

Ocean Solutions at Scale:

Empowering Subnational Action for Restoring the Health of Marine Ecosystems




Hosted by Regions4 Biodiversity Learning Platform

In partnership with:

Ocean Solutions at Scale: Empowering Subnational Action for Restoring the Health of Marine Ecosystems

Introduction

 The [Regions4 Biodiversity Learning Platform](#) hosted the webinar session “Ocean Solutions at Scale: Empowering Subnational Action for Restoring the Health of Marine Ecosystems”, on June 12 2025, building on nearly a decade of experience in facilitating peer-to-peer learning between subnational governments and their partners on critical environmental challenges.

This session was made possible through the collaborative efforts of key strategic partners who joined forces with Regions4 to deliver the session. The Ocean and Climate Platform, United Cities and Local Governments (UCLG), Instituto Mar Adentro, the UNESCO Chair for Sustainability of the Oceans at the University of São Paulo, the European Committee of the Regions, and the Flanders Marine Institute provided essential partnership support. Additionally, the session benefited from the active participation and leadership of Regions4 members, particularly the Government of Quebec, alongside partnering regions such as South Australia, who exemplified the regional leadership that formed the core focus of the discussion.

The session drew significant international participation, with representatives from 14 regions actively engaged throughout the webinar, including Rio de Janeiro State, California, Scotland, Quebec, KwaZulu-Natal, Pernambuco, Flanders, Wales, São Paulo State, Yucatan, Campeche, the Committee of the Regions, Burkina Faso, and Paraná. Beyond regional government participants, the open-access format attracted attendees from 19 external organizations, including universities, NGOs, and research centers such as the MAB Youth Network/UNESCO, California Natural Resources Agency, São Paulo State Forest Foundation, Oxford Climate Research Network, and Cardiff University. The session reached over 100 attendees, demonstrating strong global engagement with ocean governance and regional climate action initiatives.

Background

The strategic importance of subnational participation in global ocean governance was particularly evident during the third UN Ocean Conference (UNOC-3) in Nice, France, which ran concurrently with this webinar session. Regional leaders' presence at UNOC represented a crucial opportunity to advocate for multi-level governance approaches and ensure that subnational perspectives were integrated into international ocean policy frameworks. Their participation was essential for several reasons: they brought real-world implementation experience that could inform global strategies; they represented the scale at which many effective ocean solutions are deployed; and they could commit to specific actions that would contribute to achieving international targets such as SDG14, the Paris Agreement, and the Kunming-Montreal Global Biodiversity Framework.

At UNOC-3, Regions4 and other partner organizations advocated for transformative changes in how the international community approaches ocean governance, emphasizing the need to formally recognize and engage subnational governments in ocean governance frameworks and climate mechanisms, including Nationally Determined Contributions (NDCs), National Adaptation Plans (NAPs), and Sustainable Ocean Plans. They pushed for establishing direct funding channels to support subnational ocean action, particularly for blue carbon projects, marine protection initiatives, and coastal resilience programs, while strengthening multi-level governance collaboration to ensure cohesive approaches to marine challenges. The subnational leaders present committed to advancing integrated solutions for ocean health, sharing best practices across regions, and implementing ambitious actions that demonstrate how regional leadership and multi-level collaboration can restore marine ecosystem health at meaningful scales.

KEY TAKEAWAYS

- **Bridging the Science-Policy Gap:** A critical need exists for scientists to translate complex research into digestible information for policy makers, particularly at the subnational level. Currently, there's no transparent structural mechanism ensuring that scientific information is applied correctly in policy decisions. New platforms are working to develop this transparency and accountability.
- **Early Collaboration is Essential:** Regional decision makers should be involved from the earliest phases of research processes to ensure practical applicability. This collaborative approach can help align the rapid pace of scientific advancement with the typically slower timeline of policy implementation.
- **Multi-Level Legal Frameworks:** Strong legal protections for designated marine areas must be established at all government levels. Successful examples demonstrate how effective communication and collaboration between federal and subnational governments can significantly strengthen the security of protected marine areas.
- **Regional Leadership Creates Opportunities:** Subnational governments possess unique power to address environmental challenges like marine debris, especially when national-level action is limited. These regional initiatives can build strong collaborative networks that prove valuable when political landscapes shift, creating comprehensive multi-level governance structures.

“Across the globe, subnational leaders are stepping up. They're partnering with universities, research institutions, and local NGOs to turn the tide. What makes this so powerful is where these leaders sit - right at the intersection of global commitments and local implementation. They can take the big promises made at international conferences and make them happen in harbors, coastal communities, and marine protected areas.”

