



2024 to 2025 Departmental Sustainable Development Strategy Report

National Research Council of Canada

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National Research Council of Canada
1200 Montreal Road
Building M-58
Ottawa, ON K1A 0R6

Telephone: 613-993-9101
Toll-free: 1-877-NRC-CNRC or 1-877-672-2672
Fax: 613-991-9096
Email: info@nrc-cnrc.gc.ca

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Executive summary

The 2024 to 2025 Departmental Sustainable Development Strategy (DSDS) report outlines the National Research Council of Canada's (NRC) progress on its 2023 to 2027 DSDS commitments and its contributions to the Government of Canada's Federal Sustainable Development Strategy (FSDS), which supports all 3 dimensions of sustainable development: social, economic and environmental.

Sustainability continues to be a core research and innovation priority for the NRC, as emphasized in the [NRC's 2024–29 Strategic Plan, Research Powering Innovation for Canada](#). As Canada advances its efforts to address climate change, enhance resilience and build a prosperous green economy, the NRC is leveraging its scientific expertise and partnerships to develop impactful solutions. In fiscal year 2024 to 2025, the NRC continued to make measurable contributions to its 59 DSDS commitments. Highlights include collaborating with Indigenous and Northern partners to enhance food security and water access, and advancing battery materials research to support the clean energy transition.

The NRC's broad capabilities are supporting progress on 13 of the FSDS goals:

- Zero hunger: advancing technologies to strengthen Canada's food systems in collaboration with community and industry partners
- Good health and well-being: supporting the development of Northern-led solutions to improve health resources in Arctic and remote regions
- Quality education: increasing Northern and Indigenous R&D capacity through training and experiential learning opportunities
- Clean water and sanitation: working with Indigenous and Northern partners to improve the availability and quality of water and sewage services
- Affordable and clean energy: conducting research to optimize battery materials and improve energy storage technologies
- Decent work and economic growth: helping SMEs grow and commercialize clean technologies
- Industry, innovation and infrastructure: producing guidelines and standards to reduce climate risks for new buildings
- Reduced inequalities: providing communities with digital tools to support Indigenous language revitalization
- Sustainable cities and communities: developing new instrumentation for monitoring air pollutants like black carbon
- Responsible consumption and production: collaborating on technologies that support decarbonization in sectors such as aviation
- Climate action: reducing greenhouse gas emissions from NRC-owned buildings and operations
- Life below water: creating tools to monitor and model ocean and estuary conditions in a changing climate
- Life on land: assessing NRC properties for their contributions to biodiversity and conservation goals

Through continued commitment to sustainability, the NRC is advancing its DSDS goals and helping Canada make meaningful progress toward [the United Nations Sustainable Development Goals](#). Its work supports a more resilient, inclusive and environmentally responsible future for all Canadians.

Introduction to the 2024 to 2025 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 National Research Council of Canada (NRC) supports the goals laid out in the FSDS through the activities described in the [NRC's 2023 to 2027 Departmental Sustainable Development Strategy \(DSDS\)](#). This Report provides a report on progress related to the NRC's DSDS in the fiscal year 2024 to 2025.

The [Federal Sustainable Development Act](#) also sets out [7 principles](#) that must be considered in the development of the FSDS as well as the DSDSs. These basic principles have been considered and incorporated in the NRC's DSDS and 2024 to 2025 DSDS Report.

To promote coordinated action on sustainable development across the Government of Canada, this 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 now captures progress on SDG initiatives that fall outside the scope of the FSDS.¹

¹ The NRC leveraged its internal generative AI tool (AI Zone) to support the development of content within this report; all AI generated content has been reviewed and validated by a human.



The National Research Council of Canada's commitments



The NRC commitments included in this report are focused on the 13 [Sustainable Development Goals](#) (SDGs) of greatest relevance to the NRC's research and technical services; however, the NRC is working to advance sustainable development across all the SDGs.



GOAL 2: SUPPORT A HEALTHIER AND MORE SUSTAINABLE FOOD SYSTEM

FSDS context:

Climate change continues to affect every facet of Canada’s food system, from crop yields and water quality to marine ecosystems and food security in the North. To build resilience and long-term sustainability, the NRC is working closely with partners in agriculture and marine sectors through applied research and innovation. In fiscal year 2024 to 2025, the NRC launched 18 new collaborations focused on developing technologies that can strengthen and support Canada’s food systems.

To address the unique challenges of Arctic and Northern food systems, the NRC is exploring ways to improve access to safe, culturally appropriate food resources. Under its [Arctic and Northern Challenge program \(ANCP\)](#), the NRC is working on technologies designed for remote environments and supporting Northern-led initiatives. A new round of development grants is already seeing increased uptake, due to simplified reporting, strong NRC support and inclusive review processes guided by a Northern-based advisory committee. By supporting early-stage, Northern-led innovation, particularly among small businesses, the program is helping to build stronger local food systems, improve food security and promote sustainable practices.

Maintaining food and environmental safety in a changing climate is also a key focus. The NRC is developing [Certified Reference Materials \(CRMs\)](#) to help detect and monitor emerging risks such as natural toxins and heavy metals. In fiscal 2024 to 2025, the NRC released 2 new CRMs related to food safety and another 2 CRMs related to environmental safety. These tools can be used to validate testing methods, improve measurement precision and track contaminants, especially as climate change contributes to new and evolving threats to the Canadian food system.

Target theme: Sustainable food systems

Target: By 2030, support improvement in the environmental performance of the agriculture sector by achieving a score of 71 or higher for the Index of Agri-Environmental Sustainability (Minister of Agriculture and Agri-Food)

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
Build knowledge for sustainable agriculture	<p>Conduct research on agriculture and marine food technologies to improve the sustainability, resiliency and security of Canada’s food system</p> <p>Programs: Aquatic and Crop Resource Development-Collaborative Science, Technology and Innovation Program-Sustainable Protein Production program</p>	<p>Performance indicator: Number of collaborations with clients supporting the development of technologies to improve agriculture or marine food systems</p> <p>Starting point: 15 new collaborations in 2022–23</p> <p>Target: 20 new collaborations by March 31, 2027</p>	<p>By advancing research on agriculture and marine food technologies, the NRC is enabling the sustainable transformation of Canadian agriculture and marine bioresources into food and higher value products.</p> <p>Relevant ambition and target: CIF ambition: Canadian agriculture is sustainable</p> <p>CIF indicator: Index of Agri-Environmental Sustainability (2.2.1)</p> <p>GIF target: By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality (2.4).</p>	<p>Indicator result: 18 new collaborations in FY 2024–25</p> <p>Notes: Performance indicator, starting point and target were revised in November 2024 so a cumulative number is not included in the FY 2024–25 report</p>

Implementation strategies supporting the goal

This section is for implementation strategies that support the goal “**Support a healthier and more sustainable food system**” 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
Enhance Indigenous and northern food security	<p>Conduct applied research and develop technologies to improve the accessibility, availability and quality of culturally appropriate Northern food resources</p> <p>Program: Collaborative Science, Technology and Innovation Program-Arctic and Northern Challenge program</p>	<p>Performance indicator: Number of Northern-led research projects supporting the development of technologies to improve Northern and Arctic food resources</p> <p>Starting point: 0 in 2022–23</p> <p>Target: 4 per year starting in 2023–24</p>	<p>By participating in Northern-led projects dedicated to improving Northern and Arctic food resources, the NRC will support Northern and Arctic communities in having adequate economic and physical access at all times to quality foods that are safe and nutritious.</p> <p>Relevant ambitions and targets: CIF ambition: Canadians have access to sufficient, affordable and nutritious food</p> <p>CIF indicator: Prevalence of food insecurity (2.1.1)</p> <p>GIF target: By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round (2.1).</p>	<p>Indicator result: 5 projects in FY 2024–25</p>
Ensure the safety of Canada’s food system	<p>Develop measurement tools and standards related to food safety and environmental safety</p> <p>Program: Metrology</p>	<p>Performance indicator: Number of new certified reference materials (CRMs) related to food and environmental safety</p> <p>Starting point: 0 in FY 2022–23</p> <p>Target: 5 by March 31, 2027</p>	<p>By developing new measurement tools such as CRMs, the NRC will help to ensure the safety and security of the Canadian food system and will support its protection against emerging natural toxins due to climate change.</p> <p>Relevant ambitions and targets: CIF ambition: N/A CIF indicator: N/A GIF target: N/A</p>	<p>Indicator result: 4 new CRMs in FY 2024–25 (adding a cumulative total of 9 CRMs under 2023–2027 DSDS to the starting point value)</p> <p>Notes: 2 new CRMs released for food safety, and 2 new CRMs released for environmental safety.</p>



GOAL 3: SUPPORT MENTAL HEALTH AND ADOPT HEALTHY BEHAVIOURS

FSDS context:

The NRC’s [Arctic and Northern Challenge program](#) is fostering a broad and culturally grounded understanding of wellness that integrates mind, body, spirit and emotions. In Northern and Indigenous communities, health is closely tied to cultural continuity and requires care systems that are respectful, community-driven and designed to be accessible and responsive to local needs.

This year, the NRC participated in 4 Northern-led projects dedicated to developing technologies to improve Arctic and Northern health resources. These projects explored ways to protect lung health, apply digital tools to improve mental health and use virtual reality to support cultural and land-based healing practices. One example is the Anirniq project in Nunavik, which is named after the Inuktitut word for “breath of life”. This initiative responds to growing lung health concerns linked to climate change, such as mould in homes and poor air quality from wildfires. In partnership with the Inuit-led Kativik Municipal Housing Bureau and the Ungava Tulattavik Health Centre, local researchers, healthcare workers and community members are co-developing a lung health program. The program integrates biomedical knowledge, housing conditions and social determinants of health, and is grounded in the Nunavik Inuit cultural model.

Target theme: Mental health

Target: By March 2027, reduce the percentage of Canadians (aged 15+) with a mental disorder who have expressed that they have an unmet care need to 22% at most (Minister of Health)

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>Work with partners and stakeholders to expand access to mental health services</p>	<p>Conduct applied research and develop technologies to improve the accessibility, comprehensiveness and appropriateness of Northern health resources</p> <p>Program: Collaborative Science, Technology and Innovation Program-Arctic and Northern Challenge program</p>	<p>Performance indicator: Number of Northern-led research projects supporting the development of technologies to improve Northern and Arctic health resources</p> <p>Starting point: 0 in 2022–23</p> <p>Target: 4 per year starting in 2023–24</p>	<p>By participating in Northern-led projects focused on improving Northern and Arctic health technologies, the NRC will support the improvement of health resources in the North and Arctic, and increased physical, mental, emotional and spiritual wellbeing.</p> <p>Relevant ambitions and targets: CIF ambition: Canadians have healthy and satisfying lives</p> <p>CIF indicator: Percentage of Canadians who perceived their mental health as very good to excellent (3.7.1)</p> <p>GIF target: By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being (3.4)</p>	<p>Indicator result: 4 projects in FY 2024–25</p>



GOAL 4: PROMOTE KNOWLEDGE AND SKILLS FOR SUSTAINABLE DEVELOPMENT

FSDS context:

Building research and training capacity in the North is a core goal of the NRC's [Arctic and Northern Challenge program](#). Through this program, the NRC is prioritizing Northern-led research projects with a focus on Northern capacity building to address pressing issues confronting Northerners. The program is guided by several key principles, including:

- building true partnerships based on mutual recognition, trust and transparency
- following the "nothing about us, without us" principle by enabling the leadership of Northern First Nations, Inuit and Métis in research
- protecting the rights of Northerners and Indigenous Peoples living in the North to control and influence research conducted in their communities
- respecting and including local Indigenous Knowledge and epistemologies in the design, execution, interpretation and sharing of research

In fiscal year 2024 to 2025, the program trained 133 people through project-specific training, mentorship, courses, and hands-on development experiences, surpassing the annual target of 30 by a wide margin. This achievement reflects a strong commitment to building the local expertise needed to address climate-driven challenges in the North.

