



BCCC

ICAS BLUE CARBON & CLIMATE CHANGE QUARTERLY

Volume 1, Issue 1
(January - March 2022)

Letter From the Editor - Welcome to the BCCC Program!

Dear Readers,

Though it is an emerging and relatively understudied concept in climate change's international policy discussions, **Blue Carbon** is critically important to manage. Blue Carbon describes carbon that is sequestered in both coastal and oceanic ecosystems and has been found to remove a significant amount of carbon from the atmosphere than in land-based ecosystems. Climate Change is one of the largest challenges that humanity must face that transcends national borders, much like the world's oceans. Thus, international cooperation is key to mitigating the impacts of climate change. However, national sovereignty and economic interests muddy the waters and limit the ability of countries like the United States and China, the world's two largest carbon emitters, to come together and find ways to find practical solutions that benefit both each other and the global environment itself.

As the United States and China have reached new crossroads in their relationship, new pathways for cooperation and mutual understanding have dwindled extensively. Climate change, however, will not wait for the two countries to come together and advance toward solutions. The Institute for China-America Studies is in a unique position to promote research and encourage collaboration between American and Chinese experts in addition to scholars from other regions. The program seeks to establish a platform for academic exchange between experts around the world to produce tangible policy recommendations for the two countries to follow together.

In this vein, ICAS is proud to announce the release of its BCCC Program, which endeavors to explore pathways for sustainably developing the blue carbon economy and combating climate change through open dialogue and novel policy research. New pathways will be explored for multilateral

engagement and mediation in areas of competition to promote mutually beneficial cooperation on climate change where possible.

The program will feature four primary projects:

1. **BCCC Quarterly:** Each quarter, ICAS will release a newsletter which will record the most important trends and developments regarding blue carbon policies and regulations in China, the U.S., and other regions, as well as international regimes such as the United Nations. The ICAS team will also produce a Chinese language version of this product to disseminate to a wider audience so that both sides have access to our research.
2. **BCCC Research:** The BCCC Program Team will release commentaries, issue briefs, and reports that explore the complexities and emerging news in the field of blue carbon and the overarching issues that climate change presents to the world.
3. **BCCC Events:** Hosted periodically throughout the year, ICAS Blue Carbon & Climate Change (BCCC) events promote the free and equal exchange of ideas on policy pathways for sustainably developing the blue carbon economy and combating climate change, especially as they relate to or involve the United States, China, and other regions.
4. **BCCC Media:** ICAS Blue Carbon & Climate Change media projects include but are not limited to short-form periodicals and Twitter campaigns.

Explore the BCCC Home Page to learn more: [Blue Carbon & Climate Change Program](#)

The **BCCC Quarterly** is organized into four main sections to keep our readers informed of critical developments in blue carbon and climate change-related activity. The first section focuses on multilateral government activity, policy implementations, geopolitical concerns and scientific research being conducted that relate to blue carbon specifically and climate change at large. The second and third sections are devoted to keeping our readers informed of the conversations, differing opinions, and scientific breakthroughs in the field. The last section is devoted to updating our readers on the contributions that ICAS has made to the program in the last few months, including original research, events and other related engagements.

The Quarterly, just like the BCCC program itself, will continue to evolve. I look forward to bringing you our latest developments, thank you for your continued support!

Sincerely,
Matt Geraci
BCCC Quarterly Editor-in-Chief

This Season's Global Climate Affairs

Special News Focus: Global Health and Climate Change

- In March, Johns Hopkins researchers examined extreme-weather preparedness and other climate-change resilience efforts in 22 large cities in 14 countries and found that more than one-quarter did not involve a public health agency. Sixteen of the 22 cities—73 percent—assessed in the study reported having a public health department on their climate-plan teams.
- The decline in greenhouse gas and aerosol emissions caused atmospheric changes that intensified the downpours. According to research, parts of eastern China experienced severe flooding in June and July of 2020. The researchers say the reductions in emissions contributed to about one-third of the extreme summer rain.
- Two new complaints were filed with the U.S. Securities and Exchange Commission (SEC) against Meta, the parent company of Facebook, alleging that the company misled investors about its efforts against climate change and COVID-19 misinformation.
- On February 28, the U.N. IPCC released a report detailing the dire outlook for health, including mental health, as Earth warms. Prior to the pandemic, measures of human health worldwide largely improved. Rising temperatures have an impact on mental and physical health, which compounds with major global events such as extreme weather events and even the ability to adapt to changes to lives and livelihood from the pandemic.
- Much like the pandemic, extreme weather events are acute and hard to protect against. An analysis of 405 extreme weather events over the past decade by Carbon Brief shows that 70% were more likely to occur, or made more severe, because of global warming. These events have the potential to cause longer-term supply chain damages than what the pandemic has caused.
- At the virtual gathering of the World Economic Forum's Davos Agenda on January 17-21, world leaders urged cooperation on climate change, COVID-19 response and economic recovery.

