

Water Innovation Program (WIP): 2022 Call for Proposals

July 6, 2022

About Alberta Innovates

Innovation is the catalyst for sustainable jobs, economic and community strength, improved health and environmental benefits. [Alberta Innovates](#) leads and accelerates innovation from discovery to use across all sectors in all parts of the province. As Alberta's largest research and innovation agency, we are uniquely positioned to propel great ideas forward to improve the lives of Albertans today and for generations to come.

Alberta Innovates believes the research and innovation (R&I) ecosystem is stronger and more sustainable when it is broadly representative of the overall diversity of our community. We strive to ensure that all interested and qualified parties have an equitable opportunity to participate and contribute to the ecosystem and that our processes are inclusive.

The projects that our programs invest in are critical to how Alberta Innovates achieves positive impact for Albertans in alignment with the Government of Alberta's R&I priorities, as expressed in our corporate Business Plan. (See the most recent Business Plan on our [Publications](#) page on our website.) Accordingly, it is essential for project outcomes to align with those of the program.

The Water Innovation Program (WIP) is managed through the Clean Resources business unit within Alberta Innovates. [Clean Resources](#) helps technology developers and industry clients accelerate technology development and deployment, grow their businesses, and enhance the competitiveness of the resource sector. We provide scientific and technical insights to the Government of Alberta (GOA) on energy and natural resource development, agriculture, economic diversification, emission reduction, and water/land policies. Clean Resources has five innovation portfolios:

- **Advanced Hydrocarbons** supports economic, environmental, and diversification opportunities in Alberta's oil & gas sector.
- **Clean Technology** supports diversification of Alberta's economy through the development of clean technology.
- **Environmental Innovation** supports economic development, environmental performance and healthy communities through investments in knowledge and technology gaps in two major programs: **Water Innovation Program** and **Land and Biodiversity**.
- **Agri-Food Innovation** invests in research and innovation supporting **data driven decision making** and automation for growth of Alberta's agriculture and food sector.
- **Bioindustrial Materials** supports economic development and diversification by investing in **greener products and processes** using Alberta biomass.

Together, our efforts are to sustain and grow Alberta's oil & gas, agriculture, forestry, and clean technology industries, add value to enhanced and new energy products, reduce greenhouse gas emissions, and protect Alberta's water and land resources.

Program Overview

The **Water Innovation Program** (WIP) is designed to help the Government of Alberta (GoA) achieve the outcomes of the [Alberta Water Research and Innovation Strategy \(2014\): A Renewal \(AWRIS\)](#) and the goals of the [Water for Life Strategy](#): (1) safe, secure drinking water; (2) healthy aquatic ecosystems; and (3) reliable, quality water supplies for a sustainable economy.

The program builds on a history of world class research and innovation, and helps create and apply relevant, reliable, and credible knowledge and information that will lead to a high-performing, innovative and responsive water system for the province of Alberta, as called for in AWRIS.

The objectives of the WIP 2022 Call for Proposals are to:

- Improve water use, conservation, efficiency, and productivity;
- Increase reliability of water supplies in support of a growing economy;
- Increase reliability and safety of water supplies for healthy communities; and
- Maintain and support healthy aquatic ecosystems.

The key outcomes (i.e., measurable effects) the program will accomplish for the benefit of Albertans are:

- Development and implementation of new water policies, practices and strategies;
- Acceleration of water technologies toward commercialization;
- Sharing and mobilization of water knowledge;
- Creation and/or retention of jobs; and
- Development of highly qualified personnel (HQP).

Funding

The WIP 2022 Call for Proposals has up to \$9M of funding available to approved projects through this call.

- A successful Applicant can receive up to \$750,000 in Canadian dollars from Alberta Innovates (AI).
- The Program supports up to 50% of the total project costs, with remaining funding from the Applicant and/or other project partners (including cash and in-kind support).
- Co-funding of Projects with other funding agencies is encouraged. There is no limit on the amount of stacking towards the Applicant's contribution.
- Funding will be dispersed to successful Applicants at the end of each project milestone, based on proof of milestone completion.

