

ICAS MARITIME AFFAIRS HANDBILL

October 25, 2022

Volume 1, Issue 9

Recent News in Global Maritime Affairs

[1] Climate Change and Blue Carbon Economy [1]

New seaweed deal taps into Indigenous ecological knowledge

October 24 - Axios

[South Pacific, United States]

The Te Whānau-ā-Apanu, a tribe of the New Zealand First Nations, has signed and invested in a Trans-Pacific seaweed research and farming deal with Blu3, a climate technology company based out of California. The deal mainly includes research and commercial projects centered around the potential of seaweed as a source of blue carbon, food, bioenergy, construction and biopharmaceuticals.

Tiny Antarctic creatures provide US\$8.6 billion of carbon storage via their poo

October 20 - Imperial College London [The Antarctic, Europe, Global]

A new research report released by the World Wide Fund for Nature (WWF) explains how the krill that live in the Antarctic seas can significantly help reduce global heating by keeping 23 megatonnes of carbon annually out of the atmosphere through their natural processes, making them "worth more to nature and people left in the ocean than removed."

<u>Climate change exposes lack of US preparedness in defending Arctic Ocean interests, US senator says</u>

October 16 - CNN [United States, Arctic]

During a CNN TV interview, Maine Senator Angus King warned that the U.S. has "been slow to pick up on" securing the Arctic region as other powers move in as a "new ocean" is in the process of appearing in the region due to climate change and a declining summertime extent of sea ice.



Rising Waters Again Force Evacuations and Spread Misery in Australia

October 15 - The New York Times [Paywall] [South Pacific]

Following a year of record-breaking rainfall and floods, Australia's southern states of New South Wales, Victoria and Tasmania have all experienced flash flooding again in October; a risk which is expected to remain or increase in the coming weeks. Victoria is hit the hardest by the flooding with authorities anticipating "some of the largest evacuations" ever.

Meet the multimillion-dollar building deliberately built to drown

October 12 - The Washington Post [Paywall] [United States]

In Norfolk, Virginia, the non-profit organization Elizabeth River Project is building a US\$8.1 million headquarters in an area destined to be submerged in the upcoming decades in an effort to show people "how to work and play and live with this rising sea level."

50% of Earth's coral reefs face climate change threat by 2035

October 11 - University of Hawai'i News [Global]

According to new research done at the University of Hawai'i at Mānoa, if climate change continues unabated, its negative impacts on coral reefs "are actually worse than anticipated due to a broad combination of climate change-induced stressors" such as tropical storms, ocean acidification, sea surface temperature, land use and human population. Thus, among other conclusions, in 2035, 50% of the world's coral reefs will be unsuitable when multiple stressors are considered.

The Mediterranean Sea is so hot, it's forming carbonate crystals

October 5 - Ocean Acidification International Coordination Centre [Europe]

Global warming is now causing some parts of the eastern Mediterranean Sea to form carbonate crystals in a process called stratification as the sea can no longer absorb carbon dioxide gas and instead releases it.

First African Emissions Reduction Platform to Begin Trading

October 3 - Bloomberg [Africa, Global]

Africa's first verifiable emissions reduction platform, known as CYNK, will begin trading in "Tamuwa biomass tokens" this quarter, with plans already underway to also add "regenerative agriculture" and "blue carbon" credits to the platform.



IMO and Commonwealth Secretariat join forces for sustainable maritime development

September 29 - The Commonwealth [Global]

On September 29, the International Maritime Organization and the Commonwealth Secretariat, an intergovernmental organization representing 56 member countries, signed a Memorandum of Understanding partnership to promote "sustainable maritime transport through joint activities."

[2] Maritime Economy and Shipping [2]

Indonesia exports could hit \$300 bln by 2024, spurred by resource 'downstreaming'

October 24 - Reuters [Paywall] [Southeast Asia, Global]

Luhut Pandjaitan, Indonesia's Coordinating Minister of Maritime and Investment Affairs, said in an interview that Indonesia's exports could hit a record US\$280 billion in 2022 and could further rise above US\$300 billion by 2024 as the government continues its adjustments on export bans.

Port of Rotterdam Says War and Economy Reshaped Business in 2022

October 21 - The Maritime Executive

[Europe, the Mediterranean]

The Port of Rotterdam Authority has released new evidence of the negative impact the war in Ukraine and the resulting sanctions on Russia have had on the shipping industry. While the total volumes have not drastically changed, "the energy landscape has changed dramatically" along with Russia-Rotterdam container traffic coming to a "standstill."

