.

In 2020 the Greek Ministry of Maritime Affairs gave the Port of Piraeus the “green” light to start, in specific locations inside the port area, LNG bunkering operations, either from ship-to-ship or truck-to-ship, whenever the necessary investments are in place.
Given the key role of the Revithoussa LNG Terminal as the “logistical springboard” of the ssLNG supply chain in the wider region, investments for small scale facilities in the terminal are underway. As a result of studies undertaken within the framework of PMII a truck loading station, for bunkering and off grid consumers’ supply, is currently under construction and will be operational by May 2022. Moreover, the basic engineering design of a new ssLNG jetty has been completed. The facility will accommodate vessels from 1.000m³ to 28.000m³ and is expected to be operational by February 2023.

With regard to ports, the respective master plans for LNG bunkering facilities for Piraeus, Patras, Heraklion, Igoumenitsa and Limassol have been completed and the permitting process for the mandatory environmental studies is being finalized. To maximize the opportunities created by these actions, an LNG bunkering vessel, registered at the Piraeus Port and scheduled to load LNG from the nearby Revithoussa Terminal, is currently being developed.

In Cyprus, PMII is financing the studies for the construction of a permanent berth for the docking of LNG bunkering vessels, opposite to the jetty for the FSRU berthing in Vassilikos area.

Furthermore, in support of the Shipping world’s efforts to meet the challenging IMO and EU environmental driven targets and to lead by example, PMII financed the realization of the design studies for the retrofitting of ten conventional fuelled vessels to run on LNG, five of which were detailed designs, as well as for a conventional and an innovative RO-PAX ferry using environmentally friendly technologies to improve propulsion and efficiency. Additionally Cost Benefit Analyses have been performed for all Ports and the ten selected vessels.

At the same time, the construction of an innovative LNG bunker vessel with a Semi Ballastable system (SBBT) is nearing completion in Italy and will operate in the Adriatic Sea.

On the regulatory framework, PMII contributed with proposals to the preparation of the “umbrella” legislation to ensure safe LNG bunkering operations at Greek Ports that resulted in legislation published in 2019 in the Government Gazette (Presidential Decree 64/2019). Additionally, PMII has drafted a Practical Guide to Port Authorities on how to maintain safety during LNG bunkering operations.

In order to establish an economically viable supply chain, PMII has financed a series of studies assessing the cost of LNG bunkering logistics and synergies with other sectors, such as supply with natural gas the industrial and/or the urban network of Western Greece (Patras & Igoumenitsa) and Vassilikos (Cyprus).

Furthermore, as a result of targeted dissemination events and communication action plan, stakeholders and the general public alike are better informed on the use of LNG as a maritime fuel and the importance of creating sustainable Shipping. Poseidon Med II, has already laid the foundations for LNG bunkering in the Eastern Mediterranean, setting the example for a cleaner, more effective, competitive and sustainable marine transportation. With Poseidon Med II Eastern Mediterranean is sailing into the LNG era, in line with the IMO’s and the EU’s “Fit for 55” goals.
According to Drewry’s latest Container Forecaster report, supply chain turmoil will last longer than thought, forcing big upgrades to container freight rates and carrier profit forecasts.

A longer than anticipated period of supply chain disruption has forced Drewry to raise once again its forecasts for container freight rates and industry profitability in the latest edition of the Container Forecaster. Although the container shipping network is clearly under intense pressure, many goods are still getting through (eventually). Drewry expects world port handling to increase by 8.2% this year, or 7.2% against pre-pandemic 2019, which is a downgrade on its previous guidance of 10.1% given three months ago. Since then, disruption has exacerbated the supply chain crisis as cases of Covid-19 temporarily shuttered some Chinese terminals, and extreme weather events have compounded the problem. Drewry does not expect to see operations normalise before the end of 2022. Drewry has retained its previous 5.2% guidance for global port handling for 2022, even though rising inflationary pressures, partly as a direct consequence of the supply chain inefficiencies that have supercharged transportation costs, stand out as a downside risk.

Drewry predicts that fleet growth will lag behind demand growth this year and next, but the story will flip from 2023 onwards as the recent frenzy of orders starts to be delivered. The anticipated mismatch between supply and demand in 2023 presents a risk to carriers of overcapacity returning to the market. The real question is whether they will care. Three years of previously unthinkable and outlandish profits could very well have desensitised them to such trifling concerns.

According to Drewry, stronger than expected spot rate movement in 3Q21 and a longer supply chain recovery timeline are behind its decision to upgrade the outlook for average global freight rates (spot and contract) for 2021 to 126%, which is an upward adjustment from 47% in its June forecast. In 2022, spot rates are expected to decline, but there will be a significant increase in contract pricing, leading to an average global pricing increase of about 6%.

In the following pages, Naftika Chronika presents the views and predictions of distinguished representatives of the segment.
Industry participants can agree that 2022 should be a good year

The containership market and thus the supply chain for goods have been severely disrupted by supply-demand imbalances caused primarily by congestion in US ports due to unprecedented demand deriving from the US in terms of end-consumer goods. This demand drive has been chiefly attributed to COVID-19 and its side effects regarding the changes in consumer spending. Although this is partially true, it should be noted that vessel supply-demand had already been projected to be balanced for the foreseeable future, even pro-covid; however, nobody had really expected that the pandemic would ultimately weigh on the demand side of the scale. Although Chinese Golden Week briefly halted Chinese manufacturing and seemed to paint a better picture in terms of port congestion and the freight rates, which eased slightly, this proved to be short-lived as spot freight rates are still sky high across the board. Although many liner companies have refrained from any further increases, it is evident that these companies’ goal is to now try to focus on long-term customers and lock in long-term freight rate contracts that may run for as long as three years. Even if the congestion issue is resolved at some point, we will need to see retail companies re-stocking while we get back to what we know as a normal supply chain. As far as the hot chartering market is concerned, we can all agree that we cannot reasonably expect an imminent end to this super cycle in which we are all engaged. The market will move towards normalisation as soon as
the freight levels cool off and consumer spending also turns to pre-pandemic activities such as traveling, etc. So, yes, it will happen, although when remains a question whose answer depends on many unknown factors like each country’s obstacles and restrictions, vaccination levels, further mutations, and others.

Industry participants can agree that 2022, which is around the corner, will be a good year as most freight and charter contracts have already been locked since mid-2021. Effectively, this means that there are very few ships to be chartered from 2022 onwards, and therefore, even though activity will be moderate, charter rates will remain at high levels due to the lack of supply. Most liner companies have now locked 3 to 5-year charter contracts at high numbers (depending on vessel size). However, let us not forget that the chartering burden for a liner company stands at about 17% of its overall costs. Hence, companies, more than anything else, have to worry more about the possibility of further inflated oil prices. While it is true that liner companies themselves have engaged in a substantial number of NB orders, most of the new vessels entering the market from late 2023 onwards will be of bigger sizes only. At the same time, the industry has consolidated, participants are financially stronger, while current and expected revenues generated within 2021 and up to 2023 should generate cash levels that make any charter exposure seem like a walk in the park.
I am a fan of looking at the fundamentals when facing bullish markets. The market may move upwards, downwards, or otherwise, depending on the beholder's perspective. So, what factors are currently shaping market trends?

**Containers:** The shortage of containers or the oversupply of empty containers in the wrong parts of the world have contributed to complicating liners' operations organization.

**Ports:** They are an integral part of our equation and have to do with onward transportation. Currently, more containers than ever before are on hold at some ports due to Covid shutdowns or a lack of drivers. In any case, port congestion is another factor influencing the market.

We are all looking forward to some good years and a new equilibrium

by Angelos Tyrogalas,  
Chief Operating Officer, Contships Management Inc.
Shippers: Before the pandemic, we had seen 2,000 million tons of cargo loaded in containers. Economic growth remains the most significant factor explaining the current growth in containerized trade volume.

Liners: Liner companies, or carriers, provide global transport for cargoes that are too small to fill a single ship and need to be grouped with others for efficient transportation. Ships operate a regular service schedule between ports, carrying cargo at fixed prices for each commodity. When there is an interruption like that of Covid or the post-Covid effect, managing such business operations becomes more complex than before.

Owners: For each type of marine transport (bulk, specialized, or liner transport), there is a primary fleet owned by operators and a secondary fleet hired from independent ship-owners who only charter their ships out without operating them directly. In the case of the container fleet, close to 55% is the property of non-operating owners, while liners own the rest. Ship-owners invest in a new or second-hand ship to get the highest return possible by chartering it to the liners for the maximum time and rate possible. They often suffer the impact when any of the above factors do not perform well.

Any container industry inefficiencies in any of the above fundamental elements lead to increased freight rates. More importantly, any induced global trade inefficiencies that eliminate part or all of the competitive advantages of global manufacturing clusters can negatively affect seaborne trade, especially seaborne container trade. All the above create the shipping cycle in which all the previously described markets have their own dynamics. At the same time, these markets are interrelated, as players tend to adjust their decisions according to what is happening in their own sector, which in turn affects the whole shipping industry.

Understanding what stage the shipping cycle is in and where it is leading is a key management skill. But no one has a crystal ball. It is crucial to stay one step ahead of the competition by finding one’s own way and avoiding the path everybody takes. Initially, that often comes at a cost, but we seek a long-term equilibrium within this dynamic industry.

Shipping seems to be characterized by long periods of low rates due to excess capacity interrupted by brief moments of joy when companies rush into a shipbuilding spree, which is replaced by melancholy and a nostalgia for the good times after some time.