Multilateral & Government Activity

- The first-ever Middle East and North Africa (MENA) Climate Week runs from March 28 to 31 in Dubai as one of the world's most vulnerable regions to climate change seeks ways to address its dire threat.
- On March 23, it was reported that Prof Andrew Macintosh, the former head of the Australian government's Emissions Reduction Assurance Committee, said the growing carbon market overseen by the government and the Clean Energy Regulator was "largely a sham" as most of the carbon credits approved did not represent real or new cuts in greenhouse gas emissions.
- On March 4, Chinese Ambassador Qin Gang suggested opportunities for Sino-U.S. cooperation in climate change, referencing the Sino-U.S. Joint Statement on Addressing the Climate Crisis and the Sino-U.S. Glasgow Joint Declaration on Strengthening Climate Action.
- On February 28, the U.N. IPCC released a report detailing the impacts of climate change, covering ecosystems, biodiversity, and human communities across the globe. Another report, focusing on climate change mitigation approaches, will be released on April 4.
- On February 11, 40 heads of state and government attended the One Ocean Summit at the invitation of the President of France. At the summit, members commit to strengthening marine ecosystem protection, fighting plastic pollution, and fighting climate change through ocean-related solutions.
- On January 13, a joint NASA and NOAA report determined that Earth's global average surface temperature in 2021 tied with 2018 as the sixth warmest since record keeping began in 1880.
- The European Commission wants to give a temporary green label to natural gas and nuclear projects as long as they meet a set of criteria to avoid significant harm to the environment and water resources. Critics argue these classifications would undermine the credibility of sustainable investments.

- Environmental and climate-change-related risks that dominate the World Economic Forum's Global Risks Report 2022, while cascading impacts of the COVID-19 pandemic are expected to fundamentally change the landscape of global risks.

Associated News Sources:

[“Study: Cities Not Fully Engaging Public Health Agencies in Climate Change Planning”](#), Newswise, March 3

[“Global health has improved for decades. Climate change could change that.”](#), NBC News, February 28

[“Climate change: Covid shutdown linked to record rainfall in China”](#), BBC, February 18

[“Meta Faces New Whistleblower Complaints Over Climate Change, COVID Misinformation”](#), Cnet, February 18

[“Climate, COVID, China: Takeaways from online Davos event”](#), ABC News, January 21

[“Global Risks Report 2022: What you need to know”](#), World Economic Forum, January 11

[“Covid-19 Hit Supply Chains Hard. Climate Shocks May Hurt More”](#), Bloomberg, January 6

Associated News Sources:

[“‘Grave threat to life’: UN climate chief issues warning for MENA”](#), Al Jazeera, March 26

[“Australia’s carbon credit scheme ‘largely a sham’ says whistleblower who tried to rein it in”](#), The Guardian, March 23

[“Climate change: IPCC scientists to examine carbon removal in key report”](#), BBC, March 21

[“Qin Gang: China and the US have more consensus than differences on climate change \[in Chinese\]”](#), People.cn, March 5

[“Climate Change 2022: Impacts, Adaptation and Vulnerability”](#), IPCC Sixth Assessment Report, February 28

[“Looking back at the One Ocean Summit: What commitments for the ocean?”](#), Ocean & Climate Platform, February 12

[“2021 Tied for 6th Warmest Year in Continued Trend, NASA Analysis Shows”](#), NASA, January 13

[“Europe Seeks Green Label for Certain Gas and Nuclear Projects”](#), Bloomberg, January 1

The Geopolitics of Climate Change

- On March 28, the U.S. Department of Commerce said that it will investigate whether Chinese solar producers are illegally circumventing solar tariffs by routing operations through four countries in Southeast Asia.

- In March, Tang Renjian, China's agriculture minister, brought up the threat of climate change to food security at a high-profile government meeting in Beijing. In addition to a higher frequency of extreme weather conditions, turmoil from the Russia-Ukraine war hinders China's effort to ensure food supplies for its 1.4 billion population.

