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B.C. CENTRE
FOR INNOVATION
& CLEAN ENERGY

Wildfire Tech Applicant Guide

May 30, 2024

B.C. Centre for Innovation and Clean Energy (CICE)

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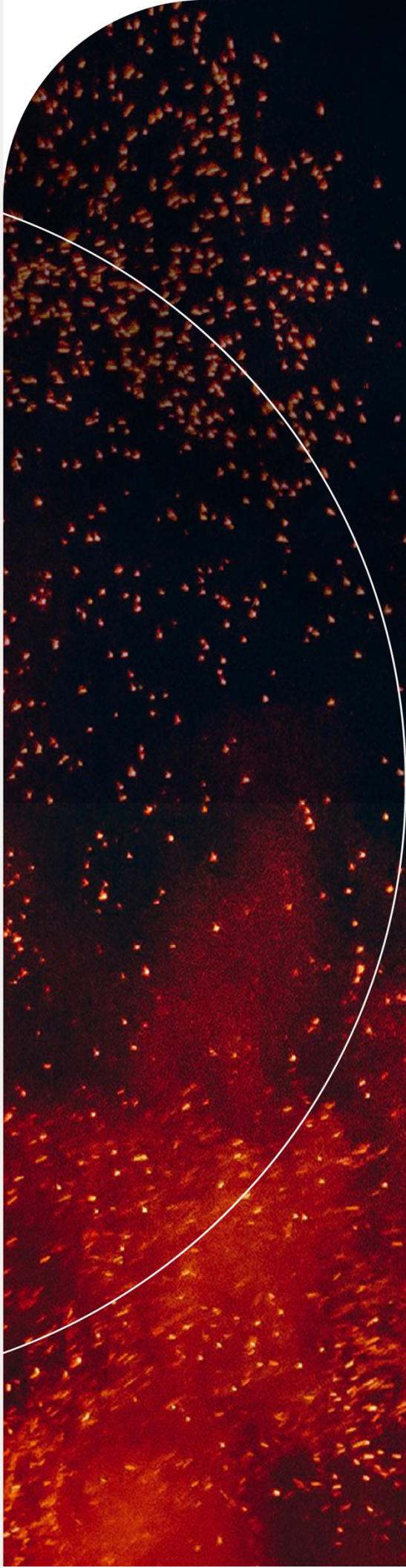

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Introduction

The impact of wildfire emissions in British Columbia (B.C.) and across Canada is intensifying, posing significant environmental challenges with far-reaching consequences for both regional ecosystems and the global climate. From the early 2000's, wildfires across B.C. have grown in frequency and size, with emissions skyrocketing from approximately 1.9 megatonnes of CO_2 ($MtCO_2$) in 2002 to an estimated 631.5 $MtCO_2$ in 2023 through increases in forest and peatland burning.[1]

CICE's Catalyzing Carbon Dioxide Removal at Scale Report highlighted that 2023 Canadian wildfires were at an estimated 2.3 gigatonnes of CO_2 equivalent ($GtCO_2e$), which is over three times the total emissions of Canada's entire economy (670 $MtCO_2e$ in 2021). Globally, this outpour of emissions represents a significant 20% decrease in Earth's land-based biosphere's natural capacity to absorb carbon, compared to the 11.4$GtCO_2$ removals recorded in 2022.

In 2023, Canada saw 18.4 million hectares (Mha) of forests burned, exceeding the 10-year average by over 6.5 times resulting in a loss of about 5% of its total forest area. With boreal forests warming faster than the global average, and facing more frequent and intense wildfires, effective wildfire management is crucial. Forests store 30-40% of the world's land-based carbon, emphasizing the need to preserve them for carbon sequestration and climate mitigation.

Amidst the immediate challenges posed by climate change, supporting wildfire management solutions is becoming increasingly important. Devastating impacts are not just environmental, but social and economic as well. While advances in technology have improved wildfire detection and mitigation capabilities, wildfire management requires innovation in early detection, predictive modeling, vegetation management, firefighting technologies, and post-fire recovery.

B.C. has an opportunity to lead in developing and implementing innovative wildfire management solutions by harnessing its expertise in forest management, collaboration with research institutions and proactive engagement with local communities and Indigenous rights holders. With this vision, CICE is inviting proposals and will award up to $3 million in non-dilutive investments to innovators developing B.C.-based commercial pathways to scale wildfire management solutions.

