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Urgent Times, Urgent Action
The Annual Progress Report on the Environmental Goals and
Climate Change Reduction Act and Nova Scotia's Climate Change Action Plan

Department of Environment and Climate Change July 2024 ISBN: 978-1-77448-670

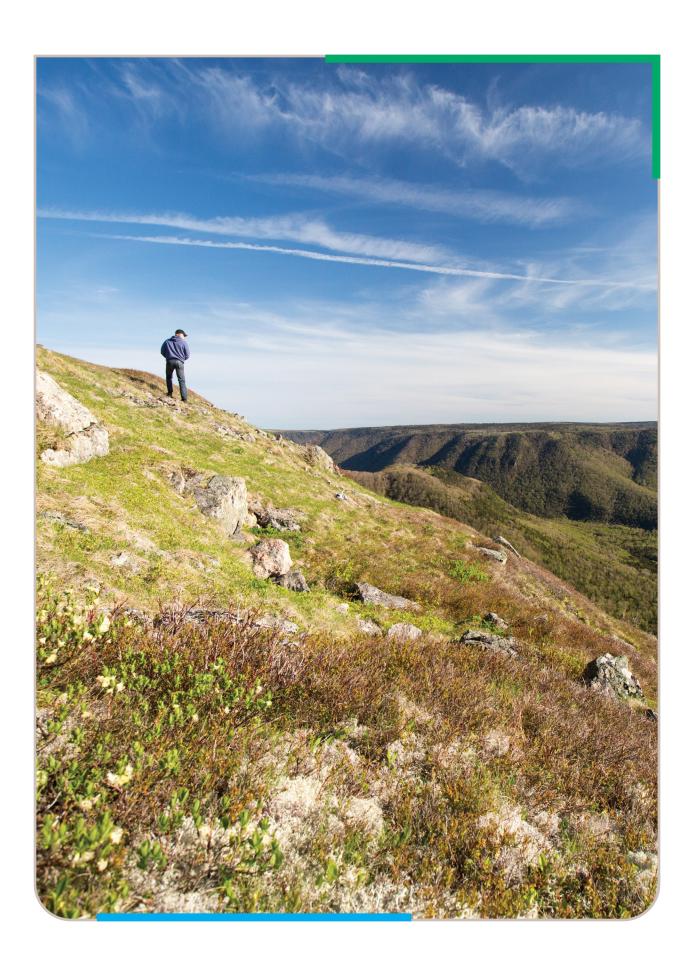


# Urgent Times, URGENT ACTION

The Annual Progress Report on the Environmental Goals and Climate Change Reduction Act and Nova Scotia's Climate Change Action Plan

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# Minister's Message

I am proud to present our Government's annual report on work to achieve the goals of the Environmental Goals and Climate Change Reduction Act and the 68 actions of Our Climate, Our Future: Nova Scotia's Climate Change Plan for Clean Growth.

This report presents the work being done across Nova Scotia from August 1, 2023, to July 31, 2024, to respond to climate change, reduce greenhouse emissions, create a clean energy sector, protect more of our land and water, and more. Work that has helped to garner Nova Scotia a third-place spot in the Pembina's Institute's rating of provincial and territorial climate and energy policies. This recognition of Nova Scotia's leadership and achievements is a testament to everyone who is working hard to ensure our province is resilient, sustainable and energy-independent. You can read the Pembina Institute report at <a href="https://www.pembina.org/pub/all-together-now">www.pembina.org/pub/all-together-now</a>

As we continue to experience the impacts of climate change, Nova Scotians can have confidence that there is a solid plan for both mitigation and adaptation. Unfortunately, we can expect to continue to see more powerful storms, flash flooding, hotter summer days, wildfires, rising sea levels, coastal erosion and other impacts. While this is concerning, and these events can be stressful and frightening, our future is in our hands. There is a great deal that we can do – and are doing – to be better prepared, and to change how, and where, we live so that we can better protect our families, ourselves, and our properties in the face of a globally changing climate. This report highlights what is happening, and what must continue to happen, to safeguard our communities, our province and each other. It also celebrates some of the inspiring Nova Scotians who are at the forefront of work to make our communities strong, resilient, green, healthy and sustainable.

I am proud of the achievements in this report and want to thank everyone who made them possible.

Our Government has a bold vision for Nova Scotia. To fix healthcare, create jobs and strengthen our economy. We want to welcome new people to our communities and help to make sure every person has a safe place to live. To make life more affordable and help every Nova Scotian achieve their full potential. To protect our environment and achieve net zero by 2050. To become a green energy global leader. To give Nova Scotians optimism that although we are experiencing a global climate change emergency, we can have the upper hand, and more.

PHOTO ON LEFT: A ground view of a Department of Natural Resources and Renewables worker at the Pollet's Cove and Asby Fault Wilderness Area



As we look ahead to the next 12 months, teams across government will continue to:

- protect more of our land and water
- transform how we produce and use energy
- invest in programs to help people get off oil heat, switch to heat pumps and make their homes energy efficient
- transition to a circular economy
- support the growth of clean technologies here in Nova Scotia
- empower community-led leadership and projects to reduce emissions, adapt to climate change and mitigate its impacts
- modernize the environmental assessment process
- develop the skills needed to support a clean economy
- engage African Nova Scotians and the Mi'kmaq of Nova Scotia on how to address environmental racism
- give communities and people who live by, or want to live by, the ocean, more new tools and resources to know their risks and make changes to build and live safely in areas that will be impacted by rising sea level, coastal flooding and erosion
- and more

My work...our Government's work...won't be done until we achieve net zero and fulfill the commitments we made to the people of Nova Scotia in the Environmental Goals and Climate Change Reduction Act and in Our Climate, Our Future: Nova Scotia's Climate Change Plan for Clean Growth.

You may have noticed that the cover of this report has a photo of the Youth Climate Council which was created in 2023 by our Government to give youth a formal way to help influence public policy so they can have confidence in their future. We have all heard that saying: A picture says 1000 words. Pictures tell a story. In choosing a photo of this group of remarkable young Nova Scotians to grace this year's cover, our Government wants to make it clear that we know climate change is concerning. We know our youth are worried about their future. We are listening to them, and we will do everything we can to make sure they, and many generations after them, have the future they deserve – one full of promise, hope and opportunity. That is the story that, together, we can create for Nova Scotia.

Thank you.

The Honourable Timothy Halman

Minister of Environment and Climate Change



| PHOTO: People walk along the dykes near Wolfville

# Introduction

In the past year, Nova Scotians have experienced the devastating impacts of extreme weather events, including wildfires, flooding, tropical cyclone Lee, and extreme snowfall. Global climate change means Nova Scotia will see more of these events in the future. And not everyone is experiencing the same challenges in the same way.

Nova Scotia is tackling these big and connected issues with smart solutions for sustainable prosperity. We are making our communities more resilient, growing our clean economy, creating good jobs, and fighting climate change to make life better here in Nova Scotia.

The <u>Environmental Goals and Climate Change</u>
<u>Reduction Act</u> is Nova Scotia's sustainable prosperity roadmap. It demonstrates that we are committed to:

- support clean air and water and protect land that Nova Scotians call home
- reduce greenhouse gas emissions which threaten our future
- support affordability for Nova Scotians
- transition to reliable and affordable renewable energy
- grow the clean economy
- create economic opportunities for entrepreneurs
- address environmental racism
- support community-led action to protect our environment and respond to climate change

# Sustainable Prosperity

As defined in the Environmental Goals and Climate Change Reduction Act, 'sustainable prosperity' means prosperity where economic growth, environmental stewardship, and social responsibility are integrated and recognized as being interconnected.

