



MARITIME WATCH MAY 2022

PAKISTAN'S PREMIER MONTHLY MARITIME NEWS DIGEST

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KARACHI SHIPYARD & ENGINEERING WORKS LTD.

A Symbol of Excellence !

Ship Lift & Transfer System

- Karachi Shipyard & Engineering Works Limited (KS&EW) has recently completed the installation, commissioning and load testing of Ship Lift & Transfer System (SLTS) at Karachi, Pakistan in collaboration with the world's re-known OEM M/s Syncrolift, Norway.



PM Imran Khan inaugurating SLTS
from left to right:
Rear Admiral Ather Saleem HI(M) - MD KS&EW
Chief of Naval Staff Admiral M. Amjad Khan Niazi NI(M)
PM Imran Khan & Ms. Zubaida Jalal - Minister of Defence Production



PM Imran Khan along with dignitaries walk around of SLTS vicinity

- SLTS can accommodate 12 x ships on dedicated repair stations; it can facilitate different types of vessels up-to 7321 Ton capacity simultaneously, catering the regional needs for under and above water repairs.



Ship Lift & Transfer System facility available for ships / vessels at KSEW

- Available Parking Spaces:

Sr. #	Platforms / Parkings	Length (M)	Width (M)
1	3 x Repair Station	125	32
2	3 x Repair Station	90	25
3	2 x Repair Station	75	25
4	3 x Repair Station	60	25
5	1 x Repair Station	45	25
6	Short term parking on ship lift platform (minor works and underwater hull survey)	125	32
7	Short term parking on transfer area	125	32



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**Ministry of Defence Production
Government of Pakistan**

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ABOUT US

NIMA is working as a national think tank acting as a repository of maritime information with major focus on; applied research for comprehensive solutions to Pakistan's maritime issues, taking maritime education initiatives, conserving the history and culture, advocating best maritime practices, raising awareness & capacity building, and publishing research of highest international standards.

MISSION

National Institute of Maritime Affairs (NIMA) is functioning under Bahria University as National Think Tank on Maritime affairs as national body, based at Islamabad. National Centre for Maritime Policy Research (NCMPR) Karachi which was established in 2007 under the direction of Government of Pakistan has been placed as a constituent unit of NIMA. The establishment of NIMA was conceived in order to meet the objectives of National Maritime Policy.

WORK

The significance of maritime domain is the economic development of the country and the potential of our maritime sector are not well understood in Pakistan. NIMA engages eminent and renowned researchers to extract concrete policy recommendations. It endeavors continuously to create awareness through seminars, conferences, workshops, writing research papers and other maritime related activities challenges of 21st century for Pakistan.

Disclaimer

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Dumping at sea is one of the major causes of pollution endangering ocean ecology and biodiversity. Control on dumping at sea has been a major challenge, especially in the underdeveloped as well as the developing nations. The term "Dumping" essentially means the deliberate disposal at sea of wastes or other matter from vessels, aircraft, platforms, or other man-made structures. This year marks 50 years since the 1972 London Convention on Dumping at Sea was adopted to recognize that the oceans could no longer be a dumping ground for any kind of waste. In the past, a substantial number of States permitted the dumping of waste at sea. Bans on the dumping of radioactive wastes at sea and industrial waste were also implemented in the 1990s. The 1996 Protocol, however, introduced a smaller, permitted list of dumping wastes. Under the London Protocol, all dumping is prohibited, except for possibly acceptable wastes on the so-called "reverse list" commonly known as the permitted list. Few notable items on this list include dredged material, sewage sludge, fish waste, material resulting from industrial fish processing operations, etc. This has also been termed the black and the grey list approach. For the blacklist items, dumping is prohibited. Dumping of the grey-listed materials, however, requires a special permit from a designated national authority under strict control and provided certain conditions are met.

Recently a proposal has been submitted by the Republic of Korea and Mexico to amend the relevant Protocol Annex to remove sewage sludge from the permitted list. If the proposal is agreed upon by the Contracting Parties, then the dumping of sewage sludge at sea would be prohibited worldwide. The next meeting of Contracting Parties is scheduled for October 2022. If adopted at that meeting, the amendment would enter into force 100 days after adoption.

Such international protocols are aimed at preserving the ocean ecology and the environment. The ocean is a common heritage of mankind and a source of supporting life on the planet, all responsible nations need to make policies and take necessary measures to ensure adhering to the actions needed to prevent all illegal activities causing pollution such as dumping at sea. To this end, all countries need to promote the effective control of all sources of marine pollution. Additionally, in addition to the coastal states, it is the duty of all mariners or other persons who observe dumping incidents in ocean waters that could be violations of the London Convention and Protocol are encouraged to report these events to the coastal state or the concerned international agencies.

Pakistan is a party to several international conventions, protocols, and treaties for the protection of the environment and biodiversity. Under the obligations of these treaties and agreements, Pakistan has vowed to protect its marine environment as well. Despite all this, one of the biggest issues Pakistan is facing right now is environmental degradation. This not only depletes Pakistan's resources, but is also affecting human life adversely. The environment of Pakistan is being degraded in several ways, one of which is oceanic pollution.

Despite being part of the London Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, violations are observed in terms of discharge of all sorts of waste into the sea, including sewage, potentially infectious hospital waste, plastic bags, and bottles, etc. Due to such illegal and undesirable actions, the natural blue-colored water at the famous tourist points of the city and port of Karachi has been badly discolored.

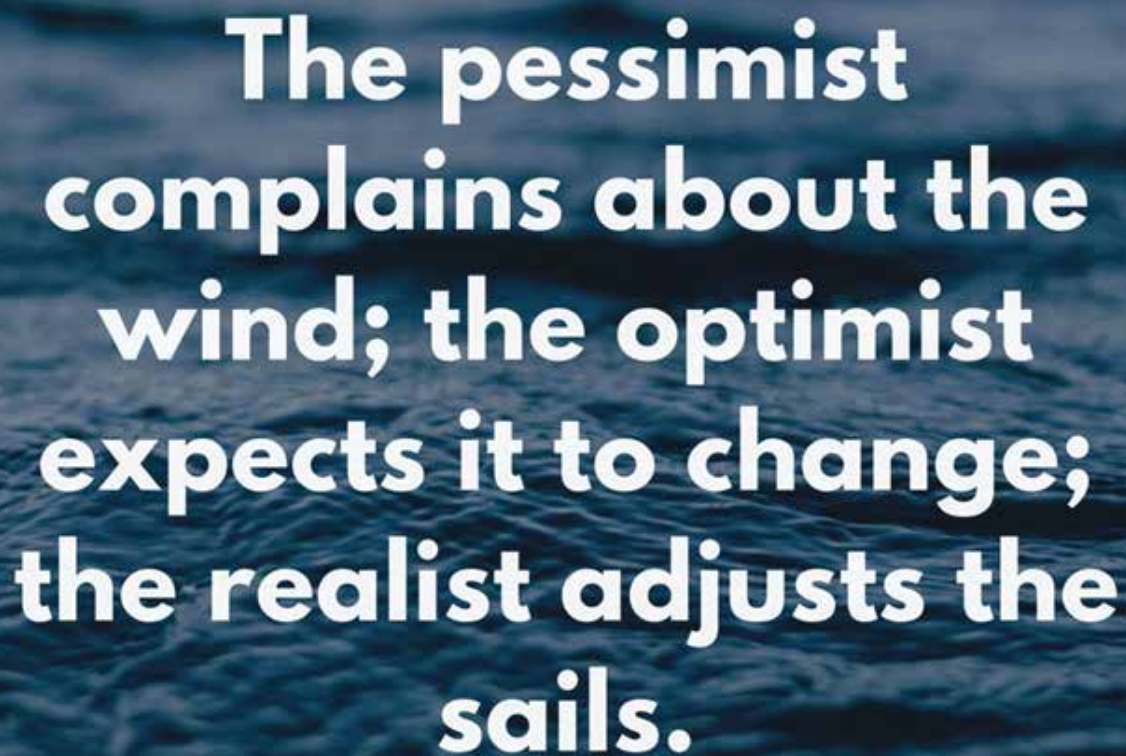
Apart from the used plastic stuff, sewage waste, heavy metal impurities, and industrial chemical discharge are the major threats to ocean pollution in our urban sea areas. We generally find the industrial zones of Karachi lacking in proper waste management systems due to which the hazardous industrial waste eventually finds its way into the sea. The fish and other marine life swallow small particles of metals, plastic, and toxic substances. Completing the food chain, these fish are eaten by humans and the toxic substances can severely



damage their immune systems. In other words, humans are harming their health through such actions. Increasing dumping of hazardous waste, including cow dung, untreated water, industrial waste, and a large quantity of plastic into the sea has also severely affected the fisheries resources, which in turn negatively impacts the economic conditions of fishing communities, who are highly dependent on these resources. According to research conducted by WWF, 65 percent of the litter in the coastal areas consists of plastic bottles, wrappers, bags, disposable utensils, etc.

Pakistan must not allow untreated waste to be dumped into the sea as agreed in the London Convention. Proper waste treatment plants must be installed at industrial sites and arrangements must be made to dispose of the waste at specially marked zones on land. International standards should be followed for any waste that is essential to be dumped into the sea. The government should encourage the construction of treatment plants and non-abiding industries should be treated severely.

Cdre (R) Ali Abbas
Chief Editor



**The pessimist
complains about the
wind; the optimist
expects it to change;
the realist adjusts the
sails.**



LIEUTENANT GENERAL AAMER RIAZ, HI (M) PRESIDENT, CENTER FOR GLOBAL & STRATEGIC STUDIES (CGSS), ISLAMABAD CALLED ON VICE ADMIRAL (RETD) ABDUL ALEEM HI (M), DG NIMA



On 11th April 2022, Lieutenant General Aamer Riaz, HI(M), (Retd), President, Center for Global & Strategic Studies (CGSS), Islamabad visited Natioal Institute of Maritime Affairs (NIMA) at NIMA Headquarters, Islamabad and also had a meeting with Vice Admiral (Retd) Abdul Aleem HI (M), Director General, NIMA. Mr. Ashfaq Ahmed Gondal, Vice President (Federal Region), CGSS and Mr. Khalid Taimur Akram, Executive Director, CGSS were also present during the meeting.

A detailed briefing was given regarding the working of NIMA, and its various initiatives taken in the fields of maritime affairs, blue economy and maritime awareness.

Various areas of cooperation between NIMA and CGSS were also discussed including joint research activities, conferences, and policy dialouges, etc.

Moreover, both institutions agreed to increase collaboration in other areas of mutual interests, including Indian ocean, maritime security, and other related sectors.



Pak-China Vocational Institute Gwadar Starts Short Courses for Students

March 17, The Pak-China Technical and Vocational Institute Gwadar, has started short courses to provide vocational trainings to students. The first-ever modern vocational and technical training institute in the port city of Gwadar would accommodate 256 trainees at a time and provide training opportunities for at least 1,000 people every . The institute would also create job opportunities for local people, he added. The official said, the students belonging to Gwadar district would be enrolled free of cost to get modern vocational skills in the institution. The students after completing their course work would be sent to china for visit of various industries to get hands on exposure of modern technologies and industrial advancements. The province was going to embrace huge economic and employment opportunities after CPEC's operational phase and it was imperative to ensure quality education of the local masses to benefit from the game changer project, he added. the project was being built under CPEC at the total cost of \$ 10 million.