Implementation strategies supporting the goal

This section is for implementation strategies that support the goal **“Promote knowledge and skills for sustainable development”** 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
Support capacity in Indigenous communities	<p>Increase Northern and Indigenous R&D capacity and conduct research to solve climate-driven challenges faced by Northerners</p> <p>Program: Collaborative Science, Technology and Innovation Program-Arctic and Northern Challenge program</p>	<p>Performance indicator: Number of Northern and Indigenous People trained through ANCP research projects*</p> <p>Starting point: 0 in 2022-23</p> <p>Target: 30 people per year starting in 2023-24</p> <p>*Training includes project-specific training, courses, mentoring, and experiential development</p>	<p>By conducting research projects, the NRC will support increased individual, organizational and community R&D capacity to address pressing issues confronting Northern and Arctic communities.</p> <p>Relevant ambitions and targets: CIF ambition: N/A CIF indicator: N/A GIF target: N/A</p>	<p>Indicator result: 133 people trained in FY 2024-25</p>



GOAL 6: ENSURE CLEAN AND SAFE WATER FOR ALL CANADIANS

FSDS context:

For many Arctic and Northern communities, safe, clean drinking water remains an ongoing challenge, despite its vital role in sustaining community health, cultural practices, economic stability and spiritual connection to the land.

In fiscal year 2024 to 2025, the [NRC's Arctic and Northern Challenge program](#) continued to support 3 projects focused on improving water infrastructure and quality across the North. These included:

- assessing groundwater vulnerability in Whitehorse, Yukon
- supporting future water supply planning in Pangnirtung, Nunavut
- contributing to the inclusive design of pilot water equipment in Nunavik to improve household water tank quality through innovative water strategies

Implementation strategies supporting the goal

This section is for implementation strategies that support the goal “**Ensure clean and safe water for all Canadians**” 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
Work with partners on drinking water quality	<p>Conduct applied research and develop technologies to improve the availability, accessibility and quality of Northern water resource</p> <p>Program: Collaborative Science, Technology and Innovation Program-Arctic and Northern Challenge program</p>	<p>Performance indicator: Number of Northern-led research projects focused on improving Northern and Arctic water and sewage services</p> <p>Starting point: 0 in 2022-23</p> <p>Target: 4 per year starting in 2023-24</p>	<p>By participating in Northern-led research projects focused on improving Northern and Arctic water and sewage services, the NRC will support the development of technologies that will help increase the quality, availability and accessibility of the Northern safe water supply.</p> <p>Relevant ambitions and targets: CIF ambition: Canadians have access to drinking water and use it in a sustainable manner</p> <p>CIF indicator: Percentage of municipalities across Canada with sustained drinking water advisories (6.2.1)</p> <p>GIF target: By 2030, achieve universal and equitable access to safe and affordable drinking water for all (6.1)</p>	<p>Indicator result: 3 projects in FY 2024-25</p> <p>Notes: The number of projects funded on a specific topic depends on the focus areas of proposals submitted and the rankings of the place-based review committees. As a result, only 3 projects in this area were funded in FY 2024-25.</p>



GOAL 7: INCREASE CANADIANS' ACCESS TO CLEAN ENERGY

FSDS context:

Critical minerals like lithium, cobalt and rare earth elements play a central role in Canada's clean energy transition. These resources are key to producing batteries for electric vehicles and energy storage systems, and they support wider efforts to electrify transportation and power systems. [Canada's Critical Minerals Strategy](#) is focused on securing a stable and sustainable supply of these minerals to reduce reliance on imports and strengthen domestic manufacturing and innovation.

In fiscal year 2024 to 2025, the NRC advanced 13 collaborative research projects through its [Critical Battery Materials Initiative](#), working with universities such as Waterloo and Toronto, and Canadian SMEs such as Corem, NiVolt and Pulsenics. These projects aim to speed up the discovery of new materials and improve how critical minerals are processed for a stronger battery supply chain in Canada.

Under its [Advanced Clean Energy](#) and [Industrial Carbon Management](#) programs, the NRC also supported the development of clean, renewable fuels, with 32 active projects in 2024–25 focused on low-carbon hydrogen production and carbon dioxide conversion. 3 clean fuel demonstrations also advanced to technology readiness level 5, meaning they have been tested in lab settings that mimic real-world conditions and are showing strong potential for practical use.

To address emissions from Canadian buildings, the NRC continued its role supporting the [Canadian Board for Harmonized Construction Codes](#). In spring 2025, the Board approved proposed energy efficiency and greenhouse gas (GHG) emission mitigation provisions for inclusion in the 2025 National Model Codes. These updates will introduce new requirements for new buildings and alterations to existing buildings and are expected to be published at the end of 2025. Provinces and territories are expected to adopt the updates within 18 months of publication.

Clean energy innovation also continued in the power harvesting space. In 2024, NRC researchers published 9 new papers related to material discovery and process optimization for next-generation solar cells and battery technologies. These contributions build on a cumulative total of 31 publications and reflect growing momentum toward more flexible, low-cost energy solutions. Topics included lithium-ion battery monitoring, nanocomposites for energy storage and photocatalytic hydrogen production.

Target theme: Renewable and non-emitting sources of electricity

Target: By 2030, 90%, and in the long term 100% of Canada's electricity is generated from renewable and non-emitting sources (Minister of Natural Resources)

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 research, development and demonstration of clean energy technologies	Advance research in material discovery and process optimization for battery materials, including the development of a suite of innovative tools to support the Canadian battery supply chain Program: Clean Energy Innovation	Performance indicator: Number of research projects with clients or collaborators supporting battery material discovery and process optimization Starting point: 0 Target: 30 by March 31, 2027	By conducting research projects with clients and collaborators, the NRC is advancing research in material discovery and process optimization, which will support Canada's clean energy transformation. Finally, by conducting research in material discovery and process optimization, the NRC is supporting the development of clean energy technologies such as low-cost solar cells, which will help reduce use of fossil fuels. Relevant ambitions and targets: CIF ambition: Canadians have access to clean and renewable energy	Indicator result: 11 research projects in FY 2024–25 (adding a cumulative total of 13 research projects under 2023–2027 DSDS to the starting point value).
	Advance research in material discovery and process optimization for power harvesting, notably flexible and low-cost solar cells Program: Quantum and Nanotechnologies	Performance indicator: Number of publications produced related to material discovery and process optimization for power harvesting Starting point: 10 in 2022–23 Target: 40 by March 31, 2027		Indicator result: 9 publications in calendar year 2024 (adding a cumulative total of 21 publications under 2023–2027 DSDS to the starting point value).

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
			CIF indicator: Proportion of electricity generated from renewable and non-greenhouse gas emitting sources (7.3.1) GIF target: By 2030, increase substantially the share of renewable energy in the global energy mix (7.2)	

Target theme: Energy efficiency

Target: By 2030, 600 petajoules of total annual energy savings will be achieved as a result of adoption of energy efficiency codes, standards and practices from a baseline savings of 20.0 petajoules in 2017 to 2018 (Minister of Natural Resources)

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
Develop and implement energy efficiency codes and regulations	Support the Canadian Board for Harmonized Construction Codes in the development of potential energy efficiency provisions for the 2025 National Model Codes Program: Construction	Performance indicator: Number of jurisdictions that have adopted updated energy efficiency requirements for new construction set out by the 2025 editions of the National Model Codes Starting point: 0 in 2022–23 Target: 13 by September 30, 2027	By including the National Model Codes updated requirements related to energy efficiency and greenhouse gas emissions mitigation in new and altered buildings and homes, and for regulating operational greenhouse gas emissions, the NRC will help reduce energy usage and the costs incurred by building owners and operators.	Indicator result: No results to report as this KPI and target refers to adoption of the 2025 National Model Codes, which will not be published until late 2025. Notes: Adoption and enforcement of construction regulations are the responsibility of the provincial and territorial authorities having jurisdiction. The NRC provides

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>Performance indicator: Number of jurisdictions that have adopted updated energy efficiency requirements for alterations to existing buildings set out by the 2025 editions of the National Model Codes</p> <p>Starting point: 0 in 2022–23</p> <p>Target: 13 by September 30, 2027</p>	<p>Relevant ambitions and targets: CIF ambition: Canadians reduce their energy consumption</p> <p>CIF indicator: Annual energy savings resulting from adoption of energy efficiency codes, standards and practices (7.1.1)</p> <p>GIF target: By 2030, double the global rate of improvement in energy efficiency (7.3)</p>	<p>technical, policy and administrative support to the Canadian Board for Harmonized Construction Codes through the NRC’s Construction Research Centre.</p> <p>On April 23, 2025, the Canadian Board for Harmonized Construction Codes approved the proposed energy efficiency changes for publication in the 2025 editions of the National Model Codes. These are expected to be published at the end of 2025, following which provinces and territories will have an 18-month adoption target consistent with the Construction Codes Reconciliation Agreement</p> <p>Indicator result: No results to report as this KPI and target refers to adoption of the 2025 National Model Codes, which will not be published until late 2025.</p> <p>Notes: Adoption and enforcement of construction regulations are the responsibility of the provincial and territorial authorities having jurisdiction. The NRC provides technical, policy and administrative support to the Canadian Board for Harmonized Construction Codes through the NRC’s Construction Research Centre.</p> <p>On April 23, 2025, the Canadian Board for Harmonized Construction Codes approved</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>Performance indicator: Number of jurisdictions that have adopted updated requirements for the mitigation of operational greenhouse gas emissions set out by the 2025 editions of the National Model Codes</p> <p>Starting point: 0 in 2022–23</p> <p>Target: 13 by September 30, 2027</p>		<p>the proposed changes applicable to alteration of existing buildings to improve energy efficiency for publication in the 2025 editions of the National Model Codes. These are expected to be published at the end of 2025, following which provinces and territories will have an 18-month adoption target consistent with the Construction Codes Reconciliation Agreement.</p> <p>Indicator result: No results to report as this KPI and target refers to adoption of the 2025 National Model Codes, which will not be published until late 2025.</p> <p>Notes: Adoption and enforcement of construction regulations are the responsibility of the provincial and territorial authorities having jurisdiction. The NRC provides technical, policy and administrative support to the Canadian Board for Harmonized Construction Codes through the NRC’s Construction Research Centre.</p> <p>On May 2, 2025, the Canadian Board for Harmonized Construction Codes approved proposed changes to minimize excessive emissions of operational greenhouse gases for publication in the 2025 editions of the National Model Codes. These are expected</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
				to be published at the end of 2025, following which provinces and territories will have an 18-month adoption target consistent with the Construction Codes Reconciliation Agreement.
Invest in research, development and demonstration of energy efficiency technologies	Support the development of industry carbon accounting tools and zero- or low-carbon construction materials Program: Construction	Performance indicator: Number of Canadian Construction Materials Centre validated low-carbon products, tools and services that are in use in the built environment Starting point: 0 in 2022–23 Target: 12 by March 31, 2027	By working with industry, academia and other stakeholders, the NRC is supporting the development of carbon accounting and decision support methodologies that will minimize, and ultimately eliminate, the life-cycle carbon emissions of buildings and infrastructure. Relevant ambitions and targets: CIF ambition: Canadians reduce their energy consumption CIF indicator: Annual energy savings resulting from adoption of energy efficiency codes, standards and practices (7.1.1) GIF target: By 2030, double the global rate of improvement in energy efficiency (7.3)	Indicator result: No results to report at this time as the criteria project started in FY 2024–25. On track to report results in the next reporting cycle.

