



OCEAN VISIONS

BIENNIAL SUMMIT | MARCH 25-27, 2025

Advancing Solutions for Ocean-Climate Restoration

Program Guide



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Overview

Join us for the Ocean Visions Biennial Summit 2025! The Summit will be an exceptional opportunity to advance the sharing of knowledge and solutions to critical challenges at the ocean-climate nexus. During this action-oriented event, global and local scientists, policymakers, innovators, funders, and others will converge to explore emerging solutions and strengthen partnerships that can help restore our ocean and stabilize the climate.

This solutions-focused three-day Summit, happening in Vancouver, British Columbia from March 25-27, 2025, will feature a range of innovative and engaging programming types and topics. Summit participants will share and discuss cutting-edge advancements in ocean sciences, engineering, policy, governance, and economics, and coordinate action on key priorities to advance innovative solutions for ocean-climate restoration across these key themes:

- Ocean-Based Decarbonization
- Marine Carbon Dioxide Removal
- Marine Ecosystem Repair
- Expanding the Global Community of Solvers



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The State of mCDR - Where Are We on the Road to Actionable Information?

The Summit will feature programming focused on the current status of mCDR RD&D and where we are on the trajectory to prove or disprove mCDR technologies as potentially durable climate solutions. Sessions will be informed by a detailed status report and gap analysis being developed now that will be introduced at the Summit. From that foundation of up-to-the-minute information, participants will explore how to address the biggest gaps and to catalyze and align the efforts still needed to fill the gaps. Come ready to roll up your sleeves and collaborate in workshops where facilitators will lead participants to review the status report and gap analysis, and identify a shared agenda for the next 5 years to get to the needed evidence base for policy action.



Facilitating Action on Global Tipping Points:

As climate change progresses, it is becoming more and more evident that critical elements of the Earth system are at risk of irreversible changes. These are known as tipping points. [The Global Tipping Points Report](#) released in 2023 states that, “five major tipping systems are already at risk of crossing tipping points at the present level of global warming: the Greenland and West Antarctic ice sheets, warm-water coral reefs, North Atlantic Subpolar Gyre circulation, and permafrost regions.” In addition, the rest are threatened to varying degrees as warming continues. This session will convene a panel of experts working in different capacities to understand, slow down, or stop surpassing of Earth system tipping points, including relevant governance mechanisms and climate interventions and highlight ways to frame the climate crisis in terms of action on tipping points.



The Early Career Ocean Professional (ECOP) Lunch:

This lunchtime networking event will bring together individuals who self-identify as being early in their career in any field related to the ocean. This is an opportunity to meet fellow ECOPs as well as potential mentors/advisors.



Enhancing the Ocean's Biological Pump for CDR:

Join a conversation exploring design of a next-gen research, development and demonstration (RD&D) program to provide a robust body of evidence about the additionality, durability and safety of biologically-based mCDR. This RD&D initiative is being designed with broad sectoral, geographic, community and disciplinary input. At the Summit, project leaders will share updates and seek additional input for the RD&D design phase. The session will be conducted in a workshop format to prioritize participant feedback.



Lessons from the Launchpad:

Ocean Visions' Launchpad program provides scientific and engineering advice to innovators to help them optimize their technologies and to fully measure, understand, and minimize negative environmental effects. We do so by connecting innovators with expert advisors. In this session, we will highlight Launchpad innovator and advisor experiences from cohort 1, provide time to cohort 2 companies to briefly describe their technologies and areas where they need scientific/technical support and then have a "speed dating" session for these cohort 2 companies with a curated set of scientific and technical experts.

Showcasing Innovations from the Pacific Northwest:

The Pacific Northwest has long been a hotbed of innovation and a driver of cultural change. This remains true with regards to solutions at the ocean-climate nexus. This plenary session will feature a range of innovators and technologies from the Pacific Northwest region.



The Ocean's Role in the transition to net zero and beyond:

There is an increasing recognition of the role the ocean can play in the decarbonization of the global economy through provision of low-or-zero carbon energy, food, and materials. Although attention to these areas is growing, there are still many high potential areas that are underinvested, with key technology knowledge gaps and socioeconomic challenges that have so far slowed development.