<u>Indian Register of Shipping expands footprint in South-East Asia with RO authorisation from Philippines maritime flag administration</u>

October 18 - Hellenic Shipping News [South Asia, Southeast Asia]

The Indian Register of Shipping (IRS) and the Philippines maritime flag administration have signed a recognized organization agreement as part of the IRS' efforts to extend its efforts and presence around the world. An office has also been established in Manila, to be followed by a surveyor.

Taylor Maritime makes all cash offer for Grindrod Shipping

October 12 - Quoted Data

[Europe, Southeast Asia, Global]

Taylor Maritime Investments has announced it has made a new offer for Grindrod Shipping Holdings Limited shares, valued in total at about US\$506 million. This offer followed a previous all cash offer made this past August by Taylor Maritime for all Grindrod Shipping shares it did not already own.



Container shipping set for 'short, sharp, hard landing'

October 6 - Seatrade Maritime News [Global]

After months of upticks in the container shipping sector leading to historic highs, experts in the field are now facing the declining demand in container ship markets; a decline which experts say was always expected to eventually come as the supply chain normalizes once again after the onset of the pandemic.

The fastest-growing port in Texas just got even safer

October 4 - NOAA
[United States]

Port Freeport, the fastest-growing port in the state of Texas, USA, now features a National Oceanic and Atmospheric Administration (NOAA) system called Physical Oceanographic Real-Time System (PORTS) that "improves safe and efficient marine navigation." This is the 38th PORTS system deployed in the PORTS network.

Adani Ports, Vedanta group co-bidders for Puducherry's Karaikal port

October 3 - Business Standard [South Asia]

On September 30, two parties—the Adani Ports and Special Economic Zone (APSEZ) and a Vedanta group entity—co-submitted financial bids to purchase the Karaikal Port; an all-weather deep water port located in India's union territory of Pudocherry that recently defaulted on loans.

<u>Global shipping companies recognized for reducing speeds off California coast to protect blue whales and blue skies</u>

October 1 - *qCaptain* [Global]

Eighteen shipping companies from around the world participated in the voluntary, seven-month-long "Protecting Blue Whales & Blue Skies" incentive program off the coast of Southern California last year. Companies primarily received awards based on the percent of distance their vessels traveled through speed reduction zones at 10 knots or less and with an average speed of 12 knots or less.

UK marks World Maritime Day with £60 million boost for clean shipping

September 29 - Government of the United Kingdom [United Kingdom, Global]

On September 29, the United Kingdom celebrated World Maritime Day by announcing £60 million in funding for a third round of the clean maritime demonstration competition, which is set to run from



April 2023 to March 2025. The announcement was made during the keynote address given by the United Kingdom's Transport Secretary at the Atlantic Future Forum in New York.

MoEI Launches "UAE Maritime Network" To Reinforce Maritime Investments

September 29 - Marine Insight [Middle East, Global]

The United Arab Emirates' Ministry of Energy and Infrastructure has launched the UAE Maritime Network initiative. Although there are nine key objectives, the initiative is ultimately aimed at promoting the UAE as a global maritime hub and prime place for maritime-related investments.

[3] Ocean Governance and Maritime Cooperation [3]

Scientists Call For The Ocean to Be Recognized as a Living Being With Inherent Rights

October 18 - Science Alert [Global]

In a recent editorial published in PLOS Biology, a group of researchers have argued for an official, legal framework to recognize the ocean as a living being with its own inherent rights. "International law needs to evolve to reflect the Ocean's inherent rights to exist, flourish, and regenerate. Ocean health is human health," they explain.

Israel and Lebanon reach agreement over gas reserves in the Mediterranean

October 11 - PBS

[Mediterranean, Middle East]

After years of discussion, Israel's prime minister announced that Israel and Lebanon have reached a "historic agreement" over their shared maritime border, which could also result in natural gas exploration and a reduction of bilateral tensions. The U.S. took the role of mediator in the talks between the two nations who have formally been at war since Israel's establishment in 1948.

China, Russia Quietly Expanding Arctic Partnership, Says Panel

October 11 - USNI News [Arctic]

China's presence in partnership with Russia in the Arctic region has been steadily growing; evident through "extensive" partnerships in the use of multi-use ports and airfields and the sharing of scientific research, intelligence, and surveillance and reconnaissance data. Experts believe Beijing's focus remains on Taiwan and the South China Sea over the Arctic.



Hong Kong declines to seize a supervacht linked to a Russian oligarch under sanctions.