Alberta Innovates only funds reasonable costs incurred after an Investment Agreement is signed by Alberta Innovates and the Applicant. Any costs incurred prior to the signing of the Investment Agreement, and costs greater than market prices, are ineligible. Costs must be incurred between arm's-length entities. Please refer to Schedule B in the Investment Agreement posted on the Clean Resources web page (<https://albertainnovates.ca/focus-areas/clean-resources/application-process/>) for detailed information, including eligible and ineligible expenses.

Key Dates

The following timelines are anticipated for the full funding process. Note that Alberta Innovates reserves the right to alter or cancel the currently-anticipated process and deadlines.

Action	By Whom	Timing
EOI Submission Deadline	Applicants	3:00 PM MDT, September 15, 2022
EOI Shortlist Notification	Alberta Innovates	October 31, 2022
FP Submission Deadline	Applicants	3:00 PM MST, January 12, 2023
Funding Decision Notification	Alberta Innovates	March 15, 2023
Earliest Project Start Date	Applicants	April 1, 2023

Eligibility

This program is open to all categories of lead applicant, providing they are legally able to execute the Investment Agreement.

All projects must demonstrate a clear and justified value proposition for addressing water challenges in Alberta. Innovations can originate from anywhere globally, but must be researched, piloted, demonstrated, and/or implemented in Alberta. Preference will be given to projects that are led by an Albertan researcher or organization.

Project partners must include a problem owner, end-user and/or recipient of the generated knowledge/outcomes. Demonstration that discussions are underway is sufficient at the EOI stage. Confirmation of commitment from project partners is required at the Full Proposal (FP) stage.

Collaboration between multiple organizations is strongly encouraged. Collaboration can often represent a strong value proposition by demonstrating opportunities for leveraging knowledge, technology validation, and sharing of results. Applicants should consider adding economic, legal, social and environmental expertise where appropriate.

The maximum project length for projects funded under this Call is **four (4) years** from project commencement. Projects could commence as early as April 2023 and be completed by May 2027. Timelines for projects may be extended with appropriate justification.

Projects or portions thereof that have received Alberta Innovates funding are not eligible to receive further Alberta Innovates 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.

Eligible projects must clearly fit within one of the following three funding streams.

Stream 1: Integrated Approaches to Water Management

Water is a critical part of day to day life. It flows through our communities, it drives our economy, and supports our natural ecosystem. It can be found underground, in lakes, streams and rivers. Water cannot be managed for each use in isolation, without consideration of broader impacts and cumulative effects. It is imperative that we take an integrated approach to managing water. How can we share water between sectors? Can we manage water throughout an entire process, rather than simply disposing of the effluent on the back end? This funding stream is looking for novel approaches, technologies, practices, and tools that will advance integrated approaches to water management in Alberta.

Key areas of interest in this stream include:

- Water reuse strategies and pilots.
- Cross-sector water management strategies and pilots.
- Effluent characterization to inform and pilot alternative uses.
- Full cost accounting tools to support a water management business case.
- Understanding and management of cumulative landscape level impacts on surface and groundwater.
- Application of digital solutions to support an integrated approach.
- Regionalization of water systems.

- Integrated approaches for the agri-food sector.

Stream 2: Management of Climate Change Impacts

Climate change prevention is about reducing greenhouse gases, whereas climate change impact management is about water. As our climate changes, where, when and how much water we get also changes. This will have significant impacts on our natural ecosystems, economy and communities. Considerable effort and progress have been made in support of water-focused climate adaptation but there continues to be knowledge and technology gaps. This funding stream is looking for projects that will develop new understanding and strategies/practices for management of climate change impacts in Alberta.

Key areas of interest in this stream include:

- Developing new understanding and management strategies of/for:
 - Impacts on long term access to water for economies, communities and ecosystems and strategies for management.
 - Changing dynamics of physical processes in lake systems, reservoirs, storm ponds etc. due to warming temperatures and impacts on aquatic ecosystems.
 - Flooding in low-relief regions.
 - Impacts on water quality.
 - Impacts on groundwater (supply and quality).
- Application of novel remote sensing techniques to monitor water resources.

