



# 2023 to 2024 Departmental Sustainable Development Strategy Report

Natural Sciences and Engineering Research Council of Canada

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# Introduction to the 2023 to 2024 Departmental Sustainable Development Strategy Report

The [2022 to 2026 Federal Sustainable Development Strategy \(FSDS\)](#) presents the Government of Canada's sustainable development goals and targets, as required by the [Federal Sustainable Development Act](#). This is the first FSDS to be framed using the 17 Sustainable Development Goals (SDGs) of the United Nations 2030 Agenda and provides a balanced view of the environmental, social, and economic dimensions of sustainable development.

In keeping with the purpose of the Act, to make decision-making related to sustainable development more transparent and accountable to Parliament, the Natural Sciences and Engineering Research Council of Canada (NSERC) supports the goals laid out in the FSDS through the activities described in NSERC's 2023 to 2027 Departmental Sustainable Development Strategy (DSDS). This Report provides a report on progress related to NSERC's DSDS in the fiscal year 2023 to 2024.

The [Federal Sustainable Development Act](#) also sets out [7 principles](#) that must be considered in the development of the FSDS as well as DSDSs. These basic principles have been considered and incorporated in NSERC's DSDS and 2023 to 2024 DSDS Report.

To promote coordinated action on sustainable development across the Government of Canada, NSERC's departmental strategy reports on Canada's progress towards implementing the 2030 Agenda and advancing the SDGs, supported by the Global Indicator Framework (GIF) and Canadian Indicator Framework (CIF) targets and indicators. The Report also captures progress on SDG initiatives that fall outside the scope of the FSDS.



# NSERC's Commitments





## GOAL 4: PROMOTE KNOWLEDGE AND SKILLS FOR SUSTAINABLE DEVELOPMENT

### FSDS Context:

#### Supporting student skill development

NSERC acknowledges that education is a primary driver of progress toward sustainable development. To ensure Canada’s economic and social prosperity, it is essential to provide quality education and promote learning opportunities for Canadians of all ages. NSERC contributes to the Government of Canada’s commitment to promoting knowledge and skills for sustainable development by supporting the training of the next generation of researchers through its ongoing programs and thematic funding opportunities. Through scholarships, fellowships and grants, the agency demonstrates its dedication to advancing Goal 4 and works to support access to quality education and lifelong learning for all Canadians. The funding opportunities that NSERC offers to students and fellows increase educational attainment rates and support the development of relevant job skills, including in the environmental, clean technology and clean economy sectors.

NSERC is also working with partners to increase the international mobility of Canadian students and fellows with the aim of offering them an enriched training experience and broadening their opportunities. The [Collaborative Research and Training Experience \(CREATE\)](#) program, the [Canada Graduate Scholarships – Michael Smith Foreign Study Supplements](#), and the [Japan Society for the Promotion of Science Postdoctoral Fellowships](#) are some of NSERC’s programs that support trainees’ skill development in key fields while also strengthening international research partnerships.

Moreover, through its continued national leadership, NSERC promotes science, technology, engineering and mathematics (STEM) understanding among young Canadians to encourage them to study the NSE at the post-secondary level. NSERC’s [PromoScience](#) program offers funding opportunities for organizations that provide relevant hands-on learning to youth and that work to promote an appreciation of the NSE among young people. The program supports activities and content designed for youth as well as activities specifically developed to encourage Indigenous undergraduate students to pursue

graduate studies in the NSE. NSERC also promotes science literacy and STEM careers among youth through communications initiatives, such as [Science Odyssey](#) and [Science Literacy Week](#).

### **Supporting research partnerships for sustainable development initiatives**

NSERC contributes to the Government of Canada's commitment to producing new knowledge on sustainable development. Its grants and partnership programs help forge invaluable links between researchers and key partners in the private, public and not-for-profit sectors. These relationships can generate new perspectives on sustainable development, drive the growth of clean technologies, and support the transition to a low-carbon economy. Scientific collaborations are essential to help researchers understand the impact of unprecedented environmental changes across the globe and address the critical challenges of our time. NSERC acknowledges that funding research in key areas ultimately benefits Canada's environment, society and economy; the agency is committed to delivering programs that enable researchers to fill knowledge gaps and create new solutions. NSERC's programs provide opportunities for Canadian scientists to collaborate within domestic and international science and technology initiatives that address climate change and sustainability challenges. These programs prepare and empower those who are driven to contribute to the global discourse on sustainable development, to deliver ground-breaking technologies, and to provide essential data for decision-making.

To support transformative collaborations that enable fast responses to today's challenges, NSERC is also implementing the [Tri-Agency Research Data Management Policy](#) in response to the Chief Science Advisor's [Roadmap for Open Science](#). NSERC, CIHR and SSHRC recently announced a review of the [Tri-Agency Open Access \(OA\) Policy on Publications](#), with the goal of requiring that any peer-reviewed journal publications arising from agency-supported research be freely available, without subscription or fee, at the time of publication. The renewed open access policy will be released by the end of 2025. To complete the review, NSERC will collaborate with other research funders, both Canadian and international, to keep the policy aligned with national and global standards.

