

Program Guidelines for Alberta Bio Future

Strategic Priority Area: Research and Innovation

1.0 Purpose and Objectives

1.1 Purpose

Alberta Innovates Bio Solutions is building upon earlier provincial initiatives in the bioeconomy with a new program called **Alberta Bio Future** (ABF) to accelerate growth in this sector.

Past initiatives included: [BioE Initiative: Recommendations to Build Alberta's Bioeconomy](#) (2013), [Alberta Forest Products Roadmap](#) (2011) and [Getting Value from Every Fibre](#) (Fibre Roadmap) (2007).¹

A total of \$26.85 million (M) in grants arising from the Fibre Roadmap initiative were invested in activities directed at new bioindustrial product development, conversion technologies and market readiness, and feedstock development and primary processing. A results-based budgeting (RBB) review in 2013 found that these grants succeeded in:

- Fostering collaborative research and development projects.
- Creating, commercializing or licensing new bioindustrial products and bioindustrial technologies.
- Creating companies and new jobs.
- Encouraging investment by industry.

Alberta Innovates Bio Solutions, and the Ministry of Innovation and Advanced Education, have created the new Alberta Bio Future program with \$20M in funding to build upon these successes and take advantage of emerging opportunities. The program will run until March 31, 2019.

In line with Government of Alberta priorities and the Alberta Innovates Bio Solutions Business Plan, the purpose of the Alberta Bio Future program is to increase the value derived from Alberta's abundant, renewable biomass resource, and to expand a competitive, sustainable and profitable bioindustrial sector (materials, chemicals and energy) through an integrated program with a strong industry focus. In addition to supporting the forest and agriculture sectors, the Alberta Bio Future program represents a potentially significant opportunity to diversify the provincial economy.

The Alberta Bio Future program has been designed to encourage and support collaborations and partnerships between industry, academia, research organizations, and government, which focus on new and improved bioindustrial products and bioindustrial technologies.

¹ URLs for these documents:

BioE initiative: <http://bio.albertainnovates.ca/stratthemes/bioecoadvance/bioe-initiative/>

Forest Products Roadmap: <http://www.albertaforestroadmap.ca/>

Fibre Roadmap: http://eae.alberta.ca/media/180652/fibre_roadmap.pdf

Alberta Bio Future is the overarching program that will provide funding in these **three priority areas**:

- Discovery and developmental research
- Testing and commercialization
- Research and Innovation

Where applicable, biomass assessment and characterization, and the sharing of this information, will be required components in projects funded under Alberta Bio Future program areas.

Objectives:

- Enhance the value of Alberta's renewable and sustainable biomass resources by generating discoveries and innovations that translate into new and/or improved competitive products and technologies for the Canadian and international marketplace.
- Attract greater investment in bioindustrial products and bioindustrial technology development and commercialization.
- Enhance Alberta's reputation as a bioindustrial innovation hub.

Long-Term Outcome:

- Growth in revenue, jobs generated from Alberta-based companies producing new or enhanced biomaterials/bioproducts.
- Growth in international investment in Alberta-based companies producing new or enhanced biomaterials/bioproducts.

Nearer-Term Outcomes:

- Accelerate development and commercialization of new and improved bioindustrial products and bioindustrial technologies by research organizations and industry.
- Increased coordination and integration of organizations working to enhance bioindustrial products in Alberta.
- Increased ability of Alberta companies to access appropriate equipment, infrastructure and knowledge in Alberta to advance their bioindustrial innovations.

1.2 Guiding Principles

- **Value:** Projects must bring demonstrated value to Alberta and Albertans.
- **Rigour and Excellence:** Projects will be subject to rigorous evaluation.
- **Due Diligence:** AI Bio will only invest in high-quality projects that are supported by a good business case.
- **Industry co-funding:** Applicants are encouraged to have industry support and co-funding.
- **Collaboration:** Applicants must identify opportunities for collaboration amongst government, academic and/or private-sector organizations to ensure effective use of resources and to maximize use of highly qualified personnel and infrastructure.

- **Leveraging:** Applicants should identify opportunities to maximize project financing through leveraging.
- **Multi-Sector Participation:** AI Bio encourages cross-sector participation in the development of innovations. For example, projects involving agriculture, forestry, the oil and gas sectors, as well as downstream user of products are encouraged.
- **Alignment:** Projects must be aligned with Government of Alberta priorities and the current AI Bio Business Plan (<http://bio.albertainnovates.ca/about/corpinfo/>)

1.3 Eligibility

Projects must:

- Be completed within four years.
- Be submitted by:
 - Researchers based in Alberta, and researchers elsewhere conducting projects with a benefit to Alberta.
 - Operating companies or industry groups based in Alberta.
- Have the project work carried out primarily in Alberta.
- Have a direct application to the bioindustrial sector. (Note: in this program, bioindustrial products exclude food, feed or pharma products.)
- Develop bioindustrial products and bioindustrial technologies that use renewable, sustainable biomass, with a focus on agriculture and forestry biomass, produced or available in Alberta.
- Focus on developments leading to a competitive advantage for Alberta companies or other direct benefit to Alberta.
- Be conducted by a team with demonstrated competence, experience and the organizational capacity to successfully complete the project.

1.3.1 Research and Innovation program:

This Alberta Bio Future program has a total of \$4.5 million in available funding.