[1] countryprofile (europa.eu)

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2024 wildfire tech call for innovation priorities

CICE is focused on taking action to secure a low-carbon future. Together, we endeavor to expand the possibilities of clean energy innovation like the future of the planet depends on it. Because it does.

This means our first and most important objective is to identify high impact projects that accelerate the reduction of wildfires, global greenhouse gases (GHGs) and enable a net-negative emissions future. With a changing climate, these projects will also contribute to a comprehensive understanding of their impact on emission removal, reduction, and avoidance to unlock the potential of innovative wildfire management solutions.

Our second priority is supporting B.C. innovators (working on either technology or business model innovations) as they grow and amplify their impact by scaling from first demonstration to local, repeated implementation, and potentially to global deployment.

The opportunity

CICE is awarding up to $3 million in non-dilutive funding for project proposals that develop commercial wildfire tech projects in B.C. This total budget allocation may be distributed between multiple projects at our discretion, depending upon the strength and number of proposals received. While proponents may request up to $3 million per project, preference will be given to requests lower than $750K to accommodate multiple solutions. CICE reserves the right to not fund any projects. CICE will contribute funding to projects in the form of non-repayable grants, paid in increments upon successful completion of project milestones.

Who can apply?

This program is focused on companies located in B.C. with projects in B.C.; however, CICE will consider applications from companies based outside of the province with a project in B.C.

Companies must demonstrate their ability to complete the proposed project with sound management, operational capability, and overall financial support to advance the commercial potential of the company.

CICE is particularly interested in supporting projects that drive for development of scaling wildfire management solutions, whose innovation can be replicated across multiple jurisdictions to enable global climate impact.

Consortia of companies working together to complete a project are acceptable and welcomed. In such cases, it is recommended that a single lead company should become the applicant.

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What projects are eligible?

The 2024 wildfire tech call for innovation provides an opportunity for furthering commercial development of technology and business model solutions pertaining to wildfire management in B.C. CICE will favour proposals to scale wildfire management solutions across the value chain that directly address associated emissions such as:

- **Prevention solutions**: Predictive modeling tools, proactive land management practices, and fire-resistant materials.
- **Mitigation technologies**: Early wildfire detection systems, communication and information technologies, firefighting technologies, spread halting, sustainable fire retardants, and the development of specialized equipment.
- **Adaptation innovations**: Solutions to increase forest and community resiliency, post-fire recovery, and business model innovations to integrate climate change adaptation strategies into land/vegetation management practices.

CICE will prioritize solutions that have significant co-benefits such as integrating additional carbon reduction into projects, promoting ecosystem restoration and biodiversity conservation, and enhancing community resilience and socio-economic benefits through wildfire management efforts.

Project activities may include, but are not limited to, demonstrations and pilot projects, innovative implementation solutions, novel linkage of system components, mitigation or monitoring technologies, and business model innovations.

How can project funds be used?

To comply with CICE's mandate, favoured projects will fall between Technology Readiness Level (TRL) 4-9. Proposals must include a plan for regulatory approvals that is aligned with their proposed timeframe for implementation. Projects must start within 6 months of executed funding agreement dates. Proposals for feasibility and front-end engineering design (FEED) studies will be contemplated, but considered behind projects that have near term applications. Preference will be given to projects that empower Indigenous carbon management solutions in B.C.