The Environmental Goals and Climate Change Reduction Act commits to preparing a province-wide climate change risk assessment and a climate change action plan. In 2022, Government fulfilled these commitments by releasing a climate change risk assessment, Weathering What's Ahead and Our Climate, Our Future: Nova Scotia's Climate Change Plan for Clean Growth.



Over the past year, we have continued to implement Our Climate, Our Future: Nova Scotia's Climate Change Plan for Clean Growth's 68 actions in a way that is affordable for Nova Scotians. Since forming government, we have invested over \$229 million dollars in programs that help Nova Scotians and businesses reduce their energy bills. This year, programs that support Nova Scotians to get off heating oil and improve the energy efficiency of their homes have helped 14,273 homes undergo retrofits, leading to an average of \$1,191 in energy bill savings per home in the first year. These programs also reduce our dependence on imported heating oil.

Still, we know we need to do even more.

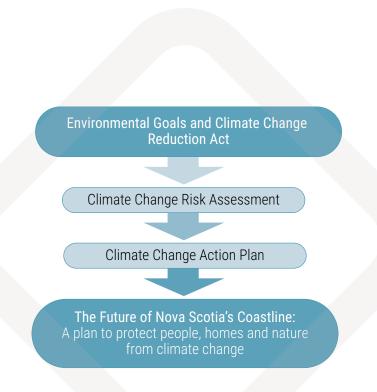
With 13,000 kilometres of coastline, Nova Scotia's coastal communities are vulnerable to the effects of climate change, such as erosion, flooding, storm surge, and rising sea levels. Like Nova Scotians, our Government loves our coast and is committed to protecting it.

This is why in February 2024, our Government announced the <u>Coastal Protection Action Plan</u>, The Future of Nova Scotia's Coastline: A plan to protect people, homes and nature <u>from climate change</u>. This plan, with 15 robust actions, empowers informed decision-making, supports municipal leadership, and aligns Government resources with coastal protection. The plan embraces the reality that climate action requires an all-hands-on-

deck approach. It is one part of the broader and holistic suite of actions being taken under the Environmental Goals and Climate Change Reduction Act and Our Climate, Our Future: Nova Scotia's Climate Change Plan for Clean Growth to tackle climate change, improve resilience, and build a brighter future for all Nova Scotians.

The updates highlighted in this annual progress report demonstrate Government's continued investments in people, our industries and sectors, and communities, so that together all Nova Scotians can adapt and become climate resilient. This will help us maintain our high quality of life. These investments are helping to build a stronger, cleaner economy and reach our sustainability and climate change goals, which will benefit Nova Scotians for generations to come.

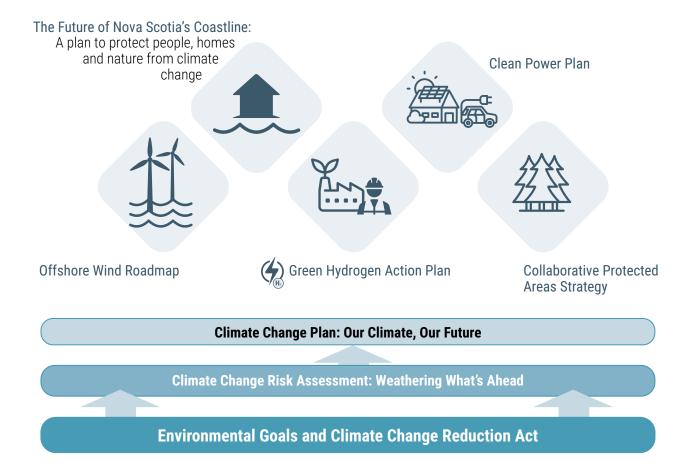
This report outlines annual progress for both the Environmental Goals and Climate Change Reduction Act and Our Climate, Our Future: Nova Scotia's Climate Change Plan for Clean Growth. It includes updates on the actions happening on both and is published every year. For a detailed review of progress on all goals, please see Appendix A.



# The Environmental Goals and Climate Change Reduction Act

With 28 legislated goals, the Environmental Goals and Climate Change Reduction Act serves as the foundation for building a brighter today and tomorrow for Nova Scotians.

Over the past year, we continued to implement the Environmental Goals and Climate Change Reduction Act and the roadmap it has laid out for Nova Scotia by launching more initiatives that work together to drive sustainable prosperity. These include:



Together, these solutions are driving action faster, creating resilience, growing the clean economy, addressing climate change, protecting the place Nova Scotians call home, and making life more affordable.

#### The State of Nova Scotia

The Environmental Goals and Climate Change Reduction Act says Government must report on the work it is doing under the Act each year. This includes reporting on progress made toward the long-term objective of sustainable prosperity.

The Environmental Goals and Climate Change Reduction Act, Our Climate, Our Future: Nova Scotia's Climate Change Plan for Clean Growth, and other key government initiatives all influence sustainable prosperity in Nova Scotia. Tracking this progress involves looking at many types of information to get a clear picture of Nova Scotia's environment, economy, and communities over time.

Below are some key pieces of information that help to tell a story about what Nova Scotia is like right now. Some of these factors we can control (for example, how much land is protected), while others we cannot control because of what is happening around the country and the world. The work we are doing as part of the Environmental Goals and Climate Change Reduction Act and Our Climate, Our Future: Nova Scotia's Climate Change Plan for Clean Growth is benefiting our province. In each year's report, these key pieces of information tell the story of the long-term change we are creating together.



Our population has grown 3.24 per cent as of July 2023. That means we have added 33,249 Nova Scotians since July 2022<sup>1</sup>



As of the year 2022\*, we have reduced our greenhouse gas emissions by 35 per cent. In 2022\*, we emitted 14.77 megatonnes of carbon dioxide equivalent<sup>2</sup>



This year, our electricity was 6.4 per cent more renewable

<sup>&</sup>lt;sup>1</sup> Nova Scotia Annual Population Estimates as of July 1, 2023

<sup>\*</sup>Data delayed by two years

<sup>&</sup>lt;sup>2</sup> National Inventory Report 1990-2021: Greenhouse Gas Sources and Sinks in Canada

#### The State of Nova Scotia Continued



Unemployment fell by 0.2 per cent to 6.3 per cent in 2023 – the lowest annual average rate since 1970<sup>3</sup>



In 2023-24, 27-34 per cent of total food spending was on locally produced products



There are 1,300 more electric vehicles registered in Nova Scotia this year, for a total of 4,500



Seven more communities have active transportation plans in Nova Scotia. Total to date is 36



Last year, Nova Scotians produced 417 kilograms of waste per person – steady from last year



This year, the Department of Environment and Climate Change worked directly with over 40 organizations in implementing their adaptation plans and priorities



The value of environmental and clean technology products in Nova Scotia was \$859 million in 2022, up from \$799 million in 20214\*



We are over halfway to our goal of protecting 20 per cent of land and water by 2030 with 13.6 per cent protected

<sup>&</sup>lt;sup>3</sup>Labour Market Trends, Annual 2023

<sup>&</sup>lt;sup>4</sup>Environmental and Clean Technology Products Economic Account, gross domestic product

<sup>\*</sup>Data delayed by two years

# **Progress on the Environmental Goals and Climate Change Reduction Act**

To date we have achieved five goals and made substantial progress on four more under the Environmental Goals and Climate Change Reduction Act. Work on all the remaining goals is underway - details can be found in Appendix A. Major achievements over the last year include:

# ■ Goal Seven - Making progress towards phasing out coal-fired electricity generation by the year 2030

The Province took a significant step towards cleaning our electricity grid by appointing the <u>Clean Electricity Solutions Task Force</u> in April 2023. The Task Force has since met with more than 20 individuals and organizations representing a broad spectrum of energy, environmental, and electricity consumers to develop recommendations for changes to the electricity sector that align with our clean energy goals. The Task Force's February 2024 report detailed these recommendations which aim to support the modernization and greening of Nova Scotia's electricity grid focusing on legislation, infrastructure, reliability, telecommunications, and affordability.