Stream 3: Water and Wastewater Management in Rural, Indigenous and/or Remote Communities

Rural, indigenous, and remote communities continue to face boil water advisories and tightening wastewater regulations with limited budgets and capacity. Regardless of where they live, Albertans have a right to access clean water and sustainable water supplies to support their local communities, local economy and natural ecosystems. This funding stream is looking for projects that will develop technologies and/or strategies to address this ongoing challenge.

Key areas of interest in this stream include:

- Development of water or wastewater treatment technologies that are:
 - Low cost
 - Low complexity
 - Require a Class 1 or Class 2 operator
- Strategies to address:
 - Operator retention
 - Low risk tolerance
 - Regulatory barriers
 - Capacity challenges

Applicant Eligibility

WIP 2022 Call for Proposals is open to (but not limited to):

- Technology developers
- Industry and industrial associations
- Small and medium-sized enterprises
- Research and development organizations
- Post-secondary institutions
- Municipalities
- Not-for-profit organizations
- Government entities

In addition, to qualify for funding, the Applicant must:

- Exist as a corporate person, with up-to-date corporate filings;
- Be authorized to undertake the proposed project, and execute a grant with Alberta Innovates on our standard terms;
- Not otherwise be prohibited from receiving Alberta Innovates funding, for instance due to a past bad debt or otherwise not be in good financial standing with Alberta Innovates or its subsidiaries, InnoTech Alberta and C-FER Technologies;
- Applicants are not required to be based in Alberta, but must demonstrate a clear value proposition for Alberta.

Please note: For Applicants **not** at post-secondary institutions, Alberta Innovates may perform corporate, bankruptcy and litigation searches, and conduct other forms of due diligence on the Applicant company and its principals.

Project Eligibility

To qualify for funding, all Projects must:

- Align with the objectives of the WIP 2022 Call for Proposals;
- Align with one of the three funding streams outlined above;
- Be structured with well-defined objectives, milestones, deliverables, and timelines;
- Include a confirmed end user for the developed knowledge, strategy and/or technology;
 - The end user must demonstrate a need or potential use for the project innovation;
 - The end user must provide a letter indicating their intention to participate in the Project at the time of application (Full Proposal stage only);
- Include a knowledge transfer task/activity to maximize project impacts; and
- Comply with other criteria that Alberta Innovates may develop from time to time.

Use of existing data, tools and models is encouraged.

How to Apply?

The application process is divided into two stages: the Expression of Interest (EOI) stage and the Full Proposal (FP) stage.

Step 1: EOI Application

Applications will be submitted electronically using the Alberta Innovates SmartSimple online intake system (https://albertainnovates.smartsimple.ca/s_Login.jsp).

The deadline for submission of EOIs is **Thursday, September 15, 2022 at 3:00 PM Mountain Daylight Time**. Late, partial, or incomplete submissions will **NOT** be accepted. Applicants are encouraged to complete their submissions well in advance of the deadline.

Step 2: EOI Evaluation

The evaluation process is highly competitive and only the highest-quality projects will be considered. Merit is determined against the evaluation criteria outlined in the following section.

Applicants will be notified in writing of the results of the evaluation by October 31, 2022.

Step 3: FP Application

Applicants that have received notice of approval to move to the FP stage will be given access to the FP form using the same account previously set up in the Alberta Innovates SmartSimple online intake system (https://albertainnovates.smartsimple.ca/s_Login.jsp).

The deadline for submission of FPs is **Thursday, January 12, 2023 at 3:00 PM Mountain Standard Time**. Late, partial, or incomplete submissions will **NOT** be accepted. Applicants are encouraged to complete their submissions well in advance of the deadline.

Step 4: FP Evaluation

The evaluation process is highly competitive and only the highest-quality projects will be considered. Merit is determined against the evaluation criteria outlined in the following section.

Applicants will be notified in writing of the funding decision by March 15, 2023.

Step 5: Project Management

Successful Applicants will execute an Investment Agreement with Alberta Innovates to proceed with the activities of the Project.

Alberta Innovates will provide on-going management, receiving and evaluating Applicants' reporting of milestones and payments on each milestone based on achievement of the objectives.

Alberta Innovates continues to require information from the Applicant for five years following the completion of the project in order to measure long-term benefits.