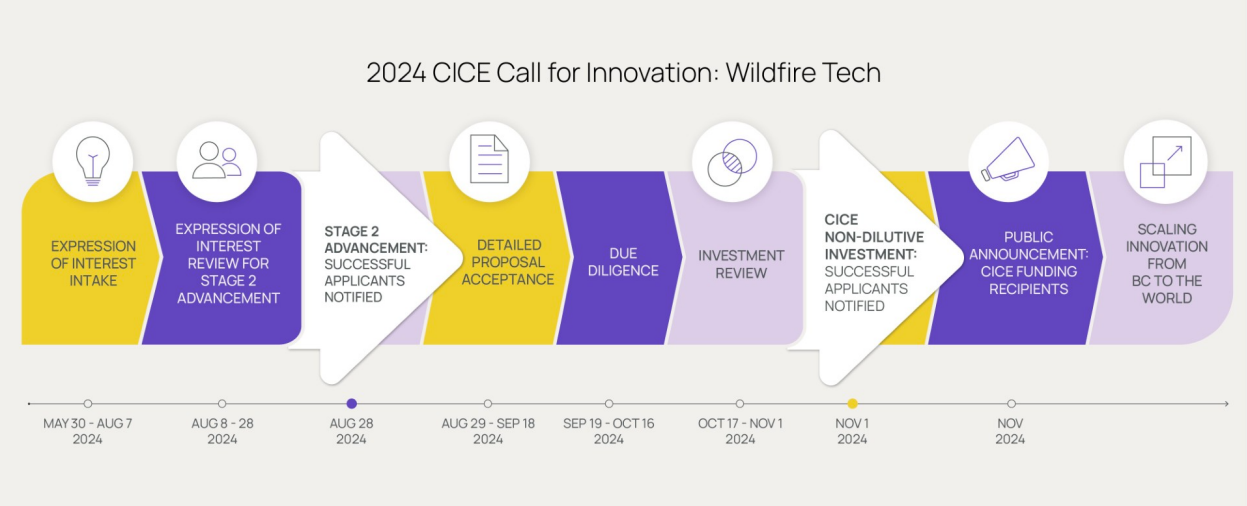
Project funds can be used to pay salaries, consultants, and reasonable direct costs of project management. Funds can also be used to secure demonstration sites (including the operating costs of demonstrations), build prototypes, integrate system components, demonstrate pilot production, or scale up manufacturing.

Project funds **cannot** be used to enhance normal business operational capabilities, purchase capital equipment that is indirectly related to and not core to the proposed innovation, perform capital or leasehold improvements or purchase furniture or other equipment to be used in the routine course of business. Project funds cannot be used for advertising or other forms of business promotion. Human resource costs cannot be 'marked up' to include blanket overheads.

Projects must be started within 6 months of executed funding agreement dates; project funding will be aligned with a contribution agreement between the proponent and CICE that will be negotiated as part of the final award process. Project funding will be paid against completion of milestones. Project funding will be withdrawn in the event projects are significantly delayed or milestone objectives are not adequately met.

Application process

A staged application process will be used to funnel project proposals from initial inquiry to final evaluation, as outlined below.



STAGE 1: EXPRESSION OF INTEREST

The first stage of proposal includes an expression of interest (EOI) that requires a short video to explain basic details about the proposed project and short-form project description. This application style is meant to provide an accessible platform to deliver an oral summary of the project. Video quality and production elements will not be evaluated or prioritized in the decision process. A short outline form will also be submitted via a web-based application form that will be available on CICE's website May 30th, 2024. At this stage, CICE expects submissions to involve non-confidential disclosures submitted without a requirement for any non-disclosure agreement. We encourage participants to refer to the project evaluation criteria as guidance in preparing for submission.

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GENERAL WRITTEN INFORMATION FOR EXPRESSION OF INTEREST

Company name and location
Main contact and contact details
Project title
Short summary
Project location
Estimated total project cost
Funds requested from CICE
Funding requested start date
Funding estimated end date

VIDEO SUBMISSION

Proponents are required to submit a simple, 5-minute video that provides an overview of the project, including:

a. Project title and short project description. What innovation are you developing? How is it unique? How does your solution address current challenges or gaps in wildfire management solutions?

b. What are you requesting for funding? What funding is currently secured? How could CICE funds be used to accelerate the project?

c. What is the commercial status of your innovation? What is the commercial business model and business plan, and who are your current customers or customer under contract? How will the status of the technology change over the duration of the project?

d. How do you plan to scale/commercialize your innovation, and what kind of partnerships or collaborations are in place or planned to achieve this? Describe how this project impacts the commercialization of wildfire tech innovation.

e. Describe how the technology or innovation impacts or enables GHG emissions reductions and wildfire reductions.

f. Describe the diversity in position of leadership at the project level.

g. Further elaborate on the lifecycle emissions considered in the solution. Describe any implementations of your solution. What controls do you have in place to ensure the validity of your data?

Videos will be uploaded via the web-based application form.

