

Program Guidelines for Alberta Bio Future

**Strategic Priority Area:
Equipment Utilization**

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: [Recommendations to Build Alberta's Bioeconomy \(BioE Initiative\)](#) (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.

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

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.

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

- Discovery and developmental research
- Testing and commercialization
- Equipment utilization

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 required 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 users 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 from an Alberta-based applicant.
- Be submitted by operating companies or sole proprietorships.
- 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/or forestry biomass produced or available in Alberta.
- Focus on developments leading to a competitive advantage for Alberta companies or some other direct benefit to Alberta.
- Engage a team with demonstrated competence, experience and the organizational capacity to successfully complete the project.

1.3.1 *Alberta Bio Future Equipment Utilization program*

This Alberta Bio Future program has a total of \$2.5 M in available funding.

- The focus of the program is on **the scale-up and pilot development** of bioindustrial products and bioindustrial technologies requiring the use of publicly funded equipment and supporting technical expertise in Alberta for conversion of biomass. (The equipment providers are also referred to in this program as “the service provider(s).”)
 - This program builds on previous investments by the Government of Alberta, through the Ministry of Innovation and Advanced Education. These investments were designed to fill critical gaps and initiate business activities in the developing industry.
- In all cases, the service provider must be a publicly funded, incorporated organization, institution or agency in Alberta.
- Information about available equipment (the service providers) can be found here:
 - <http://www.albertatechfutures.ca/RDSupport/BioandIndustrialTechnologies/BioIndustrialTechnologiesandServices.aspx>
 - [http://www1.agric.gov.ab.ca/\\$Department/deptdocs.nsf/all/bt15028](http://www1.agric.gov.ab.ca/$Department/deptdocs.nsf/all/bt15028)
- Post-secondary institutions in Alberta with pilot-scale equipment for conversion of biomass also qualify as service providers under this program. Proposals for use of equipment and expertise at institutions will be considered on an individual basis.
- A “project” in this program refers to the use of equipment and the accompanying expert work performed by the service provider for the conversion of biomass. The project proposal should describe the purpose of the work and why it is necessary (i.e. how will the converted biomass be used and how will this advance the scale-up or piloting of a new product or technology?).
- A **detailed quote from the service provider** is required for application to this program. The quote:
 - Should be developed in close consultation between the applicant and the service provider.
 - Must clearly define the full scope of work that the service provider will undertake, the total cost of the work and include the unit cost of different activities.
 - Must indicate what equipment is being used.
 - Must clearly define the details of the product or technology being provided; e.g. the fibre length, quality factors, tonnes, certifications, etc.
 - Must be signed by the service provider and submitted with the online application.

- This program will contribute up to 75 per cent of the quoted cost from the service provider, **to a maximum of \$100,000.**
- The applicant is also required to contribute to the project – **both cash and in-kind contributions.** Each type of contribution must equal a minimum of 25 per cent of the quoted cost of equipment use. See Section 3.1 on p. 7 (Eligible In-Kind Expenses) and Section 3.2 on p. 8 (Funding Sources) for further explanation of required applicant contributions.
- This program does not pay for the purchase of equipment.
- The project must be completed within 12 months.
- Information on biomass characterization developed in the project will be made publicly available to advance the bioindustrial sector.
- Projects must include some or all of the following activities:
 - Scale-up, pilot, pre-commercial and commercial processing activities.
 - Biomass characterization with direct application to the bioindustrial sector.
- In all cases, the service provider must:
 - Have demonstrated qualifications, capability and capacity to successfully perform the work required in the project in a timely manner.
 - Be at arm's-length from the applicant (cannot have any legal relationship with the applicant).
 - Provide the service(s) and/or product(s) at reasonable market rates.

2.0 Guidelines for Project Submission

2.1 Process and Deadlines

Proposals are invited from eligible applicants wishing to participate in the **Alberta Bio Future, Equipment Utilization** program. Each proposal must be submitted through the [online application system \(https://www.fundingconsortium.gov.ab.ca/aibio/Account\)](https://www.fundingconsortium.gov.ab.ca/aibio/Account).

Proposals will be reviewed and assessed by the AI Bio Review Committee (which may include external reviewers) for alignment with program purpose and objectives and the evaluation criteria identified in Section 4.0.

Applicants will be notified about the review committee's decision regarding their proposal.

Timelines	Date and time
Alberta Bio Future, Equipment Utilization program.	Continuous intake. Projects reviewed quarterly.
Deadline for submission for quarterly review.	4 p.m. MT on each of the following dates: June 11, 2015 September 10, 2015 December 10, 2015 March 10, 2016 June 15, 2016 September 28, 2016 December 13, 2016
Review of proposals.	6 weeks
Notification of successful applicants.	8 weeks

2.2 Submission of Proposal

- **Application:** The proposal form can be found in the AI Bio [online application system](#), under the **Alberta Bio Future (ABF) Equipment Utilization program**.
- AI Bio will maintain the confidentiality of the information submitted.