“The project will enhance skills of local population of Gwadar to participate in the growth of the port city and bring investment, business and tourism in the area,” he added. The Institute would help fulfilling maritime skilled manpower requirements of the Gwadar Port after the development of industrial projects including the Gwadar Port Free Zone, Export Processing Zone and other industrial and port-related projects. The Institute comprises a main building, having two blocks, an administration block, four workshops, cafeteria, hostels, parking areas, an examination block and a teachers lodging facility, he said. (Credits: The Nation)

Engro Foundation Becomes Largest Supporter of Indus River Dolphin

March 18, WWF-Pakistan and Engro Foundation, the social investment arm of Engro Corporation, have entered into a first-of-its-kind partnership for the conservation and management of the endangered Indus River dolphins. The project will focus on the core habitat of the 500km (approximate) Indus River stretch between Taunsa and Sukkur barrages. This stretch is a habitat of approximately 1,800 Indus River dolphins and overlaps with the Indus Flyway, which is a globally important route of migratory birds. The area has immense ecological and cultural

significance as the Guddu – Sukkur stretch is a protected area, Indus Dolphin Reserve, and was declared a Ramsar wetland under the Ramsar Convention on Wetlands and Key Biodiversity Area (KBA). Similarly, the Taunsa – Guddu River section is home to the second-largest Indus dolphin population of 660 individuals. The selected project area supports 90 per cent population of the Indus River dolphin, eight species of freshwater turtles, smooth-coated otters, hog deer and fishing cats. The project area and the adjoining wetlands support many endangered and threatened migratory birds as well. Considering that the Indus River dolphin is the top predator and keystone species of the river, saving and protecting it will support the conservation of the other important species including migratory birds and freshwater turtles.

As part of the project, Engro Foundation along with WWF-Pakistan will work towards protection, conservation and management for the viable population of the Indus River dolphin and its habitat, using internationally developed and tested tools and technological advancements. The partners will also be undertaking a comprehensive dolphin survey, along with awareness and outreach efforts to foster commitment from the government, communities, and other stakeholders, to achieve the desired project outcomes. Moreover, the project aims to create a strong relationship of the citizens (communities, civil society, students, teachers and youth) with the Indus River and its associated biodiversity through monitoring of the river's health parameters and biodiversity (dolphins, turtles, migratory birds). The project will help diversify the existing livelihoods of the fisherfolk and other indigenous wetlands-dependent communities to reduce pressure from the riverine resources. This project will be a part of the River Dolphin Rivers Initiative of WWF International under Freshwater Practice. The project is aligned with the Global River Dolphin Strategy, which was jointly developed by leading global conservation organizations such as the Whales and Dolphin Society, UK and IUCN/Cetacean Specialist Group, among others. (Credits: The Nation)

KPT Port Security Force Conducted Marine Security Drills

March 19, KPT Port Security Force conducted marine security drills with HPO Boats, Tugs & GRP for channel clearance exercise today. 80 Armed PSF both males &



females participated.

Workshop on International Ships & Ports Security Code was Held at KPT Staff College



March 20, A workshop on International Ships & Ports Security Code was held at KPT Staff College Lalazar, which was well attended by Karachi Port Security Force. GM (OP's) Rear Admiral Zubair Shafiq was present along with Commandant Port Security Force. The purpose was to apprise KPT's Port Security Force of International Ships & Port Security Code.

Gwadar May Gain Tax-free Status



March 21, Under the Gwadar Smart Port City Master Plan, the proposed special economic district (SED) is likely to gain tax free status. The Gwadar Development Authority (GDA) has prepared a draft to acquire tax-free status for the proposed SED for a period of 30-35 years under the master plan. The draft aims to provide similar benefits and incentives to foreign investors and traders given to local businesses in special economic zones across the country. Gwadar holds pivotal importance in the China-Pakistan Economic Corridor (CPEC), as a hub of connectivity. Through its deep-sea port, Gwadar will benefit not only China and Pakistan but also entire Central Asia by becoming the region's key entrepôt.

Pakistan Navy Seizes Narcotics in Joint Operation at Sea

March 23, In an intelligence based joint operation at sea, Pakistan Navy and office of Customs Collectorate Gwadar seized approximately 3000 kg narcotics at sea off Balochistan Coast. Afterward the seized narcotics valued nearing Rs. 750 million was handed over to customs for further legal proceedings, said a news release on Tuesday. The successful execution of intelligence based joint operation is a demonstration of Pakistan Navy's resolve to deter and disrupt illegal activities in maritime zone of the country. (Credits: Daily Times)

Exhibition Maritime Treasures of Pakistan Held at Alhamra



March 26, An art exhibition titled Maritime Treasures of Pakistan took place at Alhamra Art Gallery, the Mall. This exhibition took place under the patronage of Commodore Sohail Ahmed, the "Maritime Treasures of Pakistan" is a unique exhibition that is on display for the first time in Pakistan. The exhibition was inaugurated by Vice Admiral Javed Iqbal HI (M), S.Bt Former Ambassador to Tunis and PLO in the presence of Commodore Naveed Ahmed, Naval War College and Executive Director Alhamra Zulfiqar Ali Zulfi. It was a solo show created by Dr. Javeeria Nabahat Amin. Amin has bridged the gap between conventional art, literature, and technology. She has brought forth a unique triad of visual art, poetry, and augmented reality to give the viewer a multi-dimensional experience of her art. On the occasion, she said that her aim through this exhibition is to highlight these elements of art and bring about maritime awareness amongst the



nation.

Executive Director Alhamra Zulfiqar Ali Zulfi said that this is a unique exhibition of its kind in which the people are enjoying the work in it immensely. Zulfi said that Alhamra is a platform for artists to present their work to the world. This is our mission and it is our goal to make art and artists as popular as possible. It is pertinent to mention here that the statement art piece is inspired by Commodore Sohail Ahmed's proposal of claiming the waters of Junagarh into Pakistan's exclusive economic zone. (Credits: Daily Times)

Karachi Port Trust Organized a Seminar on "Blue Economy Potential"



March 26, Karachi Port Trust organized a seminar on "BLUE ECONOMY POTENTIAL" at KPT Staff College, Lalazar, Karachi. During the proceedings, the Chairman KPT highlighted the opportunities offered by Blue Economy. He said that economic paradigm has shifted to Asian region opening doors for new opportunities for maritime sector development in Pakistan under the CPEC umbrella. Participants of the seminar hailed from maritime professionals, academia and university students and they evinced keen interest in the proceedings. Chairman KPT shared that high level exchange of visits has taken place btw Federal Minister for Maritime Affairs Syed Ali Haider Zaidi and his counterparts for CAR's to access and divert their external trade to Karachi Port. Chairman KPT highlighted that Secretary General IMO in a meeting with Federal Minister for Maritime Affairs Syed Ali Zaidi at IMO Headquarters in London spoke at length about the need to realise the transshipment potential of Karachi Port. The guest speaker, Cdre. (R) Anjum Sarfaraz during an interactive session underlined the avenues available to maritime sector of Pakistan. The learned speaker having previously worked in KPT & Pakistan Navy, stressed upon Maritime Tourism development to be the game changer to spur the maritime economy. At the conclusion of the seminar on the potential of

the Blue Economy of Pakistan the Chairman KPT presented souvenir to the guest speaker Cdre (R) Anjum Sarfaraz. The Prime Minister of the Islamic Republic of Pakistan has declared the year 2020 as the Year of the Blue Economy. Many maritime initiatives were launched by Karachi Port Trust.

PMSA Conducts Rescue Operation at Gwadar

March 29, Pakistan Maritime Security Agency (PMSA) Base at Gwadar rescued a boat in distress off Gwadar. Rahim Baksh, a resident of Gwadar, reported that his boat Al Naveed registration number 1676B was missing along with 4 personnel including his son Naveed as Nakhuda. PMSA immediately dispatched its boat and proceeded towards the indicated position near SUR BANDAR. PMSA found the boat in distress. PMSA provided water, food and medicine to the crew and towed the stranded boat along with crew safely to Gwadar Fisheries Jetty.

Gwadar Eastbay to be Opened for Traffic from May 16



March 29, Gwadar Eastbay Expressway, the most important mega connectivity and road infrastructure project of \$179 million would be open for traffic from May 16. The completion of Eastbay Expressway being constructed under the China Pakistan Economic Corridor (CPEC) would provide primary connectivity of the Port and its Free Zone with the network of National Highways for smooth logistic transportation of import, export, and transit goods. An official of Gwadar Port Authority while elaborating the project details said the six-lane expressway would connect the port with the Makran Coastal Highway through the 2,281 acres free trade zone of Gwadar Port. (Credits: Business Recorder)



Second Phase of CPEC: Chinese Shelf Investment Plans due to Political Uncertainty



April 6, Chinese investors have put billions of dollar investment on ice, planned for second phase of China-Pakistan Economic Corridor (CPEC), due to political uncertainty in Pakistan. The key sectors, which have been identified for Chinese investments under CPEC-II, are textile, pharmaceutical industry, automotive industry, information technology, footwear industry, furniture industry, and agriculture sector. The Chinese companies, which have already invested in Pakistan's energy sector are unhappy with the treatment, they are receiving with special reference to payments against sold electricity. Chinese leadership had shared their concerns with the Prime Minister and other authorities, but payments have not yet been made to them as per commitment. (Credits: Business Recorder)

'CPEC SEZs to Usher in New Era of Industrial Development'

April 11, Special Economic Zones, a key component of China Pakistan Economic Corridor (CPEC), are expected to usher in a new era of industrial development and economic growth in the country in the days ahead. As both the Pakistani and the Chinese authorities at a recent interaction had reviewed progress on Special Economic Zones, they had a common notion that SEZs would help boost economic activity in the country, generate employment opportunities and earn foreign exchange. Officials of Board of Investment (BoI) Pakistan and Chairman National Development and Reform Commission (NDRC), China, Ying Xiong, the Zhejiang, Shan-



dong and Guangdong provinces had reiterated to encourage their enterprises to develop linkages with Pakistan's provincial BoIs and invest in the SEZs. Pakistan is currently developing five out of nine SEZs nominated under CPEC including Allama Iqbal Industrial City in Faisalabad, Punjab, Dhabeji SEZ in Sind, Rashakai SEZ in Khyber Pakhtunkhwa and Boston SEZ in Balochistan. Another fast-track SEZ is in Gwadar namely Gwadar Free Zone is also under progress. First phase of Gwadar Free Zone at an area of 60 acre land is already fully functional while the mighty second phase spanning over 2200 acres of land is under construction.