In response to these recommendations, Government introduced the Energy Reform Act in Spring 2024. The Energy Reform Act changes how the electricity system is structured and managed by introducing two new laws and cancelling the Utility and Review Board Act.

The new laws are the Energy and Regulatory Boards Act and the More Access to Energy Act. Together, they improve transparency and accountability and allow decision makers to consider the environmental commitments laid out in Environmental Goals and Climate Change Reduction Act.

The Energy and Regulatory Boards Act will establish the new Nova Scotia Energy Board, which will focus on regulating public utilities in the energy sector. The Nova Scotia Energy Board is expected to be established April 1, 2025.



The More Access to Energy Act will create an independent, non-profit organization to act as the new Independent Energy System Operator which will manage the operations of the electricity system, making sure electricity is delivered where and when it is needed. The new Independent Energy System Operator is expected to be fully operational by late 2025.

## ▶ Goal Seven - Making progress towards phasing out coal-fired electricity generation by the year 2030: The Clean Power Plan

Following the appointment of the Clean Electricity Solutions Task Force, in October 2023, Government released the <u>2030 Clean Power Plan</u>. It charts the path to achieving our goals to generate 80 per cent of electricity from renewable sources and phasing out coal-fired electricity by 2030.

The Clean Power Plan is flexible, achievable, and focuses on affordability. It puts Nova Scotia on a path towards significant increases in renewable energy sourced from domestically produced wind, solar power, and emerging green hydrogen. We will also enhance our energy reliability through a strengthened transmission link to New Brunswick and improve our energy independence through investments in advanced battery technology. The Clean Power Plan charts a clear and certain path to reaching at least 80% renewable electricity by 2030 and then net zero emissions economy-wide by 2050.

Over the past year, Government completed the largest-ever procurement for renewable electricity in the province. When completed, it will result in about 70 per cent of our electricity coming from renewable sources. Government also approved 10 new onshore wind energy projects through environmental assessments in 2023 which will create enough clean, renewable energy to power the equivalent of just under 500,000 homes. The Province also put programs in place for residential, commercial, and community solar.

The Clean Power plan aligns with the regulatory modernization efforts outlined by the Clean Electricity Solutions Task Force and is enabled by the Energy Reform Act.

# ► Goal Eleven - Working with Nova Scotian municipalities, First Nations, and African Nova Scotian communities to take immediate and long-term action on their climate change priorities.

The Clean Foundation's <u>Community Climate Capacity Program</u>, funded by the Department of Environment and Climate Change, is supporting 12 community-led projects across Nova Scotia that respond to local climate challenges. The 12 projects involve 16 municipalities, one Mi'kmaw community and two community organizations. A dedicated team of climate change experts will help them with the projects over the next three years. In addition, those experts are available to support all municipalities through the Municipal Climate Learning Group. This group will be established later this year.

# Diving to Raise Awareness of Waste in Our Waters

Sean McMullen – a.k.a. Saltwater Sean – is an example of how Nova Scotians are using their individual skills and interests to help us make progress on our environmental goals. Sean spends time each week exploring Nova Scotia's waterways, collecting and cleaning up trash as he goes. He shares his diving sessions online and helps to raise awareness about the impact of garbage and plastic pollution in our waters. Water pollution can negatively impact wildlife and their habitats. Pollution can also reduce our ability

to enjoy our own waters and waterfront places.

Nova Scotians like Sean are doing great work to clean up our waters. It is important for us all to do what we can to make sure garbage does not end up in our waters. Next time you are out for a walk on the beach or taking a trip to the lake, think about bringing some gloves and doing a small cleanup. Together, we can preserve our waters!

## Establishing the Sustainable Communities Challenge Fund

Government launched the first call for projects under the <u>Sustainable Communities</u> <u>Challenge Fund</u> in November 2022, receiving a total of 102 applications from municipalities, registered non-profit organizations, post-secondary institutions, and First Nations or Tribal Councils from around the province. 105 applications were received from interested communities in October 2023.

This year, Government nearly doubled the funding for the program by providing a \$15.4 million top up. The additional funding will extend the program to 2028 and help more Nova Scotians and communities respond to climate change, prepare for extreme weather events, reduce greenhouse gas emissions and switch to clean, renewable, and more affordable energy.

In total the Sustainable Communities Challenge Fund has invested \$7.8 million in 26 projects, 20 per cent of which were awarded directly to First Nations and African Nova Scotian communities.

## **Nova Scotia Nature Agreement**

This year, Nova Scotia signed a three-year agreement with Environment and Climate Change Canada. The new Nova Scotia Nature Agreement provides the Province with \$28.5 million in funding to increase the amount of protected areas and advance an integrated approach to the protection, conservation and recovery of biodiversity. Of these funds, \$3.5 million will support Mi'kmaw leadership in the conservation and care of nature.

In addition to provincial work, the project supports land trusts, the Mi'kmaq, and municipalities in their conservation work. The Nova Scotia Nature Agreement aims to protect 82,500 hectares by 2026.

# ► Goal Fourteen - Releasing the Protected Areas Strategy

The <u>Collaborative Protected Areas Strategy</u> was released in December 2023, charting a course for Government's ambitious action to protect 20 percent of Nova Scotia's land and water by 2030. The strategy involves a significant expansion of the province's network of protected and conserved areas to help maintain biodiversity, achieve sustainable prosperity, and support the health and well-being of all Nova Scotians.

The strategy contains four overarching solutions and numerous supporting actions, for example:

- continuing to work to designate protected areas from the <u>2013 Parks and</u> Protected Areas Plan
- · enabling more private land protection
- supporting Mi'kmaq led Indigenous Protected and Conserved Areas
- exploring new opportunities for other effective area-based conservation measures
- working to maximize funding from the new federal-provincial Nature
   Agreement, much of which will flow to private conservation organizations

Working together, we will get to 20 per cent by 2030.

# ▶ Goal Twenty-six - Piloting a new course, Netukulimk 12, in schools across Nova Scotia

A new course is being piloted in schools across Nova Scotia to give young Nova Scotians an opportunity to engage with the concept of Netukulimk. The Netukulimk 12 course explores environmental science concepts through the guiding principle of Etuaptmumk (Two-Eyed Seeing). Etuaptmumk refers to learning with the strengths of both the Mi'kmaw and western knowledge systems for the benefit of all. This pilot course is expanding to seven new schools in the 2024-25 school year. The draft plan outlining student learning outcomes is complete, and new teaching and learning resources have been developed to support the expansion of the pilot. Professional learning is also provided for teachers, including "Reconnecting with Wskitqamu," which offers an authentic learning opportunity that nourishes the spirit, heart and relationships with Wskitqamu (the land), Mi'kmaw communities and culture.

# ► Goal Twenty-eight – Establishing Environmental Racism Panel Recommendations

This is the first time a panel of this nature has been formed to address historic environmental racism in Canada. The Panel is comprised of eight experienced community leaders. The Panel has undertaken significant time and care to develop recommendations to address inequities with equity-deserving communities and shared their draft report with the Department of Environment and Climate Change and the Office of Equity and Anti-Racism. Government is taking the time to thoughtfully consider the draft report and recommendations.

