

Carbon Solutions @ Western

Research Grant Program

Guidelines

1. Overview of the Funding Opportunity

Western University has prioritized *Sustainability*, within the pillar of *Our Place in the World* in [Towards Western at 150 – Western University Strategic Plan](#).

The Government of Canada is committed to achieving net-zero greenhouse gas (GHG) emissions by 2050.¹ Canada's leading research universities are at the foundation of the research, development and innovation ecosystem that will enable an economy which embraces a net-zero future.

A total of \$2M has been provided by Western to support Carbon Solutions @ Western, which invites interdisciplinary based translational research proposals that directly address the mitigation of carbon to reduce Green House Gas emissions.

Carbon Solutions @ Western will be based on academic and external partner collaboration to address carbon reduction and replacement. The sectors of focus for carbon reduction will have strong ties to the Southwestern Ontario and Ontario economies and communities for opportunities that will have significant national impact either directly, or through validation for deployment across Canada and internationally.

Examples of major carbon emissions sources and opportunities to reduce carbon emissions include:

- Homes and building emissions through policies, technologies, and standards to address both new construction and existing infrastructure;
- Mobility for net-zero personal and fleet vehicles, and mass transit by improving the use and support for electric vehicles;
- Renewable clean electricity production, transmission and storage;
- Industries that produce carbon emissions through the use of carbon capture, utilization and storage;
- Natural and natural climate solutions to conserve, protect and enhance the biosphere to store and capture carbon;
- Agriculture and agri-food systems to promote sustainable practices in crops and protein production as well as make our food system sustainable;
- Waste stream conversion to renewable energy sources such as renewable natural gas, and hydrogen; and intermediates for further processing in a circular economy;
- Support for people in marginalized communities by social, economic, cultural, gender or other factors;

¹ [2030 Emissions Reduction Plan – Canada's Next Steps for Clean Air and a Strong Economy - Canada.ca](https://www.canada.ca/en/environment-climate-change/news/2022/03/2030-emissions-reduction-plan--canadas-next-steps-for-clean-air-and-a-strong-economy.html)

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- Development of educational initiatives that can lead to change in consumer behaviors.

Award

- The amount awarded to each project will vary with a minimum award of \$20,000 and maximum award of \$100,000 per year, for periods of 6 months to 2 years.
- External opportunities are encouraged that will leverage the grant support, either during or after the project award, e.g. Tri-Council funding, foundation support.
- The grant is contingent on a signed letter of support with external translational partner(s), which may include: for profit and not-for-profit corporations, non-governmental organizations, registered charitable foundations, municipal, provincial and federal government agencies, educational providers, as well as international partners of similar categories.
- Academic collaborating partners from other universities and community colleges are not normally considered as external translational partners; however, if there is translation through academic partners then the activities should be explained in the proposal.
- The contributions of all translational and collaborating partners should be clearly explained in the proposal.
- Interdisciplinarity can be demonstrated through teams of researchers at Western, or through the interactions with external translational partners or academic collaborating partners.
- Funded projects must be completed in accordance with the agreed-upon milestones. A final report will be submitted from the research group to intgrant@uwo.ca within three months of completion of the project.

Additional Details

The funding opportunity is intended to support a broad range of research encompassing work in all research disciplines and faculties.

Proposals will be evaluated for approval by the Carbon Solutions @ Western Steering Committee. The Steering Committee may request a meeting with the principal investigator to discuss, as appropriate, the proposed research, intellectual property rights, potential third-party contributors, conflict of interest or address specific questions.

2. Program Proposal Timelines

Proposals will be received continuously and evaluated every four months beginning April, 2022, with the final decision date of September, 2023 for the current funding allocation of \$2M.

Project start dates will begin at the time of award notification, pending any certification approvals and partner agreements being finalized.

3. Eligibility

- This funding opportunity is open to researchers in all disciplines and faculties.
- Projects require a **lead Principal Investigator** who is eligible to hold grants at Western.
- Inclusion of early career researchers (<10 years since first independent academic appointment) is encouraged but is not a requirement for funding.
- A lead PI may only submit and hold one application at a time from Carbon Solutions @ Western University.

4. Guiding Principles for Research at Western

- **Equity, Diversity and Inclusion (EDI)**

If the proposal requires a team of researchers, the team composition should address EDI principles and

promising practices. The research project should meaningfully engage members of equity-deserving groups within the research team through the engagement of faculty, partners, students, postdoctoral fellows, and knowledge users. Equity-deserving groups include, but are not limited to, the four designated groups (women, Indigenous peoples, members of visible minorities, and persons with disabilities). See [Canada Research Chair Program – Equity, Diversity & Inclusion Action Plan](#) and the [Western Research EDI resources](#).

- **Promoting Indigenous Research**

Western is committed to supporting high-quality research projects by and/or with Indigenous Peoples (as outlined in Western's [Indigenous Strategic Plan: Goal 4 - Achieve Excellence in Indigenous Research & Scholarship](#)) that use either community-engagement research methodology, or Indigenous research methodologies. In addition, decolonization challenges and promising practices should be considered as part of EDI plans.

- **Adjudication & Peer Review**

The Steering Committee will act as the adjudication committee and will apply relevant EDI best practices to the evaluation of all applications. Additionally, review of proposals including research by, or with, Indigenous peoples will ensure compliance with the Government of Canada's Interagency Steering Panel on Research Ethics guidelines published in [TCPS 2 - Chapter 9: Research Involving the First Nations, Inuit and Métis Peoples of Canada](#).