According to the CPEC officials, dozens of Chinese firms were operating at Pakistan's various economic zones as both the governments were actively engaged to carry forward the SEZ projects and making them operational at the earliest possible. The official said that over 84% of industrial area has been allotted in the SEZs, 46% of investment has been realized with 50% of it being Foreign Direct Investment (FDI). Experts believe that China Pakistan Economic Corridor is a rare opportunity for Pakistan to boost its economy and overcome deepening economic recession. Since, the country is facing trade deficit, depleting reserves, downing rupee value and number of other challenges; this initiative can turn things around leading the country to economic stability. They also expect from the upcoming government to fully focus these projects so the country could be able to reap the benefits of this historic project between China and Pakistan at the earliest possible. (Credits: Business Recorder)



UAE, Israel in Cooperation to Advance Maritime Transport Sector



April 4, The UAE and Israel have signed an MOU to boost transport cooperation, especially in the field of maritime trade, in a boost to the strategic partnership that has emerged from the signing of the Abraham Accords, between the two countries, as well as Bahrain and the US, in September 2020.

“The joint action between the UAE and Israeli sides is part of the framework of the two countries' interest in ensuring permanent economic security, stability, and prosperity, and to develop and strengthen sustainable national economies,” Suhail Al Mazrouei, the UAE Minister of Energy and Infrastructure was quoted as saying by official UAE news agency, WAM. “Both parties believe that boosting bilateral relations would help establish stability and peace in the Middle East, stimulate economic growth, enhance technological innovation and establish closer relations between the peoples of the region.” As soon as the accords were signed, Israeli shipping line ZIM lost no time in initiating services to DP World's flagship port, Jebel Ali. ZIM's India-East Med Express offered services from Israel and the East Med to the UAE while the ZIM Israel India Service began accepting cargo from Jebel Ali to Haifa. “Economic and commercial ties build and maintain political relations, and the MoU we signed aims at strengthening maritime transport links between Israel and the UAE and will allow a trade to flow efficiently, quickly, and at a low cost,” said Merav Michaeli, Israeli Minister of Transport and Road Safety. “I am proud that the relations between our two countries take another advanced step, allowing us to cooperate more closely and in a way that serves the interests of both sides and strengthens national economies.”

As early as 2019, before the accords even took place, DP World announced that its Yarımca Container Terminal in Turkey had added ZIM to the shipping lines it served. In September 2020, DP World's Group

Chairman and CEO, Sultan bin Sulayem, signed a few MOUs with DoverTower, a company owned by Shlomi Fogel, the co-owner of Israel Shipyards and Port of Eilat. (Credits: Seatrade News)

SGP Assumes Operational Control of Riyadh Dry Port



April 4, Saudi Global Ports (SGP), part of the PSA International group, formally assumed operations of the Riyadh Dry Port (RDP) on 14th March this year, under a new entity called SGP Riyadh. The successful takeover was completed in less than four months after the signing of a 10-year concession agreement between Saudi Railway Company (SAR) and SGP last December. SAR and SGP say they have worked closely together in an effort to retain manpower, transfer assets, and engage the port community ahead of the takeover, and closely consulted with a range of stakeholders, including the Saudi Chamber of Commerce, Tabadul, and Saudi Customs Authority. SAR and SGP have also purchased and commissioned more than 100 items of new container and cargo handling equipment to gear up for expanded operations.

Shortly SGP will be starting operations of the Riyadh Empty Yard to re-position empty containers for exports. The current RDP and container depot in Dammam will also undergo a series of upgrades to their terminal operating systems. Overall, SGP is expected to invest over SR 250 million in RDP.

Wan Chee Foong, Regional CEO of Middle East South Asia for PSA International, said, “The integration of RDP and Dammam Port is timely as the demand for more resilient and sustainable supply chain ecosystems increases. PSA is committed to working alongside our partners towards the Kingdom's vision to build an efficient logis-



tics hub for the region and beyond.”

SGP also operates the First and Second Container Terminals in King Abdul Aziz Port Dammam, the closest gateway port to the country’s economic center and capital city Riyadh. (Credits: The Maritime Standard)

Mawani and CMA CGM to Launch Jeddah Integrated Logistics Platform



April 4, The Saudi Ports Authority (Mawani) has signed an agreement with the French CMA CGM Group to build an integrated logistics platform at Jeddah Islamic Port that will include several specialized container depots and warehouses. The new facility will be established on 130,000m2 of land leased by the port administration to CMA CGM with the overall aim of boosting the Kingdom’s profile as a global logistics hub.

CMA CGM Inland Services (CCIS) and its logistics subsidiary CEVA have collaborated closely on this project which involves a US\$ 130 million investment over 20 years. The agreement will create more than 150 direct jobs and hundreds of indirect ones within the logistics sector.

The deal was signed by HE Omar Talal Hariri, President of Mawani, and Xavier Eiglier, CMA CGM Group’s Regional Director for the Middle East Gulf, Indian Subcontinent, Indian Ocean Islands, and Southern and Eastern Africa, in the presence of senior officials from both sides and a host of leading industry executives. (Credits: The Maritime Standard)

Heavy Lift Joint Venture Formed in Saudi Arabia

April 15, Netherlands-based Roll Group has announced a joint venture with Saudi Arabia-based FTE Heavy lift to provide heavy lift transportation and marine works for the Saudi Arabia market. The new company will be called Roll FTE and will be based in Dammam with operational yards in Jubail, Dammam, Jeddah, and Rabigh.



The joint venture plans on investing in marine assets which will be registered and based in Saudi to accommodate the growing number of projects in the country requiring a combined marine and land transportation solution. Nimalan Logeswaran, Regional Sales Director, Roll Group MEA, said: “By consolidating our equipment and expertise, we can offer our clients tremendous value with optimized solutions for their heavy lift requirements. Roll FTE will own both marine and land-based assets in the country thereby providing a one-stop-shop for our client’s needs in KSA.”

Roll Group was started in 2006 in the Netherlands, and it has since developed into one of the key providers of heavy haulage solutions worldwide for both land and sea, across the world, including the Middle East. FTE Heavy lift division was started in 2013 and since has grown to become the leading service provider for heavy lift transport and installation in Saudi Arabia. (Credits: The Maritime Standard)

DP World Global Container Volumes Up 1.7% in First Quarter



April 21, DP World Limited handled 19.3m teu across its worldwide portfolio of container terminals in the first quarter of 2022. First-quarter volume growth in 2022 was driven by the Asia Pacific, Middle East, Europe, Africa,



and Americas regions. At a consolidated level, DP World's terminals handled 11.3m teu during the first quarter of 2022, increasing 1.4% on a reported basis and up 1.1% year-on-year on a like-for-like basis. The group highlight was the Americas and Australia regions, which combined saw an increase in throughput of 4.3% to 2.7m teu. "As anticipated, 1Q2022 volume growth has softened due to the strong prior-year performance and uncertain macro environment," said group chairman and CEO Sultan Ahmed Bin Sulayem. "However, we continue to see robust growth in markets such as Asia Pacific and the Americas, while in Europe, London Gateway's strong performance has continued into 2022. The softer volumes Jebel Ali (UAE) is due to loss of low margin throughput where we remain focused on more profitable origin & destination cargo." The near-term volume outlook is mixed given the macro-economic and geopolitical environment, but bin Sulayem remains positive on the medium- to long-term fundamentals of the industry. On the broader portfolio, DP World continues to make strong progress in bolstering its product offering, allowing it to connect directly with cargo owners to deliver a range of unique logistic solutions. "Overall, we remain focused on integrating our recent acquisitions, growing profitability while managing growth capex, delivering on our 2022 leverage targets, and disciplined investment to cement DP World's position as the logistics partner of choice," he said. (Credits: Seatrade Maritime)

Bahrain's ASRY Inks Cooperation Agreement with Greece's ONEX



April 21, Bahrain's Arab Ship Shipbuilding, and repair Yard (ASRY) has signed an MoU with ONEX Shipyards Greece to share know-how on maritime repair and technology and explore future business opportunities. Greek Prime Minister Kyriakos Mitsotakis was guest of honor in Greece at a recent virtual ceremony co-located at

ONEX's yard on the island of Syros, and ASRY Bahrain, as Panos Xenokostas, President and CEO, ONEX Group, and Mazen Matar, ASRY Managing Director, and board member, signed the MoU. "The ONEX Group is one of the leading Greek business groups with a wide range of specialized companies such as ONEX Shipyards, whom we look forward to working with soon," said Matar. The Gulf ship repair industry has become increasingly competitive in recent years, with the entry of International Maritime Industries (IMI) in Saudi Arabia, which could emerge as the region's largest shipbuilding and repair yard. The UAE's Dubai Drydocks World, and Oman Drydocks Company, in Duqm, are also jockeying for positions.

IMI intends to transfer the construction of VLCCs to its Ras Al Khair yard, after seeing 50 staff members help build its first such vessel in Ulsan, Korea, in collaboration with JV partner, Hyundai Heavy Industries. In October 2020, Rado Antolovic, CEO of Dubai's Drydocks World, told S&P Global Platts that its yard had returned to almost full capacity as it emerged from the Covid slowdown and that the five-year outlook was positive as shipowners adapted to changing environmental rules. ASRY may have stolen a march on its competitors by partnering with a major Greek yard. According to the Union of Greek Shipowners (UGS), in 2021, Greek shipping represented 58% of the EU-controlled fleet and almost 20 percent of world deadweight capacity. "Greece remains the world's largest ship owning nation. With a fleet of 4,901 vessels, Greek shipowners' control 19.42% of global deadweight tonnage (dwt). In 2020, the Greek-owned fleet grew by over 4% to approximately 364 million dwt," the UGS said. "We are very pleased to join forces with the Arabian Gulf's leading maritime and industrial optimization yard ASRY. Together, we can implement best practices and exchange valuable know-how to benefit our shared clientele. Our alliance will leverage our competitiveness to address the global market," said Xenokostas. Founded in 1977, ASRY claims to be the Gulf's most experienced maritime repair and fabrication yard. Its range of facilities includes a 500,000 dwt dry-dock, two floating docks of 252 meters and 227 meters in length, 15 repair berths and a 250,000 square meter fabrication area. ASRY carries out repair and conversion for ships, rigs and naval vessels, and fabrication and engineering, often on offshore assets. Headquartered in New York, ONEX Shipyards & Technologies Group was established in 2004 and offers a diversified portfolio of activities in homeland security, aviation, maritime, ICT, IoT, and energy. (Credits: Maritime Network)



Yanbu Grain Terminal Project



April 4, An agreement between National Grain Company and HAIF Trading & Construction Company has been signed for the latter to construct a grain terminal in Yanbu Commercial Port. This will have a storage capacity of 156,000 tons in the first phase, consisting of 12 silos with a total capacity of 96,000 tons and a warehouse with a capacity of 60,000 tons. The terminal will also include a 650m long conveyor belt, unloading equipment with a discharge capacity 800 tons per hour, and a dedicated area for loading trucks and packaging. The terminal will be designed to handle, store, and distribute up to 3 million tons of grains annually, including barley, corn, and soybeans. The project aims to accelerate the loading and discharge of essential grains, with the new terminal being the first regional center for grains in the commercial port of Yanbu. Mawani believes the port's geographical location will help enhance food distribution in the region by connecting the Kingdom with global sources of grains. In addition, the terminal will contribute to importing, transporting, and distributing grains by enhancing supply chains capabilities in Saudi Arabia and providing logistical support for all importers in the public and private sectors. The National Grains Company was formed in 2020 as a joint venture between SALIC and Bahri to contribute to achieving Saudi Arabia's food security strategy. (Credits: The Maritime Standard)

New Container throughput Higs for Saudi Ports

April 15, Saudi ports saw container throughput increase by 2.5% in March this year compared with the same month in 2021, handling a total of 865,000 containers. Container transshipment activity was especially buoyant jumping by 17%, to 503,000 containers, against March last year.

