

Urgent Times, URGENT ACTION

APPENDIX A

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Appendix A: Progress on Commitments under the Environmental Goals and Climate Change Reduction Act and Climate Change Plan

The Environmental Goals and Climate Change Reduction Act legislates 28 goals that aim to drive sustainable prosperity in Nova Scotia. These actions aim to grow the clean economy, protect nature (including the air and water needed to live healthy lives), and address the climate change emergency. The 68 actions under the climate change plan contribute to some of the goals in the Environmental Goals and Climate Change Reduction Act. This work involves efforts across many departments and in collaboration with many sectors.

The appendix below outlines the progress on both the goals of the Environmental Goals and Climate Change Reduction Act and the actions under the climate change plan since the [2022 progress report](#) was released. These actions work together to support the sustainability and resiliency of our province.

This report does not include all the work happening across government or sectors that is helping to protect the environment, build the clean economy, and address climate change.

Reducing Greenhouse Gas Emissions

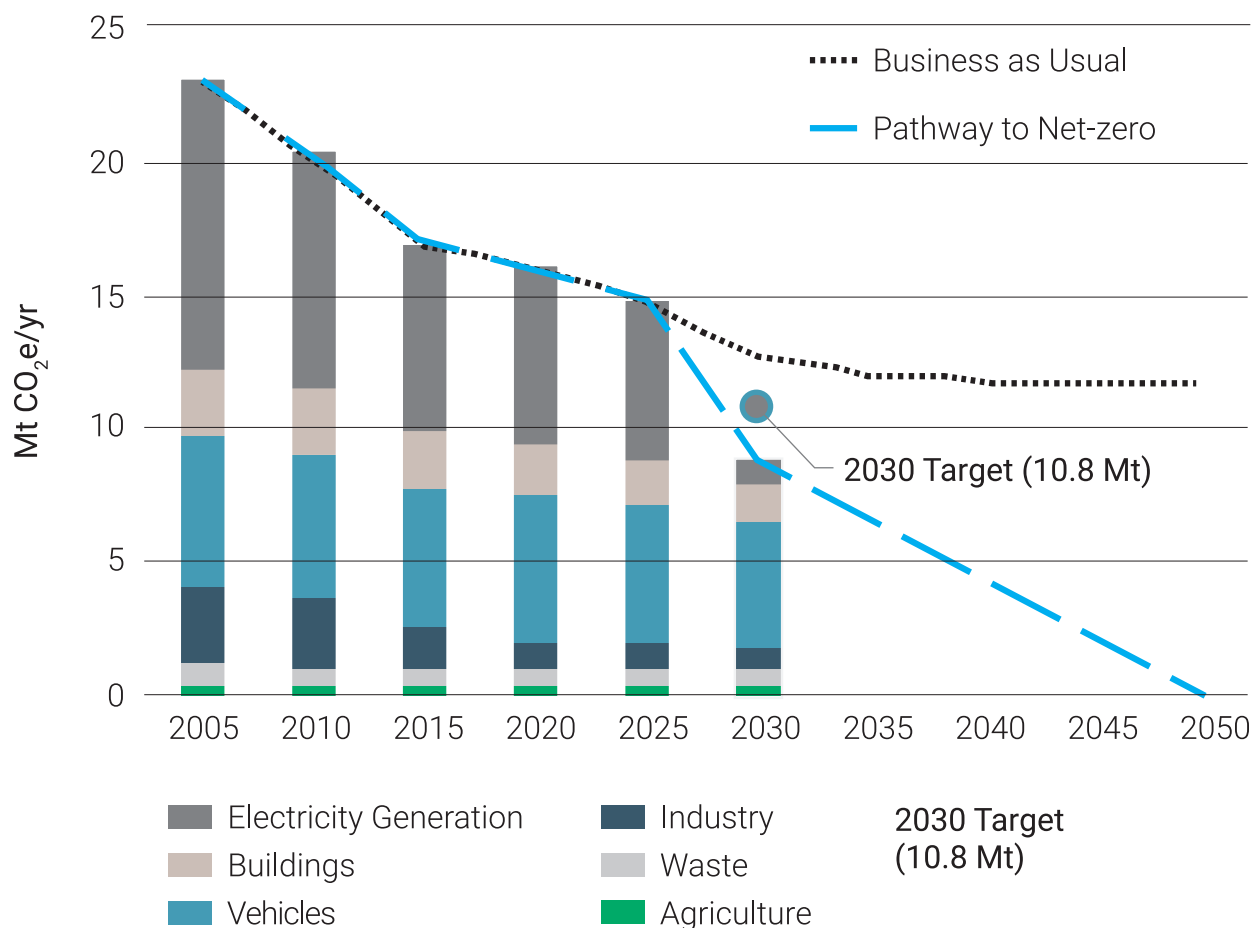
The science is clear—we need to reduce global greenhouse gas emissions if we want to avoid the most severe impacts of climate change. Below are updates on our current emissions and actions we’re taking to continue reducing greenhouse gas emissions.

Environmental Goals and Climate Change Reduction Act Goal 1:

Reduce greenhouse gas emissions by 53 per cent below 2005 levels by the year 2030, and be net-zero by 2050.

In 2021, Nova Scotia emitted 14.6 megatonnes of greenhouse gases, a 36 per cent reduction in emissions since 2005. These emissions come from many sources across the province (e.g., electricity, transportation, buildings, etc.). Greenhouse gas emissions data comes from [Canada’s National Inventory Report](#) where there is a two-year delay in reporting.

Nova Scotia’s Pathway to 2030 and Net-zero Greenhouse Gas Emissions



Progress on Climate Change Plan Actions Helping To Reduce Greenhouse Gas Emissions:

Action #	Action	Highlight/Milestone
21	Work with our neighbouring provinces to transfer more electricity across Atlantic Canada and Quebec through projects like the Atlantic Loop, Muskrat Falls, and stronger connections with New Brunswick.	<p>For 2022, electricity imports from other provinces, including the Maritime Link, totalled 1,849 gigawatt hours, or approximately 18 per cent of total electricity sales in Nova Scotia.</p> <p>Nova Scotia continues to engage with Nova Scotia Power, the federal government, and our neighbouring provinces on the analysis of the Atlantic Loop and alternatives.</p>
29	Ban installations of oil-fired heating equipment in new buildings by 2025.	Government is taking action to cut our emissions in the building sector, the third-largest source of emissions in Nova Scotia, in 2021. We are reviewing how other jurisdictions, such as Quebec and Vancouver, have banned oil-fired heating equipment.
63	Invest in research needed for new clean technologies and practices to help us meet our net-zero by 2050 target.	Expansion of the Verschuren Centre into a national bioprocessing centre will attract 10 new companies to Nova Scotia per year. This investment is helping to grow Nova Scotia's bioeconomy sector.

Taking Action and Accountability

The Environmental Goals and Climate Change Reduction Act requires that a climate change plan be developed. Public progress reporting on the actions of the climate change plan and the goals of the Environmental Goals and Climate Change Reduction Act are required under the act.

Environmental Goals and Climate Change Reduction Act Goal 2:

Create a climate change plan for clean growth that addresses

- (a) achieving the greenhouse gas emission targets set out in the act
- (b) adapting to the impacts of climate change and building a climate-resilient province
- (c) accelerating the integration of sustainable and innovative technologies and approaches
- (d) clean inclusive growth

This goal is complete. In December 2022, the government released Nova Scotia's climate change plan, [Our Climate, Our Future: Nova Scotia's Climate Plan for Clean Growth](#). The plan has 68 actions that were informed by the new provincial climate change risk assessment, conversations with Nova Scotians, and emerging opportunities to reduce greenhouse gas emissions. The actions build on many of the goals in the Environmental Goals and Climate Change Reduction Act.

Progress on Climate Change Plan Actions that Support Accountability

Action #	Action	Highlight/Milestone
67	Report annually on progress and impacts of the actions in the climate change plan.	This serves as the first report on progress and impacts of climate change plan actions and commitments under the Environmental Goals and Climate Change Reduction Act.
68	Review and renew the climate change plan within five years of its release.	Government continues to build on knowledge and learnings as actions are implemented within the plan to continue to respond to climate change and remain relevant and responsive to the needs of Nova Scotia.

Increasing the Use of Zero-emission Vehicles

Zero-emission vehicles are good for the environment and public health. They reduce our greenhouse gas emissions from the transportation sector and can support cleaner air and quieter neighbourhoods.

Environmental Goals and Climate Change Reduction Act Goal 3:

Develop and implement a zero-emission vehicle mandate that ensures, at a minimum, that 30 per cent of new vehicle sales for all light-duty and personal vehicles in the province will be zero-emission vehicles by 2030. Develop and implement supporting initiatives for this goal.

- This goal is reinforced in action #36 in the climate change plan.

The Department of Natural Resources and Renewables is in the process of hiring a consultant to assess a zero-emission vehicle mandate and other actions that can support the goal of increasing the supply of electric vehicles (EVs) in Nova Scotia. In addition to this, the government continues to work closely with the federal government on a federal zero-emission vehicle mandate.

