

# INDUSTRIAL TRANSFORMATION CHALLENGE

Up to **\$50 million** for agriculture, forestry, industrial manufacturing, oil and gas, and more

**Online Submission:** ERAlberta.ca **Deadline:** Friday, June 21, 2024 5:00 p.m. MDT (UTC-6h)

CALL FOR EXPRESSION OF INTEREST

Alberta



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# **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) The final decision with respect to the projects to be included in the EOI short-list rests solely with ERA Board of Directors ("Board of Directors"). The Board of Directors' evaluation of EOIs may be based on, but is not in any way limited to, the criteria set out in this RFP. The Board of Directors may consider any criteria determined by the Board of Directors to be relevant to ERA's mandate, regardless of whether such additional criteria have been disclosed to the Proponent.
- d) 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.
- e) 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.
- f) 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.
- g) 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.

- h) 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.
- 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.
- j) 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.
- k) 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.
- 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 more than 13 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 \$912 million to 274 projects worth nearly \$8.7 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 41 million tonnes CO<sub>2</sub>e by 2030 and over 116 million tonnes CO<sub>2</sub>e 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 <u>https://eralberta.ca/apply-for-funding/</u>.

The Industrial Transformation Challenge - 2024 is the second iteration of ERA's series of broad Industrial Transformation funding programs, and is envisioned to be repeated on an annual or semiannual basis. For more information please view ERA's current <u>Business Plan</u>. Program guidelines will be updated with each iteration; this guidelines document pertains only to the 2024 edition.

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

# 2 Call for Proposals Scope

#### 2.1 Background and Context

Emissions from Alberta's industrial, agricultural, and natural resource sectors account for approximately 2/3 of the province's total GHG emissions. There are significant commonalities in the

emissions challenges faced by these sectors, including the high energy- and emissions-intensity of established processes, significant existing asset bases of legacy capital investments, high exposure to global trade, commodity prices, and competitive pressures, and high risks (perceived and actual) associated with piloting new technologies. Sector specific challenges also exist: from waste management and emerging opportunities for carbon sequestration and bioproducts in the agriculture and forestry sectors to the need to address inherent process emissions and extreme operating conditions in heavy industry. In order to overcome these challenges and achieve net-zero by 2050, Alberta's major sectors require transformative emissions reduction solutions. Increased scrutiny will continue to apply to sectors, operators, and individual facilities who do not have a clear path to achieving net zero including realistic interim measures and targets.

Many of the high-potential opportunities for step-change improvement in sectoral emissions footprints are still in early stages of development and need significant investment, testing, and scaling to prove viability from the lab to the field. Because of the long timelines for commercialization and stock turnover inherent to these industries, it is imperative to invest today in the technology solutions that will be needed in 2030, 2050, and beyond. Novel industrial technologies can provide access to the other benefits of advanced technologies, which can include productivity and performance gains, improved product quality, reduced waste, customer attraction, and diversification into higher-value products. In addition, global demand for lower-carbon products is an opportunity for attraction and development of new industries in Alberta that complement our current strengths, such as bitumen beyond combustion and energy minerals production.

This Call for Proposals is dedicated to finding the most promising innovative technologies and solutions to support the decarbonization efforts of Alberta's natural resource and industrial sectors. 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. It reinforces Alberta's leadership in advancing technologies and solutions for a carbon neutral economy.

### 2.2 Call Focus and Technology Areas

ERA's 2024 Industrial Transformation Challenge is seeking technology scale-up, pilot demonstration, and first-of-kind projects that present transformative solutions for Alberta's industrial and natural resource sectors. The Call aims to unlock critical solutions (which may be technologies, practices, or combinations thereof) to reduce emissions and ensure existing and new industries in Alberta remain competitive in a carbon-constrained future.

ERA's investment strategy is defined by the principles and themes outlined in ERA's <u>Technology</u> <u>Roadmap</u>, (4<sup>th</sup> edition). This Call primarily aligns with the Industrial Transformation, Energy Efficiency, and Circular Economy areas of the Technology Roadmap but is not limited to any particular focus area or technology.