- As rising temperatures are already affecting crop yields and quality and worsening agricultural productivity, the war between Russia and Ukraine is leading to a global food crisis. Russia, the world's leading wheat supplier, recently banned grain shipments abroad. Ukraine, a top supplier of sunflower oil and a major wheat producer, has suspended all its port activity.

- Following Biden's signing of the Uyghur Forced Labor

Issues & Updates on Blue Carbon

- The Delta Blue Carbon Project, the world's largest mangrove restoration project, has sold its first batch of carbon credits. The project is owned by Delta Capital (IDC), the Government of Sindh and Pollination.

- At China's Two Sessions on March 5, blue carbon attracted increasing attention. Following Chinese Premier Li Keqiang's recommendations, blue carbon plans in Hainan, Guangdong, Hong Kong, and Macau were proposed. On March 18, officials from Hainan announced plans to establish an international blue carbon trading center. Guangdong is also considering similar efforts.

- During the One Ocean Summit on February 11, France, Costa Rica, Colombia, and other stakeholders announced the Global Blue Carbon Coalition. The coalition will address scientific gaps, build technical capacity, establish global standards and accelerate the growth of climate financing through blue carbon projects.

- Japan's Sojitz Corporation and Nippon Trading East have pledged to start a Blue Carbon Fund in collaboration with

Prevention Act in December 2021, solar power industry associations submitted comments to the Department of Homeland Security on developing guidelines for the law. As nearly half of the world's polysilicon is sourced from Xinjiang, a key ingredient for solar panels, the solar industry and Biden's climate goals could be severely impacted depending on how the law is enforced.

- In February, the U.N. IPCC issued the second of three multi-year reports, emphasizing the potential geopolitical upheavals that an over-reliance on fossil fuels can bring. "As current events [the Russia-Ukraine issue] make all too clear, our continued reliance on fossil fuels makes the global economy and energy security vulnerable to geopolitical shocks and crises," U.N. Secretary-General António Guterres said.

- On February 18, U.S. special envoy for climate John Kerry warned that geopolitical tensions, including the crisis between Russia and Ukraine, might undermine international efforts to fight against global warming.

- According to a January report by the Stockholm Environment Institute (SEI), climate change and the resulting growing competition over natural resources has aggravated tensions in Africa and will likely increase possibilities of violent conflicts in the continent.

Associated News Sources:

["U.S. to Probe Tariff-Dodging Claim Against Chinese Manufacturers"](#), *Wall Street Journal*, March 28

["China Faces Worst Crop Conditions Ever Due to Climate Change"](#), *Bloomberg*, March 22

["War in Ukraine and Climate Change Could Combine to Create a Food Crisis"](#), *Scientific American*, March 16

["Solar companies submit strategy comments on Uyghur Forced Labor Prevention Act"](#), *Solar Power World*, March 14

["Climate change happening faster than globe can adapt, latest U.N. report warns"](#), *MarketWatch*, February 28

["US envoy warns geopolitics risk hurting climate efforts"](#), *AP*, February 18

["Climate change amplifies the risks for violent conflicts in Africa"](#), *Stockholm Environment Institute*, January 10

Worldview International Foundation in support of blue carbon projects in Asia, Africa and the Middle East. The initial funding is set at USD 25 million, which will be used to support the planting of 25,000 mangroves in Sri Lanka.

- Researchers from The Nature Conservancy, the University of Virginia, and William & Mary are working with the Virginia state government to establish the first carbon credit program linked to seagrass.

- Starting January 19, Australia's carbon market will recognize carbon credits generated from blue carbon, covering projects in Australia's coastal wetland ecosystem.

- On January 1, China completed its first carbon credits trade originating from an aquaculture project, marking another milestone in China's blue carbon credits trade.

