



Supporting collaborative research to initiate or accelerate the development of solutions that will be required for a sustainable, resilient, and profitable agriculture sector in a net zero economy.

Webinar - 2023

Purpose

To help the Canadian agricultural sector contribute to Canada's GHG emission reduction goals

To reinforce, coordinate and scale up Canada's domestic research capabilities

To support partnerships between universities, colleges, and organizations and stakeholders across the Agriculture sector.

To initiate or accelerate transformative solutions for the Agriculture sector

To expand the traditional network of agriculture research partners.

To support knowledge mobilization from lab to farm.

Why apply?



- Support is available for preparation costs of applications (for ~20 grants, up to \$50,000)
- \$72M is available in this initiative for grants of \$500,000 to \$2,000,000 per year for 4 years
- NSERC and SSHRC support 100% of the eligible costs of research
- Awards are expected to start April 1, 2024

Who can apply

- You can apply as if you are a Canadian university researcher <u>eligible</u> to receive NSERC funds.
- The applicant must apply as a team with two or more eligible co-applicants

When to apply

- Preparatory Funding May 8, 2023, 8:00 p.m. (ET)
- Full Project Funding November 8, 2023, 8:00 p.m. (ET)

Research objectives

Fundamental and applied research required to develop a technical path to a more sustainable and resilient sector in a net-zero economy.

Developing metrics to better understand and report on environment and climate impacts of different production systems, and of producers' efforts in adopting innovative practices.

Improving ways to **transfer science and technology knowledge** effectively to the agricultural sector, with a view to accelerate change

Research topics

The list of research topics was developed in collaboration with AAFC and were informed from stakeholder consultations in May 2022 at AAFC's Transformative Workshop: **Path to 2050-Transforming Canada's Farm and Food Production Systems**

- > A list of research topics is available online, please note projects are not limited to the research topics.
- Applications should focus on developing transformative solutions toward net-zero emissions agriculture and propose research required to develop a technical path to a sustainable and resilient sector in a net-zero economy.









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Research topics



Identifying practices and technologies to enable the sector to capture carbon effectively (e.g., nature-based climate solutions or technologies that enhance soil carbon sequestration)



Innovative plant health solutions that reduce the need for added amendments (e.g., biofertilizers, plant gene-editing, nanotechnology)



Alternative input management tools and technologies (e.g., pesticide/fertilizer delivery methods, precision agriculture)



Diverse production systems (crop, soil, livestock, grassland, and nutrient management systems) that maximize environmental outcomes in future climate change scenarios.



Developing and testing improved methane and nitrous oxide emission factors, measurement tools, and models



Supporting fundamental socio-economic and behavioural research toward increased adoption of practices and technologies that support greenhouse gas mitigation in the agriculture and agri-food sector



Developing metrics to better understand and report on environment and climate impacts, including biophysical and socio-economic

What results are we hoping for?

To fund multidisciplinary networks of researchers and partners

To support fundamental **and** applied research

To encourage transformative alternative practices, technologies, and their adoptions,

To support the development of measurement tools and performance metrics.

To increasing the speed of the adoption of technologies and practices for the Agricultural sector To enhance collaborations between the social and behavioural sciences and humanities, with the natural sciences and engineering

To continue to fund research in Agriculture after the initiative via the Alliance program

How to apply

Applicants will be using NSERC's online system for both the preparatory funds and the full proposals

Preparatory funds Fit to the initiative A Justification of needs for funds Eligibility of requested budget items Partner engagement, participation and contributions (if applicable) Full applications Relevance and outcomes* Partnership Quality of the proposal Training

^{*}For this initiative, the alignment with the objectives and/or research topics will be assessed as part of the relevance and outcomes criteria

Preparatory Funding

Login to <u>NSERC's online system</u> and choose Create a new form 101, select Research partnerships programs, then Alliance grants. Proposal type field = **Letter of intent**; Type of call field = **Preparatory funds for sustainable agriculture**

Your request will include

- · your summary for public release and ten keywords
- THE PROPOSAL : details on fit to the initiative, and the team, including the names of two or more co-applicants and potential partners (maximum 2 pages)
- •a list of other sources of support and the amounts provided (if applicable)
- •how the funds will be used (budget and budget justification)
- •a form 100A and CCV for the applicant

Preparatory funds

- can be used for meetings costs; travel and accommodation expenses of academic participants as well as community members; communication, secretarial, clerical and co-ordination services over and above what is available from the universities and the supporting organizations; salaries of technical writers (max \$15,000).
- cannot be used for salaries for university personnel or travel costs of employees from partner organizations.

Review

• Preparatory funding applications will be evaluated for eligibility and fit internally at NSERC and SSHRC using the following criteria: fit to the initiative, justification of need for funds, eligibility of requested budget items and partner engagement, participation, and contributions (if applicable)

Full applications

Login to NSERC's online system

Select "Create a new form 101" Select "Research Partnerships programs" Select
"Alliance grants"
"Full Proposal"
"Sustainable
agriculture"

Complete proposal as per the instructions and the bullet points in the proposal template.

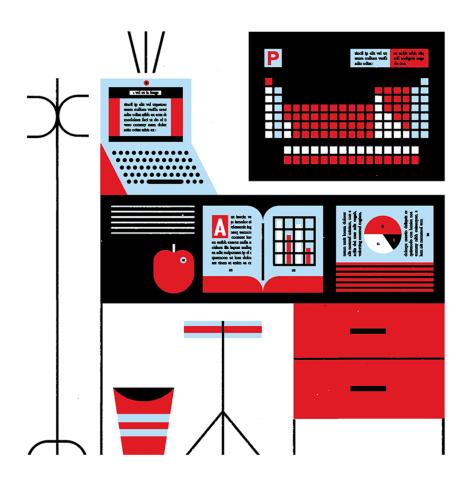
Partners

Your partner organizations must actively play a role in the project and support the project through in-kind contributions.

At least one partner organization must have the ability to exploit the project's research results..

Applicants are encouraged to collaborate with knowledge users (such as agronomists, producers, smart farms, etc.) to support knowledge mobilization.

Alliance grants - Role of partner organizations



Questions?

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