Progress on Climate Change Plan Actions Helping To Increase the Use of Zero-emission Vehicles:

Action #	Action	Highlight/Milestone
35	Build more EV charging stations across the province so Nova Scotians can access them when and where they need to.	This year, EV rebates for charging stations in apartment and condominium buildings were launched. Four projects are already underway. Program information is available at Efficiency Nova Scotia . <i>Continued below.</i>

Action #	Action	Highlight/Milestone
35	<i>Continued.</i>	<p>These projects join the existing 15 fast chargers and over 500 community chargers publicly available in the province. For more information on publicly accessible charging stations, visit EV Assist.</p> <p>An EV Infrastructure Training Program certification course, which trains Nova Scotian trades people how to safely install and maintain EV chargers, is now being delivered by Efficiency Nova Scotia. For more information, visit IBEW: Electrical Vehicle Infrastructure Training - Efficiency Nova Scotia (efficiencyns.ca).</p>
36	Increase the number of zero-emissions vehicles and e-bikes to meet the 2030 30 per cent zero-emissions vehicle sales target by continuing to offer rebates and continuing to provide education and outreach programs.	<p>Significant steps toward increasing EV and e-bike sales have been made:</p> <ul style="list-style-type: none"> • In 2022/23, 3 per cent of vehicles sold were electric and there are currently over 3,200 EVs in Nova Scotia. • EV sales are up 175 per cent from last year when 1.6 per cent of vehicles sold were electric. • The EV rebate program contributed to this surge by supporting over 1,300 EV and over 4,000 e-bike owners. • There was a 60 per cent increase in EV test drives under the Next Ride outreach campaign, including over 129 events at more than 80 locations.
37	Increase the number of zero-emissions medium- and heavy-duty, freight, and marine vehicles through new incentives.	To reduce transportation emissions, marine vessels and large transport trucks need to electrify or switch to alternative energy sources. Programs are under development to support this work and are expected to be launched in 2024.

Action #		Highlight/Milestone
40	Electrify public transit across the province by partnering with municipalities and the federal government.	<p>Government continues to work with public transit agencies across Nova Scotia and the federal government to begin electrifying our bus fleets.</p> <p>To date, the three largest fleets (Halifax Transit, Cape Breton Transit, and Kings Transit) have begun fleet electrification studies, planning, and design.</p> <p>In addition, Halifax Transit will incorporate 60 electric buses into their fleet in late 2023 or early 2024.</p>
20	Research how we can use battery technologies or EVs for electricity storage and backup power supplies to make our electricity system more reliable.	<p>Work is underway to research advanced battery technologies and their application in Nova Scotia.</p> <ul style="list-style-type: none"> • Last year, \$500,000 was invested in two projects at Dalhousie University to support research into vehicle-to-grid integration. • Amendments to the Electricity Act were made in March 2022 to support more electricity storage solutions by allowing the Department of Natural Resources and Renewables to <ul style="list-style-type: none"> • issue contracts for well-developed, innovative energy storage projects • issue requests for proposals for energy storage solutions such as large-scale batteries
41	Explore opportunities for electric school buses through a strategic pilot project.	The province issued a tender in March 2023, on behalf of the Council of Atlantic Ministers of Education and Training, to consider the feasibility of electrifying school buses. The feasibility study will inform efficiency, financing opportunities, and service reliability in the transition to electric school bus fleets.

Increasing Renewable Energy

Increasing the amount of renewable energy in Nova Scotia will help improve air quality and the health of Nova Scotians, reduce our greenhouse gas emissions, and grow the clean economy by attracting new businesses to our province.

Environmental Goals and Climate Change Reduction Act Goal 4:

By 2030, 80 per cent of electricity needs will be supplied by renewable energy.

Nova Scotia continues to increase the amount of electricity supplied by renewable energy. Currently, 36.1 per cent of the electricity we use comes from renewable sources.

Progress on Climate Change Plan Actions That Are Increasing Renewable Energy:

Action #	Action	Highlight/Milestone
18	Increase the amount of renewable energy used for electricity generation by building at least 500 megawatts of new local, renewable energy by 2026 and an additional 50 megawatts of new community solar.	<p>The Rate Base Procurement program awarded five new wind energy projects last year. The projects will provide up to 373 megawatts per year of renewable, low-impact electricity production. This represents 12 per cent of electricity generation when projects are operational in 2025. Three additional wind projects were proposed, which will bring even more low-cost wind to Nova Scotia. These projects are</p> <ul style="list-style-type: none"> • 148.5 megawatts as proposed through the Renewable to Retail program • 130.6 megawatts from a private wind facility proposed by Port Hawkesbury Paper Wind • 50 megawatts is proposed from a private wind facility by Natural Forces <p>These eight projects will represent 20 per cent of electricity generation once operational.</p> <p><i>Continued below.</i></p>

Action #	Action	Highlight/Milestone
18	<i>Continued.</i>	In addition to wind, the government is supporting solar power through community solar programming, enabling people who cannot install solar panels on their own property to access this solar electricity and contribute to greening our electricity grid. A community solar program is expected to open for applications in the fall of 2023.
19	Provide funding support for farms and other businesses to adopt more solar power.	Solar power can be used for more than our homes, and additional supports for solar power in the agriculture sector are being designed to support farmers and agri-businesses in reducing their emissions and energy bills.
34	Launch the Green Choice Program in 2023, which will allow government to purchase 100 per cent renewable electricity for its operations as it becomes available.	Government is measuring electricity consumption from core operations and will use the Green Choice Program to offset its consumption when available.
59	Issue leases for 5 gigawatts of offshore wind energy by 2030, with a first call for bids by 2025.	<p>Significant steps toward enabling offshore wind have taken place in the last year, including the following:</p> <ul style="list-style-type: none"> • The offshore wind industry was brought together for a workshop in November 2022 to inform the Offshore Wind Roadmap. • In collaboration with the federal government, a regional assessment on offshore wind was launched in March 2023. • Government will continue to engage with stakeholders and make enabling amendments to related regulations to support the development of 5 gigawatts of offshore wind by 2030. <p><i>Continued below.</i></p>

Action #	Action	Highlight/Milestone
59	<i>Continued.</i>	<ul style="list-style-type: none"> In May 2023, the federal government, in partnership with the governments of Nova Scotia and Newfoundland and Labrador, introduced amendments to expand the mandates of the Canada-Nova Scotia Offshore Petroleum Resources Accord Implementation Act and the Canada-Newfoundland and Labrador Atlantic Accord Implementation Act to create a legislative framework for offshore renewable energy.
64	Launch the Green Choice Program in 2023, which will allow large industrial energy consumers to purchase 100 per cent renewable electricity as it becomes available.	The Green Choice Program is anticipated to start accepting applications in 2023. Expression of interest for eligible customers and groups of customers with at least 10,000 megawatt hours per year of consumption closed in May 2023. More information can be found at https://novascotiagcp.com/

Strengthening Energy Efficiency

Energy efficiency is an important piece of meeting our climate targets, improving affordability for Nova Scotians, and creating healthier homes. This is why the Environmental Goals and Climate Change Reduction Act and climate change plan work together to improve energy efficiency in Nova Scotia.

Environmental Goals and Climate Change Reduction Act Goal 5:

Support, strengthen, and set targets for energy efficiency programming while prioritizing equitable access and benefits for low-income and marginalized Nova Scotians.

In October 2022, changes were made to the Public Utilities Act which strengthen and support the work of Efficiency Nova Scotia. These changes include

- removing the franchise term end date and extending the term of the Demand Side Management Plan from three to five years
- enabling Efficiency Nova Scotia to focus on program delivery (including more targeted programs for low-income households) during inflation rather than negotiating with Nova Scotia Power
- clarifying Efficiency Nova Scotia's role in reducing fuel oil use in homes and businesses
- supporting the goals and targets outlined in the Environmental Goals and Climate Change Act

In addition to these amendments, in December 2022, the Department of Natural Resources and Renewables announced a \$140 million provincial investment in energy efficiency programs to help all Nova Scotians move away from oil heat faster, with extra support for low- and middle-income households. Low-income households can receive free insulation, heat pumps, and any electrical panel upgrades needed to install a heat pump. This program will be delivered over the next four years. The funding will improve and expand Efficiency Nova Scotia's programs (e.g., HomeWarming and Home Energy Assessment) with extra support for people who need help the most. When combined with federal contributions, the funding will help about 13,500 low-income households and about 30,000 middle-income households.

