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MARITIME WATCH

Pakistan's Premier English Language Monthly Maritime News Digest.

Published by National Institute of Maritime Affairs (NIMA) Karachi.

To Subscribe:

Subscriptions to Maritime Watch (12 printed issues) for one year are available for 1800Rs/,

Drawn your check in favour of NCMPR Resource Fund.

Allied Bank Limited, Youth Branch Stadium Road, Karachi. Branch Code:0971

Account No:0010005881820333

IBAN:PK32ABPA0010005881820333 (for Online Transfer)

Email: maritimewatch@bahria.edu.pk

Circulation: SM Faheem(UDC)

smfaheem.ncmpr@bahria.edu.pk

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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 Institue 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 establishement 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 reowned researchers to extract concrete policy recommendations. It endeavors continously to create awareness through seminars, conferences, workshops, writing research papers and other maritime related activities challanges of 21st century for Pakistan.

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World maritime day is celebrated on the 29th of September every year around the world by UN/IMO member states. In Pakistan as well it is keenly followed by various entities and organizations. NIMA in pursuance of its objective of creating maritime awareness in the country has always taken the lead role in celebrating such events by organizing academic discourses and other activities. This year also NIMA has put particular focus on the WMD by organizing a high-level Webinar on the theme, "New technologies for Greener shipping" inviting high-profile professional speakers. The theme reflects the need to support a green transition of the maritime sector into a sustainable future while leaving no one behind. It provides an opportunity to focus on the importance of a sustainable maritime sector and the need to build back better and greener in a post-pandemic world. It will also provide an opportunity to promote innovation, research and development, and technology integration for showcasing solutions for decarbonization and more environmentally friendly shipping.

As we all appreciate that there is a growing environmental conscientiousness and awareness in the world, especially in line with UN sustainable development goals for a sustainable future. Greener shipping primarily is an idea to ensure the prevention or minimization of carbon contents in the atmosphere in order to ensure environmental sustainability. Earth's greenhouse gases trap heat in the atmosphere and warm the planet. The main gases responsible for the greenhouse effect include carbon dioxide, methane, sulfur oxides, nitrous oxide, water vapors (which all occur naturally), and fluorinated gases (which are synthetic). These emissions are primarily due to the use of fuel used for sea freight forwarding, which is of paramount importance to the environment. Ship owners are duty-bound to reduce carbon footprint and emissions, in line with the global movement to combat climate change.

It is interesting to note that contribution of the maritime transport to GHG emissions is only 3.2%. IMO has already adopted a strategy for the reduction of GHG emissions on ships by setting suitable targets. It aims at reducing CO2 emissions in shipping by at least 40% by 2030 and pursuing a 70% reduction by 2050. The vessels can adopt suitable measures like going at economical speeds, avoiding shorter routes through rough

Editorial



seas, reducing cargo volumes, and using energy efficient new technologies. These days shipping companies are in tough competition to ensure low CII (Carbon Intensity Indicator) for their ships, which is a measure of how efficiently a ship transports goods or passengers and is given in grams of CO2 emitted per cargo-carrying capacity and nautical mile.

The shipping industry is vastly controlled by a regulatory framework consisting of international, regional, and national laws, rules, procedures, and protocols. These include aspects related to compelling ship owners to do their part in protecting the environment. These include in areas such as ship design, shipbuilding, fuel use, maintenance, ship repair, and even ship breaking/demolition. The applications of technologies would play a crucial role in fostering the efficiency of the shipping industry. The use of automation, artificial intelligence, and interconnectivity of new technologies will provide safer environmental protection.

Every passing day new and stronger conventions and regulations are being formulated on this aspect (greener shipping) in an effort to maintain global biodiversity and environmental protection. Since the use of sulfur-free fuel is very expensive, new green technologies are increasingly being employed as energy efficient features in ships creating a competitive advantage. This coupled with better environment related data and economic, political, and social considerations are the key drivers of sustainability in shipping.

Meeting the cost of investing in green technologies/solutions and sustainability initiatives is a major challenge for developing countries. As environmental sustainability is a global issue attached with indiscriminate adverse effects therefore the technological gap between developed and developing countries needs to be reduced. Developing nations need to be supported in establishing sustainability policies and roadmaps to steer the shipping industry toward a low-carbon future.

It is satisfying to note that PNSC has already planned to enter 2030 and beyond with a newer fleet having advanced technology. While the current fleet is also fully compliant to global environmental requirements, efforts are in hand for CII and EEXI certification of vessels/fleet. I am sure that our shipbuilding industry is also making all-out efforts to keep pace with technological developments in ship's hull, superstructure and propulsion mechanism, etc for energy conservation in order to limit GHG emissions.

Another important aspect of this theme is the human factor, I mean the people who are going to use these technologies for greener shipping, both onboard and ashore. Investing in their training and education is therefore an equally important factor along with the introduction of new technologies.

Cdre (R) Ali Abbas Chief Editor



HARNESSING GREENER TECHNOLOGIES WILL MAKE SIGNIFICANT CONTRIBUTION TOWARDS ADDRESSING CLIMATE CHANGE AND MEETING THE UNITED NATIONS SDGS



October 4, National Institute of Maritime Affairs (NIMA), organized a webinar to mark the celebrations of World Maritime Day 2022. The World Maritime Day (WMD) is celebrated every year to signify the contributions of International Maritime Industry in World's economy and to bring attention on the importance of safety in shipping, maritime security, technology and marine environment. The theme for this year's celebration is "NEW TECHNOLOGIES FOR GREENER SHIPPING". Director General Ports & Shipping Ms. Alia Shahid graced the occasion as the Chief Guest.

Director General National Institute of Maritime Affairs (NIMA) Vice Admiral (Retd) Abdul Aleem, HI (M), in his opening remarks welcomed the Chief Guest, speakers & the participants. He highlighted the significance of this year's WMD theme and spoke about NIMA's efforts for promotion Maritime sector of Pakistan. Earlier as a moderator of the webinar, Director NIMA Karachi Cdre (R) Ali Abbas SI(M), stated that the state of Maritime Sector in Pakistan with particular focus on the global modern trends and technological advancement to reduce the GHG emissions.

Eminent speakers, Captain Anwar Shah, Board Member PNSC, Captain Jamil Akhtar, Marine & Insurance/Takaful Professional, and Mr. Tariq Majeed, Executive Director (SM), PNSC, presented their paper and shared intellectual insights and highlighted the significant need to protect and preserve the environment through de-carbonization technologies in the shipping sector. On this auspicious occasion, The Chief Guest Director General Ports and Shipping, Ms. Alia Shahid addressed the participants and stressed upon the emerging new technologies and the importance of greener shipping for a safe and sustainable future. She emphasized to adopt the technological advancement in shipping industry and assured all out support from the ministry of Maritime Affairs.

DG NIMA Vice Admiral (Retd) Abdul Aleem, HI(M) applauded and acknowledged all the speakers for their knowledgeable presentations. He further said that maritime industry serves as the backbone of the global trade and economy and the theme for 2022 will allow us to focus on the United Nations sustainable development goals, particularly on SDGs 9, 13, 14, and 17.

In concluding remarks the Chief Guest appreciated efforts of NIMA for organizing the webinar and providing a platform to deliberate on issues and challenges related to greener shipping. She advised NIMA to establish linkages between academic institutions and maritime industry to innovate the technology in maritime sector. The event was attended by various prominent dignitaries, naval officers, government officials, intellectuals, researchers and students.



Sherry Announces Launch of Lyari River Clean-Up Drive



September 9, Around 9,000 tonnes of waste and debris is thrown into the Lyari River every month by industries, municipal organisations and common people, and it has accumulated on the riverbed and in the Lyari harbour area, preventing rain and floodwater from flowing into the sea uninterrupted. This shocking statistic was shared with Federal Climate Change Minister Senator Sherry Rehman at a roundtable in Karachi, where she announced the launch of a Lyari River clean-up drive in collaboration with public and private organisations. Senator Rehman stressed the need for adopting an all-inclusive holistic approach and coordination among all stakeholders to cope up with repercussions of climate change and saving natural ecosystem from hazardous impacts of pollution. The session was attended by Federal Minister for Maritime Affairs Syed Faisal Subzwari, Chairman Karachi Port Trust SM Tariq Huda, officers of relevant departments and organisations, representatives of the WWF-Pakistan, Unicef, multinational and national companies and public policy experts..

VC and Pro-VC University of Gwadar Called on DG Bahria University, Karachi

September 15, University of Gwadar Vice Chancellor Prof Dr. Abdul Razzaq Sabir and Pro-Vice Chancellor Prof. Dr. Syed Manzoor Ahmed called on Khawaja Ghazanfar Hussain HI (M) Director General Bahria University, Karachi to discuss various venues to work on Blue Economy, Port and Shipping Management, and Fisheries Sciences.Bahria University Prof. Dr. Asif Anam briefed Vice-Chancellor and Pro-Vice Chancellor about the areas where both Universities can forge an understanding to work together. Both Universities agreed to ink an agree-



ment for faculty and students' linkages, academic courses sharing, training programs and internship. The delegates further discussed collaborative efforts to identify and develop policy proposals and briefs for various stakeholders in port and shipping management, and fisheries-related affairs. It was decided that both institutions will facilitate each other in research, blue economy, port and shipping management, marine sciences conservation and protection of marine tourism. At the end VC and Pro VC Visited different sections, labs and other facilities of Bahria University.

Chief of the Naval Staff Visits Flood Affected Areas of Sujawal



September 16, Chief of the Naval Staff Admiral Muhammad Amjad Khan Niazi visited flood affected areas of Sujawal to review flood relief operations by Pakistan Navy. A comprehensive briefing was given to the Naval Chief regarding ongoing rescue and relief operations. During the briefing, the Chief of the Naval Staff was apprised with detailed review of inundated areas and on ground flood situation as well as ongoing relief and rehabilitation operations by Pakistan Navy. Speaking on the occas, on, the Naval Chief underscored that heavy downpours during ongoing monsoon season had cost human



losses and damaged infrastructure. The Naval Chief urged the commitment to overcome the challenges posed by natural disaster with continuous efforts and support. The Admiral interacted with troops deployed in flood affected areas and appreciated their professional prowess and dedication to ensuring timely assistance and help to the flood affectees. Chief of the Naval Staff also appreciated the efforts put in by Pakistan Navy along with civil administration and various philanthropist organizations providing continuous assistance to our aggrieved brethren. Pakistan Navy is determined to continue the rescue and relief operation till the rehabilitation of all distressed countrymen.