Associated News Sources:

["Hainan authorized to establish international carbon trading center \[in Chinese\]"](#), *People.cn*, March 22

["Landmark carbon transaction marks turning point for global 'Blue Carbon' market"](#), *Trafigura*, March 10

["Two Sessions | Utilize resource advantages, and tell good blue carbon stories \[in Chinese\]"](#), *Hainan Daily*, March 9

["Two sessions' 2022: Carbon neutrality high on agenda as delegates offer proposals on new energy vehicles, green AI and blue carbon"](#), *South China Morning Post*, March 6 [Paywall]

["CPPCC National Committee Representative Yu Xun proposes: Using blue carbon to achieve carbon neutrality and build marine ecological civilization \[in Chinese\]"](#), *Hainan Daily*, March 5

["Ma Huateng: Make use of geographical advantages in the Great Bay Area to develop blue carbon to achieve carbon neutrality \[in Chinese\]"](#), *China News*, March 5

["Conservation International Statement on the Creation of the Global Blue Carbon Coalition"](#), *Conservation International*, February 11

["Sri Lanka to benefit from Blue Climate Fund"](#), *The Island Online*, February 7

["A 'blue carbon' market in Virginia"](#), *Yahoo*, February 7

["Australia to recognize carbon credits from new sources including blue carbon"](#), *S&P Global Commodity Insights*, January 19

["China completes first carbon credits trade from aquaculture sequestration pilot"](#), *SeafoodSource*, January 18

Scientific Research and Beyond

Analysis & Commentaries

- "[Climate change creates financial risks. Investors need to know what those are.](#)", Michael Panfil and David Victor, March 9, Brookings
- "[California's kelp forests are dying. Preservation isn't the only way to save them.](#)", Matt Muehleman, March 28, The San Diego Union-Tribune
- "[China Unveils its First Long-Term Hydrogen Plan](#)", Jane Nakano, March 28, The Center for Strategic and International Studies
- "[What the Ukraine War Means for the Future of Climate Change](#)", Spencer Bokart-Lindell, March 16, *The New York Times* [Paywall]
- "[Q&A | China-Russia Energy Relations: Will New Oil and Natural Gas Deals Help Russia Weather Economic Sanctions?](#)", Erica Downs, March 16, Columbia University Center on Global Energy Policy
- "[To jointly fight against global climate change, China \(Hainan\) and ASEAN should pursue practical collaboration.](#)", Wang Sheng, March 8, National Institute for South China Sea Studies [In Chinese]
- "[Americans want to fight climate change with nature](#)", Quill Robinson, February 24, The Hill
- "[Cascading Climate Effects in the Middle East and North Africa: Adapting Through Inclusive Governance](#)", Frederec Wehrey and Ninar Fawahl, February 24, Carnegie Endowment for International Peace
- "[Climate change communication should focus less on specific numbers](#)", Carolyn Gramling, January 11, Science News
- "[Climate change amplifies the risks for violent conflicts in Africa](#)", Philip Osano, January 10, Stockholm Environment Institute

Scientific Research

- "[Underestimated PAH accumulation potential of blue carbon vegetation: Evidence from sedimentary records of saltmarsh and mangrove in Yueqing Bay, China](#)", Runqiu Huang et al., *Science of The Total Environment*, April 15, Volume 817
- "[Institutional challenges and solutions in the building of a blue carbon market](#)", Yang Yue et al., March 11, Academy of Ocean of China [In Chinese]
- "[Network analysis of blue carbon governance process in Indonesia](#)", Ines Ayostina, Lucentezza Napitupulu, Barakalla Robyn, Cynthia Maharani and Daniel Murdiyarso, Available online February 1, *Marine Policy*, Volume 137, 2022
- "[Impacts of Climate Change on Blue Carbon Stocks and Fluxes in Mangrove Forests](#)," Daniel Michael Alongi, January 19, *Forests* 13, no. 2: 149
- "[Biota-mediated carbon cycling—A synthesis of biotic-interaction controls on blue carbon](#)", Linjing Ren, Kai Jensen, Philipp Porada, and Peter Mueller, January 10, *Ecology Letters*, Volume 25, Issue 2
- "[Blue Carbon Accounting as Metrics to Be Taken into Account Towards the Target of GHG Emissions Mitigation in Fisheries](#)", Eduardo Entrena Barbero, Gumersindo Feijoo, Sara González-García, and María Teresa Moreira, January 8, SSRN
- "[Implementation of Japanese Blue Carbon Offset Crediting Projects](#)", Tomohiro Kuwae, Satoru Yoshihara, Fujiyo Suehiro and Yoshihisa Sugimura, January 1, in: *Green Infrastructure and Climate Change Adaptation*, Nakamura F. (eds) (Springer: Singapore), 2022

Climate-Focused Events of Note

January 2022

- On January 13, the Wilson Center held a virtual event on "[Walking the Walk After the New U.S.-China Climate Declaration](#)". A full recording of the event is available online.
- On January 27, the Atlantic Council the Adrienne Arsht Latin America Center held a virtual event on "[Road to the Summit. Responding to the next disaster: Building health and climate resilience in the Americas](#)". A full recording of the event is available online.
- On January 31, the Atlantic Council Global Energy Center held a virtual event on "[EnergySource Innovation Stream with Native Renewables: Advancing clean energy access for Indigenous people](#)". A full recording of the event is available online.