Progress on Climate Change Actions That Are Strengthening Energy Efficiency:

Action #	Action	Highlight/Milestone
22	Help Nova Scotians reduce their demand for electricity by continuing and expanding programs delivered by Efficiency Nova Scotia and their partners.	<p>In 2022, the government supported EfficiencyOne's 2023–2025 Demand Side Management (DSM) Plan.</p> <ul style="list-style-type: none"> • The plan was approved by the Nova Scotia Utility and Review Board on September 6, 2022. • This plan outlines DSM programs and services to deliver 412.7 gigawatt hours of incremental net energy savings and 96.7 megawatts (78.8 megawatts from energy efficiency and 17.9 megawatts from demand response) of cumulative system-peak demand savings to ratepayers. • The plan comes with a total cost of \$173 million over three years, a 57 per cent funding increase from the 2020–2022 DSM plan. • The DSM plan is expected to save Nova Scotians over \$540 million in energy bill savings and reduce greenhouse gas emissions by nearly 2 million tonnes.
23	Support businesses and communities in reducing their energy demand by expanding access to onsite energy managers (OEMs) and continuing support for energy efficiency programming for businesses.	<p>OEMs have been assisting businesses across Nova Scotia in identifying and achieving energy savings and supporting energy-related applications to clean technology programs.</p> <ul style="list-style-type: none"> • The program expanded to include 11 additional OEMs to support several sectors including municipalities, universities, schools, hospitals, agriculture, seafood, and sport fishing. • OEMs have helped achieve significant reductions for the agriculture sector. In 2022, 63 energy savings projects were completed resulting in an estimated 1,293 tonnes per year of greenhouse gases reduced, and energy savings of \$276,000 per year. <p><i>Continued below.</i></p>

Action #	Action	Highlight/Milestone
23	<i>Continued.</i>	In addition to OEMs, support for the Small Business Energy Solutions program helped 177 businesses to perform retrofits to reduce their energy consumption. On average, each participating business will save over \$4,000 per year and cumulative greenhouse gas emissions reductions are expected to be 538 tonnes per year.
24	Help new building developments install shared heating systems to make multi-building heating more efficient.	<p>In 2021, the government invested \$4.6 million for an energy system to supply heating, cooling, and hot water for the Cogswell District redevelopment area in downtown Halifax. The system, the first in eastern Canada, will supply renewable energy generated by Halifax Water's nearby wastewater effluent treatment facility to six mixed-use buildings. The federal government is investing \$5.5 million in the project through the Investing in Canada Infrastructure Program.</p> <p>Work is ongoing to identify and support additional district energy projects in the province.</p>
25	Review energy efficiency programming in Nova Scotia to see where programming has gaps or can be made better.	This review is ongoing and is anticipated to be completed by end of March 2025.
26	Reduce heating oil use by at least 20 per cent by 2030 by helping retrofit 60,000 homes and piloting a new off-oil program for homeowners to completely replace oil heating equipment with electric ones.	<p>8,506 homes underwent retrofits to reduce their reliance on heating oil.</p> <ul style="list-style-type: none"> • This represents 11,981 tonnes in annual greenhouse gas emissions reductions and annual bill savings of \$12,114,344 (or ~\$1,400 annual savings per home, per year). • These emissions reductions represent about 9,226,482 litres of heating oil consumption, or approximately a 3 per cent reduction in 2022–23 of total heating oil consumption in 2019.

Action #	Action	Highlight/Milestone
27	Provide energy efficiency upgrades to more low-income households by expanding on programs such as the HomeWarming and the Affordable Multifamily Housing programs.	<p>A total of 1,323 low-income homes benefitted from no-cost energy efficiency upgrades through the HomeWarming and Affordable Multifamily Housing programs this year.</p> <p>This represents annual greenhouse gas emissions reductions of approximately 2,879 tonnes and annual bill savings of \$2,154,189 (or ~\$1,628 per home, per year).</p>
28	Continue with the Mi'kmaw Home Energy Efficiency Project and pilot a similar program for African Nova Scotian communities.	<p>This year, 244 homes were retrofitted through the Mi'kmaw Home Energy Efficiency Project, representing 489 tonnes of greenhouse gas emissions reduced per year and approximately \$312,603 total bill savings per year (or ~\$1,280 per year, per home).</p> <p>A similar program for African Nova Scotian communities is in development and is anticipated to launch in 2024.</p>
31	Support the construction and renovation of net-zero homes and multi-unit residential buildings, including net-zero affordable housing.	<p>The departments of Natural Resources and Renewables and Municipal Affairs and Housing are researching options to expand net-zero and affordable housing programs.</p> <p>An incentive program is expected to launch in 2024.</p>
32	Help owners of commercial and institutional buildings better understand their energy performance and plan for energy efficiency upgrades through voluntary energy-use monitoring.	<p>The Energy Efficient Commercial Building Rebates program, delivered by Efficiency Nova Scotia, offers incentives, financing, and advice to help upgrade commercial buildings with energy efficient products.</p> <p>This year, 19 customers, representing 381 commercial and institutional buildings across the province, enrolled in the Energy Benchmarking Pilot Program to better understand their energy performance and plan for upgrades. The program was created to support building owners to better understand the performance of their buildings while finding areas for optimization. The program will continue for the next three years.</p>

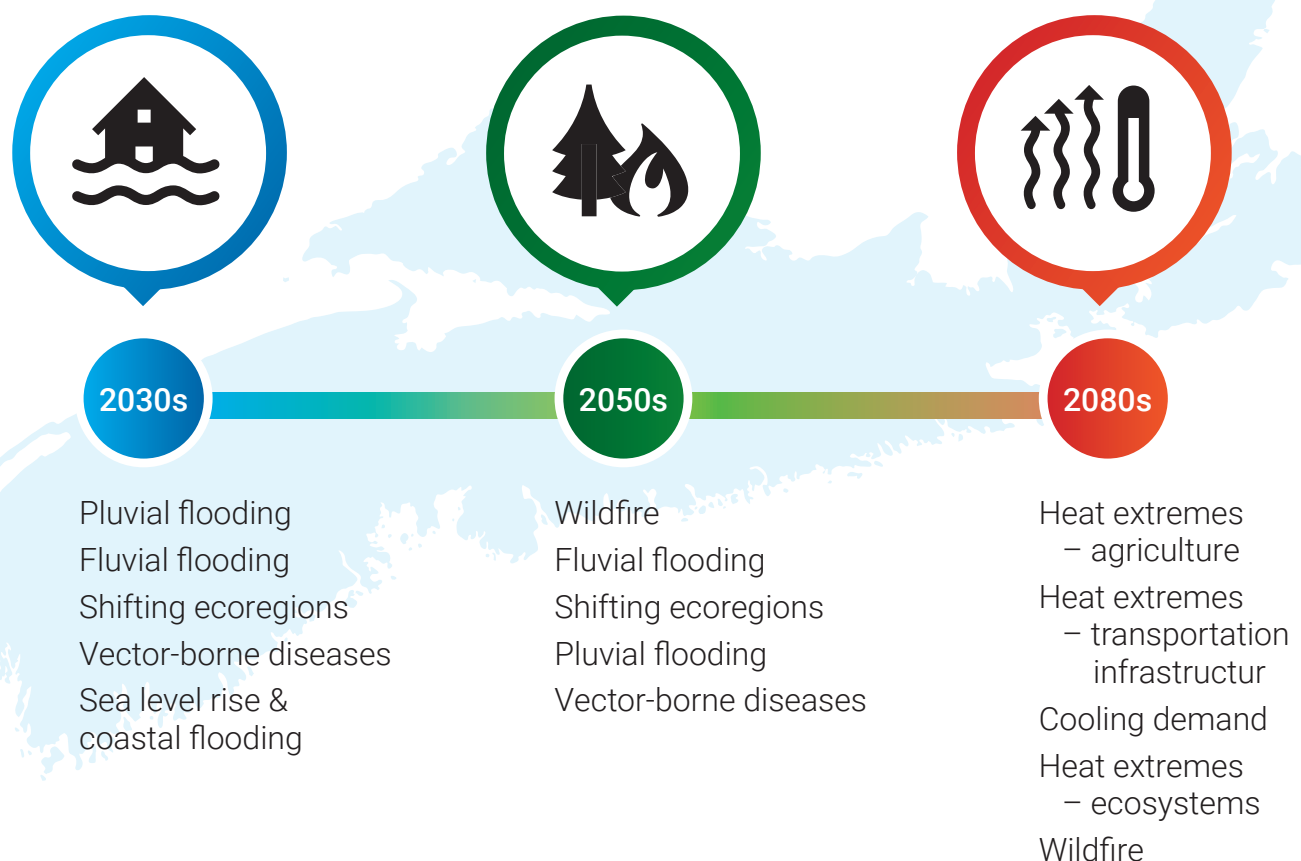
Understanding Climate Risk

The better we understand climate change risks, the more successful and sustainable our climate actions will be. The commitments below improve our understanding of climate change impacts, risks, and opportunities to act in Nova Scotia so we can prioritize efforts and adapt effectively.

Environmental Goals and Climate Change Reduction Act Goal 6:

Complete and release a provincewide climate change risk assessment in 2022, with updates in 2025 and every five years thereafter.

Nova Scotia's latest climate change projections and risk assessment, [Weathering What's Ahead](#), was released in December 2022. It presents a clear picture of the current impact of climate change and what Nova Scotians can expect over the next 80 years if further action is not taken. The climate change risk assessment identifies areas of concern, as well as the opportunities and priorities for action for Nova Scotia. Below are the climate hazards that may impact our well-being in the coming years:



Progress on Climate Change Plan Actions That Help To Understand Risk:

Action #	Action	Highlight/Milestone
1	Build on the research findings of the climate change risk assessment to better understand the risks identified and research important data and information gaps.	<p>The 2022 climate change risk assessment explored how the climate is changing and the climate risks and opportunities in relation to the well-being of Nova Scotians, including how these are likely to change over the course of this century. The province is working to share these findings with businesses and communities to help respond to and prepare for a changing climate.</p> <p>Work is beginning on the update of the provincial climate change risk assessment for 2025, along with further explorations of climate hazards and risks of concern to help guide next steps and action.</p>
12	Strengthen and coordinate responses to coastal and inland flood risk by investing in natural flood protection and implementing new regulations under the Coastal Protection Act in 2023.	<p>The government continues with year five of the nine-year project to upgrade and improve the provincial dykeland system by strengthening the resilience of dykes and reducing disaster risks. Sixteen sites are being upgraded, with 50 per cent of the funding coming from the federal Disaster Mitigation and Adaptation Fund. Project sites will be selected based on the</p> <ul style="list-style-type: none"> • total acres/hectares of farmland and infrastructure being protected • total length of dykes being upgraded <p>These projects will provide 50 years of protection for these sites.</p> <p><i>Continued below.</i></p>

Action #	Action	Highlight/Milestone
12	<i>Continued.</i>	Work continues on the Coastal Protection Act to build a strong awareness of the issues and the approach of the act and its proposed regulation of development along our coast to best ensure its successful implementation. The Department of Environment and Climate Change is finalizing a consultation plan which will be targeted at coastal property owners or those who may be buying property along the coast. More information can be found on https://novascotia.ca/coast/
15	Invest in infrastructure and natural systems to manage heat stress, such as tree planting in urban areas or heat pumps/ cooling centres, to lower exposure to high temperatures for vulnerable Nova Scotians, and invest in ecosystem-based responses, like coastal wetland restoration, to help manage flooding.	The Department of Environment and Climate Change is in the planning phase for this action to identify and prioritize potential adaptation options to guide investments in things such as ecosystem restoration and nature-based solutions to reduce risks from extreme heat.