Over the years, NSERC's programs and funding opportunities have supported a substantial amount of research on climate change and sustainable development, with annual investments of over \$90 million. NSERC has offered at least 20 special funding calls and grant supplements in these areas, either directly or in collaboration with other federal departments and funders. Moving forward, the agency will continue to promote knowledge and skills for sustainable development through its ongoing programs and a range of thematic funding opportunities, including the following initiatives:

#### **[The National Science Foundation Global Centres initiative](#)**

This program supports research partnerships that address themes related to climate change and/or clean energy. Partners include NSERC, SSHRC, UK Research and Innovation, and the Commonwealth Scientific and Industrial Research Organisation (Australia). The program design aligns with Canada's [\*Climate Science 2050: Advancing Science and Knowledge on Climate Change\*](#).

#### **The NSERC-SSHRC sustainable agriculture research initiative**

This funding opportunity is delivered jointly by NSERC and SSHRC in collaboration with Agriculture and Agri-Food Canada. The program supports the development of new science and technology that can help the agricultural sector transition toward a net-zero economy. The initiative was designed to support the [\*Canada's 2030 Emissions Reduction Plan\*](#), the [\*Global Methane Pledge\*](#), and Canada's commitment to reaching net-zero emissions by 2050.

#### **The Alliance Missions grants: Anthropogenic greenhouse gas research**

Issued in consultation with Environment and Climate Change Canada (ECCC), this funding opportunity supports interdisciplinary research that investigates anthropogenic GHG emissions and the changes they are causing over time. The program enables research to inform decision-making and achieve net-zero GHG emission targets by 2050. The program was designed to support the [\*Canada's 2030 Emissions Reduction Plan\*](#) and recommendations by the [\*Net-Zero Advisory Body\*](#). The next Alliance Missions call (scheduled to launch in summer 2023 and developed in collaboration with Natural Resources Canada) will support research on critical minerals for 3 years, with an anticipated annual investment of \$20 million.

#### **The 2023 International Joint Initiative for Research in Climate Change Adaptation and Mitigation**

Under the strategic direction of the Canada Research Coordinating Committee (CRCC), in which NSERC actively participates, this program brings together research funders from Canada, Brazil, Germany, Norway, South Africa, Switzerland, the UK and the US. Its goal is to leverage international expertise to tackle the global challenges caused by climate change and to further the design and implementation of co-produced adaptation and mitigation strategies for vulnerable groups currently most impacted by the effects of climate change.

Among the supplements to NSERC's ongoing programs, the following are notable:

- [Discovery Grants – Northern Research Supplements](#), established to augment and promote Canadian university-based northern research and training
- [The Fisheries and Oceans Canada Aquatic Science supplement](#), offered to eligible doctoral-level award holders by Fisheries and Oceans Canada to conduct research on fisheries, oceans ecosystems and climate science

- [The ECCC Atmospheric and Meteorological graduate supplement](#), offered to eligible master’s- and doctoral-level award holders by ECCC to conduct research in the atmospheric and meteorological sciences
- [The Supplement for Research in the Field of Impact Assessment](#), offered to master’s-, doctoral- and postdoctoral-level award holders by the Impact Assessment Agency of Canada (IAAC) Projects must fall within one of the areas of relevance to the IAAC, such as aquatic ecosystems, best environmental practices, cumulative environmental effects, environmental assessment, or environmental management.

**Target theme:** Training and skills in sustainable development

**Target:** By December 2025, Canada’s pool of science talent grows by 175,000 science, technology, engineering and mathematics (STEM) graduates (Minister of Innovation, Science and Industry)

IMPLEMENTATION STRATEGY	DEPARTMENTAL ACTION	PERFORMANCE INDICATOR STARTING POINT TARGET	HOW THE DEPARTMENTAL ACTION CONTRIBUTES TO THE FSDS GOAL AND TARGET AND, WHERE APPLICABLE, TO CANADA’S 2030 AGENDA NATIONAL STRATEGY AND SDGS	RESULTS ACHIEVED
Support youth skill development in environmental sectors	Support students at every stage of study, help develop research skills and assist in the training of highly qualified personnel in environmental sectors  <b>Programs:</b> Research Training and Talent Development  Discovery Research  Research Partnerships	<b>Performance indicator:</b> Funding allocated to support research trainees working on projects related to the environment and sustainable development. Progress toward target will be reported annually.  <b>Starting point:</b> \$113.7M in 2021  <b>Target:</b> At least \$109M by 2027 <sup>1</sup>	Through grants, scholarships and fellowships, NSERC attracts, retains and supports the next generation of scientists and engineers.  Through this departmental action, NSERC contributes to the Government of Canada’s commitment to ensuring that Canadians have access to the quality education, training and skills they need to build an inclusive, sustainable and resilient future, as outlined in Canada’s 2030 Agenda National Strategy.  <b>Relevant targets or ambitions:</b>	<b>Indicator result:</b> \$146.2M in 2022-23