An Effective and Ambitious Global Treaty to End Plastic Pollution



September 21, Global businesses across the plastics value chain, financial institutions, and non-governmental organizations (NGOs) came together to announce a common vision for an effective and ambitious Global Treaty to End Plastic Pollution. The vision will form the basis for future policy engagements with governments through a newly launched Business Coalition for a Global Plastics Treaty which will be convened by the Ellen MacArthur Foundation and WWF. Building on previous efforts to raise the business voice in favour of starting intergovernmental negotiations, the organizations standing behind the vision see the global treaty as the single most important opportunity to accelerate progress towards a circular economy in which plastic never becomes waste or pollution, and the value of products and materials is retained in the economy. The treaty negotiation process, which is expected to

conclude at the end of 2024, will largely determine the trajectory of the plastic pollution crisis for generations to come. "The plastic crisis extends beyond all borders, impacting the health of our oceans and wildlife, and the livelihoods of people from major cities to small coastal communities. The scope and scale of this global issue must be met with equally ambitious solutions," said Erin Simon. Vice President and Head of Plastic Waste and Business, WWF. "We have no time to waste. The need for global coordination to tackle the plastic pollution crisis has never been more urgent, a Business Coalition for a Global Plastics Treaty will push strongly for a framework that leaves the business-as-usual approach at the door and ushers us into a new era where ending plastic pollution is finally within reach." Ahead of the first Intergovernmental Negotiation Committee (INC) meeting scheduled for the end of November this year, the endorsing organizations are calling out the need for a global treaty which sets common goals, rules, and obligations that member states will be required to implement within their national jurisdictions. For businesses and investors, this means creating a level playing field and preventing a patchwork of disconnected solutions.

Federal Minister Maritime Affairs, Senator Syed Faisal Ali Subzwari delivered a lecture on "Maritime Economy" at NDU Islamabad.



September 21, Federal Minister for Maritime Affairs, Senator Syed Faisal Ali Subzwari attended National Security and War Course 2023, as a speaker, at National Defence University Islamabad. The Minister delivered a brief presentation on the subject – "Maritime Economy" and answered questions of the course participants. On the Occasion, Minister for Maritime Affairs was welcomed by Lt. Gen. Nauman Mahmood, HI (M), President National Defence University and was requested to



address the participants on Maritime Economy of Pakistan. While addressing to the audience, Minister highlighted the role and functions, organizational structure, ports operations, goals and major challenges faced by the Maritime Ministry. He stated that Maritime sector is both financially and techno intensive and needs significant capital for building, operating and making it economically profitable for the country. He explained the concept of Blue Economy as the sustainable use of ocean resources that helps increasing economic growth by efficient and sustainable use of oceanic space as opportunities for development, new energy avenues, improving biodiversity conservation, climate change adaption and enhancing food security. He further apprised the audience that the need for a more considered approach to sustainable management and conservation of our oceans and coastlines has grown considerably since the past few years. The Government of Pakistan is keenly focused on Goal 14 of the Sustainable Development Goals to conserve and sustainably use the oceans, seas and marine resources. The Minister highlighted the important role of Ports and their contribution to the National Economy of Pakistan and stated that one-third of the tax collection of the country is being done through ports. He further highlighted the importance of Gwadar Port and stated that in line of the vision of the Prime Minister of Pakistan, special focus is being given to the sustainable development of Gwadar for the overall progress of the Province of Balochistan. Minister also spoke on the areas including; Fisheries, Aquaculture, Ship-breaking, Trans-shipment, Coastal tourism and Marine pollution and enlightened the participants on the recent initiatives taken by the government on these sectors. By the end of the session, the Minister attended to a detailed Question/Answer session from the course participants including both national and international military and civil services officers.

Joint Counter Narcotics Operation by PMSA and Pakistan Customs

September 27, In joint counter Narcotics operation by PMSA and Pakistan Customs, the Crew of the smuggling boat set the boat ablaze and jumped into the sea when intercepted by PMSA Ship, to avoid legal actions. PMSA ship prioritized saving the lives of all crew & rescued promptly. Despite the smuggler's attempt to destroy the evidence by sinking the boat, the PMSA ship recovered drugs thrown in the sea & apprehended the culprits. As a



result of the successful operation, eight suspects were arrested, and around 15 kg of crystal ice worth Rs45 million was recovered. The seized narcotics have been handed over to the Pakistan Customs for further legal proceedings, it added. In another operation in Gwadar, the PMSA ship intercepted a suspicious boat at high seas within the Exclusive Economic Zone (EEZ) of Pakistani waters. As the boat was boarded and searched, around 28-kg hashish was found in its hidden compartments. "The boat along with four crew members were apprehended. The value of seized narcotics is estimated to be Rs4 million,"

Stakeholder's Concern on National Hazardous Waste Management Policy 2022

September 30, In pursuance of the Honorable Prime Minister's direction, Mr. Mathar Niaz Rana, the Federal Secretary Ministry of Maritime Affairs chaired a meeting to address and resolve the issues of Pakistan Ship Breakers Associations (PSBA) on National Hazardous Waste Management Policy 2022 in Islamabad .The meeting was attended by Chairman Balochistan Development Authority (BDA), representative of Ministry of Climate Change (MoCC), Pakistan Ship Breakers Association (PSBA), Gaddani Ship Breakers Association, and officials of the Ministry of Maritime Affairs. The Secretary Maritime Affairs welcomed the participants to the meeting and appreciated the role of ship breaking industry in the economy of Pakistan and ensured complete assistance in resolving their issues. On the occasion, the representative of PSBA expressed reservation on National Hazardous Waste Management Policy, 2022 issued by Ministry of Climate Change (MoCC). According to them some clauses of the policy – based on Basel Convention – are against Ship Breaker's business model. It was apprised to the participants that Basel Convention has become obsolete now and recycling / ship breaking of ship is done on Hong Kong Convention which has not been adopted yet. The Secretary appreciated all stakeholders and desired to



support Ship Breaking Industry as they contribute heavily in the national exchequer through taxes. He assured that a committee will be formed to resolve the issue of PSBA and to expedite the ratification of Hong Kong Convention. He also suggested that the MoMA will move a summary to the Cabinet for making changes in the Rules of Business to designate Ship Recycling / Ship Breaking Industry and directed officials of the MoMA to start the process of ratification of the Hong Kong Convention.

Pakistan's External Account Challenges: BoP President Highlights Enormous Potential of Blue Economy



September 30, The launch ceremony of the report entitled 'Pathways to a sustainable blue economy: role of financial institutions' organised jointly by the Sustainable Development Policy Institute (SDPI) and the Bank of Punjab (BoP) was held at a hotel in Islamabad.A round-table discussion was held which was led by Zafar Masud, the president and CEO of BoP, and Dr Abid Qaiyum Suleri, executive director of SDPI.Zafar Masud stated that the enormous potential of the Blue Economy to contribute towards economic growth and improvements in livelihoods has not been fully realized by the policy makers of Pakistan and across the world. The maritime sector provides significant opportunity to meet the external financing requirement in short to medium term through raising funding through Green and Blue bonds on extremely attractive terms (vis a vis plain vanilla offering of Sukuks and Eurobonds), enhancing fish exports, offering coastal tourism, etc.He said that global sustainable bond market is estimated to be around \$1 trillion. China and India have taken the lead in terms of issuance of global sustainable bond with over \$12 billion raised by each of them hitherto. In India, the corporate sector raised nearly \$10 billion through ESG and Green bonds in 2021. While Pakistan tasted success in its first green bond issuance in 2021, there is a need to develop a larger pipeline by identifying green assets and scaling up capacity to meet the international standards. Climate change and over-exploitation of our blue natural resources are extracting significant costs in terms of loss to marine biodiversity. He further said that the recent flooding could also be mitigated with proper and focused infrastructure investment in this area. The livelihoods of communities dependent on the blue resources are also being impacted, leading to rising unemployment and poverty."Blue economy contributes 0.45 percent to GDP which is \$1 billion," he said, adding that Pakistan's maritime sector is confronted with governance issues, lack of technology, marine pollution, and destruction of mangroves. He pointed out that \$5 billion can be generated annually through coastal and marine tourism.(Credit: Business Recorder)

Expected ships in Karachi

ETA by AIS	Туре	Vessel
Oct 13, 09:00	Chemical/Oil Products Tanker	BLACK PANTHER
Oct 13, 12:00	Bulk Carrier	JOSCO DAZHOU
Oct 14, 07:17	Container Ship	YM EXPRESS
Oct 19, 22:00	General Cargo Ship	DA GUI
Oct 26, 18:00	Motor Hopper	SHB TARSEEL-1
Oct 27, 01:00	Bulk Carrier	AMIS WISDOM II
Oct 30, 10:00	Bulk Carrier	SHB TARSEEL-1

International News - Trade & Economy



Seatrade Maritime Event Returns to Dubai in 2023



September 16, The maritime exhibition and conference – including Logistics for the first time – has been a firm fixture on the maritime calendar since 2003. The refreshed, re-invented and the all-encompassing event will be the centerpiece of UAE Maritime Week connecting buyers and suppliers in the maritime & logistics community from 16-18 May to be filled with new features and improved core experiences.

H.E Eng. Hassan Mohamed Juma Al Mansouri, Undersecretary for Infrastructure and Transport Affairs at the UAE Ministry of Energy and Infrastructure said: "The maritime sector locally and globally has witnessed rapid growth over the last few years. Even more, during the pandemic, our ports showcased their resilience with round-the-clock operations, supporting governments to keep countries going. In the UAE itself, the maritime sector is a key economic pillar. Our boundless potential, competencies, and qualified talents have helped us keep pace with the developments in the sector. AD Ports Group Acquires Majority Stakes in Egypt's Transmar and TCI. This has solidified the country's status as an international maritime hub with noteworthy rankings in several competitiveness indexes."