Phasing Out Coal-fired Electricity Generation

Phasing out coal-fired electricity generation is an important part of meeting our greenhouse gas emission reduction targets.

Environmental Goals and Climate Change Reduction Act Goal 7:

Phase out coal-fired electricity generation by the year 2030.

Phasing out coal-fired electricity generation requires an all-hands-on-deck approach. In April 2023, the premier appointed the Clean Electricity Solutions Task Force to explore how we can modernize our electricity infrastructure and regulatory environment to achieve our climate change targets. This will support Nova Scotia’s goal of phasing out coal-fired electricity generation by the year 2030. Nova Scotia continues to explore all opportunities and options for the phase out of coal-fired electricity generation that provide best value to rate payers by 2030. Current mechanisms include incentive programs and procurements of new renewable energy and advanced battery energy storage.

Progress on Climate Change Plan Actions That Are Phasing Out Coal-fired Electricity Generation:

Action #	Action	Highlight/Milestone
17	Create provincial regulations to phase out coal-fired electricity generation by 2030 with the goal of achieving at least a 90 per cent reduction in greenhouse gas emissions from the electricity sector by 2035.	The Department of Environment and Climate Change is developing provincial regulations to phase out coal-fired electricity generation by 2030. In 2023, Nova Scotia launched its output-based pricing system which puts emissions reduction targets on the electricity sector and other large industry, supporting the transition to renewable energy.

Updating Buildings Codes

Buildings are the third largest source of greenhouse gas emissions in Nova Scotia. Ensuring that our buildings are resilient and efficient is important for the well-being of Nova Scotians. Building codes change over time as science and best practices improve. Updating our building codes is an important part of growing the clean economy and taking action on climate change.

Environmental Goals and Climate Change Reduction Act Goal 8:

Provincially adopt the 2020 National Energy Code for Buildings within 18 months of it being published by the federal government.

- This goal is reinforced in **action #30** in the climate change plan.
 - Action #30 adds the requirement of adopting the 2020 National Building Code.

The government continues to work to adopt the 2020 National Energy Code for buildings. Since the federal government released the codes in March 2022, the Office of the Fire Marshal has been reviewing the more than 600 changes and updates to the codes and determining the implications of adoption for Nova Scotia. The Building Advisory Committee has provided feedback on proposed changes to the codes and a suggested process and timeframe to adopt them. The Office of the Fire Marshal has also partnered with the Department of Agriculture and the Nova Scotia Federation of Agriculture for additional stakeholder feedback on the proposed changes specific to the farming community.

Transportation Efficiency

To establish an environmentally friendly transportation system that addresses issues such as congestion, accessibility, and efficiency, it is important to support modes of transportation that are more efficient and have less impact on the environment. By promoting and supporting public transportation options such as buses, ferries, and community-based services, as well as active modes of transportation such as walking, biking, or scooters, we can reduce our reliance on fossil fuels, build vibrant communities, and enhance access to essential services, goods, and opportunities. By providing a wider array of transportation alternatives, we can decrease greenhouse gas emissions and offer Nova Scotians the means to travel without depending solely on personal vehicles.

Environmental Goals and Climate Change Reduction Act Goal 9:

The government will support the well-being of Nova Scotians through active transportation by

- (a) establishing a provincial active transportation strategy to increase active transportation options by 2023**
- (b) completing core active transportation networks that are accessible for all ages and all abilities in 65 per cent of Nova Scotian communities by 2030**
 - This goal is reinforced in **action #43** in the climate change plan.

The departments of Public Works and Natural Resources and Renewables are supporting active transportation in Nova Scotia in many ways. First, the Department of Public Works is working with a consultant to develop a provincial active transportation strategy that will be complete by the end of 2023. The department has also supported work on the Blue Route bicycle network, with approximately 476 kilometres open.

In addition, there are currently 29 communities in Nova Scotia that have active transportation plans. The Department of Natural Resources and Renewables has supported Bicycle Nova Scotia in working with four more communities to develop core active transportation networks. Currently, 31 per cent of the communities with active transportation plans have been awarded funding to build their core active transportation network projects.

Progress on Climate Change Plan Actions That Contribute to Transportation Efficiency:

Action #	Action	Highlight/Milestone
39	Increase access to community transportation services for all communities outside of the Halifax Regional Municipality and Cape Breton Regional Municipality.	<p>The Department of Public Works received five-year funding to support community transportation initiatives that help to reduce greenhouse gas emissions.</p> <p>Some of the initiatives currently underway or in the planning phase include</p> <ul style="list-style-type: none"> • the community transit pilot project in the Municipality of Guysborough and the Town of Mulgrave • the development of community transit services in the western portion of Lunenburg County and the Municipality of the District of St Mary's • a fleet electrification study for community transportation operators that will identify cost savings and potential replacement vehicles <p>Additional projects will be identified through collaboration with government and sector partners.</p>
42	Make transportation easier by developing new transportation efficiency strategies and reducing single-person vehicle trips.	<p>The Department of Natural Resources and Renewables is researching the current state of transportation efficiency work in Nova Scotia. Discussions are ongoing with key partners to assess gaps and determine program opportunities in Nova Scotia.</p>

Improving Efficiency and Resilience of Government Buildings

Government continues to work on demonstrating leadership and contributing to greenhouse gas emission reductions by taking action on the commitments described below. This work creates jobs, grows the clean economy, and takes action on climate change.

Environmental Goals and Climate Change Reduction Act Goal 10:

The government will demonstrate leadership and contribute to greenhouse gas emission reductions by ensuring that

- (a) any new build or major retrofit in government buildings, including schools and hospitals, that enters the planning stage after 2022 is to be net-zero energy performance and climate resilient**
 - (b) landlords who currently lease office space to government are encouraged to transition existing office space to meet net-zero energy performance**
 - (c) priority is given to leased office accommodations in buildings that are climate resilient and meet net-zero energy performance starting in 2030**
 - (d) greenhouse gas emissions are decreased across government-owned buildings by 75 per cent by the year 2035**
- This goal is reinforced in **action #33** in the climate change plan.

The Department of Public Works is completing energy audits on its core buildings. This will determine the baseline for greenhouse gas emissions from government-owned core buildings. Of the 460 energy audits that need to be completed to establish the baseline data, 159 have now been completed. The department intends to start reporting a burndown graph that shows the reduction of greenhouse gas emissions of core buildings starting in 2024–25. This work is supported by a review of the cost of constructing government buildings that are net-zero energy performance and climate resilient.

In 2030, the Department of Public Works will begin prioritizing leases in buildings that are climate resilient and meet net-zero energy performance standards. In the coming year, the government will create a plan to raise awareness on net-zero energy performance office spaces and engage with landlords who lease office space to government.

Progress on Climate Change Plan Actions That Are Improving Efficiency and Resilience of Government Buildings:

Action #	Action	Highlight/Milestone
6	Review the infrastructure that Build Nova Scotia manages to assess climate risks and develop adaptation plans to reduce future damages from climate change.	Build Nova Scotia is planning for an asset inventory to assess the impact of climate change on the infrastructure they manage. This work is expected to require adaptation strategies and engineering plans.

Working with Communities

The impacts of climate change events are felt most at the community level. Communities are often the first responders to climate change. This is why working with communities to act on their climate change priorities is critical to improve our understanding of how best to respond to climate change events in a way that meets local needs.

Environmental Goals and Climate Change Reduction Act Goal 11:

Work with Nova Scotian municipalities, First Nations, and African Nova Scotian communities to take immediate and long-term action on their climate change priorities.

In April 2022, the province announced its partnership with the Nova Scotia Federation of Municipalities (NSFM) for designing and delivering the Sustainable Communities Challenge Fund. The first call for projects opened on November 7, 2022, and over 100 applications were received. The province and NSFM will announce successful projects throughout summer 2023. Learn more about the Sustainable Communities Challenge Fund [here](#).