October 11 - The New York Times [Paywall] [East Asia, Eurasia, Global]

A superyacht which arrived near Hong Kong from Vladivostok, Russia, suspected to be owned by Russian oligarch and ally of President Vladimir Putin Alexei Mordashov, was under consideration to be seized by Hong Kong in an effort to help enforce sanctions against Russia over its invasion of Ukraine. Hong Kong's chief executive said it would enforce sanctions ordered by the UN Security Council but otherwise did not have the legal basis to carry out sanctions in this case.

<u>Parliamentary resolution places nature at the core of good ocean governance, but omits impacts of domestic fisheries</u>

October 6 - World Wide Fund For Nature [Europe]

The European Parliament has adopted a resolution on strengthening ocean governance and biodiversity, establishing an official position for how Member States and the EU as a whole should better safeguard the ocean and balance those responsibilities with those related to human activities.

The Australia-India-Indonesia trilateral finally takes off

October 4 - Observer Research Foundation [Indian Ocean, Indo-Pacific]

On the sidelines of the 77th session of the United Nations General Assembly in New York, the first, long-awaited meeting of the Australia-India-Indonesia foreign ministers took place. Discussions were largely focused around the prospects of strengthening cooperation in the framework of the Indian Ocean Rim Association, the G20 and the blue economy.

Morocco-Mauritania: First operational plan to implement convention on maritime fisheries, aquaculture

October 1 - The North Africa Post [Africa]

On September 30, alongside the 1st session of the joint Moroccan-Mauritanian High Joint Commission on fisheries and aquaculture, the two countries signed the first operational plan for 2023-2024. The plan focuses on managing and cooperating on "scientific research, fisheries management, training, aquaculture, shipbuilding and infrastructure."



Delayed relief shipments to Puerto Rico rekindle debate over a century-old shipping law

September 30 – Marketplace

[Caribbean]

As Puerto Rico still struggles to recover from Hurricane Fiona, the U.S. Department of Homeland Security waived a century-old law known as the Jones Act so a Marshall Islands-flagged ship could dock in Puerto Rico and deliver a much-needed tanker of diesel fuel. Section 27 of the Jones Act says that goods moved from one port to another in the U.S. have to be done via a U.S. vessel.

<u>China facing increased competition from US in Pacific as Washington hosts first island</u> summit

September 29 - South China Morning Post [Paywall] [United States, China, South Pacific]

In the last week of September, the U.S. hosted the first U.S.-Pacific summit in Washington, D.C. involving 14 Pacific island governments to discuss issues like trade, security and climate change. Total investments in the partnership, which is in line with the U.S. Indo-Pacific strategy, are expected to reach over US\$860 million.

Amid rising seas, island nations push for legal protection

September 30 - PBS [Global, Pacific]

With sea levels continuing to rise, island nations like Samoa and Fiji in the South Pacific are determined to protect their national sovereignty and be "at the forefront of challenging international law to develop in a way which is equitable and just."

[4] Maritime Security and Defense [4]

Australia Boosts Pacific Aid as Efforts Ramp Up to Counter China

October 21 - The Wall Street Journal [Paywall] [South Pacific, Southeast Asia]

Australia has announced that, over the next four years, it will increase official security ties and development assistance to Pacific nations by about US\$565 million; a significant increase from the amount Prime Minister Anthony Albanese's party promised during the recent election campaign.

U.S., S.Korean troops stage river-crossing drills as North Korea protests

October 19 - Reuters [Paywall] [East Asia, United States]

As part of a larger 12-day Hoguk 22 joint military exercise, U.S. and South Korean troops practiced building floating bridges and transporting materials across rivers. The drill, which took place just



south of Seoul, was condemned by North Korea for raising tensions, who also test-fired rockets and artillery in response.

US Navy ship docks in Palawan as 'KAMANDAG' Exercise concludes

October 14 - Manila Bulletin [United States, Southeast Asia]

As tensions between Beijing and Washington continue, the armed forces of the Philippines and the United States held the two-week joint naval exercise KAMANDAG. Named after an acronym in Filipino for "Cooperation of the warriors of the sea," the exercise involved 3,760 troops with Republic of Korea Marine Corps and Japan Self-Defense Ground Corps observing.

After years of headaches, the US Navy's first stealth destroyer is operating farther from home than it's ever been

October 13 - Business Insider [United States, Pacific]

The USS Zumwalt, the US Navy 's most advanced destroyer, is on a tour of the Pacific which included stops in Guam and Japan. The trip, which marks the longest distance the Zumwalt has ever been deployed, is part of the US Navy's "fleet integration process of introducing a class of ships into the operational environment."