The sharper and more purposeful focus on integrated logistics reflects the pace of change in the maritime sector as it becomes more interwoven in supply chain services by the day. According to Seatrade Maritime Group Director, Chris Morley "speaking to our exhibitors and visitors it's clear that we can add real value to our community by broadening the content and focus of the event as we reconnect after a very challenging few years for our industry."

Highlighting how important it is to listen to its community, Morley added: "As we look to bring our audience

together in a world that is living with and learning from a global pandemic, we have taken the opportunity to take a fresh look at our flagship exhibition & conference in the Middle East.

Apart from introducing 'Logistics' to the core features, a host of umbrella activities of UAE Maritime Week will be organized in conjunction with, and under the patronage of, the Ministry of Energy & Infrastructure.

"We will be working hard to demonstrate the fantastic progress being made by the UAE as it continues to grow as a significant global maritime centre," added Morley. (Credits: Transport and Logistics ME)

Uncertainty Could Hamper Container and Tanker Outlooks—Poulsson



September 19, In the fifth in a series of interviews ahead of the Saudi Maritime Congress Poulsson, talks to Seatrade Maritime News about how he sees the market outlook and the important role Saudi Arabia has to play in the maritime industries.

"Current market conditions are very positive for the container segment especially, and in more recent times, the tanker segment as well. For the dry bulk sector, there has been a correction in recent months, but I still believe the medium-long term prospects for this segment are positive," he said.

"That said, we are facing many uncertainties, be it the conflict in Ukraine, inflation, or recession fears, to name just a few, so predicting future markets is always problematical but, as I always say, to be in shipping one must be an optimist, so I am optimistic overall." Poulsson held the position of ICS chairman from 2016 to 2022. He is also executive chairman of Enesel Pte. Ltd., a Singapore-based ship owning entity, which operates a fleet of

International News - Trade & Economy



large container vessels under the Singapore flag. In his 45-year career in the maritime industry, he has held a variety of senior management positions in Hong Kong, London, Copenhagen, and Singapore. He said that, as VLCC owners, Saudi Arabia was important to the ICS, and that he hoped the Kingdom would soon become an associate or full member. The Kingdom saw its neighbor, the UAE, become a full ICS member, via the national body the UAE Shipping Association (UAESA), in 2019. "Saudi Arabia is a fundamentally important maritime nation and it is key that we engage with national stakeholders and work together for the future of shipping. Given the buoyant state of the Saudi economy, and not least the relatively strong oil price, I believe the prospects for Saudi ports are very positive," he said.

According to the International Monetary Fund, Saudi Arabia's 36.2 million population will see real GDP growth of 7.6% in 2022, the year when the size of its economy passes the \$1trn mark at current prices, according to its estimates. Its economy will be over twice the size of the UAE's: this year, the IMF forecasts Saudi GDP at \$1.04trn, compared to the UAE's \$501bn.

"Saudi Arabia and the wider Middle East region are very important to the maritime community," he said. "The region is located in the middle of key international trade routes and with the Kingdom's large maritime fleet, this undoubtedly offers significant opportunities to the ICS' members and the shipping industry overall. Saudi Arabia's Vision 2030 has seen considerable investment in the construction of ports, railways and infrastructure, and the maritime sector will certainly thrive over the coming years."

According to the ICS's Saudi data page, the Kingdom, a net exporter thanks oil, operates a merchant fleet of 284 ships valued at \$5bn. Data provided by the U.N. Conference on Trade and Development show that throughput at Saudi ports grew at an annual average rate of 5.9% in the decade to 2020 when the total reached 9.4m teu. The Kingdom's National Transportation and Logistics Strategy call for that figure to increase fourfold to 40m teu by the end of the decade.

"I have throughout my career in shipping always had a great wish to visit the Kingdom of Saudi Arabia, and finally it is happening. I recall being extremely disappointed when in 2020, this event was postponed due to the Covid-19 pandemic, but I have no doubt that the long

wait will prove to have been worth it." (Credits: Seatrade Maritime)

Suez Canal Authority to Raise Tolls Again



September 19, Having already raised fees three times in quick succession this year, the Suez Canal Authority (SCA) has warned shipowners of another increase coming up. The SCA will raise fees for tankers by 15% starting in the new year, while bulk ships and cruise vessels face a 10% increase in fees to transit the waterway linking Asia with Europe. The SCA announced a general 6% upward tariff revision in February this year and then introduced new surcharges adding a further five to 10% in fees the following month followed by further increases of the rates ranging from seven to 20% in May. The other major canal, the Panama Canal, has unveiled a new tolls system, due to come into effect next year, which will also see fees rise dramatically. Meeting in Singapore earlier this month, before this latest Suez rise, delegates of the Asian Shipowners' Association (ASA) expressed their confusion and concern over the substantial toll increases in both canals. "Delegates shared a perception that such a significant toll hike may not be compatible with the long-term sustainability required for a global infrastructure," the ASA stated in an official communique. (Credits: Splash247)





Egypt Clears Cargo Backlog at Ports



September 1, Egypt's finance ministry has put in place a package of measures to clear a backlog of goods piled up in port, a ministry statement said on Tuesday. A severe shortage of foreign currency in Egypt over the last six months has sent banks and importers scrambling to pay for the letters of credit needed to get their cargo released from customs. Factories and retailers complain that production and sales have been hurt due to a lack of inputs. The foreign exchange crisis was triggered by the Ukrainian war and interest rate hikes by the U.S. Federal Reserve.

The package, to be implemented "in the coming days", is designed to help reduce commodity prices paid by Egyptian citizens, Finance Minister Mohamed Maait said in the statement.

One measure will allow cargoes that have completed their customs procedures and are awaiting the "Model 4" financing to leave ports within "the next few days", the statement said.

Model 4 is a pledge issued by commercial banks to pay the foreign exporter, according to a 2017 central bank directive. Banks over the last six months have often lacked the foreign currency needed to issue the pledge. Fines imposed on importers and investors for being late in completing customs procedures will also be suspended if caused by a lack of documents from concerned authorities.

This measure will reduce the financial burden on importers and discourage them from passing on higher prices to consumers. In addition, shipping agents will be allowed to remove cargo from customs zones and place it in outside warehouses provided they pledge not to release it before they have received permission. This is to relieve investors and importers from the additional cost of storing cargo inside port warehouses. (Credits: Maritime Gateway)

SAFEEN Feeders Joins CMA CGM Group in Launching New Service for Southeast Asia



September 8, RIYADH: The company's 'SAFEEN Pioneer,' which has a container capacity of 2,034 TEU, will join CMA CGM Group's 'Songa Tiger' on the India East Coast Express 2 service, connecting the ports.

SAFEEN Feeders will market the service under the name Singapore Chennai Colombo Service (SCC).

This will be SAFEEN Feeders' first service to call in Southeast Asia.

Captain Ammar Mubarak Al Shaiba, Acting CEO – Maritime Cluster and SAFEEN Group, AD Ports Group, said: "We are very proud to be working with our partner, CMA CGM Group, on the India East Coast Express service.

"This service connects key global markets with some of the busiest ports in the world and will help boost trade and improve delivery times."

SAFEEN Group delivers a range of port and marine services, transshipment, offshore and subsea logistics and feeders services. (Credits: Port Technology)

Saudi Arabia Inaugurates Hutchison-Run Jazan Port

September 19, Saudi Arabia inaugurated Hutchison-run Jazan Port, the Kingdom's future southern gateway and link to the world and its main opening for logistics services recently, as it aims to transform into a leading industrial power and global logistics hub by 2030.

The inauguration of Port of Jazan City for Primary and Downstream Industries (JCPDI Port), on September 7 was led by Prince Mohammed bin Nasser bin Abdulaziz, governor of Jazan Region, Hutchison Ports said in a press





release on September 15. Hutchison, a global port developer and operator, will operate JCPDI Port under a contract signed in February 2021 with the Royal Commission for Jubail and Yanbu to invest in and operate the port according to international best practices. Jazan Port has a total berth length of 1,250 meters for containers, bulk and general cargo, with a design capacity of 1 million TEUs a year and around 4 million tons of cargo, as well as a liquid terminal for oil tankers of Saudi Aramco. It will add to an array of modern, well-equipped ports in the Kingdom. Khalid al-Salem, president of the Royal Commission for Jubail and Yanbu, praised JCO-DI's achievements and revealed that a range of investments and partnerships had been inaugurated with many local and international partners.

He mentioned the Saudi Silk Road Company, which was established to attract Chinese industrial investments to the Kingdom; the investment and operation contract with Hutchison Ports, and an agreement to build an alumina refinery with Hangzhou Jinjiang at an estimated investment capital of 4 billion Saudi riyals (US\$1.04 billion). Al-Salem added that existing investments at JCPDI have now reached about 88 billion riyals, although the city is still under construction. He pointed out that the port is one of the most critical enablers supporting JCPDI's industrial

In its first phase, which comprises three industrial berths, the port will have a single point mooring, three commercial berths for handling containers, and storage yards with special areas for storing and monitoring reefers. The berth draft of 16.5 meters can dock modern fifth-generation ships larger than 21,000 TEUs and can handle general and bulk cargo ships with more than 100,000 tons capacity. Minister of Industry and Mineral Resources Bandar al-Khorayef stressed Jazan can attract investments and achieve the goals of the Saudi Vision 2030 in the industry

growth.

and tourism sectors. Jazan lies 572 km north of South Yemen's border on the Red Sea.

Al-Khorayef asserted JCPDI Port is a new enabler to Saudi and regional logistics services, a significant attraction to investments and job creation in transport and logistics. He said \$23 billion in investment opportunities awaits investors in Jazan.

Minister of Investment Khalid al-Falih said in his speech the Saudi economy had achieved growth of 11% in Q1 2022 and that the International Monetary Fund forecasts the Kingdom will be the fastest-growing economy among the G20 countries in 2022.

