

Oversight Committee
Exploring Climate Cooling Programme

December 9, 2025

Dear Ilan,

Thank you for the opportunity to review the documents prepared by Real Ice, Arctic Reflections, the Cambridge Center for Climate Repair, and the Exploring Climate Cooling Programme regarding the proposed experiment by the “Rethickening Arctic Sea Ice (RASI)” project.

Our recommendation is to approve the funding for the outdoor experiment subject to:

- a) ARIA's confirmation that all relevant laws, regulations, and permitting requirements, including Indigenous rights as set out in the UN Declaration of the Rights of Indigenous Peoples, have been followed.
- b) Continuation of meaningful, respectful engagement with local communities. On this point we have some recommendations below.

We note that (a) is in fulfillment with ARIA's statement commitment in the November 2025 Revision of Exploring Climate Cooling Programme Oversight and Government that

“ARIA will not fund experiments where the activities proposed are prohibited by domestic or international law or that violate Indigenous rights, including those outlined in the UN Declaration on the Rights of Indigenous People. Project teams will be required to show how their tests comply with all applicable laws.”

We appreciate the extensive documentation of information on prior and ongoing engagement with communities around the experiment sites, as well as the thoughtfulness and care that it demonstrates.

While the primary engagement between Real Ice and Arctic Reflections has been with local Indigenous right-holders, it is our understanding that the Programme Director, Exploring Climate Cooling, ARIA and the Principle Investigators have, in the past, also reached out by email and informally in conversations to individuals associated with the Inuit Circumpolar Council (ICC), Inuit Tapiriit Kanatami (ITK), and the Member of Parliament from Nunavut.

We have several additional recommendations for ARIA and for the Creator teams. These recommendations stem from the recognition that the Exploring Climate Cooling portfolio of projects has a special importance as the largest disclosed public funding for climate cooling to date, with a stated ambition to demonstrate responsible research practices. These particular experiments would also be the first to be approved under this portfolio. Their conduct, as well as perceptions of conduct, will have a bearing on the subsequent program activities. The demonstration of responsibility in research should reflect this wider context.

First, we recommend that ARIA as a whole, and particularly the Exploring Climate Cooling team, document and, most importantly, extend their “best effort” to obtain and maintain Free, Prior, and Informed consent (FPIC) from higher level Inuit bodies such as the ICC and ITK. This is in addition to the Creator teams’ continuing engagement with local bodies.

Why engage with higher level Inuit bodies.

We understand that the proposed experiments are controlled, small-scale, research efforts similar to work that has, in the past, been reviewed and approved by local bodies and non-government community representatives such as Hunters and Trappers Organizations. We also recognize that they are funded by a program that is focused on *exploring* climate cooling and has explicitly distinguished small-scale research from wider use or deployment.

The experiment, however, has the potential to set a precedent for responsible research. It is also potentially a first step in a larger evolution of scaling climate intervention. One of the participants (Real Ice)’s mission is to “prove and scale new methods of restoring and preserving Arctic sea ice using renewable energy.” (<https://www.realice.eco/mission>) Another participant, Arctic Reflections, is “committed to halting the rapid disappearance of Arctic sea ice.” (<https://arcticreflections.earth/>). The Cambridge Center for Climate Repair is “a mission-driven organisation advancing research on high impact climate repair projects that can be rolled out at scale within the next 5-10 years.” (<https://www.climaterepair.cam.ac.uk/mission>) This larger context cannot be ignored, particularly in the present moment for science, narrative, and discourse on climate change and climate intervention.

Given the larger context of the particular experiment, ICC and ITK, as organizations representing Inuit rights holders, could be considered relevant to engage with at this point, prior to scale, due to the potential transboundary impacts implied by participants’ stated intentions.

Why ARIA should lead

In the normal course of events, it is the implementing entity, rather than the funder’s responsibility to obtain FPIC. This is also noted in Item 4.1.2 of the contract between ARIA and the University of Cambridge.

Real Ice, Arctic Reflections, the Centre for Climate Repair do have a duty to be honest and transparent about their intentions and potential future trajectories for both research and possible use of ice sheet thickening.

In this case, however, we see ARIA as best positioned to lead engagement with ICC and ITK, given:

- ARIA’s role as the overarching programme coordinator and the entity best positioned to represent the collective activities of a set of projects that are exploring climate cooling approaches in which there may be a broader Inuit interest;

- the organization's overall position as an "executive non-departmental public body" of the UK government;
- ARIA's larger orientation toward catalyzing new technologies and industries (noting that the ECC program's emphasis on exploration is an exception).

Specific guidance

As a rule of thumb, engagement with ICC and relevant Indigenous rights holders should be at least as structured and formal as the ways in which ARIA has reached out to national authorities in countries where research is planned.