Natalia Uribe, Regions4 Secretary General



“An extraordinary event like a marine heatwave, like a flood the scale of which was unprecedented for [South Australia], this series of high pressure systems, are events we can't control - but we can make nature more resilient. That is one of the ways that we must face up to the challenges of climate change. While the world is steadily reducing carbon emissions, we need to make sure we are doing everything we can to make nature stronger so that when these awful pressures are put on it, it is more resilient and will bounce back faster.”

Hon Susan Close MP, Deputy Premier of South Australia and the Minister for Climate, Environment and Water



Regions4 at UNOC-3

Main Highlights from Regions4's Participation:

- 12 Regions4 member regions participated onsite
- 51 participants regional representatives mobilised 4 accreditations facilitated
- 11+ strategic or bilateral meetings held with members, partners, and donors

Check our resources:



[Read the opinion article by Agatha Tomassi, Sustainable Development Goals Liaison Officer in Regions4 and Environmental Engineer in the Secretariat for Environment and Sustainability of the State of Rio de Janeiro](#)



[Explore Our Photos](#)

Thank you to all our members and partners who contributed to this milestone. Your commitment to ocean health and coastal resilience reinforces the global impact of regional action.

Shared experiences

The session gathered expert panelist from the Flanders Marine Institute (VLIZ), Instituto Mar Adentro, and the UNESCO Chair for Ocean Sustainability at the University of São Paulo as well as government representatives from the Government of Quebec and the Region of Murcia.

From Knowledge to Action: Building Ocean Resilience Through Multi-Level Collaboration

Knowledge Translation: Bridging science and policy implementation, Anne-Cathérine Lescrauwaet, Director of International Relations at Flanders Marine Institute (VLIZ).



- Implementing ocean research and innovation.

The InnovOcean Campus in Ostend (Flanders) is home to institutions and initiatives that bring together expertise from ocean data and information sharing, ocean literacy, citizen science, marine ecosystems restoration, blue carbon flexes, coastal spatial planning, adaptation and engages with local communities and municipalities. By bringing together the technical bodies of these different governance levels - at the multilateral, European, regional, and local level - and connecting with the local level while offering a space for sharing this expertise, Flanders has created a fertile ground to accelerate the integrated approach that we need to address the multiple planetary crisis, especially on ocean science and innovation.

- Blue Cluster Innovation Model.

Flanders created a maritime industries cluster that bridges science and business to accelerate ocean solutions. This "blue cluster" manages a dedicated fund for ocean innovations that can scale to international value chains, positioning Flanders as a knowledge-based economy leader. Critically, the ocean science community chairs the cluster's advisory council, with Flanders Marine Institute federating the research and innovation community to provide guidance to industry partners and small innovators.

- Multi-Stakeholder Co-Design Platform.

Flanders chairs the national Ocean Decade committee, bringing together private sector, research institutions, NGOs, education partners, and public administrations in a co-design approach to develop actionable science-based solutions. They operationalize this through the "Compendium for Coast and Sea" - a pioneering platform established in 2008 that engages over 300 experts in two-way dialogue between science and policy. The platform monitors policy needs and delivers evidence-based responses through digestible formats like infographics and rapid response briefs, creating actionable maps and information that policymakers can readily use.

An overview at action on the ground

Implementation Partnerships: The "Ilhas do Rio" project model, Aline Aguiar, PhD - Ilhas do Rio Project Chief Scientist, Instituto Mar Adentro.

- Science-Driven Marine Protected Area Expansion.

The Ilhas do Rio project demonstrates how sustained scientific research can drive systematic expansion of marine protection. Since 2011, the project has partnered with federal and state environmental agencies to study and protect Rio de Janeiro's island ecosystems, beginning with the Cagarras Island Natural Monument. Through comprehensive biodiversity mapping and management plan development, their scientific data contributed to the Cagarras Islands' recognition as a Mission Blue spot in 2021. The project has since expanded to cover over 57,000 hectares by 2024.

- Strategic Corridor Development Through Multi-Level Partnerships.

The project employs a strategic approach to create marine protected area mosaics by working across different jurisdictional levels and protection statuses. Beyond the established federal protected area, the team expanded to the unprotected Tijuca archipelago, producing white papers and policy recommendations to regulate unsustainable practices.

- From Research to Policy Implementation.

The project's methodology emphasizes translating scientific research into actionable policy recommendations. By maintaining long-term partnerships with government agencies and systematically documenting biodiversity data, the team at the Ilhas do Rio project provides evidence-based support for new marine protected area designations. Their goal is creating an interconnected marine protected area corridor that safeguards ecological connectivity across Rio's metropolitan island network.



Governance Systems: Creating enabling environments for ocean action, Virginie Galindo, Marine Conservation Coordinator, Directorate for Protected Areas, Ministry of the Environment, Fight against climate change, Wildlife and Parks, Government of Québec.

- Federal-Provincial Collaborative Framework.