Target theme: Clean fuels

Target: By 2030, increase Canada’s capacity to produce clean fuels by 10% over 2021 levels (Minister of Natural Resources)

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 research, development and demonstration of clean fuels	Accelerate the development of clean, renewable fuels (low-carbon fuels and hydrogen) Program: Clean Energy Innovation	<p>Performance indicator: Number of research projects with academia and industry supporting research in materials for hydrogen production and CO₂ conversion</p> <p>Starting point: 40 in 2022–23</p> <p>Target: 60 by March 31, 2027</p>	<p>By conducting R&D projects to develop new technologies with collaborators, the NRC is supporting the development of new materials for zero-emission transportation fuels and chemical feedstocks.</p> <p>Relevant ambitions and targets: CIF ambition: Canadians have access to clean and renewable energy</p>	<p>Indicator result: 32 active projects in FY 2024–25 (adding a cumulative total of 33 projects launched under the 2023–2027 DSDS to the starting point value)</p> <p>Notes: A total of 33 projects were launched in FY 2023–24 and 1 project was completed in the same fiscal year.</p>
		<p>Performance indicator: Number of clean fuel technology demonstrations reaching technology readiness level (TRL) 5</p> <p>Starting point: 4</p> <p>Target: 8 by March 31, 2027</p>	<p>CIF indicator: Proportion of electricity generated from renewable and non-greenhouse gas emitting sources (7.3.1)</p> <p>GIF target: By 2030, increase substantially the share of renewable energy in the global energy mix (7.2)</p>	<p>Indicator result: 3 demonstrations in FY 2024–25 (adding a cumulative total of 4 demonstrations under the 2023–2027 DSDS to the starting point value)</p>



GOAL 8: ENCOURAGE INCLUSIVE AND SUSTAINABLE ECONOMIC GROWTH IN CANADA

FSDS context:

Sustainable economic growth is essential to Canada’s long-term prosperity and resilience. The NRC supports this goal by advancing clean technology development and helping businesses expand their innovation capacity. Through the NRC Industrial Research Assistance Program (NRC IRAP), Canada’s leading innovation support program for innovative Canadian small- and medium-sized enterprises (SMEs), the NRC enables companies to develop, grow, and bring new technologies to market. In fiscal year 2024 to 2025, NRC IRAP supported 627 clean technology projects, with total contributions valued at \$94.3 million. This support contributes to the growth of Canada’s clean technology sector and helps innovative companies move closer to commercialization.

In addition to financial support, the NRC works directly with businesses through its research centres, offering technical expertise and collaborative opportunities. In fiscal year 2024 to 2025, 95% of the NRC’s surveyed clients reported positive impacts from these engagements, such as job creation, improved research and development capacity, and increased sales. These partnerships help accelerate innovation and enhance Canada’s competitiveness across key sectors.

Access to high-speed internet remains a critical factor for enabling full participation in the digital economy. Reliable connectivity improves business productivity and supports the delivery of essential services like healthcare, education and government, especially in rural and remote regions where infrastructure development is more challenging. Since 2019, the NRC’s [High-throughput and Secure Networks Challenge program](#) has been developing breakthrough technologies to improve the cost, performance and security of broadband service delivery. By the end of fiscal year 2024 to 2025, the program had developed a total of 122 technologies that support the deployment of 5G telecommunications networks, helping to expand broadband access and promote digital equity across Canada.

Target theme: Support for workers and business

Target: By 2026, there are at least 245,000 jobs in the clean-tech products sector, an increase from 2019 (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 growth in the clean tech products sector	<p>Advance the development of clean technologies to drive economic growth and technological competitiveness</p> <p>Program: National Research Council of Canada Industrial Research Assistance Program (NRC IRAP)</p> <p>*Performance indicators listed for NRC IRAP will be monitored by the NRC until IRAP’s transition to the new Canada Innovation Corporation</p>	<p>Performance indicator: Number of clean technology projects supported</p> <p>Starting point: 595 in 2022–23 Target: 450 projects per year*</p> <p>* Since NRC IRAP does not have sector-specific funding allocation, the number of clean technology projects supported by NRC IRAP over a given fiscal year is dependent on the projects presented by clients and whether those are meeting the criteria in place.</p>	<p>By providing advice, connections, and funding to Canadian small and medium-sized businesses (SMEs), NRC IRAP is supporting the growth of Canada’s clean tech sector and helping Canadian SMEs increase their innovation capacity and take ideas to market.</p> <p>Relevant ambitions and targets: CIF ambition: Canadians contribute to and benefit from sustainable economic growth</p> <p>CIF indicator: Jobs in the clean technology products sector (8.6.1)</p>	<p>Indicator result: 627 projects in FY 2024–25</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>Performance indicator: Value (\$) of clean technology projects supported</p> <p>Starting point: \$87.9M in 2022–23</p> <p>Target: \$75M in contribution agreement value per year. *</p> <p>* Since NRC IRAP does not have sector-specific funding allocation, value of clean technology projects supported by NRC IRAP over a given fiscal year is dependent on the projects presented by clients and whether those are meeting the criteria in place.</p>	<p>GIF target: N/A</p>	<p>Indicator result: \$94.3M in FY 2024–25</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
Other	<p>Provide research and technical services to industry clients and collaborators to help Canadian businesses grow, innovate and commercialize technologies</p> <p>Programs: Quantum and Nanotechnologies, Aerospace, Aquatic and Crop Resource Development, Automotive and Surface Transportation, Construction, Digital Technologies, Clean Energy Innovation, Herzberg Astronomy & Astrophysics, Human Health Therapeutics, Medical Devices, Metrology, Ocean, Coastal and River Engineering</p>	<p>Performance indicator: Percentage of R&D clients surveyed who report positive benefits of working with the NRC (e.g., increased jobs, sales, R&D capacity and other benefits)</p> <p>Starting point: 89% in 2022–23</p> <p>Target: At least 90% each year starting in 2023–24</p>	<p>By providing a broad range of research and technical services to industry clients and collaborators, the NRC furthers their capacity to bring innovative products, services and processes to market, which in turn supports increased economic growth and competitiveness.</p> <p>Relevant ambitions and targets: CIF ambition: Canadians contribute to and benefit from sustainable economic growth</p> <p>CIF indicator: N/A GIF target: N/A</p>	<p>Indicator result: 95% of the NRC’s surveyed R&D clients reported positive impacts from their work with the NRC.</p>

Target theme: Connectivity in Canada

Target: By 2030, ensure that 100% of Canadians have access to broadband speeds of at least 50 Mbps download and 10 Mbps upload (Minister of Rural Economic Development)

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 broadband capacity across Canada	Develop technologies that will enable 5G next-generation high-speed telecommunications networks	<p>Performance indicator: Number of technologies developed (e.g., prototypes, models, demonstrations, proof of</p>	By developing disruptive technologies that improve the cost and performance of delivering secure, affordable and high-	<p>Indicator result: 46 technologies in FY 2024–25 (adding a cumulative total of 122 technologies</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>Program: Collaborative Science, Technology and Innovation Program-High-throughput and Secure Networks Challenge program</p>	<p>concepts, research platforms, system architectures)</p> <p>Starting point: 30 from 2019–20 to 2022–23</p> <p>Target: 55 by March 31, 2027</p>	<p>speed internet services in rural and remote communities, the NRC is supporting increased broadband across Canada.</p> <p>Relevant ambitions and targets: CIF ambition/target: N/A CIF indicator: N/A GIF target: N/A</p>	<p>under the 2023–2027 DSDS to the starting point value)</p>



GOAL 9: FOSTER INNOVATION AND GREEN INFRASTRUCTURE IN CANADA

FSDS context:

Infrastructure is a major pillar in [Canada's National Adaptation Strategy](#), which outlines a shared path to a more climate-resilient future. The strategy emphasizes the dual role of infrastructure as both vulnerable to climate impacts and as a key means of mitigating those impacts. The NRC continues to support this national priority by advancing applied research and developing practical tools and guidance for decision makers, engineers and industry stakeholders.

In fiscal year 2024 to 2025, the NRC advanced the Climate Resilient Built Environment Initiative, which is included in [Canada's Adaptation Action Plan](#). 4 new standards and guidance documents were published this year, with additional outputs expected in fiscal year 2025 to 2026. Through robust guidance and standards, and support for code development, the NRC plays a key role in helping decision makers and professionals address the most critical climate change risks to buildings and infrastructure.

To support more reliable operations under a changing climate, the NRC advanced risk-mapping tools for key railway corridors. In fiscal year 2024 to 2025, the [Resilient Ground Transportation \(RGT\) program](#) launched a multi-year project with a Canadian shortline railway to develop a risk mitigation system that integrates continuous in-service data with NRC-developed risk tools. This project will deliver new capabilities to predict and reduce climate-related service interruptions and is scheduled for completion by March 31, 2026. The NRC is also helping modernize Canada's railway systems to better withstand climate-related stressors. Under the [Clean and Efficient Transportation \(CEET\) program](#), 2 new guidelines were published on hydrogen-powered rail systems (Hydrail): one focused on risk and hazard assessment, and another on gaps in current codes and standards. In parallel, the RGT program completed a technical report that addresses climate-related infrastructure gaps. With the final version expected by March 2026, the [Canadian Standards Association](#) plans to use this work as a foundation for future standard development.

Target theme: Green infrastructure and innovation

Target: By 2023 and each year thereafter until 2026, 30% of Sustainable Development Technology Canada’s portfolio of SD Tech Fund-supported technologies are commercialized annually (Minister of Innovation, Science and Industry)

Note: The SD Tech Fund was wound down in 2024. Starting in fiscal year 2025 to 2026, NRC IRAP has a new Clean Technology stream to offer support to Canadian SMEs that are developing, demonstrating and commercializing clean technologies.