In other sectors the number of passengers increased by 84.2%, to 98,000, and the number of cars increased by



15.5% to 78,000 units. However Saudi ports recorded a decrease in imported livestock, which dropped by 73.4% to a total of 105,000 head. Total cargo throughput during the month was around 25 million tons. This was more or less the same as the same period in 2020. One of the star performers was Yanbu Commercial Port, which handled more than 500,000 tons of general cargo during March 2022. This represented an 85% increase compared to the 271,000 tons recorded at the same time last year. (Credits: The Maritime Standard)

Safeen Feeders Signs with Saif Powertec for Bangladesh Bulk Cargoes



April 18, The contract will use up to eight 55,000 dwt supramax dry bulk vessels over a 15-year period.

The new bulk shipping offering will also oversee cargo operations to the Indian subcontinent, South-East Asia, and other global destinations, Abu Dhabi's AD Ports Group, which owns Safeen Feeders, said. "Leveraging Safeen Feeders' expertise as a leading maritime service provider, as well as the advanced capabilities of its modernized fleet, Saif is well-positioned to accelerate the trade of dry construction materials between the UAE and Bangladesh, along with other dry cargo goods to key markets across the region and beyond," Capt. Maktoum Al Houqani, CEO of maritime cluster, AD Ports Group, said.



The International Monetary Fund forecasts real GDP growth of 6.5% for Dhaka in 2022. With a population of 168m people, Bangladesh's economy was booming until the coronavirus pandemic hit, after witnessing real growth of 8.2 percent in 2019, and is now preparing for a new burst of development. Platts said that Bangladesh was the world's fifth-biggest wheat importer in 2019. Set up in 2020 in a tie-up with Singapore's Bengal Tiger Line, Safeen Feeders has launched two main container services. The weekly UAE Indian Sub-Continent Gulf (UIG) service is a "pendulum" service of three 1,700 teu vessels on a 21-day rotation calling at Khalifa Port, Sharjah, Bahrain, Dammam, Umm Qasr, Karachi, Mundra, Kandla, and Nhava Sheva. Its weekly UAE Coast & Oman (UCO) service offers a 1,000 teu vessel calling at Khalifa Port, Sharjah, Ajman, Umm Al Quwain, Ras Al Khaimah, and Sohar. In a fact sheet shared with Seatrade Maritime News, Safeen Feeders said that, as of March, its container fleet consisted of nine container ships, eight owned and one chartered.

"We are pleased to announce the start of our close partnership with AD Ports Group's Safeen Feeders, which has greatly enhanced our capabilities as Bangladesh's sole terminal operator to facilitate the movement of dry cargo at the international level," Tarafder MD Ruhul Amin, MD Saif Powertec, said.

According to Safeen Feeders' own website, in addition to 18 tugs, its fleet also includes seven pilot boats, seven speedboats, one buoy maintenance vessel, one diving supply vessel, and two oil spill response boats. Safeen Feeders' bulk carriers will be offered on a bareboat or time charter basis. (Credits: Seatrade Maritime)

Kotug takes over OSV Operator Seaways



April 19, Dutch tugboat specialist Kotug International is boosting its offshore portfolio by acquiring the Dubai-headquartered owner and operator of offshore support vessels, Seaways for an undisclosed sum. The intended acquisition of Seaways marks the largest in

Kotug's history and is part of the company's strategy to expand its business in assisting floating facilities such as FSO, FPSO, FLNG, FSRU, and SPM terminals. In addition, Kotug said the move will further consolidate its position in this niche market that is expected to grow as new offshore floating projects emerge in response to rising energy demand. Established in 1995, the West Africa-focused Seaways owns and operates a fleet that comprises of AHTs, fast crew suppliers and cargo barges, and provides terminal management services. The acquisition is expected to be completed in the second half of 2022, and both companies will now work on customary governmental and other approvals, with the aim of completing the transaction by July 2022.

Ard-Jan Kooren, president and CEO of Kotug International, commented: "Over the last years, we have already heavily invested in offshore support vessels and people. The integration of the services and assets of the two leading companies will bring compelling synergy opportunities, leading to more efficient operations and enhancing significant value creation for our global customers. It strengthens our presence in West Africa and paves the way to enter other emerging markets." (Credits: Splash247)

NPCC Seals Taiwanese Wind Farm Deal After Sapura Contract Termination



April 19, National Petroleum Construction Company (NPCC), part of National Marine Dredging Company (NMDC), has won a contract to install monopile foundations on the Yunlin offshore wind farm in Taiwan. The UAE-based fabrication giant will pick up where Malaysian offshore contractor Sapura Energy left off after it terminated the contract earlier this year, citing unresolved technical and operational issues. The contract, worth AED363m (\$99m) has been awarded by project develop-



er Yunneng Wind Power, a subsidiary of wpd offshore. The Yunlin offshore wind project is located in the Taiwan Strait, between 8 and 17 km off the west coast of Taiwan. The 82 sq km project area will comprise 80 wind turbines with a total capacity of 640 MW. The project was initially expected to be completed in September 2020, but completion was delayed to September 2023. Once onstream, it will produce 2.4 TWh of renewable electricity per year, enough to serve the power needs of 605,000 households. (Credits: Splash247)

UAE Recognizes Croatian Registry of Shipping for Ship Surveys



April 19, The Maritime Administration at the UAE's Ministry of Energy, and Infrastructure (MOEI) has signed an MOU with the Croatian Register of Shipping (CRS), to allow the CRS to issue maritime statutory certificates and carry out survey works to ensure the eligibility of ships to sail safely.

As a result of this recognition, all classification societies under the International Association of Classification Societies (IACS) are accredited by the UAE, the MOEI said in a statement.

"By recognizing the Croatian Register of Shipping, we continue our cooperation with major international classification societies accredited by IACS," Sheikh Nasser Al Qasimi, the MOEI's assistant undersecretary for infrastructure and transport regulations, said. "This will enable the UAE's maritime sector, represented by the MOEI, to enhance its control over the seaworthiness of national ships."

The CRS traces its origins back to the 19th century. While the Yugoslav Register of Shipping was founded in 1949, Croatia separated from Yugoslavia in 1992, leading to the creation of an independent CRS.

Damir Roje, General Manager, CRS, see the UAE as a gateway to the Middle Eastern market. "Its ports are [among] the busiest in the region, which allows us to

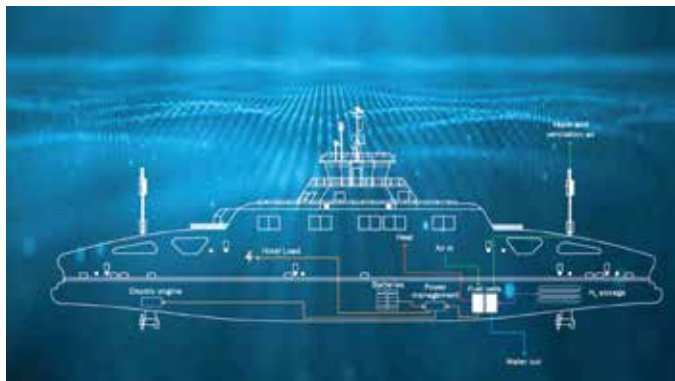
receive and serve a large number of ships from neighboring countries," he said. (Credits: Seatrade Maritime)

Expected ships in Port Qasim

<i>ETA by AIS</i>	<i>Type</i>	<i>Vessel</i>
May 14, 13:00	Bulk Carrier	IVS PRESTWICK
May 14, 17:00	Bulk Carrier	MANDARIN TRADER
May 17, 00:01	LNG Tanker	TRINITY ARROW
May 18, 12:00	Bulk Carrier	ALONISSOS
May 22, 00:01	Bulk Carrier	BEKS MUNEVVER
May 23, 12:00	Bulk Carrier	NEFELI
May 26, 18:00	Bulk Carrier	KEN STAR
May 31, 02:00	Bulk Carrier	ATLANTIC SAKURA
Jun 8, 15:00	Bulk Carrier	ZOE



Ballard Fuel Cell Module Granted Type Approval by DNV



April 6, Ballard Power Systems has received Type Approval from DNV for its marine fuel cell module, FCwave. The scalable 200kW power module could provide a plug-and-play replacement for conventional diesel engines and could also become an integral component in ships' hybrid power systems. It is suitable for a range of ship types as well as certain applications onshore, the Nasdaq-listed company said. Mark Kammerer, EMEA Sales and Business Development Director, Off-road, told Seatrade that the first installations are likely to be on short-sea ships, notably ferries, but will be extended to wider sections of the world fleet in due course. The fuel cells, which are 'scalable' and can be installed in parallel, are also potentially suitable to provide electrical energy in ports – both for shore power connections and for the re-charging of batteries. The power density, he said, is comparable with diesel. FCwave has been developed at the company's Marine Center of Excellence in Hobro, Denmark where manufacturing will also take place. The location has been chosen partly because Nordic countries generally are likely to be among the first takers. One of the most promising markets in Norway, which has access to cheap hydrogen through hydropower and has some of the strictest zero-emission targets, notably in fjords and across the ferry network. Commenting on the DNV approval, Søren Østergaard Hansen, General Manager, Marine, at Ballard Power Systems Europe A/S, said: "Type Approval from DNV is highly important in building market confidence in hydrogen fuel cells and validates that FCwave is designed, tested, and prepared for installation. The module enables us to deliver the first deployment-ready fuel cell solution, capable of helping the marine sector take the next steps in implementing zero-emission operations."

Ballard proton exchange membrane (PEM) fuels cells are

already used in the electrification of other transport modes, including buses, trucks, trains, cars, and forklift trucks. Construction and earth-moving vehicles are also in the frame. (Credits: Seatrade Maritime)

UN Unveils Plan to Prevent Stricken Oil Tanker Disaster off Yemen Coast



April 8, David Gressly outlined plans to address the threat posed by the FSO Safer, described as a time bomb sitting off Yemen's Red Sea coast. The 45-year-old floating storage and offloading (FSO) facility holds 1.1 million barrels of oil or four times the amount of the Exxon Valdez - the tanker that caused one of the greatest environmental disasters in the United States' history. It is at imminent risk of spilling a massive amount of oil due to leakages or an explosion. If it were to happen, the spill would unleash a massive ecological and humanitarian catastrophe centered on a country already decimated by more than seven years of war," said Mr. Gressly.

The FSO Safer has been moored some 4.8 nautical miles southwest of the Ras Issa peninsula on Yemen's west coast for more than 30 years.