Progress on Climate Change Plan Actions That Work with Communities

Action #	Action	Highlight/Milestone
53	Provide funding through programs such as the Sustainable Communities Challenge Fund and support new community-based climate change coordinators to help municipalities, as well as Mi'kmaw and African Nova Scotian communities respond to their climate priorities.	<p>In the first round of funding, the Sustainable Communities Challenge Fund received 102 applications from municipalities, non-profits, post-secondary institutions, and First Nations from around the province.</p> <p>The program has announced three projects to date. This includes the Cape Breton Community Housing Association, which provides residential supports and programs for individuals living with mental illness and/or experiencing homelessness. This project will convert nine homes from oil-fired heat to fully electrified heating and cooling.</p> <p><i>Continued below.</i></p>

Action #	Action	Highlight/Milestone
53	<i>Continued.</i>	The province also invested \$5 million through the Clean Foundation to deliver a four-year program that will hire and train five new climate change coordinators and support up to 15 communities across Nova Scotia to address their climate priorities. Community recruitment will begin soon.
54	Provide funding to help more communities across Nova Scotia complete clean energy projects in areas such as buildings, transportation, electricity, and capacity building through programs such as the Low Carbon Communities Program and the Halifax Climate Investment, Innovation and Impact (HCi3) Fund.	<p>The government invested \$7.5 million in HCi3. HCi3 seeks to reduce greenhouse gas emissions and invest in a net-zero Halifax. This past year, HCi3 awarded \$510,000 for 12 projects, including 4 projects either led or co-led by an equity-deserving group. More information can be found here.</p> <p>The Department of Natural Resources and Renewables launched the Low Carbon Communities Program for another round of clean energy funding on May 1, 2023, and accepted applications until June 29, 2023. The program is open to municipalities, First Nations and organizations, post-secondary institutions, businesses, and non-profit organizations with clean energy projects that benefit communities. Applications will be awarded by September 2023 and recipients have until August 2024 to complete their projects. More information can be found here.</p>

Action #	Action	Highlight/Milestone
55	Continue to support federal-provincial partnerships on large infrastructure projects throughout Nova Scotia through programs such as the national Investing in Canada Infrastructure Program.	<p>In 2022, federal-provincial partnership on five infrastructure projects led to a total investment of over \$138 million across the province. These projects include</p> <ul style="list-style-type: none"> • Municipality of District of Guysborough – Solar Energy for Facilities (\$1.1M) • First Nations Housing Retrofits (\$12.3M) • Cape Breton University – Centre for Discovery and Innovation (\$84.5M) • SMU Sobeys’ Inspiration Hub Phase 2 and Campus Renewal Project (\$20M) • Burnside Transit Centre Eco-Rebuild – Phase 1: Planning and Design (\$20.8M)
56	Create a new funding navigator at the Department of Environment and Climate Change to connect Nova Scotians to climate change funding opportunities.	The Department of Environment and Climate Change hired a funding navigator in spring 2023. This position will help develop better ways to connect Nova Scotians to climate change funding opportunities.

Climate Change Adaptation

Climate adaptation means taking action to mitigate the impact of climate change and to ensure we have a resilient province for future generations. It also includes recognizing how our climate is changing so we can position ourselves to respond to new and emerging opportunities.

Environmental Goals and Climate Change Reduction Act Goal 12:

Build climate change adaptive capacity and resilience by requiring climate adaptation planning across government departments.

- This goal is reinforced in **action #7** in the climate change plan.

The Department of Environment and Climate Change leads the Climate Change Adaptation Leadership Program which helps participants understand, plan for, and take action on climate adaptation. The following provincial departments have completed and are preparing to implement departmental adaptation strategies:

- Agriculture
- Natural Resources and Renewables
- Environment and Climate Change
- Communities, Culture, Tourism and Heritage

These plans prioritize adaptation action over the next four years and will allow these departments to carry out their mandate and sustain operations in the face of the risks and new opportunities brought about by climate change. The Department of Environment and Climate Change and partner departments also helped create adaptation strategies with the following seven sectors:

1. Archeology
2. Coastal parks
3. Freshwater resources
4. Electricity
5. Christmas tree and greenery
6. Horticulture
7. Cattle and sheep sectors

In addition, the Department of Fisheries and Aquaculture has prepared a draft strategy that considers climate change (including adaptation and energy efficiency). They will be engaging sector stakeholders and the public in the coming months and years to prepare a climate change action plan that involves coastal communities and sector stakeholders. This is scheduled to be complete in 2026–27.

Progress on Climate Change Plan Actions Contributing to Climate Adaptation Capacity:

Action #	Action	Highlight/Milestone
8	Increase climate change adaptation capacity in communities and business sectors by supporting them in hiring their own climate change coordinators to help develop and implement climate change adaptation strategies.	<p>Significant steps toward increasing climate change adaptation capacity have taken place over the last year:</p> <ul style="list-style-type: none"> • The Department of Environment and Climate Change signed an agreement with Cape Sable Historical Society to embed a climate change adaptation coordinator in their organization for two years to lead the implementation of their sector adaptation strategy. • The Department of Environment and Climate Change is working with other industry partners on similar agreements to support the implementation of the other sector adaptation strategies.
10	Bring key partners together to plan for responses to multiple climate risks facing our natural, built, human, social, and financial systems.	Work planning has begun to identify partners and opportunities for actions.

Ecological Forestry

The government's goal is healthier forests today and for generations to come. Ecological forestry supports sustainable development.

Environmental Goals and Climate Change Reduction Act Goal 13:

By 2023, implement an ecological forestry approach for Crown lands, consistent with the recommendations in *An Independent Review of Forest Practices in Nova Scotia* prepared by William Lahey in 2018, through the triad model of forest management that prioritizes the sustainability of ecosystems and biodiversity in the province. Also, by 2023, identify the percentage allocation of Crown land dedicated to each pillar of the triad model of forest management.

The government is transforming how forestry is done in this province. The three zones recommended in the [forest practices review](#) are now in place on Crown land. The three zones make up the triad model and the percentage of Crown land dedicated to each pillar is 35 per cent in conservation zone, 55 per cent in mixed-use/matrix zone, and 10 per cent in high-production zone. Through this model, biodiversity is the priority on 90 per cent of Crown land. The Department of Natural Resources and Renewables is continuing this complex work with many experts and stakeholders.

Work is complete or underway on about 86 per cent of the review's 45 recommendations. Key achievements to date include the following:

- High-production forestry zone established in January 2023.
- Old-growth Forest Policy updated in August 2022.
- Silviculture Guide for the Ecological Matrix implemented in June 2022.
- Nine buildings at six sites converted to wood chip heating. Phase 2 is now underway.
- Recovery plans complete for all species at risk under sole Nova Scotia jurisdiction.
- Two peer-reviewed papers published on natural disturbance regimes.

Other work that continues includes

- training for staff and forest professionals on methods under the Silviculture Guide for the Ecological Matrix
- developing a new pre-treatment assessment program for full implementation of Silviculture Guide for the Ecological Matrix
- working with partners to protect and conserve more Crown lands
- aligning Crown and private silviculture programs with ecological forestry
- developing a forest stewardship planning guide that will support landscape level planning

Protecting Land and Using Nature-based Solutions

Protecting land and using nature-based solutions are ways for us to protect biodiversity; support physical, mental, and emotional health; reach our net-zero emission commitments; and improve the resiliency of the places we cherish.

Environmental Goals and Climate Change Reduction Act Goal 14:

Conserve at least 20 per cent of the total land and water mass of the province by 2030 as protected areas and other effective area-based conservation measures, including Indigenous protected and conserved areas, in a manner consistent with national reporting criteria. Support this goal with a collaborative protected areas strategy to be released by December 31, 2023.

- This goal is reinforced in **action #14** in the climate change plan.

Currently, 13.2 per cent of Crown land is protected in Nova Scotia. In December 2022, the government contributed to this by announcing the creation of six new nature reserves, expanding seven wilderness areas, and protecting an additional 9,300 hectares of Crown land, including creating the new Sackville River Wilderness Area. In addition to this, \$20 million of funding was provided for the Crown Share Land Legacy Trust Fund to support private land conservation.

In 2023, the Mi'kmaq and departments of Natural Resources and Renewables, Environment and Climate Change, and Office of L'Nu Affairs have agreed to a collaborative process for establishing Indigenous protected and conserved areas. In January 2023, the province and Mi'kmaq of Nova Scotia took the first step toward shared governance of Kluskap Wilderness Area, which includes the sacred Mi'kmaw site Kluskap's Cave. The agreement marks a new working relationship and shared commitments to conserve, maintain, and celebrate the ecological, cultural, and spiritual significance of Kluskap Wilderness Area. The work is guided by key principles and values identified by Mi'kmaw communities for the creation and long-term care of Indigenous protected and conserved areas in Unama'ki (Cape Breton). It is the first agreement of this type between Nova Scotia and the Mi'kmaq.

Work is continuing on a collaborative protected area strategy that will set the stage for achieving the 20 per cent land protection goal by 2030. This goal complements national and international biodiversity commitments, including those associated with the international Convention on Biological Diversity. The government intends to hold a public engagement on this strategy in the coming months. It will be complete by December 31, 2023.

Progress on Climate Change Plan Commitments Contributing To Protecting Land and Using Nature-based Solutions:

Action #	Action	Highlight/Milestone
16	Plant 21 million trees across Nova Scotia in partnership with the federal government's 2 Billion Trees Commitment.	The government signed an agreement-in-principle on tree planting with the federal government in February 2023. The Department of Natural Resources and Renewables is developing project outlines which will be completed in 2024.