Stage 1 evaluation will consist of a preliminary review of proposal details to ensure eligibility against program requirements. Eligible projects will undergo a competitive review of the proposed projects against the CICE evaluation criteria as well as in comparison to all other project proposals submitted. A limited number of project proposals will be invited to execute a confidentiality agreement and proceed to Stage 2.

STAGE 2: DETAILED PROPOSAL SUBMISSION AND REVIEW

This stage includes preparation and submission of a detailed proposal by the proponents, detailed due diligence, third-party assessments conducted by experts and multiple engagements with the CICE project review team.

CICE will provide Stage 2 applicants with a document template for the detailed proposal submission. Applicants will be required to enter into a confidentiality agreement with CICE before confidential or detailed information on the project is submitted.

Upon review of the written submission, CICE may elect to conduct a review meeting with project proponents and request further documentation to support the project proposal.

Project proposals will be reviewed against CICE evaluation criteria and will be ranked competitively with other Stage 2 project proposals. CICE and the third-party reviewers will assess proposals independently and in relation to each other to identify projects to be funded under the program. Multiple projects may be funded, with funding amounts determined by the requirements of each project.

Successful project proposals will be subject to a final stage of due diligence review after which they may proceed to Stage 3.

STAGE 3: DECISION COMMUNICATED

Successful project proponents will sign an agreed-upon contribution agreement with CICE which will identify obligations of all parties and will become a binding agreement governing the relationship between CICE and the project proponent(s). The contribution agreements will also include key milestones for release of funds and reporting requirements.

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Project Evaluation Criteria

CICE will lead the project intake, review and evaluation. Projects will be evaluated by CICE staff and subject matter experts. The following lists the seven major decision criteria which will be applied to project proposals:

1. **Strategic Alignment**
    - The project furthers the commercialization of a technology or business model innovation that can significantly impact wildfire reductions with the ability to be applied at multiple sites within the province.
    - The technology or business model innovation is validated, developed, and commercialized through a project completed in B.C.
2. **Team Strength**
    - The application presents a strong management team with the required skills for growth aspiration.
    - The team possesses a depth of knowledge on what is required to successfully scale their solution.
3. **Technology Viability**
    - The overall plan for technology development is realistic.
    - Barriers have been identified and plans to overcome barriers have clear and measurable targets.
    - Regulatory, permitting and IP ownership issues are addressed to enable project implementation.
4. **Regulatory Compliance**
    - The overall proposal is feasible within the existing regulatory frameworks of the province.
    - Proposals and plans for permitting are realistic and provide opportunity for timely project development.
5. **Corporate Readiness**
    - Teams have a finance framework in place to partially fund and scale the opportunity.
    - No encumbrances or other liabilities exist to prevent implementation and scaling.
    - Planned partnership agreements are in place.
6. **Plan Readiness**
    - Project outcomes lead to a scaling opportunity for the business.
    - A development plan, including assumptions for market readiness and financing is in place.
7. **Social Impact**
    - Overall environmental, social and governance impact benefits are shown, including impact on Indigenous communities and enhancement of diversity, equity, and inclusion.

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Schedule

Date	Event
May 30, 2024	Program Announcement
May 30, 2024, at 10:00am PT	Virtual Q&A Session
May 30, 2024, at 5:00pm PT	Program Start Date – Open to receive Expression of Interest
August 7, 2024, at 5:00pm PT	Deadline for submission of Expression of Interest
August 21-28, 2023	Notification of Stage 1 outcome, invitation for successful projects to advance to Stage 2
September 18, 2024, at 5:00pm PT	Deadline for submission of detailed proposals
November 1, 2024	Stage 3 invitation to successful applicants
November 15, 2024	Execution of contribution agreements, projects start

About CICE

The B.C. Centre for Innovation and Clean Energy (CICE) is an independent, not-for-profit corporation that provides early-stage investment to fast-track the commercialization of British Columbia's most impactful clean energy and climate solutions – from Canada to the world. We match the urgency and efficiency of the companies we support, driving innovation like the planet depends on it. Because it does. Together with our climate-first community of innovators, industry leaders, investors, academia, government, and Indigenous partners, we advance future pathways to net-zero – leveraging B.C.'s clean energy advantages to attract investment, create good jobs and build a prosperous, clean economy for decades to come. cice.ca