Production, offloading, and maintenance ceased in 2015 due to the conflict between a pro-Government Saudi-led coalition, and Houthi rebels, and the vessel is now beyond repair. Mr. Gressly warned that a significant spill would have devastating consequences for Yemen and beyond. Some 200,000 livelihoods in the already war and crisis-wracked country could be instantly wiped out, and families would be exposed to life-threatening toxins.

"A major oil spill would likely close, at least temporarily, the ports of Hudaydah and Saleef," he added, referring to critical entry points for food, fuel, and supplies. The disaster would have a severe environmental impact on water, reefs, and life-supporting mangroves. Saudi



Arabia, Eritrea, Djibouti, and Somalia are also at risk. Clean-up alone would cost \$20 billion. “That does not count the cost of environmental damage across the Red Sea. Or the billions that could be lost due to disruptions to shipping through the Bab al-Mandab Strait, which is also a passageway to the Suez Canal,” Mr. Gressly told journalists. “Think of the Ever Given”, he said, referring to the huge container ship which ran aground in the Suez Canal a year ago, disrupting global trade. An UN-coordinated plan aims to address the threat, with an overall cost of around \$80 million. Yemen’s warring sides, which last week implemented a two-month ceasefire, have signaled their support, as have senior UN leaders and some countries on the Security Council. The plan has received the backing of the Yemeni Government, based in Aden, while a memorandum of understanding has been signed with the de facto authorities in the capital, Sana’a, who control the area where the FSO Safer is located. The plan covers two tracks, which will run simultaneously. It calls for installing a long-term replacement for the decrepit tanker within an 18-month period, and an emergency operation to transfer the oil to a safe temporary vessel over four months, thus eliminating any immediate threat. Both the FSO Safer and the temporary vessel would remain in place until all the oil is transferred to the permanent replacement vessel. The FSO Safer would then be towed to a yard and sold for salvage. To raise the funds, a pledging conference in May, co-hosted by the Netherlands, is set to be announced shortly. Mr. Gressly will travel to Gulf capitals next week to discuss the plan and drum up financial support. He underlined the urgent need for funding, stressing that without it, the “time bomb” will continue to tick. “My particular concern is really we need to finish this operation by the end of September to avoid the turbulent winds that start in the latter part of the year...increasing the risk of a break-up, and also increasing the risk in conducting any operation,” he said. “So timing is tight.” (Credits: UN News)

IACS: New Requirements for Cyber Safety

April 21, The International Association of Classification Societies (IACS) adopted new requirements on cyber security to ensure the reliability and functional effectiveness of onboard, safety-critical, computer-based systems. IACS identified at an early stage that, for ships to be resilient against cyber incidents, all parts of the industry needed to be actively involved, and so convened a Joint Working Group (JWG) on Cyber Systems which helped identify best practices, appropriate existing standards in



risk and cyber security, and a practical risk-based approach. Building on this extensive collaboration, and utilizing the experience gained from its existing Recommendations, as well as developments at IMO including, in particular, IMO Resolution 428(98) applicable to in-service vessels since the 1st of Jan 2021, IACS has adopted two new IACS Unified Requirements (URs) on the cyber resilience of Ships.

UR E26 aims to ensure the secure integration of both Operational Technology (OT) and Information Technology (IT) equipment into the vessel’s network during the design, construction, commissioning, and operational life of the ship. This UR targets the ship as a collective entity for cyber resilience and covers five key aspects: equipment identification, protection, attack detection, response, and recovery. UR E27 aims to ensure system integrity is secured and hardened by third-party equipment suppliers. This UR provides requirements for cyber resilience of onboard systems and equipment and provides additional requirements relating to the interface between users and computer-based systems onboard, as well as product design and development requirements for new devices before their implementation onboard ships. These URs will be applied to new ships contracted for construction on and after 1 January 2024 although the information contained therein may be applied in the interim as non-mandatory guidance. (Credits: Safety4Sea)



Lamprell Inks MoU for Scottish Offshore Floating Wind Project



April 11, UAE-based offshore shipyard Lamprell today announced that it has signed a Memorandum of Understanding (MoU) with energy services company NOV, to support its delivery of three 1 gigawatt (GW) offshore floating wind farms for Cerulean Winds. Under the MoU, NOV will employ Lamprell as its provider for the fabrication, assembly and outfitting in relation to the construction of NOV designed tri-floaters to be used as floating foundations for the three wind farms, Lamprell said in a regulatory filing to the London Stock Exchange, where it is listed. Formerly known as National Oilwell Varco, NOV is an American multinational corporation based in Houston, Texas, specializing in upstream oil and gas equipment and components.

In June 2021, Cerulean applied to develop a 3GW-plus floating wind turbine project at sites West of Shetland and in the Central North Sea, Lamprell said in a statement. "NOV was named as the first of Cerulean's major delivery partners for fabrication for this proposed 200-plus turbine development and will act as the exclusive provider of floating and mooring systems. If approved, the project is anticipated to be commissioned in 2026."

Floating wind is seen as a technology that could gain momentum, allowing wind turbines to be mounted on floating structures, instead of using fixed foundations in the sea. Tethering these structures to the sea-bed prevents them from floating away from their designated locations to land or into shipping lanes. "Today represents an important milestone for our floating wind ambitions. Our long history in the traditional oil and gas sector has stood us in good stead for our transition into the renewables space where we have been active since 2007," said Lamprell CEO, Christopher McDonald.

"Offshore floating wind is a natural progression for the

business and represents another step in the realization of our strategy and establishing our credentials in the UK market. We look forward to supporting NOV in the development of this transformational project for the industry and Scotland." Cerulean says it is an authority in floating offshore developments with an ambition to develop 10GW of generation within the next five years.

In January, the UK government awarded Guildford-based Cerulean GBP825,000 to develop an integrated system between the mooring, floating foundation and wind turbine for deployment at an offshore oil and gas facility in the North Sea or West of Shetland, as part of GBP31 million of grants disbursed to support the development of the UK floating wind. "We are very pleased to have Lamprell on board with us as a partner for Cerulean's major infrastructure development. Lamprell's track record in offshore wind will complement our UK and European infrastructure and personnel and we look forward to making a joint contribution towards decarbonizing the UK Offshore sector," said Joe Rovig, President of NOV Rig Technologies. Lamprell has other Scottish interests. Last month, it signed a capacity reservation agreement for the Moray West Offshore Wind Farm. In 2014, Dubai Drydocks World signed an agreement to build a second offshore wind converter platform for TenneT, the Dutch-German transmission-grid operator. (Credits: Seatrade Maritime News)

Oman 100th State to Ratify the Maritime Labour Convention



April 12, Oman has become the 100th nation, and the first member of the Gulf Cooperation Council (GCC), to ratify the Maritime Labour Convention (MLC) 2006, designed to ensure the right of all seafarers to decent employment. An International Labour Organization (ILO) press release said the move meant that more than 96% of the world's



gross shipping tonnage was now covered by an internationally agreed set of standards, which also applied to many seafarer labour supplying countries of the world. “Joining the MLC, 2006 is a clear confirmation of the Sultanate of Oman’s longstanding tradition as a prominent maritime nation in the region. This ratification reaffirms the commitment of my country to uphold the provisions of the Convention to achieve decent work for seafarers,” said Idris Al Khanjari, Oman’s Ambassador to the UN in Geneva, who formally submitted ratification documents on 29 March. “We shall spare no efforts in safeguarding seafarers’ labour rights.”

The coronavirus pandemic has thrown the plight of neglected seafarers all over the world into stark light, and the accession of the MLC by an Arab member of the ILO, at a time when GCC nations—and in particular Qatar, in the build-up to the FIFA World Cup 2022, taking place in and around Doha later this year—have been accused of mistreating labourers, is timely. Adopted by the ILO member states in 2006, the MLC sought to unify and standardize a disparate set of industry labour standards that no longer reflected contemporary working and living conditions, had low ratification levels, or inadequate enforcement and compliance systems. It was amended in 2014, 2016 and 2018. “Combining these often very detailed instruments into one Convention makes it easier for countries to regulate and enforce consistent industry norms and standards, worldwide,” the ILO said. Oman is moving ahead with the effort to consolidate several sectors of the economy into major groupings, with state-owned transport group Asyad set to integrate all aspects of the maritime industry under one umbrella. Last year, it announced plans to restructure its operations in order to focus on logistics, port services, free zones, shipping, drydocks and e-commerce, with the transport ministry taking over supervision of the company’s land transportation activity, official sources said. “As we saw throughout the pandemic and the crew change crisis, governments who have ratified the Convention must stand by their words and take action to protect seafarers’ rights,” said Guy Platten, secretary-general of the International Chamber of Shipping. “Now more than ever it is vital that more governments ratify this important Convention and I hope that we will reach 150 signatories soon to bring it in line with the three International Maritime Organization pillar conventions of SOLAS, STCW and

MARPOL.” (Credits: Seatrade Maritime News)

Bluesoul Inks Scrubber Systems Contract with ADNOC



April 19, Shanghai Bluesoul Environmental Technology announced that the company had received orders from ADNOC for scrubber systems. The deal made ADNOC the second international line establishing cooperation with Bluesoul this year following a contract with MSC. ADNOC runs the largest energy transportation fleet globally and the first batch of energy system upgrading products will be exhaust gas cleaning systems (scrubbers) for vessels, according to Bluesoul.

Bluesoul has won over 100 sets of scrubber orders so far. Its various research projects in the field of marine environmental protection are supported by national and local resources. (Credits: Seatrade Maritime News)

Expected ships in Karachi

ETA by AIS	Type	Vessel
May 21, 07:00	Bulk Carrier	YI CHUN 15
May 22, 22:00	Bulk Carrier	EFFIE
May 24, 12:00	General Cargo Ship	CERULEAN
May 27, 18:00	Bulk Carrier	AFRICAN IBIS
May 31, 12:00	Bulk Carrier	U GLORY



MARKETS WILL REWARD DECARBONIZATION FIRST MOVERS ... TIME FOR LEGISLATORS TO DO THE SAME

By Heather Ervin



There is a growing consensus that immediate action is needed to decarbonize shipping, but much of the debate remains focused on alternative fuels that won't be fully ready for another decade. Failing to prioritize “clean tech” that is capable of reducing shipping's emissions today would be a mistake—both for shipowners who would miss on a business opportunity, and for regulators who want to see meaningful change for the planet.

Will it be ammonia, hydrogen, or green methanol? The debate on which future fuel will come to dominate markets and power fleets on the world's ocean has sparked heated debates across the maritime sector, from maritime conferences to companies' boardrooms. While there is no doubt that new carbon-free fuels will be needed to achieve net zero shipping, the reality is that it will likely take at least 10 years to develop the fuels, engines, and supply infrastructure on the scale necessary to supply the global commercial fleet. The planet simply cannot wait for that long, and nor should the industry.

The good news is that solutions do exist today. The future fuels debate risks overshadowing other options that should be at the heart of shipping's decarbonization journey, which include various clean technologies that are already available to reduce emissions from ships, such as wind propulsion, air lubrication and advanced hull coatings.

They represent one of the best ways to start decarbonizing shipping today, and as such, anyone making decarbonization plans, from shipowners making investment decisions, to political leaders making regulatory choices, should treat them as a priority. These decision makers have a steep mountain to climb—and should be looking for anything that makes the journey smoother now.

