



ADVANCED MATERIALS CHALLENGE

Up to \$40 million to shape the circular economy and create low emissions products.

EMISSIONS
REDUCTION
ALBERTA



Online Submission:
ERAadmin.ca

Deadline:
Wednesday, January 22, 2025
5 PM Mountain Standard Time (UTC-7h)

**CALL FOR EXPRESSIONS OF INTEREST
GUIDELINES**

EMISSIONS
REDUCTION
ALBERTA



Table of Contents

1	Introduction.....	5
1.1	ERA.....	5
1.2	Document Scope.....	5
2	Call for Proposals Scope	6
2.1	Background and Context	6
2.2	Collaboration with Alberta Innovates.....	8
2.3	Call Focus and Technology Areas.....	8
2.4	Project Structure.....	11
2.5	Stage of Development and Novelty	11
2.6	Project Location	12
2.7	Eligible Applicants.....	13
2.8	Project Initiation and Term.....	13
3	Terms of Funding.....	14
3.1	Total Funds Available	14
3.2	Funding Per Project.....	14
3.3	Fund Matching.....	14
3.4	Contribution Agreement.....	15
3.5	Fund Disbursement.....	15
3.6	Eligible Expenses.....	16
3.7	Outcomes Reporting and Knowledge Sharing.....	16
3.8	Funding Leverage.....	16
4	Submission Details.....	17
4.1	Submission Deadline.....	17
4.2	Funding Process Timelines.....	18
4.3	Submission Content.....	18
4.4	Submission Standards.....	18
4.5	Applicant Support and Contact Information	19
5	Evaluation.....	20
5.1	Methodology	20
5.2	Evaluation Criteria	20
5.3	Eligibility Screening Criteria	21
5.4	Next Steps	22
5.5	Note on Proposal Quality.....	22
6	Equity, Diversity, and Inclusion	22
7	Intellectual Property.....	23
8	Confidentiality	23

Legal Notice

Emissions Reduction Alberta is a registered tradename of the Climate Change and Emissions Management (CCEMC) Corporation and is referred to as ERA throughout this document. By submitting an Expression of Interest (“EOI”), you confirm that you have read, understand and accept the information contained in this Call for Expressions of Interest and, that each of you, the applicant (the “Proponent”), and any project partners agree as follows:

- a) ERA may at any time suspend, terminate, cancel, withdraw, amend or alter all or any portion of this request for proposals (“RFP”) EOI stage (“EOI Stage”), including but not limited to the EOI requirements, the EOI selection and review process and the EOI eligibility criteria.
- b) ERA reserves the unqualified right to accept or reject any or all EOIs for any reason. ERA is not required to accept the highest ranked EOI nor is it required to accept any EOI recommended for advancement to the full project proposal (“Full Project Proposal”) stage (“FPP Stage”) by the applicable ERA evaluators.
- c) EOIs that do not comply with the requirements described in this RFP may be rejected in whole or in part or not considered by ERA. ERA reserves the unqualified right to accept or reject a non-compliant EOI.
- d) This EOI Stage is an invitation for EOIs only. It is not an offer and the submission of an EOI does not create a contract or agreement of any kind between ERA and the Proponent.
- e) No conduct, act or omission of CCEMC, CCEMC operating as ERA, or its directors, officers, consultants, project advisors, agents, servants and their respective successors and assigns (collectively the “ERA Parties”), other than a written notice to the Proponent in writing signed by an authorized person for ERA, will constitute an acceptance of an EOI.
- f) Acceptance of an EOI does not create any binding contract between ERA and the Proponent. ERA shall not be obligated in any matter whatsoever to any Proponent until a written contribution agreement (“Contribution Agreement”) between CCEMC operating as ERA and the Proponent has been duly executed relating to an approved FPP.
- g) As between the parties, the EOI and all documents and materials you submit to ERA in connection with the EOI Stage and all intellectual property in and to the foregoing are the exclusive property of ERA immediately upon delivery to ERA. For clarity, this refers to the materials themselves, not to any technology or innovations disclosed or discussed in them. Intellectual property developed during the course of the project will be addressed through the Contribution Agreement and will normally be owned by the Proponent.
- h) You, the Proponent and any project partners will keep this EOI Stage confidential and will not use, reproduce or distribute it, any portion of it, or any data, information, drawings, or

specifications included in or provided with it except as necessary to prepare an FPP as requested by ERA.

- i) Neither ERA nor any of ERA Parties will have any liability whatsoever to you, the Proponent or any project partners, or any of them, in connection with this EOI Stage or any EOI prepared in response to it.
- j) You, the Proponent and any project partners will not make a claim against CCEMC, CCEMC operating as ERA, or ERA Parties for any reason whatsoever or howsoever relating to this EOI Stage. You are undertaking the expenditures required to prepare and submit an EOI entirely at your own risk, and you waive any right and release ERA and ERA Parties from any demands, liability, claim or recovery for costs, expenses, or damages incurred whatsoever or howsoever arising out of or relating to this EOI Stage or any EOI prepared in response to it, whether such right or claim arises in contract, negligence or otherwise.
- k) ERA takes no responsibility for the accuracy of the information supplied during this EOI Stage process by ERA or ERA Parties.