IMPLEMENTATION STRATEGY	DEPARTMENTAL ACTION	PERFORMANCE INDICATOR STARTING POINT TARGET	HOW THE DEPARTMENTAL ACTION CONTRIBUTES TO THE FSDS GOAL AND TARGET AND, WHERE APPLICABLE, TO CANADA’S 2030 AGENDA NATIONAL STRATEGY AND SDGS	RESULTS ACHIEVED
			<p><i>CIF Ambition:</i> Canadians have access to inclusive and quality education throughout their lives</p> <p><i>CIF Indicator:</i> 4.2.1 Post-secondary education attainment rate</p> <p><i>GIF Target:</i> 4.4 By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship</p>	

**Target theme:** Research and knowledge sharing

**Target:** By 2025, Canada's Average Relative Citation (ARC) in natural sciences, engineering, and life sciences ranks within the top 10 of OECD countries, increasing from a ranking of 18 in 2020 (Minister of Innovation, Science and Industry)

IMPLEMENTATION STRATEGY	DEPARTMENTAL ACTION	PERFORMANCE INDICATOR STARTING POINT TARGET	HOW THE DEPARTMENTAL ACTION CONTRIBUTES TO THE FSDS GOAL AND TARGET AND, WHERE APPLICABLE, TO CANADA’S 2030 AGENDA NATIONAL STRATEGY AND SDGS	RESULTS ACHIEVED
Work with partners on sustainable development research initiatives	Support team-led research projects on sustainable development	<b>Performance indicator:</b>	Through research partnerships, NSERC supports research projects led by strong,	<b>Indicator result:</b> 749 in 2023-24

IMPLEMENTATION STRATEGY	DEPARTMENTAL ACTION	PERFORMANCE INDICATOR STARTING POINT TARGET	HOW THE DEPARTMENTAL ACTION CONTRIBUTES TO THE FSDS GOAL AND TARGET AND, WHERE APPLICABLE, TO CANADA'S 2030 AGENDA NATIONAL STRATEGY AND SDGS	RESULTS ACHIEVED
	<p><b>Program:</b> Research Partnerships</p>	<p>Number of partners on research projects related to sustainable development. Progress toward target will be reported annually</p> <p><b>Starting point:</b> 700 in 2021</p> <p><b>Target:</b> At least 680 by 2027 <sup>1</sup></p>	<p>complementary, collaborative teams that will generate new knowledge about sustainable development and accelerate the application of research results to create benefits for Canada.</p> <p><b>Relevant targets or ambitions:</b> <i>CIF Ambition:</i> Canadians have access to inclusive and quality education throughout their lives</p> <p><i>CIF Indicator:</i> 4.2.1 Post-secondary education attainment rate</p> <p><i>GIF Target:</i> 4.7 By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development</p>	
<p>Work with partners on sustainable development research initiatives</p>	<p>Support team-led research projects on sustainable development</p> <p><b>Program:</b> Research Partnerships</p>	<p><b>Performance indicator:</b> Non-academic partner funding for research projects related to sustainable development. Progress toward target will be reported annually</p>	<p>Through research partnerships, NSERC supports research projects led by strong, complementary, collaborative teams that will generate new knowledge about sustainable development and accelerate</p>	<p><b>Indicator result:</b> \$77M in 2023-24</p>

IMPLEMENTATION STRATEGY	DEPARTMENTAL ACTION	PERFORMANCE INDICATOR STARTING POINT TARGET	HOW THE DEPARTMENTAL ACTION CONTRIBUTES TO THE FSDS GOAL AND TARGET AND, WHERE APPLICABLE, TO CANADA'S 2030 AGENDA NATIONAL STRATEGY AND SDGS	RESULTS ACHIEVED
		<p><b>Starting point:</b> \$62M in 2021</p> <p><b>Target:</b> At least \$60M by 2027 <sup>1</sup></p>	<p>the application of research results to create benefits for Canada.</p> <p><b>Relevant targets or ambitions:</b> <i>CIF Ambition:</i> Canadians have access to inclusive and quality education throughout their lives</p> <p><i>CIF Indicator:</i> 4.2.1 Post-secondary education attainment rate</p> <p><i>GIF Target:</i> 4.7 By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development</p>	



## GOAL 10: ADVANCE RECONCILIATION WITH INDIGENOUS PEOPLES AND TAKE ACTION ON INEQUALITY

### FSDS Context:

#### Supporting Indigenous research and research training

Research excellence includes the strengthening of Indigenous self-determination, leadership and capacity in research and research training. It must also involve respecting the value of Indigenous knowledge systems. NSERC has long been committed to supporting research by and with First Nations, Inuit and Métis Peoples, and supports Indigenous research and research training across all its funding opportunities.