## Meetings with the Round Table on Environment and Sustainable Prosperity

The Minister's Round Table on Environment and Sustainable Prosperity advises the Department of Environment and Climate Change on issues related to environmental sustainability and its connection to economic and social prosperity. The members of the Round Table are appointed by the Minister of Environment and Climate Change.

This year, the Round Table met regularly with the Minister. The Premier also met with the Round Table, fulfilling the commitment as laid out in the Environmental Goals and Climate Change Reduction Act.

In the context of Nova Scotia, advancing sustainable prosperity means considering and driving action on the following principles, included in the Environmental Goals and Climate Change Reduction Act:



Netukulimk



**Circular economy** 



**Equity** 



**Shared responsibility** 



Sustainable development



**Climate action** 



Businesses, non-profits, communities, and individuals are all advancing these principles and we celebrate this work. Below are some examples of change makers in Nova Scotia. More can be found in Appendix B.



#### **Netukulimk**

#### What is it?

As defined by the Mi'kmaq, and included in the Environmental Goals and Climate Change Reduction Act Netukulimk is "the use of the natural bounty provided by the Creator for the self-support and well-being of the individual and the community by achieving adequate standards of community nutrition and economic well-being without jeopardizing the integrity, diversity, or productivity of the environment".

Partnerships between Indigenous organizations, such as the Unama'ki Institute of Natural Resources and the Department of Environment and Climate Change are one way that Government centers the principle of Netukulimk in environment and climate action. Established in 1999, UNIR represents the five Mi'kmaw communities in Unama'ki/Cape Breton – Eskasoni, Membertou, Potlotek, Wagmatcook, and We'kogma'g.

Since 2003, the Unama'ki Institute of Natural Resources has hosted the secretariat for the Bras d'Or Collaborative Environmental Planning Initiative. The Province is a key partner in the initiative. The Mi'kmaq communities, municipal, provincial, and federal agencies and citizens with an interest or responsibility in the Bras d'Or watershed have banded together to work on a management plan for the Lakes. A unique declaration, the Bras d'Or Charter, was signed by all these groups, which committed them to the Bras d'Or Lake Collaborative Environmental Planning Initiative. The spirit of the Charter is collaboration: one eye on our past history and teachings, and one eye on modern science (Two Eyed Seeing). All agencies and peoples work together sharing information and ideas.

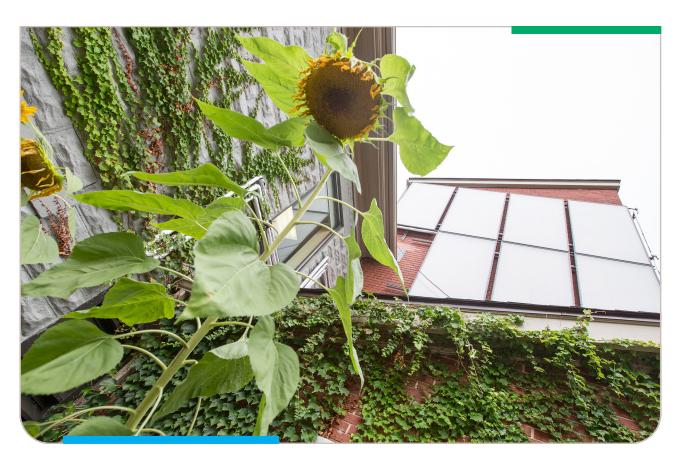


# **Equity**

#### What is it?

Equity means recognizing people's differences and attempting to counteract unequal opportunities by considering fairness and justice.

The Environmental Noxiousness, Racial Inequalities, and Communities Health Project (the ENRICH Project) is building on the success of their 2023 project, funded by the Province's Sustainable Communities Challenge Fund, to develop the African Nova Scotian Climate Justice Ambassadors Program. This new three-year program is creating a cohort of African Nova Scotians to hold knowledge and skills to address climate change impacts in their communities. This project will include hosting 13 workshops in African Nova Scotian communities across the Province, which is an expansion of 12 workshops hosted in 2023, and provide hands-on climate work contributing to climate resiliency for these 25 communities. This investment is empowering African Nova Scotians to form a community of emerging climate leaders that are identifying and helping to address climate change issues of greatest concern to their communities.



**Urgent Times, Urgent Action:** The Annual Progress Report on the Environmental Goals and Climate Change Reduction Act and Nova Scotia's Climate Change Action Plan



## Sustainable development

#### What is it?

Sustainable prosperity means prosperity where economic growth, environmental stewardship and social responsibility are integrated and recognized as being interconnected. Pursuing sustainable development means shifting the economy in a meaningful way so that it:

- is cleaner and more innovative, and
- meets the needs of the present generation without preventing future generations from being able to meet their own needs.

NSCAD University received funding for its innovative Flaxmobile project. The Flaxmobile is a mobile facility offering a hands-on learning experience on how to grow and process fibre flax, the plant source for linen. The project aims to create a critical network that connects farmers, fibre mills, craftspeople, and consumers to promote the growth of sustainable textile supply chains in Nova Scotia. Sustainable, local industries are important for building resilience to climate change, making Nova Scotia more environmentally friendly, and economically strong through job creation. The project received \$112,000 in funding through the Province's Sustainable Communities Challenge Fund which is administered by the Nova Scotia Federation of Municipalities.



# **Circular Economy**

#### What is it?

Circular economy means keeping resources and products in use for as long as possible before throwing them out. This involves making something that could be "waste" into other resources and products as many times as possible. This is important because we live on a planet with limited resources.

In the past year, Lafarge Canada, Geocycle Canada, and the Holcim Group Innovation Centre worked together on making clinker at the Brookfield Plant completely circular. Clinker is a key ingredient needed to make cement. Together, these companies collaborated and changed how they make clinker by using waste materials and fuels

from materials destined for the landfill. The material was tested in February 2024, and they plan to make more cement from this new clinker for further testing and development. This new clinker will be used to make entirely recycled cement, which can then be used to make concrete. This helps cut down on carbon emissions and promotes recycling in Nova Scotia. Geocycle Canada partnered with waste producers in Nova Scotia to ensure they had the necessary materials for producing recycled clinker.



## **Shared Responsibility**

#### What is it?

Creating a healthy economy, healthy communities, and a healthy environment is a shared responsibility—the work belongs to us all. It requires an all-hands-on-deck approach because sustainability is built on relationships and finding solutions together.

Municipalities have long been leaders in climate change adaptation and mitigation and have expertise in creating climate-resilient communities. Nova Scotia's Coastal Protection Action Plan – The Future of Nova Scotia's Coastline: A plan to protect people, homes and nature from climate change – recognizes and leverages municipal expertise, and existing municipal systems and processes. Municipalities do land-use planning, zoning, and the regulation of building permits to take action to protect our coastal communities and natural areas. The Province is working hand-in-hand with municipalities every step of the way to make sure they have the tools and support they need and that we do this important work together.

Understanding the importance of shared responsibility and collaboration, the Province is supporting the Nova Scotia Federation of Municipalities with \$476,345 over three years to fund a Coastal Planning Coordinator position. The coordinator will serve as a critical link between the Province and municipalities as they work together to implement the plan.

Municipalities will also receive support for their coastal protection priorities through the Municipal Climate Learning Group, which is part of the Community Climate Capacity Program, led by the Clean Foundation and funded by the Province.



#### **Climate Action**

#### What is it?

Climate action is urgently responding to the global climate emergency. It includes reducing greenhouse gas emissions, creating resilience, and responding to the impacts of climate change. Climate impacts have negative impacts on our personal health, public health, ecosystems, food systems, infrastructure, transportation networks, and more.