The Business Case for Clean Tech

Given the level of investment involved, the temptation is high for shipowners to sit back and wait until we



THE IMPORTANCE OF SCIENCE A

have a clearer indication of which fuel will come to dominate the markets. But inaction at this stage would be a mistake—for the right thing to do for the planet is also a decision that makes business sense, now and in the long term.

The first and most immediate benefit of clean tech is obvious: by improving energy efficiency through renewable energy sources such as the wind, ships need to burn less fuel to achieve the same result, which cuts costs and improves their carbon emissions performance.

For example, our Seawing system, an automated parafoil that harnesses wind power to lower the engine effort for commercial ships, reduces emissions by an average of 20%, and up to 40% on certain routes. Through reduced fuel costs, we estimate that the investment will pay for itself after 2 to 5 years depending on the routes and the types of ships. Furthermore, as the industry is faced with volatile fuel prices, burning as little fuel as possible is already a major advantage.

In the longer term, clean technologies will enable ships to remain compliant with energy efficiency regulation as it is progressively tightened. For shipowners, this may make the difference between keeping their vessels trading, or seeing their assets being stranded. Ultimately, investing in clean technologies will buy shipowners some vital time to analyze emerging fuels and market trends, and make better informed decisions when the time comes for critical investment on new vessels and alternative fuels.

Time for Regulators to do the Right Thing

Just like steering a giant containership into a sharp turn is a delicate operation, transforming the global fleet of over 50,000 commercial ships to achieve net zero is complex and will take decades to achieve. And just like changing the course of a vessel is easier if the necessary manoeuvres have started in time, being a first mover on decarbonization will pay off, and today's pioneers will be one move ahead in the new playing field for shipping.

Now is the time for regulators to support this trend, by providing the right incentives that will encourage immediate actions in the industry. The time has come to change the paradigm and include renewable energies in the regulatory landscape. Renewable energy sources should be considered on equal footing as alternative fuels in any regulatory frameworks, including any carbon intensity index to come, and any source of energy should be assessed on its full life cycle—so that shipowners and their vessels are assessed on the amount of carbon they actually emit, not just on the fuel that power their engines.

In other words, we need to move from a fuel-centred approach to an energy-centred approach, that is based on results and isn't biased towards fuels.

So far, this period of major transformation for shipping has been led more by the industry than by regulators, but it's not too late for them to act, and recognize the value of all possible tools that will get us closer to the GHG reductions the planet needs.

***About the Author:** Heather Ervin is the Editor in chief at Simmons-Boardman publishing corporation for marine log magazine.*

(Source: Marine Log)



TECHNOLOGY FOR PAKISTAN'S MARITIME SECTOR THE IMPORTANCE OF SCIENCE AND TECHNOLOGY FOR PAKISTAN'S MARITIME SECTOR

By Anam



“Today’s world is divided into two segments; technologically advanced countries and technological-ly developing countries. The benefits of advancing Pakistan’s maritime science and technology sector are manifold, both for the economic prosperity of the country, as well as for the sustainability of its natural marine resources.”

As the world advances into a global village, the need for science and technology is seen now more than ever before. The maritime sector has been no exception to this. The maritime sector has driven the development of various types of technologies for its advancement and the benefit of the global population at large. Furthermore, societies have played a crucial role in the growth of the maritime industry as a result of developing their scientific research capabilities and analyzing their survey records to keep up with the state of the art technology in the maritime sector.

The maritime sector encompasses but is not limited to shipping, fishing, ports and harbors, search and rescue, satellite technology, and water sports.

Ships have been an integral component of globalization as ninety five percent of the total global trade is carried out via ships around the world. Countless naval architects and marine engineers have contributed greatly towards the advancement of the shipping sector around the world. Over the years, ships have advanced from sail to steam and from steam to internal combustion engines. They have also progressed from wood to steel and to larger and more specialized vessels. Today, technologies such as unmanned ships, smart shipping, energy management, and green technologies have paved the way for the shipping industry.

Marine fisheries have made use of science and technology to study marine organisms and the environments they reside in. The field of fisheries has also used modern technologies in order to harvest, handle, process, and distribute marine resources and their products. Some of these techniques and technologies include aerial and sail drones, satellite tags, underwater vehicles, acoustics, research vessels, genetics, bio-preservation, enzyme application, sous-vide cooking, extrusion, radiofrequency thawing, and IR radiation.



The incorporation of novel technologies in ports and harbors has also rendered the entire supply chain more efficient and has maximized the benefits of connectivity and digital transformation by enabling a seamless flow of data. Advancements in science and technology in ports and harbors have resulted in technologies such as simulated training, the Internet of Things, 5 G networks, drones, and augmented reality.

Search and rescue in a continuously dynamic space such as the marine environment poses many challenges and requires an enhancement in the efficiency of SAR through methods involving improved modelling of drifting objects as well as optimized search assets allocation. Some examples of emerging SAR technologies include MEOSAR, amphibious aircraft, drones, and Automatic Identification Systems.

The role of satellites in the maritime industry has been imperative for various fields including piracy, distress, navigation, oil spills, etc.

The importance of science and technology for emerging trends in water sports cannot be ruled out as most developed countries earn a lot of foreign exchange by using modern technologies while hosting regional, continental, and world championships as well as the Olympics. The use of science and technology to view watersports such as swimming, sailing, windsurfing, rowing, canoeing, jet skiing, water skiing, waterboarding, parasailing, and diving also increases the tourism potential of a country.

Today's world is divided into two segments; technologically advanced countries and technologically developing countries. While technologically advanced countries have been able to use their scientists and engineers for rapid economic growth, technologically developing countries rely on developed countries for most of their needs, further increasing the poverty gap.

The benefits of advancing Pakistan's maritime science and technology sector are manifold, both for the economic prosperity of the country, as well as for the sustainability of its natural marine resources. A few reasons Pakistan lags far behind in the science and technology sector include a lack of funding allotted for the development of the sector and due to the low quality of education disseminated to students in Universities and Institutes.

There is a dire need to address all of the reasons Pakistan's maritime sector has not been able to advance in the science and technology domain as well as the rest of the world. Furthermore, there is a need to come up with solutions in order to make the maritime sector of Pakistan flourish through science and technology. This needs to be done via open discussions, research, and most of all with a passion for the development of Pakistan's true maritime potential.

About the Author:



The writer is a Researcher – Marine Fisheries and Conservation at the National Institute of Maritime Affairs



CHINESE SUBMARINE DIPLOMACY – INDIAN OCEAN

By Mr. Kamran Hashmi



China has entered IOR by selling its submarines to four countries in a rapid manner. Myanmar, Bangladesh, and Thailand will be operating Chinese Submarines apart from Pakistan.

Submarine sales are a powerful weapon in the game of international power and influence. For the past few decades, the submarine export market has been dominated by France and Germany. These big players are already being challenged. These include new entrants South Korea, Spain, and Japan, and reemerging established players like Sweden and Russia have a stake in submarine exports. Now China is joining the club and rapidly rising towards the top. China is increasingly combining it with the Belt and Road Initiative in ways that shape the geopolitical landscape. China is already supplying four nations with a total of 12 submarines.

Recently China supplied a conventional submarine Type-035 Ming Class to Myanmar in December 2021, which is commissioned as UMS Minye Kyaw Htin. This is the second Chinese submarine for Myanmar the first one was received in 2019. Both submarines are relatively old types, and second-hand. The Chinese submarine for Myanmar is more complex than most in a few ways. Although China has been Myanmar's main defense supplier for many years, it had not been in the frame for submarines. Instead, India and Russia had. Externally, it might be seen as a stab in the back to Indian efforts.

China is already supplying four nations with a total of 12 submarines. The largest, and likely most sophisticated, deal is for Pakistan. The Pakistan Navy is getting eight Type-039B Yuan Class submarines, with four being built locally. These missile-capable submarines come with AIP (Air Independent Power). Thailand is getting another Yuan, designated S26T. Bangladesh also supplied 2 submarines of ex-PLAN Type-035 Min Class boats, which are less capable than the Yuans.



China's surprise submarine move shows its growing power in Chinese submarine sales in the Indian Ocean. The operations & maintenance of submarines by Myanmar, Bangladesh, and Thailand will be a challenging task for these countries.

About the Author:



Mr. Kamran Hashmi is working as a Research Fellow at Indian Ocean Study Center (IOSC) at NIMA.

Cover Story

The picture on the title page is the Peer Ghaib waterfalls situated in the Bolan valley, of Baluchistan, Pakistan. Peer Ghaib waterfalls are one of the most well-known tourist destinations. Located 70 kilometers away from Quetta, the waterfall is a rocky mountainside and it makes its way through streams and ponds among the palm trees. Some legends believe that Peer Ghaib and his sister Bibi Nani arrived here to convert the locals to the religion of Islam. This waterfall is a center of attraction for tourists because of its scenic landscape and peaceful atmosphere. The lush green grazing lands around and the streams with clear water enhance the beauty of the majestic waterfall.



PAKISTAN MARITIME MUSEUM, KARSAZ, KARACHI: EDUCATE, ENTERTAIN AND INSPIRE



Pakistan Maritime Museum is home to a collection of objects and artifacts relating to the Pakistan Navy and its history. Maritime Museum hosts events and exhibitions of several unique galleries. The museum is spread across 18 acres of land with a beautiful park, a library, and an auditorium with a capacity for 60 people. Main building with three floors comprising six different galleries.

The main purpose of the establishment was to promote awareness among the general public about the navy and its history, artifacts, defense, and equipment, which are strongly linked to the country's heritage. The maritime history gallery highlights the importance of historical events concerning seafaring exploits and their greatest accomplishments. Models of naval ships, aircraft, and submarines are on display. A small space in this gallery is dedicated to the expeditions of the Pakistani research station in Antarctica, named Jinnah Antarctic Station. This gallery contains personal belongings, uniforms, and photographs of the former chiefs of the naval forces. One part is dedicated to "The Quaid", where you can witness the crockery used by Quaid-e-Azam at PNS Dilawar in 1948, along with letters of correspondence with President Ayub Khan. Other memorabilia depicting Quaid's long association with the navy is also displayed here.

An open-air museum, with a large lake, Pakistan Navy Community Centre, Cafeteria, Praying area, and Playland. The Ex-PNS Mujahid minesweeper ship, followed by the Ex-PNS Hangor historic submarine, and the Ex-PNS barge. An Atlantic aircraft, vintage guns, and torpedoes, as well as the saluting gun and coffin carriers of Quaid-e-Azam Muhammad Ali Jinnah and Liaquat Ali Khan.

Out of the above, you can tour the submarine, the ship, and the aircraft from the inside. The core purpose to write about the visit is to enhance and encourage the educational trips at the school and college levels.

Your's Sincerely
Syeda Nida Hamid (MS) Student



THREATS TO THE MANGROVE



Pakistan's mangrove forests are beginning to contract at an alarming rate due to city struggle and climate change. However, efforts are being made to restore these ecosystems along the coast of Sindh and Balochistan. Pakistan has 0.6 million hectares of mangrove ecosystem, which is probably the 10th largest in the world. They are distributed along the coast of Sindh and Baluchistan. The largest number, about 95% is found in the province of Sindh.

