CALL FOR PROPOSALS
Advancing Ocean and River Alkalinity Enhancement Research in Canada
September 2026

A. Call Overview

Meeting climate targets that keep warming below 2°C requires both deep reductions in greenhouse gas emissions and the removal of hundreds of billions of tonnes of CO_2 from the atmosphere this century. Ocean and River Alkalinity Enhancement (OAE and RAE, respectively) are among the most promising carbon dioxide removal (CDR) approaches: they accelerate a natural geological weathering process, converting oceanic dissolved CO_2 into bicarbonate that the ocean is expected to store stably on geologic timescales, while potentially counteracting local acidification.

Canada is uniquely positioned to continue to lead the next phase of OAE/RAE research. With the world's longest coastline, world-class marine research infrastructure, an established federal climate mandate, and globally-leading OAE/RAE deployments underway in Nova Scotia, Canada offers exceptional scientific, operational, and societal conditions for advancing OAE and RAE research. Together, these strengths position Canada to continue to generate the evidence needed to rigorously evaluate the role of OAE/RAE within a durable global CDR portfolio. This Call for Proposals (CFP), co-developed by Carbon to Sea Canada (Carbon to Sea Initiative) and the Marine Environmental Observation Prediction and Response Network (MEOPAR), seeks proposals that take advantage of that Canadian context to fundamentally advance understanding of OAE/RAE.

The call invites proposals that address three foundations of OAE/RAE research (safety, efficacy, and scalability) and advance one or more of the thematic research and development (R&D) priorities described in **Section B, below**. Proposals are encouraged from diverse geographies, ecosystems, and organizations across Canada.

We are committed to actively moving forward on the path of Truth and Reconciliation and advancing Equity, Diversity, Inclusion, and Accessibility (EDIA) initiatives in all our activities. Applicants are encouraged to engage with academic audiences and beyond, including Indigenous communities, ocean-impacted communities, industry, not-for-profits, policymakers, and equity-deserving groups (e.g., members of the 2SLGBTQIA+ communities, persons with a disability, racialized individuals, and women) in the ocean sector, to foster inclusive participation and amplify diverse voices in the ocean sector. Applications will be evaluated, in part, on their ability to engage diverse teams and audiences effectively, demonstrating a commitment to EDIA and Truth and Reconciliation principles.

B. Alignment with MEOPAR's Objectives and Science Strategy, and the Research and Development Priorities for OAE/RAE in Canada

Funding will be prioritized for projects that align with one or more of the strategic objectives below and contribute to addressing the identified knowledge gaps and strategic research priorities for OAE/RAE in Canada.

MEOPAR has identified the following objectives for which targeted funding will be provided:

1. Strengthen the evidence base for decision making and adaptation through development of improved tools, techniques, and strategies for ocean and coastal observation, prediction, and information sharing.
2. Increase economic opportunity, coastal community resilience, and marine ecosystem protection in the face of climate and technological change through end-user-driven science and novel collaborative structures.
3. Improve access to and use of ocean research infrastructures.

4. Diversify, develop, and broaden deployment of Canada's ocean-related research and innovation talent.

Project leads should consult the MEOPAR Science Strategy 2025–2030 for further context and to ensure alignment with MEOPAR's long-term vision and core priorities.

MEOPAR's Science Strategy is marine-focused but acknowledges the important role that rivers and estuarine systems play in shaping marine ecosystems, communities, and industries. In this CFP, MEOPAR and Carbon to Sea are interested in advancing research on RAE projects that examine marine-terminating rivers, where the effects of alkalinity enhancement may be propagated into the estuarine/marine environment. Proposed RAE projects are expected to consider the marine system in their scope.

Knowledge Gaps and Strategic Research Priorities for OAE/RAE in Canada

Three thematic priorities, surfaced through sustained engagement with Canadian partners and collaborators across the OAE/RAE field, cover a range of research areas and strategic initiatives. The framing below identifies priority areas within the field and invites proposals that define the work most likely to generate impact. Applicants are not expected to address every theme. The intent is depth on a focused contribution, located clearly within a theme and tied to the Canadian context (see MEOPAR's Objectives and Science Strategy above). Additional detail on the thematic R&D priorities as well as several illustrative examples of interest can be found in the ***Section B* of the Application Guide**.

I. Measurements and models for Monitoring, Reporting, and Verification (MRV)

Quantification of CO_2 removal from OAE/RAE hinges on targeted measurements and accurate modelling. Advancements in measurements and models that underpin OAE MRV are essential for assessing the efficiency, durability, and scalability of OAE/RAE, while building scientific confidence and public trust needed for responsible deployment.

