

Climate Change Mitigation

ACTION PLAN

2025-2030



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Executive Summary

The urgent need to reduce greenhouse gas emissions is a defining global issue of the 21st century and the urgency is increasing as the impacts of a changing climate are becoming more apparent all over the world, including in Newfoundland and Labrador.

In the [2015 Paris Agreement](#), 195 countries, including Canada, committed to limit global warming to below 2°C, and ideally no more than 1.5°C, compared to average temperatures in the late 1800s, in an effort to stop rising sea levels, changes in precipitation patterns, and increases in incidence and frequency of extreme storm events. Governments are setting greenhouse gas reduction commitments at the global, national, and sub-national levels to minimize global temperature growth and achieve the goals of the 2015 Paris Agreement.

Building on the success of the 2019-2024 Climate Change Action Plan, this Mitigation Action Plan outlines 23 governance, regulatory, financial, and awareness-raising actions to ensure that the 2030 reduction target is achieved. The actions are focused across each of the province's greenhouse gas emitting sectors – transportation, building and residential heating, industry, waste, and electricity generation – as well as negative emission opportunities. These measures are structured to achieve the province's 2030 greenhouse gas reduction target, lay the foundation for net zero 2050, and accelerate the global green transition. To ensure the province is on the right track, the 2025-2030 Mitigation Action Plan also sets a new greenhouse gas reduction target for 2040.

In addition to mitigating the impacts of climate change, reducing greenhouse gas emissions will accelerate economic growth, enhance economic competitiveness, and contribute to the global green transition.

Introduction

Government leadership is key to climate action and the green transition. This includes measures to demonstrate government leadership, such as purchasing electric vehicles, constructing and retrofitting buildings to high energy efficiency standards, and establishing a sustainable procurement policy. It also includes implementation of regulations, programs, and initiatives to support the green transition, improve health outcomes, and deliver public services while reducing its own emissions.

The last five years have seen significant policy commitments, programs, legislation, and investments to reduce greenhouse gas emissions in Newfoundland and Labrador. Since 2019, \$480 million has been invested in mitigating the impacts of climate change in the province. This supports programming for residents, businesses, and non-profits. Over \$260 million has been spent to reduce building fuel oil use in the residential and non-residential sectors, to implement electric vehicle incentives and charging infrastructure, and to enhance public transit. A further \$110 million is projected to be invested through federal-provincial agreements to enhance these programs by 2027, and \$98 million is projected to be invested through the [Green Transition Fund](#).

This period has been marked by a focus on the development of critical minerals, renewable energy, and green hydrogen strategies, new investments in wind energy and hydrogen, and efforts to further develop renewable electricity on the Churchill River. The [Critical Minerals Strategy](#) positions the province to maximize benefits from investment in mineral development while playing a critical role in the global green transition. Critical minerals are the building blocks to accomplish this transition in new generation, storage, and transmission infrastructure.

The [Renewable Energy Plan](#) focuses on opportunities to use the province's hydro, wind, biomass, solar, and wave/tidal resources for the reduction of provincial greenhouse gas emissions while attracting investment to accelerate global decarbonization efforts. The [2024 Memorandum of Understanding between Newfoundland and Labrador Hydro and Hydro-Quebec](#) respecting the Upper Churchill River including Gull Island projects is a significant step toward the decarbonization of electricity in this province and elsewhere. The [Hydrogen Development Action Plan](#) focuses on enabling the development of a green hydrogen and ammonia production industry in the province. The province's first wind-hydrogen project received environmental approval in 2024. As of May 2025, five additional wind-hydrogen

projects are in progress in various stages of the assessment process. These projects are expected to provide green energy to the global market, supporting the green transition around the world, and advance the province's status as a Clean Energy Centre of Excellence, and a global clean energy supplier.

This Mitigation Action Plan is informed by the [Health Accord](#), which recognizes the intersection between climate risks and public health and recommends an aggressive and proactive approach to addressing the climate emergency. This Mitigation Action Plan was also informed by the provincial Net Zero Advisory Council, which was established in 2021 to provide foundational advice on how the Provincial Government can make progress toward its 2050 net zero target. The Net Zero Advisory Council has provided policy advice related to electricity generation, industry, transportation, buildings, and waste.

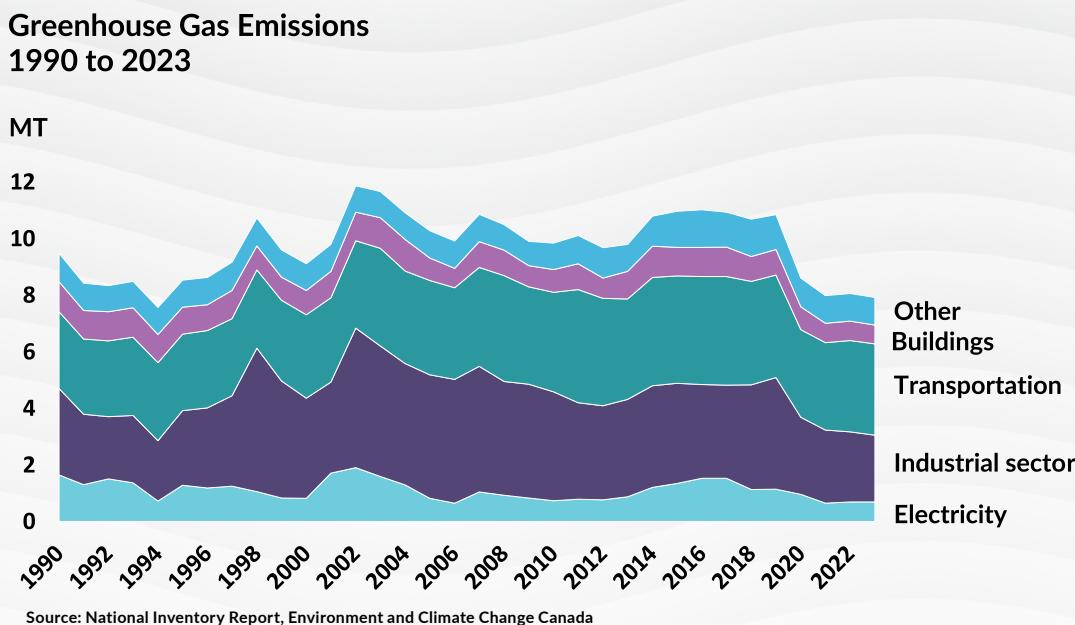
This Mitigation Action Plan was informed by input provided through a public and stakeholder engagement process. Input from the public included 245 questionnaire responses submitted through the EngageNL website and 13 written submissions. The stakeholder engagement process consisted of sessions with 24 industry associations, academic institutions, cities, towns, and local service districts, and Indigenous Governments and Organizations to gather perspectives on climate change.