Quebec established a groundbreaking intergovernmental collaborative agreement with Canada in 2018 after years of negotiations to create a unified approach to marine protection. This framework includes a bilateral ministerial group with three ministers from each order of government level, enabling them to jointly identify, plan, establish, and manage protected marine areas across Quebec's entire marine territory. The collaboration leverages Canada's shared environmental legislative powers between provinces to achieve comprehensive marine and coastal protection.

- Stakeholder-Centered Implementation Process.

Quebec prioritizes extensive local stakeholder consultation as a cornerstone of marine protected area establishment. The government conducts systematic consultative meetings with local communities before creating any marine protected areas, recognizing that meaningful stakeholder engagement is crucial for successful implementation. This approach extends beyond initial establishment, with ongoing consultations for new projects and mechanisms that allow advisory committees of local stakeholders to communicate to the management committee.

- Transition Tools and Legal Frameworks.

Quebec developed innovative "territorial reserves for protected area purposes" as transition tools that immediately ban industrial activities like mining and electricity production while longer-term negotiations with stakeholders proceed toward full legal protection status. This staged approach allows for immediate conservation action while building consensus for permanent protection. The Saguenay – St. Lawrence Marine Park exemplifies this dual-law approach, established through legislation from both federal and provincial governments.

- Ambitious Conservation Targets with Long-Term Vision.

Quebec has committed to conserving 30% of its marine and coastal areas by 2030, building from the current 12.33% protection level in Quebec marine territory. The government positions these protected areas as multi-generational assets for education, training, and scientific research, ensuring future generations can benefit from these marine resources. Recent project announcements demonstrate ongoing commitment to expanding protection through continued stakeholder consultation processes.



LIVE POLLING WITH OUR AUDIENCE

What's the key bottleneck that slows down the journey from ocean science to implementation?

"Finance and funding for subnational governments to implement local projects"

"Implementing scientific research projects"

What is the most transferable element from these presentations to your own context?

"EU Networking - Focus on connecting with European Union regional bodies"

"Ocean Guardians - Transforming fishermen into ocean protectors against illegal fishing"

"Regional Innovation - Emphasizing innovation at the regional scale"

"Aligned Actions - State government initiatives matching presented programs"

"Best Practices - Learning from shared experiences for territorial implementation"

Policy Frameworks: EU-level advocacy for regional ocean action, Adrián Zittelli Ferrari, Director General for the EU of the Government of Murcia, Spain, and member of the European Committee of the Regions (CoR).

- Bridging EU Policy and Territorial Realities.

The European Committee of the Regions (CoR) advocates for better integration of regional perspectives in EU marine policy, highlighting a critical gap between European-level frameworks and territorial implementation realities. Despite coastal communities being on the frontline of marine ecosystem protection and managing critical systems like waste management, farming, and water management that directly impact seas and coasts, regional authorities often lack adequate voice in marine policy decisions that they are essential to implementing.

- Place-Based Financing and Resource Access.



The CoR has developed policy recommendations for the European Pact for Oceans, emphasizing the need for place-based approaches to marine protection and restoration with dedicated financing mechanisms. They specifically advocate for improved access to data and technical knowledge for smaller authorities with limited resources, recognizing that effective ocean governance requires empowering local and regional actors with appropriate tools and funding to implement marine conservation strategies.

- Regional Innovation and Multi-Level Collaboration.

Murcia has pioneered wetland recovery programs, fisherman partnerships for waste collection, and plastic recycling systems to prevent marine pollution. The CoR argues that EU ocean resilience depends on regional resilience, advocating for enhanced dialogue mechanisms between the European Union, member states, and regions to ensure coherent policy implementation across governance levels while supporting the SDGs and European Green Deal objectives.



Expert Voices

Sustaining Ocean Advocacy Through Crisis: How can we maintain ocean conservation as a priority during competing crises and political transitions?

"We've made great steps in organizing the science community and ensuring our research integrates different perspectives with digestible deliverables for policymakers. But after 30 years in this field, **I see a critical missing link: accountability for science advice.** Since research is largely taxpayer investment, **we need structural, transparent mechanisms showing what happens with the science advice we provide.** When policymakers request advice, there should be open reporting on whether and how it was used in policy processes. Here in Nice, the community launched IPOS (International Platform for Ocean Sustainability) to accelerate this accountability - providing rapid, transparent science advice for urgent decision-making. Many countries are joining this two-year pilot to bridge the gap between science advice and policy implementation."