'If this is not provocation, what is it?': Taiwan says mainland China sends 4-6 warships every day

October 11 - South China Morning Post [Paywall] [China, East Asia]

Taiwan's defence minister Chiu Kuo-cheng said that the People's Liberation Army has deployed 4-6 warships to the waters close to Taiwan every day since August in addition to multiple warplane sorties. While such deployments are not irregular, even in peacetime, it is the first time Taipei has released its count of daily PLA warship deployments close to the island.

Japanese Warships Return Home Following First Phase of Indo-Pacific Deployment

October 6 - USNI News [East Asia, Pacific]

After being deployed for four months, the first of two surface units of the Japan Maritime Self Defence Force—consisting of the the helicopter carrier *Izumo* (DDH-183) and destroyer JS *Takanami* (DD-110)—returned to its home port in Yokosuka the first week of October.



New transport ship highlights Taiwan's improving defense industry

October 3 - The Japan Times [Paywall] [East Asia]

Taiwan's navy has successfully received delivery of its largest locally-built warship; an action that is regarded as a way to highlight Taiwan's self-reliance and strengthen the domestic defense industry. The warship, named the Yu Shan, is a 153-meter-long "amphibious multimission vessel" constructed by Taiwanese state-backed shipbuilder CSBC and will reportedly replace the Taiwanese navy's only in-service amphibious transportation dock.

Romanian Navy Needs Minehunters to Keep Black Sea Safe for Ships, Navy Chief Says

October 3 - USNI News [Europe, Black Sea]

At a public discussion, the chief of the Naval Forces of Romania said that they want more minehunters employed in the Black Sea to keep merchant ships safer. The mines concerned are ones that Ukrainian forces placed near its coastline after Russia invaded Ukraine in February and which have now shifted away into the Black Sea.

South Korea, U.S., Japan stage anti-submarine drills amid North Korea tension

September 30 - Reuters [Paywall] [South Korea, United States, Japan, East Asia]

For the first time in five years, the navies of the United States, Japan and South Korea staged trilateral anti-submarine exercises. The drills, held in international waters off the East coast of South Korea, also took place amid a recent uptick in tension over North Korean missile tests.

Coast Guard spots Chinese guided missile cruiser off Alaskan island

September 27 - NBC News [United States, China, Arctic]

While on a routine patrol in the Bering Sea, a U.S. Coast Guard cutter spotted a Chinese guided missile cruiser alongside two other Chinese naval ships and four Russian naval vessels, including a destroyer. The ships were spotted as part of a single formation.



Peer-Reviewed Research & Government Releases on Maritime Issues

- ➤ Government Release: Government of Australia <u>"Strategic Fleet Taskforce launched"</u> [October 20]
- Government Release: U.S. Department of Transportation "Biden-Harris Administration Announces Nearly \$39 Million in Grants for America's Marine Highways to Strengthen Supply Chains" [October 6]
- ➤ Government Speech: Government of the United Kingdom <u>"The importance of maritime security in an uncertain world"</u> [September 30]
- ➤ Government Release: The White House <u>"FACT SHEET: Roadmap for a 21st-Century U.S.-Pacific Island Partnership"</u> [September 29]
- ➤ Government Remarks: The White House <u>"Remarks by Vice President Harris Aboard the USS Howard Naval Ship in Yokosuka, Japan"</u> [September 28]
- ➤ Government Release: The White House <u>Pacific Partnership Strategy of the United States</u> [September 2022]
- ➤ Government Release: The White House <u>National Strategy for the Arctic Region</u> [October 2022]
- ➤ Podcast Episode: <u>"The past, present and future of an integrated Mediterranean"</u> [European Commission Maritime Forum October 12]
- > Scientific Report: "Mangroves provide blue carbon ecological value at a low freshwater cost" [Scientific Reports 12 October 21]
- ➤ Opinion: "Why Vietnam needs to pivot landward for its security" [Australian Strategic Policy Institute October 24]
- ➤ Opinion: <u>"5 ways the Israel-Lebanon maritime deal matters"</u> [CNN October 12]
- ➤ Opinion: <u>"America's Dependence on China Is a Crisis in the Making"</u> [The Heritage Foundation October 4]
- > Opinion: "A U.S. 'Ships Act' Would Break China's Control of the Seas" [The New York Times October 3] [Paywall]
- ➤ Analysis: <u>"They're 'World Champions' of Banishing Water. Now, the Dutch Need to Keep It."</u> [The New York Times Published October 10, Updated October 18] [Paywall]
- ➤ Analysis: "Activity at the Sinpo South Shipyard Part 1: The Secure Boat Basin" [Center for Strategic and International Studies, Beyond Parallel October 18]
- ➤ Analysis: "Among the Sea Powers: Australia's Maritime Strategy in the Indo-Pacific" [Australian Institute of International Affairs October 17]
- > Analysis: "Can China build a "community" for shared oceans?" [The Interpreter October 17]
- ➤ Analysis: "China's slow but steady moves in the Arctic" [The China Project October 12]
- ➤ Analysis: <u>"Lebanon and Israel's Maritime Deal Suspends Them Between No War and No Peace"</u>
 [Carnegie Middle East Center October 12]
- ➤ Analysis: "Could this breakthrough by Chinese scientists put hypersonic weapons on PLA aircraft carriers?" [South China Morning Post October 11] [Paywall]
- ➤ Analysis: "A Clear Look at China's Deep-Sea Fishing" [The New York Times October 9] [Paywall]
- ➤ Analysis: "Making the Indian Ocean into the "Western Ocean" [Harvard International Review October 9]