Provincial Greenhouse Gas Emissions Profile

Greenhouse gas emissions in Newfoundland and Labrador have been declining since 2019.

Emissions averaged eight million tonnes (MT) between 2021 and 2023 and were 26 per cent below average emissions in the three-year period prior to the COVID-19 pandemic (2017-2019).

Emissions in 2023 were 7.9 MT, the lowest level since 1994.



The transportation sector, including on-road passenger and freight, air, marine, and off-road vehicles, and the construction sector accounted for 44 per cent of emissions in 2023. Almost all emissions from these sectors are subject to the federal **Clean Fuel Regulations**, which require fuels wholesalers and distributors to reduce the carbon content of transportation fuels sold to consumers.

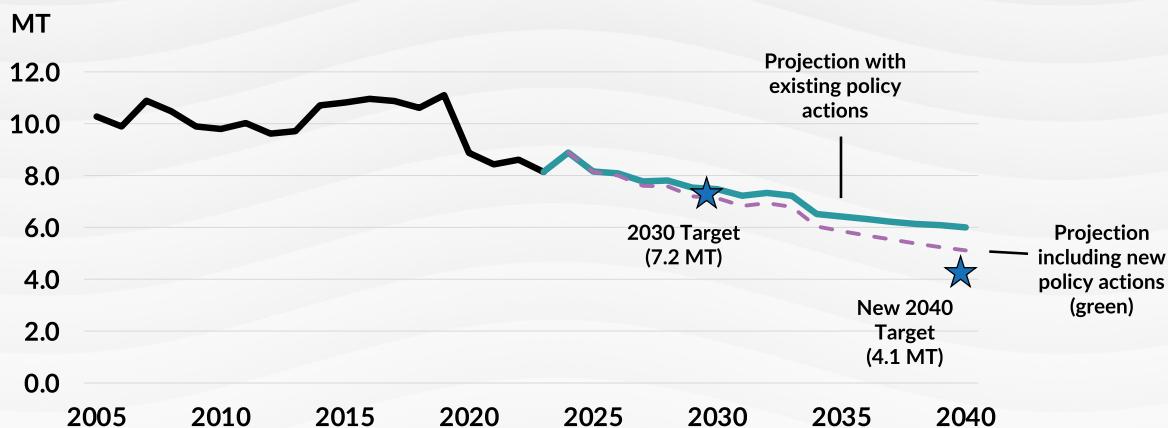
The industrial and electricity sectors, including oil production, accounted for 38 per cent of emissions in 2023. Over 95 per cent of emissions from these sectors are subject to annual greenhouse gas reduction targets through the provincial **Management of Greenhouse Gas Act**. Of the remaining emissions, about 8.4 per cent were accounted for by fuel use in buildings, 7.2 per cent by waste, and about three per cent from other sources such as agriculture.

The Provincial Government publicly reports greenhouse gas emissions by year, greenhouse gas data for land use, land use change, and forestry by year, and annual performance outcomes for the **Management of Greenhouse Gas Act** and the Greenhouse Gas Reduction Fund.

Provincial Greenhouse Gas Emissions Projections

Newfoundland and Labrador's 2030 commitment is achievable. The actions in this Plan will enable the province to meet its 2030 target of reducing emissions by 30 per cent below 2005, or to 7.2 MT. Provincial modeling projects greenhouse gas emissions to be 7.1 MT by 2030 – or 31 per cent below 2005 – with a further decline to 5.9 MT by 2035 (43 per cent below 2005) and 5.1 MT by 2040 (50 per cent below 2005).

Greenhouse Gas Emissions Projections 2005-23 historical, 2024-40 projected



Source: National Inventory Report, Environment and Climate Change Canada, 2005 and 2023; provincial modelling, 2030 and 2040

Achieving the 2030 target will require continued implementation of existing programs to decarbonize passenger vehicles and residential and commercial buildings, continued investments by large industrial facilities to decarbonize their operations, and an increased focus on “hard-to-abate” sectors such as marine and aviation transportation.

Through this Plan, Government is establishing an ambitious new greenhouse gas reduction target for 2040 equal to 60 per cent below 2005 levels, or 4.1 MT. This represents a decline of about 52 per cent in emissions below the current (2023) level. This target is bold, but achievable. To meet this target, greenhouse gas reduction technologies will need to be implemented in hard-to-abate sectors. This will ensure that electricity generation remains de-carbonized as electricity demand increases. It will also call for increased focus on negative emissions such as carbon offsets, and technologies such as carbon capture, utilization, and storage.