The mangrove forests under the management of the Sindh Forest Department and the Port Qasim Authority are classified as 'protected forests.' On the other hand, the mangrove swamps in Sindh that fall under the control of the Revenue Board are declared 'Government'.

It is very important from the ecological perspective. Because they provide ideal breeding grounds for many species of fish, jellyfish, sponges, shrimps, crabs, and other mussels. Many species of fish live even under mangroves most of their children's lives and swim in the sea when they are older. These marine animals trust deeply the food chain provided by these coastal marshes. In addition, crabs and shrimps also feed on the soft mud beneath mangrove roots.

Following activities are threatening mangroves need to reduce them.

- Deforestation is a major threat to mangrove swamps in Sindh and Balochistan.
- Mangroves are regularly cut down to make way for city development and infrastructure
- Pollution is one of the main causes of the decline of mangroves worldwide
- The global problem of overfishing has also led to the destruction of mangroves
- The reduction of coral reefs also hurts mangrove forests in Balochistan and Sindh.

I, hereby requesting to the officials of the government to take some useful steps for the protection of Pakistan's mangrove forests.

*Your's Sincerely
Concerned Pakistani.*



Axis Container

Port Qasim Bin Qasim Town,
Karachi,
Mobile: +92 321 9355576

UMA Container Depot

Atlas honda street, Mehdi Hassan Rd, Mauripur,
Karachi,
Contact: +92 21 3259 5201

Bay West Off-Dock Container Terminal

32 Industrial Area, Adjacent Fishery Yard
West Wharf, Karachi 74400
Contact: +92 21 3233 0030

ICS Port Qasim Terminal

Qasim Port Road, Port Bin Qasim,
Karachi, Sindh
Contact: +92 21 3474 0969

Qasim Freight Station

H- 1 North Western Industrial Zone Port Qasim, Bin
Qasim Town,
Karachi, Sindh 75600
Contact: +92 21 3472 0166

Inter Ocean Container Services

CP-1/28 A&B, South Western Industrial Zone, Port
Qasim Authority,
Karachi, Sindh
Contact: +92 21 3474 0969

Paklink Shipping Services

Suit No. 803, 8th Floor, Business Plaza, Mumtaz Hassan
Road,
Karachi, 74000 - Pakistan.
Contact: +92 21 3244 1333-6

Modern Container Terminal

Suite # 703, 7th Floor, Business Plaza, Mumtaz Hassan
Road, Off. I.I. Chundrigar Road, Karachi – Paksitan.
Contact: +92 21 111 672 000

Pak Shaheen Container Services Jungle Shah Empty Park

East Wharf, Keamari.
Karachi
Mobile: +92 21 3285 1800

Pak Shaheen Container Service Yard PQA

B-1 North West Industrial Zone Port Muhammed Bin
Qasim.
Karachi- Pakistan
Contact: +92 21 3472 0220

BOML Container Freight Station

V.M. Plaza, 13 Dockyard Road, West Wharf, Karachi,
Sindh 74000
Contact: +92 21 1111 11175

Universal Yard

Mauripur Rd, Keamari,
Karachi, Sindh
Contact: +92 345 8287 717

Falcon Freight System B Yard

SP-16/6, SWIZ, PQA, Port Qasim Bin
Qasim Town, Karachi, Sindh
Mobile: +92 300 2608 222

BOML Temperature Controlled Warehouse-1

Plot 1 & 2 Boat Building Yard Road,
West Wharf Karachi,
Sindh 74000
Contact: +92 21 3233 1004

Supreme Off Dock Custom Bond Warehouse

BBA/SP, 03, Port Qasim Authority,
Karachi, Sindh
Mobile: +92 300 8254 580

Speedy Track Container Terminal

Plot # Sp-06, Port Operation Area ,
Port Qasim Authority, Karachi Sindh
Contact: +92 21 3539 3915



ECONOMICS OF MARITIME BUSINESS (ROUTLEDGE MARITIME MASTERS) 1ST EDITION

ISBN 13: 978-1138999640

ISBN-10: 1138999644

Book Description

This book provides a comprehensive introduction to the economics of the business of maritime transport. It provides an economic explanation of four aspects of maritime transport, namely, the demand, the supply, the market and the strategy.

The book first explains why seaborne trade happens and what its development trends are; it then analyses the main features of shipping supply and how various shipping market's function; the book finally addresses the critical strategic issues of the shipping business. The full range of different types of shipping are covered throughout the chapters and cases. The book combines the basic principles of maritime transport with the modern shipping business and the latest technological developments, particularly in the area of digital disruption. The ideas and explanations are supported and evidenced by practical examples and more than 160 tables and figures. The questions posed by the book are similar to those that would be asked by the students in their learning process or the professionals in the business environment, with the answers concentrating on the reasons for what has happened and will happen in the future rather than merely fact-telling or any specific forecast.

The book is most suited for students of shipping-related disciplines and is also a valuable reference for maritime professionals.



SHIPPING AND GLOBALIZATION IN THE POST-WAR ERA: CONTEXTS, COMPANIES, CONNECTIONS 1ST EDITION

ISBN 13: 978-3030260019

ISBN-10: 3030260011

Book Description

This open access book belongs to the Maritime Business and Economic History strand of the Palgrave Studies in Maritime Economics book series.

This volume highlights the contribution of the shipping industry to the transformations in business and society of the postwar era. Shipping was both an example and an engine of globalization and structural change. In turn, the industry experienced and pioneered, mirrored, and enabled key developments that led to the present-day globalized economy. Contributions address issues such as the macro-level shift of shipping's 21st of gravity from Europe to Asia, the political and legal frameworks within which it developed, the strategies and performance of both successful and unsuccessful firms, and the links between the shipping industry and the wider economy and society. Without shipping and its ability to forge connections and networks of a global reach, the modern world would look very different.

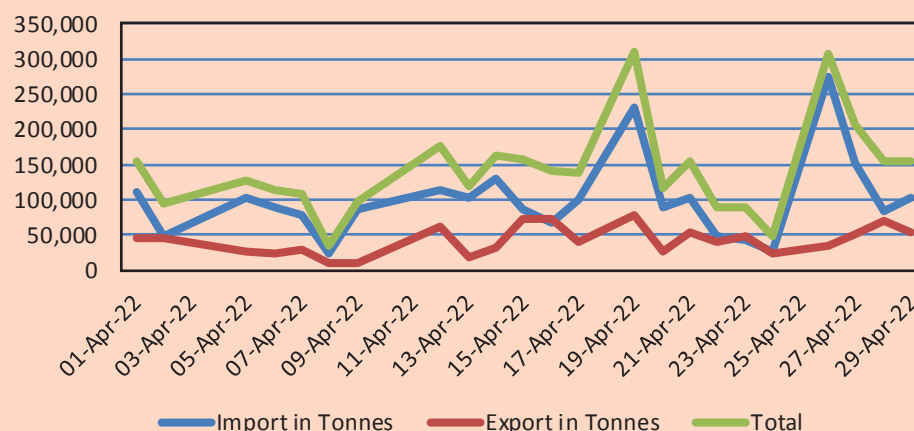
By bringing together scholars from various disciplinary and national backgrounds, this book advances our understanding of the linkages that bind economies and societies together.



ACTIVITIES AT KARACHI PORT (APRIL 2022)

Date	Import in Tonnes	Export in Tonnes	Total
01-Apr-22	110,381	44,582	154,963
02-Apr-22	48,057	46,936	94,993
05-Apr-22	102,728	25,767	128,495
06-Apr-22	88,994	23,927	112,921
07-Apr-22	78,599	29,208	107,807
08-Apr-22	23,434	10,242	33,676
09-Apr-22	87,355	10,914	98,269
12-Apr-22	114,912	62,133	177,045
13-Apr-22	101,756	17,744	119,500
14-Apr-22	130,291	32,676	162,967
15-Apr-22	85,991	72,417	158,408
16-Apr-22	68,204	74,148	142,352
17-Apr-22	100,289	39,004	139,293
19-Apr-22	230,424	79,442	309,866
20-Apr-22	88,011	27,343	115,354
21-Apr-22	101,990	52,689	154,679
22-Apr-22	47,859	40,399	88,258
23-Apr-22	42,874	47,349	90,223
24-Apr-22	25,751	22,900	48,651
26-Apr-22	274,170	34,345	308,515
27-Apr-22	153,335	52,185	205,520
28-Apr-22	84,985	69,250	154,235
29-Apr-22	102,304	52,732	155,036
Total	2,292,694	968,332	3,261,026

ACTIVITIES AT KARACHI PORT

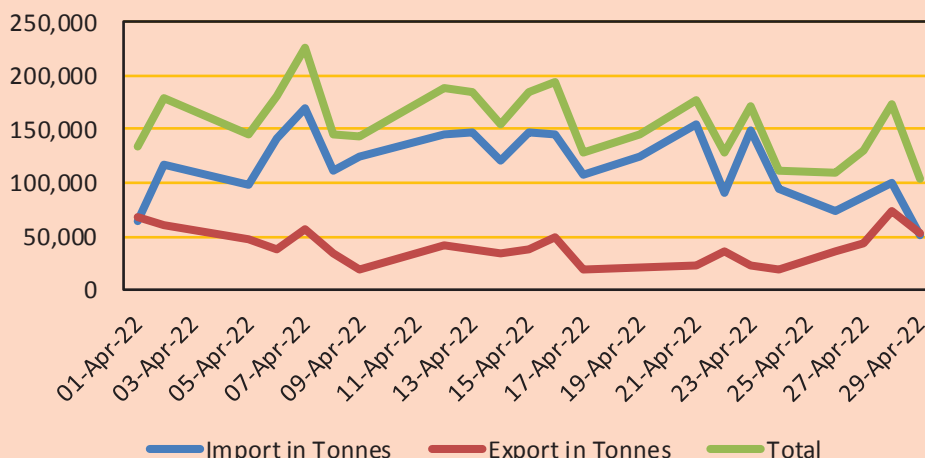




ACTIVITIES AT PORT QASIM (APRIL 2022)

Date	Import in Tonnes	Export in Tonnes	Total
01-Apr-22	65,065	68,676	133,741
02-Apr-22	117,609	60,685	178,294
05-Apr-22	98,187	47,614	145,801
06-Apr-22	141,935	38,844	180,779
07-Apr-22	169,957	56,411	226,368
08-Apr-22	112,206	33,537	145,743
09-Apr-22	123,774	19,689	143,463
12-Apr-22	146,195	41,462	187,657
13-Apr-22	146,492	38,392	184,884
14-Apr-22	120,557	33,405	153,962
15-Apr-22	146,492	38,392	184,884
16-Apr-22	144,965	48,687	193,652
17-Apr-22	108,407	19,509	127,916
19-Apr-22	124,789	20,433	145,222
21-Apr-22	154,675	22,695	177,370
22-Apr-22	91,587	35,870	127,457
23-Apr-22	148,798	23,460	172,258
24-Apr-22	93,723	18,496	112,219
26-Apr-22	73,537	36,601	110,138
27-Apr-22	86,677	43,036	129,713
28-Apr-22	99,406	73,875	173,281
29-Apr-22	50,336	52,898	103,234
Total	2,565,369	872,667	3,438,036