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 the deployment and adoption of clean technologies	Support industry in addressing technical challenges in critical mineral value chains through conducting collaborative R&D Program: Clean Energy Innovation	Performance indicator: Number of platforms commissioned to perform collaborative research in the area of processes and materials discovery for the mid-stream battery supply chain Starting point: 0 Target: 2 by March 31, 2027	By developing platforms, which are self-driving laboratories that combine robotics and artificial intelligence to accelerate materials discovery, the NRC will help industry develop solutions for technical challenges in the critical mineral value chains and provide Canadian firms with a competitive advantage. Relevant ambitions and targets: CIF ambition/target: N/A CIF indicator: N/A GIF target: N/A	Indicator result: 0 in FY 2024–25 Notes: Procurement and projects are launched and progress toward this goal is underway

Target: By fiscal year 2027 to 2028, the federal share of the value of green infrastructure projects approved under the Investing in Canada Plan will reach \$27.6 billion (Minister of Intergovernmental Affairs, Infrastructure and Communities)

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
Develop and implement climate-resilient codes and standards	<p>Develop new and improved building codes, regulations, standards, and guidelines to take action against climate change risks</p> <p>Programs: Construction, Ocean, Coastal and River Engineering</p>	<p>Performance indicator: Number of new standards and guidance documents produced against climate change risks</p> <p>Starting point: 0 in 2022–23*</p> <p>Target: 30 by March 31, 2026</p> <p>*30 standards and guidance documents were produced from 2016–2021 through the Climate Resilient Buildings and Core Public Infrastructure Initiative</p>	<p>By developing new and improved building codes, regulations, standards, and guides, the NRC is helping to ensure that Canadian infrastructure is resilient to top climate change risks.</p> <p>Furthermore, by developing new climate-related guidelines and best practices, and new risk mapping and prediction tools, the NRC will help to ensure that the Canadian railway system and freight railway operators and regulators will be better prepared for climate change risks.</p> <p>Relevant ambitions and targets: CIF ambition: Canadians have access to modern and sustainable infrastructures</p> <p>CIF indicator: N/A</p> <p>GIF target: Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all (9.1)</p>	<p>Indicator result: 4 standards/guidance documents were published in FY 2024–25 (adding a cumulative total of 4 standards/guidance documents under the 2023–2027 DSDS to the starting point value).</p> <p>Notes: New standards and guidance documents are under development through the Climate Resilient Built Environment Initiative (CRBE). The majority are expected in 2025–26. The 2025 edition of the National Model Code will include the design of buildings for future climatic data; and the next edition of the Canadian Highway Bridge Design Code (CHBDC), expected for July 2025, will include significant changes to increase climate resilience, including the design of bridges for future climate data.</p>
	<p>Develop new guidelines and best practices that address specific climate-related challenges (gaps) for the passenger railway systems in Canada</p> <p>Program: Automotive and Surface Transportation</p>	<p>Performance indicator: Number of guidelines or best practices developed to address climate related challenges for the railway transit system</p> <p>Starting point: 0 in 2022–23</p> <p>Target: 5 guidelines by March 31, 2027</p>		<p>Indicator result: 2 guidelines were published in FY 2024–25 (cumulative total of 2 guidelines under the 2023–2027 DSDS).</p> <p>Notes: 1 guideline was published on risk and hazards assessment, and 1 was published on codes and standards gap analysis.</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
Other	<p>Develop new risk mapping tools to reduce railway transportation interruptions by predicting risks for key railway corridors, including climate-related risks.</p> <p>Program: Automotive and Surface Transportation</p>	<p>Performance indicator: Number of new risk mapping tools developed and adopted by freight railway operators and regulators.</p> <p>Starting point: 0 in 2022–23</p> <p>Target: At least 3 by March 31, 2027</p>		<p>Indicator result: 0 in FY 2024–25.</p> <p>Notes: The RGT program initiated a multi-year project with a Canadian shortline railways operator to develop a risk mitigation system based of continuous in-service data collection and the risk tools previously developed by NRC. This project is expected to be completed by March 31, 2026.</p>



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

FSDS context:

The NRC is committed to building relationships with Indigenous researchers, innovators and communities to bridge Western and Indigenous knowledge systems and to help reimagine research approaches and co-create solutions that reflect the needs and perspectives of all people living in Canada. In alignment with the Truth and Reconciliation Commission's Calls to Action, the NRC continued to build intercultural competency as a first step towards positive long-term relationships with First Nations, Inuit and Métis which is integral to fostering a more equitable, inclusive and sustainable future for Canada. In fiscal year 2023 to 2024, in alignment with its Indigenous Engagement Strategy, the NRC developed 3 resources to enhance intercultural competency and strengthen research relationships with Indigenous communities. These resources included engagement strategies, best practices toolkits and learning sessions, all aimed at fostering respectful and informed interactions.

A highlight of the year was the advancement of Indigenous language technologies. Through the [Canadian Indigenous Languages Technology \(ILT\) project](#), the NRC developed a new text-to-speech capability in Kanien'kéha, Plains Cree, and SENČOTEN. This project addresses the shortage of audio learning materials in Indigenous languages and was developed in collaboration with the Onkwawenna Kentyohkwa language school and international research partners. Feedback from Indigenous Elders, community educators and linguists has been highly positive, with some calling it a breakthrough for language revitalization. The NRC worked with Indigenous partners to introduce automatic speech recognition systems for Kanien'kéha and SENČOTEN to support transcription of archival recordings, and helped launch interactive grammar tools for Oneida and SENČOTEN.

To date, 25 Indigenous language communities in Canada have adopted methodologies or technologies developed by the ILT project. These include tools such as ReadAlong Studio, interactive grammar tools and speech processing systems that strengthen local education and support community-led language preservation.

The NRC recognizes the value of Indigenous knowledge and strives to learn from it to develop solutions that address pressing issues. Projects conducted under the [Arctic and Northern Challenge program](#) are encouraged to interweave Indigenous knowledge to achieve research objectives. For instance, one project investigating the impacts of plastics on local food systems took an Inuit-led approach directed by community members that prioritized the integration of local knowledge systems. This shift to community-based research methodologies not only empowered Inuit researchers but also centred the project on Inuit knowledge, ensuring it would provide value and create an impact for communities in Nunatsiavut.

A diverse and inclusive workforce is key to driving innovation. In fiscal year 2024 to 2025, representation of women and racialized persons in the NRC workforce exceed Canadian labour market availability, and the NRC met its annual goals for representation of Indigenous Peoples and persons with disabilities, as it works towards representation rates that meet or exceed labour market availability for all equity-deserving groups. These gains reflect the ongoing implementation of the NRC's equity, diversity and inclusion strategy, which is designed to eliminate systemic barriers and ensure fair access to employment opportunities.

To improve accessibility and inclusion for persons with disabilities, the NRC made progress under its [Accessibility Plan 2023-2025](#). By the end of 2024, the NRC had completed 68% of its planned accessibility actions. Notable achievements include introducing accessibility training for web developers and IT professionals, creating a digital accessibility resource inventory, and embedding accessibility considerations into procurement processes.

The NRC continues to focus on developing a diverse, respectful and inclusive workplace where persons with disabilities have equal opportunities to grow and can bring different perspectives to the table.

Target theme: Advancing reconciliation with First Nations, Inuit and 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
Implement the <i>United Nations Declaration on the Rights of Indigenous Peoples Act</i>	<p>Develop intercultural competency, resources and training to strengthen research relationships with Indigenous researchers and communities</p> <p>Program: Internal Services-Indigenous Engagement</p>	<p>Performance indicator: Number of resources (e.g., toolkits) developed to help strengthen Indigenous relationships</p> <p>Starting point: 0 in 2022–23</p> <p>Target: 5 by March 31, 2027</p>	<p>By developing resources such as toolkits and delivering training sessions to NRC employees, the NRC will help develop intercultural competency within the organization and build intentional relationships with Indigenous researchers, innovators, and communities to advance equity for First Nations, Inuit and Métis communities.</p> <p>By developing speech- and text-based technologies, in collaboration with Indigenous communities and language experts, the NRC is supporting Indigenous language students, educators, translators, transcribers and other language professionals, and contributing to the revitalization of Indigenous languages.</p>	<p>Indicator result: 3 resources in FY 2024–25 (adding a cumulative total of 12 resources under 2023–2027 DSDS to the starting point value).</p> <p>Notes: In 2024-25, the NRC focused on developing comprehensive resources for employees, including an <i>Engagement Planning Guide</i> and a toolkit for commemorative events. The NRC also adapted Natural Resources Canada's <i>Braiding Knowledges</i> learning curriculum for an NRC audience.</p>
	<p>Work with Indigenous communities and language experts to develop technologies that contribute to the revitalization of Indigenous languages</p> <p>Program: Digital Technologies</p>	<p>Performance indicator: Number of language communities that adopt the methodologies and software for their community</p> <p>Starting point: 16 in 2022–23</p> <p>Target: 24 by March 31, 2027</p>	<p>By integrating traditional knowledge in ANCP projects and by developing applied technologies, the NRC is helping ensure that project outputs address the pressing issues that impact the quality of life of Northern peoples and will support strong and sustainable Northern communities through applied technology and innovation.</p>	<p>Indicator result: 25 communities as of FY 2024–25</p>
	<p>Use Indigenous knowledge in study design, data collection, project implementation, training and/or technology advancement</p>	<p>Performance indicator: Percentage of research projects that integrate traditional knowledge from Indigenous Peoples</p> <p>Starting point: 0 in 2022–23</p>	<p>Relevant ambitions and targets:</p>	<p>Indicator result: 80% of ANCP research projects in FY 2024–25</p> <p>Notes:</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
	Program: Collaborative Science, Technology and Innovation Program-Arctic and Northern Challenge program	Target: 75% by March 31, 2027	CIF ambition: Canadians live free of discrimination and inequalities are reduced CIF indicator: N/A GIF target: By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status (10.2)	Metric to measure Indigenous knowledge integration changed in year 3, from 100% to 75%. As IK is proprietary, it is inappropriate to mandate its inclusion in research projects. While projects are encouraged to braid methodologies where possible, the decision to include Indigenous knowledge ultimately rests with the Indigenous partners involved.

Target theme: Taking action on inequality

Target: Each year, the federal public service meets or surpasses the workforce availability for women, Indigenous persons, persons with a disability and members of a visible minority (President of the Treasury Board)

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
Advance gender equality in the Government of Canada	Increase representation of Employment Equity designated groups (Indigenous Peoples, women, racialized persons and persons with disabilities) at the NRC	Performance indicator: Ratio of the NRC workforce made up of underrepresented groups relative to Canadian average labour market availability	By having a workforce representative of Canada’s diverse population, the NRC is advancing equity and diversity, supporting innovation, and enhancing scientific and knowledge advancement.	Indicator result: Results in FY 2024–25: Women: 1.09 Indigenous Peoples: 0.77 Racialized persons: 1.16 Persons with disabilities: 0.71

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>Program: Internal Services-Human Resources branch</p>	<p>Starting point: Results in 2022–23 Women: 1.0 Indigenous Peoples: 0.6 Racialized persons: 1.0 Persons with disabilities: 0.6</p> <p>Target: TBC *</p> <p>*The NRC is undertaking an Employment Systems review in 2023–24 that will inform targets for the next 3 years (up to and including 2026–27)</p>	<p>Relevant ambitions and targets: CIF ambition: Canadians live free of discrimination and inequalities are reduced</p> <p>CIF indicator: N/A</p> <p>GIF target: By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status (10.2)</p>	
<p>Foster diversity, inclusion and accessibility in the federal public service</p>	<p>Execute the NRC Accessibility Plan 2023–2025 to ensure that NRC is an accessible employer</p> <p>Program: Internal Services-Human Resources branch</p>	<p>Performance indicator: Percentage of accessibility plan actions completed as planned</p> <p>Starting point: 0</p> <p>Target: 100% by December 31, 2025</p>	<p>By implementing the NRC Accessibility Plan, the NRC will identify, remove and prevent barriers to accessibility and help create a respectful and inclusive workplace and culture.</p> <p>Relevant ambitions and targets: CIF ambition: Canadians live free of discrimination and inequalities are reduced</p> <p>CIF indicator: N/A</p> <p>GIF target: By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status (10.2)</p>	<p>Indicator result: 68% of accessibility plan actions completed</p> <p>Notes: In December 2024, the NRC published its second Accessibility Plan progress report, highlighting the completion of 15 Accessibility Plan actions, in addition to the 7 actions completed as of December 2023.</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>Support the Government of Canada’s Procurement Strategy for Indigenous Businesses through contracting with Indigenous businesses</p> <p>Program: Internal Services-Finance and Procurement Services branch</p>	<p>Performance indicator: Percentage of procurement contracts with Indigenous businesses.</p> <p>Starting point: 1.8% in 2022–23</p> <p>Target: 5% by March 31, 2025</p>	<p>By supporting the Government of Canada’s Procurement Strategy for Indigenous Business, the NRC is helping Indigenous businesses succeed and grow through increased opportunities in the procurement process.</p> <p>Relevant ambitions and targets: CIF ambition: Canadians live free of discrimination and inequalities are reduced</p> <p>CIF indicator: N/A</p> <p>GIF target: 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 (10.3)</p>	<p>Indicator result: 5.85% of procurement contracts for FY 2024–25</p>



GOAL 11: IMPROVE ACCESS TO AFFORDABLE HOUSING, CLEAN AIR, TRANSPORTATION, PARKS, AND GREEN SPACES, AS WELL AS CULTURAL HERITAGE IN CANADA

FSDS context:

Air pollution continues to be one of the most significant environmental threats to health in Canada, contributing to thousands of hospital visits and more than 15,000 premature deaths annually. The economic toll is estimated at \$120 billion per year.² In addition to health concerns, pollutants like black carbon, second only to carbon dioxide in contributing to global warming, amplify warming in northern regions by darkening snow-covered surfaces. In fiscal year 2024 to 2025, the NRC supported efforts to reduce air pollution and its impacts through a combination of technology development, standards advancement and environmental monitoring.