Evidently, we are witnessing Covid’s aftereffects. But are we facing Covid’s tailwinds on the freight rate markets? The need to enjoy some good years is there, and we are all looking forward to a new equilibrium. We have to remember that what we describe as exiting peaks is part of a continuous seesaw.
Horizon from the bridge

Through a seafarer’s eyes

OCIMF Human factors management and self-assessment: The way to enhancing safety at sea

Following the huge ecological disaster caused by the EXXON VALDEZ accident, the shipping industry has focused on reducing the effect of human factors on marine maritime accidents. This great effort has had positive results, but accidents continue to occur. Improving crews’ skills, especially tanker crews, seems to be the only way to reduce the impact of human error on the safety of life at sea.

In this direction, the Oil Companies International Marine Forum (OCIMF) has released a new paper providing a framework to integrate human factors into management systems. Although it has been developed under the same principles as OCIMF’s TMSA 3 publication, it is currently not integrated under the TMSA 3 umbrella. These key performance indicators are intended to be included in future editions of TMSA. The main objective is to help companies and leadership teams address the conditions and systems that influence human actions and decisions and promote safety and excellence across all operations.

Safe and efficient tanker operation depends on skilled and capable people carrying out their tasks properly. When incidents occur, they are often attributed to human error; however, most mistakes, actions, and decisions result from the way the workplace is set up, how work is planned, the equipment and control measures taken, and how leaders influence the culture in an organization.

by Capt. Georgios Georgoulis
Human factors are the physical, psychological, and social characteristics that affect human interaction with equipment, systems, processes, other individuals, and work team(s).

According to the OCIMF approach, human factors are based on the following assumptions:

- People will make mistakes.
- People’s actions are rarely malicious and usually make sense to them at the time.
- Mistakes are typically due to conditions and systems that make work difficult.
- Understanding the conditions in which mistakes happen helps us prevent or correct them.
- People know the most about their work and are key to any solution.
- Plant, tools, and activities can be designed to reduce mistakes and manage risk better.
- Leaders contribute to shaping conditions that influence what people do.
- It matters how leaders respond when things go wrong and that they take the opportunity to learn.

The OCIMF Guide has defined five focus areas of tanker operations where human factors play the most significant role:

- The role of leadership in defining the culture: Culture in this Guide refers to the shared ideas, attitudes, and behavior that people bring to their work. It covers how they communicate and work together, make decisions, and process
the results. It can be summed up in the phrase “it’s how we do things.”

- Well-executed tasks and procedures: The difference between the two is referred to as ‘work as imagined versus work as done’ must be eliminated to zero. The result should be “the work is done as imagined.”
- Well-designed equipment and controls: Again, the key is to work with the people who use the equipment.
- Skills to respond to emerging situations: The ability of tanker crews to adapt and respond well during emergency situations will give them a better chance of maintaining safe operations. In this direction, questions should be addressed related to specific soft skills development, preparing the workforce to recognize dangerous situations.
- Learning before and after things go wrong: Tanker crews should constantly learn from everyday work that is proceeding normally but also from things that go wrong. Near miss reports and incident/accident investigations can also help expose less obvious workplace hazards.

The OCIMF human factors approach considers both the focus areas outlined above and ways to build companies’ capability to deal with them. In this direction, a set of key performance indicators (KPIs) has been developed relating to human factors, grouped by the following categories:

- Policy – the role of leadership in promoting a human factors approach.
- Capability – how the company builds its capacity to implement the policy.
- Design and execution – ensuring the appropriate tools, processes and training are in place.
- Skills – are staff trained to identify and respond in emerging situations?
- Learning – both when things go well and from mistakes.

OCIMF’s effort focuses on improving the self-assessment of tanker management companies and improving safety on board. The ultimate question is whether crews are ready to integrate all these practices and procedures that are still far from their work culture (“how we do things here”). Without embedding the above procedures into the hearts and minds of seafarers, we will improve the image of safety on board and possibly performance in emergencies but will hardly affect safety in routine work.

Seafarers Happiness Index (SHI) and Lesson learned by the report of Q3 2021

The Seafarers Happiness Index (SHI) is the shipping industry’s ongoing barometer of the key issues facing those at sea today. Seafarers are asked 10 key questions every quarter, sharing their views about specific issues affecting their life and work.

The Mission to Seafarers’ latest Seafarers Happiness Index published for the third quarter of 2021 highlights that happiness levels have increased overall to 6.59/10, from 5.99 in the previous reporting period, returning to the same levels seen pre-COVID in Q3 2019.

The survey, conducted with support from Wallem Group and the Standard Club, suggests that COVID-19-related strains on seafarers are beginning to ease, and seafarer support measures have now had a chance to take effect, yet challenges with shore leave and ship-shore connectivity remain.

Shore leaves and extended contracts have been a huge challenge since the start of the pandemic:

- 5% of seafarers responding said that they have been away at sea for over a year
- 13% of respondents have served at sea for over nine months, with the remainder reporting less than nine months – so far.

The challenges of balancing home life with the uncertainty arising from the crew-change crisis have led many seafarers who were tentatively considering a move ashore to accelerate their career change plans. The report emphasizes that many seafarers do not intend to return to the sea once they eventually get home.

The issue of retention in an already stressed workforce is a major concern. There is likely to be a growing shortfall in seafarers in the coming years, with seemingly little or no coherent mechanism to manage the problems looming on the horizon. The seafaring experience and expertise that is potentially going to be lost should serve as a warning to all.

Ship-to-shore connectivity is a long-held contentious issue. The crews who either have no access or feel it is of poor quality, slow, patchy and expensive, are not happy. Many respondents see the issue of internet access as one of the most telling ways of assessing how a company feels about its crews.

The issue of the cost of online access came up repeatedly this quarter. One seafarer stated, “Our internet onboard costs US$25 for 100MB.”
No physical attendance!

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That is the scale of how challenging the fee structures are for seafarers. Others bemoaned the size of their internet allocation, with one stating that owners gave them 250MB for the whole-month consumption (potentially not even enough for one video call to their family).

This feedback raises stark concerns over the affordability and rationing of internet access on board, which is such a priority for so many seafarers from a welfare perspective. Owners and managers are encouraged to look again at the steps that could be taken to improve this.

Unfortunately, whereas there was often a sense of camaraderie and togetherness onboard in the past, it seems that the challenges of crew changes and bans on shore leave have seen tensions running high. This has all too often been manifested in accusations of bullying, intimidation, and victimization. Good leadership is the answer to such problems.

Seafarers are being painted as pariahs when visiting nations, despite the goods, materials, fuels, and foods these crews bring to them. There is a disconnect between the good that seafarers do and the bad reception they get when doing it. The report concludes that the following conditions and actions are necessary to make life better at sea and raise the happiness levels of seafarers:

- Respectful, open, and honest communication from employers to seafarers.
- Good quality internet provision for seafarers and an assessment of the associated costs.
- Help and support for seafarers to identify mental health issues and any changes they may be experiencing.
- Unequivocal reporting mechanisms for bullying, harassment, victimization, and intimidation on board. A zero-tolerance approach, but with a realistic and visible means of applying it.
- Make seafarers feel respected and apply further pressure on nations to define them as key/essential workers.
- Identify and understand the challenges of recruitment and retention. Evaluate with honesty the reason why sailors may not want to return to sea and take action to address their reluctance.

ReCAAP Piracy and Armed Robbery
Information Sharing Centre: Incidents of Piracy and Armed Robbery against Ships in Asia decreasing, but the threat is still there

The Regional Cooperation Agreement on Combating Piracy and Armed Robbery against Ships in Asia (ReCAAP) has released its statistics on piracy and sea robbery in Asia for January-September this year.

Between January-September 2021, a total of 55 armed robbery incidents against ships were reported in Asia. No piracy incident was reported. Of the 55 incidents, 52 were actual, and three attempted incidents. The total number of incidents reported between January-September 2021 decreased by 27% compared to January-September 2020, when 75 incidents (comprising 73 actual incidents and two attempted incidents) had been reported.

The total number of reported cases in Asia from January to September 2021 was the second-lowest compared to the same periods over the last 15 years (2007-2021). The number of incidents has decreased in several locations in Asia. However, the ReCAAP ISC (ReCAAP Information Sharing Center) is concerned with the continued occurrence of incidents in the Singapore Strait, the increase in violence level of the perpetrators to crew at Manila Anchorage Areas, the Philippines; and the persisting threat of abduction of crew in the Sulu-Celebes Seas. In more detail, the areas of concern are:

- The continued occurrence of incidents in the Singapore Strait: A total of 27 incidents were reported in the Straits of Malacca and Singapore (SOMS) during January-September 2021, accounting for half of the total number of incidents reported in Asia (55 incidents). Of the 27 incidents reported
in the SOMS, 26 occurred in the Singapore Strait and one in the Malacca Strait. Compared to the same period in 2020, there was an increase of five incidents during January-September 2021.

- The increase of violence to crew at Manila Anchorage Areas in the Philippines: A total of nine incidents were reported at Manila Anchorage Areas during January-September 2021. Of concern was the level of violence by the perpetrators against crews. Of the nine incidents, four involved perpetrators armed with guns or/and knives. The perpetrators used the guns and knives to threaten the crew members and tied them up. On 27 and 29 Sep, the Philippine authorities arrested the leader and one member of a criminal group responsible for past incidents. In addition, crew change issues due to COVID-19 forced the Philippine authorities to designate quarantine areas within the Anchorage Area of Manila. With more ships at the Anchorage Area of Manila for crew changes, the possibility of criminal groups illegally boarding vessels is increasing in these areas.

- Abduction of crews in the Sulu-Celebes Seas: No incident has been reported in the Sulu-Celebes Seas since January 2020. However, the risk of crew abduction in Sulu and Tawi-Tawi remains high as the leaders of the Abu Sayyaf Group responsible for past abduction incidents are still at large.

ReCAAP ISC classifies all incidents into one of the four categories described below, based on a matrix of the Violence Factor and Economic Factor indicators.