- A discussion of [Sex and gender-based analysis \(SGBA\)](#) and/or [Gender-Based Analysis Plus \(GBA+\)](#) should be included in study designs as applicable. It is expected that research applicants will integrate gender and sex into their research designs where appropriate.

5. Support for Highly Qualified Personnel (HQP)

- Support for undergraduate and graduate students is highly encouraged as part of the research project. If the student has yet to be identified, you must indicate this in the proposal.

6. Budget Requirements and Restrictions

- Funds will support only those activities directly related to the research (e.g., data collection and analysis, writing, translation, EDI).
- Expenses must meet Tri-Council eligibility requirements and support the direct costs of research related to the project;
- Indigenous research and eligible costs outside of traditional ones are eligible and should be identified and explained in the proposal;
- Funding cannot be used to pay for partner contributions but can be used to facilitate partner engagement as part of the research where knowledge exchange, dissemination and leveraging opportunities may exist. A clear value-added purpose for combining funds from different sources must be provided in the proposal.

Personnel

Personnel costs to hire Research Assistants and to support HQP/trainee development may be requested. Western will be the employer of any personnel hired using project funds; therefore, researchers must pay appropriate wages and include benefits at established rates. Current employee benefit rates can be found in the Benefit Recovery Rates section located on the [HR Services webpage \(see Researcher Toolbox\)](#).

The employment category for "research assistants/associates" has the widest flexibility in pay levels and is the most difficult in which to determine appropriate levels. Colleagues, your department, or Human Resources (and the Research Toolbox) are reliable sources of information.

The budget justification must include a description of the duties of the personnel requested, the required qualifications, and an explanation as to why the position is necessary to the project. Workload should be

shown to justify the amount of time the person will be employed on the project.

Supplies & Services

Whenever appropriate, numbers of units and unit costs should be explained. Quotes from suppliers should be provided for purchased services, e.g., computing or equipment repairs.

Equipment

It is expected that equipment costs will be limited to a maximum of \$5,000 and pertain to the direct costs of research. If additional equipment is needed to complete the research, the Carbon Solutions at Western Steering Committee will advise on potential third party supports. Otherwise, all equipment purchased with internal grant funds becomes the property of The University of Western Ontario. Written quotes, or advertisements giving prices, must accompany the application.

Computing Equipment & Software

The committee will review requests for computers and related equipment and software; however, the request must be necessary for the conduct of the research activity described in the application and not for general or personal computing.

7. Application Process

Please use the [Carbon Solutions @ Western Proposal Application Template](#) (fillable Word document). When complete, submit the proposal through the website portal.

8. Submissions

- **Proposals will be submitted through the [Carbon Solutions @ Western Portal](#) within the Western Research web site.** It is the responsibility of the applicant to ensure that all conditions are met and that all application forms are complete and submitted to Western Research as required.
- A ROLA proposal is required at application stage and the ROLA opportunity for proposal submission is [available here](#).

9. Adjudication

- Applications will be reviewed by the Carbon Solutions @ Western Steering Committee which is comprised of 3-4 Western researchers, 2-3 Western Research personnel, and 1 external member.
- Additional people with topic-specific expertise may be consulted as needed.

10. Review Criteria

Application Review Criteria

When evaluating applications, the committee will use the following criteria questions to determine their overall score:

- a) Alignment with the theme of carbon mitigation and reduction.**
- b) Clarity of purpose**
- c) Clear Innovation, Novelty and Impacts**
 - i. Are the project purpose and goals presented clearly, relevant, and addressed well by the described methodology?
 - ii. Does the proposal outline a novel and innovative project, not previously applied in the field?
 - iii. Do the methods require novel thinking about the problem presented and differ from conventional approaches?
 - iv. Are the proposed impacts feasible?
 - v. Is the knowledge exchange plan clearly explained?

d) Interdisciplinarity

- i. Is an interdisciplinary perspective clearly articulated in the proposed approach and project?
- ii. Does the team, including the external partner(s), provide interdisciplinary perspectives?

e) Equity, Diversity and Inclusivity

- i. What approaches will be used to support EDI?

11. Certifications

- All research proposals involving ethics (human subjects), animal subjects or biohazardous materials must be approved by the appropriate Western certification review committee. Applicants must indicate at the Full Application stage whether they require approval for the use of human or animal subjects or biohazardous materials. For more information on the certification approval process, please visit the relevant [Ethics](#), [Animal Use](#) or [Bio Hazard](#) websites.
- Support for the development of ethics protocols (human and/or animal) is available for applicants through the [Research Ethics and Compliance Office \(RECO\)](#). We highly recommend all parties requiring ethics oversight for their projects contact RECO (either human research ethics or animal research ethics) for a brief consultation prior to proposal submission to ensure ethical and public health issues are feasible. If you are unsure if your project requires ethics oversight it is recommended you contact RECO for determination.

12. Project Time Period

All grants will be available for the period proposed for the project. Extensions of up to six (6) months for the use of awarded funds will be considered by the Steering Committee on an individual case basis.

13. Final Reporting

Within three (3) months of the termination of the award, awardees must submit a [final report](#) to the Carbon Solutions @ Western portal.

14. Contact Information

Internal competitions are administered by Research Western, Room 5150, Support Services Building.

Please contact [Carbon Solutions @ Western](#) with any questions or inquiries.