February 2022

- On February 2, the Stimson Center and the U.S. – Philippines Society co-hosted a virtual event on "[Climate Change in the Philippines](#)". A full recording of the event is available online.
- On February 7, the Foreign Policy Research Institute held a virtual event on "[Climate Change and the Global South](#)". A full recording of the event is available online.
- On February 9, the Atlantic Council Global Energy Center and E3G co-hosted a virtual event on "[Looking forward: What's next after the EU-US Energy Council meeting?](#)". A full recording of the event is available online.
- On February 15, the Wilson Center held a virtual event on "[Locking in a High-Carbon Future: Chinese Steel, Cement and Coal Investments at Home and Abroad](#)". A full recording of the event is available online.
- On February 16, the Atlantic Council Global Energy Center held a virtual event on "[Preparing the United States for a mineral-intensive future](#)". A full recording of the event is available online.
- On February 23, the Wilson Center held a virtual event on "[Water Security is Climate Security](#)". A full recording of the event is available online.

March 2022

- On March 2, the Center for Strategic and International Studies held a virtual event on "[Climate & Energy in the 117th Congress: A Conversation with Rep. John Curtis](#)". A full recording of the event is available online.
- On March 3, the Center for Strategic and International Studies held a virtual event on "[Advancing Global Climate Action: A Conversation with MEP Mohammed Chahim](#)". A full recording of the event is available online.
- On March 7, the Institute for Public Policy Research held a virtual event on "[Net zero places: Developing a community-led response to the climate crisis](#)". A full recording of the event is available online.
- On March 17, the Foreign Policy Research Institute held an event on "[Africa's Energy Transition: Climate Adaptations and Economic Pressures](#)". A full recording of the event is available online.
- On March 18, the Atlantic Council Global Energy Center held an event on "[Unearthing potential: The value of geothermal energy to US decarbonization](#)". A full recording of the event is available online.
- On March 28, the Atlantic Council Global Energy Forum held an annual convention to set the global energy agenda for the year ahead and examine the longer-term geopolitical and geoeconomic implications of the changing energy system. A full recording of the "[2022 Global Energy Forum](#)" is available online.
- On March 30, the Urban-Brookings Tax Policy Center and the Center on Regulation and Markets co-hosted an event on "[Can state-level carbon pricing help achieve national climate goals?](#)" at Brookings.