- Cat 1: Incidents involved a large number of perpetrators: more than 9 men in four out every 10 incidents, and 4-9 men in the other six incidents armed with guns and knives.
- Cat 2: Incidents involved 4-9 men possibly armed with knives/machetes, and in 1/4 of the incidents, armed with guns.
- Cat 3: Incidents usually involved groups of between 1-6 men. At times, the perpetrators were armed with knives/machetes/other weapons or other items such as sticks, rods, bats, etc.
- Cat 4: Incidents where the perpetrators were not armed and the crew not harmed. More than half of this incident category involved 1-3 men who escaped empty-handed upon being sighted by the crew.

The location of the incidents reported during January-September 2021 is shown in the following map:

Spatial distribution of incidents reported to ReCAAP from Jan to Sep 2021

Source: ReCAAP 3RD quarter report Jan – Sep 2021
Together, we can improve seafarer safety

We have a dedicated, worldwide loss prevention team providing Members with proactive and inclusive support
Finally, on the road to ensuring the safety of seafarers and safe navigation of ships, minimizing the incidents, and arresting the criminals, collective efforts and shared responsibility of all the stakeholders are required. That involves immediate reporting of incidents by ships, enhanced patrols, quick response by coastal States, and timely and accurate information sharing among all stakeholders. The law enforcement authorities in Asia have to:

- continue to cooperate
- enhance surveillance
- increase patrols
- respond promptly to incident reports.

Ships transiting the areas of concern are advised to enhance vigilance, maintain all round lookout, and report all incidents to the nearest coastal State and flag State. They are also advised to implement preventive measures recommended in the “Regional Guide to Counter Piracy and Armed Robbery against Ships in Asia.”

As the shipping industry seeks ways to reduce its environmental footprint, industry technology leaders are joining forces to develop advanced CO₂ capture technologies.

“K” Line will deploy a small-scale demonstration plant for CO₂ capture onboard a vessel and conduct research and development on compact facility design, in collaboration with project partners Mitsubishi Shipbuilding and Nippon Kaiji Kyokai (ClassNK). The Japanese shipping company says it has been able to catch and store CO₂ with a purity level of more than 99.9%. The two-year project is underway, starting with the launch of a hazard identification evaluation of the demonstration plant and vessel deployment, with verification by ClassNK. In August 2020, Mitsubishi Shipbuilding began developing and constructing a small-scale CO₂ capture demonstration plant and conducting a system safety evaluation. In mid-2021, Mitsubishi Shipbuilding tested operations of the demonstration plant at its factory, followed by deployment of the plant on K Line’s Corona Utility, a thermal coal carrier operated for Tohoku Electric Power. By the end of fiscal 2021, the project partners will start operating the demonstration plant onboard the vessel and measuring the system’s performance under marine conditions, with the aim of jointly developing a new marine system for vessels.

The marine-use CO₂ capture demonstration plant is based on an onshore plant and designed to capture a portion of a vessel’s gas emissions. This project verifies the efficacy of capturing and storing CO₂ from a vessel’s gas emissions and the operability and safety of CO₂ capture facilities at sea. These demonstration tests aim to promote the development of more compact equipment required by marine environments and the system requirements necessary for stable continuous operation at sea.

“As the world’s first marine demonstration test, the project will provide invaluable insights into facilities design and technologies for capturing CO₂ emissions and achieving zero emissions onboard vessels. Additionally, the captured CO₂ is expected to be recycled as a new CO₂ source for Enhanced Oil Recovery processes or as raw material in synthetic fuel through methanation,” “K” Line had shared in a press release from August 2020 when it revealed the CC-Ocean Project.

The “K” Line initiative is not the only one of its kind. Stena Bulk is participating in a novel mobile carbon capture project for shipping. The Swedish tanker giant is working with the Oil and Gas Climate Initiative (OGCI), a voluntary energy major group, on a feasibility study to evaluate the technical and economic challenges involved when capturing carbon dioxide onboard ships while at sea. In part, the project is an extension to OGCI member Aramco’s work that successfully demonstrated carbon capture onboard heavy-duty trucks, but it also aims to provide necessary research.
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on a solution that might help shipping reach its target to cut emissions by 50% relative to 2008 levels by 2050.

Erik Hånell, president and CEO of Stena Bulk, commented: “It’s increasingly evident that we need to evaluate as many potential solutions as possible that might help decarbonise the industry. Carbon capture might be such a solution with the potential to play a key role in this transition. This feasibility study presents a unique opportunity for us to work with some of our key customers to understand and assess the technical and economic challenges involved in making carbon capture work onboard vessels.”

Technology company Wärtsilä is signing up for a leading role in a new Norwegian carbon capture and storage research project. The new LINCCS (Linking Carbon Capture and Storage) consortium brings together industry and academic partners with experience in CCS to develop mature solutions. It will benefit from $13 million in funding from the Norwegian government’s Green Platform Initiative.

One of the project’s major components is the development of a maritime CCS solution; Wärtsilä Exhaust Treatment will be leading this element, with support from the Sustainable Energy Catapult Center and SINTEF Energy. Wärtsilä Exhaust Treatment is the industry’s largest provider of scrubbers, and its expertise will be of particular use in leading the CCS project.

The project will see Wärtsilä expand its exhaust treatment engineering facility in Moss, Norway, to accommodate the R&D work. Once the technology has matured in shoreside testing, it will be followed by full-scale pilot implementation on a vessel.

“The transition towards zero emissions will require a combination of several different technology solutions in close cooperation with key partners. We are humbled and excited to be working with a strong group of companies who all have market-leading competencies to advance CCS as a solution that can enable a low-carbon future,” said Tamara de Gruyter, President of Marine Systems at Wärtsilä.

The broader LINCCS project is focused on reducing costs for new carbon storage facilities by 70 percent and advancing the development of carbon capture technologies in a wide range of sectors. It includes cross-industry CCS developments from a range of partners, including Aker Solutions, Cognite, AGR, Wintershall Dea, V r Energi, Lundin, Equinor and TotalEnergies.

Wärtsilä has been working with SINTEF on carbon capture systems through their joint CCShips program for some time. It is not alone in pursuing CCS solutions for shipping: Mitsubishi, Teco 2030, Alfa Laval, ANDRITZ, and others have announced parallel initiatives.

“Building on the success of existing and well-proven technologies, such as scrubbers, will be vital to succeeding on the industry’s decarbonization goals,” said Sigurd Jenssen, Director of Exhaust Treatment at Wärtsilä. “Exhaust gas abatement technologies have reached a point of maturity where it is only right that we explore their wider applications beyond sulphur compliance.”

Meanwhile, the former head of DNV GL is leading a new maritime carbon capture and storage initiative. Henrik Madsen, who was CEO at the class society from 2006 to 2015, is the chairman of the decarbonICE project, developed by Denmark-based Maritime Development Center and a host of top shipping names. Nippon Yusen Kaisha (NYK), Sovcomflot, Knutsen and Ardmore, shipbuilder DSME and the mining company Vale have teamed up to develop this onboard carbon capture and storage solution which catches emissions and, via a cryogenic process, turns them into dry ice.
Despite the circumstances and the general restrictions imposed by the Polish government amidst this extraordinary period, Remontowa Shiprepair Yard continues its operations, dry dockings and repairs, working currently on the same pace. There are currently no legal restrictions on arrivals of foreign ships to Polish ports and shipyards.

Crew members of any vessel entering Poland are not subject to a mandatory 14-day quarantine either, but members of the crew are most likely to be examined by sanitary officers.

Of course, considering health care of all crew members and shipyard's employees, Remontowa has taken some additional actions aiming to prevent any potential threats. Our customers’ safety remains a priority especially under this current unprecedented condition.

### Technical Features of Remontowa Docks

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Filonos 107 – 109, Piraeus, Greece  Tel: +30 210 4181833  E-mail: dcsi@dcsi.gr  www.dcsi.gr
The shipping community’s contribution to our country’s state maritime education institutions remains undiminished and steady. The Hellenic Mutual War Risks Association (Bermuda) Limited, faithful to the commitment of its members to support the Greek shipping family and especially the new generation of seafarers, generously donated a Liquid Cargo Simulator for the needs of MMA Macedonia. Four years ago, the School of Engineering directors, Mr. Dimitrios Gourgoulis, and, later on, Mr. George Gotzamanis, introduced and supported the procedures for this donation and liaised between the donor and the Ministry of Maritime Affairs and Insular Policy. Subsequently, the current director proceeded with its installation and organized the training of the Merchant Navy officers working in the Academy on the simulator. The Liquid Cargo Handling Simulator (LCHS) will allow one instructor to train six trainees during the particular seminar.

by Ilias Bissias

In his speech on behalf of all the Academy’s military, political and educational staff, the Director of MMA Macedonia Commander CG George M. Makris, expressed his gratitude to the organization, stating: “With this commendable act, you have contributed enormously by ensuring that MMA Macedonia is equipped with high-quality training equipment that meets the requirements of national and Community legislation and shipping’s modern technological environment. In this way, a high level of education is offered to our engineering students, which is achieved through a simulation based on the latest PC-based technology networks.”

In his address, Charalambos Yakinthos, Director of Studies at the School of Engineering, stressed that the donation of the Hellenic Mutual War Risks Association completes the Academy’s material and technical infrastructure and lays the foundations for creating the only simulator...
in Greece that will interconnect the School of Marine Deck Officers’ existing bridge simulator with the recently donated one. He added that “this connection will be achieved via one more machine simulator functioning as the brain of the whole installation. The Academy will then be proud that it has a complete ship simulation on its premises interconnecting the two faculties. We hope the company’s support in this project will continue.”