- ➤ Analysis: "Shipping giants are still rolling in cash but time is running out" [Freight Waves October 6]
- ➤ Analysis: "Guest post: Why ocean depth is key for how warming will affect marine life" [Carbon Brief -September 30]
- ➤ Analysis: "Indian Ocean rivalry: China's naval maneuvers irk New Delhi" [Nikkei Asia September 27] [Paywall]
- ➤ Analysis: "How China Targets the Global Fish Supply" [The New York Times September 26] [Paywall]

Events on the Maritime Domain

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- ➤ On October 4, the Wilson Center Polar Institute held a virtual discussion on <u>"Forty Years of Antarctic Marine Conservation: Policy Approaches in the Antarctic Treaty System."</u> A recording is available online.
- From October 5-7, the International Seabed Authority, in partnership with the African Union and the Norwegian Agency for Development Cooperation (NORAD) held the <u>fourth workshop</u> for the "promotion of the sustainable development of Africa's deep-seabed resources in support of Africa's blue economy strategy. The three-day workshop was held in Abuja, Nigeria and hosted by the government of the Federal Republic of Nigeria. A press release and summary is available on the ISA website.
- ➤ On October 7, the Wilson Center held a virtual discussion on <u>"The Geopolitical Importance of Southeast Asia and the Pacific."</u> A recording is available online.
- ➤ From October 9-12, the "Maritime Cyprus 2022" Conference was held in person in Limassol, with a main theme of "Shipping Response to the 3"C"s Crises Challenges Competitiveness". Hosted by the Shipping Deputy Ministry of the Republic of Cyprus, the conference brought together "more than 1000 participants, including shipowners, shipping executives, regulators and state officials from all over the world." There are official, detailed press releases for each day of the conference available online.
- > From October 10-13, the World Maritime University and International Maritime Organization held a joint international conference on <u>"Protecting the Ocean Moving Forward at 50: London Convention & Stockholm Declaration"</u> in Sweden.
- ➤ On October 11, the Hudson Institute held a virtual conference titled <u>"The Dragon in the North: Assessing the Growing Chinese Threat to the Arctic Region."</u> A recording is available online.
- ➤ On October 14, the Center for Strategic & International Studies held a virtual discussion with Vice-Admiral Karl Thomas of the USN on a <u>"SEVENTH Fleet Update."</u> A recording is a available online.
- ➤ On October 18, the Stimson Center held a live panel discussion on <u>"COP27: Closing the Climate Adaptation Investment Gap in Small Island States and Coastal Communities."</u> A recording is available online.
- > On October 19, the Atlantic Council held a <u>virtual discussion with US Chief of Naval Operations</u>
 <u>Admiral Mike Gilday</u> on how the Navy will build, maintain, train, and equip a dominant naval force as a part of Forward Defense's Commanders Series. A recording is available online.
- ➤ On October 24, the Wilson Center Asia Program held a virtual discussion on <u>"Recalibrating U.S.-Japan Indo Pacific Strategies Towards ASEAN."</u> A recording is available online.



- ➤ On October 25, the Wilson Center Polar Institute will be holding their first in a series of virtual discussions on "Unpacking the 2022 US National Strategy for the Arctic Region."
- > From November 3-4, the China-Southeast Asia Research Center on the South China Sea will be holding its hybrid "Symposium on Global Maritime Cooperation and Ocean Governance 2022" out of Sanya, China, featuring seven sessions and including several keynote speeches by representatives from regional governments, the United Nations, and the International Seabed Authority, among others.
- ➤ From November 11-12, the World Academy of Science, Engineering and Technology will be holding the "International Conference on Maritime Transport (ICMT 22)" in Venice, Italy.
- ➤ From November 21-22, the "Nigeria International Maritime Summit (NIMS)" will be held in Lagos, Nigeria with a focus on "igniting the blue economy."
- From December 14-16, the United Nations and a multitude of partners will be holding a hybrid "Global Workshop on Source-to-sea Management" that "will gather experts and policymakers from the freshwater and ocean communities, as well as from transboundary basin organizations and marine organizations, with the aim to strengthen cooperation and to share good practices in policy-making and implementation of effective source-to-sea management." Registration is open until December 2.