He said that the Industrial Production Index (IPI), by the end of July 2022, had risen to 21.5 %, another indicator of the successful implementation of Vision 2030. Charlie Darazi, Hutchison Ports Jazan CEO, said the port will be equipped with the latest remote-controlled cranes, state-of-the-art systems for both bulk and container operations that will enhance visibility to its clients and enable them to transact business electronically. Darazi said Hutchison Ports Jazan will run several training programs for local talent. "We have been in Saudi Arabia for 22 years, and it is a very important market for Hutchison Ports. Today's ceremony marks a new chapter for us in the Kingdom," Hutchison Ports group managing director said. Andy Tsoi, Hutchison Ports managing director for the Middle East and Africa, said JCPDI Port sits at the crossroads of the busy east-west trade lane and the rapidly growing north-south trade. It also has the potential to be the Kingdom's first port of call from East Asia. (Credits: Port Calls)

AD Ports Integrates Economic Zones under KEZAD Brand

September 19, AD Ports launched Khalifa Economic Zones Abu Dhabi (KEZAD) Group as part of the plan to consolidate and grow its Economic Cities & Free Zones offering and bolster Abu Dhabi's position as the region's leading industrial and manufacturing destination. The move by the ports and logistics giant, owned by sovereign wealth fund ADQ, follows the consolidation of Khalifa Industrial Zone Abu Dhabi (KIZAD) and Specialised Economic Zones (ZonesCorp) into the newly formed group, which comprises 12 economic zones with a total area of 550 sq km, including 100 sq km designated as free zones. The new group will be solely responsible for planning, developing, operating, regulating, and promoting





combined assets under the AD Ports Group's Economic Cities & Free Zones portfolio, which makes up 55% of the UAE's industrial area.

"KEZAD Group is now responsible for the largest integrated trade, logistics, and industrial hub in the region and is the largest operator of purpose-built economic zones and workers' residential cities in the United Arab Emirates," stated Mohamed Al Khadar Al Ahmad, CEO of KEZAD.

KEZAD Group hosts more than 1,750 clients from 17 industrial and economic sectors and has been designed to offer greater opportunities for investors looking to streamline every segment of their supply chain. "Combining the portfolio's assets, will drive higher investments and develop a stronger portfolio of products and services for businesses and investors at the local, regional, and international levels," AD Ports said in a release.

The launch is expected to enable, among other things, expanded competitive choice of locations, greater pricing options, quality of infrastructure, and ease of doing business. It also opens new opportunities to scale up adjacent businesses, such as KEZAD Communities, and allows the group to explore investments in dedicated infrastructure for key industrial sectors such as enhanced gas networks for metal and other heavy industries and wholesale marketplaces for food and automotive.

"By providing a suite of favorable business solutions and economic zone benefits, KEZAD Group will provide an unmatched platform across strategic locations that drives growth across the region and beyond," added Al Khadar. (Credits: Splash247)

SAFEEN and Invictus to Launch New Dry Bulk Shipping Service

September 26, The pair of companies will launch a new



international dry bulk shipping service with the vessels. The ships will be owned by a series of Special Purpose Vehicles, owned 85% by SAFEEN Feeders and 15% by Invictus, while the joint venture to operate the vessels will be 51% owned by SAFEEN and 49% by Invictus. For an initial capital commitment of AED463m (\$126m), the partners will deploy five dry bulk vessels of varying sizes within six months of September 2022. Future growth plans include additional vessels, the companies said.

Invictus' dry bulk trading business ships over three million tonnes of commodities annually; the new joint venture will primarily serve this business, which is focused on grain trading and is expected to generate strong returns. Invictus will commercially operate the vessels.

The joint venture will also offer its bulk shipping capabilities to external companies, initially focusing on the Red Sea and Pacific corridors, the Indian subcontinent, and Black Sea region. Invictus is listed on the Abu Dhabi Securities Exchange (ADX), and SAFEEN is owned by the AD Ports Group.

Capt. Mohamed Juma Al Shamisi, Managing Director and Group CEO, AD Ports Group, said: "This is an important agreement for AD Ports Group as we look to expand the diverse portfolio of international dry bulk services that we provide for customers and strengthen food security in the region and around the world."

Amir Abdellatif, Chief Executive Officer of Invictus Investment Company, said: "This agreement with AD Ports Group ensures our commitment to investing in businesses that add synergies and value to our expanding trading business, and in building strong strategic partnerships. It is further aligned with our focus on investing in



fixed assets to strengthen our logistics capacity. (Credits: SeaTrade Maritime)

IMI to Launch Full Operations Before the End of 2023



September 28, "We anticipate the yard to be fully operational by the end of 2023," Dr. Abdullah Al Ahmari, IMI CEO, said. "As we move towards operational readiness, we have begun transitioning our workforce to the yard with the aim of having all our employees located there by the end of 2022."

At this stage, IMI Is focusing efforts on capacity building through partnerships with well-established companies—including its partners—to facilitate knowledge transfer and ensure employees are equipped with the skills and technical know-how to engineer these products locally, on a par with global best practices. Once the yard is fully operational, he anticipates being in a suitable position to begin building VLCCs and other maritime products within the complex.

"Last year, we were proud to inaugurate our very first VLCC, named 'Rayah', which was built for our partner Bahri by IMI and Hyundai Heavy Industries (HHI) engineers at HHI's shipyard in Ulsan, Korea. Saudi engineers, working with experts from HHI, gained valuable on-the-job experience and contributed to the construction of the vessel."

In 2021, IMI's leadership, in association with the National Maritime Academy in Jubail, delivered specialized on-the-job training in collaboration with its JV partners for more than 600 Saudi employees.

"Two hundred IMI employees underwent training at HHI's shipyard in South Korea and Lamprell's yard in the UAE, with an additional 425 receiving training in Saudi Arabia with Saudi Aramco, Saudi Aramco Jubail Refinery (SASREF), and Dammam Shipyard (DSY)," he said.

The yard also has more than 60 ongoing digitalization initiatives to modernize and optimize product offerings and business infrastructure, including software-based labor; augmented, virtual and mixed reality applications; RFID and biometrics; and partnerships with tech leaders to develop an integrated data management platform.

"We aim to provide quality, reliable, and efficient maritime solutions powered by the latest technologies at internationally competitive prices to attract customers to IMI and Saudi Arabia, while delivering safer and more sustainable working practices," he said. Since its establishment, IMI has prioritized the formation of several strategic partnerships with national and international companies to enhance its localization efforts, service offering and digital infrastructure, while providing specialized training opportunities for Saudi youth and IMI employees. "These partnerships will help drive forward our efforts as we continue to move towards full operations," he said. IMI was launched at The King Salman Global Maritime Industries Complex in 2017, with the participation of joint venture partners Saudi Aramco, Bahri (National Shipping Company of Saudi Arabia), Hyundai Heavy Industries of Korea, and the UAE's Lamprell. Upon completion, it will be the largest shipyard in the Gulf and among the largest in the world. Dr. Ahmari spoke at the SMC's first panel session, updating conference participants on progress in the Kingdom's Vision 2030 diversification program. "Saudi Maritime Congress is an ideal platform to meet and do business with influential entities in the local maritime industry and network with investors and decision-makers from around the world," he said. Development of the yard has attracted keen industry attention, with evidence of progress in the Saudi maritime sector a source of debate, as economic development under Vision 2030 has been spurred in 2022 by surging oil prices in the first half of the year on the war in Ukraine. (Credits: SeaTrade Maritime)

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X-Press Feeders Powers it's Fleet with Zeronorth Platform



September 5, Bahri, the Saudi global provider of logistics and transport services inaugurated on Monday the first phase of its Fleet Performance Monitoring Center (FPMC) in Riyadh, as part of its strategy to develop a centralized support system to provide data and analytics-driven guidance and recommendations for technical, safety, and crew operations. The new centre will leverage high-frequency data collected from vessels' alarm monitoring, navigation, and cargo systems to provide data-driven support for the company's vessel operations. "With this first phase now underway, our day-to-day focus at the Fleet Performance Monitoring Center will be on improving the overall performance of Bahri's vessels through high-frequency data collection and monitoring systems," Bahri CEO, Eng. Ahmed Al Subaey said, noting that the centre is part of the company's long-term digital transformation strategy set to take its operations to "unprecedented levels of efficiency," and support the Kingdom's drive for smarter and more sustainable operations across all sectors of the economy. Furthermore, the centre enables the crew onboard and the operations team ashore to easily monitor the condition of various equipment and systems. It also allows for analytics-driven timely interventions and machine learning anomaly detection tools to pre-empt breakdowns, minimize downtime, and enhance predictive maintenance, monitor regulatory compliance, and support decision-making. The centre's main control hub is equipped with HD video walls along with other equipment and software required to transmit inputs. According to the company, the second and third phases set to commence in the upcoming two years will further expand the centre's operations, by

integrating new systems, and developing and refining its analytical dashboards. (Credits: Logistics Middle East)

Canada Aids FSO Safer Salvage Fund Service



Sept 7, Canada has chipped in with C\$2.5m (\$1.9m) to add to the urgently needed funds sought by the United Nations to support the urgent international salvage operation of the FSO Safer off Yemen, a decaying tanker carrying 1.1m barrels of crude, which risks breaking up creating one of the worst environmental disasters recorded in the Red Sea. The latest donation means the UN is still some \$14m shy of its \$80m target required to avert a catastrophe expert have warned would be five times worse than the Exxon Valdez disaster in 1989.