In fiscal year 2024 to 2025, the NRC advanced efforts to decarbonize Canada's construction industry by publishing practical tools and guidance that also support the Government of Canada's affordable housing priorities. This work included the [National Whole-Building Life Cycle Assessment Practitioner's Guide](#), now used across Canada and integrated into academic programs, as well as new guidelines for reducing greenhouse gas emissions in new and existing buildings. [Updates to the National Master Construction Specification](#) also introduced low-carbon design and construction solutions that support the industry's shift toward more sustainable practices.

The NRC supported Canada's affordable housing priorities by leading R&D projects to scale up pre-fabricated housing and working with builders to compare these methods with conventional construction approaches in terms of productivity, cost and emissions. To support the safe implementation of these new approaches, the NRC is collaborating with the Canadian Standards Association on modular housing design standards and informing the 2030 pre-fabrication priority of the Canadian Board for Harmonized Construction Codes.

² [Health Impacts of Air Pollution in Canada 2021 Report - Canada.ca](#)

To reduce the health risks associated with indoor air pollution, the NRC helped develop 4 new standards and guidelines. These included [ASHRAE Guideline 44](#) on protecting building occupants from wildfire smoke, the [ASHRAE Handbook Online](#) and 2 [Canadian General Standards Board](#) standards: 1 for radon control in new buildings and 1 for mitigation in existing buildings.

At the same time, the NRC tested 5 different technologies that could help improve indoor air quality. These included 2 ultraviolet (UV) air purifiers, 2 UV-activated coatings designed to break down harmful chemicals like formaldehyde, and a spray foam that helps block radon from entering homes. Together, these efforts give Canadians solid, science-based guidance on how to make indoor spaces healthier and safer.

To further support climate and public health objectives, the NRC continued to advance air quality monitoring and emissions research. This included developing a new calibration-free method to measure how black carbon particles absorb light, which is an important factor in understanding their impact on climate and human health. A patent for the technique is in progress, and the results were published in a peer-reviewed journal. The NRC is also developing prototype instruments that can measure light absorption across the full solar spectrum, rather than at a single light wavelength. Together, these innovations offer more accurate and practical tools for tracking air pollutants, providing Canadians with better data to guide climate action and protect public health.

The NRC continued its work on sensor technologies that provide critical environmental data to scientists, regulators and policymakers. In fiscal year 2024 to 2025, 11 sensor projects were completed, bringing the total to 28. These tools support more accurate, real-time monitoring of pollutants to improve the evidence available to inform decision making across sectors.

The NRC also remained active in wildfire smoke research, bringing together experts from across disciplines to better understand its impacts and protect affected communities. NRC researchers collected smoke samples aboard a research aircraft to analyze the composition and movement of wildfire emissions, while construction teams tested air filters and explored strategies for maintaining healthy indoor air during smoke events and heat waves. In collaboration with academic partners, the NRC supported field studies in exposed communities and the development of a numerical model to predict indoor air quality. Together, these efforts aim to inform practical, science-based solutions for improving indoor environments in the face of increasingly frequent wildfire events.

Target theme: Affordable housing and homelessness

Target: By 2028, reduce chronic homelessness by 50% (Minister of Housing and Diversity and Inclusion)

Implementation strategies supporting the goal

This section is for implementation strategies that support the goal “**Improve access to affordable housing, clean air, transportation, parks, and green spaces, as well as cultural heritage in Canada**” 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
Research the impacts of air pollution	<p>Support industry to develop innovative building solutions, standards, and guidelines to reduce health risk from indoor air pollution</p> <p>Program: Construction</p>	<p>Performance indicator: Number of standards, guides and guidelines addressing health risks associated to indoor air pollution</p> <p>Starting point: 5 in 2022–23</p> <p>Target: 8 by March 31, 2027</p>	<p>By developing new innovative building solutions, standards, and guidelines addressing health risks associated to indoor air pollution, the NRC is supporting improved air quality and health in Canada, and will provide Canadians with the tools to make informed decisions to reduce their exposure to indoor air pollutants.</p>	<p>Indicator result: 5 standards were published in FY 2024–25 (adding a cumulative total of 8 standards under 2023–2027 DSDS to the starting point value).</p>
		<p>Performance indicator: Number of new technologies addressing health risks associated to indoor air pollution evaluated in research projects</p> <p>Starting point: 30 in 2022–23</p> <p>Target: 35 by March 31, 2027</p>	<p>Relevant ambitions and targets: CIF ambition: Canadians live in healthy, accessible, and sustainable cities and communities</p> <p>CIF indicator: N/A GIF target: N/A</p>	<p>Indicator result: 4 new technologies in FY 2024–25 (adding a cumulative total of 10 new technologies under 2023–2027 DSDS to the starting point value).</p> <p>Notes: The result also included 1 new application of an existing technology</p>
	<p>Develop sensor technologies to deliver environmental pollutants data to environmental scientists, regulators and all levels of government and industry</p> <p>Program: Quantum and Nanotechnologies</p>	<p>Performance indicator: Number of sensor projects for environmental monitoring developed</p> <p>Starting point: 7 as of 2022–23</p> <p>Target: 14 by March 31, 2027</p>	<p>By developing sensors for pollutants, the NRC is helping environmental scientists, regulators, other government departments and industry access quality data on pollutants and supporting research on air and water pollution.</p> <p>Relevant ambitions and targets: CIF ambition: Canadians live in healthy, accessible, and sustainable cities and communities</p> <p>CIF indicator: N/A GIF target: N/A</p>	<p>Indicator result: 11 projects in FY 2024–25 (adding a cumulative total of 21 projects under 2023–2027 DSDS to the starting point value).</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>Support the development of guidelines to help mitigate the impact of wildfire smoke on populations</p> <p>Program: Aerospace, Construction</p>	<p>Performance indicator: Number of wildfire flights conducted to collect spatial and temporal profiles of wildfire plumes</p> <p>Starting point: 0 in 2022–23</p> <p>Target: 5 by March 31st, 2027</p>	<p>By conducting wildfire flights, the NRC will be able to collect spatial and temporal profiles of wildfire plumes and assess its contribution to indoor air pollution which will help determine air quality protection measures and support the development of guidelines for healthy cities and communities.</p> <p>CIF Ambition: Canadians live in healthy, accessible, and sustainable cities and communities.</p> <p>CIF Indicator: N/A</p> <p>GIF Target: N/A</p>	<p>Indicator result:</p> <p>3 flights in FY 2024–25 (adding a cumulative total of 5 flights under 2023–2027 DSDS to the starting point value).</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
	Develop the next generation of black carbon and methane measurement instruments Program: Metrology	Performance indicator: Number of black carbon measurement instruments developed through NRC research projects with external partners Starting point: 1 in 2022–23 Target: 2 by March 31, 2027	By developing the next generation of black carbon and methane measurement instruments, the NRC is supporting government and industry partners in reducing harmful air pollutants such as black carbon. Relevant ambitions and targets: CIF ambition: Canadians live in healthy, accessible, and sustainable cities and communities CIF indicator: N/A GIF target: N/A	Indicator result: 2 instruments in FY 2024–25 (adding a cumulative total of 4 instruments under 2023–2027 DSDS to the starting point value)
	Publish new datasets on air pollutants to support emissions research and monitoring Program: Aerospace, Metrology	Performance indicator: Number of datasets of high-resolution sampling made available for research and monitoring of emissions Starting point: 0 in 2022–23 Target: 1 by March 31, 2027	By generating datasets on air pollutants for research and monitoring, the NRC will help in the evaluation of emissions trends and ultimately support emission reductions. Relevant ambitions and targets: CIF ambition: Canadians live in healthy, accessible, and sustainable cities and communities CIF indicator: N/A GIF target: N/A	Indicator result: 0 datasets in FY 2024–25 Notes: The NRC completed 3 flights in FY 2023–24 which were used to validate instrumentation as well as upscaling models for emissions monitoring. This will help to prepare the instruments and data collection procedures for future flights in which scientific data can be collected with confidence.



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

FSDS context:

As Canada continues its transition to a low-carbon economy, transportation remains a critical sector for emissions reduction. In fiscal year 2024 to 2025, the NRC advanced 36 collaborative projects under its Clean and Energy Efficient Transportation program, focusing on electric and connected vehicles, aerodynamics, batteries, hydrogen technologies, electrical machines and fleet energy efficiency. These efforts aim to address technical requirements and adoption barriers while supporting the sector's shift toward cleaner technologies.

To strengthen Canada's electric vehicle (EV) infrastructure, the NRC continued developing measurement standards and quality assurance protocols. This includes work on the National Power and Energy Measurement Standard for Fast High Voltage DC Chargers, which is supported by Transport Canada, and the creation of a Partial Discharge Testing Facility for high-voltage EV components. Although standards and diagnostic prototypes are still in development, these initiatives lay the foundation for safer and more efficient EV charging nationwide.

In aviation, the NRC collaborated with 22 external partners in fiscal year 2024 to 2025 to decarbonize the aviation industry, participating in collaborative projects with leading innovators from SMEs, multinational corporations and academic institutions, to develop technologies for low-emission aircraft. These efforts support research on technologies such as advanced battery systems and mobile charging units, which are critical to enabling hybrid-electric and fully electric aircraft.

Reducing plastic waste remains a key priority. In fiscal year 2024 to 2025, the NRC filed 2 invention disclosures focused on improving the moisture resistance of paper-based food packaging. This advancement supports broader adoption in food services and helps reduce reliance on plastics. These efforts build on earlier work, which included developing innovative coating technologies and bio-based materials for sustainable packaging. To help

reduce the risks of plastic pollution, the NRC also continued developing the Ocean Microplastic Explorer, a decision support system (DSS) designed to aid policy and management decisions.

Internally, the NRC continued greening its operations. Waste audits at key sites showed a 53% diversion rate for non-hazardous waste and a 48% diversion rate for plastics, though efforts are ongoing to improve performance through composting initiatives and public awareness campaigns. Construction and demolition waste diversion reached 92%, reflecting strong progress on federal sustainability targets. The NRC also achieved a 62% reduction in Scope 1 GHG emissions from its conventional fleet, contributing to broader emissions-reduction goals for the Government of Canada.

The NRC also supports the circular economy by advancing battery recycling technologies. Two critical minerals projects progressed in their technology readiness levels, including processes for lithium iron phosphate recycling and supported liquid membranes. These innovations help secure domestic supply chains and reduce environmental impact.