Handbill Spotlight

Green Shipping

Issue Background

Maritime shipping is arguably the most important mode of global transportation. It was also the primary—or only—mode for hundreds of years. United Nations Secretary–General Guterres pointed out in his recent speech on September 29, World Maritime Day, that more than 80% of the world's trade currently depends on shipping. Both the COVID–19 pandemic and the Black Sea Grain Initiative remind us of the vital role that shipping plays in all aspects of our society. Sea transportation is a booster for global communication and economic development. Unfortunately, it is also a major source of pollution. According to he International Council on Clean Transportation, the shipping industry releases approximately one billion tons of greenhouse gas (GHG) every year, which contributes to 3% of global emissions. Meanwhile, ships also pollute the sea water by dumping wastewater and ballast water into the ocean. Toxic water and invasive species could cause-significant turmoil to local marine environments. Even after a ship is scrapped, the oil and heavy metals leaked during the dismantling process can cause-serious damage to the ecology of the local coastal area.

"Green shipping" is an idea in which people make as little pollution as possible during maritime transportation to protect the environment. Green shipping requires transporters to <u>control GHG</u> <u>emissions</u>, <u>ship more efficiently</u>, <u>and enhance related technologies</u>. This concept can largely contribute to four of the 17 UN Sustainable Development Goals (SDGs), including SDG 13 (climate change), SDG 14 (life below water), SDG 9 (industry innovation), and SDG 17 (importance of partnerships). There are already <u>many available measures</u> that allow shipping to be greener, such as



slowing down ship speed and reducing the number of empty containers on board, but they are not always effectively utilized due to specific transportation needs. So, efforts have been taken in some countries to enforce more sustainable and greener shipping.

Countries will have a more and more difficult time reaching the goals of the Paris Agreement unless they take more actions to promote green shipping. Not to mention that the current maritime industry creates a lot of other pollution besides carbon emissions. Countries and related organizations have accused the International Maritime Organization (IMO), the specialized agency of the United Nations responsible for shipping, of failing to correctly recognize the urgency of solving environmental problems and offer effective measures. Thus, many governments, NGOs, and firms began to look for solutions to green shipping themselves.

Recent Events

Although there are many doubts and criticisms of the work done thus far by the IMO, it has to be admitted that the IMO is also making unremitting efforts to advance green shipping. In support of the UN SDGs, in 2018 the IMO <u>adopted an initial strategy</u> for the reduction of greenhouse gas emissions from ships. In 2020, the organization ruled out the new regulation, also known as IMO 2020, significantly reduced the <u>maximum allowable amount of sulfur content in ship fuel</u> to improve air quality. The IMO is also making new progress steadily every year.

In celebration of World Maritime
Day 2022,¹ the IMO chose "New
technologies for greener shipping" as
the theme of this year. Fundamentally,
only technological innovations can
facilitate green shipping to the greatest
extent. The theme also reflects the idea
that, through technological
improvements, the IMO will "leave no
one behind" in this process of
supporting a green transition of the



maritime sector into a sustainable future. The IMO presented some "potential game-changing green technologies" to support this theme. For example, the IMO-supported Maritime Technology Cooperation Centre (MTCC) is starting to install Propeller Boss Cap Fins (PBCF) on ships to enhance propeller efficiency. Theoretically, it can help to reduce 9,000 tons of emissions per ship each year. They also plan to use more marine solar power systems on smaller ships to reduce at most 98% of pollutant emissions. The IMO also plans to develop new management technologies and systems—such as using AI for ship trim optimization—to minimize the damage done to ocean organisms. Allowing cargo ships sailing empty is actually a waste in disguise. And as mentioned previously, ballast water can seriously damage marine ecology systems if ships do not dump them scientifically. The problems such as ballast water and shipping efficiency are the causing factors of pollution that are often overlooked.