ACTIVITIES AT PORT QASIM



Tide Times for Port



Tide Times for Port Gwadar			
Lat Long: 25.12° N 62.33° E			
Date	Tide	Time(PKT)	Height
15.May.2022	Low Tide	03:52 AM	0.21m
	High Tide	09:42 AM	2.59m
	Low Tide	15:25PM	1.18m
	High Tide	20:54 PM	2.50m
16.May.2022	Low Tide	03:39 AM	-0.11m
	High Tide	10:24 AM	2.70m
	Low Tide	16:08 PM	1.25m
	High Tide	21:27 PM	2.51m
17.May.2022	Low Tide	04:17 AM	-0.21m
	High Tide	11:07 AM	2.73m
	Low Tide	16:52 PM	1.32m
	High Tide	22:03 PM	2.48m
18.May.2022	Low Tide	04:57 AM	-0.20m
	High Tide	11:54 AM	2.68m
	Low Tide	17:39 PM	1.38m
	High Tide	22:42 PM	2.40m
19.May.2022	Low Tide	05:42 AM	-0.07m
	High Tide	12:44 PM	2.58m
	Low Tide	18:30 PM	1.44m
	High Tide	23:25 PM	2.26m
20.May.2022	Low Tide	06:31 AM	0.14m
	High Tide	13:41 PM	2.46m
	Low Tide	19:32 PM	1.47m
	High Tide	00:18 AM	2.07M
21.May.2022	Low Tide	07:29 AM	0.41m
	High Tide	14:45 PM	2.35m
	Low Tide	20:52 PM	1.45m
	High Tide	01:33 AM	1.87m
22.May.2022	Low Tide	08:38 AM	0.69m
	High Tide	15:54 PM	2.29m
	Low Tide	22:29 PM	1.34m
	High Tide	03:35 AM	1.74m
23.May.2022	Low Tide	09:58 AM	0.92m
	High Tide	16:58 PM	2.27m
	Low Tide	23:51 PM	1.13m
	High Tide	05:39 AM	1.80m
24.May.2022	Low Tide	11:18 AM	1.08m
	High Tide	17:51 PM	2.27m
25.May.2022	Low Tide	00:48 AM	0.90m
	High Tide	07:01 AM	1.96m
	Low Tide	12:27 PM	1.20m
	High Tide	18:34 PM	2.28m
26.May.2022	Low Tide	01:29 AM	0.69m
	High Tide	07:59 AM	2.12m
	Low Tide	13:24 PM	1.29m
	High Tide	19:09 PM	2.27m
27.May.2022	Low Tide	02:03 AM	0.52m
	High Tide	08:44 AM	2.27m
	Low Tide	14:12 PM	1.37m
	High Tide	19:38 PM	2.25m
28.May.2022	Low Tide	02:32 AM	0.39m
	High Tide	09:21 AM	2.39m
	Low Tide	14:54 PM	1.42m
	High Tide	20:05 PM	2.23m
29.May.2022	Low Tide	02:59 AM	0.29m
	High Tide	09:53 AM	2.47m
	Low Tide	15:33 PM	1.45m
	High Tide	20:32 PM	2.22m
30.May.2022	Low Tide	03:26 AM	0.23m
	High Tide	10:24 AM	2.52m
	Low Tide	16:06 PM	1.47m
	High Tide	21:00 PM	2.20m
31.May.2022	Low Tide	03:52 AM	0.21m
	High Tide	10:54 AM	2.53m
	Low Tide	16:39 PM	1.47m
	High Tide	21:28 PM	2.18m

Tide Times For Port Muhammad Bin Qasim			
Lat Long: 24.78° N 67.35° E			
Date	Tide	Time(PKT)	Height (m)
15.May.2022	Low Tide	03:45 AM	-0.14m
	High Tide	11:22 AM	3.51m
	Low Tide	16:11 PM	0.92m
	High Tide	22:24 PM	3.41m
16.May.2022	Low Tide	04:24 AM	-0.40m
	High Tide	12:15 PM	3.70m
	Low Tide	16:57 PM	0.96m
	High Tide	23:06 PM	3.43m
17.May.2022	Low Tide	05:03 AM	-0.52m
	High Tide	13:04 PM	3.81m
	Low Tide	17:44 PM	1.04m
	High Tide	23:43 PM	3.42m
18.May.2022	Low Tide	05:45 AM	-0.47m
	High Tide	13:50 PM	3.81m
	Low Tide	18:34 PM	1.14m
	High Tide	00:18 AM	3.34m
19.May.2022	Low Tide	06:29 AM	-0.26m
	High Tide	14:36 PM	3.71m
	Low Tide	19:28 PM	1.26m
	High Tide	00:52 AM	3.20m
20.May.2022	Low Tide	07:19 AM	0.06m
	High Tide	15:23 PM	3.56m
	Low Tide	20:27 PM	1.36m
	High Tide	01:30 AM	2.99m
21.May.2022	Low Tide	08:21 AM	0.42m
	High Tide	16:17 PM	3.41m
	Low Tide	21:31 PM	1.41m
	High Tide	02:18 AM	2.71m
22.May.2022	Low Tide	09:35 AM	0.75m
	High Tide	17:18 AM	3.31m
	Low Tide	22:39 PM	1.39m
	High Tide	03:57 AM	2.43m
23.May.2022	Low Tide	10:51 AM	0.99m
	High Tide	18:20 PM	3.28m
	Low Tide	23:53 PM	1.26m
	High Tide	06:54 AM	2.50m
24.May.2022	Low Tide	12:03 PM	1.14m
	High Tide	19:15 PM	3.30m
25.May.2022	Low Tide	01:03 AM	1.03m
	High Tide	08:10 AM	2.77m
	Low Tide	13:09 PM	1.22m
	High Tide	20:02 PM	3.30m
26.May.2022	Low Tide	02:01 AM	0.75m
	High Tide	09:06 AM	3.03m
	Low Tide	14:06 PM	1.27m
	High Tide	20:39 PM	3.27m
27.May.2022	Low Tide	02:45 AM	0.51m
	High Tide	09:55 AM	3.23m
	Low Tide	14:56 PM	1.32m
	High Tide	21:09 PM	3.21m
28.May.2022	Low Tide	03:23 AM	0.35m
	High Tide	10:41 AM	3.37m
	Low Tide	15:41 PM	1.37m
	High Tide	21:33 PM	3.16m
29.May.2022	Low Tide	03:55 AM	0.26m
	High Tide	11:22 AM	3.46m
	Low Tide	16:23 PM	.41m
	High Tide	21:57 PM	3.14m
30.May.2022	Low Tide	04:23 AM	0.24m
	High Tide	12:00 PM	3.50m
	Low Tide	17:03 PM	1.43m
	High Tide	22:24 PM	3.14m
31.May.2022	Low Tide	04:47 PM	0.25m
	High Tide	12:34 PM	3.50m
	Low Tide	17:41 PM	1.45m
	High Tide	22:56 PM	3.15m

Tide Times for Port



Tide Times for Karachi			
Lat Long: 24.80° N 66.97° E			
Date	Tide	Time(PKT)	Height (m)
15.May.2022	Low Tide	03:42 AM	0.21m
	High Tide	10:20 AM	3.00m
	Low Tide	15:54 PM	1.26m
	High Tide	21:48 PM	3.06m
16.May.2022	Low Tide	04:20 AM	-0.03m
	High Tide	11:03 AM	3.16m
	Low Tide	16:42 PM	1.30m
	High Tide	22:27 PM	3.07m
17.May.2022	Low Tide	05:00 AM	-0.17m
	High Tide	11:47 AM	3.24m
	Low Tide	17:31 PM	1.36m
	High Tide	23:08 PM	3.04m
18.May.2022	Low Tide	05:42 AM	-0.19m
	High Tide	12:33 PM	3.25m
	Low Tide	18:21 PM	1.42m
	High Tide	23:51 PM	2.94m
19.May.2022	Low Tide	06:27 AM	-0.09m
	High Tide	13:21 PM	3.19m
	Low Tide	19:14 PM	1.48m
	High Tide	00:38 AM	2.79m
20.May.2022	Low Tide	7:16 AM	0.11m
	High Tide	14:15 PM	3.09m
	Low Tide	20:14 PM	1.53m
	High Tide	1:31 AM	2.59m
21.May.2022	Low Tide	8:12 AM	0.38m
	High Tide	15:14 PM	2.99m
	Low Tide	21:26 PM	1.53m
	High Tide	02:38 AM	2.37m
22.May.2022	Low Tide	09:18 AM	0.67m
	High Tide	16:18 PM	2.91m
	Low Tide	22:48 PM	1.44m
	High Tide	04:09 AM	2.22m
23.May.2022	Low Tide	10:33 AM	0.91m
	High Tide	17:21 PM	2.88m
24.May.2022	Low Tide	00:05 AM	1.24m
	High Tide	05:52 AM	2.22m
	Low Tide	11:45 AM	1.09m
	High Tide	18:18 PM	2.87m
25.May.2022	Low Tide	01:07 AM	1.01m
	High Tide	07:18 AM	2.34m
	Low Tide	12:47 PM	1.23m
	High Tide	19:08 PM	2.86m
26.May.2022	Low Tide	01:58 AM	0.78m
	High Tide	08:25 AM	2.50m
	Low Tide	13:43 PM	1.34m
	High Tide	19:52 PM	2.83m
27.May.2022	Low Tide	02:41 AM	0.59m
	High Tide	09:17 AM	2.65m
	Low Tide	14:35 PM	1.43m
	High Tide	20:32 PM	2.80m
28.May.2022	Low Tide	03:18 AM	0.45m
	High Tide	10:00 AM	2.78m
	Low Tide	15:25 PM	1.49m
	High Tide	21:08 PM	2.75m
29.May.2022	Low Tide	03:52 AM	0.36m
	High Tide	10:39 AM	2.87m
	Low Tide	16:12 PM	1.53m
	High Tide	21:42 PM	2.70m
30.May.2022	Low Tide	04:24 AM	0.31m
	High Tide	11:15 AM	2.93m
	Low Tide	16:56 PM	1.54m
	High Tide	22:16 PM	2.65m
31.May.2022	Low Tide	04:54 AM	0.30m
	High Tide	11:51 AM	2.96m
	Low Tide	17:37 PM	1.54m
	High Tide	22:50 PM	2.60m

WORLD CONTAINER CARRYING SHIP FLEET



Germany, China and Greece own

39%

of the world container-carrying ship fleet

TOP THREE FLAGS BY TONNAGE



More than

70%

of the commercial fleet is registered under a flag which is different from the country of ownership

LEADERS IN SHIP BUILDING



China, the Republic of Korea and Japan were leaders in ship building, accounting for

92%

of global deliveries in 2016

SHIP-SCRAPPING COUNTRIES



Bangladesh, India, Pakistan and China accounted for

94%

of ship scrapping in 2016



Pursuing Sustainable Maritime Development

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