NSERC is fulfilling its commitment to Indigenous research and reconciliation through a variety of its own initiatives, as well as through activities organized in collaboration with SSHRC and CIHR. The agencies also co-developed a strategic plan to identify alternative ways of supporting research by and with Indigenous communities and advance new support models for Indigenous research and research training. The plan, titled [Setting New Directions to Support Indigenous Research and Research Training in Canada 2019-2022](#), was launched by the agencies on behalf of the [CRCC](#). It sets out 4 directions to strengthen the capacity of First Nations, Inuit and Métis communities to lead their own research and partner with the broader research community. The strategic plan seeks to further build and strengthen relationships with First Nations, Inuit and Métis Peoples; support the research priorities of Indigenous Peoples; increase access for Indigenous Peoples to agencies' program funding; and champion Indigenous leadership, self-determination and capacity-building in research. This includes supporting the [Indigenous Leadership Circle in Research](#) and co-developing, with Indigenous advisory bodies, a framework to support the self-identification of First Nations, Inuit and Métis Peoples in tri-agency programs. Through ongoing engagement with Indigenous Peoples, NSERC and its CRCC partners will implement research and a research training model that contribute to reconciliation.

To help bring Indigenous-led research to the forefront of the NSE, NSERC is working on several initiatives to advance Indigenous research priorities. The agency's activities aim to improve access to its programs and enhance its engagement with Indigenous communities. Within this context, NSERC signed a memorandum of understanding with [Inuit Tapiriit Kanatami](#) to advance Inuit self-determination in research. Collaborating with Inuit Tapiriit Kanatami, the agency is developing new funding possibilities to support the implementation of the [National Inuit Strategy on Research](#). Informed by these initiatives, the agency has developed a new definition of "Indigenous research" that creates better conditions for researchers to articulate research that supports Indigenous priorities and approaches.

The Tri-agency [College and Community Innovation program](#) is also aligned with the tri-agency's commitment to supporting Indigenous research and research training models that lead to meaningful new relationships with First Nations, Inuit and Métis Peoples. Administered by NSERC, the program supports research that respectfully involves and engages with Indigenous Peoples. It works to strengthen the links between Indigenous communities and colleges, polytechnics and CÉGÉPs. NSERC is also identifying ways to encourage more Indigenous youth to pursue science and engineering at university. The [NSERC Indigenous Student Ambassadors program](#) aims to engage Indigenous students and fellows in promoting interest and participation in the NSE by visiting Indigenous communities and schools in Canada. The [Indigenous Scholars Awards and Supplements Pilot Initiative](#), delivered in collaboration with CIHR and SSHRC, is another example of NSERC's efforts to develop effective training mechanisms that support Indigenous talent in STEM fields. The initiative provides financial support to meritorious Indigenous students who apply for the Canada Graduate Scholarships (Master's program) and is expected to increase the number of awards offered to Indigenous students.

To further engage with the Indigenous research community, NSERC actively participates in key Indigenous-led fora (such as the [Turtle Island Indigenous Science Conference](#)) and engages with Indigenous-led advisory bodies (examples include the I-STEM Cluster Advisory Circle and the Tri-Agency Indigenous Leadership Circle in Research). Moreover, work is underway to develop a comprehensive and long-term engagement strategy that aligns with the [United Nations Declaration on the Rights of Indigenous Peoples](#). As part of that work, NSERC also developed an Indigenous Scholar-in-Residence position to provide strategic advice on its Indigenous-focused priorities. The Indigenous Scholar in Residence will engage with Indigenous advisory committees to the federal agencies, help shape and direct culturally safe and appropriate engagement processes with Indigenous rights holders and play a central role in supporting NSERC's reconciliation efforts with First Nations, Inuit and Métis Peoples. Finally, to foster internal engagement, NSERC is organizing sessions to raise awareness of Indigenous research issues.

## **Equity, diversity and inclusion in research**

Achieving a more equitable, diverse and inclusive research enterprise is essential to generating excellent, innovative and impactful research. In recent years, the federal research funding agencies have undertaken several initiatives to foster a more equitable, diverse and inclusive research ecosystem in Canada. Under the CRCC's leadership, NSERC, SSHRC and CIHR have also developed an action plan that will guide initiatives and decisions to contribute to a system-wide transformation. The [Tri-Agency Equity, Diversity and Inclusion Action Plan for 2018–2025](#) outlines measures to increase equitable and inclusive access to funding opportunities offered by the federal granting agencies. It also details how the agencies can influence the development of an inclusive post-secondary research system and culture in Canada.

Since 2018, NSERC has collected data to help identify EDI-related barriers and inform decision-making in its funding programs. NSERC intends to synthesize its findings to date to identify gaps and best practices and provide recommendations for future analyses. NSERC also recruited its first [EDI Scholar in Residence](#), who provides a researcher's perspective on the integration of EDI considerations into the agency's activities.

Together with SSHRC and CIHR, NSERC is also delivering a new [initiative to support Black scholars](#), which will further address barriers to equitable participation. Through established scholarship and fellowship programs, this initiative seeks to strengthen the research capacity of Black scholars and enrich Canadian research and innovation. In its effort to support Black researchers, NSERC is also sponsoring the [Canadian Black Scientists Network](#) by providing financial or in-kind support for the network's activities and programs.