Glooscap First Nation is taking action to become more energy-independent, improve resilience during power outages, and make energy more affordable. With \$832,418 in funding from the Sustainable Communities Challenge Fund, the community is installing a solar energy system, an electric vehicle fast charging station, battery energy storage systems, and a microgrid controller. Microgrids are independent, small systems that generate, store, and distribute electricity. This initiative will help offset over 90 per cent of Glooscap Landing's energy consumption and create new economic opportunities. Glooscap First Nation is embarking on a transformative journey and is a testament to the leadership and collective commitment towards shaping a greener and more prosperous future.





#### **Water Health**

Water plays an essential role in our day-to-day lives. Nova Scotia is blessed with an abundance of lakes, rivers, streams, saltwater coastlines, and groundwater that is used by citizens and businesses alike for drinking, recreation, agriculture and other important sectors of our economy.

Nearly half of Nova Scotians depend on well water for their daily household needs which is why protecting and providing access to safe drinking water for private well owners in Nova Scotia is a legislated goal in the Environmental Goals and Climate Change Reduction Act.

Work is actively underway to identify and understand the barriers Nova Scotians face when it comes to testing and treating their well water. While the cost of testing is one factor, research has shown that there are many additional reasons why people may not test their water. The work under Section 11 of the Environmental Goals and Climate Change Reduction Act will aim to develop the supports Nova Scotians need to ensure their water supplies are safe by 2026.

When it comes to our lakes, rivers and streams, the
Government has committed to developing tools needed to
ensure the sustainable management of our water resources. This
includes a commitment to develop provincial water quality objectives
by 2026 as well as enhancements to our water quality monitoring
network under action three of Our Climate, Our Future: Nova Scotia's
Climate Change Plan for Clean Growth. This water quality monitoring network
helps us understand and respond to impacts of climate change.

Nova Scotia has begun experiencing the impacts of climate change firsthand – we have seen more frequent and intense storms, flooding and drought, and wildfires. These events impact both water quality and availability. To that end, the the Department of Environment and Climate Change has partnered with academic institutions and non-government organizations to understand the impacts so that we are better able to respond.

In addition to the province's legislated goals for drinking water and water quality, the Department of Environment and Climate Change protects our water resources in many ways, including:

- leading programs for controlling and regulating hundreds of activities to ensure effects to our water resources are managed
- providing support for watershed planning to our municipal water supplies
- developing partnerships and programming with non-governmental groups to support communities in water quality stewardship for education and monitoring

Some examples of ongoing work include:

- the development of a water resources management data system to improve transparency and data sharing,
- guidance on erosion and sediment control plan requirements to prevent siltation events,
- educational campaigns for public awareness for blue-green algae, water well testing, and
- support to our provincial partners on provincial beach water quality monitoring to protect public health.

Learn more about the work we do to preserve the health of our waters by visiting these resources:

- Water Resource Management Strategy webpage
- Information on blue green algae and how to report it



# **Nova Scotia's Climate Change Action Plan:**

<u>Our Climate, Our Future: Nova Scotia's Climate Change Plan for Clean Growth</u>, builds on the Environmental Goals and Climate Change Reduction Act. With 68 actions it provides more detailed solutions to help achieve some of the Act's goals.

In the past year, work has continued on the plan's three actions areas:

- 1. Responding to climate impacts
- 2. Reducing our emissions
- 3. Seizing opportunities for a cleaner sustainable economy

Progress on these action areas is progress towards an affordable, sustainable, and clean future for our province.

## **Government Spending on Climate Action**

Government is committed to supporting Nova Scotians who are leading responses to climate impacts and working to reduce greenhouse gas emissions. That is why Nova Scotia has a fully-funded climate change action plan – the first such plan in Nova Scotia's history. To date, \$237 million has been invested from Our Climate, Our Future: Nova Scotia's Climate Change Plan for Clean Growth to help Nova Scotians respond to the impacts of climate change, reduce greenhouse gas emissions and grow a cleaner, more sustainable economy.

Below is a summary of ongoing work through the Our Climate, Our Future: Nova Scotia's Climate Change Plan for Clean Growth. More details on the 68 actions and progress of the work can be found in Appendix A.

# **Action Area One: Responding to Climate Impacts**

Nova Scotians care about our environment and are leading action in response to climate change. Our Climate, Our Future: Nova Scotia's Climate Change Plan for Clean Growth is preparing Nova Scotians to respond by:

- increasing access to climate data and information
- supporting adaptation planning and action across government, communities, and industry sectors

# 2023-24 Highlights

- In March 2024, the Province announced the creation of a new Department of Emergency Management, and the creation of a new volunteer corps called the Nova Scotia Guard, to help communities during and after emergencies. The Nova Scotia Guard will include volunteers with specialty skills and members of the public to fill a variety of roles depending on emergency needs. It will harness the many talents of Nova Scotians and their sense of community.
- Program received \$1.6 million in additional funding and launched with 19 partner communities. This program is helping communities act on their climate change priorities and is delivered by the Clean Foundation. A dedicated team of climate change experts is focusing their efforts to help the communities with 12 projects over the next three years. The program will also provide a valuable resource to municipalities through the Municipal Climate Learning Group to support climate change capacity-building across the province.
- In the Summer of 2023, seven climate adaptation coordinators were hired by organizations representing a range of sectors including agriculture, archaeology, and freshwater resources. Coordinators are supporting their sectors to develop and/or implement their climate adaptation plans. Together they are building the province's adaptive capacity and resilience to climate change by engaging over 40 organizations to collaborate on climate adaptation action.

## **Adaptive Capacity**

Climate change adaptive capacity is the ability of people, organizations and systems to adjust to potential damage, take advantage of opportunities, and respond to consequences related to the impacts of climate change.

- The Department of Communities, Culture, Tourism and Heritage is working with Nova Scotia Museum sites to protect these valued properties. This year, they developed an Emergency Preparedness and Disaster Response Planning Guide, and the museums trimmed trees as preventative maintenance in preparation for wildfire season and storms. The guide will be shared with, and adapted to, other sectors served by the Department of Communities, Culture, Tourism and Heritage.
- Climate risk information is essential to guide climate action. Work has begun to update the Nova Scotia climate change risk assessment by 2025.

#### **CLIMAtlantic**

CLIMAtlantic is the regional climate services organization for the Atlantic provinces, helping people access, interpret, and use climate information in adaptation planning. Established in 2021 as part of the network of climate hubs across Canada, CLIMAtlantic quickly became a significant source of support for municipalities, businesses, community organizations, Indigenous groups, and government. Through expertise, information resources, training, and partnerships attuned to local needs, CLIMAtlantic helps Nova Scotians take action to adapt. For example, CLIMAtlantic created an extensive online library of resources and information and developed the Coastal Adaptation Toolkit to proactively help coastal property owners and communities plan for the effects of climate change. CLIMAtlantic also supports climate adaptation practitioners to learn from each other, build on successes and inspire local projects.



- About one half of Nova Scotians depend on groundwater from dug or drilled wells for their daily needs. Climate change can threaten this resource through sea level rise and, more frequently, drought. The <u>Centre for Water Resource Studies</u> at Dalhousie University, in partnership with <u>Rural Water Watch</u>, received \$343,000 through the Sustainability Communities Challenge Fund to research how climate change will impact groundwater that enters wells in rural communities and develop adaptation plans. The Centre's work focuses on several communities, including Cape Breton Regional Municipality.
- In the past year, 14,000 hectares of Nova Scotia were protected within new or expanded wilderness areas and nature reserves. Five new wilderness areas and nine new nature reserves were designated, and eight existing wilderness areas and one nature reserve were expanded. These new designations protected 115 kilometres of coast and 3,680 hectares of coastal ecosystems.
- Important archaeological sites are being assessed through a new climate change vulnerability model to prioritize preservation actions. Understanding the risks faced by our historical sites is important to preserving them for generations to come.