Supporting Clean Air

Clean air supports the health of Nova Scotians and takes pressure off our health-care system.

Environmental Goals and Climate Change Reduction Act Goal 15:

Ensure Nova Scotians have clean air to breathe by

- (a) **managing Nova Scotia's air zones consistent with the Canadian Ambient Air Quality Standards**
- (b) **reviewing and updating Nova Scotia's air emissions targets and ambient air standards by 2025 and continuing to review and update as required or every five years**

The Department of Environment and Climate Change has also improved the [Air Assessment Guidance Document](#) that businesses use when they want to do business in Nova Scotia. It provides clear expectations of the government's requirements around assessing and monitoring impacts to air quality.

Clean air is important for the health and well-being of Nova Scotians. Air zones in Nova Scotia continue to meet the [Canadian Ambient Air Quality Standards](#). Learn more about air quality in Nova Scotia [here](#).

To support clean air, the Department of Environment and Climate Change continues to work on reviewing and updating Nova Scotia's air emissions targets and ambient air standards. On Clean Air Day (June 8, 2022), the Department of Environment and Climate Change launched a public engagement on proposed updates for the ambient air quality standards. The public had the opportunity to participate and provide feedback. Outreach was also done to specific interest groups including 522 businesses that are approval holders, municipalities, industry bodies, federal agencies, and the L'hu. In total, 644 individuals provided feedback.

Many of the actions under the climate change plan also support clean air. For example, increasing renewable energy and phasing out coal-fired electricity generation will improve air quality.

Clean Water

All life depends on clean water. This is why protecting and monitoring it is so important for the health of Nova Scotians; the ecosystems we work, play, and live in; and all living creatures.

Environmental Goals and Climate Change Reduction Act Goal 16:

Improve drinking water safety and water quality in lakes, rivers, and groundwater by

- (a) developing provincial water quality objectives by 2026 that will guide activities that affect water quality**
- (b) addressing, by 2026, key barriers Nova Scotians face to testing and treatment of rural wells**

Nova Scotians are fortunate to be surrounded by marine and freshwater ecosystems. With increasing development and climate change pressures, the department continues to work to develop provincial water quality objectives to protect the quality of our water. Staff continue to work on identifying options for how water quality objectives can best meet the most important needs of our province, and the diverse range of uses of fresh water in Nova Scotia.

The Department of Environment and Climate Change provided free well-water testing kits for those who were required to evacuate from wildfires in spring 2023.

More than 40 per cent of Nova Scotia households get their drinking water from their own private wells. Well water should be tested regularly for bacteria and chemical contaminants because we can only be sure the water is safe to drink if we get it tested. Nova Scotia has one of the lowest rates of testing in Canada. The Department of Environment and Climate Change continues to

identify barriers and actions to help improve testing rates. This past year, the department worked with an external partner and identified that improving processes for taking a water sample, getting it analyzed, and understanding the results could support Nova Scotians in testing their wells more regularly. Also this year, the department launched a public awareness campaign on why it is important to test well water and how to do it. Learn more [here](#).

Progress on Climate Change Plan Actions That Are Contributing to Clean Water:

Action #	Action	Highlight/Milestone
2	Improve municipal stormwater infrastructure by updating planning requirements and helping develop stormwater management plans.	Municipal Affairs and Housing is working with the Department of Environment and Climate Change to identify opportunities to update municipal engineering specifications for stormwater infrastructure, update planning requirements related to stormwater management plans, and identify areas of risk. The scope of work and outcomes related to this action are being developed collaboratively. The Department of Environment and Climate Change has created a stormwater engineer position to support this work.
3	Improve the quality and availability of water-resource data for better water resource management and flood line mapping by upgrading provincial water monitoring networks.	<p>The Department of Environment and Climate Change completed a third-party analysis and evaluation of the Nova Scotia hydrometric network and identified gaps in network coverage, with recommendations for the installation of five new stations. Collaboration is underway with staff from the federal government to determine final locations for these new stations before construction and operation begins.</p> <p>To date, 15 per cent of the province has undergone coastal inundation and floodplain mapping, which includes seven primary watersheds. Fifteen municipalities have participated in this process. The Department of Municipal Affairs and Housing continues efforts to map more of the province and to have information for municipalities to incorporate the results into municipal land use planning.</p> <p>Throughout 2023–24, the intention is to map the Annapolis watershed, Guysborough County watersheds, and all the mainland drainage into the Northumberland Strait, as well as to collect data in the Halifax Regional Municipality, Minas Basin, and Upper Fundy Watersheds to support future flood mapping.</p>

Modernizing Environmental Assessments

Environmental assessments are an important tool for Nova Scotia as it works to grow the clean economy and its population, and address climate change.

Environmental Goals and Climate Change Reduction Act Goal 17:

Modernize the environmental assessment process by 2024, including consideration of

- (a) cumulative impacts**
- (b) diversity, equity, and inclusion**
- (c) independent review**
- (d) Netukulimk**
- (e) climate change**

- This goal is reinforced in **action # 62** in the climate change plan.

The Department of Environment and Climate Change is preparing to launch a public engagement on modernizing the environmental process. It is important to hear from the Mi'kmaq and other Nova Scotians, as well as businesses, on how to modernize the environmental assessment process.

Sustainable Fisheries and Aquaculture

Nova Scotia has a rich history of fishing and aquaculture. Fisheries and aquaculture generate economic prosperity, social well-being, and environmental sustainability. The Department of Fisheries and Aquaculture aims to be a global leader in fisheries and aquaculture for the benefit of all Nova Scotians by stewarding the innovation and sustainable growth of our sectors. In 2022–23, the department developed, promoted, and supported Nova Scotia’s fishing, aquaculture, seafood processing, and sport fishing industries.

Environmental Goals and Climate Change Reduction Act Goal 18:

Support low-impact, sustainable aquaculture through a licensing process that weighs environmental considerations and includes provincial regulation for potential environmental impacts, animal welfare, and fish health.

This past year, the Department of Fisheries and Aquaculture contracted an independent consulting firm to conduct a comprehensive review of the regulatory framework to support low-impact sustainable aquaculture under the guidance of the Nova Scotia Aquaculture Regulatory Advisory Committee. Engagement with partners and the public informed the review. This included 43 meetings with partners and stakeholders and 988 responses to a public survey. In March 2023, a [What We Heard Summary Report](#) was published, and the committee’s [Final Report and Recommendations](#) were submitted to the department. The department is in the process of reviewing and implementing the recommendations.

In addition to the aquaculture regulatory review, the department has taken multiple actions in 2022–23 to enhance their understanding of potential climate change impacts and provide mechanisms to help the fisheries and aquaculture industry adapt to and mitigate climate change.

Progress on Climate Change Plan Actions That Are Supporting Sustainable Fisheries and Aquaculture:

Action #	Action	Highlight/Milestone
4	Create a new fisheries and aquaculture climate change information hub to improve the sharing of climate change adaptation and greenhouse gas emissions reduction data and information in the fisheries and aquaculture sector.	The Department of Fisheries and Aquaculture has started the first step in the design and build of the fisheries and aquaculture information hub by completing a climate change communications and engagement strategy to better understand the information needs and requirements for the fisheries and aquaculture sector.
9	Support the fisheries and aquaculture sector to complete climate change vulnerability assessments on important infrastructure and develop sector-specific adaptation plans.	Work to support the completion of vulnerability assessments of the aquaculture (2023–24) and sportfishing industries (2024–25) is expected to commence in 2023, however the Department of Fisheries and Aquaculture has already completed a vulnerability assessment of the province's commercial lobster fishery, and is mid-way through the completion of a vulnerability assessment of critical (non-federally owned) infrastructure supporting the province's seafood sector (due to be completed December 2024).
66	Create a new fisheries and aquaculture energy efficiency innovation fund and new fisheries and aquaculture climate change adaptation fund to help prepare the fisheries and aquaculture sector to reduce their energy use and better prepare for the impacts of climate change.	The Department of Fisheries and Aquaculture is currently developing the Fisheries and Aquaculture adaptation fund and the Fisheries and Aquaculture energy efficiency innovation fund. These funds will be made available to Nova Scotians in 2023–24.

Increasing Local Food Production

Producing and consuming more local food can help us reduce greenhouse gas emissions; support local farmers, processors, and retailers; and improve food security, which is tied to our health.

Environmental Goals and Climate Change Reduction Act Goal 19:

Develop a provincial food and beverage strategy for enhanced awareness, improved access, and increased local production to meet a goal of 20 per cent local consumption by 2030.

The Department of Agriculture is working across the government to develop a food and beverage strategy. The strategy will enhance awareness of, improve access to, and increase the production of healthy local food over the next four years. Engagement with industry and community partners helped shape potential initiatives for public consultation in December 2022. A What We Heard Report has been released and can be found [here](#). The strategy is anticipated to be published in 2023.

The Department of Agriculture is also currently working with a consultant to establish a baseline of the current percentage of money Nova Scotians spend on locally produced food. Once this is established, the same methodology will be used to measure the annual percentage Nova Scotians spend on locally produced food going forward.

Supporting the Circular Economy

A circular economy is an economy where resources and products are kept in use for as long as possible, with the maximum value being extracted while they are in use, and from which, at the end of their service life, other materials and products of value are recovered or regenerated. Growing the circular economy is important because the Earth has finite resources.