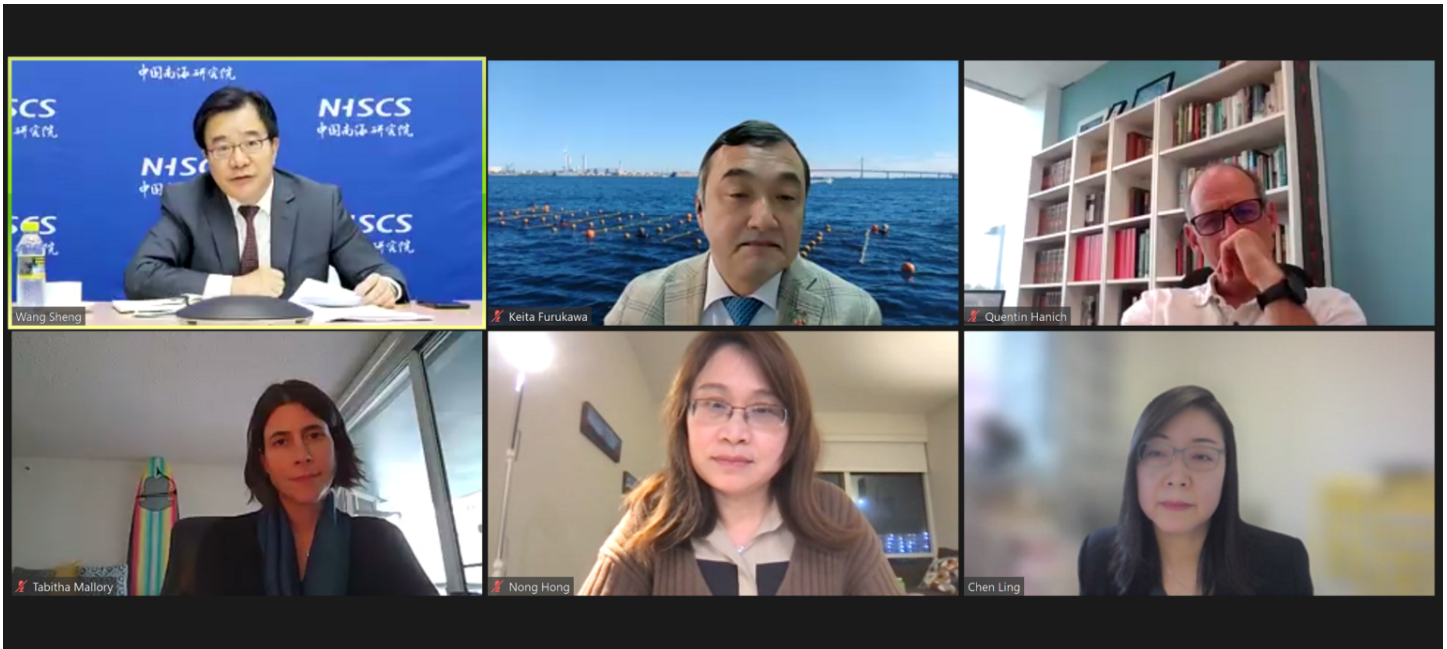
BCCC Program Updates

---Past ICAS Event ---

The Blue Carbon & Climate Change Program Inaugural Event

March 24, 2022

8:00pm - 9:30pm EDT



From top left, clockwise: Wang Sheng (NISCSS), Keita Furukawa (Sasakawa Peace Foundation), Quentin Hanich (University of Wollongong), Chen Ling (Tsinghua University), Nong Hong (ICAS), and Tabitha Mallory (University of Washington)

On March 24, 2022, the Institute for China-America Studies (ICAS) officially launched its Blue Carbon & Climate Change (BCCC) Program. The inaugural event of the BCCC program brought together expert scholars from the United States, China, Japan, and Australia to discuss each country's practices and perspectives on blue carbon and its potential role in building global relations.

We thank our audience for their engagement and our expert speakers—Quentin Hanich, Keita Furukawa, Tabitha Grace Mallory and Chen Ling—for sharing their insights, research, & potential solutions for the novel blue carbon issue and its potential to form global connections. We also thank President Wang Sheng of the National Institute for South China Sea Studies for his participation and kind remarks.

The four panelists first introduced a specific aspect of the development of the blue carbon economy within their respective countries and the implications for economic development, international regulatory institutions, academic and technical cooperation, and social and local activities.

Read the event summary and watch the full video on our website!

[Read the Event Summary](#)

[Watch the Event Recording](#)

---Upcoming ICAS Academic Engagement---

Who Owns Antarctica? The Geopolitics of the Seventh Continent

Tuesday, April 5, 2022
6:00am – 8:00am EST

On April 5, 2022, ICAS Executive Director Dr. Nong Hong will be participating in a Graduate Institute of International and Development Studies conference “Who Owns Antarctica? The Geopolitics of the Seventh Continent” alongside other expert speakers. She will be discussing the important question: “Will China Compete for the Poles?”

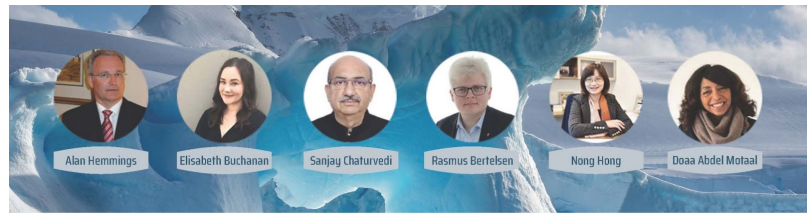
Learn more about the event and the other speakers through the embedded links below.