II. Environmental and ecological impact assessment

The ecological safety case for OAE/RAE rests on understanding how increases in alkalinity can drive changes in carbonate chemistry, and where relevant, how pathway-specific feedstock constituents (e.g., metals, nutrients), particles, or other aspects of alkalinity delivery affect marine and river systems under realistic field conditions. Exposure dynamics, recovery and reversibility, multi-stressor effects, indirect impacts and biogeochemical feedbacks, and the variability introduced by different ecosystems, seasons, and alkalinity delivery approaches must be further constrained at the appropriate spatial and temporal scales.

III. Governance, communities, and decision-making

OAE/RAE research and deployment occurs in places where people hold relationships with the natural environment that long predate climate interventions. The desirability, credibility, and legitimacy of OAE/RAE depends on meaningful engagement, relationship-building, and collaboration with Indigenous rights holders, host communities, and interested and affected parties, as well as an enabling environment of effective governance, fit-for-purpose regulation, institutional capacity, and robust social, governance, and economic evidence. Strengthening this evidence base across social, governance, and economic dimensions is essential to informing responsible research, policy development, and future deployment.

C. Structure of the Call

Projects may be up to 18 months in duration, from April 1, 2027, to October 31, 2028, with a maximum request of $150,000. The total funding envelope for this call is approximately $1M. Project leads are required to secure matching funds (cash or in-kind) from non-federal government sources at a minimum 0.3 : 1 matching ratio

(30 cents for every dollar requested from MEOPAR and Carbon to Sea Canada; see details in Budget Section below).

D. Funding Eligibility

The project lead must be eligible to be a grant-holder within their recipient organization. Eligible recipients of MEOPAR funds include Canadian post-secondary institutions, not-for-profit organizations, Indigenous organizations and governments, municipalities, research networks, public engagement networks, organizations and companies that deliver public engagement activities, or start-up companies (including those housed in Canadian post-secondary-linked incubators). Eligible recipients do not include federal departments, agencies, or Crown Corporations of the Government of Canada. To learn about some OAE projects previously funded by MEOPAR and Carbon to Sea, click here.

E. Requirements of Funding

The project lead and their home organization will enter into an agreement with MEOPAR called an Ultimate Recipient Agreement (URA) that will enable the organization to pay for eligible project expenses. The URA identifies the funding schedule, reporting timeline, as well as the project's milestones/deliverables and their target completion dates.

F. Budget

Detailed budgets, with accompanying justifications, are required. This includes a Project Budget (Appendix B/B1) and a Partner Contribution Budget (Appendix C). Budgets must be submitted using the provided templates.

Overhead (indirect costs) are eligible for funding at a rate appropriate for the context of the project, up to a maximum of 15%. The rate must be established considering the scale of the project (i.e., not simply using a general flat-rate percentage charge [such as 15%] that does not consider project context). Applicants must provide a justification explaining how the funds will be used under this category, how each expense is calculated, and why it is required. Worksheet B1 (tab 2 in Appendix B) is provided to help identify eligible overhead expenses, calculate costs, and document the rationale and justification for each expense. If administrative support is required but not charged to the project, it may instead be described as an in-kind contribution to assist with the matched funding requirement.

For all other contributions, indicate whether partner support is cash or in-kind and whether it is expected or secured. A minimum ratio of 0.3 : 1 matched funding from non-federal sources is required for every dollar of funding requested through this call, and applications will be evaluated in part on the strength of their matched funding ratio.

G. Submission Procedure

Proposals will be submitted online through the MEOPAR portal at https://meopar.smapply.ca/. The portal will open on **September 16, 2026**. The submission deadline is **December 3, 2026 at 23:59 EST**.

H. Inquiries

An information session was held on **October 9, 2026.** To view a recording, click here.

For questions regarding this Call for Proposals contact Kristi Carter at kristi.carter@meopar.ca.

I. Proposal Evaluation

Proposals will be assessed through an independent review process involving external experts. Reviewers will evaluate proposals using the criteria and scoring rubric provided below. The weighting assigned to each assessment component is outlined in the rubric and contributes to the overall proposal score.