Environmental Goals and Climate Change Reduction Act Goal 20:

Encourage the growth of the circular economy, including expanding extended producer responsibility, reducing single-use plastics, and reducing solid waste disposal rates to no more than 300 kilograms per person per year by 2030. A plan will be developed by 2023 to meet this solid waste goal, including specific actions and interim targets.

In the coming year there will be a landfill audit. The last one was in 2017.

In 2021, Nova Scotians produced 417 kilograms of waste per person. While this is an increase of 3.7 per cent, it is due in part to an increase in online purchases and an increase in construction. It is a reminder of how important the upcoming strategy is in helping to guide Nova Scotia to its goal of reducing solid waste disposal rates to no more than 300 kilograms per person per year by 2030.

To help support our goal of reducing waste, the Department of Environment and Climate Change is working to add printed paper and packaging, batteries, and lighting and electronics to the extended producer responsibility program in Nova Scotia.

Encouraging Sustainable Procurement

Continuing to increase sustainable procurement is an opportunity to support equity, local entrepreneurs, and sustainable practices, and to reduce greenhouse gas emissions and benefit the circular economy.

Environmental Goals and Climate Change Reduction Act Goal 21:

Demonstrate leadership in sustainable procurement by increasing innovation, sustainability, diversity, and inclusion in government procurement, as well as considering community benefits attached to procurements.

Currently, the Department of Service Nova Scotia is preparing to implement the recently approved Diversity and Sustainable Procurement program which has three projects to support this goal and increase sustainable procurement:

1. Socioeconomic: Diversity Project 2022–25. This project will create equitable access to procurement opportunities for diverse and underrepresented community suppliers and service providers in Nova Scotia. It is aimed at increasing the diversity of bidders for government contracts.
2. Accessibility: Accessibility Management Project 2022–25. This project focuses on providing tools and resources to ensure accessibility is integrated within the government procurement process. The goal is to achieve accessibility by preventing and removing barriers with respect to delivery of goods and services.
3. Sustainability: Greening Procurement Project 2022–30. The goal of this project is to focus on purchasing products and services that are as sustainable as possible, with the lowest environmental impact and most positive social and economic results. At the heart of the sustainable procurement policies will be the inclusion of previously underrepresented and historically disadvantaged groups in relation to the Environmental Goals and Climate Change Reduction Act.

The Department of Service Nova Scotia continues to support these goals through its standard specifications for procurement of goods and services as well.

Progress on Climate Change Plan Actions That Encourage Sustainable Procurement:

Action #	Action	Highlight/Milestone
38	Develop a greening fleets strategy for government vehicles.	Work on the greening fleets strategy is currently ongoing and the province has applied for federal funding to support the development of the strategy.

Doing Business in Nova Scotia

The Environmental Goals and Climate Change Reduction Act creates certainty and clarity for businesses that are considering the sustainability of their supply chain. The commitments below aim to encourage innovative, sustainable, and green businesses to do business in Nova Scotia.

Environmental Goals and Climate Change Reduction Act Goal 22:

Actively encourage innovative, sustainable, and green businesses to establish or relocate to the province and promote an environment to enable innovative, sustainable, and green business startups.

The Department of Economic Development, in partnership with Invest Nova Scotia, delivers the following programs to actively encourage sustainable and green businesses across the province: [Innovation Rebate Program](#), [Early Stage Commercialization Fund](#), GreenShoots, and AscendBio. The department also supports projects through the Community Economic Development Fund and provides funding to encourage development of Nova Scotia's innovation ecosystem to increase the startup and success of innovative, sustainable, and green businesses. For example, in the last year the department

- supported 22 innovative and green companies through GreenShoots and AscendBio
- had 97 per cent of the Innovation Rebate Program applications indicate increased sustainability (e.g., reduced greenhouse gas emissions or reduced waste) as a potential outcome
 - Learn more about the companies approved for the program [here](#).
- introduced a low-carbon technology stream to Invest Nova Scotia's Early Stage Commercialization Fund, where 30 per cent of all awards in the past two years went to green/sustainable technologies.

Other tax credit programs, such as the [Innovation Equity Tax Credit](#), the [Venture Capital Tax Credit](#), and the [Capital Investment Tax Credit](#), can help to attract and retain sustainable and green businesses across Nova Scotia.

Progress on Climate Change Plan Actions That Support Doing Business in Nova Scotia:

Action #	Action	Highlight/Milestone
13	Research natural carbon sinks to help offset any remaining greenhouse gas emissions needed to reach net-zero greenhouse gas emissions by 2050.	The government awarded Net Zero Atlantic \$3 million for their Emerging Concepts and Technologies Research Program, which will advance local research into technologies and approaches needed to achieve net-zero by 2050 and help to adopt new technologies from other jurisdictions. The first call for applications opened in June 2023, with future calls anticipated in September 2023 and June 2024.
57	Develop a clean investment plan that takes deliberate and strategic actions to ensure the Nova Scotia economy is prepared to respond to the needs of a low-carbon economy.	Work to develop a clean investment plan is being led by a cross-departmental advisory committee with representatives from the departments of Environment and Climate Change; Labour, Skills and Immigration; Natural Resources and Renewables; and Invest Nova Scotia.
58	Create a green hydrogen action plan by 2023 to support the development of the green hydrogen sector in Nova Scotia.	<p>Work is ongoing in the development of a green hydrogen action plan scheduled to be released by the end of 2023. To support this, several legislative and regulatory changes were made in the last year.</p> <ol style="list-style-type: none"> 1. Amendments to the Electricity Act expanded the definition of wholesale customer to include businesses that are advancing green hydrogen projects and to provide the government with the ability to create a new hydrogen innovation program to support the industry. <p><i>Continued below.</i></p>

Action #	Action	Highlight/Milestone
58	<i>Continued.</i>	<ol style="list-style-type: none"> 2. Amendments to the Underground Hydrocarbons Storage Act expand the scope of the act to now include hydrogen, ammonia, carbon sequestration, and compressed air energy storage. 3. Amendments to the Gas Distribution Act allow Nova Scotia Utilities and Review Board to now consider hydrogen as part of a gas distribution system. 4. Amendments to the Environmental Assessment Regulations and Activities Designation Regulations support timely assessments of proposed green hydrogen projects.
61	Implement the Innovation Rebate Program and pilot a low-carbon stream of the Early Stage Commercialization Fund through Invest Nova Scotia to create an environment that supports innovative businesses.	<p>The Innovation Rebate Program is led in partnership between the Department of Economic Development and Invest Nova Scotia to provide \$12 million per year to support companies as they innovate, drive productivity, increase production capacity, and adopt cleaner and more sustainable approaches to growth across Nova Scotia. Last year, 31 projects in 10 regions were supported.</p> <p>The Department of Natural Resources and Renewables and Invest Nova Scotia are partnering to offer a low-carbon technology stream through the Early Stage Commercialization Fund which will advance clean technology businesses. Last year, one project was supported through this program.</p>

Supporting Businesses and Their Climate Action

Sustainable prosperity and climate action is a shared responsibility, but small businesses do not always have the resources to take on big change. This is why the government is working to better support them in reducing their emissions and investing in more sustainable technologies and practices.

Environmental Goals and Climate Change Reduction Act Goal 23:

Work with small businesses across the province and in all sectors to get their feedback on potential ways to further enable them to take action to reduce emissions, including through rebates, targeted investments, and other supports.

- This goal is reinforced in **action #44** in the climate change plan.

The Department of Economic Development is supporting this work by

- mandating a review of investment/attraction mechanisms, which included in-person and online consultations. Through that process the department held 50 engagements across sectors and connected with more than 250 individual participants.
- applying an environmental sustainability and clean economy lens to the services and supports provided to businesses through Invest Nova Scotia leading to specific initiatives (such as the Sustainability Workshops offered last year) that augment Invest Nova Scotia's understanding and support for green/sustainable business models and solutions

In addition, this year the Minister of Economic Development completed five regional tours—Cape Breton, Eastern Region, Western Region, Northern Region, and Cumberland—and completed more than 160 meetings with businesses.

Progress on Climate Change Plan Actions That Support Businesses in Taking Climate Action:

Action #	Action	Highlight/Milestone
50	Make sure professionals across Nova Scotia understand how they can participate in the clean economy and grow their businesses through new specialized training programs.	In 2023, 124 individuals from public sector, industry, and community sector organizations completed online learning modules on climate change adaptation designed to increase awareness of climate change hazards, risks, and opportunities. In 2024, the Department of Environment and Climate Change will expand training to organizations, businesses, and government to increase action and leadership on climate change adaptation.
60	Create a clean fuels fund to support industries and businesses in adopting low-carbon and renewable fuels such as green hydrogen, renewable natural gas, biofuels, and sustainable biomass.	The framework for this program is in development and is expected to be launched in 2024.
65	Extend the Clean Technology for Agriculture Program to allow more farmers to adopt clean technologies that support more sustainable farming.	The Clean Technology for Agriculture Program supports farmers and food processors in improving their operations through the adoption of clean technologies and improved energy efficiency to increase value-added agricultural production, extend growing seasons, and improve costs of production. The program opened in the summer of 2021 with all \$5 million of the initial funding fully committed by February 2022. Fifty-five approved projects are expected to be completed in 2024 and another round of funding is being developed.