The proposed salvage operation consists of two processes occurring at the same time. One is the temporary ship-to-ship transfer of the FSO Safer's cargo of crude oil into a replacement tanker and the other involves finding a permanent solution for replacing the abandoned FSO Safer. "Canada is supporting UN-led efforts to prevent a catastrophic spill. The potential consequences would be devastating not only environmentally, but would also destroy livelihoods and force closures of ports Hodeidah and Saleef in Yemen, which support the delivery of critical humanitarian assistance including shelter, food, water and health care," commented Harjit Sajjan, Canada's minister of international development. (Credits: Splash247)

Saudi Arabia, Oman Partner to Enhance Joint Work in Maritime Transport Sector

September 8, RIYADH: Saudi Arabia has signed a cooperation agreement with Oman to enhance joint work in the maritime transport sector, according to the Saudi Press Agency. The agreement aims to facilitate the smooth movement of commercial ships, develop economic relations between the two countries and contribute to

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raising the efficiency of maritime transport services. It also seeks to facilitate technology transfer and encourage maritime studies and training, contributing to the industry's localization. In July, Saudi Arabia's cabinet approved a cooperation agreement between the government and Iraq in the field of maritime transport.

Also, in June, Saudi Arabia, represented by the Transport General Authority, signed a joint maritime transport cooperation agreement with the Department of Maritime Affairs in Djibouti.

Last year, Saudi Arabia made progress in maritime connectivity at the regional level, according to the UN Conference on Trade and Development report for the third quarter of 2021. The Kingdom achieved 70.68 points in the Maritime Connectivity Index, which is the highest in the region, said the report. (Credits: Arab News)

DNV Signs MOU with SIT to Promote Maritime Decarbonization and Digitalization



September 26, DNV has signed a Memorandum of Understanding (MOU) with the Singapore Institute of Technology (SIT) to explore opportunities to advance net-zero ambitions in Singapore's maritime sector and actively support the new generation workforce. As part of

the three-year partnership, DNV Maritime Decarbonization & Autonomy Regional Centre of Excellence will help spearhead multiple Research & Development (R&D) and educational initiatives in collaboration with SIT's Sustainable Maritime Engineering Strategic Translational Research Program.

The partners have agreed to cooperate on development of ship and system designs using simulation-based approaches; joint industry applied research projects with entities in the Singapore maritime ecosystem within the areas of decarbonization & digitalization and a deeper and wider knowledge exchange between the two.

"This MOU represents a new level of collaboration with SIT, and the beginning of a partnership focused on innovation, education and cooperation that will help accelerate the maritime industry's sustainable transition goals," said Cristina Saenz de Santa Maria, Regional Manager South-East Asia, Pacific & India, and Maritime at DNV. The MOU will enable DNV to support SIT and other maritime entities in Singapore to use DNV's Simulation Trust Centre for educational and R&D purposes. Research collaborations between DNV and SIT will focus on advancing zero-emission and autonomous ships; shore remote control and simulation centres; shore charging and future fuel bunkering infrastructure.

Under the agreement, DNV intends to transfer knowledge in maritime decarbonization and digitalization to SIT to develop industry postgraduate programs. The collaboration brings together the university's applied learning pedagogy and DNV's Simulation Trust Centre to conduct lessons on optimizing ships, and system design for advanced hydrodynamics, energy management system, emission control, and system safety. Students will also gain opportunities to collaborate with DNV on capstone projects in novel maritime technology applications, perform their Integrated Work Study Program at DNV, and co-organize student competitions. DNV Maritime Decarbonization & Autonomy Regional Centre of Excellence in Singapore focuses on maritime digitalization, decarbonization and port capabilities in support of South-East Asia's transition to a smart and sustainable future

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Tristar Group Maps out Carbon Footprint Management



September 1, Dubai-based Tristar Maritime Logistics says it aims to lead the way in terms of carbon footprint management within the shipping industry, with a series of new initiatives.

New regulations come into effect on 1st January 2023, with the aim of reducing overall emissions through to 2050, but Tristar believes it is already ahead of the curve. "With our historic sustainability outlook, before it became fashionable, our newbuild vessels in 2016 and again in 2020/2021 already meet the new regulations without having to make any modifications," says Chris Peters, Tristar Maritime Logistics' CEO.

Looking forward, there are new global regulations coming into effect in relation to decarbonization, with various versions of net zero scheduled for 2050 and other targets set to be reached by 2030.

Peters claims that for existing vessels it is not presently technically or financially viable to change the fuel used by that vessel to a lower or zero carbon alternative. "This may change and then Tristar Maritime Logistics will endeavor to introduce these changes to our fleet," adds Peters. However, he points out that there are many smaller things that can be completed now to reduce fuel consumption and therefore carbon footprint. He says, "As and when vessels are due for their 5-year dry dockings, modifications have been made by Tristar to engines and upgraded paint schemes have been applied to the hulls, reducing friction in the water and therefore consumption."

Tristar also has a program to periodically polish the vessel propeller, examine the hull condition and clean if required, to ensure that fuel is saved by reducing the drag caused by fouling. "We are also evaluating existing

technologies such as wind-assisted power, air lubrication of the hull and other initiatives to reduce the fuel consumed," Peters says.

From a longer-term perspective Peters points out that an ongoing evaluation of the fleet is being carried out to see how Tristar can not only meet the regulations but also strive to continuously stay ahead of them. Various concepts have been reviewed for alternative fuels, including battery-powered vessels for the coastal fleet and dual-fueled ocean-going vessels. (Credits: Maritime Executive)

Green Hydrogen as an Energy Carrier in Shipping Decarbonization



September 21, The omens are good for the Middle East, as strength in renewables will translate into strength in green hydrogen. Last month, research carried out by Siemens identified a total of 46 potential green hydrogen projects in the Middle East and Africa, worth \$92bn. These emissions-cutting schemes have seen the signing of MoUs on over \$ 40bn worth of projects in Egypt in the past year, and a \$5bn green hydrogen project in Neom in Saudi Arabia is expected to begin construction this year. The shipping industry is keen to understand the implica-

The shipping industry is keen to understand the implications of this new technology on transportation and vessel performance.

"We see quite a big movement in the use of hydrogen in heavy-duty transport in general. Fuel cells are now being adopted on buses, trucks, and trains. Based on that, we also see that production volumes for this technology are rising—and costs are declining," Jostein Bogen, VP Global Product Line Manager, electric solutions, at ABB, told Seatrade Maritime News.

"We believe that hydrogen will be an important energy carrier to decarbonize shipping."

He said shipping line Maersk had recently contracted several methanol-run container vessels in South Korea.

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"According to Maersk, they plan to create methanol by first producing green hydrogen from renewables, and then generating methanol from bio-CO2. That's why we believe that hydrogen could be a very important driver towards an emissions-free industry."

To produce green hydrogen at the lowest possible cost, there was a need to create production at scale, Bogen said. "All the barriers of transporting green hydrogen through pipelines or in vessels, as with LNG today, still exist. The research and development on the subject is substantial, and we should be able to overcome these technical barriers," he said.

"Major renewables investments are taking place in the Middle East. Countries in the region have launched their own hydrogen strategies. Middle East solar energy production potential will have major implications for hydrogen storage."

Hydrogen is not an energy source itself, Bogen explained, but an energy carrier and means of storage. Hydrogen is a good way to store solar energy, and here the Middle East has an advantage, he believes.

"The Middle East is also a strong hydrocarbons producer. The technology in the infrastructure being used today in the petrochemical industry can also be used in the hydrogen supply chain. Given that role, I think the Middle East is in a central position to develop the infrastructure," he said.

"The question of hydrogen is not only about bunkering, but also transport, either to a pipeline or using shipping. We are seeing developments in Middle East ports in that area. Countries like Saudi Arabia have announced massive investments in hydrogen. Dubai and Qatar are also investing in hydrogen and solar panels, which again are an enabler for green hydrogen production."

Khaled Nagieb, CEO and president, Egypt Ports Development Group, said green hydrogen projects were gaining momentum in the Suez Canal Economic Zone (SCZone). "You can expect some of those projects to happen in other ports as well, but [they will be executed] predominantly in Sokhna Port," he told Seatrade Maritime News.

"Nearly 20 MoUs have been signed in Egypt for the production of green ammonia, green hydrogen for export and bunkering vessels, green methanol or LNG. Whatever it is, Egypt's got all of it. It is a great position to be in, and there is availability of land around the SCZone." Last month, independent power company Globeleq,

signed an MoU with four Egyptian government entities to create a green hydrogen facility at the SCZone. It is also a participant in the Benban solar farm in the south of Egypt, which is set to become the world's largest such facility.

"Egypt's got great solar power and wind. Only a few countries have the best of both worlds. We have great, cheap, clean energy and good infrastructure today. It's been such a big change," Nagieb said. (Credits: SeaTrade Maritime)

DP World Wins Latest Judgement in HK Court over **Djibouti Concession**

September 21, The Hong Kong Court of Appeal has dismissed the latest request by China Merchants Ports Holdings seeking permission to file a second appeal before the Court of Final Appeal, against its previous decision that DP World's suit against the company should be heard before Hong Kong Courts – and not the courts of Djibouti.

DP World and joint venture company Doraleh Container Terminal are bringing multi-billion dollar claims against China Merchants Port Holdings, alleging that it induced the government of Djibouti to expel DP World from the country and hand over the Doraleh terminal to China Merchants.

China Merchants Port Holdings investments in other ports and free zone projects in Djibouti, in breach of DP World's exclusivity rights, will also be examined.

China Merchants Port Holdings argued that the case should be heard by the Djibouti courts, despite Hong Kong being its home jurisdiction.

The High Court of Hong Kong found that the case should proceed in Hong Kong and ordered China Merchants Port Holdings to pay DP World's legal costs. The Court of Appeal dismissed an appeal against that decision and has now refused to grant China Merchants Port Holdings permission to file a second appeal before the Court of Final Appeal. The London Court of International Arbitration (ICIA) decided in January 2022 against the Republic of Djibouti awarding interim compensation of \$200M for damages caused between 23 February 2018 to 31 December 2020. Damages due to DP World now amount to \$686.5m, plus accruing interest, while the concession itself remains legally in force. (Credits: DP World)



HIGH PRICE SPREAD DRIVING HFO SALES, SCRUBBER INSTALLATIONS

By Marcus Hand



While bunker prices have come off the highs seen early this year the spread between HFO and VLFSO remains high making scrubbers allowing vessels to burn HFO an attractive option.