## **Agricultural Sector Work**

On-farm weather stations and a new online information hub on climate hazards and best practices are helping Nova Scotian farmers, including Christmas tree and vegetable growers and cattle and sheep producers, adapt to the impacts of climate change. These new resources are allowing farmers to access more timely, regional weather data to help them make more informed management decisions in the face of more frequent and unpredictable extreme weather events. The on-farm weather stations were funded by the Department Agriculture and the Department of Environment and Climate Change.



#### **Coastal Protection Action Plan**

Nova Scotians love our coast and Government has committed to protecting it. We all share the sense of personal responsibility and collective pride in doing what is right — whether it is protecting the coastline or supporting a neighbour. That is why Government is trusting local communities and Nova Scotians to make good decisions when it comes to coastal protection.

With 15 comprehensive actions, the <u>Coastal Protection Action Plan</u>, <u>The Future of Nova Scotia's Coastline</u>: A plan to protect people, homes and nature from climate change is empowering property owners and municipalities with the tools they need to protect each unique piece of coastline.

Tools available now for coastal property owners include:

- The Coastal Hazard Map, an interactive, <u>online map</u>, which shows Nova Scotians a worst-case scenario of coastal flooding in the year 2100
- A <u>Resource guide for coastal property owners</u>, which provides Nova Scotians with information on coastal hazards and actions they can take
- Navigators, who can help Nova Scotians use the Coastal Hazard Map, understand the map, and direct them to more resources
  - The Navigators can be contacted at <u>coastalnavigator@novascotia.ca</u> or by calling 1-888-570-4240

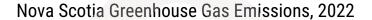
Municipal leadership and action are critical as municipalities know their communities best and are the level of government responsible for zoning, land-use planning and building permits. Climate change response requires all hands-on deck and the Province is committed to working lock-step with municipalities on coastal protection and supporting them. This is why Government has provided funding to the Nova Scotia Federation of Municipalities to employ a Coastal Planning Coordinator, who will serve as a critical link between the Province and municipalities as they work together to protect Nova Scotia's coastline. The Department of Environment and Climate Change also has a dedicated Coastal Protection Action Plan Lead who is travelling across the province and providing information to municipalities about the plan and next steps. Work is underway on all 15 actions in the plan. See resources on our website.

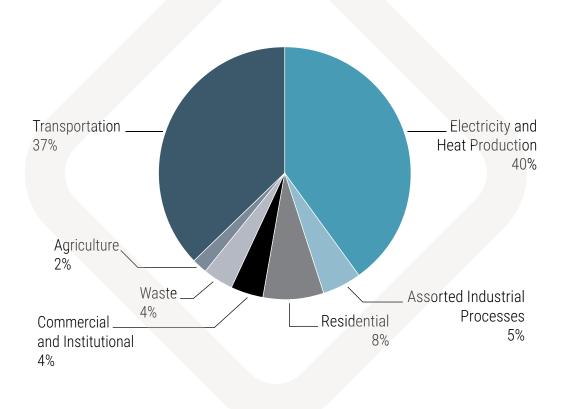
# **Action Area Two: Reducing Our Emissions**

Global climate change is occurring rapidly. This increases the need for significant and sustained efforts to address its impacts and the sources of greenhouse gas emissions. In Nova Scotia, greenhouse gas emissions mainly come from the use of fossil fuels for electricity generation, transportation, and heating buildings.

The Environmental Goals and Climate Change Reduction Act made greenhouse gas emission reduction targets the law in Nova Scotia. The targets are to reduce greenhouse gas emissions by at least 53 per cent below 2005 levels by 2030 and achieve net-zero greenhouse gas emissions by 2050. These targets are among the most ambitious in Canada.

In 2022, Nova Scotia emitted 14.77 megatonnes of greenhouse gases, a 35.2 per cent reduction in emissions since 2005.







Government is reducing greenhouse gas emissions through a made-in Nova Scotia plan which includes:

- 1. Our Climate, Our Future: Nova Scotia's Climate Change Plan for Clean Growth our plan for clean growth to reduce greenhouse gas emissions and improve our ability to be responsive and prepared for climate change.
- 2. Nova Scotia's Clean Power Plan demonstrates a path to reach at least 80 per cent renewable electricity by 2030 and then net zero by 2050, which is better than a carbon tax.

As a part of the Our Climate, Our Future: Nova Scotia's Climate Change Plan for Clean Growth, we have implemented the <u>Output-Based Pricing System</u> to hold large emitters – which represent over 50 per cent of Nova Scotia's carbon emissions – accountable to reduce their emissions.

Together, these policies and plans work to:

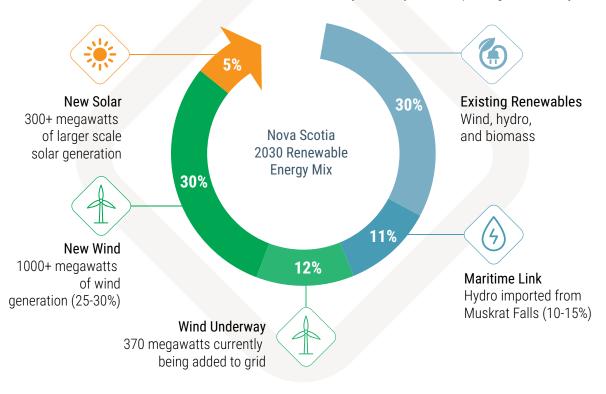
- advance programs that give Nova Scotians clean, reliable power at affordable rates
- regulate greenhouse gas emissions from large industrial emitters
- fund programs to help Nova Scotians reduce their energy use
- support more Nova Scotians to get off home heating oil
- increase access to clean transportation options

### 2030 Clean Power Plan Infographic

The <u>2030 Clean Power Plan</u> lays out the path to get off coal and achieve 80 per cent renewable electricity by 2030. Through the plan, the Province has committed to increase wind energy generation so that it meets at least 50 per cent of Nova Scotia's electricity needs. The plan sets a goal of introducing larger-scale solar projects into Nova Scotia's mix of electricity generators and outlines the resources needed to support the resiliency and reliability of the grid. Here are the steps in the Clean Power Plan on our path to 2030:

### Nova Scotia's 2030 Clean Power Plan

Achieve 80% renewables • Close coal • Cut electricity GHGs by 90% • Improve grid resiliency



### Supporting Resiliency and Reliability of the Grid



Batteries: 300 megawatts Innovative battery deployment underway



Fast Acting Generators: 300 megawatts New, dispatchable generators



Reliability/ Emergency Plants: 450 megawatts Retain 4 oil/gas units for emergency use



NS-NB Tie: 500+ megawatts New 345 kilovolts reliablity line to NB to help manage renewables



Load Management: 150 megawatts Peak management, demand response, and efficiency

## 2023-24 Highlights

- Nova Scotia now has an Output-Based Pricing System, which is holding large
  industries and the electricity sector accountable for reducing their greenhouse gas
  emissions. This new system will reduce emissions while minimizing rate impacts
  for Nova Scotians and ensuring our businesses remain competitive. The system
  includes emissions reduction targets, also referred to as facility performance
  standards. The goal is to have large industrial emitters reduce their emissions by
  switching to clean energy sources and by making their operations more energy
  efficient. Fifteen facilities are now registered and must meet the performance
  standards during the manufacturing of their products.
- Last year Government supported 191 small businesses in reducing their energy demand through energy efficiency programs for small businesses. The programs help businesses make informed decisions about energy efficiency upgrades and provide rebates to help them to complete energy upgrades. This helps small businesses throughout the province become more profitable while reducing their emissions.