Evaluation Criteria

Criteria	Outstanding	Very Strong	Strong	Moderate	Insufficient
Project Impact and Alignment with the Objectives of the Call **30%**	The project has strong potential to significantly advance the evidence base needed to support responsible OAE/RAE research, decision-making, policy, or future deployment in Canada. Expected contributions are substantive and address gaps whose resolution would materially shape the field.	The project has clear potential to meaningfully advance the evidence base needed to support responsible OAE/RAE research, decision-making, policy, or future deployment in Canada. Expected contributions are important, well-defined, and address recognized priority gaps in the field.	The project has potential to advance the evidence base needed to support responsible OAE/RAE research, decision-making, policy, or future deployment in Canada. Expected contributions are relevant and address recognized gaps in the field, though their influence on broader research, policy, or practice may be more limited.	The project has limited potential to advance the evidence base needed to support responsible OAE/RAE research, decision-making, policy, or future deployment in Canada. Expected contributions are modest or address gaps of narrower relevance to field priorities.	The project shows little potential to advance the evidence base needed to support responsible OAE/RAE research, decision-making, policy, or future deployment in Canada. Expected contributions are minimal or do not address recognized field priorities.
	The project demonstrates exceptional alignment with MEOPAR's objectives and science strategy and with one or more thematic priorities detailed in the Application Guide (Section B). Connections are explicit, compelling, and-thoroughly integrated in the project's objectives, design, and approach.	The project demonstrates strong alignment with MEOPAR's objectives and science strategy and with one or more thematic priorities detailed in the Application Guide (Section B). Connections are explicit and well justified, and are reflected in the project's objectives, design, and approach.	The project demonstrates clear alignment with MEOPAR's objectives and science strategy and with one or more thematic priorities detailed in the Application Guide (Section B). Connections are identified and justified, and are visible in the project's objectives, design, and approach.	The project demonstrates partial alignment with MEOPAR's objectives and science strategy or with the thematic priorities detailed in the Application Guide (Section B). Connections are asserted but not fully justified, or are inconsistently reflected in the project's objectives, design, or approach.	The project demonstrates weak or unclear alignment with MEOPAR's objectives and science strategy or with the thematic priorities detailed in the Application Guide (Section B). Connections are absent or not reflected in the project's objectives, design, or approach.
Scientific Rigour, Technical Feasibility, and Research Team **30%**	Approach is exceptionally rigorous; hypotheses, methods, controls, and analysis plan are state-of-the-art, well integrated, and exceptionally well matched to the research question(s).	Approach is rigorous and well designed; methods, controls, and analysis plan are clearly appropriate and well matched to the research question(s).	Approach is sound; methods and analysis plan are appropriate and adequately address the research question(s).	Approach is broadly sound but has notable methodological weaknesses, gaps, or limitations that reduce confidence in the proposed outcomes.	Approach lacks scientific rigour; methodological weaknesses or gaps substantially limit its ability to address the research question(s).
	Approach is clear, well-scoped, and highly feasible within the proposed timeframe.	Approach is clear and feasible within the proposed timeframe.	Approach is generally feasible within the proposed timeframe.	The feasibility of achieving the project objectives within the proposed timeframe is uncertain due to identified weaknesses or gaps in the approach.	Significant weaknesses or gaps raise serious concerns about the feasibility of achieving the project objectives within the proposed timeframe.

Criteria	Outstanding	Very Strong	Strong	Moderate	Insufficient
	Project Lead and team demonstrate exceptional expertise and experience to deliver all proposed activities, with participating HQP receiving substantial training and skill-building directly related to OAE/RAE in Canada.	Project Lead and team demonstrate substantial expertise and experience to deliver all proposed activities, with participating HQP receiving meaningful training and skill-building relevant to OAE/RAE in Canada.	Project Lead and team demonstrate the expertise and experience needed to deliver the proposed activities, with participating HQP receiving training and skill-building relevant to OAE/RAE in Canada.	Project Lead and team demonstrate partial expertise or experience to deliver the proposed activities, or important gaps in team capacity have not been fully addressed. Training and skill-building opportunities for participating HQP in areas relevant to OAE/RAE in Canada are limited.	Project Lead and team lack the expertise or experience required to deliver the proposed activities, with minimal or no training and skill-building opportunities for participating HQP relevant to OAE/RAE in Canada.
Project Plan, Milestone and Deliverables, Knowledge Mobilization, and Matching Contributions **20%**	The plan, data management considerations, budget, and timeline are clear, highly detailed, demonstrate strategic foresight, and are contextually appropriate.	The plan, data management considerations, budget, and timeline are clear, detailed, well-considered, and contextually appropriate.	The plan, data management considerations, budget, and timeline are clear, appropriately detailed, and contextually appropriate.	The plan, data management considerations, budget, or timeline lack detail or clarity in places, or are not fully appropriate to the project context.	The plan, data management considerations, budget, or timeline are unclear, insufficiently detailed, or poorly matched to the project context.
	Milestones and deliverables are well-defined and demonstrate a deep understanding of implementation needs, with clear alignment to expected outcomes.	Milestones are clear with logical sequencing and directly linked to expected outcomes.	Milestones are present but could be more specific or better linked to outcomes.	Some milestones may be unclear or poorly aligned with expected outcomes.	There is little to no alignment with expected outcomes.
	The project demonstrates an exceptional knowledge mobilization strategy that translates results into action for clearly identified end-users through audience-appropriate approaches. Activities are likely to support uptake and application of project results.	The project demonstrates a strong knowledge mobilization strategy that translates results into action for identified end-users through audience-appropriate approaches.	The project demonstrates a sound knowledge mobilization strategy that shares results with identified end-users through appropriate approaches.	The project demonstrates a partial knowledge mobilization strategy, with end-users identified only in general terms or approaches that are not fully matched to intended audiences.	The project demonstrates a weak or absent knowledge mobilization strategy, with end-users unclear or approaches poorly matched to intended audiences.
	Strong matching contributions are evident. For every dollar MEOPAR/CtSC contributes, the applicant will secure at least 1 dollar from non-federal sources (cash or in-kind) as well. Ratio of 1 : 1, or higher.	Matching contributions are present and reasonable. For every dollar MEOPAR/CtSC contributes, the applicant will secure 0.7 to 0.99 dollars from non-federal sources (cash or in-kind), as well. Ratio of 0.7-0.99 : 1.	Matching contributions are modest or not fully explained. For every dollar MEOPAR/CtSC contributes, the applicant will secure 0.5 to 0.69 dollars from non-federal sources (cash or in-kind), as well. Ratio of 0.5-0.69 : 1.	Matching contributions are minimal or unclear. For every dollar MEOPAR/CtSC contributes, the applicant will secure at least 0.3 to 0.49 dollars from non-federal sources cash or in-kind), as well. Ratio of 0.3-0.49 : 1.	There are minimal or no matching contributions. For every dollar MEOPAR/CtSC contributes, the applicant will secure less than 0.3 dollars from non-federal sources (cash or in-kind), as well. Ratio of < 0.3 :1 . If this box is triggered the application should not pass the pre-screening.