#### Example Technology Areas

This Call is <u>not</u> technology prescriptive. The following list provides a non-exhaustive set of example areas that ERA believes could represent strong alignment with this Call:

- Agricultural and Forestry Innovation
  - Improved nutrient and feed management
  - Novel fertilizers
  - Detection, monitoring, measurement, and/or abatement of methane emissions from agriculture/forestry operations.
  - $\circ$   $\;$  Novel use of sensors, robotics, and software for smart farming techniques
  - Novel tillage, seeding, and harvesting techniques
  - Advanced genetics and omics for crops and livestock
  - o Land use management practices
  - Value-added novel bioproducts (e.g., from forest residues or crops)
- Fuel switching and low-carbon heat
  - <u>Onsite</u> deployment of geothermal, solar thermal, nuclear, clean hydrogen, or bioenergy at industrial facilities (i.e., behind the meter)
  - Process electrification (e.g., electric boilers, industrial heat pumps, separation/purification, microwave/infrared technologies, etc.)
  - o <u>Onsite</u> deployment of energy storage including thermal energy storage
- Novel industrial processes
  - New chemistries for cement (incl. novel clinker substitutes), fertilizer, plastics, etc.
  - Novel oil and gas extraction, processing, and refining (conventional, oil sands, etc.)
  - Clean feedstocks (e.g., hydrogen, biogenic, waste, etc.) for manufacturing and chemicals
  - Novel refrigeration technologies
  - Non-thermal processing
  - o Novel industrial water treatment and waste management
- Novel approaches for reduction/elimination of methane emissions (e.g. fugitive, vented, diffuse, etc.)
- Major industrial facility upgrades in support of emissions reductions
- Development of advanced materials production, manufacturing, and/or recovery sectors
  - Critical minerals (e.g., lithium, vanadium, etc.)
  - Energy materials (e.g., supply chains for batteries, electrolyzers, supercapacitors, superconductors, etc.)
  - Hydrocarbons beyond combustion (e.g., bitumen derived carbon fibre)

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

#### **Out of Scope Technologies and Projects**

Examples of opportunities that are **<u>out of scope</u>** for this Call include:

- GHG detection, quantification, measurement and monitoring technologies in sectors other than agriculture, forestry, and natural land use.
- Standalone FEED studies.
- Emissions/energy inventory or estimation software; energy audits or conservation plans.
- Carbon capture and sequestration.
- Production of clean fuels such as hydrogen or biofuels (except where used onsite for fuelswitching purposes).
- Standalone power generation facilities.
- Zero-emission vehicles and/or fueling infrastructure.
- Business-as-usual deployment of efficiency technologies such as engine performance upgrades or commercial/residential building efficiency improvements (these are covered under ERA's ESB, ETP, and SPEED programs).
- Incremental industrial efficiency improvements (e.g., marginally reducing energy/emissions without a clear path to carbon neutrality).
- Development of GHG emissions offset protocols or crediting systems.
- Digital solutions for industrial efficiency without a direct line of sight to emissions reductions at a specific site and without an industrial partner (e.g. digital twins, emissions estimation software, etc.).

#### Alignment with other ERA Funding Opportunities

ERA's <u>Technology Roadmap</u> (June 2021) and 2023-25 <u>Business Plan</u> identify several interrelated focus areas for upcoming funding opportunity areas that complement this Call for Proposals. These technology areas are summarized below:

| Program                                     | Technology Focus   | Timelines                |
|---|--|--------------------------|
| Reshaping<br>Energy Systems                 | • Solutions for enabling the shift to cleaner energy via improvements to <i>midstream energy infrastructure,</i> systems integration, and smart energy demand. | Intake Closed            |
| Hydrogen                                    | <ul> <li>Solutions specifically related to hydrogen, including<br/>production, storage, transport, and end-use.</li> </ul>                                     | Intake Closed            |
| Emerging<br>Innovators                      | <ul> <li>Support for SME-led projects that are focused on reducing emissions within Alberta.</li> </ul>  | Intake Closed            |
| Industrial<br>Transformation<br>(This Call) | • Technologies and solutions to support industrial sectors on their path to decarbonization.   | Launch in Spring<br>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 <u>applications@eralberta.ca</u> to discuss their technology alignment.

## 2.3 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.

### 2.4 Stage of Development and Novelty

EOIs are invited for projects that will advance technology to the stages of field pilot, demonstration, or first-of-kind commercial implementation by project completion, as described below:

- **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, with the intent to operate the technology for its full commercial life.

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 technology.

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

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

### 2.5 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 <u>must</u> 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.

### 2.6 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 advancing transformative opportunities for Alberta's industrial and natural resources sectors. As such, involvement from industry members is critical to demonstrate market pull for proposed solutions.