The Academy’s decision to name the room of the liquid cargo handling simulator “HELLENIC MUTUAL WAR RISKS ASSOCIATION (BERMUDA) LIMITED Hall” is a small token of gratitude for the donation, “so that memory prevails over oblivion to remind everyone of your substantial contribution to the modernization of our Academy’s training equipment,” as MMA Head stated.

The ceremony was attended by MPs Savvas Anastasiadis and Dimitris Vartzopoulos of Constituency B, Thessaloniki, and the MP Dimitrios Kouvelas of Constituency A, Thessaloniki. The Mayor of Thessaloniki, Georgios Tsalas, who also honored the event with his presence, said in his short greeting that these substantial donations should be publicized throughout Greece to honor the donors and highlight the quality of the training provided by the specific MMA. Messrs. Orestis Chalkias and Aris Desypris attended the event on behalf of the donor company.

A little while later, as part of a ceremonial visit to Thessaloniki, the Commander of the Hellenic Coast Guard, Rear Admiral Theodoros Kiliaris, visited the Academy and was given a tour of the facilities and the Academy Schools’ simulators. The Commander of the Coast Guard showed interest in the needs of the Academy; he stressed that he, as an MMA Kymi graduate, is particularly interested in the modernization of the country’s state maritime education. In addition, he underlined the undivided and continuous support of SYN-ENOSIS and other shipping companies and institutions towards the needs of our country in these difficult times. Finally, he emphasized the effort to upgrade and modernize the maritime academies and their educational books with the full cooperation of the Eugenios Eugenides Foundation.
Prevention is better than cure

An interview with Iasonas Lalizas, Marketing & Communications Manager, LALIZAS Group

LALIZAS recently supported the Euclid Lab Center & the operation of the newly established Merchant Marine Engineering Specialization of the 15th Technical High School in Thessaloniki. How important do you think it is to foster a culture of safety among tomorrow’s shipping protagonists?

At LALIZAS, we always support young people who aspire to build a career within the maritime industry. It is vital to provide them with the knowledge and the proper tools to get trained in the best possible way during their educational journey. We keep saying that knowledge is key and must be shared, especially when it can save someone’s life. Greece has traditionally been a maritime nation; thus, everyone involved in this industry should assist future seafarers, who will undoubtedly play a crucial role in the Greek economy. The earlier they are introduced to a culture of safety, the sooner they will be ready to manage any situation onboard and thus ensure their own safety but also that of the rest of the crew. It is in our nature to believe that any unfortunate incident will never happen to us; unfortunately, this is not always the case, so prevention is better than cure.

How important are concepts such as sustainability and innovation for the future development of LALIZAS?

For us, it is crucial to keep up with new developments in order to provide solutions that will optimise a vessel’s onboard operations and ensure safety at sea. Having almost 40 years of experience in this industry, we are trained to follow all market trends and discussions on the table regarding upcoming safety regulations to provide our partners with an accurate and certified product in a timely fashion. We invest in research and development, while at the same time we try to deliver products & services with minimal environmental impact.

In recent months, global supply chains have been facing significant disruption. To what extent has this situation affected marine equipment companies/the marine equipment industry and your company in particular?

It is a fact that the biggest part of our industry has faced supply-chain disruptions during 2020-2021 while the demand was unpredictably high. However, we managed to overcome any obstacle thanks to the overall infrastructure of the company itself. More specifically, we follow the vertical production model by manufacturing 80% of our products, which is a real asset. It gives us the advantage of being more flexible and ready to respond. Additionally, our very strong and intelligent procurement system and our wise investment in stock and manufacturing procedures have always helped deliver the best possible service to our partners. We also took proactive actions by having an adequate supply of raw materials.
There are two poles of fast economic growth in the European Union — Ireland in the West and the twelve countries of the Three Seas Initiative whose economies have grown by 2.8% per annum since they joined the EU. International investors are yet to use the full potential of that rapid pace of development in the region.

It does not take a keen observer of economics to notice that there is a relationship between economic growth and stock quotations. In spite of hundreds of papers written to explain the correlation we still do not know whether it is the capital market that drives growth or whether strong stock exchanges are the result of economic prosperity. The most likely explanation seems to be that there is a sort of feedback between the two. Public capital markets are the perfect tool for turning savings into investment, but investment will only make sense if one can expect attractive returns and these are related to economic growth.

As we analyse the relationship between GDP per capita and the share of market capitalisation of listed companies in the GDP figures of different countries in the European Economic Area, it becomes clear that “rich” countries also have “larger” capital markets. In the Three Seas countries such markets are usually less developed than it might seem from the state of their economies.

A country that has grown fast and yet has quite a large capital market compared to its GDP is Poland. Over the last 30 years, Polish GDP more than tripled which implies real economic growth of an average 4% per annum. Nominal growth was of course higher, amounting to over 11.5% annually. At the same time, over the three decades, the main stock exchange index, WIG, grew at an average rate of over 15%. This seems to be the secret of success — the Warsaw Stock Exchange lists companies that develop better from the “national average,” attracting investors whose presence encourages more successful companies to float on the market.

by Marek Dietl,
CEO of GPW (Warsaw Stock Exchange)
In spite of Poland’s undisputed success, its capital market still has a lot of growth potential. The share of capitalisation in GDP oscillates between 30% and 40%, a figure that is twice lower than in the so-called old EU countries. The potential in the other countries of the Three Seas Initiative is even higher. Excluding Austria and Poland, the average market capitalisation-to-GDP ratio ranges between 15% and 20% notwithstanding the excellent economic results of the last three decades. Even though the companies listed on the Three Seas stock exchanges flourish, their ability to attract investors and, consequently, other companies is undermined by the economies of scale. Almost 85% of turnover is generated by the three biggest markets in the region, which is why it seems necessary that they should cooperate more closely. A joint offer for global investors will provide dynamic companies with an opportunity to raise regional capital that will not try to control them.

One example of such cooperation is the CEEplus index. Introduced in 2019, it now covers 153 companies from seven countries of the region: Poland, Croatia, the Czech Republic, Romania, Slovakia, Slovenia and Hungary. Due to its diversity of countries and industries, the index attracts growing interest from funds and investors from all over the world. It also fosters joint marketing activities and a common position on EU regulatory solutions in the area of capital markets. So far big players had more bargaining power which, combined with some proposals from the European Commission, could simply annihilate smaller stock exchanges.

The area of cooperation that is specifically important for the WSE is technology. The stock exchanges in the region are already testing some of our solutions. In the future our export product will be a unique transaction system adapted to the specific nature of small stock exchanges that will make it possible to create a single technological ecosystem for the capital markets of this part of Europe.

The WSE also holds the Three Seas Stock Exchanges Conference, a platform dedicated to the exchange of experiences. We are glad that, for this year’s edition of the conference, we are joined by the stock exchanges from Bulgaria and Austria as well as guests from outside the Three Seas Initiative: Armenia, Greece and Georgia.

The Warsaw Stock Exchange is currently the undisputed leader of the group. Two decades ago, the Athens Stock Exchange was four times larger than the WSE in terms of capitalization and over two times larger in terms of turnover. Today, it is the stock exchange in Warsaw that is four times larger than the one in Greece. This breakneck pace of growth gave Poland unique know-how on how to develop capital markets. However, we do not perceive our position as one of privileged domination, but rather as a commitment to support the evolution of capital markets across the region.

The Three Seas Initiative was launched to address the gaps in the transport and transmission infrastructure on the North-South axis. As it was being developed, we noticed similar shortcomings in capital markets. While cooperation between regional stock markets and the largest markets in the West thrived on many levels, relations between the northern and southern parts of the region were very weak.

It is high time to change this for the benefit of the thousands of regional companies who want to raise capital and the investors who look for an opportunity to multiply their savings. Acting with caution and courage as the leader of the region, the Warsaw Stock Exchange is ready to take on this challenge.
Chinese imports set to increase by the end of the year

In recent months, Chinese coal imports have been posting positive year-on-year growth rates. Furthermore, according to BIMCO, while accumulated volumes after nine months remain lower than in the same period in 2020, total imports by the end of the year could well end above the 304.0 million tonnes imported in 2020, as power shortages have caused the government to reconsider policies aimed at lowering emissions. In the first nine months of the year, Chinese coal imports are down by 3.6% compared to the same period in 2020. However, the deficit in volumes compared to last year has been narrowing every month since April. In September, imports of 32.9 million tonnes marked the highest monthly imports since December 2020 when Chinese customs data reported staggeringly high imports of 39.1m tonnes. The recent month-on-month increase in imports can be linked to China’s widely reported coal shortage and its attempt to ensure enough supply.

In addition, the pick-up in coal imports can be attributed to recent announcements that restrictions on domestic production (enforced to reduce emissions) will be eased. In September, China produced 33.4 billion tonnes of coal, and in the first nine months of the year, total domestic coal production rose by 3.7% to 293.1billion tonnes.
**Global focus on exports**

According to the Resources and Energy Quarterly, released by the Australian Government’s Department of Industry, Science, Energy, and Resources, U.S. metallurgical coal exports are expected to grow modestly in 2021, partially reversing the sharp fall of 2020. However, little growth is expected from 2022. As the demand surge from Europe passes, high production costs in the U.S. metallurgical coal industry and high transport costs to Asia will place the U.S. at a structural disadvantage, particularly in Asia, where the market is growing the fastest.

It is estimated that Russian exports will recover from a 2020 low of 30 million tonnes to reach 37 million tonnes by 2023. Russian coal is cheap to produce and has low sulphur, making it suited for emerging Asian markets where pollution laws are becoming more stringent. A large quantity of new transport capacity is also expected to come online between 2022 and 2024.

Mongolian exports are expected to increase from 26 million tonnes in 2020 to 33 million tonnes by 2023. Exports should be supported by recent tariff cuts in China under the Asia-Pacific Trade Agreement and the completion of a key railway connecting mines in Mongolia with buyers in northern China.