Anne-Cathérine Lescrauwaet, Director of International Relations at Flanders Marine Institute (VLIZ)



"The key is **co-produced science** - a fundamental change in how we do science collaboratively. Here in Nice (...) the main discussion is how to support better decisions through science that translates data into information decision-makers can understand and use. In Brazil, we **created dialogue opportunities** between different societal actors to understand marine debris problems and develop state-level strategies. When our national government was problematic on environmental issues, we used the window of opportunity at state level for co-creation processes. Now with federal government change, they've rejoined - launching a national strategy against plastic pollution this week. This joint effort uses a transdisciplinary approach with inputs from different sectors, bringing science to concrete commitments. We engaged over 1,000 stakeholders across Brazil to build effective actions against marine litter. It's an exciting process that demonstrates how **adaptive, collaborative science can navigate political transitions while maintaining momentum.**"

Prof. Dr. Alexander Turra, UNESCO Chair for Ocean Sustainability at the University of São Paulo

"We work closely to reduce the gap that exists at regional level, especially regarding oceans. We need more efficient communication between scientific research and decision makers, and crucially, we must **involve regional decision makers in the very first phases of research processes.** This ensures results are scientifically important but also applicable on a daily basis.

At the CoR we want to translate scientific data into clear, concise policy recommendations that can be directly applied in territories. While national governments face changes, at regional level **in Murcia, we're trying to have direct impact through direct relationships with the scientific community** to apply solutions on the ground. The rhythm of research should be adjusted to our capacities as decision makers."

Adrián Zittelli Ferrari, Director General for the EU of the Government of Murcia, Spain, and member of the European Committee of the Regions (CoR)

From science to on-the-ground action: How can we align rapid scientific advancement with slower timeline of creating and enacting public policy and public projects?

"We've got to always bring our science in terms of policy and advocacy - not just scientific papers. I always tell my team to think about how we can propose **research that delivers applied science for conservation as the end result**.

We maintain open channels with government agencies to understand opportunities and help them prioritize ocean conservation in local programs. It's not just about top-down federal policies, but **helping local governments understand that local impact contributes to national goals**. We cannot have a thriving community without a healthy ocean.

What we're showing them is that this isn't only about biodiversity - it's about human well-being and blue economy. We don't just bring 'square science' - **we translate our data into recommendations and policies that demonstrate economic benefits**."

Aline Aguiar, PhD - Ilhas do Rio Project Chief Scientist, Instituto Mar Adentro



Local stakeholders as conservation partners: How is Quebec operationalizing whole-of-society approaches to achieve 30% marine conservation by 2030?

"Local actors and their involvement is absolutely crucial. We conducted **targeted consultations with 230 organizations** from autumn to summer 2024, plus public and citizen consultations to ensure we listen to communities. The support from local actors was clear, and our joint report with Canada confirmed the desire for expanded protection of the Saguenay–Saint-Lawrence Marine Park. Quebec also called for project proposals for marine areas, receiving 10 proposals with strong municipal support. We organize round tables with local actors, fisheries representatives, and stakeholders, with webinars explaining topics for discussion. **These generate recommendations for our ministry for some marine protected areas, to advance 30 by 30 marine protection goals**. Once marine areas are implemented, local actors remain crucial for management. We have **direct communication mechanisms between local actors and the ministry**, consultation committees for recommendations, and local contributors to scientific monitoring. For Quebec government, it's not possible to have marine areas without local actors - we must implement these areas with communities to ensure better protection."

Virginie Galindo, Marine Conservation Coordinator, Directorate for Protected Areas, Ministry of the Environment, Fight against climate change, Wildlife and Parks, Government of Québec

Conclusions

The session demonstrated why subnational leadership is indispensable to achieving global ocean goals. From Rio de Janeiro's community-driven science-policy partnerships to Quebec's inclusive governance frameworks, from Flanders' innovative blue cluster model to Murcia's EU advocacy efforts, Regions4 community and the public witnessed real ocean solutions being developed and implemented at regional and local levels. These voices and experiences represent the innovative, collaborative approaches that must inform negotiations and commitments at international forums like the third UN Ocean Conference in Nice. The diversity of perspectives shared - spanning continents, sectors, and governance approaches - exemplifies the multi-level collaboration essential for ocean resilience.

Participant engagement through live polling reinforced a crucial insight: while we face common challenges in connecting science to policy, maintaining political momentum, securing funding to scale up successful models, we are not alone in these efforts. The Regions4 Biodiversity Learning Platform was designed precisely for moments like this - to connect practitioners, share solutions, and build the peer-to-peer networks that accelerate progress on our world's most pressing environmental challenges.



Did you miss the session?
[Explore the recording here](#)



ABOUT THIS BRIEF FOR ACTION

This brief for action is part of a series aimed at informing Regions4 members on key results and recommendations based on Regions4 research and learning sessions.

The [Regions4 Biodiversity Learning Platform \(R4BLP\)](#) is a collaborative space where Regions4 members and guest experts share knowledge and best practices on biodiversity action. The platform generates technical knowledge that informs Regions4 global advocacy efforts. It facilitates cross-jurisdictional exchange, and fosters partnerships among its members.

The R4BLP is an operational partner of the [Advisory Committee on Subnational Governments to the Convention on Biological Diversity](#).

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