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.

### 2.7 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 December 2024. 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 **\$50 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 **\$10 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 has imposed a minimum funding request of \$500,000 CAD for this Call. Applicants who require less than \$500,000 are advised to seek support from other sources in the innovation ecosystem.

**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

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 \$50 million in eligible expenses. If the applicant and private partners contribute \$40 million, ERA could contribute up to \$10 million.

• **Example 3** – A project has a total cost of \$9 million in eligible expenses. If the proponent and partners contribute \$3 million and the Government of Canada contributes \$3 million, ERA could contribute up to \$3 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 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 time of Contribution Agreement execution, 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 reuqetsed. For information about eligible expenses and costs, please refer to the ERA *Eligible Expenses and Cost Instructions* document available at <a href="http://eralberta.ca/apply-for-funding">http://eralberta.ca/apply-for-funding</a>. 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 late September 2024). 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 <u>not</u> 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, participation 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:

- <u>Alberta Innovates</u>
- <u>Alberta Indigenous Opportunities Corporation</u>
- Alberta Indian Investment Corporation
- ISED Strategic Innovation Fund
- <u>Natural Resources Canada Programming</u>
- <u>Prairies Economic Development Canada</u>

- <u>Canadian Agri-food Automation and Intelligence Network</u>
- <u>Results-Driven Agriculture Research</u>

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 **Friday**, **June 21**, **2024** at **5:00** p.m. **Mountain Daylight Time (UTC-6h)**. 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 ("ERIMS") at <u>http://www.eraadmin.ca/</u> 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 ERIMS to ensure the submission was complete. If the problem persists, applicants may contact <u>IMS@eralberta.ca</u> 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 | June 21, 2024      |
| EOI Shortlist Notification    | ERA        | Mid-August 2024    |
| FPP Submission Deadline       | Applicants | October 2024       |
| FPP Oral Presentation         | Applicants | Late November 2024 |
| Funding Decision Notification | ERA        | December 2024      |

## 4.3 Submission Content

EOIs must be submitted using the ERIMS at <u>www.eraadmin.ca</u>. 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. <u>Please</u> <u>combine all letters of support into a single PDF attachment</u>.
- **Online Information (Required)**: In addition to the documents outlined above, applicants are also required to enter general information about the project into the ERIMS 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 ERIMS 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 ERIMS will have the EOI number and applicant name automatically appended to the filename. Please do <u>not</u> 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) lettersized (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, ERIMS, 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: <u>applications@eralberta.ca</u>
- Assistance with ERIMS online application system and submission: IMS@eralberta.ca
- Assistance with greenhouse gas benefit quantification: <u>ghg@eralberta.ca</u>
- Other information and general inquiries: <u>applications@eralberta.ca</u>

Please allow up to one week for responses to email inquiries due to high anticipated volumes. Use of alternate email addresses such as ERA's general information email or media contact email may result in a response to your request being delayed.

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 <u>only</u> 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 <u>applications@eralberta.ca</u> 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 by 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<br>Opportunity | Proposals will be evaluated on the strength of the proposed<br>solution and alignment of the opportunity with the Call for<br>proposals, including the novelty of the technology or practice,<br>the competitive advantages relative to existing technologies and<br>practices, the expected technology advancement over the course<br>of the project, and the potential for step-change performance<br>improvements relative to current practice. | 20     |
| Implementation<br>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<br>significant GHG reductions in Alberta and on the potential for the<br>project and technology to enable the transition to a carbon-<br>neutral economy. Evaluation of this criterion will consider near-<br>term direct benefits from implementation of the project and<br>from future commercial implementations (e.g., benefits arising<br>from market rollout).                     | 30     |
| Non-GHG Benefits          | Proposals will be evaluated on their potential to achieve socioeconomic, environmental, and other sustainability benefits.   | 15     |

|                                 | These include examples such as potential to create rural employment opportunities, land management/footprint reduction, reduced water use, etc.  |    |
|---------------------------------|--|----|
| Market and Value<br>Proposition | Proposals will be evaluated on the opportunity for<br>commercialization and widespread market adoption of the<br>innovation in Alberta and beyond, including the value proposition<br>of the solution, alignment with market needs, adoption potential,<br>the plan for knowledge transfer/sharing, and the quality of the<br>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 <u>not</u> 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, lowercarbon 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 EDI Committee who are 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 ERIMS 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 <u>http://eralberta.ca/privacy</u>.