1 Introduction

1.1 ERA

Emissions Reduction Alberta (“ERA”) is a registered tradename of the Climate Change and Emissions Management (CCEMC) Corporation. For 15 years, ERA has responsibly invested revenues from Alberta’s Technology and Innovation for Emissions Reduction (TIER) fund – the carbon price paid by large industrial emitters in Alberta – to accelerate the development and adoption of innovative clean technology solutions. Since inception in 2009, ERA has committed \$937 million to 294 projects worth \$7.3 billion that are helping reduce greenhouse gas (GHG) emissions, create competitive industries, and lead to new business opportunities in Alberta. These projects are estimated to deliver cumulative GHG reductions of more than 35 million tonnes CO₂e by 2030 and nearly 100 million tonnes CO₂e by 2050.

1.2 Document Scope

This Call for Proposals (“Call”) is inviting project proposals to be considered for ERA funding in a competitive process. Proposals will be accepted and evaluated in two stages: the Expression of Interest (“EOI”) stage and the Full Project Proposal (“FPP”) stage. Applicants that are successful in both stages will proceed to Contribution Agreement development and project execution. These guidelines provide information about the EOI stage only. Information specific to the FPP stage, including details regarding preparation and evaluation of FPPs, will be made available to shortlisted EOI applicants at the time of invitation to the FPP stage.

A description of ERA’s overall funding process can be found on the ERA website at <https://eralberta.ca/apply-for-funding/>.

Note: Applicants who have questions about the EOI process or who wish to discuss their potential submission with ERA are invited to email applications@eralberta.ca. Inquiries will be directed to appropriate personnel within ERA.

2 Call for Proposals Scope

2.1 Background and Context

Alberta ranks third among Canadian provinces when it comes to the production of manufactured goods and materials¹ The manufacturing sector consists of several subsectors, including food and plastics, metal, machinery, forest products, and chemicals². Within these materials sectors, there is a critical need to reduce embodied carbon, enhance material properties with additives and/or new formulations, and improve circularity via resource use optimization and reduction of waste, and better waste management, recovery, and recycling.

Significant efforts are also underway to develop new materials including non-combustion products such as carbon fibre and asphalt binders from Alberta's hydrocarbon resources; high-value metals such as vanadium, titanium, and lithium; novel bioproducts and biomaterials; and carbon-based materials produced via conversion of carbon dioxide. In addition to their direct economic and environmental benefits, such materials can facilitate secondary effects such as supporting advanced battery and fuel cell development and enabling lighter and more durable products used in everyday life. However, these technologies are nascent in Alberta and are at a critical stage where funding support can significantly accelerate development and commercialization prospects.

Numerous solutions supported by Alberta Innovates in these areas have reached a stage where they are primed for further scale up with the backing of ERA. Concurrently, there remains a pressing need to develop new opportunities at earlier Technology Readiness Levels (TRLs), and Alberta Innovates will continue to play a vital role in fostering this innovation.

The Government of Alberta has signaled priority areas for investment within Alberta's economy; these are highlighted below as critical areas of focus for this Call.

Hydrocarbons Beyond Combustion

ERA and Alberta Innovates have previously made significant investments to advance carbon fibre production from Alberta's bitumen resource. Extensive work to date has advanced a number of candidate technologies in this area, from fundamental research (TRL 1-2) to early pilot scale (TRL 5), but there remains a need for sustained financial support. In a paper released in November 2023, Alberta Innovates estimates that \$300 million in total government investment is required over the

¹ [Alberta Economic Dashboard](#)

² [Alberta Sector Profile: Manufacturing](#)

next 10 years to realize the full benefits of developing energy carbons and other carbon-rich materials. Thus far, these products (e.g., carbon fibre, asphalt binder, activated carbon, and energy carbons) have progressed through technical feasibility stages and now require additional investment to reach the next stage of commercialization. Carbon fibre requires additional quality improvement and scale-up, as this material must now reach a stage where it can be manufactured reliably and with consistency for various industrial applications. Asphalt binders and energy carbons also face similar challenges in their technology development stage and require additional testing. Energy carbons such as activated carbon and hard carbon require additional support in optimizing their performance and integrating them within supply chains for energy technologies.

Circular Plastics

Globally, plastics have become a topic of discussion, as they take a significant amount of time to degrade, and are harmful to a large number of habitats and populations. According to the United Nations Environment Programme, 400 million tonnes of plastic waste are produced every year, with Canadians contributing over 3 million tonnes. Most of the plastic produced around the world, including single-use plastics, comes from fossil fuels or virgin feedstocks and ultimately ends up in landfills or outside of landfills as unregulated waste.

Alberta has recently introduced its Extended Producer Responsibility Regulation that outlines a framework for those that produce single use plastics to ensure that systems are developed to adequately collect and manage the disposal of plastic materials among others. This approach is intended to shift the responsibility for collecting and disposing single-use plastics and other single-use products (e.g., magazines, booklets, utensils, straws, etc.) from consumers to producers. Alberta Innovates and ERA have previously invested in a number of plastics recycling and circular plastics technologies. Targeted funding for these technologies is needed to ensure that plastics circularity continues to mature while also gaining traction and acceptance by regulators and producers.

Materials for Next Generation Carbon Capture

Carbon capture is an essential component of both Alberta's and Canada's strategies to reduce emissions and achieve carbon neutrality by 2050. ERA has identified an ongoing opportunity to advance the pipeline of next-generation carbon capture and carbon removal technologies, including natural carbon sequestration solutions. To meet the growing demand for carbon storage and help enable the Government of Alberta's carbon sequestration initiatives, novel capture technologies are required to help drive down costs and increase capture efficiencies. Materials are an essential component of carbon capture and removal technologies, whether in the form of advanced solvents, metal-organic frameworks, adsorbents, nature-based carbon sinks, or others.