Additionally, through the new [NSERC Accessibility Plan](#), the agency intends to identify, remove and prevent barriers to accessibility. In compliance with the [Accessible Canada Act](#), the agency will work to apply the plan in both external programs and policies and internal activities.

**Target theme:** Advancing reconciliation with First Nations, Inuit, and the Métis communities

**Target:** Between 2023 and 2026, and every year on an ongoing basis, develop and table annual progress reports on implementing *the United Nations Declaration on the Rights of Indigenous Peoples Act* (Minister of Justice and Attorney General of Canada)

IMPLEMENTATION STRATEGY	DEPARTMENTAL ACTION	PERFORMANCE INDICATOR STARTING POINT TARGET	HOW THE DEPARTMENTAL ACTION CONTRIBUTES TO THE FSDS GOAL AND TARGET AND, WHERE APPLICABLE, TO CANADA’S 2030 AGENDA NATIONAL STRATEGY AND SDGS	RESULTS ACHIEVED
<p>Implement the <i>United Nations Declaration on the Rights of Indigenous Peoples Act</i></p>	<p>Support Indigenous research and research training.</p> <p><b>Program:</b> Research Training and Talent Development Discovery Research Research Partnerships</p>	<p><b>Performance indicator:</b> Percentage of newly funded recipients who self-identify as Indigenous Peoples. Progress toward the target will be reported annually.</p> <p><b>Starting point:</b> 2.4% in 2022-23</p> <p><b>Target:</b> At least 3% by 2027</p>	<p>NSERC is committed to supporting and promoting research by Indigenous Peoples and to advancing research excellence by reducing systemic barriers experienced by Indigenous Peoples. NSERC is fulfilling its commitment to Indigenous research and reconciliation through its own diverse initiatives and through activities organized in collaboration with CIHR and SSHRC.</p> <p><b>Relevant targets or ambitions:</b> <i>CIF Ambition:</i> Canadians live free of discrimination and inequalities are reduced</p> <p><i>CIF Indicator:</i> 10.2.1 Proportion of the population reporting discrimination or unfair treatment</p> <p><i>GIF Target:</i> 10.3 Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard</p>	<p><b>Indicator result:</b> 2.4% in 2023-24</p>

### Implementation strategies supporting the goal

This section is for implementation strategies that support the goal “**Advance reconciliation with Indigenous Peoples and take action on inequality**” but not a specific FSDS target

IMPLEMENTATION STRATEGY	DEPARTMENTAL ACTION	PERFORMANCE INDICATOR STARTING POINT TARGET	HOW THE DEPARTMENTAL ACTION CONTRIBUTES TO THE FSDS GOAL AND TARGET AND, WHERE APPLICABLE, TO CANADA'S 2030 AGENDA NATIONAL STRATEGY AND SDGS	RESULTS ACHIEVED
Invest in targeted scholarships	<p>Support Black research trainees through targeted scholarships</p> <p><b>Program:</b> Research Training and Talent Development</p>	<p><b>Performance indicator:</b> Percentage of research trainees supported through targeted scholarships who self-identify as Black</p> <p><b>Starting point:</b> 2 USRA: 1.4% CGS-M: 1.3% CGS-D: 1.0% PDF: 1.7%</p> <p><b>Target:</b> USRA: 4.0% CGS-M: 3.6% CGS-D: 3.9% PDF: 5.4%</p>	<p>This departmental action aligns with the 2022 to 2026 FSDS commitment to promoting equality for Black, racialized, religious minorities and 2SLGBTQI+ communities and for persons with disabilities. These targeted scholarships aim to support Black students and postdoctoral fellows in Canada and to increase the number and proportion of Black research trainees directly supported by the Tri-agency. This will contribute to strengthening the research capacity of Black scholars, enriching Canadian research and innovation, and making Canada's research culture more equitable, diverse and inclusive.</p> <p><b>Relevant targets or ambitions:</b> <i>CIF Ambition:</i> Canadians live free of discrimination and inequalities are reduced  <i>CIF Indicator:</i> 10.2.1 Proportion of the population reporting discrimination or unfair treatment  <i>GIF Target:</i> 10.3 Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard</p>	<p><b>Indicator result:</b> 2023-24 USRA: 5.5% CGS-M: 3.5% CGSD/PGSD: 2.7% PDF: 4.9%</p> <p>Note: The target for this indicator is for 2027</p>





## GOAL 12: REDUCE WASTE AND TRANSITION TO ZERO-EMISSION VEHICLES

### FSDS Context:

#### Supporting the transition to a net-zero, circular economy

NSERC contributes to the Government of Canada's commitment to achieving net-zero emissions by 2050 and transitioning to a circular economy by implementing practices within its internal services that reduce the environmental impact of its infrastructure. In compliance with the [Policy on Green Procurement](#) and in support of the whole-of-government effort to promote environmental stewardship, NSERC is fulfilling its commitment to reducing its carbon footprint by greening its acquisition operations.