Target theme: Zero-emission vehicles

Target: For the 2030 model year, at least 60% of new light-duty vehicle sales are zero-emission vehicles and 100% of vehicle sales will be zero-emission vehicles for the 2035 model year* (Minister of Transport; Minister of Environment and Climate Change)

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>Make zero-emissions vehicles more affordable and improve supply</p>	<p>Conduct research on clean and energy efficient transportation, including on addressing the technical requirements for adoption of electric and connected vehicles</p> <p>Program: Automotive and Surface Transportation</p>	<p>Performance indicator: Number of research projects with external partners supporting clean and energy efficient transportation</p> <p>Starting point: 111 from 2020–21 to 2022–2023</p> <p>Target: 55 per year starting in 2023–24</p>	<p>By conducting research projects focused on clean and energy efficient transportation, the NRC is supporting Canada’s transition to low-carbon modes of transportation</p> <p>Relevant ambitions and targets: CIF ambition: Canadians consume in a sustainable manner</p> <p>CIF indicator: Proportion of new light duty vehicle registrations that are zero-emission vehicles (12.1.1)</p> <p>GIF target: N/A</p>	<p>Indicator result: 36 projects in FY 2024–25</p> <p>Notes: Several distinct projects in aerodynamics were combined into a single larger project for the same client. Projects covered activities in areas related to aerodynamics, batteries, electrical machines, hydrogen, fleet energy efficiency</p>
	<p>Develop innovative technologies and support the development of policies to decarbonize the aviation industry</p> <p>Program: Aerospace</p>	<p>Performance indicator: Number of external partners involved in decarbonization projects.</p> <p>Starting point: 9 in 2022–23</p> <p>Target: 12 per year starting in 2023–24</p>	<p>By collaborating with industry partners on decarbonization-related projects, the NRC is supporting the development of disruptive technologies for low-emission aircraft such as high-power or energy dense batteries, hydrogen systems, electric propulsion systems and novel aircraft configurations, which will reduce the environmental impact of the aviation industry.</p> <p>Relevant ambitions and targets: CIF ambition: Canadians consume in a sustainable manner</p> <p>CIF indicator: N/A</p>	<p>Indicator result: 22 partners in FY 2024–25</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
	Develop reliable measurement and quality assurance protocols for electric vehicles and rapid charging stations Program: Metrology	Performance indicator: Number of new measurement standards developed for electric vehicles charging stations Starting point: 0 in 2022–23 Target: 1 by March 31, 2027	GIF target: N/A By developing new measurement tools and quality assurance protocols, the NRC will help increase electric vehicle performance and support the implementation of standards of rapid charging stations. Relevant ambitions and targets: CIF ambition: Canadians consume in a sustainable manner CIF indicator: N/A GIF target: N/A	Indicator result: 0 standards in FY 2024–25 Notes: The development of national power and energy measurement standard for fast high-voltage DC chargers for EVs has started and is in progress.
		Performance indicator: Number of new prototype measurement tools developed with external partners to diagnose faults in electric vehicle power electronics Starting point: 0 in 2022–23 Target: 1 by March 31, 2027		Indicator result: 0 tools in FY 2024–25 Notes: The development of national power and energy measurement standard for fast high-voltage DC chargers for EVs has is in progress.

Target theme: Federal leadership on responsible consumption

Target: By 2030, the Government of Canada will divert from landfill at least 75% by weight of non-hazardous operational waste (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
Maximize diversion of waste from landfill	Complete waste audits for large buildings and report the annual rate of diversion of waste from landfill Program: Special Purpose Real Property	<p>Performance indicator: Percentage by weight of non-hazardous operational waste diverted from landfill</p> <p>Starting point: 65% in 2022-23</p> <p>Target: 75% by weight of non-hazardous operational waste diverted from landfill annually by 2030</p>	<p>By diverting non-hazardous operational waste and plastic waste from landfill, the NRC is helping reduce emissions from the production, transportation, and disposal of material.</p> <p>Relevant ambitions and targets: CIF ambition: Canadians consume in a sustainable manner</p> <p>CIF indicator: Total waste diversion per capita (12.3.1)</p> <p>GIF target: By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse (12.5)</p>	<p>Indicator result: 53% of non-hazardous operational waste diverted in 2024-25</p> <p>Notes: In FY 2024-25, waste audits were completed for 2 NRC sites in Winnipeg. Compostable waste accounted for 49% of total waste stream currently being sent to landfill. The City of Winnipeg has implemented a commercial composting program as of October 2024. A program will be implemented at the Winnipeg facilities in the coming year.</p>
		<p>Performance indicator: Percentage by weight of plastic waste diverted from landfill</p> <p>Starting point: 55% in 2022-23</p> <p>Target: 75% by weight of plastic waste diverted from landfill annually by 2030</p>		<p>Indicator result: 48% of plastic waste diverted in 2024-25</p> <p>Notes: In FY 2024-25, waste audits were completed for 2 NRC sites in Winnipeg. Approximately 80% of the plastic category was made up of non-recyclable plastics. The current plastics program has a 36% success rate. The NRC is developing a re-education campaign and conducting a review of product substitutions/removal of non-recyclable plastics.</p>

Target: By 2030, the Government of Canada will divert from landfill at least 90% by weight of all construction and demolition waste (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
Maximize diversion of waste from landfill	<p>Ensure public tender construction project general contractors track and disclose the amount of construction and demolition waste generated, as well as the amount diverted from landfill</p> <p>Program: Special Purpose Real Property-Office of Facilities Renewal Management</p>	<p>Performance indicator: Percentage by weight of construction and demolition waste diverted from landfill in Crown-owned buildings for applicable projects</p> <p>Starting point: 47% in 2022-23</p> <p>Target: 90% by weight of non-hazardous operational waste diverted from landfill annually by 2030</p>	<p>By diverting construction and demolition waste from landfill, the NRC is helping reduce emissions from the production, transportation and disposal of material.</p> <p>Relevant ambitions and targets: CIF ambition: Canadians consume in a sustainable manner</p> <p>CIF indicator: Total waste diversion per capita (12.3.1)</p> <p>GIF target: By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse (12.5)</p>	<p>Indicator result: 92% of construction and demolition waste diverted in 2024-25</p>

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
Disclose embodied carbon in construction	<p>Disclose the amount of embodied carbon in the structural materials of major construction projects, based on material carbon intensity or a life-cycle analysis</p> <p>Program: Special Purpose Real Property-Office of Facilities Renewal Management</p>	<p>Performance indicator: Percentage of major construction projects that disclose embodied carbon for structural materials.</p> <p>Starting point: 0% in 2022-23</p> <p>Target: 100% of major construction projects disclose embodied carbon for structural materials by 2030</p>	<p>Relevant targets or ambitions: By tracking the amount of embodied carbon in the structural materials of major construction projects, the NRC will develop a better understanding of emissions associated to its major construction projects and develop mitigation strategies.</p> <p>Relevant ambitions and targets: CIF ambition: N/A CIF indicator: N/A GIF target: N/A</p>	<p>Indicator result: N/A</p> <p>Notes: No identified projects in 2024-25 that meet requirements for reporting.</p>
	<p>Reduce embodied carbon from structural materials of major construction projects by 30%, starting in 2025, using recycled and lower-carbon materials, material efficiency and performance-based design standards.</p> <p>Program: Special Purpose Real Property-Office of Facilities Renewal Management</p>	<p>Performance indicator: Percentage of reduction in embodied carbon from the structural materials of major construction projects completed during the year</p> <p>Starting point: 0% in 2022-23 (this is a new requirement in 2023-24)</p> <p>Target: 30% reduction by 2025</p>		<p>Indicator result: N/A</p> <p>Notes: No identified projects in 2024-25 that meet requirements for reporting.</p>
Transform the federal light-duty fleet	<p>New light-duty and executive fleet vehicle purchases will include zero-emission vehicles (ZEVs) or hybrids</p> <p>Program: Special Purpose Real Property</p>	<p>Performance indicator: Percentage of light-duty and executive fleet vehicles that are ZEVs or hybrids</p> <p>Starting point: 7% in 2022-23</p> <p>Target: 100% of light-duty and executive fleet vehicles are ZEVs or hybrid by 2030</p>	<p>By purchasing zero emission vehicles or hybrids, the NRC is reducing greenhouse gas emissions from conventional fleet operations and enhancing sustainable consumption.</p> <p>Relevant ambitions and targets:</p>	<p>Indicator result: 23% of fleet vehicles in 2024-25</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>Optimize and rationalize federal vehicle fleet management through application of telematics and development of a fleet strategic plan</p> <p>Program: Special Purpose Real Property</p>	<p>Performance indicator: Percentage reduction in Scope 1 GHG emissions from conventional fleet relative to fiscal year 2005–06 levels</p> <p>Starting point: 57% reduction in 2022–23 (153 ktCO2e)</p> <p>Target: 40% reduction by 2025</p>	<p>CIF ambition: Canadians consume in a sustainable manner</p> <p>CIF indicator: Proportion of new light duty vehicle registrations that are zero-emission vehicles (12.1.1)</p> <p>GIF target: Implement the 10-year framework of programmes on sustainable consumption and production, all countries taking action, with developed countries taking the lead, taking into account the development and capabilities of developing countries (12.1).</p>	<p>Indicator result: 62% reduction in 2024–25 (136 ktCO2e)</p> <p>Notes: In 2024–25, zero emission vehicles represented 23% of the NRC’s conventional fleet.</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	<p>Build capacity in green procurement to incorporate "greening" criteria into NRC procurement practices (e.g., carbon reduction, sustainable plastics, training) to aid the transition to a net-zero, circular economy</p> <p>Program: Internal Services-Finance and Procurement Services branch</p>	<p>Performance indicator: Percentage of "green"-trained procurement officers</p> <p>Starting point: 98% in 2022-23</p> <p>Target: 100% every year starting in 2023-24</p>	<p>By incorporating environmental considerations into purchasing decisions, the NRC is helping suppliers reduce the environmental impact of goods and services delivered, and their supply chains.</p> <p>Relevant ambitions and targets: CIF ambition: Canadians consume in a sustainable manner</p> <p>CIF indicator: Proportion of businesses that adopted selected environmental protection activities and management practices (12.2.1)</p> <p>GIF target: Promote public procurement practices that are sustainable, in accordance with national policies and priorities (12.7)</p>	<p>Indicator result: 100% of procurement officers were "green"-trained as at March 31, 2025</p>