### **Affordability**

Nova Scotians are eager to insulate and switch from oil to heat pumps which can save them thousands on their energy bills. The Province is making significant investments to help people switch from oil to heat pumps to heat and cool their homes. For example, provincial funding has helped to expand the existing <a href="HomeWarming program">HomeWarming program</a> to include free heat pumps for low-income oil heated households. The program expansion launched in 2023 and has seen a high volume of applications compared to previous years of the program. Government also invested in an expanded <a href="Home Energy Assessment program">Home Energy Assessment program</a>, increasing rebates for moderate income households who heat with oil to help them reduce, or switch away from, oil use.

A total of 2,355 low-income homes benefitted from no-cost energy efficiency upgrades through the HomeWarming and Affordable Multifamily Housing programs in the last year. Participants in the HomeWarming program saved on average \$1,100 on their annual energy bills in the first year and these savings will continue for years. Find out if you qualify for HomeWarming <a href="https://example.com/heme-energy-block-ne



Nova Scotians have shown they want to reduce greenhouse gas emissions through high uptake of efficiency programs and by switching to renewable energy. Government continues to support Nova Scotians who want to make these changes. For example, the Community Solar Program helps community groups and businesses set up solar gardens and sell their renewable electricity to other people who cannot install their own solar panels. There are many reasons why people cannot install solar panels on their homes, including lack of roof space, too much shade, living in an apartment, condo, or other shared housing arrangement, or cost. The Community Solar Program is making solar energy an option for people in these situations and will extend the benefits of solar energy - increasing access to clean, reliable power at affordable rates.

### **Clean Transporation**

Transportation represents 37 per cent of Nova Scotia's emissions. This year has seen exciting partnerships that will enable Nova Scotians to get around quickly using cleaner transportation options, such as the Mill Cove Ferry Service project, a new, environmentally friendly, high-speed ferry service for travel between Bedford and downtown Halifax. The project includes five new electric ferries, two new net-zero ferry terminals and a maintenance facility to be completed in 2027-28. A bridge will also be built over the CN rail line in Bedford to connect buses, cars, pedestrians and cyclists to the Mill Cove terminal. The electric ferries will benefit passengers and ferry operators with reduced noise and air pollution and advances transportation goals in Our Climate, Our Future: Nova Scotia's Climate Change Plan for Clean Growth. The Government of Nova Scotia is investing \$65 million in this new green transportation service which showcases the Province's leadership in reducing emissions while helping Nova Scotians get where they need to go quickly and sustainably. The project aligns with the <u>Joint Regional Transportation Agency's</u> Regional Transportation Plan. The agency is taking a regional approach to growth by looking at the safe, efficient and coordinated movement of people and goods.

### **Building to Zero Exchange**

The <u>Building to Zero Exchange</u>, which launched in October 2023, is a coalition of building sector stakeholders committed to net-zero buildings. This collaborative initiative is bringing together all key stakeholders with the goal of retrofitting and creating high-performance buildings efficiently and at a large scale. The objectives of the Exchange are to build capacity through collaboration, training, and research; create the enabling conditions through policy and building code development and adoption; and accelerate action by testing ideas and projects that can be scaled for impact. The founding members of the Building to Zero Exchange include the Province, the Construction Association of Nova Scotia, Nova Scotia Community College, EfficiencyNS, Clean Foundation, Dalhousie and Halifax Regional Municipality. You can find out more and sign up to be a member (over 60 organizations are already members) here: <u>Building to Zero Exchange</u>

- Community Transportation services are now accessible to 99.5 per cent of communities outside Halifax Regional Municipality and Cape Breton Regional Municipality. Increased access to reliable community transportation helps Nova Scotians travel more easily and contributes to cleaner, more livable communities.
- Government is working with local partners to set up Level 3 fast chargers across Nova Scotia. Level 3 chargers, also known as DC fast chargers, are the fastest charging options available to a vast majority of electric vehicles. They allow vehicle owners to charge their batteries to 80% in approximately 30 minutes, depending on the battery size and its initial level of charge. This work will improve access to electric vehicle charging stations so Nova Scotians can access them where and when they need to. <u>Find a charger near you using PlugShare</u>.
- New rebates are available to help businesses, non-profits, municipalities, and
  Mi'kmaw communities buy electric vans and trucks for commercial or industrial
  purposes and electric ice resurfacing machines like Zambonis. The Electrify Nova
  Scotia Rebate pilot program is administered by the Clean Foundation. The program
  offers rebates of up to \$50,000 per vehicle depending on its class. You can learn
  more at <u>Electrify Nova Scotia</u>.

# **Action Area Three:** Seizing Opportunities for a Cleaner Sustainable Economy

Nova Scotians deserve to thrive in a clean and sustainable economy. Our Climate, Our Future: Nova Scotia's Climate Change Plan for Clean Growth is guiding action that gives youth, industry, investors, and communities ways to participate in economic development in an empowering and solutions-focused way. The Province is taking careful and planned steps to ensure Nova Scotians and the economy are prepared to meet the demands of a cleaner more sustainable future by:

- promoting meaningful employment and skill-building for youth across Nova Scotia
- ensuring Nova Scotians experience the social and economic benefits of acting on climate change by partnering with and supporting local communities in their responses to climate change
- positioning Nova Scotia to respond to the global demand for innovative technologies and services to achieve net-zero greenhouse gas emissions by 2050
- creating a more supportive environment for clean investments



### **Growing the Clean Economy**

Government has developed an <u>Offshore Wind Roadmap</u>, a <u>Green Hydrogen Action Plan</u> and a <u>Critical Minerals Strategy</u> which will create a supportive environment for clean investments, advance clean technology research and development, ensure the sustainable management of our natural resources, grow our clean economy, and move us forward to achieving net-zero emissions by 2050.

The Offshore Wind Roadmap establishes the framework for building wind farms in ocean waters that are jointly managed with the federal government. It will help the province achieve the goal of issuing leases for five gigawatts of offshore wind energy by 2030. Nova Scotia is well positioned to succeed in the development of offshore wind. World-class wind speeds off the coast, research institutions with strong expertise in clean technology and well-established port services are some of the factors that place Nova Scotia at an advantage when it comes to developing offshore wind. Offshore wind farms will provide renewable energy to the province and support the province's green hydrogen industry.

The Green Hydrogen Action Plan was released in December 2023. It has seven goals and 23 actions to develop a green hydrogen sector in Nova Scotia including actions focused on safety, developing a skilled workforce for the industry, research and innovation and opportunities for public engagement. Releasing a Green Hydrogen Action Plan is a commitment in the climate change action plan. Nova Scotia's abundant wind resource, access to a gas distribution system that can be used to transport green hydrogen and proximity to European markets seeking clean fuel options make the province an ideal location for large scale green hydrogen production and position us to become world leaders in the production of green hydrogen. Local green hydrogen could be used to help industrial processes, heavy transportation and the marine sector use less fossil fuels. Green hydrogen also has potential to be used as a fuel source for zero-emission vehicles and peak power generation or blended with natural gas to help reduce the carbon intensity of the natural gas system.