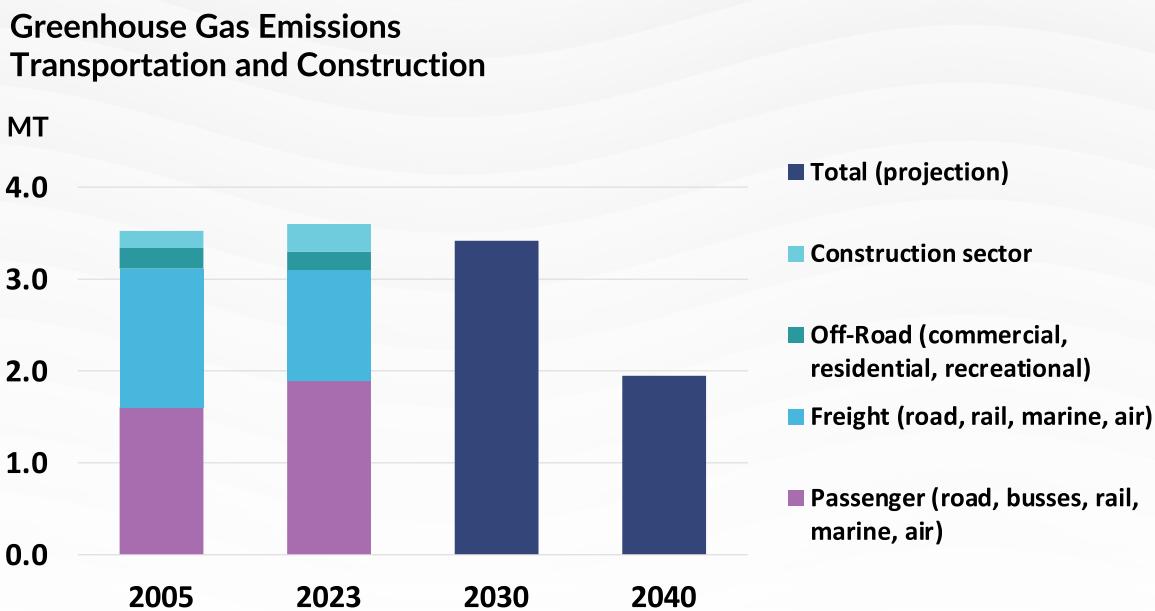
Government reiterates its net zero greenhouse gas reduction target for 2050. Almost 200 countries have committed to achieving net zero emissions by 2050. The Provincial Government has established a Net Zero Advisory Council to provide foundational advice toward its net zero 2050 target in policy.

Actions

Transportation

Transportation, including construction vehicles, accounted for 44 per cent of greenhouse gas emissions in 2023. This includes passenger transport (23.5 per cent), freight transport (14.7 per cent), as well as off-road vehicles and construction equipment emissions (5.7 per cent). Freight, marine, air, and off-road industrial vehicles and construction equipment are hard-to-abate in terms of greenhouse gas emissions. These sectors are estimated to have accounted for 18 per cent of provincial emissions in 2023.

Transportation emissions are projected to remain stable and then decline in the coming decades to 2050, driven in the near term, by improved manufacturing efficiency standards and the federal **Clean Fuel Regulations** and, over the longer term, by continued vehicle electrification.



Source: National Inventory Report, Environment and Climate Change Canada, 2005 and 2023; provincial modelling, 2030 and 2040

What We're Doing

There are now 1,700 battery electric vehicles registered in the province. This is over a 1,400 per cent increase since 2018. There are almost 6,750 conventional hybrid and plug-in hybrid electric vehicles registered in the province. This is a 590 per cent increase since 2020. These increases have been supported by federal and provincial rebates and by growth in charging infrastructure. The provincial [Electric Vehicle Rebate Program](#) has issued over 1,200 battery electric vehicle rebates and over 700 plug-in hybrid electric rebates to date. There are currently eight battery electric vehicles in the Provincial Government fleet and 21 in the Newfoundland and Labrador Hydro fleet.

At the end of 2024, there were 33 publicly available fast electric vehicle chargers in the province, or 6.2 per 100,000 people. In 2025, the first eleven ultra-fast chargers in the province will be installed. Fast charging stations are supplemented by a range of level-2 publicly and privately available stations and level-1 (residential) stations. This includes over 50 level-2 ports at Provincial Government office buildings, schools, medical facilities, and post-secondary institutions.

Level 3 Charging Stations, Operational and Approved



The Provincial Government has invested in electric vehicle support measures, including \$1 million to the College of the North Atlantic to support the development of maintenance training, and \$180,000 to Drive Electric NL to enhance public awareness and first responder awareness training. Investments have been made in public transit through the Investing in

Canada Infrastructure Program and Community Transportation Program. Approximately \$100 million in federal, provincial, and municipal funding was invested since 2021 to support Metrobus and the St. John's paratransit system to upgrade their fleets. This complements a \$100,000 Community Transportation Program investment in 2024 toward a \$840,000 community electric bus initiative in Happy Valley-Goose Bay.

What's Next

Progress toward the province's 2030 greenhouse gas reduction target will require increased focus on hard-to-abate components of the transportation sector, such as marine, aviation, rail, and on-road freight transport. Over the long term, these reductions will be aided by improved manufacturing standards, the federal **Clean Fuel Regulations**, electrification, hybrid technologies when electrification technologies do not exist, and the use of alternative fuels.