Lithium and Critical Minerals

Alberta is in the process of refining its critical minerals strategy. Developing local supply chains for critical minerals, like lithium and vanadium, provides significant benefits including new economic activity and resource revenues, energy and supply chain security, and investment attraction. Alberta is well-positioned to become a significant player in this space due to the growing awareness of mineral resources present in the Western Canadian Sedimentary Basin, and Alberta's skilled workforce in resource exploration, extraction, and processing.

This Call for Proposals is dedicated to finding the most promising innovative technologies and solutions to develop advanced materials and their supply chains and enable the growth of the circular economy in Alberta. This Call complements Alberta's 2023 Emissions Reduction and Energy Development Plan and is supported by the Government of Alberta's Technology Innovation and Emissions Reduction (TIER) Fund.

2.2 Collaboration with Alberta Innovates

ERA typically funds projects in the later stages of development, focusing on those progressing toward commercialization within the Technology Readiness Level (TRL) range of 7 to 9 (field pilots, demonstrations, and first-of-kind commercial implementation). In contrast, Alberta Innovates typically provides funding for projects in the earlier stages of development, encompassing the TRL range of 3 to 7. Recognizing Alberta Innovates' leadership in materials technologies as well as the need to support solutions across a diverse range of TRLs, this Call represents a strong opportunity for enhanced collaboration between ERA and Alberta Innovates.

In light of the above, for this Call ERA will accept projects as early as TRL 5 or 6 and will work closely with Alberta Innovates to manage and triage earlier-TRL opportunities. This collaborative approach ensures that project developers will receive tailored support throughout the spectrum of innovation, from lab-scale research and development to commercial deployment. ERA will collaborate with Alberta Innovates to identify submissions to this Call that show merit but fall in the earlier stages of development (e.g., TRL of less than 5). As appropriate and with Applicant permission, such proposals may also be considered for funding support by Alberta Innovates. For all projects funded by ERA in this Call, technical experts from Alberta Innovates may be included in the project Steering Committee and/or may participate as the lead Project Advisor on ERA's behalf.

2.3 Call Focus and Technology Areas

ERA's Advanced Materials Challenge will invest in scale-up, pilot, demonstration, and first-of-kind projects of technologies and solutions relating to the extraction, production, manufacturing, performance improvement, and circular lifecycle of new and existing material products in Alberta. This Call aligns with the "Circular Economy," "Industrial Decarbonization", and "Carbon Management" focus areas outlined in ERA's [Technology Roadmap](#), (5th edition) but is not limited to any particular focus area.

Example Technology Areas

While all opportunities funded under this Call must be relevant to materials products, this Call is not prescriptive with regard to specific materials/sectors or specific technologies. The following list provides a non-exhaustive set of example technology areas that ERA believes could represent strong alignment with this Call:

- Novel carbon materials
 - Activated carbon products
 - Advanced carbon nanotubes, carbon fibres, or carbon composite products and their application in different sectors (e.g., biocompatibility, smart materials, sensors)
 - Graphene and integration in end-uses (e.g., supercapacitors, high performance batteries)
- Production of non-combustion products from bitumen or other hydrocarbons
- Circular plastics and other low-emissions plastics technologies
 - Novel plastics recycling processes (e.g.: mechanical, chemical, hybrid, etc.)
 - Advanced compostable and/or biodegradable bioplastic production (PHA, PLA, etc.)
 - Low-emissions production methods and feedstocks for plastics
 - Plastic re-purposing and re-use into secondary and tertiary products/feedstocks
- Novel materials with applications in carbon capture and sequestration:
 - Next generation amines and solvents, ionic liquids, and similar
 - Novel chemical and physical sorbents (metal organic frameworks)
 - Novel enzymatic or biological processes
 - Novel membranes technologies including membrane contractors, etc.
- Novel production and/application of biochar and other carbon-absorbing minerals
- Conversion or utilization of carbon dioxide or other GHGs into valuable products that achieve permanent CO₂ sequestration (note: this excludes production of fuels and similar products)
- Production and processing of critical minerals (incl. lithium, vanadium, etc.)
- Material performance enhancements and/or embodied carbon reduction, including:
 - Substitutionary cementitious materials
 - Novel formulations or chemistries for plastics, ceramics, and mineral products
 - Material additives and advanced manufacturing techniques
- Novel materials solutions for emissions reduction in industry, including:
 - Membranes and filters (e.g. for product separation and purification, water treatment, etc.)
 - Coatings, metallurgical improvements, and similar
 - Improved catalysts (e.g. to enhance performance and/or reduce energy use)
 - Materials for thermal efficiency, insulation/refractory enhancement, and/or improved heat transfer
 - Material enablers for clean industrial heat including electrodes and thermal energy storage materials

- Waste-to-value and recycling solutions for waste streams (municipal, food, agricultural, industrial, wastewater, etc.)
- Energy supply chain (components for batteries, electrolyzers, etc.)
- Biomaterials and bioproducts, including:
 - Base chemicals and additives
 - Green building products

This Call is seeking transformative opportunities to position Alberta for success in a future carbon-neutral economy. All proposed solutions must be compatible with decarbonization strategies and must demonstrate a clear line of sight towards realized emissions reductions.