Criteria	Outstanding	Very Strong	Strong	Moderate	Insufficient
EDIA & Truth and Reconciliation Commission's (TRC) Calls to Action Considerations* **20%**	EDIA principles are foundational and explicitly guide leadership, decision-making, communication, and engagement. These values are co-developed with equity-deserving communities and are reflected in the project's plans for implementation and evaluation.	EDIA principles are clearly articulated and integrated into project structures and processes. There is evidence of meaningful engagement with equity-deserving groups in shaping these principles.	EDIA principles are acknowledged and present in some areas of the project. There is a stated commitment to inclusion, though integration may be uneven or emerging.	EDIA is mentioned as a value, but its influence on leadership, decision-making, or engagement is limited or unclear.	There is no evidence that EDIA principles are considered or embedded in the project, or it includes only superficial references.
	The project includes concrete, sustained actions to implement EDIA across all activities. Accountability is embedded through regular reflection, feedback mechanisms, and adaptive practices.	The project outlines clear actions to support EDIA, with mechanisms for monitoring and improvement. Accountability is addressed and partially implemented.	Some actions are taken to support EDIA, and there is a general commitment to accountability, though plans may lack depth or consistency.	Initial steps toward EDIA action are visible, but accountability mechanisms are vague or underdeveloped.	No meaningful actions or accountability measures related to EDIA are described.
	The project demonstrates a deep, respectful understanding of the TRC's Calls to Action and cultural safety. These principles are co-developed with Indigenous partners and are foundational to the project's leadership, values, and direction.	The project clearly aligns with relevant TRC's Calls to Action and shows a strong commitment to cultural safety. Indigenous perspectives inform the project's values and approach.	The project references TRC's Calls to Action and acknowledges the importance of cultural safety. There is a stated commitment, though integration may be partial or emerging.	The project mentions reconciliation or cultural safety, but the connection to TRC's Calls to Action is vague or underdeveloped.	There is little or no evidence of understanding or integrating TRC's Calls to Action or cultural safety principles.
	The project includes sustained, reciprocal engagement with Indigenous communities. Actions are co-developed, culturally safe, and supported by clear accountability mechanisms (e.g., shared decision-making, feedback loops, long-term relationship building).	The project demonstrates meaningful engagement with Indigenous communities, includes specific actions to ensure cultural safety during engagement and knowledge sharing activities. Accountability is addressed through planned reflection or reporting.	The project includes some engagement with Indigenous communities and outlines actions to support cultural safety. Accountability is acknowledged but may be limited in scope.	Engagement with Indigenous communities is minimal or one-directional. Actions are limited, and accountability mechanisms are unclear.	No meaningful engagement with Indigenous communities is described, and there are no actions or accountability measures in place.

We recognize that Indigenous-led projects may express EDIA and Truth and Reconciliation commitments through community-based practices, oral traditions, and relational accountability. This matrix is intended to support reflection and recognition of diverse approaches to equity and reconciliation.