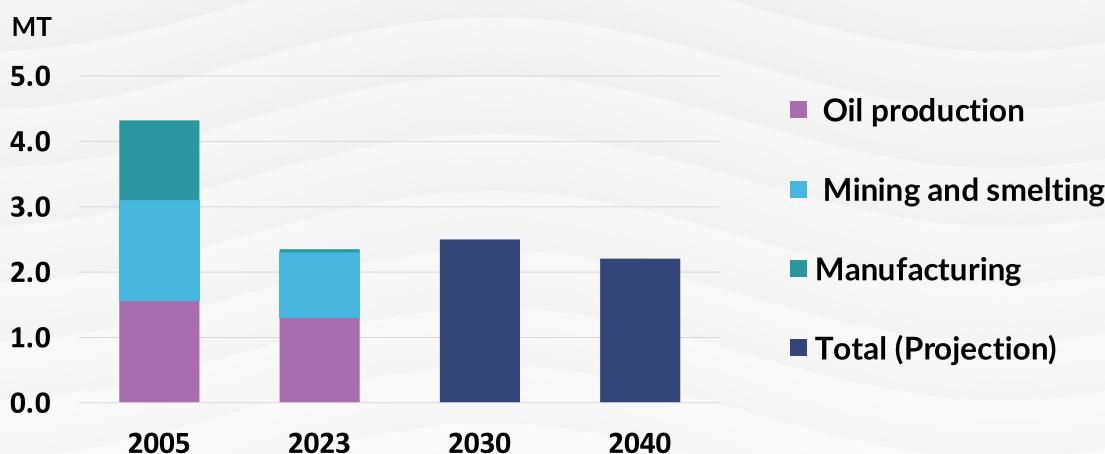
Transportation and Construction 2025-2030	
1.1	Continue to reduce passenger vehicle transportation emissions by investing in electric vehicle incentives and charging infrastructure, public transit, and training programs.
1.2	Develop mechanisms to support charging infrastructure in multiple unit residential buildings.
1.3	Increase focus on hard-to-abate components of the transportation sector by working with the Federal Government and industry to increase efficiencies and electrification.
1.4	Work with the Federal Government and industry to develop a marine decarbonization initiative.
1.5	Seek opportunities to reduce the transportation carbon footprint of the Provincial Government, including its agencies, boards and commissions, through service delivery innovations and improved use of technologies.

Large Industry and Manufacturing

Mining, manufacturing, and oil and gas extraction accounted for 29 per cent of total provincial greenhouse gas emissions in 2023. Emissions from these sectors are projected to remain stable between 2023 and 2030, even with increased production at existing onshore and offshore industrial facilities. Emissions are projected to decline between 2030 and 2040, primarily driven by emission reduction projects and end of production at some existing industrial facilities.

Greenhouse Gas Emissions

Oil and Gas, Mining and Manufacturing



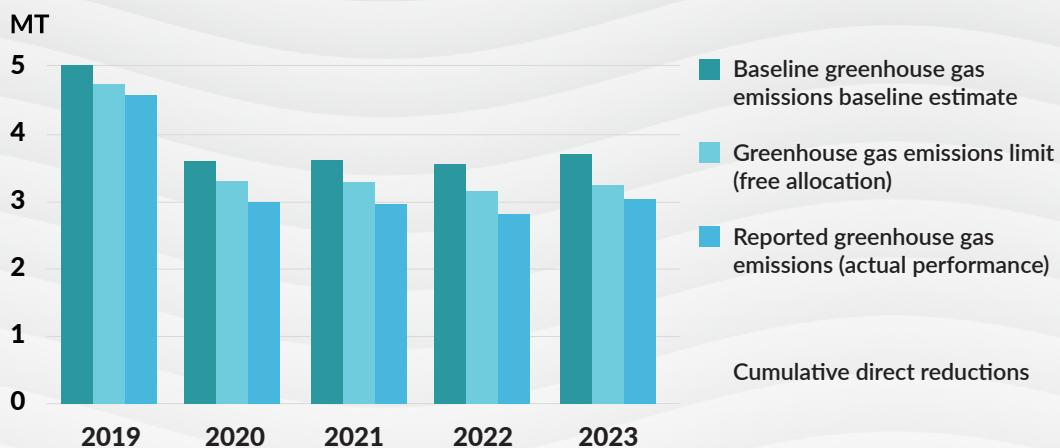
Source: National Inventory Report, Environment and Climate Change Canada, 2005 and 2023; provincial modelling, 2030 and 2040

What We're Doing

Through the Management of Greenhouse Gas Act, the Provincial Government requires large industry to meet increasing annual greenhouse gas targets. Over 98 per cent of greenhouse gas emissions from mining, manufacturing, and oil and gas extraction are regulated through this Act.

The target was met or exceeded by industry each year from 2019 to 2023. The Act also establishes a credit market to allow facilities that do not meet their reduction target to comply. The carbon price for the credit market increases on an annual basis. The price in 2024 is four times higher than the initial price in 2019. By 2030, the price will be 8.5 times higher than in 2019.

Management of Greenhouse Gas Act
Baseline emissions, free allocations and actual performance
2019-2023



Source: Calculated from emissions reports filed pursuant to the Management of Greenhouse Gas Act

Four major funding initiatives for industry were announced from 2023-2025.

- The 12-year, \$100 million [Green Transition Fund](#) aims to propel the development of the renewable energy sector and clean technologies in the province and position Newfoundland and Labrador as a leader in the global green transition. This fund supports the greening of commercial operations, research and development, manufacturing and extractive resource development, and other areas that help transition to a greener economy.
- The \$6 million [Carbon Capture, Utilization and Storage \(CCUS\) Innovation Challenge](#) provides financial support to advance the development of CCUS to decarbonize ongoing oil production in the province's offshore, as well as the ability for the province's offshore region to serve as a regional CCUS hub for the storage of locally and externally-produced carbon dioxide.
- The \$12 million [Climate Change Challenge Fund](#) provides support to the private sector, not-for-profit organizations, public sector bodies or boards, cities, towns and local service districts, and Indigenous Governments and Organizations to undertake greenhouse gas emission reduction projects in Newfoundland and Labrador.
- The [Greenhouse Gas Reduction Fund](#), established under the **Management of Greenhouse Gas Act** and funded by regulated industrial facilities, disbursed \$0.4 million to further support industrial initiatives that reduce greenhouse gas emissions.