Looking at prices from Ship & Bunker IFO380 HFO in the Port of Singapore is priced at \$395.00 per tonne compared to \$716.00 per tonne for VLFSO a difference of \$312 per tonne. For Rotterdam HFO is priced at \$419.50 per tonne while VLFSO is \$645 per tonne, a lower but still substantial differential of \$225.50 per tonne. Pricing in Fujairah is fairly similar to that in Singapore with HFO at \$411.50 per tonne and VLFSO at \$716.00 per tonne, a spread of \$304.00 per tonne.

The high price spread has seen more owners with scrubber fitted vessels opting to use HFO and figures from the Maritime & Port Authority of Singapore, which regulates the world's largest bunkering port, showing HFO now accounting for nearly 30% of all monthly bunker fuel sales compared to around 25% previously. In August figures from the MPA showed that HFO sales were 1.23m tonnes, some 29.8% of total bunker fuel sales of 4.12m tonnes for the month. Until July and August sales of HFO had generally hovered around 25% of total bunker sales in Singapore.

The high price spread between HFO and VLFSO is also driving shipowners to invest in scrubbers. A participant at Sibcon 2022 in Singapore noted that price spreads had "pretty crazy this year" and this was driving more owners to look at installing scrubbers. Back in June Oman's Asyad Dry Dock told Seatrade Maritime News that it had seen a growing number of customers retrofitting scrubbers to their vessels.

According to classification society DNV some 4,819 ships in the global fleet either have scrubbers installed or on order. Of these the vast majority -4,013 – are open loop scrubbers which are banned from being operated in the waters of a number of countries and ports around the world.

World Media



A decision to install scrubbers will be weighed heavily by where owners believe the HFO is headed and whether the price spread with VLFSO will remain as high as has been seen this year.

A report by Integr8 Fuels noted that Singapore HFO prices are now at their lowest levels since August last year. However, looking ahead it said "HFO prices are likely to rise relative to crude as we go through the northern hemisphere winter on the back of a seasonal rise in fuel oil demand and potential additional requirements into power generation."

About the Author: : Marcus Hand is the editor of Seatrade Maritime News and a dedicated maritime journalist with nearly two decades of experience covering the shipping industry in Asia

(Source: : Seatrade Maritime News)

Expected ships in Port Qasim

ETA by AIS	Туре	Vessel
Oct 16, 06:00	Chemical/Oil Products Tanker	GRAND ACE7
Oct 16, 07:00	Chemical/Oil Products Tanker	FAIRCHEM TRIUMPH
Oct 17, 11:00	Bulk Carrier	IVS BOSCH HOEK
Oct 17, 12:00	Bulk Carrier	SENTINEL
Oct 17, 14:00	Chemical/Oil Products Tanker	WEALTHY LOYAL
Oct 17, 22:00	Chemical/Oil Products Tanker	FAIRCHEM KISO
Oct 17, 23:00	LNG Tanker	LNG ENUGU
Oct 18, 10:00	Bulk Carrier	DENEB

Opinion Article



IMS 22 OPPORTUNITIES AND CHALLENGES - MARITIME SECTOR IN PAKISTAN

By Kamran Hashmi

Pakistan's Maritime Strategy, which is a part of the National Grand Strategy, encompasses a wide range of maritime-related activities and interests. It deals with aspects of national power that are connected to national interests at sea, such as diplomacy, safety, and security of its maritime trade, fishing, exploitation, conversation, regulation, defense of Exclusive Economic Zones, and everything that falls under the categories of above-the-seas, on-the-seas, and under-the-seas.

Sea is a symbol of riches and all major cities, like New York, Karachi, Tokyo, and Istanbul, are situated close to the ocean. The developed nations learned to appreciate the value of the ocean, took control of the world's waters, strategically located islands, and developed into superpowers. A nation's economic prosperity and ability to support a sizable military are both attributed to its maritime power. Pakistan was unable to do much from the sea because of continental policies. Due to the underuse of ports, fishing, ship construction, ship recycling, etc., we were unable to exploit the ocean's resources.

With 40% of the world's population, more than 2.6 billion people, and 20% of the world's water, the Indian Ocean is the third-largest ocean in the world. It is also crossed by important maritime lanes. 40% of the world's oil supply comes from the Middle East, which also holds 65% of the world's oil reserves. A trillion dollars' worth of trade, or 80% of all global trade, goes via the Indian Ocean. Every year, the Indian Ocean sees an average of 100,000 ships. Seven of the most crucial chokepoints in the globe (including the Strait of Hormoz, Strait of Malacca, and others) are in the Indian Ocean, and any interruption in these chokepoints will have a devastating effect on global economies. The capabilities of the region's maritime forces, both regional and extra-regional, have gradually increased. Major powers like the United States, France, the United Kingdom, Japan, China, and regional countries like India, the United Arab Emirates, and Saudi Arabia have established naval bases or have been granted permission to use berths and airfields in the Indian Ocean's littoral nations.

Pakistan's National Security is dependent upon its Maritime Security. Pakistan has an unused 200 NM Exclusive Economic Zone and a 150 NM Continental Shelf. Approximately 91% of trade and 100% of oil are imported from the sea. Pakistan is significantly reliant on its seaborne imports and exports. This necessitates a matching expansion of its security and merchant marine capabilities. Only 13 ships are owned by the Pakistan National Shipping Corporation, which alarmingly accounts for 10% of all marine trade.

When CPEC is completely operational, the PNSC share will be even lower, and Pakistan will be incredibly reliant on foreign ships during times of conflict or tension. Additionally, freight costs will skyrocket as seen in the recent Russia-Ukraine war. A new medium-sized container ship/oil tanker will cost US\$ 50 million, compared to the projected US\$ 5 billion spent in foreign currency on sea freight costs alone in 2021. We are losing a significant quantity of foreign currency and relying on foreign carriers for our trade. In tense situations or during a war, foreign carriers' services might not be available. To address the nation's weakness of relying on foreign flag carriers, Pakistan's merchant fleet needs to be strengthened. Similarly, Pakistan's Navy's capabilities need to be improved to guarantee that the Sea Lanes of Communications are constantly protected.

Pakistan has a 1001 km long coastline with three ports: the close-by Karachi Port Trust (KPT), the

Opinion Article



Port Qasim Authority (PQA), and the partially operational Gwadar Port Authority (which is 472 km away). The Gwadar port is the center of attention because of CPEC, and Pakistan's enemies are doing all in their power to prevent it from succeeding. However, if CPEC is successful, it would alter the dynamics of the entire region. The three ports are deemed adequate to handle Pakistan's current and future marine traffic, the transit trade of neighboring landlocked nations, and rising transshipment.

KPT and PQA are the major ports of Pakistan. In 2021, these ports handled 110 million tons of cargo, less than 2% of cargo is transported by rail which is alarming, while the majority is delivered by road, which makes it more expensive. Additionally, container traffic is permitted to travel through Karachi city between 11 p.m. to 6 a.m., making port operations more difficult. The share of the railway is to be increased to make it more cost-effective.

The unfortunate truth is that despite Gwadar port's excellent strategic location and potential to handle national, transit, and transshipment cargo, we have not been able to make it operational even by extremely low criteria. The obstacles of lack of dredging, lack of hinterland connectivity, improved infrastructure, coupled with electricity and communication services, and necessary FBR SROs need to be handled on a war footing for this port to be fully operational and utilized to its maximum potential.

Two dry docks at the Karachi Shipyard and Engineering Works, which can accommodate vessels up to 26,000 DWT, are available for the development and repair of naval and commercial vessels. For Gwadar Port Operationalization, the 2nd Shipyard is crucial. Pakistan, which is adjacent to the Persian Gulf, has a significant potential for shipbuilding and repair facilities once they are built.

Fishing contributes significantly to the national economy and Pakistan is fortunate to have a wealth of fishing potential. About 300,000 fishermen work there directly. In addition, ancillary industries employ another 400,000 people. It also contributes significantly to export revenue. Fish and fisheries goods worth US\$303.6 million were exported from Pakistan in 2021, it has the potential to touch US 1 Bn \$ if incentives and facilities are provided to fishermen. The fisheries in Pakistan's Exclusive Economic Zone are under the control of the federal government. In addition, it oversees formulating policies, interprovincial coordination, planning, research, quality control, instruction, exploratory fishing, stock assessment, fisheries management, fleet enhancement, data gathering, export, etc.

In terms of its contribution to the economy, shipbreaking can be a viable enterprise. About 46 kilometers northwest of Karachi, near Gadani, lies the third-largest shipbreaking yard in the world. The 10 km long beachfront at Gadani is home to the yard, which has 132 shipbreaking sites. The Baluchistan Development Authority owns the remaining third of the plots, leaving about two-thirds in private hands (BDA). It can currently break up to 125 ships annually, including supertankers, with a combined LDT of 1,000,000 tons, these ships can be of any size. This sector is an interim processing industry that imports scrap ships and processes them into raw materials (rerolling material), mostly for the rerolling industry and small steel cottage industries. Remelting Industry also receives a tiny portion of its output, which includes melted steel and iron scrap. Around 200,000 people are employed in downstream industries, contractors, transporters, small traders, cottage industry, etc. in addition to the more than 20,000 skilled and unskilled workers directly employed in this business at Gadani. An estimated 1 million households are dependent on this industry.

Coastal/maritime tourism is a significant sector of the global tourism industry, and Pakistan offers beautiful coastlines, fishing, miles of sandy beaches, a 1001 km shoreline, and coastal highways that connect coastal areas to other parts of the country. Baluchistan's coastline is made up of sandy beaches at Somiani,

Opinion Article



Gwadar, Pasni, Ormara, and Astola Island in addition to muddy cliffs and rocky ground. The sixth-largest mangroves in the world, located in the Indus Delta, are a major ecotourism draw for travelers from all over the world.

Both the efficiency of port operations and the condition of the railroad tracks need to be improved. More financial incentives should be provided to the private sector to encourage the construction of more passenger ferries, cargo ships, and oil tankers. To make traveling easier for visitors, maritime tourism culture must be established. By providing the necessary amenities, the fishing business can generate additional foreign exchange. The shipbreaking industry needs to use the newest technologies. The new shipyard and Gwadar port will be built at a fast pace. Pakistan has the necessary resources to boost its economy through the adoption of positive maritime policies and regulations.

