

# Frequently asked questions:

## CCITF - GreenSTEM

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### How do I apply?

Visit the [GreenSTEM program page](#) on the Alberta.ca website. If there is an open call for Expressions of Interest, applicants will be prompted to create a MyAlberta Digital Identity (MADI) user account to access the portal. As part of the process, applicants are required sign an acknowledgement confirming compliance with the GreenSTEM Program.

### How long is GreenSTEM funding for?

GreenSTEM provides funding over a two-year fellowship. The first cohort will begin in January 2019 and conclude in December 2020. GreenSTEM funding has been secured with supporting agreements between Government of Alberta and the University of Calgary, University of Alberta, and University of Lethbridge.

### Is GreenSTEM open to teams?

Yes. GreenSTEM applicants can be individuals or teams of two individuals, both of whom must meet the GreenSTEM eligibility requirements. Teams are expected to form one jointly-affiliated company, and are therefore only eligible for one operational seed budget annually. The team will receive \$82,500 in salary funding to be split between the two co-founders. Team applicants can be from the same or different STEM disciplines. Applicants should consider how the team would deal with complex issues facing co-founders, including dissolution of the partnership mid-program. Team applicants may be considered for the Fellowship on an individual basis as per the evaluation committee's recommendation.

It is possible for individual applicants to have a team behind them, and choose not to apply as a team for a variety of reasons, such as eligibility or skillset of the teammates.

### What is "deep tech"? What technologies are acceptable?

"Deep technology" or "deep tech" refers to science-based innovation. Deep-tech development is generally costly; protracted due to design, testing, fabrication and optimization of the technology; and more challenging to commercialize than conventional goods or software.

Any deep technologies that have an application that will result in sustainable, quantifiable GHG emission reductions and would benefit from access to laboratories, expertise and facilities at participating institutions are welcome. The linkage to emissions reduction must be made apparent in the application.

Software alone is ineligible, as GreenSTEM is premised on the need for technical infrastructure to pursue translation towards commercialization. However, software combined with deep tech will be eligible.

What technology applications are eligible?

All clean technology concepts with a clear line of sight to quantifiable, sustainable and impactful GHG emission reductions will be considered eligible. Preference may be given to solutions that align with one or more of the Climate Change Innovation and Technology Framework (CCITF) sector pathways and have applications across multiple industries, as well as solutions with demonstrated technical qualities that meet or exceed expectations for the outlined evaluation criteria. See the [GreenSTEM Program Guide](#) for more details.

Why does the program focus on emissions reduction?

Funding for the GreenSTEM pilot is provided under the CCITF, a Government of Alberta initiative to guide the investment of funds from the pricing of carbon emissions into innovation and clean technology. Environmental performance through greenhouse gas (GHG) emission reductions is one of the strategic outcomes of the framework, thus all associated projects must demonstrate reasonable assurance that activities have the potential to lead to quantifiable GHG emission reductions in Alberta. For priority technology focus areas under the CCITF, review the CCITF background in the [GreenSTEM Program Guide](#). The linkage to emissions reduction must be made apparent in the application.

How do I quantify emissions reduction potential?

Applicants must make a reasonable case for how/why their technology application impacts or facilitates emissions reduction in Alberta and globally. For more information on quantification, please view the following webinar from Alberta Innovates.

August 1, 2018: [GHG Quantification Webinar Recording](#)

August 1, 2018: [GHG Quantification Webinar \(slides only\)](#)

Can I continue with an academic or professional career over the course of the program?

No. The salary stipend is intended to enable the Fellowship to function as full-time employment for participants. Over the two-year runway, Fellows will focus on moving their technology concept towards commercialization, creating an associated business entity, and developing skillsets and aptitudes required to succeed as a new entrepreneur. Attention to all three activity types and appetite to overlay GreenSTEM with other available resources will be instrumental to participants' success.

What are the fees to apply and/or participate?

There are no fees associated with application. Admission to GreenSTEM is merit-based and is not contingent on a fellow's ability to pay any costs associated with developing a technology concept or legal business entity up front.

Are applicants selected on a rolling basis?

GreenSTEM applications are operated through a call for proposals model. The selection process will begin once the intake has closed. Submissions will not be reviewed prior to the deadline. Evaluation decisions will be made throughout the process based on a range of evaluation criteria related to the applicant, the technology concept, and the proposed project.

## What are the roles of the GreenSTEM Fellow, the Technical Mentor and the Business Mentor?

GreenSTEM is a non-traditional fellowship model. Clarity and common understanding of roles will be important for applicants and their mentors prior to beginning a GreenSTEM Fellowship. The GreenSTEM Fellow is the recipient of a stipend and seed funding based on technical prowess, entrepreneurial aptitude, quality and viability of the proposed technology project and its GHG reduction potential. The GreenSTEM Fellow is the main decision maker and their role is to:

- Make technical and business decisions drawing on advice of the Technical Mentor and the Business Mentor, and determine the path forward for the company. Like any entrepreneur, the Fellow's business-driven decisions take precedence over academic or technical considerations, and
- Use the available seed funding to advance the technology and lay foundation of a successful enterprise.

The Technical Mentor's role is to enable the technical success of the GreenSTEM Fellow, such as:

- Provide technical and scientific advice; act as a sounding board as the entrepreneur identifies and addresses technical issues,
- Facilitate access to technical facilities and research and personal networks,
- Hold regular meetings with the GreenSTEM Fellow to advance the project and the technology,
- Facilitate access to critical pre-existing Intellectual Property (IP), if required for the success of the project, and
- Acknowledge and facilitate favourable conditions for the control of IP developed during the Fellowship by the newly established company in accordance with the IP policy of the host institution.