Implementation strategies supporting the goal

This section is for implementation strategies that support the goal **“Reduce waste and transition to zero-emission vehicles”** 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
Boost the supply of critical minerals for the green and digital economy	<p>Support the development of new or improved battery recycling processes to boost critical minerals supply chains</p> <p>Program: Clean Energy Innovation</p>	<p>Performance indicator: Number of critical minerals projects that advance by 1 or more technology readiness levels (TRL)</p> <p>Starting point: 0</p> <p>Target: 10 by March 31, 2027</p>	<p>By conducting research projects with clients and collaborators, the NRC will advance the development of new or improved battery recycling processes that will help boost the supply of critical minerals and support Canada's clean energy transformation.</p> <p>Relevant ambitions and targets: CIF ambition/target: N/A CIF indicator: N/A GIF target: N/A</p>	<p>Indicator result: 2 new projects in FY 2024–25 (adding a cumulative total of 5 projects under 2023–2027 DSDS to the starting point value)</p>
Remediate high-priority contaminated sites	<p>Continue to monitor, risk-manage or remediate identified contaminated sites</p> <p>Program: Internal Services-Health, Safety and Environment branch</p>	<p>Performance indicator: Number of site files that are closed or have long-term risk management plans in place</p> <p>Starting point: 11 in 2022–2023</p> <p>Target: 12 by March 31, 2027</p>	<p>By assessing contaminated sites and implementing remediation activities, the NRC is reducing risks from contaminated sites on human health and the environment.</p> <p>Relevant ambitions and targets: CIF ambition/target: N/A CIF indicator: N/A GIF target: N/A</p>	<p>Indicator result: 11 site files as of FY 2024–25</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
Research innovative solutions for plastics	<p>Develop and deploy a Decision Support System (DSS) to reduce the risks of plastics to the environment, wildlife and human health</p> <p>Programs: Ocean, Coastal and River Engineering-Clean Energy Innovation-Aquatic and Crop Resources Development-Collaborative Science, Technology and Innovation Program-Ocean program</p>	<p>Performance indicator: Percentage of users reporting that the DSS is an effective tool in supporting policy and management decisions to reduce the potential risks of plastics to the environment, wildlife and human health</p> <p>Starting point: N/A (the development of the DSS tool was at 50% completion in March 2023)</p> <p>Target: 90% in 2026–27</p>	<p>By developing and deploying a DSS, the NRC will give researchers and policymakers greater understanding of plastic pollution distributions and risks to Canada’s aquatic systems. It will also support the reduction of plastic pollution and mitigate risks of exposure to the environment and human health.</p> <p>Relevant ambitions and targets: CIF ambition: N/A CIF indicator: N/A GIF target: N/A</p>	<p>Indicator result: In progress</p> <p>Notes: Survey results will be available in FY 2026–27.</p>
	<p>Reduce plastic waste from food packaging by developing technologies for sustainable plastic sources and packaging</p> <p>Program: Automotive and Surface Transportation</p>	<p>Performance indicator: Number of technologies developed supporting sustainable food packaging</p> <p>Starting point: 1 in 2022–23</p> <p>Target: 3 by March 31, 2027</p>	<p>By developing technologies for sustainable packaging, especially for food applications, the NRC will support the development of new products with potential for biomass and recycled plastics reclamation and the use of compostable plastics.</p> <p>Relevant ambitions and targets: CIF ambition/target: N/A CIF indicator: N/A GIF target: N/A</p>	<p>Indicator result: 2 technologies in FY 2024–25 addressing moisture sensitivity of fibre (paper) based packaging (adding a cumulative total of 6 technologies under 2023–2027 DSDS to the starting point value)</p>



GOAL 13: TAKE ACTION ON CLIMATE CHANGE AND ITS IMPACTS

FSDS context:

Canada's path to net-zero emissions by 2050 requires coordinated action to reduce greenhouse gas emissions, enhance climate resilience, and support sustainable infrastructure development. In fiscal year 2024 to 2025, the NRC advanced efforts across these fronts through targeted research, industry collaboration and internal operations improvements.

In support of greener marine operations, the NRC worked on 36 projects for the Royal Canadian Navy and Canadian Coast Guard, advancing next-generation platforms under its Zero Impact Ships, Safe Operations and Secure Canada pillars. In support of resilient shores, the NRC established Canada's first emergency flood barrier testing facility, working with industry bodies to develop and certify flood barrier solutions and standards. The NRC supported 20 clients with flood data modelling and emergency response planning, and collaborated on 33 projects to develop flood barriers and manage shoreline risks.

Under the Climate Resilient Built Environment Initiative, the NRC collaborated with Health Canada on 4 pilot studies to mitigate the effects of extreme heat. These included nature-based urban-scale solutions to reduce urban heat island effects, strategies to manage overheating risks in vulnerable buildings such as long-term care facilities and schools, and approaches to simultaneously address heat and wildfire smoke exposure.

To improve infrastructure resilience and inform public-sector investment decisions, the NRC developed 2 new decision-making tools in fiscal year 2024 to 2025. This effort is part of a broader plan to deliver 10 new tools by 2028 to help manage assets in the face of evolving climate risks. The NRC also completed life-cycle cost assessments for all major building and infrastructure projects, embedding whole-building analyses into recapitalization projects.

The NRC also continued to decarbonize its operations. In fiscal year 2024 to 2025, 75% of eligible sites participated in Public Services and Procurement Canada’s clean electricity Power Purchase Agreement, and recommissioning activities were completed on 15% of its building footprint. As part of its long-term climate adaptation and mitigation strategy, the NRC is laying the foundation for emissions reporting and sustainable design in both owned and leased infrastructure, aligning with Canada’s broader climate targets.

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>Conduct whole building (or asset) life-cycle assessments for major building and infrastructure projects</p> <p>Program: Special Purpose Real Property</p>	<p>Performance indicator: Percentage of major building and infrastructure projects having completed whole building (or asset) life-cycle assessment in reporting year</p> <p>Starting point: 0% in 2022–23 (this was a new requirement in 2023–24)</p> <p>Target: 100% major buildings and infrastructure projects having completed whole building (or asset) life-cycle assessment*</p> <p>*Target will be formalized as part of the NRC’s Real Property Strategy at the end of 2023–24. Reporting will start in 2024–25.</p>	<p>By completing whole building (or asset) life cycle assessments, the NRC will be better positioned to quantify the amount of embodied carbon that is associated with its major infrastructure projects, and use this information as a design tool to reduce emissions.</p> <p>Relevant ambitions and targets: CIF ambition: Canadians reduce greenhouse gas emissions CIF indicator: Greenhouse gas emissions (13.1.1) GIF target: Integrate climate change measures into national policies, strategies and planning (13.2)</p>	<p>Indicator result: 100% of projects in 2024–25</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>Adopt the use of clean electricity through Public Services and Procurement Canada (PSPC) Power Purchase Agreement (PPA)</p> <p>Program: Special Purpose Real Property</p>	<p>Performance indicator: Percentage of eligible sites participating in PSPC’s clean electricity PPA</p> <p>Starting point: 0% in 2022–23</p> <p>Target: 100% of eligible sites participating when clean electricity PPA becomes available*</p> <p>*Target date to be confirmed once PPA is implemented</p>	<p>By participating in the purchase of clean electricity, the NRC will contribute to the Government of Canada’s objectives of greening its procurement, lowering its emissions and encouraging the transition to a clean economy.</p> <p>Relevant ambitions and targets CIF ambition: Canadians reduce greenhouse gas emissions</p> <p>CIF indicator: Greenhouse gas emissions (13.1.1)</p> <p>GIF target: Integrate climate change measures into national policies, strategies and planning (13.2)</p>	<p>Indicator result: 75% of eligible sites in 2024–25</p> <p>Notes: Eligible sites participating include NB and NS. PPA not yet available for all sites.</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>Recommission large energy-intensive buildings on a regular cycle</p> <p>Program: Special Purpose Real Property</p>	<p>Performance indicator: Percentage of total building footprint with recommissioning activities completed in reporting year</p> <p>Starting point: 9% in 2022–23</p> <p>Target: 10% per fiscal year starting in 2023–24</p>	<p>By recommissioning its buildings on a regular cycle through actions such as optimizing energy efficiency, implementing smart building technologies, the NRC is ensuring that its buildings are operating efficiently and reducing GHG emissions.</p> <p>Relevant ambitions and targets CIF ambition: Canadians reduce greenhouse gas emissions</p> <p>CIF indicator: Greenhouse gas emissions (13.1.1)</p> <p>GIF target: Integrate climate change measures into national policies, strategies and planning (13.2)</p>	<p>Indicator result: 15% in FY 2024–25</p>
	<p>Report building energy, water usage and waste generated using Energy Star Portfolio Manager for all new office leases and lease renewals for space over 500m² landlords</p> <p>Program: Special Purpose Real Property</p>	<p>Performance indicator: Percentage of office leases (> 500 m²) that are reporting energy, water and waste generation using Energy Star Portfolio Manager</p> <p>Starting point: 0% in 2022–23</p> <p>Target: 100% by 2025</p>	<p>Buildings with the highest scores will generally minimize energy use and therefore GHG emissions from heating and electricity (where applicable).</p> <p>By reporting on the GHG emissions of leased space, the NRC will be able to better monitor GHG emission performance in subsequent lease negotiations.</p>	<p>Indicator result: N/A</p> <p>Notes: No leased office space > 500 m²</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>Report on GHG emissions from the majority of leased office space</p> <p>Program: Special Purpose Real Property</p>	<p>Performance indicator: Percentage of leased office floor area reporting GHG emissions</p> <p>Starting point: 0% in 2022–23 (GHG emissions from leased facilities are not currently reported)</p> <p>Target: 30% by 2025</p>	<p>Relevant ambitions and targets: CIF ambition: Canadians reduce their greenhouse gas emissions</p> <p>CIF indicator: Greenhouse has emissions (13.1.1)</p> <p>GIF target: Integrate climate change measures into national policies, strategies and planning (13.2)</p>	<p>Indicator result: 0% in 2024–25</p> <p>Notes: Average lease <100 m². GHG emissions from leased facilities are not currently reported. Methodology and inclusion of requirements into lease renewals are being developed.</p>
<p>Modernize through net-zero carbon buildings</p>	<p>Design and construct all new buildings (including build-to-lease and public-private partnerships) to be net-zero carbon unless a life-cycle cost-benefit analysis indicates net-zero-carbon-ready construction</p> <p>Program: Special Purpose Real Property-Office of Facilities Renewal Management</p>	<p>Performance indicator: Percentage reduction in GHG emissions from real property from fiscal year 2005–06</p> <p>Starting point: 48% reduction in 2022–23 (37,216 ktCO₂e)</p> <p>Target: 70% reduction by 2030</p>	<p>By taking actions such as rationalizing its portfolio, sharing facilities and reducing demand for energy or switching to lower carbon sources of energy, the NRC is reducing GHG emissions from its real property operations.</p> <p>Relevant ambitions and targets: CIF ambition: Canadians reduce greenhouse gas emissions</p> <p>CIF indicator: Greenhouse gas emissions (13.1.1)</p> <p>GIF target: Integrate climate change measures into national policies, strategies and planning (13.2)</p>	<p>Indicator result: 44.1% reduction in 2024–25 (40,952 ktCO₂e)</p> <p>Notes: In 2024–25, power purchase agreements were signed for NRC sites in Nova Scotia and New Brunswick, expected to reduce overall NRC baseline emissions by 3% once clean electricity generation begins in 2027–28. The drop in the indicator result is primarily due to an increase in process load and secondly due to increased heating during a longer colder winter.</p>
<p>Apply a greenhouse gas reduction life-cycle cost analysis for major building retrofits</p>	<p>Incorporate GHG emissions reduction into the departmental decision-making process using GHG options and a life cycle costing analysis methodology for all major retrofits. Disclose the amount of embodied carbon in the structural materials of major construction projects, based on material carbon intensity or a life-cycle analysis.</p> <p>Program: Special Purpose Real Property-Office of Facilities Renewal Management</p>			

Target: The Government of Canada will transition to net-zero carbon national safety and security fleet operations by 2050 (ministers with national safety and security fleets)

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
Improve environmental performance of national safety and security fleets	Help develop state-of-the-art fleet platforms and technologies for the Royal Canadian Navy and the Canadian Coast Guard to enable green and sustainable fleet operations Program: Ocean, Coastal and River Engineering	Performance indicator: Number of projects with clients or collaborators supporting sustainable fleet operations Starting point: 36 in 2022–23 Target: 36 active projects per year starting in 2023–24	By developing fleet platforms and new technologies, the NRC is enhancing the capability and sustainability of Canada’s defence fleets. Relevant ambitions and targets: CIF ambition: Canadians reduce greenhouse gas emissions CIF indicator: Greenhouse gas emissions (13.1.1) GIF target: N/A	Indicator result: 36 projects in FY 2024–25 Notes: Count of relevant projects in 3 OCRE Strategic Pillars; Zero-Impact Ships (20), Safe Operations (8) and Secure Canada (8). Includes ship and submarine fleets, and related technologies.