Mozambique’s exports fell sharply in 2020, to an estimated 3 million tonnes, as low prices severely affected the country’s relatively high-cost producers. Exports are forecast to recover to 7 million tonnes by the end of 2024, supported by improved global demand, Vale’s Moa mine ramp-up, and upgrades to the Nacala logistics corridor rail line and port.

**IRON ORE-STEEL**

**World steel production: The latest data**

World crude steel production for the 64 countries reporting to the World Steel Association was 144.4 million tonnes (Mt) in September 2021, an 8.9% decrease compared to September 2020.

Africa produced 1.4 Mt in September 2021, up 51.0% on September 2020. Asia and Oceania produced 101.9 Mt, down 14.6%. The CIS produced 8.2 Mt, down 1.0%. The E.U. (27) produced 12.7 Mt, up 15.6%. Europe, Other produced 4.2 Mt, up 4.3%. The Middle East produced 2.2 Mt, down 35.7%. North America produced 9.8 Mt, up 19.2%. South America produced 3.9 Mt, up 17.0%.

China produced 73.8 Mt in September 2021, down 21.2% on September 2020. India produced 9.5 Mt, up 7.2%. Japan produced 8.1 Mt, up 25.6%. The United States produced 7.3 Mt, up 22.0%. Russia is estimated to have produced 5.9 Mt, down 2.2%. South Korea produced 5.5 Mt, down 5.0%. Germany produced 3.3 Mt, up 10.7%. Turkey produced 3.3 Mt, up 2.4%. Brazil produced 3.1 Mt, up 15.3%. Iran is estimated to have produced 1.3 Mt, down 51.4%.

**Chinese imports decline**

According to official Chinese customs data, in the first nine months of this year, total Chinese iron ore imports have fallen by 2.9%, totaling 843.0m tonnes. September’s imports of 95.6m tonnes were the lowest recorded for that month since September 2018. Average imports of 98.2m tonnes in the three months between May and July this year mean that iron ore imports went from being in plus, compared to last year, to recording a volume decline. In the first four months of the year, Chinese iron ore imports were up by 6.7%.

In the five months that followed, between May and September, Chinese iron ore imports totaled 460.8m tonnes, representing 49.5m tonnes less than in the same period of 2020. The loss is smaller over the whole year given the stronger imports in the first four months, with total imports down 25.5m tonnes. Imports from Australia, by far the largest supplier of iron ore to China, have fallen by 3.7% to 517.8m tonnes in the first nine months of the year. On the other hand, Brazilian exports to China have grown by 5.5% in the first nine months of 2021 compared to last year.

**Botswana ships first iron ore cargoes to China**

According to Reuters, Botswana delivered its maiden iron ore cargo to China as the country seeks to diversify its economy. The first exports from the Ikongwe mine reached China in September. Botswana aims to produce one million tonnes of iron ore per year from the Ikongwe mine. In this context, the mine is in talks with Botswana Railways to organize bulk shipments through Mozambique’s port of Maputo as exports currently go via South Africa in containerized shipments. China has been seeking new sources of iron ore amid a trade war with its top supplier Australia.
GRAINS

WHEAT

The latest forecasts on global production, consumption, and trade

The U.S. Department of Agriculture (USDA) recently published the monthly “World Agricultural Supply and Demand Estimates” report for October. The outlook for 2021/22 U.S. wheat this month is for reduced supplies, lower domestic use, unchanged exports, and decreased ending stocks. Supplies are projected to fall by 8.6 million tons to 1,064.2 million, primarily due to the combination of reduced beginning stocks for Iran and reduced production for Canada, Iran, and the United States. Iran’s 2021/22 beginning stocks are lowered 3.6 million, the result of a multi-year production revision from 2017/18 onward. Projected 2021/22 world consumption is lowered 2.6 million tons to 787.1 million with the majority of the reduction for food, seed, and industrial use in India and Canada and feed and residual use for the United States. Projected 2021/22 global trade is fractionally lower at 199.6 million tons on lower exports by Canada that are nearly offset by higher exports by Australia, the E.U., and India. Projected 2021/22 world ending stocks are reduced 6.0 million tons to 277.2 million and are the lowest since 2016/17 with Iran, the United States, and Australia accounting for most of the reduction.

Egypt: Marginal increase in production and imports

FAS Cairo forecasts Egypt’s wheat production in marketing year (MY) 2021/22 (July – June) to reach 9 million metric tons (MMT), up by almost 1.1 percent compared to 8.9 MMT in MY 2020/21. FAS Cairo attributes the rise to an increase in the total area harvested, which is set to reach 1.4 million hectares (H.A.) compared to 1.39 million H.A. the previous year. FAS Cairo forecasts Egypt’s wheat imports in MY 2021/22 (July – June) to reach 12.4 MMT, up by approximately 2.14 percent from MY 2020/21 Post’s import estimate figure of 12.14 MMT. The latter was revised downward by 2.88 percent from the USDA official estimate of 12.5 MMT. The largest foreign suppliers to the Egyptian market in MY 2020/21 (July – June) were Russia (8.13 MMT), Ukraine (2.45 MMT), followed by EU-28 (1.08 MMT). The General Authority for Supply Commodities (GASC) is Egypt’s largest wheat purchaser, and in MY 2020/21, it imported 5.46 MMT of milling wheat compared to 6.33 MMT in MY 2019/20. The largest foreign suppliers to GASC in MY 2020/21 (July – June) include Russia (3.8 MMT), Ukraine (765,000 MT) followed by France (240,000 MT), and Romania (240,000 MT).

SOYBEAN

Global production expected to peak

In its latest report, the International Grains Council (IGC) says that with record harvests anticipated in the U.S. and Brazil, global soybean production in 2021/22 is predicted to peak at 380m t, a gain of 14m y/y. Assuming an uptick in growth in Asia, key processors in the Americas, and elsewhere, uptake is seen rising by 4% y/y, to a new high. Including a modest recovery in the major exporters, global stocks are raised to 60m t (+3m y/y). After falling in the prior season, exacerbated by below-potential U.S. exports in September, the IGC predicts that trade will expand by 5% y/y.
WET BULK CARGOES

CRUDE OIL

OPEC: The latest estimates

According to a recent OPEC report, oil demand is estimated to increase by around 5.8 mb/d, revised down from 5.96 mb/d in the previous month’s assessment. The downward revision is mainly driven by lower-than-expected actual data for the first three quarters of this year, despite healthy oil demand assumptions going into the final quarter of the year, which will be supported by the seasonal uptick in petrochemical and heating fuel demand and the potential switch from natural gas to petroleum products due to high gas prices. Both OECD and non-OECD figures are adjusted lower, with the downward revision in OECD regions focused on 1H21, while the non-OECD revision is concentrated in 3Q21. The world is expected to consume 96.6 mb/d of petroleum products this year. For 2022, the estimate for global oil demand growth remains unchanged at 4.2 mb/d. As a result, global demand next year is seen averaging 100.8 mb/d. Demand is anticipated to be supported by healthy economic momentum in the main consuming countries and better management of the COVID-19 pandemic.

Non-OPEC liquids supply growth in 2021 is revised down by 0.3 mb/d from the previous month’s assessment to now stand at 0.7 mb/d. The revisions were driven mainly by a downward adjustment in 3Q21 due to factors such as production outages in the U.S. Gulf of Mexico caused by Hurricane Ida; maintenance in the Tengiz field in Kazakhstan; and a force majeure in Canada at the Suncor oil sands site. The impact of the hurricane led to a downward revision in U.S. liquids supply in 2021 from a growth of 0.1 mb/d to a contraction of 0.1 mb/d. The main growth drivers for 2021 supply growth continue to be Canada, Russia, China, Norway, and Brazil. Similarly, the non-OPEC supply growth forecast for 2022 is revised up by 0.1 mb/d due to the base change to now stand at 3.0 mb/d. Russia and the U.S. are expected to be the main drivers, followed by Brazil, Norway, Canada, Kazakhstan, Guyana, and other countries in the DoC. OPEC NGLs are forecast to grow by 0.1 mb/d in both 2021 and 2022 to average 5.2 mb/d and 5.3 mb/d, respectively.

EIA’s forecast on prices and supply

In its October Short-Term Outlook (STEO) report, the U.S. Energy Information Administration forecasts that Brent prices will remain near current levels for the remainder of 2021, averaging $81/b during the fourth quarter of 2021, which is $10/b higher than its previous forecast. The higher forecast reflects the expectation that global oil inventories will fall at a faster rate than previously expected, largely due to a lower global oil supply in late 2021 across a range of producers. In 2022, the EIA predicts that growth in production from
OPEC+, U.S. tight oil, and other non-OPEC countries will outpace slowing growth in global oil consumption and contribute to Brent prices declining from current levels to an annual average of $72/b.

U.S. crude oil production is estimated to reach 11.0 million b/d in October and rise to 11.3 million b/d in December. EIA forecasts 2021 production will average 11.0 million b/d, increasing to 11.7 million b/d in 2022 as tight oil production increases in the United States. Growth will come as a result of operators increasing rig counts, which we expect will offset production decline rates.

**World Bank: Prices are forecast to average $74/bbl in 2022**

In 2021Q3, energy prices rose sharply while many non-energy prices plateaued at high levels. Natural gas and coal prices soared amid high electricity demand. In its Commodity Markets Outlook report, the World Bank says that crude oil prices are expected to rise in 2022 before declining in 2023 as the recovery in demand is met by increased production. Oil prices are forecast to average $74/bbl in 2022, up from a projected $70/bbl in 2021, before dropping to $65/bbl in 2023. Oil demand is expected to continue its recovery and reach its pre-pandemic level by the second half of 2022. Oil production is expected to increase as supply outages are resolved; production responds to higher demand, particularly shale production in the United States; and OPEC and its partners unwind the rest of their production cuts. Investment shortfalls in new production, including U.S. shale, pose an upside risk.