Out-of-Scope Technologies and Projects

Examples of opportunities that are **out of scope** for this Call include:

- Business as usual recycling or waste management
- Production of plastic feedstocks without an end-user
- Biochar production without an end-user
- Projects whose primary focus is production of biofuels or other fuels
- Standalone pre-construction studies

Alignment with other ERA Funding Opportunities

ERA’s [Technology Roadmap](#) (Fifth Edition) and 2024-27 [Business Plan](#) identify several interrelated focus areas for upcoming funding opportunities that complement this Call for Proposals. These technology areas are summarized below:

Program	Technology Focus	Timelines
Emerging Innovators	<ul style="list-style-type: none"> • Support for SME-led projects that are focused on reducing emissions within Alberta. 	Intake Closed
Industrial Transformation	<ul style="list-style-type: none"> • Solutions to reduce emissions and ensure existing and new industries in Alberta remain competitive. 	2024 Intake Closed – Renewed launch planned Summer 2025
Advanced Materials (This Call)	<ul style="list-style-type: none"> • Technologies and solutions related to the design, production, manufacturing, and lifecycle of new and existing materials and products. 	Launch in Fall 2024

Technologies or solutions that, in ERA’s sole determination, are better aligned with other programs may be passed on to the respective funding organizations for consideration, should the applicant elect to having their proposal shared. Given the broad nature of the Call, ERA encourages applicants to contact applications@eralberta.ca to discuss their technology alignment.

2.4 Project Structure

Funding made available through this Call is provided for completion of projects with well-defined objectives, milestones, deliverables, and timelines. Applicants must clearly delineate the scope of the project for which ERA funding is being requested and the benefits associated with that scope of work. Any related work completed concurrently or before the project term but outside the scope of the project may be discussed in the proposal but should be clearly indicated as such.

ERA is seeking projects that involve field testing, piloting, demonstration, or first-of-kind implementation of novel technology (e.g., devices, equipment, systems, processes, or practices). Standalone pre-construction projects (e.g., feasibility/FEED study, detailed engineering, software development) are not eligible. All projects must include field testing, piloting, demonstration, or first-of-kind implementation of novel technology and must incorporate sufficient operational time to generate performance data and lessons learned. Projects may include late-stage pre-construction work as the initial stage of a technology demonstration/implementation, as long as the project is at an advanced state of readiness and can be completed within the project term described below.

Projects or portions thereof that have previously received ERA funding are not eligible to receive further ERA funding for the same development. However, applicants may request support for a new phase of development that builds on and sufficiently advances a previously funded project.

2.5 Stage of Development and Novelty

EOIs are invited for projects that will advance technology to the stages of prototype, field pilot, demonstration, or first-of-kind commercial implementation by project completion (e.g., TRL 5-9 by project completion), as described below:

- **Prototype:** At this stage, the solution is near a desired configuration and may be tested in a simulated setting. Projects in this category include prototype testing and optimization and with adequate validation already completed in a laboratory prior to this stage.
- **Field Test/Pilot:** At this stage, the solution is ready to be field tested in an operational environment. Projects in this category include scale up of prototypes to representative pilot scale and subsequent in-field testing of pilot units.
- **Demonstration:** At this stage of development, the technology or innovation is approaching the final commercial product and representative systems have been built. Projects in this category include demonstration of near- or full-commercial-scale systems in an operational environment.
- **First-of-Kind Implementation:** At this stage, the technology is ready for first-of-kind commercial deployment. Projects in this category will involve design, construction, and operation of the technology in its final commercial form and at commercial scale, with the intent to operate the technology for its full commercial life.

For clarity, technologies may be at a TRL of less than 5 prior to the start of the proposed ERA-funded project. It is incumbent on all applicants to show how their project scope aligns with the above definitions and to justify the reasonableness of achieving the proposed project objectives based on the current TRL at the start of the project. Technologies or projects that fall below the TRL range for this Call may be eligible for other supports; please refer to Section 2.2 Collaboration with Alberta Innovates.

This Call is only open to new developments that are additional to business-as-usual activities. For clarity, prior announcement or development of a project does not preclude it from receiving funding, but applicants must justify how ERA funding will lead to activities and developments that are additional to the business-as-usual case. Applicants must demonstrate how the proposed technology or application thereof is an innovative solution for emissions reduction in Alberta. This may include elements such as first-of-kind demonstration of novel technological solutions, innovative adaptation of solutions that have been implemented outside of Alberta or in a different industry, or novel configurations of leading commercial technology for a new operational environment.

In general, projects should include elements of technological advancement and de-risking rather than deployment of commercially available solutions. The presence of commercially available components in a project does not disqualify it from funding as long as the primary focus of the ERA-funded scope of work is advancing novel technologies or processes.

Note: It is incumbent upon applicants to justify how their project qualifies as a novel opportunity.

In the context of this Call, novelty can be demonstrated through elements such as:

- a) the additionality of the potential project outcomes relative to a reasonable future baseline condition;
- b) the extent to which the technology has been previously implemented/tested in Alberta;
- c) the incremental strategic value of the project relative to current/past investments in [ERA's portfolio](#); and
- d) the degree of technology risk associated with the proposed project.

As such, ERA funding will not be provided to address only a financial barrier or for projects whose focus is the implementation of business-as-usual technology.

2.6 Project Location

All projects supported through this Call must demonstrate a clear and justified value proposition for reducing GHG emissions in Alberta. Technology solutions can originate from anywhere globally but must be demonstrated or implemented in Alberta during the project. Projects that involve demonstration or implementation of a technology at multiple Alberta sites are eligible for funding under this Call.