This session will feature speakers who will provide a compelling overview of ocean pathways for emissions reductions ranging from recent advances in marine renewable energy to plant-based bioproducts to innovations in maritime decarbonization. Talks will be followed by a panel discussion that highlights the opportunities and challenges that face these solutions.



Women in mCDR:

This lunch time networking event, will facilitate a supportive space specifically for women/non-binary people working in or interested in the mCDR space. This is an opportunity to meet, network and make connections in a welcoming and informal setting.

**21st Century Conservation: Can We Protect and Restore Vanishing Ecosystems? Ocean Visions' Arctic Sea Ice Road Map:**

Reducing emissions of greenhouse gases and removing CO₂ from the atmosphere, show signs of not being able to cool the planet in time to avoid continued devastating impacts from climate change. Arctic sea ice, which serves a pivotal role in global climate stability through its high albedo, is a system at high risk. The loss of summer sea ice estimated to occur in the coming decades will worsen impacts to ecosystems, Arctic people, and global climate. A wide range of approaches have been proposed to potentially slow the loss of Arctic ice. Ocean Visions has assessed 21 of these, within five broad categories: Arctic Protection; Pollution Management; Ice Management; Surface Albedo Modification; and Solar Radiation Modification. This session will introduce Ocean Visions' Arctic sea ice road map, spotlight experts working on approaches covered in the road map, and provide a forum for a discussion of the concepts and the broader set of issues that pertain to climate interventions research.



Navigating the Changing Political Landscape: How to Move Ocean-Climate Solutions Forward:

As political parties, administrations and other governing bodies continue to shift on the global stage, how can the ocean-climate solutions community keep progress at scale moving forward? This session will explore strategies and lessons from the past with knowledgeable observers about how to navigate shifting political environments.

Lighting Talks and Pitches:

Come hear a range of short talks on cutting edge findings and innovations in the broad arena of ocean-climate solutions.

Climate Anxiety- Managing an Occupational Hazard:

The Yale School of Medicine defines climate anxiety as “distress about climate change and its impacts on the landscape and human existence. That can manifest as intrusive thoughts or feelings of distress about future disasters or the long-term future of human existence and the world, including one’s own descendants”. There are few demographics as exposed as all of us who work every day at the forefront of the ocean and climate crises. This session will equip participants with tools for navigating the impacts of climate change on the human experience and create a safe space to discuss how to cope with feelings of climate anxiety.

Straight Out of Academia to Entrepreneurship:

Moving from the lab to the commercial space! This plenary panel will feature an engaging moderated discussion between entrepreneurs who transitioned from academia. Panelists will discuss their respective journey stories, and what it takes to make the jump from academic to founder.





Working with Communities at the Ocean-Climate Nexus:

Community engagement is critically important to the success of any project. No matter the stage of the project lifecycle: inception, implementation or evaluation, community involvement is key. This session will explore a range of relevant case studies, share lessons learned and strategies to navigate working with communities.

Talking Ocean-Climate Solutions: Increasing Public Understanding of Decarbonization and mCDR Science:

This is a pivotal time for the ocean-based decarbonization and mCDR field and scientists have a key role to play in helping society understand the current state of the science and techniques, as well its potential, risks and impacts to communities. A panel of journalists, policymakers, and scientists who have been at the forefront of communicating mCDR science, will explore lessons learned, opportunities and challenges ahead in communicating effectively about this rapidly evolving field.



Ocean-Climate Innovation Hubs: Building Global Partnerships for Restorative and Equitable Solutions:

As the global demand for solutions intensifies in the face of escalating climate challenges, innovation is one of the only levers that we have. And innovation hubs are emerging as critical incubators and catalysts to foster needed collaborations. This session will explore how innovation hubs, particularly in emerging economies, provide unique platforms for local and global stakeholders to drive transformative ocean-based climate action. By emphasizing restorative approaches and forging sustainable partnerships, these hubs can amplify both existing and untapped capacities. They can play a pivotal role in overcoming emerging barriers, supporting local communities to co-develop scalable, climate-positive solutions tailored to their distinct regional characteristics and needs.