**LIQUEFIED NATURAL GAS (LNG)**

**The impact of the recent rally in prices**

The recent rally in LNG prices in Europe and Asia has dramatically widened the economic incentive to switch from natural gas to oil in power generation. Steep carbon regulations and operational constraints limit Europe’s ability to burn oil in power plants, but Asia has more flexibility. If the gap between LNG and oil prices remains wide, Asia is set to boost oil demand by 400,000 barrels per day on average over the next two quarters, a Rystad Energy report shows. This will support already high oil prices. Asia’s liquid-burning capacity for power generation has declined over the past ten years but still sits at about 100 gigawatts (G.W.), mostly in Japan, Taiwan, Indonesia, Bangladesh, and Pakistan. Rystad Energy is looking at the spot and futures prices of the JKM and TTF gas-price benchmarks and is considering five different thermal efficiency scenarios for natural gas and oil in power plants. As Asian natural gas prices are currently forecasted to shoot up and stay well above $20 per MMBtu over the coming Northern Hemisphere winter, there is a clear upside for oil demand in this region — unless the oil price were to increase even faster and cause the price spread to LNG to narrow.

Liquid-burning power plant capacity is approximately 2.6% of Asia’s total installed capacity, but actual power generation coming from liquids is usually lower. Pure liquids plants have typically had very low utilization factors for economic and environmental reasons. Overall liquids generation in Asia only accounted for around 1% of total power generation last year, down from around 3% a decade earlier.
Exmar and Lattice Technology to design a CO₂ carrier

Exmar and Lattice Technology signed a joint development agreement to design a 40,500 m³ CO₂ carrier, which is also suitable for LPG and Ammonia transportation. The Joint Development Company will combine Lattice’s expertise in innovative and efficient tank designs for CO₂ transport and Exmar’s strong knowledge and experience in designing and operating innovative and efficient gas carriers.

A study proved that the patented LATTICE tank design, Lattice Pressure Vessel (LPV), provides the best solution for large-scale CO₂ transportation at low and medium pressures. The design and vessel size can be adjusted to meet all required transport volumes to ensure the optimal logistical solution in the most cost-competitive way. The initial concept is a 195 meters long Panamax beam vessel.

Such a vessel will be tailored to support CCUS projects with capacities ranging from 2 to 10 MTPA. Additionally, a 3,000 m³ storage capacity for low CO₂ emitting fuels like LPG, Ammonia or LNG has been foreseen.
The patented tank design will also provide the best storage solution for offshore CO₂ liquefaction or re-injection projects. The robust pressurized storage tanks can be made in an efficient shape fitting the ship hull and allowing for large storage capacity.

**Rotor Sail installation on a hybrid ferry**

Following the successful installation of the Norsepower Rotor Sail on the hybrid ferry M/V Copenhagen in 2020 and a year of demonstrated results, Scandlines prepared the sister ferry M/V Berlin for its own Rotor Sail installation. The hybrid ferry, M/V Berlin, also operates on the Rostock-Gedser route but, unlike M/V Copenhagen, is flagged by Germany.

Scandlines has had more than a year to collect data on how the Rotor Sail works on M/V Copenhagen and its effect on the route between Rostock to the south and Gedser to the north.

The preparation for the Rotor Sail includes building a steel foundation on the ferry, on which the Rotor Sail will be fixed. The initial work took place when the M/V Berlin was on a planned yard stay at Remontowa in Poland at the end of May. The installation of the Rotor Sail itself is scheduled for 2022.

**A new deal for full-scale testing of a Carbon Capture and Storage (CCS) system for maritime use**

Solvang recently signed a letter of intent with Exhaust Gas Cleaning producer Wärtsilä to test a Carbon Capture and Storage (CCS) system on one of its ethylene carriers. Although the technology has been proven on land, there is no clear technology roadmap on achieving the required emission reductions in the shipping industry. Wärtsilä is, therefore, installing a CCS system at its research centre in Moss to test and develop the technology in a ship-like environment. After this, they will install a full-scale CCS system on the “Clipper Eos,” one of Solvang’s 2019-built ethylene carriers.

The “Clipper Eos” has been time chartered by Marubeni Corp. Tokyo, since her delivery from the shipyard in 2019. With over 40 years of experience trading and handling ethylene, Marubeni advises that they are committed to cooperating with Solvang and Wärtsilä to enable the parties to perform relevant testing and installation of equipment on the vessel in a mutual effort to reduce the vessel’s CO₂ footprint drastically.

Maritime CCS can be described as the process of capturing carbon dioxide (CO₂) from main engine combustion before it is released to the air through the exhaust outlets. By applying carbon separation in the chimney, the resulting liquid CO₂ is then transferred to deck tanks, ready to be processed for re-use in the industry (e.g., to produce synthetic fuel) or millennia-long storage. What could be described as a simple set-up requires extensive research and needs to be adapted for marine use.

The Solvang/Wärtsilä scope includes steps such as modifying existing exhaust gas cleaning technology with particle filters, installing a carbon absorber and stripper units, as well as modifying liquefaction systems to cater for deck tanks.

**An MoU reflecting a shared commitment to low-speed, dual-fuel ammonia engines and the decarbonisation of shipping**

MAN Energy Solutions has signed a Memorandum of Understanding (MoU) with Mitsui E&S Machinery Co., Ltd. (MES-M) and Mitsui OSK Lines (MOL) regarding the low-speed, ammonia-fueled main engine that MAN Energy Solutions is currently developing.

The MoU provides for keeping MOL and MES-M
updated on MAN Energy Solutions’ progress in this regard, with the ultimate intention of creating the basis for a more detailed LoI (Letter of Intent) leading to an actual purchasing contract for an ammonia-burning engine during 2023.

The signatories of the memorandum were: Yoshihiko Sugimoto, General Manager Technical Division, Technology Innovation Unit, Mitsui OSK Lines Ltd.; Yusuke Sakimoto, Executive Officer, General Manager of Diesel Engine Division, Mitsui E&S Machinery Co., Ltd.; and for MAN Energy Solutions: Bjarne Foldager, Senior Vice President and Head of Two-Stroke; and Brian Østergaard Sørensen, Vice President, Head of Research and Development, Two-Stroke.

**The world’s first emission-free high-speed catamaran**

Stockholm-based Echandia has signed an agreement to supply the world’s first emission-free high-speed catamaran with an integrated battery and hydrogen-based fuel cell system. The installation will take place in the autumn of 2022, and the agreement is worth approximately SEK 14 million for Echandia.

The agreement is for the Beluga24 model, designed by Teknicraft in New Zealand, and the Italian Studio Sculli; it is built of carbon fiber by Green City Ferries north of Stockholm.

**A powerful digital toolbox for ocean data management and analysis**

Kongsberg Maritime (KM) announced the launch of Blue Insight, a powerful, cloud-based digital toolbox to enable the state-of-the-art collection, visualisation, contextualisation, management, and distribution of ocean data. The Blue Insight ecosystem, which focuses on marine and meteorological information, is of key value to both scientific and industrial users of the maritime environment.

Blue Insight provides an open, modular platform for the processing, visualisation, and sharing of ocean data. The core module contains the cloud framework, which has been built to the highest cyber security standards, and an application-specific dashboard teamed with data storage and management functionalities. Additional modules can be added to this framework to tailor Blue Insight’s functionality to suit all large or small projects.

Key to Blue Insight’s data-streaming functionality is the concept of sensor fusion, by which data is streamlined from various onboard sensors and a local database for seamless transmission into the cloud. In addition, the module serves as a link with KM onboard sensors for remote operation.

**A long-term agreement for the supply and development of sustainable marine biofuel solutions for the global shipping industry**

Sustainable marine biofuels supplier GoodFuels and global producer and supplier of renewable fuels Renewable Energy Group have entered a long-term agreement to supply and develop sustainable marine biofuel solutions for the global shipping industry.

With REG’s expertise in biofuels and GoodFuels’ pioneering strengths, both companies are playing an important role in enabling the decarbonization efforts of shipping companies.

This announcement reinforces GoodFuels’ mission to become the favored green fuel supplier for all shipping segments and ambition to scale up the production of advanced marine biofuels in the right way using sustainable feedstocks.
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Market News

Maritime Cyber Security Compliance Framework

by Theodoros Ntouskas, Information Security Consultant, ICT PROTECT

The most critical and sensitive data of organizations, such as their personal, financial, and operational data and business strategies, are hosted in their information systems. Any information system malfunction or disruption may cause a significant impact on an organization’s business activities.

Modern commercial ships are considered “Floating Digital Offices” as they host and interact with complex, heterogeneous information systems and depend on several providers (i.e., navigation equipment, cloud, and telco providers, etc.). Thus, commercial ships are exposed to multiple known cyber-attacks and vulnerabilities, making cybersecurity a critical aspect in the business continuity of maritime organizations.

Furthermore, commercial ships play a decisive role in the maritime environment, interacting with many entities, including maritime companies, crews, ship manufacturers, port authorities, inspectors, cargo owners, shipping registers, charterers, telco providers. Therefore, any degradation, interruption, or impairment of the ships’ information systems will have serious consequences on their proper functionality and the interacting entities’ activities, making security management one of the most critical concerns. In order to improve security and avoid such events, there are several guidelines and best practices that need to be followed, such as IMO’s MCS-FAL.1-Circ.3 “Guidelines on Maritime Cyber Risk Management,” OCIMF’s “Tanker Management Self-Assessment v3,” and BIMCO’s “Guidelines on Cyber Security Onboard Ships v4”. Apart from onboard cyber security requirements, international organizations such as ENISA, UK DfT, and IAPH have published additional requirements and best practices regarding the ports information systems since they continuously interact with ships and their systems are also vulnerable to hackers.