2.7 Eligible Applicants

This Call is open to all categories of lead applicant, including innovators, technology developers, Indigenous communities, industrial facility owners/operators, industrial associations, small and medium-sized enterprises (SMEs), research and development (R&D) organizations, universities, municipalities, not-for-profit organizations, government research labs, and individuals. Applicants are not required to be located in Alberta, but all applicants must demonstrate a clear value proposition for the province.

Collaboration between multiple organizations is eligible and encouraged for this opportunity. Collaboration between partners can often represent a strong value proposition by demonstrating opportunities for technology validation, commercialization, and sharing of results. This Call is focused on creating advanced materials and supporting a circular economy in Alberta, therefore applicants are strongly encouraged to demonstrate engagement with any applicable regulatory bodies within their application.

Applicants are encouraged to partner with Alberta's post-secondary and research institutions, Indigenous communities, and municipalities where appropriate. These partnerships can offer significant benefits, including the attraction and training of highly skilled workers, increasing Alberta's innovation capacity, engagement of local communities, and leveraging complementary resources.

Note: There are no restrictions on the number of EOIs that can be submitted by any applicant. However, applicants are encouraged to be selective, bringing forward only the most promising and highest quality applications. ERA reserves the right to limit funding to any individual organization to ensure diversity of funding recipients, and may ask applicants to identify the highest priority projects for their organization. In this Call, ERA is unlikely to fund more than one proposal from any given organization.

2.8 Project Initiation and Term

Successful applicants will be required to commence work on the proposed project (engineering design, equipment procurement, construction, etc.) **within 120 days** of ERA funding approval, currently planned for June 2025. Applicants must clearly demonstrate in their proposal that the project is sufficiently advanced to initiate work within 120 days of funding approval. However, successful applicants may request a delayed start date of up to twelve (12) months after funding approval to allow for alignment with facility operations, scheduled facility turnarounds, and/or regulatory processes. Such requests will be at ERA's sole discretion to accept or decline.

The maximum length for projects funded under this Call is **three (3) years** from initiation, plus **one (1) year** additional for operational time where applicable. For clarity, all construction and commissioning activities must be completed within a three-year period, but up to one year of post-commissioning operational time must be incorporated in the project term where applicable to

generate performance data and learnings for inclusion in final reporting and knowledge-sharing activities.

3 Terms of Funding

3.1 Total Funds Available

The total funding available for projects supported through this Call is up to **\$40 million** Canadian Dollars (\$CAD), subject to the discretion of ERA and the availability of funds.

3.2 Funding Per Project

The maximum ERA contribution that may be requested for any one project is **\$5 million CAD**. For clarity, there is no maximum total budget for projects in this Call.

Based on the scale of outcomes targeted and the amount of effort required to succeed in ERA's due diligence process, ERA anticipates that most projects funded in this Call will receive a minimum of \$500,000 CAD in ERA funding. A limited number of projects where ERA's contribution falls between \$250,00 and \$500,000 may be funded on a case-by-case basis; applicants whose need is in this range are encouraged to discuss this with ERA in advance of their submission. Applicants who require less than \$250,000 are advised to seek support from other sources.

Note: Applicants must justify the amount of funding requested. ERA may choose at its sole discretion to award project funding for less than the requested amount.

3.3 Fund Matching

ERA requires its funding to be matched on a minimum 1:1 basis with funding from the applicant and/or project partners toward eligible expenses. In other words, for every dollar that ERA provides to a project, there must be at least one dollar from the applicant and/or partners. As such, the maximum ERA contribution to a single project will be no more than 50% of the project's eligible expenses. Eligible private matching funds include:

- Unencumbered Cash
- Cash-equivalent, In-kind Contribution

Note: While in-kind contributions are included as eligible matching funds, applicants are strongly encouraged to review their project financing structure against the grant amount requested.

ERA will not match other federal, provincial, or international government funds provided directly for the proposed project. However, the inclusion of other government funds does not disqualify a project from eligibility. ERA does not have a formal "stacking" limit alongside other government

funds as long as the requested ERA contribution is matched at least 1:1 by contributions from the lead applicant and private partners.

The following examples are provided for illustrative purposes:

- **Example 1** – A project has a total cost of \$8 million in eligible expenses. If the applicant and private partners contribute \$4 million, ERA could contribute up to \$4 million.
- **Example 2** – A project has a total cost of \$45 million in eligible expenses. If the applicant and private partners contribute \$40 million, ERA could contribute up to \$5 million.
- **Example 3** – A project has a total cost of \$1.75 million in eligible expenses. If the proponent and partners contribute \$0.5 million and the Government of Canada contributes \$0.75 million, ERA could contribute up to \$0.5 million.

Please note that ERA will not match future revenue associated with the outcomes of the project, including for example: offset/performance credits associated with the project; tax incentives/credits associated with the project, such as Canadian SR&ED credits; and revenue from sale of the project’s outputs or products. However, the presence of such revenue sources does not disqualify a project from eligibility and may be noted in the proposal to improve the risk profile of the proposed financing plan and technology commercialization strategy.

Note: Applicants **do not** need to have all funding secured at the time of EOI or FPP submission. While confirmation of secured funding will strengthen a proposal, it is **not a requirement for project adjudication**. ERA typically requires applicants to have funding secured at the time they execute their Contribution Agreement, which is due 60 days after successful funding notification.