By adhering to the policy, NSERC contributes to its expected results, which include leveraging the federal government's purchasing power to achieve economies of scale when acquiring environmentally preferable goods and services; adopting more environmentally responsible planning, acquisition, use and disposal practices in the federal government; supporting a healthier workplace for employees and for citizens in general by purchasing environmentally preferable goods and services; and creating a federal government that is resilient to climate change.

In keeping with the policy's objectives and in response to the [Greening Government Strategy](#), NSERC continues to integrate environmental performance considerations into its procurement processes and to play an active role in promoting sustainable production and consumption.

NSERC also acknowledges that reducing plastic pollution is a global priority. As such, it supports the Canada-wide [Strategy on Zero Plastic Waste](#), which promotes a circular economy in which plastic products and materials can be reused, remanufactured or recycled. Informed by the strategy, the agency continues to implement procurement processes that reduce plastic pollution and waste.

In the last 12 years, NSERC has taken the following steps toward greening its operations:

- promoting the use of standing offers for goods and furniture that support the policy
- meeting with internal clients to review their yearly needs, challenging them to reduce their consumption, and confirming that the volume requested is actually required
- encouraging internal client groups to consider greener products and to share documents digitally (to reduce the use of paper, postage and courier services)
- advocating for the purchase or rental of recycled or reused material when acquiring goods
- increasing awareness of the policy and of green procurement practices among managers and materiel and procurement specialists.

Through these initiatives, NSERC has ensured that 100% of its procurement specialists receive the necessary training on the policy's requirements, enabling them to integrate environmental considerations in their decision-making processes. NSERC also uses copy paper and commercial printing resources that contain 100% recycled material and are certified to a recognized environmental standard to reduce the environmental burden of their production. Moreover, the agency minimizes packaging waste and the use of paper documents (such as invoices) by incorporating environmental criteria in its contracts. This effort has the additional benefit of raising awareness among suppliers and motivating them to reduce their environmental impact.

Moving forward, NSERC will continue to support relevant policies through additional initiatives, including further incorporating green criteria into its procurement operational documents and raising further awareness on green acquisition practices among employees through training. The first strategy will incorporate green criteria into the procurement's statement of requirements and other procurement documents. This serves multiple purposes: it allows the organization to promote sustainable procurement practices, meet regulatory requirements and drive innovation. By setting clear expectations for green performance in its procurement documents, NSERC will incentivize suppliers to develop and offer innovative, environmentally friendly products and services. This will drive market transformation and enable the agency to access and adopt sustainable solutions that align with environmental goals. The second strategy, centred on employee education, involves embedding an overview of the key principles, procedures and benefits of green procurement in NSERC's in-house training. The training will explore topics like defining green procurement, understanding sustainable supplier selection, and implementing practices that promote environmentally friendly and sustainable behaviours.

**Target theme:** Federal Leadership on Responsible Consumption

**Target:** The Government of Canada’s procurement of goods and services will be net-zero emissions by 2050, to aid the transition to a net-zero, circular economy (All Ministers)

IMPLEMENTATION STRATEGY	DEPARTMENTAL ACTION	PERFORMANCE INDICATOR STARTING POINT TARGET	HOW THE DEPARTMENTAL ACTION CONTRIBUTES TO THE FSDS GOAL AND TARGET AND, WHERE APPLICABLE, TO CANADA’S 2030 AGENDA NATIONAL STRATEGY AND SDGS	RESULTS ACHIEVED
Strengthen green procurement criteria	Integrate environmental considerations into procurement management processes and controls  <b>Program:</b> Internal Services	<p><b>Performance indicator:</b>                      Percentage of in-house procurement documents implementing the <i>Policy on Green Procurement</i> requirements</p> <p><b>Starting point:</b>                      75% in 2023</p> <p><b>Target:</b>                      100% by 2027</p>	<p>Integrating environmental considerations into the procurement decision-making process is expected to result in more environmentally responsible acquisition practices and an overall reduction of the environmental impact of NSERC’s infrastructure. Implementing measures that prevent and reduce waste will support this goal and the government’s commitment toward a circular economy.</p> <p><b>Relevant targets or ambitions:</b>  <i>CIF Ambition:</i> Canadians consume in a sustainable manner</p> <p><i>CIF Indicator:</i> 12.2.1 Proportion of businesses that adopted selected environmental protection activities and management practices</p> <p><i>GIF Target:</i> 12.7 Promote public procurement practices that are sustainable, in accordance with national policies and priorities</p>	<p><b>Indicator result:</b>                      80% in 2023-24</p>