All the above guidelines can be covered by well-known international standards and regulations such as ISO/IEC 27001, ISO/IEC 22301, SOC 2, GDPR, CCPA, etc. The most effective way to comply with these complex requirements is to adopt a cyber security compliance framework.

ICT PROTECT’s proposed compliance methodology for maritime cyber risk management derives from the international standards, regulations, and
best practices mentioned above. It consists of eight phases, as depicted in the infographic below. Via this framework, maritime cybersecurity team members will be able to identify all the cybersecurity requirements; identify their IT & OT assets; evaluate targeted threats & vulnerabilities; define targeted cybersecurity controls; include specific metrics and audit evidence in their internal audits and, therefore, know the level of compliance with each requirement.

At ICT PROTECT, we have developed and implemented this framework through the STORM GRC Tool and used it to successfully address the complex compliance requirements of our clients (including our clients in the maritime sector). The STORM GRC Tool offers a bundle of targeted services to company users to guide them through securely managing their ICT systems and creating all mandatory documents and evidence required by ISO 27001:2013 as well as industry-specific cybersecurity requirements (i.e., IMO, NERC CIP, etc.).

In conclusion, with the rapid growth and adoption of technology in the maritime environment, ship information systems are increasingly exposed to cyber risks. These cyber risks could be exploited by satellite networks or traditional communication channels and could significantly impact all maritime entities, thus affecting the international economy. A holistic and common approach (cybersecurity compliance framework) should be adopted to manage the ICT & OT security systems to continuously monitor security and privacy risks, improve their ICT-based business processes, provide continuity, and render services to all entities within the maritime environment.
Viasat and Inmarsat announced they have entered into a definitive agreement under which Viasat will acquire Inmarsat in a transaction valued at $7.3 billion, comprised of $850.0 million in cash, approximately 46.36 million shares of Viasat common stock valued at $3.1 billion based on the closing price on Friday November 5, 2021, and the assumption of $3.4 billion of net debt. The combination will create a leading global communications innovator with enhanced scale and scope to affordably, securely and reliably connect the world. The complementary assets and resources of the new organization will enable the availability of advanced new services in mobile and fixed segments, driving greater customer choice in broadband communications and narrowband services (including the Internet of Things or “IoT”). The combined company intends to integrate the spectrum, satellite and terrestrial assets of both companies into a global high-capacity hybrid space and terrestrial network, capable of delivering superior services in fast-growing commercial and government sectors. This advanced architecture will create a framework incorporating the most favorable characteristics of multi-band, multi-orbit satellites and terrestrial air-to-ground systems that can deliver higher speeds, more bandwidth, greater density of bandwidth at high demand locations like airport and shipping hubs and lower latency at lower cost than either company could provide alone.

"Joining with Viasat is the right combination for Inmarsat at the right time," said Rajeev Suri, CEO of Inmarsat. "Viasat is a terrific innovator and Inmarsat brings some powerful additions: global reach, a broad distribution channel, robust business momentum and a presence in highly attractive global mobility segments. Together, the two companies will create a new global player with the scale and scope to help shape the future of a dynamic and growing industry. The combination will create a strong future for Inmarsat and be well-positioned to offer greater choice for customers around the world, enhanced scope for partners and new opportunities for employees. The industrial logic is compelling and ensures that the U.K. has a strong and sustainable presence in the critical space sector for the long term.”
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November for Panama is characterized as the "Month of the Nation" (Mes de la Patria). On November 3rd, Panama celebrates its liberation from Colombia in 1903, while on November 28th, its independence from Spain, which took place earlier, in 1821, is celebrated. In the anniversary year of 2021 both Panama and Greece commemorate their 200 years of liberation from Spain and the Ottoman Empire, respectively. This is an exceptional coincidence that goes beyond the levels of mere chance and creates substantial ties between these friendly states.

The Embassy and the General Consulate of Panama in Greece, within the initiative of the Ambassador and General Consul of Panama in Greece, H.E. Mrs. Julie Lymberopulos organized an Art Exhibition in November 2021, dedicated to the 200 years of Panama's independence, with works by one Panamanian artist, Olga Sinclair and nine renowned Greek artists Io Angeli, George Avgeros, Apostol, Chrysa Vergi, Anna Gerolymatou, Irene Kana, Christos Kechagioglou, Vangelis Rinas and Manolis Charos who created their works in honor of Panama through their own eyes and conception. The Embassy and General Consulate of Panama in Greece with the Municipality of Piraeus is an important sealing of the twinning agreement signed in July 2021 between the City of Piraeus and the City of Panama. The Municipal Gallery of Piraeus houses this valuable effort and gives a voice to the works of artists for this sacred anniversary purpose.

The physical art exhibition at the Municipal Art Gallery of Piraeus will remain open to the public from 15/11/2021 to 3/12/2021, while entrance is free of charge.

At the same time, SQLearn undertook the creation of the digitized virtual version of the exhibition, which allows this great endeavor to travel around the world, overcoming any obstacle or limitation imposed by the physical version, especially in the times of pandemic. Simultaneously, the embassy and General Consulate of Panama in Greece created an anniversary commemorative album as a complement action to the physical and digital exhibition. As a parallel action, the Piraeus Philharmonic Orchestra played the National Anthem of Panama on the central stage of the Emblematic Municipal Theatre of Piraeus with the aim of producing a creative commemorative video that will be broadcasted at the Embassy’s events and will travel around the world.

MARKET NEWS

200 years of independence for Greece and Panama: Celebration activities at their peak
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Aramco sounds the alarm about the future of black gold

Saudi giant Aramco has sounded the alarm about black gold in 2022. More specifically, in an interview in Riyadh, Aramco CEO Amin Nasser stressed that oil-output capacity is dropping rapidly, and companies will need to invest more in production. At the same time, he predicted that the supply deficit in the oil market would worsen next year if the restrictive measures due to coronavirus relax further and air travel increases.

His comments come at a time when crude prices have soared 70% since the beginning of the year to around $85 a barrel. Many energy traders are highly critical of the fact that governments and activists are calling on companies to stop investing in fossil fuels when the energy crisis is reaching alarming proportions.

In this context, Aramco is accelerating its plans to increase production capacity to 13 million barrels from the current level of 12 million barrels while major consumers such as the US, India, and Japan are also urging domestic producers to their production.

Of course, some voices contradict Aramco’s estimates. Wall Street banks and some OPEC+ members are questioning scenarios of oil supply shortages. JPMorgan Chase & Co. forecasts the daily supply balance in global oil markets will shift to a surplus of 1 million barrels by March 2022.

World Energy Outlook: The key findings

The International Energy Agency recently published its World Energy Outlook-2021 (WEO-2021) report, providing a detailed picture of how far countries have come in their clean energy transitions and how far they still have to go. A new global energy economy is emerging, but it will need to take shape much more quickly to avoid the severe impacts of a changing climate.

An outlook based on today’s policy settings, the Stated Policies Scenario (STEPS), shows aggregate fossil fuel demand slowing to a plateau in the 2030s and then falling slightly by 2050, the first time this has been projected in this scenario. Almost all of the net growth in energy demand comes from low emissions sources.

In the Announced Pledges Scenario (APS), oil demand peaks soon after 2025, and a more rapid ramp-up in low emissions sources brings emissions down to 21 gigatonnes (Gt) in 2050. However, a much greater global effort will be essential to reach the relative safety of the Net Zero Emissions by 2050 Scenario (NZE).
Actions in four key areas over the next decade are essential to keep the door to a 1.5 °C stabilisation open: a massive push for clean electrification; a renewed focus on realising the full potential of energy efficiency; concerted efforts to prevent leaks from fossil fuel operations; and a boost to clean energy innovation.

Getting the world on track for net-zero emissions by 2050 requires transition-related investments to accelerate from current levels to around USD 4 trillion annually by 2030. However, only a minority of these investments immediately deliver zero-emissions energy or energy services. A key challenge for financiers, investors, and policymakers is ensuring that other investments, such as those that aid transitions in emissions-intensive sectors, are financed.

In its WEO, the IEA mentions that if the world gets on track for net-zero emissions by 2050, then the cumulative market opportunity for manufacturers of wind turbines, solar panels, lithium-ion batteries, electrolysers, and fuel cells amounts to USD 27 trillion.

As far as the gas consumers’ categories are concerned, electricity producers continue to record the highest consumption, covering 67.40% of domestic demand with 35.36 TWh out of a total of 52.46 TWh consumed, a quantity 15.21% higher than the same period last year.

**Most of 2022’s solar PV projects risk delay or cancelation due to soaring material and shipping costs**

The surging cost of manufacturing materials and shipping could threaten 50 gigawatts (GW) – a staggering 56% – of the 90 GW of global utility PV developments planned for 2022, a Rystad Energy analysis shows. Commodity price inflation and supply chain bottlenecks could lead to the postponement or even cancelation of some of these projects, impacting demand and consumer pricing for solar-generated power.

Driven by core component price inflation, manufacturing costs for PV modules have surged from below $0.20 per watt peak (Wp) in 2020 to between $0.26 and $0.28 per Wp in the second half of 2021 – a near 50% increase in a year.

A significant driver of this surge is a more than 300% hike in the cost of polysilicon, a core component in PV manufacturing. In addition, other raw materials – silver, copper, aluminum, and glass – have also climbed steadily since January 2020, increasing the pressure on module prices.

David Dixon, Senior Renewables Analyst at Rystad Energy, said: "The utility solar industry is facing one of its toughest challenges just days ahead of COP26. The current bottlenecks are not expected to be relieved within the next 12 months, meaning developers and off-takers will have to decide whether to reduce their margins, delay projects, or increase offtake prices to get projects to financial close.”