¹ Image Source: Official banner for the IMO's World Maritime Day 2022, <u>International Maritime Organization</u>



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Meanwhile, unsatisfied with the IMO's slow decision-making, countries have started promoting green shipping in their own ways. During COP 26, 22 countries signed the <u>Clydebank Declaration for green shipping corridors</u> to promote green shipping gradually around the globe. Although the green shipping corridors only affect a minor amount of ships, it is still an effective way to reduce GHG emissions on some of the busiest ship routes in the world. It also allows officials and scientists to test the feasibility of green shipping technologies, such as clean fuel, before using them on a large scale. Although China did not join the Clydebank Declaration because it bypassed the IMO, China participated in <u>building a green corridor</u> between Shanghai and Los Angeles, the busiest ship route worldwide. There are many countries that issue their initial actions targeting green shipping challenges. For example, the Biden Administration has issued new initiatives to encourage the shipping industry to decarbonize. Private companies like <u>ABB</u>, <u>Rolls-Royes</u>, and <u>Shell</u> have also stepped up to enhance and advance green shipping; vital, given how expensive green shipping is.

Keep In Mind

This year's World Maritime Day's theme symbolizes an international recognition of the necessity of developing constructive technologies to facilitate greener shipping. In fact, many governments and private enterprises have already started to work on achieving green shipping. On the one hand, this is a moment for all of humanity to work together for the common good. Even countries and organizations that are at odds on other issues can take this opportunity to collaborate on the same objective, making the best use of human ingenuity on green shipping. On the other hand, it needs to be recognized that some parties still have disagreements on how to achieve green shipping. Needless to say, people always have different ideas on how to realize a goal, especially since all countries are still exploring the most suitable methods for themselves. However, nations also have a wide range of capabilities, needs, expertise, etc. that do not always align. The international community needs to formulate a set of scientific standards as soon as possible to avoid the situation where "bad money drives out the good." In addition, it is more important to prevent some countries from using green shipping as an excuse to take advantage of others on maritime issues.

However, there are also questionable activities regarding green shipping that need to be monitored. Greenwashing is one of the concerns that scientists usually have. Fuels such as methanol are not as carbon neutral as they appear to be. Carbon was still generated in their production, though it was not released during combustion. Companies should be encouraged to test different methods, since we are still far from finding the best solution to achieve green shipping yet. Policymakers need to be extremely cautious when deciding which enterprises they should support or even subsidize, and make sure that businesses doing greenwashing do not take up valuable and limited government resources. In addition, the European Union plans to include maritime emissions into the emissions trading scheme (ETS), but many exporting countries questioned it because it will only make shipowners spend more time and fuel to transfer their goods in the "bunkering countries" before entering the EU. Such policies not only cannot curb emissions, but it will also encourage other countries to become bunkering ports for economic reasons.

This issue's Spotlight was written by Zhangchen Wang, ICAS Blue Carbon & Climate Change Program Research Assistant Intern.



ICAS Maritime Affairs Program: New and Upcoming

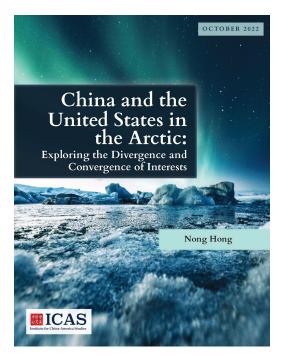
- ICAS MAP Report -

China and the United States in the Arctic: Exploring the Divergence and Convergence of Interests

By Nong Hong October 20, 2022

Executive Summary:

"The Arctic Ocean has an area of about 6.01 million square miles and makes up about 4.3% of the Earth's oceans. The melting of Arctic sea ice has led to increased human activities in the Arctic and has heightened interest in and concerns about the region's future. The supremacy of the military presence and security interests of the two Cold War-era superpowers – the former Soviet Union and the United States – have now been replaced by the multiple political interests of the eight North Pole states, dominated mainly by the military and security interests and naval capacity of Russia, Canada, the United States, Norway, and Denmark. The exclusivity of Arctic governance has also been challenged by the activities of



states from outside the region who are taking a special interest in many aspects of the Arctic that focus on scientific research, shipping, and resource development. China is one of these outside states with growing interest in the Arctic.

The emergence of the Arctic as a region of political and economic opportunity adds yet another dimension to U.S.-China relations. This report explores and compares the policy and influence of two states in the Arctic: The United States as a key Arctic littoral state and China as an Arctic stakeholder. Their respective policy and legislations, presence, and influence in this region, engagement with international and regional institutions will be unfolded in this report before yielding to a discussion on the divergence and convergence of interests between China and the United States in the Arctic. It can be concluded that there exist lots of divergence of interests between the two. Meanwhile, the Arctic is an arena where the U.S. and China, for the most part, enjoy converging interests, such as on issue areas that touch upon aspects of the law of the sea—be it conservation and climate change, marine scientific research, or construction of port and infrastructure facilities.