3.0 Project Information

3.1 Eligible In-Kind Expenses

The following expenses qualify as eligible in-kind contributions by the applicant:

Category	Eligible In-Kind:
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.
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.
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3.2 Funding Sources

Three elements are considered in calculating the required contributions from AI Bio and the applicant:

- 1) **The cost of use of publicly funded equipment and expertise** for conversion of biomass – as quoted by the service provider. This program will contribute up to 75 per cent of the quoted cost, to a maximum of \$100,000 (see Section 1.3.1 on p. 6).
- 2) The applicant must pay the balance, **in cash**, of the quoted cost (of equipment use and expertise). This cash contribution must cover a minimum of 25 per cent of the quoted cost. The applicant's required cash contribution will be higher if the quote from the service provider exceeds \$133,333 – as this is the point at which AI Bio's maximum contribution of \$100,000 is reached. The cash must be submitted to the service provider **prior to AI Bio releasing funds**.
- 3) In addition, the applicant must provide an **in-kind** contribution. The value of this in-kind contribution must also equal 25 per cent of the service provider's quote for the use of equipment and expertise. (See Section 3.1 for more details regarding expenses that qualify as in-kind contributions.)

A sample budget is provided in Appendix 1 (pages 11-13) to illustrate how these program guidelines are applied.

In the case where an applicant makes a second application to the program, the applicant must contribute a minimum of **50 per cent** of the quoted cost of the use of equipment and expertise **in cash**. As above, the balance owing from the applicant will depend on the amount of the service provider quote. The cash contribution must be submitted to the service provider prior to AI Bio releasing funds. In addition, the applicant must provide **in-kind** contributions worth **at least 50 per cent** of the quoted equipment and expertise cost.

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 one to two times in each **12-month period** for projects funded through the Alberta Bio Future program, 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 proposal 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
Proposal is received on time.		
Proposal is complete as per the online template.		
Proposal 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.		

Proposals not meeting all of the mandatory criteria will receive no additional evaluation. Proposals meeting all of the mandatory criteria will then be evaluated in the following categories:

No.	Desired Criteria	
1	Project Overview	
2	Objectives, Milestone and Deliverables	
3	Benefits	
4	Budget	
5	Project Team	
	Total Score (Maximum 100)	100

For more information about this program, please contact:

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Appendix 1

Sample Budget for an Equipment Utilization Project

This sample budget is provided for illustration purposes. The tables are similar to those generated by the online funding application system. In this example, explanatory notes for the Equipment Utilization program have been provided below some tables.

In these tables – industry means the applicant company.

Budget Commentary

- Quoted cost, from service provider, includes access to equipment and expertise = \$100,000.
- Service provider work for the project will include \$75,000 in personnel and \$25,000 in supplies = \$100,000.
- $\$100,000 \times 25\% = \$25,000$ – Applicant will pay at least 25 per cent of the quoted cost **in cash** (in this case, \$25,000) to the service provider.
- Applicant will also contribute at least 25 per cent of the quoted cost **in kind** (in this case, \$25,000) to the project. See Section 3.1 on p. 8 of the program guidelines for eligible in-kind expenses.

Applicant In-Kind:

- A) \$10,000 in fibre for decortication (“Supplies”), and \$5,000 (“Other”) to transport the fibre from X location = \$15,000.
- B) Staff - 1 person will spend 30 hours working with service provider on the decortication, plus travel to X location for 3 days: $\$900 + \$1,100 = \$2,000$.
- C) Applicant hires consultant to evaluate the product development process for the fibre product: 13.3 days at \$600 = \$8,000.

Source	Contribution Type	Personnel	Travel	Capital Assets	Supplies	CDL	Other	Total/year
Funding Agency	Cash	50000*			25000**			75000
Gov't	Cash							0
Gov't	In-kind							0
Industry	Cash	25000***						25000
Industry	In-kind	8900	1100		10000		5000	25000
Total		83900	1100	0	35000	0	5000	125000

* Toward cost of service provider personnel.

** Toward cost of service provider supplies

***Toward cost of service provider personnel.

Funding Contributions and Sources		Amount	Percentage of total
Funding Agency	Cash	75000	60
Gov't	Cash		0
Gov't	In-kind		0
Industry	Cash*	25000*	20
Industry	In-kind**	25000**	20
Total		125000	100

The ABF Equipment Utilization program will contribute up to 75 per cent of eligible expenses in the service provider quote related to use of equipment and expertise, to a maximum of \$100,000.

*Applicant is responsible for paying the balance in cash to the service provider, **prior to AI Bio funds being released.**

The applicant must also contribute to the project in kind. In-kind and cash contributions must each equal a **minimum of 25 per cent of the cost related to **use of the service provider's equipment and expertise**, not 25 per cent of the total project cost. In this example, the service provider quote was \$100,000. So the applicant must provide a minimum of \$25,000 in cash, and also in-kind contributions totaling a minimum of \$25,000. (The applicant is responsible for paying the service provider whatever balance is not covered by the funding agency. If the service quote in this example had been above \$133,333 – the point at which AI Bio's maximum contribution of \$100,000 would be reached – then the applicant would be required to contribute a higher cash amount.)

Total Amount Requested From Members of FC	Year	Amount requested	
	Year 1		75000
	Year2		0
	Total		75000

Government Sources				
	Name	Amount Cash	Amount In-kind	Confirmed
	AI Bio	75000	0	Unconfirmed

Industry Sources				
	Name	Amount Cash	Amount In-kind	Confirmed
	(Applicant name)	25000	25000	Confirmed