3.4 Contribution Agreement

Successful applicants will be required to enter into a contribution agreement (“Contribution Agreement”) with ERA. The Contribution Agreement will address without limitation the terms of funding, maximum ERA funding for the project, project scope, work plan, milestones, deliverables, performance targets, payment schedule, and reporting requirements. ERA will provide a draft Contribution Agreement to shortlisted applicants during the FPP stage for review. For this Call, ERA will only entertain minor changes to Contribution Agreement terms and will not negotiate Contribution Agreement terms prior to making a funding decision.

3.5 Fund Disbursement

ERA’s funding will be disbursed on a milestone completion basis after eligible expenses have been incurred toward specified tasks over the course of the project term. ERA’s contribution to each milestone will be at the same ratio of ERA’s funding toward the total project budget. For example, if ERA is contributing 25% of the total eligible project costs, ERA will pay 25% of the eligible expenses incurred at each milestone. The milestone completion and payment schedule will be outlined in the Contribution Agreement.

3.6 Eligible Expenses

ERA funds may only be used for eligible project expenses; thus, as discussed in Section 3.3, the total eligible expenses for the project impact the amount of ERA funding that may be requested. For information about eligible expenses and costs, please refer to the ERA *Eligible Expenses and Cost Instructions* document available at eralberta.ca/apply-for-funding. For clarity, the presence of ineligible expenses does not disqualify a project or limit its ability to recover costs for eligible expenses. All costs (eligible and ineligible) should be included in the proposal to accurately reflect the extent to which ERA's contribution will be leveraged.

ERA will only contribute toward project costs incurred after the date of ERA's FPP submission deadline (tentatively planned for early April 2025). The FPP submission deadline and cost eligibility date will be confirmed at the time of invitation to the FPP stage. Project-related costs incurred prior to ERA's FPP submission deadline will be considered out of scope, will not be considered eligible project costs, and are not eligible for fund matching from ERA. Furthermore, no disbursements will be made prior to execution of a contribution agreement with ERA, and any project costs incurred prior to execution of a contribution agreement will not be reimbursed by ERA in the event that an agreement is not executed.

3.7 Outcomes Reporting and Knowledge Sharing

Funding recipients will be required to report on project outcomes, achievements, and lessons learned, including, without limitation, GHG reductions (actual and projected), job creation, and other environmental, economic, and social benefits. Reporting requirements will include, without limitation, confidential sharing of data with ERA and preparation of public reports.

All ERA-funded projects with quantifiable GHG emissions benefits will be required to provide ERA with a GHG measurement, monitoring, and verification (MMV) plan for the duration of the project and may be required to provide third-party GHG quantification and reporting upon project completion.

ERA is committed to encouraging widespread knowledge dissemination from funded projects to maximize the benefit of our participation. In addition to written reports, ERA may require recipients to commit to specific activities such as hosting knowledge-sharing workshops, participating in ERA lessons-learned activities, or other knowledge-sharing initiatives, as determined by ERA on a case-by-case basis.

3.8 Funding Leverage

ERA is working in partnership with other funding organizations in Alberta and across Canada. In some cases, there may be an opportunity for ERA to share applicants' proposals with trusted partners and other funders in the system to explore possibilities to leverage funding available from

these organizations. Potential funding programs and opportunities that may align with the Call or be of interest to applicants include:

- [Alberta Innovates](#)
- [Alberta Indigenous Opportunities Corporation](#)
- [Alberta Indian Investment Corporation](#)
- [ISED Strategic Innovation Fund](#)
- [Natural Resources Canada Programming](#)
- [Prairies Economic Development Canada](#)
- [Canadian Agri-food Automation and Intelligence Network](#)
- [Results-Driven Agriculture Research](#)

A complete list of trusted funding partners can be found [on ERA's website](#).

During the submission process, applicants will have the opportunity to give ERA permission to share their submissions with trusted funding partners of ERA, where applicable. Please note that ERA will only share applications for the purposes of exploring further funding and with partners where ERA has a non-disclosure agreement in place. An applicant's preference regarding whether to allow sharing of their application will not influence ERA's assessment of their proposal.

4 Submission Details

4.1 Submission Deadline

The deadline for submission of EOIs in response to this Call is **January 22, 2025 at 5:00 p.m. Mountain Standard Time (UTC-7h)**. Late submissions will **not** be accepted. Applicants are encouraged to complete their submissions well in advance of the deadline. ERA will not accept partial or incomplete submissions. All required content must be uploaded into ERA's Emissions Reduction Information Management System ("Grant Manager") at <https://grant-manager.com/erims> and the submission must be finalized by completing all necessary online steps in order for the EOI to be considered complete. Applicants will receive an automatically generated email confirming receipt of the proposal upon submission. If a confirmation email is not received, applicants should check their junk/spam folder and the Grant Manager to ensure the submission was complete. If the problem persists, applicants may contact IMS@eralberta.ca for assistance.

4.2 Funding Process Timelines

The following timelines are anticipated for the full funding process. Note that ERA reserves the right to alter these timelines or cancel the Call.