Supporting Youth

Youth are the future of Nova Scotia. Like many Nova Scotians, they are experiencing climate anxiety, but they also have great ideas on how we can transition Nova Scotia to a sustainable future. They have expertise to contribute to our climate efforts and we need to ensure they have an opportunity to participate in the clean economy and have their voices heard.

Environmental Goals and Climate Change Reduction Act Goal 24:

Support youth in Nova Scotia in engaging in the clean economy through sustainability-based youth employment leadership programs in Nova Scotia.

Between 2021 and 2022, the Clean Leadership Summer Internship Program has helped 228 Nova Scotians work in summer internships across 188 different projects with over 75 organizations across the province. In both years, over 50 per cent of these internships were in rural Nova Scotia. In 2023, there are over 155 Nova Scotia youth getting paid work experience with 98 employers through the Clean Leadership Summer Internship Program, which is partially funded by the Department of Environment and Climate Change and run by the Clean Foundation.

Progress on Climate Change Plan Actions That Support Youth:

Action #	Action	Highlight/Milestone
45	Support youth-centred climate actions and learn from youth through a new youth climate change advisory committee.	The Department of Environment and Climate Change awarded \$800,000 to the Clean Foundation for the establishment of a youth climate council that will raise climate change concerns from youth and support youth-led initiatives. Recruitment for the council began in June 2023 and the first council meeting will take place in September 2023.

Preparing the Workforce for the Clean Economy

An essential part of growing the clean economy is making sure the workforce has the skills needed for the jobs that will be available. This is why the government is supporting the advanced education and professional development of Nova Scotian's workforce.

Environmental Goals and Climate Change Reduction Act Goal 25:

Collaboratively work with businesses, community colleges, and the labour sectors to modernize apprenticeship programs in Nova Scotia so the province has the trades people needed to meet the demands of the clean economy.

The Nova Scotia Apprenticeship Agency continues its work on modernizing the apprenticeship system to better meet the needs of apprentices, those interested in working in the skilled trades sector, employers, and industry. This includes preparing the workforce for a green economy through updating curriculum, ensuring prospective apprentices and current apprentices move efficiently through the system, and developing retention supports to increase employer participation and grow the number of apprentices who achieve certification or journeyperson status. In December 2022, the Minister's Panel on Nova Scotia Community College (NSCC) Pre-Apprenticeship and Trades Training was established. It will provide recommendations on NSCC trades programming needed to meet the demands of employers while ensuring students receive support and credit toward their apprenticeship pathways. This year, the Nova Scotia Apprenticeship Agency and Department of Labour, Skills and Immigration will start the process of collaborating with industry to identify new trades that are needed to meet the demands of a clean economy. It will also use the lens of supporting the clean economy when prioritizing new trades for consideration.

Progress on Climate Change Plan Actions That Help Prepare the Workforce for the Clean Economy:

Action #	Action	Highlight/Milestone
51	Develop new industry training for advanced building techniques for engineering and design professionals to make sure these professionals are ready to build to new national energy and building codes.	Initial consultation was completed in 2022 and recommendations for priority areas were identified. As part of the strategy, the development of readiness roadmaps and core sustainability training will be part of a request for proposal in 2023.
52	Make sure we have the trade professionals needed and that they are prepared to meet the demands of the clean economy by modernizing the Nova Scotia apprenticeship program.	<p>As of April 2023, there are more than 7,700 active apprentices in Nova Scotia, including over 1,800 new apprentices added in the past year. Approximately 27 per cent of all apprentices are from equity-deserving communities, including women. The Department of Labour, Skills and Immigration is working in collaboration with the Nova Scotia Apprenticeship Agency to research the training needs for new and existing tradespeople to meet the demands of the clean economy.</p> <p>Nova Scotians under the age of 30 working in this sector may qualify for the More Opportunity Skilled Trades and Occupations (MOST) provincial income tax refund administered by the Department of Finance and Treasury Board. This program helps attract and retain youth to work in Nova Scotia in industries experiencing labour shortages. To qualify for the MOST program, the occupation must be included in the list of eligible trades/occupations. More information can be found here.</p>

Encouraging Climate Change Education and Sustainability

Education can encourage people to change their behaviour and make informed decisions. This is important for sustained climate change action and supporting a shift toward a cleaner economy that benefits everyone.

Environmental Goals and Climate Change Reduction Act Goal 26:

Promote and support climate change education and sustainability through the knowledge and teachings of Netukulimk, and environmental stewardship through ongoing curricula renewal and the development of inclusive and accessible resources and professional learning that incorporate diversity and honour Etuaptmumk (two-eyed seeing).

- This goal is reinforced in **action #48** in the climate change plan.

The Department of Education and Early Childhood Development completed a review of existing curricula from grades primary to 10. It identified outcomes in social studies and science courses that support climate change education and sustainability through the teachings of [Netukulimk](#) and environmental stewardship. To further support these outcomes, a wide range of resources were developed and procured and distributed to classrooms across the province. For science courses, additional learning resources are now housed on a dedicated website for teachers. Finally, to support this goal, a new course for high school, Netukulimk 12, is in development and will be piloted in the 2023/24 school year. This course will be one of the science credits that students can use for graduation purposes.

Progress on Climate Change Plan Actions That Encourage Climate Change Education and Sustainability:

Action #	Action	Highlight/Milestone
5	Help homeowners understand and respond to climate risks such as flooding.	The Department of Environment and Climate Change awarded \$381,000 to the Clean Foundation for their Resilient Home Retrofit pilot program, in partnership with Halifax Regional Municipality and the Town of New Glasgow. This pilot program will include community engagement as well as no-cost retrofits for 20 homes to mitigate climate change risks such as flooding. Grants will be provided to 10 households in each community. Final program design is underway with community engagement expected to begin fall 2023.
11	Raise awareness of climate risks and adaptation priorities across Nova Scotia through public education and engagement on the results of the climate change risk assessment and other important climate change data and information.	Some of the activities contributing to progress on this action are delivered through a partnership between the government and CLIMAtlantic – the Atlantic climate services hub. In 2022–23, the Nova Scotia node of CLIMAtlantic received 98 requests for support, training, scientific information, and data analysis on how the climate is changing to support planning and action. The requests were received from the many groups responding to and preparing for climate change impacts in Nova Scotia, including from provincial government departments, non-governmental organizations, municipalities, Indigenous organizations, university-based researchers, and industry.

Equity, Climate Action, and Addressing Environmental Racism

Nova Scotia has a troubling history of environmental racism that continues to cause harm and trauma to Mi'kmaq and African Nova Scotia communities, and others whose voices are too often not heard or listened to. This was unacceptable then, and it is unacceptable now.

Sustainability is impossible without equity because climate impacts will make inequities worse if we do not consider equity in our actions. This is why equity is a principle in the Environmental Goals and Climate Change Reduction Act and is applied to all commitments and actions.

Environmental Goals and Climate Change Reduction Act Goal 27:

In 2022, initiate work with racialized and marginalized communities to create a sustained funding opportunity for climate change action, and support community-based solutions and policy engagement.

- This goal is reinforced in **action #47** in the climate change plan.

The government continues to explore ways to support climate action through partnerships with racialized and marginalized communities. This includes

- ensuring a minimum of 15 per cent of funds awarded under the Sustainable Communities Challenge Fund are allocated for projects serving Indigenous and African Nova Scotian communities
- providing ongoing support for the [Clean Foundation's Climate Change Leadership Program](#), which supported 124 interns in 2022. Of these interns, 27 per cent were Indigenous, 10 per cent were African Nova Scotia, and 11 per cent were persons living with a disability
- retrofitting 244 homes throughout the [Mi'kmaw Home Energy Efficiency Project](#)
- supporting climate change coordinators in Indigenous and African Nova Scotian communities to help with community-led projects

Environmental Goals and Climate Change Reduction Act Goal 28:

Create a panel to address environmental racism by the end of 2022 with recommendations for redress coming to the government by the end of 2023.

The government appointed eight experienced community leaders to the Environmental Racism Panel, including Agassou (Augy) Jones, who was appointed as the first panel member in December 2022. After his appointment, Mr. Jones's first duties were to make recommendations on the panel's work through the development of draft terms of reference and to recommend other panel members. In June 2023, Mr. Jones was appointed as chair of the panel and eight individuals were appointed as members of the panel. These individuals have a diversity of significant expertise and are connected to their communities. By December 31, 2023, they will bring forth recommendations for concrete actions government can implement to address environmental racism within provincial jurisdiction, including recommendations for the wellness and healing of harmed communities. These recommendations will reflect the experiences, knowledge, and community-based solutions put forth by the people whose voices they are representing.

This is the first time a panel of this nature has been formed to address historic environmental racism in Canada.

Progress on Climate Change Plan Actions That Support Equity and Climate Action:

Action #	Action	Highlight/Milestone
46	Make sure that diverse voices from across Nova Scotia and abroad are advising the government on climate adaptation research, planning, outreach, and strategy.	Work is underway with partner organizations to ensure diverse voices are at the table advising government on climate adaptation research, planning, outreach, and strategy so investments are accessible and just.
49	Increase the representation of racialized and Indigenous workers in the energy efficiency and clean technologies sector.	Ten African Nova Scotian and Indigenous trainees completed Energy Advisor Training in 2022. The program will continue to be funded in 2023 to support additional trainees.