"Best effort" in this context obliges ARIA to undertake persistent communication, multiple attempts to engage across different channels, and being generally proactive.

To aid transparency and to establish a best practice model for transparency, we recommend keeping documentation of the dates when ARIA or partners first contacted ICC/ITK; dates of follow-up communications; notes on meetings requested, held, cancelled, or ignored; and what/when project information or materials were shared.

Finally, ARIA should reflect on the impact of going ahead without ICC and ITK consent or acknowledgement of the overall ARIA programme of work and its commitment to act responsibly. It could consider postponing if consent is not forthcoming by the time the sea-ice experiments are due to start.

Second, we recommend that Real Ice and Arctic Reflections should document and share the following processes and share an initial draft with communities around the experiment site before the start of the experiment.

- their process for achieving consent, confirming continued consent, and discerning/accepting withdrawal of consent. This documentation should include how dissent within the community and from Elders in particular is documented and handled.
- practices for community benefit, including:
 - a. Their approach to co-authorship
 - b. Their approach to other forms of recognition of contributions (including, for example: instruments, guidance on experiments, and insights from Elders and others.)

Our suggestion is for Real Ice and Arctic Reflections to keep a journal of engagement with local communities and rights holders. This is for several reasons: a) to have a clear record in case of questions about FPIC, ongoing consent, and permissions; b) to have material to be able to share on ways of working that might help future researchers and communities.

These are important to be clear about community benefit and roles and compliance with ICEE protocols. They are also an important part of making the responsible research practices visible, capable of being adopted by future projects.

Third, we recommend that both the Exploring Climate Cooling team and the RASI Creators work with Liminal Space to find practical ways to acknowledge the wider context of these experiments both in work with media at multiple scales and in how the creator teams communicate about the work themselves (e.g. on their websites).

This is in keeping with two of the programmes' governance principles:

- Communicate proactively and be transparent, open, and honest at both the programme and project level, including around levels and sources of funding, intentions, how the research is conducted, outputs, and impacts.
- Be cognisant of the broader implications of research + integrate systems thinking into research on approaches for actively cooling the climate.

Again, we would like to draw attention to the fact that while these particular experiments are relatively small-scale experiments designed to learn about the feasibility and efficacy of certain approaches to a sheet thickening, they sit within a larger geopolitical, ethical, environmental, and technological context that cannot be ignored. Avoiding this context can create distrust or misunderstanding about intent. These activities have a meaning beyond the particular place and time, and that meaning is contested and controversial. We expect that it will continue to be debated and questioned in the media discourse, as well as in potentially legal and governance settings. Throughout this contestation and debate, it is extremely important for ARIA and the creator teams to maintain openness, transparency, and full documentation of efforts and honest reflection and disclosure of intentions.

Best regards,

Piers Forster, Chair
Jessica Seddon, Secretary
Arunabha Ghosh, Member
Elena Kavanagh, Member
Jan McDonald, Member
Jack Stilgoe, Member
Shuchi Talati, Member

ADDENDUM: Explanation of the Role of the Oversight Committee

The Oversight Committee role is to assess compliance with the governance principles set out by the Exploring Climate Cooling programme. It is not to ascertain compliance with all applicable laws and regulations.

This review is based upon the information that was provided by the creator teams, as well as a subsequent conversation with the creator teams to clarify certain aspects of the ongoing engagement and the rationale and practices for working with communities. We trust that this information is complete and true with no substantive omissions.

List of Documents Reviewed

ARIA

FPCW-PR01-P015 - Re-thickening Arctic Sea Ice— Standard Grant Funding Letter
2025-11-14 ECC - Outdoor Experiment Funding Approval Submission - RASI Real Ice
ECC -Outdoor Experiment Funding Approval Submission Arctic Reflections 2025

Supplemental Documents

Real Ice

Presentation to EHTO winter 2023.pdf
Summary of Field Experiments in Cambridge Bay 2024-2025.pdf
2025-08-15 NRI License Renewal.pdf
2025-08-15-NPC File # 150891 Real Ice - January 26 Field Test in Cambridge Bay Canada_DH (002) (1)
2025-11-20 Real Ice 2025_26 Progress with Community Engagement and Permitting
2231031-23YN044-Screening Decision Report-NIRB.pdf
EHTO-Support-Letter_Real Ice Nov 2025.pdf

Arctic Reflections

Arctic Reflections timeline.docx
250829-25YN067-NIRB Application-IR1E.pdf
Community consultation and permitting proces update for ARIA Nov 2025 v3.pdf
EIA_Qikiqtarjuaq_2026 DEF.pdf
Participant information sheet Qikiqtarjuaq.pdf