About the Author: The writer is associated with the Indian Ocean Study Center at the National Institute of Maritime Affairs. The views expressed are his own.

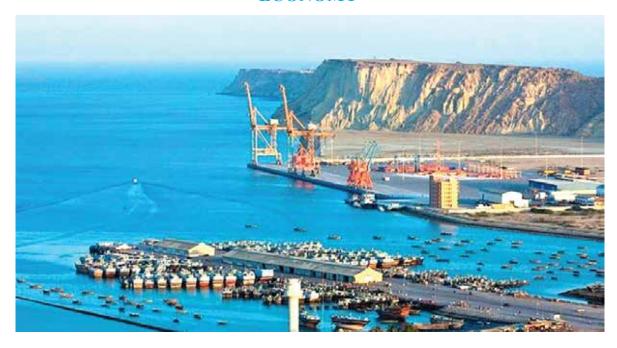
Cover Story

The picture on the title page is Pasni Harbour. It is located in Pasni town, Balochistan, and is famous for fishing or hunting trips. It is one of the best outdoor adventure locations that has not yet been fully explored. In the late eighties, a fish harbour was developed in Pasni town to facilitate the fisheries sector. It is the economic hub in Pasni, the largest tehsil in the Gwadar district. The sole source of livelihood for 90% of the population depends on the fishing and fishing industries

Letter to the Editor



POTENTIAL OF GWADAR IN THE TRANSFORMATION OF PAKISTAN'S ECONOMY



Gwadar Port has grown in popularity as a result of recent international developments that are increasingly focused on maritime-related economic activities. It has become an important reference point for people discussing the geopolitics and geo-economics of the South Asian region. They expected that it will eventually become the center of the global market. Since then, several people have tried, but China has succeeded. Time has commenced passing since the CPEC announcement. Change is taking place in Gwadar and the peak of development has been reached.

Gwadar is widely expected to change the lives of everyone associated with it. Its expanding and incredible opportunities are viewed as a great source of hope for people in the surrounding area. Their status is expected to improve quickly once they have all grown up and become functional.

It is suggested to the relevant authorities that the concerns of the local people be addressed. They should be assured that everything belongs to them and that they will benefit from the developments. They should be the subject of public awareness campaigns. Something, in reality, should cause them to believe, not just words. If the locals are happy, all Pakistanis will be happy. There must be no evidence of inequality. Locals have the first right.

There is great hope that CPEC will help to transform the lives of the underprivileged. It has made efforts to provide us with state-of-the-art infrastructure in the form of highways, power plants, and urban railways, so it is natural to hope that it will do much more to improve the lives of the people there.

Your's Sincerely Sadia Muzaffar

Letter to the Editor



SHIP RECYCLING TRANSITION



Gadani (Pakistan) is the largest shipbreaking yard in the world, employing 30,000 workers. It contributed billions to the economy of Pakistan but slowly and gradually this industry started to decline as a result of some policies and negligence. Pakistan should recognize shipbreaking as an industry and develop a comprehensive, eco-friendly ship-recycling strategy.

It is well known that shipbreaking is now formally acknowledged as an industry on a global scale. For the Sustainable Ship Recycling industry in Pakistan, it is very important to transform towards the latest technology as well as the implementation of industrial laws and regulations.

I believe that "With joint efforts from relevant government bodies, shipbreaking industry, civil society and special support from international organizations, ship-breaking in Pakistan can be turned into a modern and safe industry". Various Research studies report that South Asian shipbreaking yards expose workers to toxins that can seriously injure the neurological system. Workers' health is seriously at risk due to organic pollution from sewage.

It is a crucial time for the government will take initiative steps and follow rules and regulations, to safeguard our workers associated with to ship breaking industry from toxic trash. Workers need to be made aware of the components of their job that could be harmful to their health. Many nations have already ratified international rules prohibiting shipbreaking, thus it is about time for the Pakistani government to scale up its efforts in this direction

Your's Sincerely Future Trade Analyst

Maritime Directory



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





OFFSHORE MARINE OPERATIONS

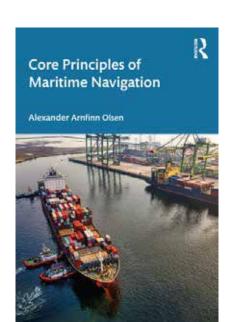
ISBN-13: 9781739774394

Book Description

This book is an adaptation of the Guidelines for Offshore Marine Operations, which were published as Revision 0611-1401 on 06 November 2013. References to the Guidelines or Guidance is made to direct the reader to the appropriate section of the original publication. The objective of this publication, therefore, is to provide said guidance regarding the best practices which should be adopted to ensure the safety of personnel on board all vessels servicing and supporting offshore facilities, and to reduce the risks associated with such operations. It particularly relates to the following activities: Operations of offshore facilities. Operations of vessels. Whilst the best practices summarised in this publication primarily reflect those adopted in the North-West European Area, the editor recognises that the guidance may just as easily apply outside this region and that many, if not all, of the recommendations included do indeed have global relevance. Where it has been possible to make recommendations relating to operations outside its core area without diluting the original objectives these have been included. It is recognised, however, that in certain circumstances local or company-specific requirements may exist.

In this event the guidance contained herein should be read in the context of such requirements and interpreted accordingly.

To facilitate common practices on a global basis, where necessary, the guidance, together with included reporting forms, should be used as the basis for preparing procedures for local practices



CORE PRINCIPLES OF MARITIME NAVIGATION

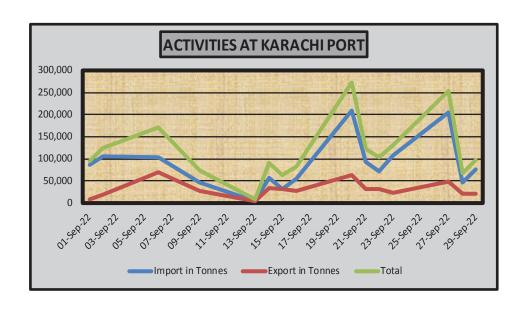
ISBN-13: 9781032271385

Book Description

Core Principles of Maritime Navigation introduces the main navigation concepts required by trainees and professionals involved in maritime operations. The book covers a wide range of subjects from wind, waves and depths to navigational marks and buoys, navigational techniques and equipment, passage planning, duties of the Officer of the Watch, berthing and anchorage. It is not intended to be a technical publication; rather, it aims to introduce core ideas and concepts in an accessible way for general readers, university students, cadets and for the continuous professional development of experienced seafarers.

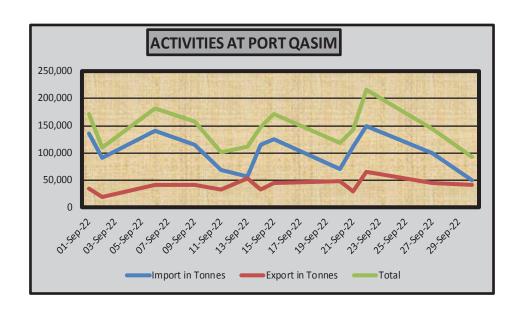


ACTIVITIES AT KARACHI PORT (SEPTEMBER 2022)			
Date	Import in Tonnes	Export in Tonnes	Total
01-Sep-22	87,318	8,398	95,716
02-Sep-22	105,916	19,112	125,028
06-Sep-22	102,766	68,721	171,487
09-Sep-22	46,516	26,932	73,448
13-Sep-22	3,857	4,487	8,344
14-Sep-22	57,187	33,176	90,363
15-Sep-22	32,472	31,210	63,682
16-Sep-22	54,295	27,587	81,882
20-Sep-22	208,304	63,829	272,133
21-Sep-22	91,980	30,916	122,896
22-Sep-22	72,695	31,669	104,364
23-Sep-22	107,829	23,338	131,167
27-Sep-22	204,299	48,288	252,587
28-Sep-22	46,686	20,511	67,197
29-Sep-22	75,509	21,023	96,532
Total	1,297,629	459,197	1,756,826





ACTIVITIES AT PORT QASIM (SEPTEMBER 2022)			
Date	Import in Tonnes	Export in Tonnes	Total
01-Sep-22	136,158	35,630	171,788
02-Sep-22	90,430	19,846	110,276
06-Sep-22	140,440	41,503	181,943
09-Sep-22	115,663	42,597	158,260
11-Sep-22	68,227	33,541	101,768
13-Sep-22	57,856	52,981	110,837
14-Sep-22	114,329	32,791	147,120
15-Sep-22	125,478	45,849	171,327
20-Sep-22	70,320	48,381	118,701
21-Sep-22	111,579	30,226	141,805
22-Sep-22	149,904	65,873	215,777
27-Sep-22	99,142	44,761	143,903
30-Sep-22	50,122	41,973	92,095
Total	1,329,648	535,952	1,865,600