Given the current development in the Arctic region driven by the Ukraine conflict, the longstanding post-Cold War perception that the Arctic region would benefit from a disconnect from security concerns has lost its essence. Instead, the geopolitical importance of the Arctic region is coming back into focus with Russia's full military escalation of Ukraine and the worrisome loss of the status quo in Arctic cooperation. The joint statement by seven states of the Arctic Council in March 2022 to



pause participation in all meetings of the Arctic Council indicates grave impediments to international cooperation in the Arctic.

China and the United States should aim to achieve cooperative activities, particularly on research, which could play a useful role in stabilizing the troubled state of their current ties. The Ukraine conflict, while severing partnerships between researchers inside and outside of Russia across many fields of science, has a particularly profound impact on climate science in the Arctic, in which China and the United States could work together. China has the potential to be a strong partner for the United States if it can match up its own interests in the Arctic with the United States' interests and, together, address questions that are important to both nations."

Link to Report: https://chinaus-icas.org/research/china-and-the-united-states-in-the-arctic/
View & Share as a PDF:

https://chinaus-icas.org/wp-content/uploads/2022/10/China-US-Arctic-Report-10.2022-Final.pdf

- ICAS MAP Commentary -

Why Russia's Arctic agenda should be of more concern than China's actions By Nong Hong October 7, 2022

"With war stifling cooperation in the Arctic, including on critical climate change research, keeping region separate from global security concerns is a challenge. China, for its part, does not see itself as a competitor in the Arctic, but Russia's military build-up in the region is another, more worrying matter.

A recent report titled "China's Strategy and Activities in the Arctic", by the US-based Rand Corporation and Swedish Defence Research Agency, examines the potential implications of Chinese investment and activity in the Arctic. It points out that while China's presence in the North American sections of the Arctic remains limited, the world should keep an eye on its relationship with Russia, which will create uncertainties in the region.

A careful observation of China-Russia relations in the Arctic alongside recent developments in the region arising from the Ukraine conflict can shed further light on the factors that are causing uncertainty in Arctic affairs...."

Read the Full Commentary:

 $\frac{\text{https://chinaus-icas.org/research/why-russias-arctic-agenda-should-be-of-more-concern-than-chinas-actions/}{}$

This commentary was originally released on South China Morning Post on October 7, 2022.



- ICAS Commentary -

U.S.-Pacific Island Country Summit: Geopolitics trumps development

By Sourabh Gupta September 30, 2022

"It is unsurprising that a country which boasts nearly three times as many military bases as embassies and consulates would see the signing of an agreement by a state falling within its sphere of influence with a counterpart major power through the lens of geostrategic competition. To a hammer, everything looks after all like a nail.

And so it was when the Solomon Islands signed a security cooperation agreement with China earlier this spring to permit Chinese law enforcement forces to support the Solomon Islands' national police force to protect Chinese investment projects on the islands, as well as facilitate rest and replenishment for Chinese naval vessels at port..."

Read the Full Commentary:

https://chinaus-icas.org/research/u-s-pacific-island-country-summit-geopolitics-trumps-development/

This commentary was originally <u>released</u> on CGTN on September 30, 2022.

ICAS BCCC Commentary –

Protecting Blue Carbon From Extreme Weather's Destruction and For Its Mitigation By Zhangchen Wang

September 30, 2022

"The Summer of 2022, with frequent cases of extreme weather conditions around the globe, has finally come to an end as the temperature drops and the floods begin to recede across the world. With extensive reports and analyses covering the significant casualties and economic losses it has caused, extreme weather has proven its power again to everyone. Just like the damages it brought to global markets and societies, extreme conditions can be equally devastating to blue carbon ecosystems. Leaving droughts, storms, floods, and other natural disasters to ruin blue carbon sinks will only worsen climate problems and cause irreversible damage. Blue carbon plays an important role in improving climate challenges so it is essential to make sure the blue carbon sinks—like mangroves, sea grasses, krill, and salt marshes—survive extreme weather cases. Maybe in the near future, a more healthy and mature blue carbon ecosystem can even, in turn, contribute to further improving climatic conditions..."

Read the Full Commentary:

 $\frac{https://chinaus-icas.org/research/protecting-blue-carbon-from-extreme-weathers-destruction-a}{nd\text{-}for\text{-}its\text{-}mitigation/}$

This commentary was written as part of the BCCC Program Quarterly newsletter's 2022 Q3 Theme of the Quarter: Global Extreme Weather