**The increasing trend of natural gas consumption in Greece continues**

The growing trend of natural gas consumption in Greece continues, according to DESFA’s data for the first nine months of 2021, with the entry point in Sidirokastro remaining the main gas inflow gate to the NNGS, while the increase of the electricity generation share in the domestic consumption of natural gas is also significant.

According to DESFA data for the period January - September 2021, domestic gas consumption increased by 13.45%, reaching 52.46 Terawatt hours (TWh) from 46.24 TWh in the same period last year.

Gas imports amounted to 57.73 TWh, recording an increase compared to 53.54 TWh in the first nine months of 2020. The largest quantities entered from the entry point in Sidirokastro (26.09 TWh), which covered 45.19% of imports, showing an increase of 10.06% compared to the corresponding period last year.

Following its interconnection with TAP, the new entry point in Nea Mesimbria covered 17.01% of imports within its first one-month operation, with more than 9.82 TWh, and now significantly contributes to the inflow of natural gas into the NNGS. Finally, approximately 3.08 TWh (5.33%) entered the NNGS through the connection point in Kipoi, Evros.
ACI EUROPE recently announced the Best Airport Awards winners during the 31st ACI EUROPE Annual Congress and General Assembly Conference Dinner, hosted by Génève Aéroport, in Geneva, Switzerland.

The Best Airport Awards recognise excellence and outstanding achievement across the entire portfolio of airport activities. This year’s 17th edition of the celebrated accolades was held with a particular focus on the many ways in which airports are not only responding but innovating during the COVID-19 pandemic while focusing on the airport industry’s sustainability goals. Airports in this section are divided into five groups according to 2019 passenger traffic.

The winner of the “25-40 million passengers” category was Athens International Airport. The busiest airport in Greece won the judges over by producing a plan for recovery that focuses on improving customer and passenger experience by implementing the Greek concept of philoxenia, or hospitality. The judges particularly liked the way Athens Airport embraces AI and virtual reality (such as measuring passengers’ emotional engagement, offering a virtual assistant and a 3D virtual airport tour) in its bid to bring passenger experience to the next level.

The judging panel also highlighted the airport’s continued carbon management prowess, with Airport Carbon Accreditation Level 3+ upheld in spite of the ongoing crisis. Furthermore, Athens Airport is committed to achieving Net Zero CO2 emissions by 2025 and achieving the UN Sustainable Development Goals. In particular, the airport was praised for increasing its efforts to increase the use of renewable energy.

One of the critical topics in air cargo and the wider economy right now is supply chain congestion. Unprecedented joint fiscal and monetary support has been deployed during the pandemic. That led to strong demand for goods and a significant increase in e-commerce sales due to the change in consumer buying habits. But supply chains operations have been impacted by COVID-related measures, labour shortages, insufficient pro-
duction of key inputs such as semiconductors, and the lack of capacity. The supplier delivery times PMIs illustrate those issues. The PMI reached record low values in October in the US and in June globally, without much improvement since then, which indicates that an overwhelming majority of businesses report longer delivery times.

In normal times, long delivery times are positive for air cargo, as it gives incentives to businesses to turn to air freight to rapidly get their goods to clients. However, the lack of air cargo capacity – down 12.2% in Jan-Aug 2021 versus the same period in 2019 – quarantined crews and disruptions at airports make the impact of long delivery times on air cargo volumes less clear than usual. Looking ahead, however, strong demand is likely to encourage businesses to use the speed afforded by air cargo to meet deadlines. Supply chain disruptions are not expected to ease significantly during the first half of 2022, meaning that the gradual return of capacity on the belly of passenger aircraft may allow air cargo to benefit even more from long delivery times.

**US facilitates air travel**

Substantial efforts are being made to increase vaccination rates across the globe. The availability of COVID-19 vaccines is rising, and over 6 billion doses have been administered globally. As of 24 October 2021, 29 countries had a COVID-19 vaccination rate higher than 70 percent. Many countries are encouraging vaccination against COVID-19, and some countries are considering or adding evidence of vaccination to entry requirements.

In light of these facts and circumstances, the White House has determined that it is in the interests of the United States to move away from the country-by-country restrictions previously applied during the COVID-19 pandemic and to adopt an air travel policy that relies primarily on vaccination to advance the safe resumption of international air travel to the United States. This proclamation governs the entry of noncitizen/nonimmigrants into the United States— that is, noncitizens who are visiting the United States or otherwise being admitted temporarily — traveling to the United States by air. It suspends the entry of unvaccinated noncitizen nonimmigrants, except in limited circumstances. It ensures that the entry of unvaccinated noncitizen nonimmigrants is consistent with applicable health and safety determinations made by the Director of the CDC, including a requirement that, where appropriate, such individuals agree and arrange to become fully vaccinated against COVID-19 upon their arrival. This proclamation is effective from 8 November 2021.

**First A319neo flight with 100% sustainable aviation fuel**

Airbus, Dassault Aviation, ONERA, the French Ministry of Transports, and Safran have launched the first in-flight study of a single-aisle aircraft running on unblended sustainable aviation fuel (SAF). During the flight test over the Toulouse region on 28 October, one CFM LEAP-1A engine of an Airbus A319neo test aircraft operated on 100% SAF. Initial results from the ground and flight tests are expected in 2022.

The unblended SAF is provided by Total Energies, which is made from Hydroprocessed Esters and Fatty Acids (HEFA), primarily consisting of used cooking oil and other waste fats. HEFA is made of paraffinic hydrocarbons and is free of aromatics and sulfur. Approximately 57 tonnes of SAF will be used for the entire test campaign. It is produced in Normandy, close to Le Havre, France. The 100% SAF will also be utilised for compatibility and engine operability studies on the Safran Helicopters Arrano engine used on the Airbus Helicopters H160, which are expected to start in 2022.

Airbus, in collaboration with DLR, is responsible for characterising and analysing the impact of 100% SAF on ground and in-flight emissions. The study — known as VOLCAN (VOL avec Carburants Alternatifs Nouveaux) — contributes to global decarbonisation efforts currently underway across the entire aeronautical industry.
The Greek Consulate General in Trieste, in co-organization with the Municipality of Trieste, presented the exhibition ‘Les Combats des Grecs’ - Papiers Peints, Philhellenic decoration in Italian palazzos, from October 16 to November 7, 2021, giving the public the unique opportunity to immerse itself into the extremely rare world of panoramic wallpaper (papiers peints).

‘Les Combats des Grecs’
Papiers Peints, Philhellenic decoration in Italian palazzos

An exhibition on the Greek Revolution

The Greek Consulate General in Trieste, in co-organization with the Municipality of Trieste, presented the exhibition ‘Les Combats des Grecs’ - Papiers Peints, Philhellenic decoration in Italian palazzos, from October 16 to November 7, 2021, giving the public the unique opportunity to immerse itself into the extremely rare world of panoramic wallpaper (papiers peints).
The exhibition, held at the “Magazzino 26”, presented one of the most well-preserved copies of this panoramic wallpaper titled Les Combats des Grecs (The Battles of the Greeks), designed by Jean-Julien Deltil and produced in 1828 by the famous French manufacturer Zuber.

It was the first time that this successful manufacturer released such a contemporary and historical wallpaper with political connotations, which was different from the hitherto themes of classical...
The release of this wallpaper with scenes on the subject of the Greek Revolution, testifies to the philhellenic sentiment that swept across Europe at that time. The son of the industrialist Zuber was, in fact, an active member of the Philhellenic Movement of Mulhouse, where the company is still based today.

The Les Combats des Grecs wallpaper exhibited in Trieste is one of the most well-preserved copies out of the three authentic copies kept in private collections in northern Italy- an area where this French wallpaper was a highly popular decorative art in these palazzos in the 19th century.

On the occasion of the 200th anniversary of the Greek Revolution, the exhibition sought to bring to life the history and personalities of the 1821 Greek Revolution. This spectacular wallpaper and other works of art such as lithographs and paintings from Italian and Greek private and museum collections, highlighted the influence of the Greek Revolution in northern Italy, and especially in Trieste, a city with special ties to Hellenism, where the oldest Consulate of modern Greece was founded in 1830.

The first in depth bilingual edition (Italian and Greek) on Les Combats des Grecs was published by the Benaki Museum, under the coordination of the art consultant Olympia Pappa. The publication, enriched by unique and academic articles by Olga Katsiardi-Hering (historian), Aphrodite Kouria (art historian), Bernard Jacqué (art historian-founder of the Rixheim Wallpaper Museum), and Nathalie Ravanel (conservator of works on paper), focuses on the history, technique, market, restoration and artistic mastery of this wallpaper as well as original stories from three Northern Italian private collections.

The exhibition was held under the auspices of the Committee “Greece 2021.”
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Maritime Numbers

**92 Mt**
the global LNG demand in the third quarter of 2021

**516.7 million**
the tonnes of goods that passed through the Panama Canal during the fiscal year 2021

**97**
the number of Piracy and Armed Robbery Against Ships incidents reported to the IMB Piracy Reporting Centre (IMB PRC) in the first nine months of 2021

**15,400**
the number of vessels comprising the global ferry fleet in 2019

**714**
the number of superyachts sale and purchase transactions since the beginning of the year

**$7,800/day**
the average weighted tanker earnings in late October

**12,028 nautical miles**
the distance a ship covers on the journey from Ponta de Madeira, Brazil, to Qingdao, China

**9.5%**
the annual increase in container traffic in Chinese ports in the first nine months of the year
Over 40 years of experience in the maritime industry

Quality Management (ISM, ISPS, MLC, ISO9001, ISO14001, ISO50001 & OCIMF TMSA3)

Safe Operation with 4-point focus: Environment, Human Resources, Cargo and Vessel

In excess of 30 million tons of cargo transported annually