Action	By Whom	Timing
EOI Submission Deadline	Applicants	January 22, 2025
EOI Shortlist Notification	ERA	March 2025
FPP Submission Deadline	Applicants	April 2025
FPP Oral Presentation	Applicants	May 2025
Funding Decision Notification	ERA	June 2025

4.3 Submission Content

EOIs must be submitted using Grant Manager at <https://grant-manager.com/erims>. Users must create an account and complete all mandatory forms to submit an application. Each submission must consist of the following:

- **Expression of Interest Document (Required):** This document will form the basis of ERA’s evaluation and must fully address each of the evaluation criteria.
- **Letters of Support (Optional):** Letters of support from partnering organizations, funding sources, site hosts, etc., may be uploaded as an appendix to the EOI document. Please combine all letters of support into a single PDF attachment.
- **Online Information (Required):** In addition to the documents outlined above, applicants are also required to enter general information about the project into the Grant Manager online system.

Note: Only the required documents and information described above will be reviewed. Any additional attachments, materials or information appended to the required documents will not be considered during the evaluation.

4.4 Submission Standards

A response template will be provided on the Grant Manager for the EOI document during the application process. Applicants must use the response template to ensure that all necessary information is provided in a consistent and practical manner. Applications that fail to use the template may not be considered.

Note on required file naming convention: All documents uploaded to the Grant Manager will have the EOI number and applicant name automatically appended to the filename. Please do not include the EOI number or full corporate legal name in filenames. Applicants are encouraged to use short filenames (no more than 30 characters) with no special characters to ensure their files are processed correctly.

The final EOI document must be uploaded in PDF format and may be no more than ten (10) letter-sized (8.5" x 11") pages in length, including all text, graphics, and tables. **Any extra pages beyond the limit will be removed from the document and will not be considered by the evaluators.** The document must use Calibri (or Arial) 11-point font with a minimum of 1.0 line spacing. Margins must be no smaller than 2.54 cm (1"). Only one EOI document and one document with compiled letters of support may be uploaded per submission.

Note: The page limit does not include optional letters of support.

4.5 Applicant Support and Contact Information

Applicants are welcome to contact ERA at any time throughout the process for support and guidance on completing their application. Before contacting ERA, applicants are encouraged to read the FAQ document available on the Call website and to carefully consult the guidelines and template. ERA provides all applicants with support from key points of contact to answer questions regarding the guidelines, template, Grant Manager, evaluation criteria/process, and technology/project alignment with the Call. ERA will not provide pre-reviews or feedback on EOI proposal content.

The points of contact for this Call are as follows:

- Assistance with Call guidelines and template: applications@eralberta.ca
- Assistance with Grant Manager online application system and submission: IMS@eralberta.ca
- Other information and general inquiries: applications@eralberta.ca

Due to high anticipated volumes, please allow up to one week for responses to email inquiries. Using alternate email addresses, such as ERA's general information email or media contact email, may result in a delayed response to your request.

At the FPP stage, shortlisted applicants will be assigned a formal project advisor and will work with ERA's GHG team to provide additional assistance in developing their Full Project Proposal.

Note: Following submission of an application, applicants are only permitted to discuss their proposal with members of ERA's Applications team (points of contact listed above). To maintain the integrity and fairness of the process, and to ensure efficient communication, contact with other individuals affiliated with the process (including reviewers, ERA executives, ERA Board members, and Government of Alberta representatives) regarding any active ERA application is strictly prohibited. Inquiries submitted by applicants outside of appropriate channels will not be responded to, may be reported to the independent Fairness Monitor for the process, and could lead to disqualification of a proposal. For clarity, this restriction does not apply to official Call proceedings such as applicant presentation sessions.

Applicants are encouraged to reach out to the Applications team at applications@eralberta.ca at any time for assistance. The Applications team is happy to refer applicants to appropriate contacts. Similarly, applicants are encouraged to contact the Applications team directly and promptly with any fairness concerns that may arise at any point in the process.

5 Evaluation

5.1 Methodology

EOIs will be evaluated based on their potential to achieve the goals of ERA’s mandate and this Call for Proposals. Each EOI will be assessed using the evaluation criteria below to determine how well the opportunity aligns with a set of overarching objectives. Each of these criteria contributes to the overall merit, outcomes potential, and risk level ascribed to each project. This is a competitive process, i.e., proposals are evaluated on their absolute merits as well as in comparison to the set of proposals received. Evaluations are conducted by a team of subject matter experts, overseen by an independent fairness monitor and supported by ERA’s technical team and service providers. All final funding decisions will be made by ERA’s Board of Directors.

5.2 Evaluation Criteria

All proposals will be evaluated based on the following criteria. Each of the evaluation criteria below is assigned a relative weighting. Applicants are encouraged to consider these weightings when developing their proposals. The prompts and instructions found in the EOI template provide additional detail on the specific considerations within each criterion.

Criterion	Description	Weight
Innovation Opportunity	Proposals will be evaluated on the strength of the proposed solution and alignment of the opportunity with the Call for proposals, including the novelty of the technology or practice, the competitive advantages relative to existing technologies and practices, the expected technology advancement over the course of the project, and the strategic alignment of the materials product(s) that the project will support.	20
Implementation Plan	Proposals will be evaluated on the quality and risk profile of the project implementation plan, including achievability of the work plan, the plan to obtain financing for the project, the capacity of the project team, and the strength of support from project partners, where applicable.	15
GHG Benefits	Proposals will be evaluated on their potential to achieve significant GHG reductions in Alberta and on the potential for the project and technology to enable the transition to a carbon-	30

	neutral economy. Evaluation of this criterion will consider near-term direct benefits from implementation of the project and from future commercial implementations (e.g., benefits arising from market rollout). For materials or products without a current baseline market in Alberta, benefits in this will be assessed based on the potential to enable a lower-emissions future.	
Non-GHG Benefits	Proposals will be evaluated on their potential to achieve socioeconomic, environmental, and other sustainability benefits. These include examples such as potential to create new economic activity, generate employment opportunities, reduce land, air, and water impacts, reduce waste, etc.	15
Market and Value Proposition	Proposals will be evaluated on the opportunity for commercialization and widespread market adoption of the innovation in Alberta and beyond, including the value proposition of the solution, alignment with market needs, adoption potential, the plan for knowledge transfer/sharing, and the quality of the proposed business plan and commercial pathway.	20