What's Next

The large industrial sector is a hard-to-abate sector requiring significant capital investments and new technology. Deep decarbonization in the industrial sector will require enhanced focus on clean technology development and deployment. This may include, for example, increased use of renewable fuels and electrification. This also includes increased focus on negative emissions technologies, such as carbon capture, utilization and storage, as well as carbon offsets.

New investments in the province's industrial and manufacturing sectors can contribute to the global green transition, green economy, and greenhouse gas reduction targets (e.g., green hydrogen and green steel). From a manufacturing perspective, greenhouse gas emissions can be lowered through reduced import of goods (e.g., procurement strategies, supplier development programming, and increased focus on local options).

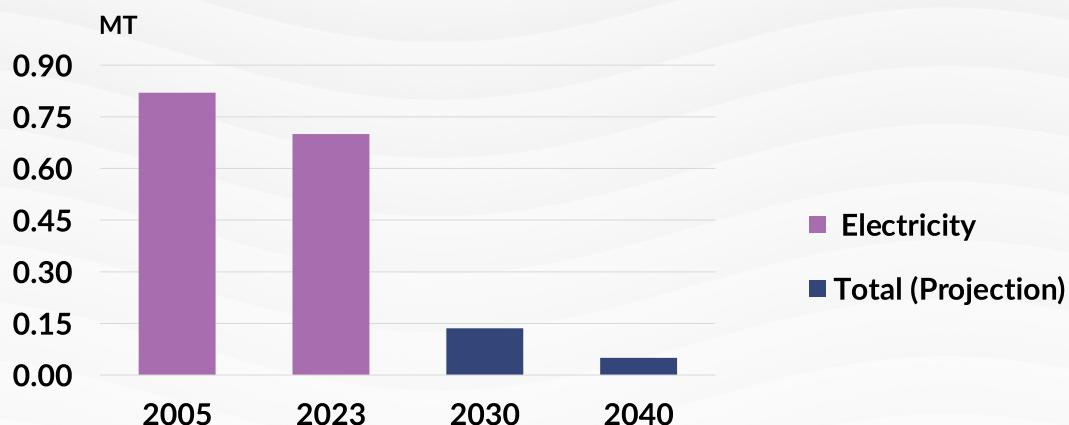
Large Industry and Manufacturing 2025-2030	
2.1	Support investments and funding, such as the Green Transition Fund, Low Carbon Economy Leadership Fund, and provincial Climate Change Challenge Fund, in the mining and manufacturing sectors and procurement processes, to maximize greenhouse gas reductions while accelerating investment in clean energy, clean technology, and green economy initiatives.
2.2	Explore opportunities to better support deep industrial decarbonization and investment in negative emissions technologies and opportunities.
2.3	Explore opportunities for carbon capture, utilization, and storage appropriate for the offshore region.
2.4	Work with the Federal Government and industry to maximize access by industrial companies to clean technology initiatives, clean fuels funding programs, and greenhouse gas reduction programs.
2.5	Collaborate with public and private sector partners to implement measures that will allow for a reduction in imported goods and a reduction in manufacturing and transportation emissions in other jurisdictions, such as supplier development measures, procurement strategies, and local options.
2.6	Collaborate with the education system and other stakeholders to raise awareness of emerging job opportunities in the green transition and ensure skills training programs maximize workers' opportunities as it relates to clean energy, clean technology, and green economic growth.

Renewable Energy and New Energy Generation

Renewable energy is critical to addressing climate change and achieving net zero. It can be used for electricity and heat, and to displace transportation fuels. Renewable electricity can also be used to manufacture other low or non-carbon emitting products such as hydrogen and its derivatives, and renewable products such as biofuel, and renewable diesel.

In 2023, over 92 per cent of electricity consumed in the province was from renewable sources resulting in a decline in greenhouse gas emissions in the province from the electricity sector. Electricity consumed in the province from renewable sources is expected to increase to 98 per cent.

**Greenhouse Gas Emissions
Electricity generation**



Source: National Inventory Report, Environment and Climate Change Canada, 2005 and 2023; provincial modelling, 2030 and 2040

Diesel fuel is used to generate electricity in off-grid communities. Greenhouse gas emissions from this electricity generation was approximately 0.04 MT in 2021. Significant efforts have been made by the Provincial Government and Newfoundland and Labrador Hydro to reduce electricity demand in off-grid communities, such as through the installation of heat pumps, high efficiency woodstoves, and other energy efficiency measures. Indigenous Governments and Organizations have also worked with the Federal Government on fuel switching and energy efficiency projects at Mary's Harbour, Makkovik, and Nain.

What We're Doing

The [2024 Memorandum of Understanding between Newfoundland and Labrador Hydro and Hydro-Quebec](#), the [Renewable Energy Plan](#), and the [Hydrogen Development Action Plan](#) set out the province's energy plans and priorities. These plans focus on the development of renewable energies to achieve the province's decarbonization and net zero goals and accelerate the global transition to a green economy.

In 2024, the Federal Government amended the federal Atlantic Accord legislation to establish a new regulatory structure to support offshore renewable energy development in the province. The amendments rename the Canada-Newfoundland and Labrador Offshore Petroleum Board to the Canada-Newfoundland and Labrador Offshore Energy Regulator to reflect the expanded mandate for renewable energy and establishes a land tenure regime and a decision making process respecting the issuance of submerged land licenses for renewable energy projects. In 2025 the Provincial Government passed its mirror legislation in the House of Assembly.

Private sector investment in renewable energy is increasing in the province. For example, in 2024, a company began to produce 18,000 barrels of renewable diesel for export to international markets. Renewable diesel can reduce greenhouse gas emissions in hard-to-abate sectors such as heavy-duty transport, aviation, and heavy industry. In addition, as of March 2025, there are six companies pursuing wind-hydrogen projects in the province, with a total capacity of over 18 GW using almost 3,000 wind turbines, and a total hydrogen electrolyzer capacity of 13.7 GW. This would allow for about one MT of hydrogen and 4.7 MTs of ammonia to be produced annually for sale in export markets.