Tide Times for Port



	Tide Times for Port Qasim			
		Long: 67.21° E		
Date	Tide	Time (PKT)	Height (m)	
15-October-2022	Low Tide	02:37 AM	3.12m	
	High Tide	07:36 AM	1.51m	
	Low Tide	13:11 PM	2.93m	
10 October 2022	High Tide	19:03 PM	0.61m 2.92m	
16-October-2022	Low Tide	03:12 AM 08:24 AM	2.92m 1.72m	
	High Tide Low Tide	13:44 PM	2.72m	
	High Tide	19:24 PM	0.87m	
17-October-2022	Low Tide	03:58 AM	2.73m	
17-0010001-2022	High Tide	10:12 AM	1.86m	
	Low Tide	14:23 PM	2.47m	
	High Tide	19:57 PM	1.19m	
18-October-2022	Low Tide	05:08 AM	2.59m	
10 000000 1011	High Tide	11:42 AM	1.83m	
	Low Tide	15:18 PM	2.23m	
	High Tide	23:48 PM	1.30m	
19-October-2022	Low Tide	06:54 AM	2.62m	
15 000000: 2022	High Tide	12:54 PM	1.68m	
	Low Tide	17:12 PM	2.10m	
20-October-2022	High Tide	00:49 AM	1.20m	
20 000000: 2022	Low Tide	08:06 AM	2.77m	
	High Tide	13:48 PM	1.45m	
	Low Tide	19:51 PM	2.31m	
21-October-2022	High Tide	01:36 AM	1.06m	
	Low Tide	08:47 AM	2.93m	
	High Tide	14:26 PM	1.17m	
	Low Tide	20:45 PM	2.61m	
22-October-2022	High Tide	02:16 AM	0.91m	
	Low Tide	09:19 AM	3.07m	
	High Tide	14:57 PM	0.84m	
	Low Tide	21:30 PM	2.88m	
23-October-2022	High Tide	02:54 AM	0.78m	
	Low Tide	09:51 AM	3.18m	
	High Tide	15:27 PM	0.48m	
	Low Tide	22:19 PM	3.11m	
24-October-2022	High Tide	03:33 AM	0.69m	
	Low Tide	10:22 AM	3.26m	
	High Tide	15:57 PM	0.13m	
	Low Tide	23:11 PM	3.31m	
25-October-2022	High Tide	04:11 AM	0.65m	
	Low Tide	10:54 AM	3.31m	
	High Tide	16:30 PM	-0.18m	
26-October-2022	Low Tide	00:02 AM	3.48m	
	High Tide	04:50 AM	0.67m	
	Low Tide	11:26 AM	3.32m	
	High Tide	17:03 PM	-0.39m	
27-October-2022	Low Tide	00:49 AM	3.57m	
	High Tide	05:30 AM	0.77m	
	Low Tide	11:54 AM	3.30m	
	High Tide	17:36 PM	-0.46m	
28-October-2022	Low Tide	01:33 AM	3.58m	
	High Tide	06:12 AM	0.93m	
	Low Tide	12:19 PM	3.24m	
20 October 2022	High Tide	18:12 PM	-0.39m	
29-October-2022	Low Tide	02:15 AM	3.50m	
	High Tide	06:57 AM	1.13m	
	Low Tide	12:43 PM	3.14m	
20 October 2022	High Tide	18:51 PM	-0.16m	
30-October-2022	Low Tide	02:58 AM	3.34m	
	High Tide	07:49 AM	1.35m	
	Low Tide	13:11 PM	3.00m	
31-Octobor 2022	High Tide	19:39 PM	0.19m	
31-October-2022	Low Tide	03:47 AM 08:57 AM	3.16m 1.53m	
	High Tide Low Tide		2.80m	
		13:48 PM 20:48 PM	0.57m	
	High Tide	20.40 PIVI	0.3/111	

	Tide Times for GWADAR			
		Long: 62.20° E		
Date	Tide	Time (PKT)	Height (m)	
15-October-2022	Low Tide	01:51 AM	2.24m	
	High Tide	07:26 AM	1.41m	
	Low Tide	12:18 PM	2.05m	
	High Tide	19:25 PM	0.46m	
16-October-2022	Low Tide	02:44 AM	2.10m	
	High Tide	08:08 AM	1.53m	
	Low Tide	12:39 PM	1.91m	
47 0-4-1 2022	High Tide	20:06 PM	0.65m	
17-October-2022	Low Tide	03:54 AM 09:12 AM	1.98m 1.63m	
	High Tide		1.63m	
	Low Tide	12:54 PM 21:04 PM	0.82m	
18-October-2022	High Tide Low Tide	05:30 AM	1.94m	
18-0010001-2022	High Tide	22:39 PM	0.94m	
19-October-2022	Low Tide	06:54 AM	1.99m	
13-0010001-2022	High Tide	14:18 PM	1.45m	
	Low Tide	17:24 PM	1.50m	
20-October-2022	High Tide	00:14 AM	0.96m	
20 0010001-2022	Low Tide	07:43 AM	2.09m	
	High Tide	14:24 PM	1.28m	
	Low Tide	19:16 PM	1.62m	
21-October-2022	High Tide	01:18 AM	0.93m	
	Low Tide	08:14 AM	2.18m	
	High Tide	14:41 PM	1.08m	
	Low Tide	20:12 PM	1.79m	
22-October-2022	High Tide	02:03 AM	0.90m	
	Low Tide	08:38 AM	2.27m	
	High Tide	15:00 PM	0.85m	
	Low Tide	20:53 PM	1.98m	
23-October-2022	High Tide	02:42 AM	0.89m	
	Low Tide	08:59 AM	2.35m	
	High Tide	15:23 PM	0.61m	
	Low Tide	21:30 PM	2.16m	
24-October-2022	High Tide	03:18 AM	0.92m	
	Low Tide	09:19 AM	2.40m	
	High Tide	15:46 PM	0.36m	
	Low Tide	22:06 PM	2.33m	
25-October-2022	High Tide	03:52 AM	0.96m	
	Low Tide	09:40 AM	2.44m	
	High Tide	16:12 PM	0.14m	
	Low Tide	22:41 PM	2.47m	
26-October-2022	High Tide	04:27 AM	1.03m	
	Low Tide	10:02 AM	2.47m	
	High Tide	16:41 PM	-0.04m	
	Low Tide	23:17 PM	2.55m	
27-October-2022	High Tide	05:02 AM	1.12m	
	Low Tide	10:27 AM	2.46m	
	High Tide	17:12 PM	-0.14m	
20.0 : 1	Low Tide	23:56 PM	2.57m	
28-October-2022	High Tide	05:38 AM	1.22m	
	Low Tide	10:54 AM	2.43m	
20.0-+-1 2022	High Tide	17:48 PM	-0.15m	
29-October-2022	Low Tide	00:39 AM	2.52m	
	High Tide	06:18 AM	1.32m	
	Low Tide	11:24 AM 18:27 PM	2.36m	
20 October 2022	High Tide		-0.07m	
30-October-2022	Low Tide	01:27 AM	2.42m	
	High Tide	07:03 AM	1.42m	
	Low Tide	12:00 PM	2.24m	
21_October 2022	High Tide	19:14 PM	0.11m	
31-October-2022	Low Tide	02:27 AM 08:00 AM	2.30m 1.51m	
	High Tide Low Tide	12:45 PM	2.07m	
	High Tide	20:12 PM	0.34m	
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Tide Times for Port



Tide Times for Port Karachi			
		Long: 66°58′ E	
Date	Tide	Time (PKT)	Height (m)
15-October-2022	Low Tide	01:48 AM	2.60m 1.42m
	High Tide Low Tide	07:40 AM 12:57 PM	2.41m
	High Tide	19:28 PM	0.58m
16-October-2022	Low Tide	02:34 AM	2.44m
10-0010001-2022	High Tide	08:26 AM	1.57m
	Low Tide	13:29 PM	2.25m
	High Tide	20:06 PM	0.79m
17-October-2022	Low Tide	03:44 AM	2.30m
17 0000001 2022	High Tide	09:44 AM	1.68m
	Low Tide	14:08 PM	2.07m
	High Tide	21:05 PM	1.00m
18-October-2022	Low Tide	05:21 AM	2.24m
	High Tide	11:33 AM	1.68m
	Low Tide	15:14 PM	1.91m
	High Tide	23:01 PM	1.12m
19-October-2022	Low Tide	06:42 AM	2.28m
	High Tide	12:54 PM	1.56m
	Low Tide	18:05 PM	1.88m
20-October-2022	High Tide	00:25 AM	1.10m
	Low Tide	07:44 AM	2.38m
	High Tide	13:54 PM	1.38m
	Low Tide	19:32 PM	2.03m
21-October-2022	High Tide	01:24 AM	1.02m
	Low Tide	08:25 AM	2.51m
	High Tide	14:34 PM	1.16m
	Low Tide	20:27 PM	2.24m
22-October-2022	High Tide	02:11 AM	0.95m
	Low Tide	08:57 AM	2.63m
	High Tide	15:06 PM	0.92m
	Low Tide	21:09 PM	2.44m
23-October-2022	High Tide	02:51 AM	0.89m
	Low Tide	09:24 AM	2.73m
	High Tide	15:34 PM	0.68m
	Low Tide	21:47 PM	2.63m
24-October-2022	High Tide	03:30 AM	0.88m
	Low Tide	09:49 AM	2.82m
	High Tide	16:03 PM	0.43m
	Low Tide	22:23 PM	2.81m
25-October-2022	High Tide	04:07 AM	0.90m
	Low Tide	10:16 AM	2.88m
	High Tide	16:32 PM	0.20m
	Low Tide	22:59 PM	2.94m
26-October-2022	High Tide	04:45 AM	0.95m
	Low Tide	10:44 AM	2.91m
	High Tide	17:03 PM	0.02m
27 0-4-1- 2022	Low Tide	23:36 PM	3.02m
27-October-2022	High Tide	05:24 AM	1.04m
	Low Tide	11:14 AM	2.90m
20 Ostoba - 2022	High Tide	17:37 PM	-0.07m
28-October-2022	Low Tide	00:15 AM	3.03m
	High Tide	06:04 AM	1.16m
	Low Tide	11:46 AM	2.84m
20 October 2022	High Tide	18:14 PM	-0.07m
29-October-2022	Low Tide	00:58 AM	2.96m
	High Tide	06:48 AM	1.30m 2.73m
	Low Tide High Tide	12:21 PM 18:54 PM	0.04m
30-October-2022	Low Tide	01:46 AM	2.84m
30-0000001-2022	High Tide	01:46 AW	2.84III 1.45m
	Low Tide	13:00 PM	2.57m
	High Tide	19:42 PM	0.25m
31-October-2022	Low Tide	02:43 AM	0.25m 2.69m
31-0000001-2022	High Tide	02:43 AW 08:39 AM	2.69ffi 1.57m
	Low Tide	13:49 PM	2.35m
	High Tide	20:43 PM	0.52m
	mgn nuc	20.43 FIVI	0.02111