The Critical Minerals Strategy was released in March 2024. It focuses on 16 critical minerals found in Nova Scotia. Critical minerals, such as lithium, zinc and copper are used to build wind turbines, electric vehicles, batteries and solar panels, making them essential in the transition to net-zero emissions for countries across the world. A critical minerals sector in Nova Scotia will also create new jobs, attract investment and grow our economy.

## 2023-24 Highlights

- The Department of Education and Early Childhood Development is providing more environmental education for students and teachers' professional development. In the last year, the Department of Education and Early Childhood Development has:
  - distributed three environmental book collections to schools across the province from primary to grade 8 and greenhouse kits to every junior high and high school across the province to support environmental learning outcomes
  - worked with partners to deliver professional learning for teachers on climate change, student climate workshops, and climate anxiety resources
  - supported Nourish Nova Scotia, a charity supporting healthy food environments for children and youth, to connect with schools to develop community gardens
- Last year the Clean Foundation launched the <u>Custom Employment Support</u>
   <u>Training</u> bursary. This program is designed to help members of underrepresented
   communities gain knowledge, experience, and skills required to enter and be
   successful in the clean energy sector. This is achieved by providing participants
   with a financial bursary to pursue educational certificates and technical training, as
   well as purchase equipment.
- The Department of Natural Resources and Renewables continues to collaborate with its federal partners and the future regulator of offshore wind, Canada-Nova Scotia Offshore Petroleum Board. The focus of this collaboration is to develop the legislative and regulatory frameworks related to licensing and calls for bids and to engage with stakeholders and rights holders on the development of Nova Scotia's offshore wind sector. The amended legislation will identify the future regulator of offshore wind as the Canada-Nova Scotia Offshore Energy Regulator.
  - The Provincial and Federal governments received and reviewed the Interim Report from the Regional Assessment of Offshore Wind Development in Nova Scotia and look forward to the final report in January 2025
- The Department of Economic Development and Invest Nova Scotia administer several programs to support businesses looking to invest in the clean economy.
   Companies who use Invest Nova Scotia programming are increasingly recognizing the importance of environmental sustainability. Through the Atlantic Trade and Investment Growth Strategy, InvestNS partners on projects to advance plans in the areas of clean technology, green building, and other energy innovation sectors. Efforts like these assist the Department of Economic Development and

Invest Nova Scotia to further adapt programs targeted at growing Nova Scotia's clean economy.

- The Advancing Clean Technologies Program is supporting the adoption of clean technologies that are helping the agricultural sector adapt to climate change, reduce greenhouse gas emissions, improve energy efficiency, and increase value-added production. Last year, the program funded 18 projects allowing more farmers to adopt clean technologies that support sustainable farming.
- The Department of Natural Resources and Renewables is supporting industries, businesses, and communities to switch to low-carbon and renewable fuels with help from the new Clean Fuels Fund. The fund is helping replace fossil fuels for heating, transportation, and industrial processes. Cleaner fuel options include biofuels and biomass from forestry waste products, green hydrogen, and renewable natural gas.

### **Supporting Youth Climate Action**

Youth across the world are increasingly taking action on climate change and there is now a growing need for a stronger line of communication between youth and Government. The Government of Nova Scotia recognized this and is committed to supporting youth-centered climate actions and learning from youth through the creation of the <u>Youth Climate Council</u>. Working in partnership with the Clean Foundation, Nova Scotia's inaugural Youth Climate Council was established in September 2023.

The Youth Climate Council is open to youth from across the province between the ages of 14 - 24. Council members provide ideas, advice, and recommendations directly to the Minister of Environment and Climate Change on how to take climate action that is aligned with youth priorities. They also support youth-centered climate action.

In its first year the Youth Climate Council: met with the Minister of Environment and Climate Change to share youth perspectives on the climate crisis; developed a bursary program to support youth in Nova Scotia to pursue education or training that leads to employment opportunities in the clean economy; and convened over 50 youth from across the province for a two day summit providing the opportunity for youth to connect with local climate leaders, meet like-minded youth, and learn how to address climate change in their communities.

The second cohort of the Youth Climate Council will be in place in Fall 2024, and they will continue work to amplify youth voices in the fight against climate change.

### **Emerging Concepts and Technologies Program**

While many programs are supporting the scaling of proven technologies, the Net Zero Emerging Concepts and Technologies Research program is giving innovative thinkers a chance to explore their newest ideas. This \$3 million, three-year funding program is supporting new ideas on how to reduce emissions in sectors where it is challenging to reduce emissions. These ideas are needed to meet Nova Scotia's 2050 net-zero emissions target. Funded projects are led by both academia and industry and range from nature-based solutions for carbon sequestration to decarbonizing fishing and ferry fleets. The program has supported 20 projects in two funding calls – read more about the program and funded projects at Net Zero Atlantic's program page. The third funding call opened July 8th and at least two more calls are anticipated in the coming years.



# Solutions in Action: Looking Ahead to the Next Steps for Nova Scotia

Over the last year Government has worked to make communities stronger and more resilient, foster sustainable economic growth, protect our natural environment, and reduce greenhouse gas emissions. This work is creating a cleaner and healthier Nova Scotia for everyone.

The progress being made so far is evidence of the collective action and dedication of all Nova Scotians in addressing the climate crisis and striving for a brighter future.

Government will continue to deliver on its commitments in the Environmental Goals and Climate Change Reduction Act, Our Climate, Our Future: Nova Scotia's Climate Change Plan for Clean Growth, and the many initiatives and strategies that work to drive sustainable prosperity in Nova Scotia. In the coming years, Nova Scotians can expect Government to:

- continue to protect our coast and our coastal way of life by continuing to implement actions in the Coastal Protection Action Plan
- modernize the environmental assessment process
- receive the final report and recommendations of the Environmental Racism Panel and support next steps
- increase the amount of renewable energy by building at least 500 megawatts of new local renewable energy by 2026 and 50 megawatts of new community solar energy
- develop departmental adaptation plans that help Government prepare for and respond to climate impacts across Nova Scotia and along its coast. Adaptation planning will build resilience of departments to ensure continued reliable delivery of programs and services to Nova Scotians in the face of climate change
- continue the Sustainable Communities Challenge Fund to support community led projects
- protect more of Nova Scotia's land and water
- expand Extended Producer Responsibility programs to further reduce waste in Nova Scotia

- update the provincial climate change risk assessment by the end of 2025, which
  presents our ongoing risk-analysis and our understanding of impacts over the
  coming decades
- review and update Nova Scotia's air emission targets and ambient air quality standards by the end of 2025
- help Nova Scotia's key economic sectors, like fishing and farming, adapt and thrive in the face of our changing climate, by:
  - continuing to develop vulnerability assessments and adaptation plans for important fisheries and aquaculture infrastructure
  - supporting more farmers to adopt clean technologies for sustainable farming through the Advancing Clean Technologies Program
- support more industries, business, and communities to switch to low-carbon and renewable fuels through the Clean Fuels Fund by supporting the adoption of biofuels and biomass from forestry waste products, green hydrogen, and renewable natural gas
- promote Nova Scotia's vibrant ecosystem of start-ups, established companies, anchor post-secondary institutions and research facilities, nationally and globally, to demonstrate that they are at the forefront of developing new technologies and to attract investment
- build more climate-resilient communities. The Province is investing in climate change capacity in a variety of groups, including in Indigenous and African Nova Scotian communities, to provide the necessary information and supports so communities can understand how climate change will impact their lives, make plans, and take action to prepare

Nova Scotians are creating a stronger, more resilient province together, as we continue to grow our population and our clean economy and take action on climate change.

#### All-hands-on-deck.