Greenhouse gas emissions from the Holyrood facilities are regulated by the **Management of Greenhouse Gas Act** and are lower than the average of the past 15 years and will decline further by 2030.

What's Next

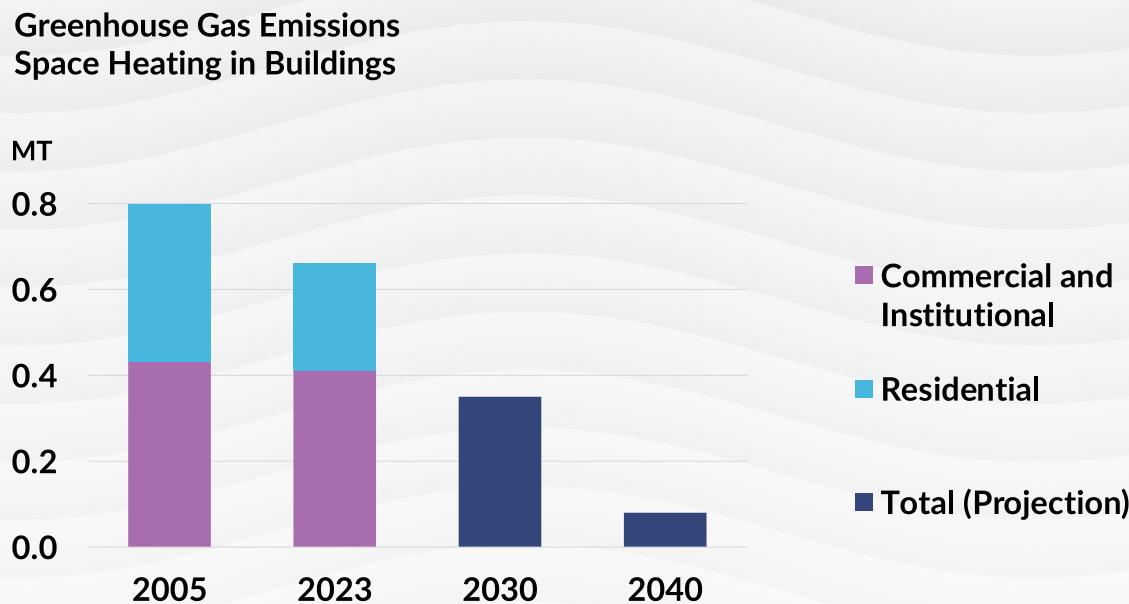
Demand for Newfoundland and Labrador's renewable energy resources continues to grow and provides an opportunity for greenhouse gas reductions. Provincial and federal net zero policy commitments, regulations, and programs are expected to increase electricity demand by industrial users, commercial and residential building owners, and in the transportation sector. Newfoundland and Labrador Hydro's central planning scenario identifies electricity supply increases will be required by 2034. The action items below complement the [Renewable Energy Plan](#) and the [Hydrogen Development Action Plan](#) while providing a framework to prevent re-carbonization of the electricity sector and provide for new electricity demand to be achieved in a reliable and affordable manner.

Renewable Energy and New Energy Generation 2025-2030

3.1	Collaborate with the electric utilities and stakeholders to advance new renewable energy opportunities and new energy efficiency measures.
3.2	Implement a program, in partnership with Indigenous Governments and Organizations in Labrador and Newfoundland and Labrador Hydro, to reduce reliance on diesel electricity generation.

Heating in Homes and Buildings

Heating in residential homes and commercial and institutional buildings accounted for 8.4 per cent of greenhouse gas emissions in 2023 (0.7 MT). These emissions come from combustion of heating fuels and propane.



Source: National Inventory Report, Environment and Climate Change Canada, 2005 and 2023; provincial modelling, 2030 and 2040

These emissions are expected to fall by 50 per cent (0.35 MT) by 2030, as a result of programs supported through the Low Carbon Economy Fund, Oil to Heat Pump Affordability Agreement, and Green Transition Fund.

What We're Doing

The province is implementing two cost-shared programs with the Federal Government worth \$160 million to reduce emissions from heating. These programs aim to reduce greenhouse gas emissions by 100,000 tonnes per year. In the residential sector, the current agreements are projected to support fuel switching to renewable electricity in 10,000 homes. In non-residential sectors, including the private, public, municipal and community, and non-profit sectors, the Provincial Government is supporting both energy efficiency and fuel switching initiatives in commercial and institutional buildings. These programs complement energy efficiency programming offered by the electric utilities for electrically-heated homes, all homes in off-grid communities, and businesses.

The Provincial Government is focused on maximizing energy efficiency in new construction. Through the **Towns and Local Service Districts Act**, cities, towns and local service districts are required to adopt the energy provisions of the National Building Code for residential buildings and small commercial buildings, and the National Energy Code for Buildings which focuses on larger commercial and institutional buildings.

The government committed to constructing new public sector buildings to Leadership in Energy and Environmental Design (LEED) Silver certification starting in 2007, where feasible to do so. Of the 45 provincial and municipal buildings registered, two have received (LEED) Gold certification, 20 have received LEED Silver certification, and 11 have received a lower certification designation.

What's Next

There are two broad areas for program interventions to facilitate further greenhouse gas emission reductions by 2030. First, to continue existing fuel switching programs to maximize reductions over the long term. Second, to introduce new measures that go beyond National Building Code requirements for new home construction.