IMPLEMENTATION STRATEGY	DEPARTMENTAL ACTION	PERFORMANCE INDICATOR STARTING POINT TARGET	HOW THE DEPARTMENTAL ACTION CONTRIBUTES TO THE FSDS GOAL AND TARGET AND, WHERE APPLICABLE, TO CANADA'S 2030 AGENDA NATIONAL STRATEGY AND SDGS	RESULTS ACHIEVED
Strengthen green procurement criteria	Provide all relevant employees and suppliers with the tools they need to support green procurement practices  <b>Program:</b> Internal Services	<b>Performance indicator:</b> Percentage of all relevant procurement contracts that incorporate green procurement considerations through a "Statement of Requirement" clause  <b>Starting point:</b> New initiative  <b>Target:</b> 100% by 2027	Employee training and contract stipulations are 2 tools that can encourage sustainable consumption and production. Green procurement incorporates environmental criteria into purchasing decisions. Procurement specialists who are trained to apply such criteria can award contracts while taking environmental considerations into account. Accordingly, they are expected to purchase green goods and services.	<b>Indicator result:</b> 75% in 2023-24
Strengthen green procurement criteria	Provide all relevant employees and suppliers with the tools they need to support green procurement practices  <b>Program:</b> Internal Services	<b>Performance indicator:</b> Percentage of procurement and/or materiel management specialists who have completed the Canada School of Public Service Green Procurement course (COR405) or equivalent  <b>Starting point:</b> 100% in 2023  <b>Target:</b> Maintain a 100% course completion rate between 2024 and 2027	By monitoring employee purchasing behaviour and clearly defining expectations for green procurement contracts, NSERC will incentivize suppliers to reduce the environmental impacts of their goods, services and supply chains.  <b>Relevant targets or ambitions:</b> <i>CIF Ambition:</i> Canadians consume in a sustainable manner  <i>CIF Indicator:</i> 12.2.1 Proportion of businesses that adopted selected environmental protection activities and management practices  <i>GIF Target:</i> 12.7 Promote public procurement practices that are	<b>Indicator result:</b> 100% in 2023-24

IMPLEMENTATION STRATEGY	DEPARTMENTAL ACTION	PERFORMANCE INDICATOR STARTING POINT TARGET	HOW THE DEPARTMENTAL ACTION CONTRIBUTES TO THE FSDS GOAL AND TARGET AND, WHERE APPLICABLE, TO CANADA'S 2030 AGENDA NATIONAL STRATEGY AND SDGS	RESULTS ACHIEVED
			sustainable, in accordance with national policies and priorities	



## GOAL 13: TAKE ACTION ON CLIMATE CHANGE AND ITS IMPACTS

### FSDS Context:

#### Supporting research on climate change

Through the research it funds, NSERC is making key contributions to resolving global challenges, such as climate change. Researchers supported by NSERC funding are investigating and shedding light on pressing environmental issues and climate change adaptation. Their research is leading to solutions and helping to shape the best possible future for Canadians and the world. Further, NSERC leads and participates in several international and collaborative research initiatives that aim to address global challenges caused by climate change. For example, through the [Alliance Missions grants: Anthropogenic greenhouse gas emissions](#), NSERC is funding research that will increase the scientific information available to support government decision-making related to achieving net-zero emissions targets by 2050.

Under the International stream of the tri-agency New Frontiers in Research Fund, NSERC is participating in the [International Joint Initiative for Research in Climate Change Adaptation and Mitigation](#). This multilateral initiative involves 9 international funding partners. The call, launched in 2023, will lead to funding for a portfolio of international projects working to develop adaptation and mitigation strategies to support groups that are most vulnerable to the impacts of climate change.

Under the [National Science Foundation Global Centres initiative](#) and in collaboration with the National Science Foundation (US), SSHRC, Australia's Commonwealth Scientific and Industrial Research Organisation, and UK Research and Innovation—NSERC will help create international hubs of research excellence focusing on climate change and clean energy. These centres will advance knowledge, empower communities, and generate discoveries and innovative solutions on a regional and/or global scale.

Through the [NSERC-SSHRC Sustainable agriculture research initiative](#), NSERC is also responding to the call for action toward sustainable agriculture to fight climate change. In collaboration with SSHRC and Agriculture and Agri-Food Canada, the agency will provide funding for fundamental and applied research, knowledge transfer and related activities. This will support transformative science that will help transition the agriculture sector to a net-zero emissions economy by 2050. Through this funding, the agencies hope to catalyze multidisciplinary collaborations among university, college, government and non-academic partners in this area.

### **Greening NSERC's operations**

NSERC is also modernizing its workplace, systems and operations to create a work environment that is socially and environmentally sustainable. NSERC recently moved to a new location in the National Capital Region, joining one of the most sustainable communities in Canada. The development is committed to reducing its ecological footprint by applying the guiding principles of the [One Planet Living](#) sustainability framework and developing its own action plan. Because environmental sustainability is an essential pillar of that plan, this new community relies entirely on zero-carbon energy sources for its operations, which include supporting NSERC's new headquarters. This is being achieved by creating a district energy system focused on ensuring that all energy needs are met on a net-zero carbon basis. The community also emphasizes sustainable transport options, with bike lanes, walking paths, public transit, car-sharing and electric vehicle charging points.