Evaluation Process

All applications are reviewed and evaluated to determine fit with the WIP 2022 Call for Proposals objectives and intended outcomes. Alberta Innovates staff and external expert reviewers are engaged to evaluate Applications.

Alberta Innovates evaluates submitted Applications to the WIP 2022 Call for Proposals against criteria in three major categories: Innovation, Project Management, and Impacts and Outcomes. The considerations for each criterion are detailed in the online SmartSimple Application forms.

EOI evaluation criteria:

Innovation	Project Management	Impacts and Outcomes
Innovation Opportunity	Work Plan, Tasks, and Deliverables	Project Impacts

FP evaluation criteria:

Innovation	Project Management	Impacts and Outcomes
Innovation Opportunity	Work Plan, Tasks, and Deliverables	Economic Impacts
Market Opportunity (or) Competitive Analysis	Budget and Funding Commitment	Environmental Impacts
Proposed Commercialization (or) Knowledge Mobilization Pathway	Project Team	Social Impacts

Alberta Innovates retains the sole right to determine the evaluation process and assessment criteria and does not disclose the names of its reviewers to ensure their objectivity and impartiality. Internal and external parties involved in the evaluation are subject to confidentiality and conflict-of-interest policies set by Alberta Innovates.

All investment decisions are at the sole discretion of Alberta Innovates.

Performance Measurement

Alberta Innovates invests in research and innovation activities on behalf of Albertans to help build a healthier, more sustainable and prosperous future for the province.

To maximize the impact of these investments, our funding is tied to achievement of results and outcomes. For this reason, Alberta Innovates funds on a milestone completion basis. This means the Applicant must submit a Progress or Final Report and demonstrate sufficient progress before Alberta Innovates advances the next milestone payment.

The Investment Agreement outlines the responsibilities the Applicant has in reporting Project outcomes to Alberta Innovates over the course of the Project and following completion of the Project. Outcomes of the Project may be monitored for up to five years after Project completion, so Alberta Innovates can evaluate the economic, social, health and/or environmental benefits to Alberta resulting from our investments.

Alberta Innovates has a common set of performance metrics it monitors, both at the individual Project level and for the aggregate Program. These metrics may evolve over time.

Terms and Conditions

Once we have evaluated and approved an application for funding, Alberta Innovates will require the Applicant to sign our standard-form Investment Agreement. A copy of the Investment Agreement is available on the Alberta Innovates [website](#) for your reference.

The Investment Agreement sets out in detail the roles, responsibilities and obligations of the various Parties to ensure a successful Project. Alberta Innovate will not provide any funding until the Investment Agreement has been signed by all Parties.

Alberta Innovates will only fund Applicants who have satisfied all eligibility criteria. Meeting the eligibility criteria does not guarantee access to funding, and all funding decisions will be made by Alberta Innovates at its sole discretion.

Alberta Innovates will only correspond in writing and provide copies of the Application to the person named in the Application form as the one authorized to speak for the Applicant.

Should you have any questions about this guide or what is expected, please contact Alberta Innovates (see contact information below). Please note that Alberta Innovates may modify this guide from time to time in keeping with any changes to the program.

Diversity, Equity, and Inclusion

The Alberta research and innovation (R&I) ecosystem is stronger and more sustainable when it is broadly reflective of the overall diversity of our community. Alberta Innovates strives to ensure all interested and qualified parties have an equitable opportunity to participate and contribute. Historically, there have been a number of groups/populations that have been under-represented in the Alberta R&I landscape including:

- Female entrepreneurs/researchers;
- Indigenous entrepreneurs/researchers;
- Remote/small community entrepreneurs/researchers; and
- New immigrant entrepreneurs/researchers.

We are guided by the principles of:

- **Diversity** – both internal and external participants to our processes are comprised of a varied composition of demographics;
- **Equity** – our processes support equal access across all demographics; and
- **Inclusivity** – our processes proactively work to include underrepresented segments of the R&I landscape.

As part of its commitment to Diversity, Equity and Inclusion (DEI), Alberta Innovates will:

- Collect data in the grant application on a voluntary basis to better understand diversity;
- Provide grant application navigation support to applicants from under-represented groups; and

- Integrate a DEI focus into its due diligence processes including striving to have diverse review committees to foster unbiased decision making.

Contact Information

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