Heating in Homes and Buildings 2025-2030

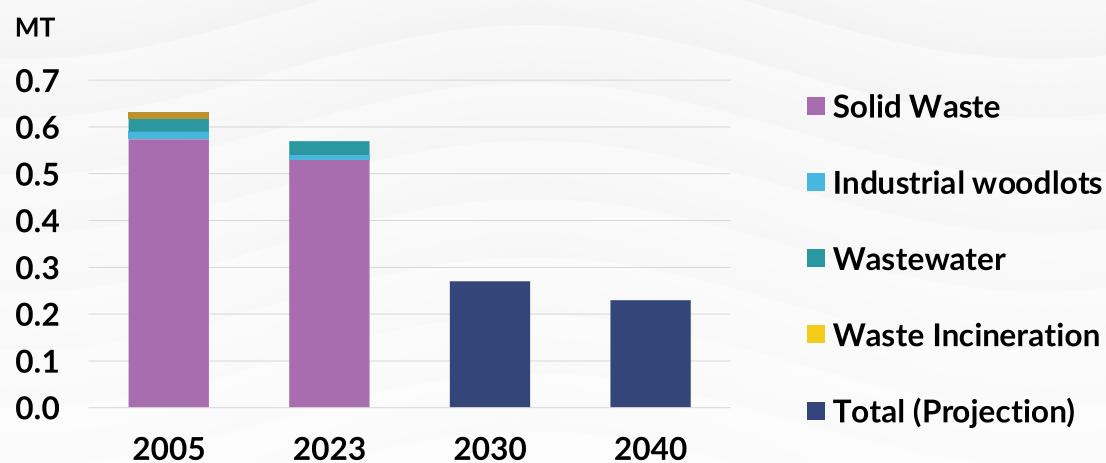
4.1	Continue to reduce greenhouse gas emissions for heating by working with the Federal Government, provincial health and education authorities, utilities, and industry to implement fuel switching and energy efficiency programs.
4.2	Work with industry to identify new regulatory requirements for new home construction, such as application of energy efficiency requirements in the National Building Code, a ban on the installation of new fossil fuel heating systems, and mandatory new home energy rating.
4.3	Share tools and resources to allow businesses and homeowners to calculate their carbon footprint, thereby providing them with information to reduce their emissions and decrease energy costs.
4.4	Seek opportunities to reduce the carbon footprint of heating Provincial Government buildings, including its agencies, boards and commissions, through efficiency and improved use of technologies.

Waste

Waste emissions accounted for seven per cent (0.6 MT) of greenhouse gas emissions in 2023. Solid waste emissions comprise almost 95 per cent of all waste emissions per year. The province's largest waste landfills include Robin Hood Bay at St. John's and the Central Newfoundland Waste Management Facility near Norris Arm.

The Robin Hood Bay facility was renovated in 2008 and has methane destruction technology to reduce emissions. The Central Newfoundland facility opened in 2012 and includes the capacity to install methane destruction infrastructure that can be operationalized when sufficient waste volumes are stored on-site. New federal regulations to reduce methane from solid waste management are expected to be released in 2025, and are expected to result in significant emissions reductions from waste by 2030.

Greenhouse Gas Emissions Waste Management



Source: National Inventory Report, Environment and Climate Change Canada, 2005 and 2023; provincial modelling, 2030 and 2040

What We're Doing

The province is examining ways to divert materials from landfills to reduce emissions. The Multi Materials Stewardship Board (MMSB) supports sustainable waste management through its Solid Waste Management Innovation Fund, Community Waste Diversion Fund, and Waste Management Trust Fund. Over the past three years, it has allocated about \$410,000 to support 45 projects. The Provincial Government continues to evaluate all options for waste diversion in the province in cooperation with the MMSB, oversees organics waste management for a number of commercial and industrial producers (i.e., on-site composting at a commercial facility), and collaborates with the MMSB on a range of education programs, workshops and learning materials about compost awareness and waste reduction.

What's Next

Waste is a hard-to-abate sector. New federal regulations to reduce methane in the waste management sector will form the basis for action in the coming years and complement planned provincial programming enhancements to reduce the volume of waste going to landfills.

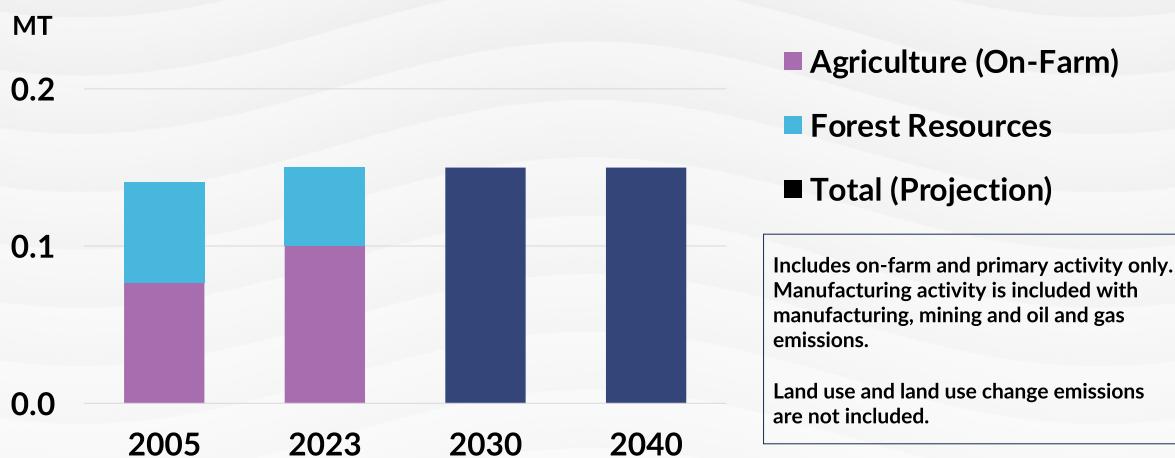
Waste Management 2025-2030	
5.1	Work with industry to enhance landfill gas utilization and gas destruction infrastructure, enhance recycling and composting initiatives, and identify and advance carbon offset opportunities.
5.2	Work with the Federal Government to ensure that new federal regulations to reduce greenhouse gas emissions in the waste management sector reflect the geography of Newfoundland and Labrador.