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WHO OWNS ANTARCTICA? The Geopolitics of the Seventh Continent

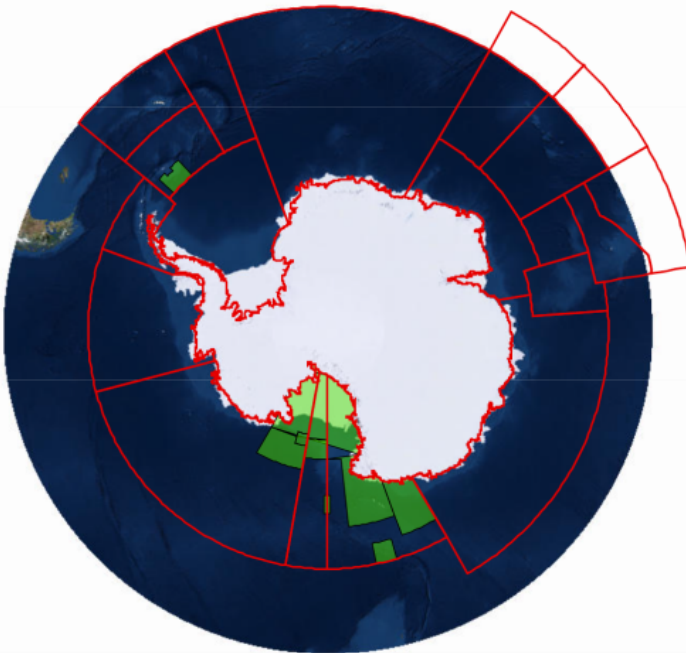
TUESDAY 5 APRIL 2022 | 12:00 - 14:00 (CET) | ROOM 58 | HYBRID EVENT
MAISON DE LA PAIX | THE GRADUATE INSTITUTE, GENEVA | CHEMIN EUGENE-RIGOT 2, 1202 GENEVA



Event programme & Registration: <https://gicra.de/bc4FR>

---ICAS Maritime Issue Tracker---

Phase 2 of the ICAS MAP Antarctic Issue Tracker: Marine Conservation



On February 3, ICAS launched Phase 2 of its Antarctic Maritime Issue Tracker. In light of the growing importance of Antarctica and its living resources, the new Marine Conservation Tracker details the CCAMLR systems that govern the conservation and sustainable management of marine living resources in Antarctica.

Accompanying the tracker release was a commentary by Matt Geraci, research associate & program officer, on the roles that the United States and China play in Antarctic maritime governance and marine conservation regimes.

[Read the Commentary Online](#)

[Explore the Interactive Maritime Issue Tracker \(ARCGIS Storymap\)](#)

---ICAS Commentary---**Ukraine war may freeze both Russia and China out of Arctic cooperation**

by Nong Hong
March 11, 2022

On March 3, seven Arctic Council member states – Canada, Denmark, Finland, Iceland, Norway, Sweden and the United States – issued a joint statement on cooperation following Russia’s invasion of Ukraine. The representatives of these countries said they will not travel to Russia, the current council chair, for meetings and will temporarily pause participation in all meetings of the council and its subsidiary bodies. This raises serious barriers for international cooperation in the Arctic. Following the end of the Cold War, the long-standing perception has been that the Arctic region would benefit from a disconnect from security concerns in other parts of the world. Instead, it would focus on non-traditional security issues, including development, education, health and communication, as well as the environmental effects of climate change and melting of the Arctic ice cap.

However, the geopolitical importance of the Arctic region is coming back into focus with the military escalation in Ukraine. Though there has yet to be any significant change in military movements in the Arctic and on Russia’s northern borders, Moscow’s dominant presence in polar politics will undoubtedly have a long-term impact on regional security and cooperation in the high north...

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This article was [originally published](#) by the South China Morning Post on March 11, 2022.

---ICAS Commentary---**Making Sense of the Buzz: What Does “U.S.-China Climate Cooperation” Actually Mean?**

by Matt Geraci
December 22, 2021

On November 10, 2021, the U.S. and Chinese governments supposedly “surprised” the world by releasing the U.S.-China Joint Glasgow Declaration on Enhancing Climate Action in the 2020s. Even before this, however, since Biden’s inauguration, the phrase “U.S.-China cooperation on climate change” has been tossed around in both countries by academics, government officials, and pundits ad nauseum as the primary area where the U.S.-China relationship can improve. This buzzphrase is intended, at least in part, to evoke a sense of hope that China and the U.S., the world’s two largest national greenhouse gas emitters, are actively doing something to mitigate the impacts of climate change together. What is often left unanswered are the two most important parts: defining the “something” and the “together”. China and the U.S. owe it to their public to better define these two areas to be better held accountable by their citizens...

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This article was [originally published](#) on the China-US Focus website on December 22, 2021.