Note: ERA intends to fund a diverse portfolio representing a range of technology opportunities of various scales and commercial readiness levels. The size of opportunity and potential for widespread GHG and economic benefits will be taken into consideration during project selection. ERA reserves the right to consider optimal portfolio balance and strategic mandate alignment when selecting proposals for funding.

5.3 Eligibility Screening Criteria

In addition to the evaluation criteria described above, projects may be screened out based on one or more of the following factors:

- Insufficient alignment with the Call and/or ERA’s overall mandate:
 - Proposed project is inconsistent with the intent or scope of this Call.
 - Proposed development is assessed to be business as usual.
 - Risk of detrimental side effects (environmental, economic, social, etc.).
- Insufficient Alberta content:
 - Insufficient relevance of the technology or approach to Alberta.
 - Insufficient Alberta activities/sites in proposed project scope.
- Insufficient potential for GHG benefits.
- Failure to meet minimum submission standards:
 - Insufficient information provided.

-
- EOI not written in English.
 - EOI not sufficiently readable or comprehensible.
 - EOI does not conform to the submission requirements outlined in the Call guidelines.

It is important to note that compliance with the eligibility criteria does not guarantee a project will be shortlisted or funded in this process.

5.4 Next Steps

Some applicants whose EOIs are best aligned with ERA's mandate, the goals of the Call, and the evaluation criteria will be invited to submit a detailed Full Project Proposal (FPP). Further information regarding FPP submission will be made available when FPP invitations are made.

All applicants who submit an EOI in response to this Call will be notified of ERA's decision via email when the EOI review process is complete. Applicants whose proposals are not accepted may arrange a short debrief phone call with ERA to receive feedback. Information about arranging a debrief phone call will be provided in the notification letter.

5.5 Note on Proposal Quality

This is a highly competitive process, and not all projects will be shortlisted. Success at the EOI stage depends on the quality of the EOI submitted. Only the highest-quality EOIs will be invited to submit FPPs. In this regard, "quality" means both the quality of the proposed project relative to the evaluation criteria and the quality of the written proposal (clarity, completeness, etc.).

6 Equity, Diversity, and Inclusion

ERA recognizes that it takes more than funding to achieve our mandate of a sustainable, lower-carbon future. In addition to creating, supporting, and implementing innovative technologies and solutions, people are critical in delivering our desired future. Equity, diversity, and inclusion (EDI) within a diverse workforce will assist in reaching shared outcomes and promoting innovation. ERA's EDI Strategy is being implemented by an internal People & Culture Committee, which is working towards ensuring our funding programs are accessible to all innovation ecosystem applicants while internally presenting staff with training and professional development opportunities to increase education and awareness. A strong component of this strategy includes how ERA engages with a broad suite of audiences. To inform our EDI efforts and engagement, ERA is gaining an understanding of audiences reached through its suite of communication tools. This includes a set of voluntary EDI questions asked of applicants at the funding intake phase. These questions are located in the Grant Manager application portal and are optional to complete. ERA requests that the questions be completed by the individual who will lead the project on behalf of the Lead Applicant. Responses are kept confidential and are not considered in proposal evaluation or adjudication processes.

7 Intellectual Property

Intellectual property will be addressed through a Contribution Agreement between ERA and each successful applicant, and will be specific to the circumstances of each project. However, a few general principles apply:

- Background IP (patents, copyrights, software, etc.) and third-party technology remains with its original owner(s).
- ERA retains rights to project results, including without limitation the technical data, reports, analysis, and discussion.
- Project outcomes, results, and learnings will normally be made publicly available at the conclusion of the project.
- Project technology (based on patent disclosures) developed as a part of the co-funded activities will be owned by the successful applicant and its partners, in accordance with the IP arrangement between project partners. However, successful applicants will be expected to commercialize and/or make the technology available through reasonable commercial terms for the benefit of Alberta.

8 Confidentiality

ERA is subject to the *Freedom of Information and Protection of Privacy Act*, RSA 2000, c.F-25 in the course of performing duties and functions and exercising powers delegated to it. All data and records in the custody or under the control of ERA that are required in the performance of duties or functions or the exercise of powers delegated to ERA are subject to the *Records Management Regulation*, Alberta Regulation 244/2001.

Subject to the requirements described above, ERA is governed by a comprehensive Privacy, Data Security and Confidentiality Policy (the “Policy”). The Policy requires that any and all information concerning the business affairs of ERA and its directors, officers, employees and applicants is to be kept private, secure and confidential. Confidential information that is collected, used or disclosed by ERA will be handled in a manner that recognizes both the right of the individual to have his or her confidential information protected and the need of ERA to collect, use and disclose such information for purposes that are reasonable.

To read the entire Policy, visit <http://eralberta.ca/privacy>.