The Business Mentor's role is to enable the success of the GreenSTEM Fellow:

- Provide business-oriented advice; act as a sounding board as the entrepreneur identifies and addresses business issues,
- Facilitate access to business networks and supports (i.e. commercialization supports, customer validation, industry and angel/venture networks),
- Facilitate access to personal business networks,
- Hold regular meetings with the GreenSTEM Fellow regarding the advancement of the business, and
- Acknowledge that IP developed during the GreenSTEM Fellowship is intended to be controlled by the newly established company in accordance with the IP policy of the host institution.

It is encouraged for applicants to secure written commitment from the mentors of their intent to act in good faith as a GreenSTEM mentor, in accordance with the intent of the GreenSTEM program. Applicants may wish to consider non-disclosure and conflict of interest agreements, recognizing multiple business and technical opportunities may be discussed in confidence during the program and commercialized beyond the term of the GreenSTEM program or mentoring relationship.

Can applicants with projects currently receiving funding from other government sources apply for GreenSTEM?

Yes, GreenSTEM funds are fully stackable against other federal and provincial government funding and participants are encouraged to leverage opportunities provided by the program to pursue additional capital from other public and private sources throughout the course of the program. GreenSTEM is designed to be among the first steps a technical graduate will take to becoming a lifelong entrepreneur. Funding from other sources will likely be required to continue to advance the technology concept up the technology readiness level (TRL) scale during and following the conclusion of GreenSTEM.

Do I/we have to be incorporated to apply?

Applicants are not required to have an incorporated entity upon application. However, GreenSTEM Fellows may be required to establish a legal entity prior to starting or during the program. A business decision you will need to make is when is the best time to create your new company, taking into account multiple factors and circumstances. The decision may vary from those embedded on one campus to another.

Can applicants who have raised capital through funding rounds or private investors apply for GreenSTEM?

Yes. In fact, previous experience in raising capital or developing relationships with investors is considered an asset and will be reviewed as part of the application and evaluation process. Selected Fellows who have raised project financing from other sources will be required to work with GreenSTEM program managers to ensure that funding is allocated appropriately and the expectations of committed investors can be managed in relation to GreenSTEM requirements. Participants are encouraged to leverage opportunities provided by the program to pursue additional capital from other sources throughout the course of the program.

What happens if I am not able to complete the program?

Entrepreneurship is unpredictable; failures and pivots are expected. That said, reasons for withdrawing from the program may vary. In extreme cases, consistent inability to reach business and technical milestones, dynamics between founding partners, or personal suitability to deep-tech entrepreneurship may warrant withdrawal from the program. GreenSTEM's goal is to support Fellows in developing the skillsets, expertise and connections required to become successful technology entrepreneurs, including enabling pivot opportunities to support Fellows in driving their technology concept toward impactful market deployment. Prior to, and in the event of withdrawal, the GreenSTEM program team will work with Fellows toward optimal resolution.

Will my team and I have to relocate for the duration of the program?

GreenSTEM offers facilitated access to lab and technical infrastructure at participating university institutions. In the majority of cases where fellows are located outside the municipality of their base host institution, relocation will be required in order to maximize value from accessing the relevant technical infrastructure and expertise. Applicant willingness to relocate will be taken into account during the evaluation process.

If I participate in the program, will I remain the sole owner of my intellectual property?

The handling of intellectual property is one of your first business decisions. Understanding of IP rights, how to protect and create value from IP, costs and potential monetary worth of patents are integral to your growth as a technology entrepreneur. The technology products created during the GreenSTEM Fellowship might require a license to use pre-existing IP and your newly created enterprise needs to secure and protect the IP generated during your Fellowship. This is key for the success of your company and needs to be done in accordance with policies of the host institution.

Applicants will be required to demonstrate a clear line of sight to obtaining the right to use pre-existing IP, as part of the evaluation process. If selected, Fellows will sign agreements with participating universities to ensure that they have favourable control of IP that is developed over the course of the program.

Is there a screening process to ensure that the technology is not infringing on other patented technology?

It will be responsibility of the applicant to ensure to their best capability that the technology concept and the underlying IP are original, defensible and not infringing on IP rights of others. The technology transfer services of the host institutions, technical and business mentors might be able to assist in this assessment.

Are technologies expected to be commercially deployable at the end of the two-year runway?

The current and projected-end TRL of the technology concept provided in the application process will be taken into account during evaluation. Even though having a commercial technology at the end of the program is desirable, it is not a requirement of participation. Development and deployment of deep technology innovations is typically characterized by capital intensive, more protracted timelines than software or non-tech products. GreenSTEM is intended to serve as a stepping stone in enabling entrepreneurially-minded technical individuals to transition toward commercialization and develop the business intelligence and network connections required to succeed.

If I apply, how will the information I submit be used?

The information is collected for the purposes of evaluating the application and assessing and promoting the program. Prior to submission, the applicant will have to sign an acknowledgement that identifies how the information will be used and for what purpose. Steering and evaluation committee members will be bound by obligations of confidentiality. Information is gathered in accordance to the Freedom of Information and Protection of Privacy Act

What does Gender Based Analysis+ mean in relation to GreenSTEM?

Research has shown that women and Indigenous peoples are under-represented and highly exposed to bias in Science Technology Engineering and Mathematics fields and entrepreneurship. While GreenSTEM is not focused solely on supporting the development of female or Indigenous hard-tech entrepreneurs, program design and delivery will be completed with a Gender Based Analysis+ lens to strive for equal representation and equitable access across groups. An applicant's self-identification with an underrepresented group may be taken into account during evaluation, or as part of the GreenSTEM program assessment.