- The funding amount for successful projects will be determined on a case-by-case basis, commensurate with the quality and scope of the project.
- The focus is on developing bioindustrial products and bioindustrial technologies using biomass. Projects will be in the following categories:
 - Biomaterials
 - Biochemicals
 - Biomass characterization with a direct application to the bioindustrial sector.
- Project activities will include basic or applied research, or pre-commercial development.
- Information on biomass characterization developed in the project will be made publicly available to advance the bioindustrial sector.

2.0 Guidelines for Project Submission

2.1 Process and Deadlines

Proposals are invited from applicants wishing to participate in **Alberta Bio Future (ABF), Research and Innovation** program. Each proposal must be submitted through the AI Bio research funding online application system:

www.fundingconsortium.gov.ab.ca/aibio/account.

Proposals will be reviewed and assessed by the AI Bio Selection Committee (which may include external reviewers) for alignment with program purpose and objectives and the evaluation criteria identified in Section 4.0 of these guidelines (see p. 8).

The application process for this program includes two stages: all eligible applicants are first invited to submit letters of intent. Those who are successful at the first stage will be notified and invited to submit a full proposal.

Timelines	Date and time
Alberta Bio Future, Research and Innovation program opens, Letters of Intent (LOI) accepted.	September 16, 2015
Deadline for submission of Letters of Intent.	October 28, 2015, 4 p.m. MT
Request for Full Proposal sent to applicants successful at first stage.	December 7, 2015
Deadline for submission of Full Proposals.	January 14, 2016, 4 p.m. MT
Full Proposal Review.	January 15 – March 10, 2016
Communication to applicants about successful and unsuccessful Full Proposals.	March 11, 2016
Agreements are developed.	After March 11, 2016

2.2 Submission of Letter of Intent

- **Application:** The application form for LOIs can be found in the AI Bio online application system: www.fundingconsortium.gov.ab.ca/AIBio/Account, under the program listing for Alberta Innovates Bio Solutions **Alberta Bio Future, Research and Innovation program**.
- AI Bio will maintain the confidentiality of the information submitted.
- The full proposal form will be made available to applicants who have been successful at the LOI stage of the application process.

3.0 Project Information

3.1 Eligible Expenses

Category	Eligible Expenses
Personnel – Project Team	<ul style="list-style-type: none"> • Time for specific activities on the project, prorated at usual annual salary rates. • Time for specific activities for project team members may be acceptable as in-kind contribution.
Personnel – Consultants	<ul style="list-style-type: none"> • Outside consultants essential to the project.
Travel	<ul style="list-style-type: none"> • Travel to project sites. • Travel to give presentations to, or discuss project with, stakeholders. • Travel for information dissemination purposes.
Capital Assets/Equipment	<ul style="list-style-type: none"> • Equipment directly required for the project, as specified in the program description documents and approved by AI Bio.
Supplies	<ul style="list-style-type: none"> • Cost of supplies directly required for the project.
Incremental costs	<ul style="list-style-type: none"> • Incremental costs required to deliver the project are eligible. • Overhead costs are not eligible.

3.2 Funding Sources

Applicants are encouraged to leverage additional funding for their project. Public and private sources may contribute to the project costs in cash or in-kind. For in-kind contributions, a description and an evaluation detailing the in-kind support must be provided and approved by AI Bio.

AI Bio will require written confirmation of other funding sources and contributions in full proposals. Upon completion of the project, the applicant is required to provide confirmation of receipt of partner contributions, including details of the contribution.

3.3 Progress Reports and Financial Reporting

AI Bio requires the applicant to submit a progress and financial report at least **every 12 months** for projects funded through Alberta Bio Future programs, as per the schedule contained in the agreement. A final report and final financial report will be required **within three months** of project completion.

3.4 Intellectual Property Principles

Intellectual property owned by the applicant must be managed by the applicant or the applicant's organization. Applicants must ensure that they have sufficient right to

intellectual property to be able to implement the project. Ownership of intellectual property arising from projects will be vested with the project applicant.

Information on biomass characterization developed in the project will be made publicly available to advance the bioindustrial sector.

3.5 Confidentiality

AI Bio is committed to protecting the confidentiality of application details. External experts who act as reviewers must sign a confidentiality agreement.

As a provincial corporation, AI Bio is subject to the protection and disclosure provisions of the Freedom of Information and Protection of Privacy (FOIP) Act. Personal information is collected pursuant to Section 33(c) of the Freedom of Information and Protection of Privacy Act as it relates to and is necessary for the Alberta Bio Future program. Should you have any questions about the collection of this information, you may contact Ms. Joan Unger, AI Bio Director of Operations, at 780-422-5737.

4.0 Evaluation Criteria

Each LOI will be evaluated using the following mandatory administrative criteria. If it does not meet all the criteria, no further rating will be conducted.

Mandatory Administrative Criteria	Yes	No
LOI is received on time.		
LOI is complete as per stated requirements.		
LOI is submitted by an eligible applicant.		
The project fits within the program objectives as outlined in these program guidelines.		
The project utilizes Alberta's biomass as outlined in these program guidelines.		

LOIs not meeting all of the mandatory criteria will receive no additional evaluation. LOIs meeting all of the mandatory criteria will then be evaluated using the following score card:

No.	Desired Criteria	
1	Project Overview	
2	Objectives, Milestone and Deliverables	
3	Benefits	

No.	Desired Criteria	
4	Budget	
5	Project Team	
	Total Score (Maximum 100)	100

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