Target: The Government of Canada will transition to climate resilient operations 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
Reduce risks posed by climate change to federal assets, services and operations	Develop plans to reduce the climate risk of mission critical assets with moderate to high risks	Performance indicator: Percentage of mission critical assets with moderate to	By developing a climate resilient real property portfolio plan, the NRC will be better positioned to prioritize its real	Indicator result: 0% in FY 2024–25

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>Program: Special Purpose Real Property-Office of Facilities Renewal Management</p>	<p>high risks related to climate change that have a risk mitigation plan</p> <p>Starting point: 0% in 2022–23 (Asset-level climate risk and vulnerability assessment initiated in 2023)</p> <p>Target: 100% by March 31, 2027</p>	<p>property assets for a detailed risk assessment and the implementation of adaptation measures.</p> <p>Relevant ambitions and targets: CIF ambition: Canadians are well-equipped and resilient to face the effects of Climate change</p> <p>CIF indicator: Proportion of municipal organization who factored climate change adaptation into their decision-making process (13.3.1)</p> <p>GIF targets: Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries (13.1)</p> <p>Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning (13.3)</p>	<p>Notes: Risk mitigation plan development for critical assets anticipated to commence in 2025–26.</p>

Implementation strategies supporting the goal

This section is for implementation strategies that support the goal “**Take action on climate change and its impacts**” 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
Collaborate on emergency management and disaster risk reduction	Collaborate with Health Canada to reduce the impacts of extreme heat through pilot studies Program: Construction	Performance indicator: Number of pilot studies completed to reduce the impacts of extreme heat Starting point: 0 Target: 4 by March 31, 2026	By conducting pilot studies, the NRC will support the development of innovative solutions to prevent and mitigate negative health consequences resulting from extreme heat events. Relevant ambitions and targets: CIF ambition: Canadians are well-equipped and resilient to face the effects of Climate change CIF indicator: N/A GIF target: Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries (13.1)	Indicator result: 4 pilot studies were ongoing in FY 2024–25, and on track to be completed by the target date.
	Help Canadian industry develop emergency flood barriers and support communities in emergency response planning Program: Ocean, Coastal and River Engineering	Performance indicator: Number of clients supported with emergency response planning and the development of flood barriers Starting point: 13 in 2022–23 Target: 5 active clients per year starting in 2023–24	By working with industry and community clients with emergency response planning and in the development of flood barriers, the NRC is supporting increased resilience to extreme weather events and other environmental factors on Canada's shorelines and infrastructure. Relevant ambitions and targets: CIF ambition: Canadians are well-equipped and resilient to face the effects of climate change CIF indicator: N/A GIF target: Strengthen resilience and adaptive capacity to climate-related	Indicator result: 19 clients in FY 2024–25 Notes: Reflects 29 active OCRE projects pertaining to flood prediction, flood barriers, nature-based solutions, or emergency response. The total number of projects exceeds the number of clients, as several clients are involved in multiple initiatives.

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
			hazards and natural disasters in all countries (13.1)	
	Develop resilient infrastructure designs, and advance technologies and decision-making tools for resilient asset management, Programs: Construction-Ocean, Coastal and River Engineering	Performance indicator: Number of decision-making tools updated or developed to support public infrastructure management Starting point: 0 in 2022–23 Target: 10 by March 31, 2028	By developing new technologies and decision-making tools, the NRC will support increased resilience to extreme weather events and other environmental factors on Canada's buildings, shorelines and infrastructure. Relevant ambitions and targets: CIF ambition: Canadians are well-equipped and resilient to face the effects of climate change CIF indicator: N/A	Indicator result: 2 decision-making tools completed in FY 2024–25. Notes: Tools are under development through the Climate Resilient Built Environment Initiative (CRBE); on track to deliver 10 tools by March 2028.
		Performance indicator: Number of projects with clients or collaborators related to resilient shores Starting point: 31 in 2022–23 Target: 31 active projects per year starting in 2023–24	GIF target: Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries (13.1)	Indicator result: 33 projects in FY 2024–25



GOAL 14: CONSERVE AND PROTECT CANADA'S OCEANS

FSDS context:

Oceans are central to Canada's environmental health, economic prosperity and community resilience. They have the potential to be part of climate solutions, enhance prospects for coastal and inland communities, and help foster a sustainable and thriving blue economy. Healthy oceans are critical to fighting climate change and protecting marine life. That is why Canada has committed to conserving 30% of our marine and coastal areas by 2030.

In alignment with this goal, the NRC has developed 5 new modelling and monitoring tools that are designed to enhance understanding and prediction of climate change impacts on oceans and estuaries. The NRC also expanded efforts to address microplastic and nanoplastic pollution in Canadian waters. These minuscule plastic particles, often originating from the breakdown of larger plastic items and synthetic fibers, threaten marine life across Canada's extensive coastal and freshwater ecosystems. Working with partners from academia, industry and Indigenous organizations, the NRC entered into 4 new data-sharing agreements to enhance knowledge exchange and generate accurate information on plastic accumulation zones and transport pathways in marine systems. These efforts are critical to shaping effective policies and mitigation strategies.

In support of Canada's resilience to extreme weather events, the NRC published 24 peer-reviewed studies on the impacts of climate and environmental forces on shorelines and related infrastructure. This research contributes to coastal planning, infrastructure durability, and the development of tools that help communities and governments adapt to changing coastal conditions.

Target theme: Ocean protection and conservation

Target: Conserve 25% of marine and coastal areas by 2025 and 30% by 2030, in support of the commitment to work to halt and reverse nature loss by 2030 in Canada, and achieve a full recovery for nature by 2050 (Minister of Fisheries, Oceans and the Canadian Coast Guard)

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
Build knowledge of coastal and marine ecosystems and marine protected areas	<p>Develop innovative ocean health modelling and monitoring technologies to enable better understanding and prediction of climate change impacts on oceans and potential solutions</p> <p>Program: Aquatic and Crop Resources Development-Digital Technologies</p>	<p>Performance indicator: Number of modeling and monitoring tools developed to better understand and predict climate change impacts on oceans and estuaries.</p> <p>Starting point: 0</p> <p>Target: 5 by March 31, 2027</p>	<p>By developing new modelling and monitoring technologies, the NRC will support increased understanding of pollution and climate change impacts on Canada’s marine ecosystems and support conservation efforts.</p> <p>Relevant ambitions and targets: CIF ambition: Canada protects and conserves marine areas and sustainably manages ocean fish stocks</p> <p>CIF indicator: Proportion of marine and coastal areas conserved (14.1.1)</p> <p>GIF target: By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans (14.2)</p>	<p>Indicator result: 1 tool in FY 2024–25 (adding a cumulative total of 5 tools under 2023–2027 DSDS to the starting point value).</p>
	<p>Support Canada in understanding and mitigating the impacts of extreme weather events and other environmental factors on Canada’s shorelines and related infrastructure</p> <p>Program: Ocean, Coastal and River Engineering</p>	<p>Performance indicator: Number of publications on the impacts of extreme weather events and other environmental factors on Canada’s shorelines and related infrastructure</p> <p>Starting point: 7 in 2022–23</p>	<p>By conducting research on resilient shorelines and related infrastructure, the NRC is helping ensure that Canada has the capabilities to mitigate the impacts of extreme weather events and other environmental factors.</p> <p>Relevant ambitions and targets:</p>	<p>Indicator result: 24 publications in FY 2024–25 (adding a cumulative total of 37 publications under 2023–2027 DSDS to the starting point value).</p> <p>Notes: Includes a subset of OCRE’s 52 peer reviewed publications in calendar</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>Target: 28 by March 31, 2027</p>	<p>CIF ambition: Canada protects and conserves marine areas and sustainably manages ocean fish stocks</p> <p>CIF indicator: Proportion of marine and coastal areas conserved (14.1.1)</p> <p>GIF target: By 2020, conserve at least 10% of coastal and marine areas, consistent with national and international law and based on the best available scientific information (14.5)</p>	<p>year 2024. These publications are related to shorelines and related infrastructure, and the impacts of severe weather.</p>

Implementation strategies supporting the goal

This section is for implementation strategies that support the goal “Conserve and protect Canada’s oceans” 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
<p>Reduce marine litter and support the Canada-wide Strategy on Zero Plastic Waste</p>	<p>Generate and disseminate knowledge on micro and nanoplastics pollution to improve the availability of accurate information to predict accumulation zones and plastic pollution pathways in different marine environments</p> <p>Programs: Ocean, Coastal and River Engineering-Clean Energy Innovation-Aquatic and Crop Resources Development-Metrology-Collaborative Science, Technology and Innovation Program-Ocean program</p>	<p>Performance indicator: Number of project partners participating in data sharing agreements (including academia, science-based departments and agencies, Canadian SMEs, and Indigenous organizations)</p> <p>Starting point: 0 in 2022–23</p> <p>Target: 10 partners by March 31, 2027</p>	<p>By developing new technologies and methods to assess plastic pollution, the NRC will help reduce barriers to assess plastic pollution in Canada’s water ways, and support prevention and reduction of plastic pollution.</p> <p>Relevant ambitions and targets: CIF ambition: Canada protects and conserves marine areas and sustainably manages ocean fish stocks</p> <p>CIF indicator: N/A</p> <p>GIF target: N/A</p>	<p>Indicator result: 7 project partners in FY 2024–25 (adding a cumulative total of 8 project partners under 2023–2027 DSDS to the starting point value).</p>



GOAL 15: PROTECT AND RECOVER SPECIES, CONSERVE CANADIAN BIODIVERSITY

FSDS context:

Canada's conservation network is diverse, encompassing more than just national parks and wildlife areas. The Government of Canada recognizes lands and waters that contribute to the long-term conservation of biodiversity through effective management practices, even outside of formally protected areas. These sites, known as other effective area-based conservation measures (OECMs), help preserve ecosystems and support healthy wildlife populations. In fiscal year 2024 to 2025, the NRC assessed 11 of its properties for potential recognition as OECMs, using established pan-Canadian criteria. This work contributes to broader national goals for biodiversity conservation and sustainable land stewardship.

Target theme: Conservation of land and fresh water

Target: Conserve 25% of Canada's land and inland waters by 2025, working toward 30% by 2030, from 12.5% recognized as conserved as of the end of 2020, in support of the commitment to work to halt and reverse nature loss by 2030 in Canada, and achieve a full recovery for nature by 2050 (Minister of Environment and Climate Change)

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
Conserve natural spaces	<p>Assess NRC properties for suitability and recognition as other effective area-based conservation measures (OECMs)</p> <p>Program: Internal Services-Health, Safety and Environment branch</p>	<p>Performance indicator: Number of NRC properties assessed for suitability as OECMs</p> <p>Starting point: 1 in 2022-2023</p> <p>Target: All 12 NRC-owned properties assessed by March 31, 2027</p>	<p>By assessing its properties for suitability as OECMs, the NRC will identify which areas are managed to achieve positive long-term outcomes in conservation and biodiversity outside of protected areas.</p> <p>Relevant ambitions and targets: CIF ambition/target: N/A CIF indicator: N/A GIF target: N/A</p>	<p>Indicator result: 2 sites in FY 2024-25 (adding a cumulative total of 10 sites under 2023-2027 DSDS to the starting point value).</p>

Integrating sustainable development

The National Research Council of Canada (NRC) will continue to ensure that its decision-making process includes consideration of FSDS goals and targets through its Strategic Environmental and Economic Assessment (SEEA) process. An SEEA for a policy, program or regulatory proposal includes an analysis of the climate, nature, environmental and economic effects of the given proposal.

Public statements on the results of the NRC's assessments are issued when an initiative that was the subject of a detailed Strategic Environmental and Economic Assessment is implemented or announced. The purpose of the public statement is to demonstrate that the environmental and economic effects, including contributions to the FSDS goals and targets, of an initiative have been considered during proposal development and decision making.

The NRC did not have any proposals subject to a detailed SEEA that were announced or implemented in 2024–25.