Through its Workplace Renewal initiative, NSERC is embracing additional green practices, such as a digital-first policy. Moreover, the transition to a hybrid working model has provided NSERC with a renewed opportunity to evaluate the environmental footprint of its professional output. This, paired with its new headquarters' commitment to sustainable practices, is keeping NSERC focused on supporting a greener workplace. In addition, the agency is developing its first business continuity plan to ensure it is well positioned to respond to disruptions, such as those caused by natural disasters and other impacts of climate change. Through these measures, NSERC will play a leadership role in supporting the [Greening Government Strategy](#) and the Government of Canada's commitment to reduce GHG emissions by 2050.

**Target theme:** Federal Leadership on Greenhouse Gas Emissions Reductions and Climate Resilience

**Target:** The Government of Canada will transition to net-zero carbon operations for facilities and conventional fleets by 2050 (All Ministers)

IMPLEMENTATION STRATEGY	DEPARTMENTAL ACTION	PERFORMANCE INDICATOR STARTING POINT TARGET	HOW THE DEPARTMENTAL ACTION CONTRIBUTES TO THE FSDS GOAL AND TARGET AND, WHERE APPLICABLE, TO CANADA'S 2030 AGENDA NATIONAL STRATEGY AND SDGS	RESULTS ACHIEVED
<p>Implement the Greening Government Strategy through measures that reduce greenhouse gas emissions, improve climate resilience, and green the government's overall operations</p>	<p>Implement electronic disposition plans to reduce the data storage space used in the agencies' systems that manage information and data<sup>3</sup></p> <p><b>Program:</b> Internal services</p>	<p><b>Performance indicator:</b> Data storage space containing the agencies' electronic information and data<sup>3</sup></p> <p><b>Starting point:</b> 15 TB in 2023</p> <p><b>Target:</b> 8 TB in 2027</p>	<p>With the transition to a digital-first work environment, NSERC must consider how to responsibly manage electronic data and information and reduce e-waste. The goal is to limit the carbon footprint associated with data storage. NSERC is putting good practices in place to ensure that the information and data it creates and stores while conducting its activities are managed in a way that limits any negative environmental impact.</p> <p><b>Relevant targets or ambitions:</b> <i>CIF Ambition:</i> Canadians reduce their greenhouse gas emissions  <i>CIF Indicator:</i> 13.1.1 Greenhouse gas emissions  <i>GIF Target:</i> 13.2 Integrate climate change measures into national policies, strategies and planning</p>	<p><b>Indicator result:</b> 11.5 TB in 2023-24</p>



# Integrating Sustainable Development

NSERC will continue to ensure that its decision-making process includes consideration of FSDS goals and targets, including – where appropriate – through the implementation of Strategic Environmental Assessments (SEAs).

As required by the Cabinet Directive on the [Cabinet Directive on the Environmental Assessment of Policy, Plan and Program Proposals](#), an SEA is conducted for a policy, plan or program proposal that, once implemented, could result in important environmental effects and includes an analysis of the impacts of the given proposal on the environment. The SEA process is one of the tools through which the FSDS is further integrated in the government’s decision making; it helps ensure that the environment is considered when developing proposals, while also reporting on how those proposals contribute to the goals and targets of the FSDS.

SEA results are communicated through public statements. The purpose of the public statement is to demonstrate that the environmental effects, including the impacts on achieving the FSDS goals and targets of the approved policy, plan or program have been considered during proposal development and decision making.

Although NSERC has never launched an initiative that required an SEA, the agency complies with the Cabinet Directive on the Environmental Assessment of Policy, Plan and Program Proposals, where applicable, and continues to ensure that its decision-making processes include considerations of FSDS goals and targets.

One way in which NSERC is further integrating sustainable development into its operations is by complying with the [Impact Assessment Act](#). The agency has established [Guidelines on Impact Assessment](#) to ensure that NSERC-funded research, whether conducted inside or outside of Canada,



fosters sustainability and protects the environment from adverse effects. This includes consideration of health, social and economic components. The guidelines also require consideration of the potential impacts on Indigenous and treaty rights. In so doing, the guidelines foster respect for Indigenous Peoples in support of reconciliation in Canada.

The guidelines allow NSERC to incorporate environmental and sustainable development considerations into its funding decisions and to ensure that agency-supported project proposals contribute to the FSDS and foster the principles of the UN 2030 Agenda.

NSERC did not complete any detailed SEAs in 2023-24.

<sup>1</sup> Target adjusted to the forecasted Grants and Scholarships spending in future years.

<sup>2</sup> The funds support Black scholars at the undergraduate, masters, doctoral, postdoctoral stages through current funding opportunities: Undergraduate Student Research Award (USRA), Canada Graduate Scholarships (CGS) – Master’s (M) and Doctoral (D) levels, Postdoctoral Fellowship (PDF).

<sup>3</sup> This initiative and the data reported are for both NSERC and SSHRC because the 2 agencies share some administrative services and systems, including information management.