Forestry and Agriculture

Forestry and agriculture sector emissions accounted for 1.9 per cent (0.15 MT) of emissions in 2023.

This sector includes activities like tree harvesting or wetland removal that add greenhouse gases to the atmosphere, as well as activities like tree planting that can remove greenhouse gases from the atmosphere.

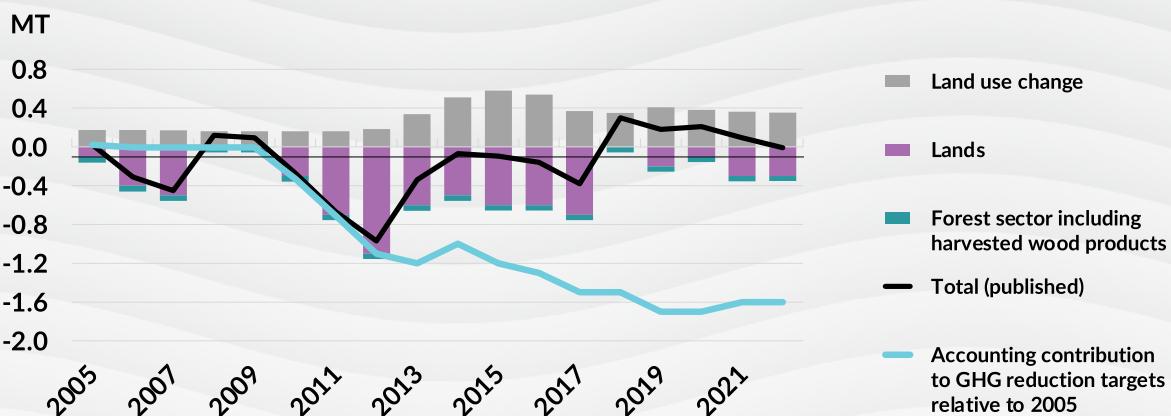
Greenhouse Gas Emissions Forestry and Agriculture



Source: National Inventory Report, Environment and Climate Change Canada, 2005 and 2023; provincial modelling, 2030 and 2040

Land use, land use change, and forestry emissions have not yet been included in setting and measuring progress toward provincial greenhouse gas reduction targets, as their contribution to the net zero reduction target for 2050 will be measured in a different manner. For example, forest sector contributions to greenhouse gas reduction targets are measured as change relative to a reference year (such as 2005). On this basis, land use and forestry sector contributions to greenhouse gas reductions in the province were 1.6 MT in 2022 relative to 2005. That is, if this carbon sink (i.e., carbon stored in trees and soils) was included in the calculation of emission reductions to measure progress toward greenhouse gas reduction targets, the province would have reported emissions of about 6.5 MT in 2022, and not 8.1 MT.

Land use and land use change emissions 2005-2022



Source: Environment and Climate Change Canada modelling. Lands and land use change includes agriculture lands, wetlands and settlements

This sector is a mechanism by which progress toward net zero emissions can be achieved, provided that more carbon is stored in carbon sinks than released (carbon sources). The establishment of net zero targets for 2050 is necessitating consideration of policy initiatives related to these emissions.

Federal policy is increasingly focused on nature-based climate solutions, such as conversions of lands to forests or peatland restoration, as a mechanism to reduce greenhouse gas emissions resulting from land use change and make progress toward net zero. Given long term horizons for these solutions, they are not projected to make a significant contribution to achieving net zero by 2050.

What We're Doing

The Provincial Government's [2014-2024 Sustainable Forest Management Strategy](#) (Strategy) highlights that forests will be increasingly impacted by climate change and natural disturbances, such as fire and insect outbreaks, water availability, extreme weather events, and longer growing seasons. The Strategy indicates that federal carbon models will be used to assess carbon storage in Newfoundland and Labrador forests, and that forest management will seek to maximize carbon storage, where possible.

The NL Living Lab project, led by the Newfoundland and Labrador Federation of Agriculture, Memorial University, and the provincial and federal agriculture branches, is focused on carbon mitigation. This includes, for example, research related to carbon sequestration in soils, soil health, crop yield and quality, nitrogen use efficiency, and biochar. This project builds on other programs, such as the Environmental Sustainability and Climate Change Program, and focuses on greenhouse gas reduction, such as through conservation tillage, manure storage and handling, and waste management.

In 2020, the Provincial Government released a [protected areas plan](#) for the island of Newfoundland to establish a network of protected areas to support ecotourism, outfitters, hunting and fishing, and the mental health benefits of access to nature. The plan also supports ecosystem services, fresh water supply, and climate change adaptation and mitigation. The plan is expected to have positive effects on carbon storage in forests, depending on the age stock of trees in a protected area, and limit carbon release associated with land use change, such as conversion of forest areas to settlements.

What's Next

Land use, land use change, and forestry emissions are expected to continue to contribute to greenhouse gas reduction in the coming decade; however, the contribution may weaken as forest stocks age. As the age distribution of forests become older, rates of carbon storage will slow down, and eventually old growth stocks will release more carbon than stored. The Forestry Branch of the provincial Department of Fisheries, Forestry and Agriculture is beginning to conduct detailed carbon storage assessments in developing its district level five-year forest management plans.

Forestry and Agriculture 2025-2030

6.1	Ensure that forest management strategies and forestry district planning frameworks enhance carbon storage potential, where possible.
6.2	Enhance opportunities for greenhouse gas reductions from nature-based climate solutions.
6.3	Work with forestry and agricultural stakeholders to maximize greenhouse gas reduction initiatives, including advancement of carbon offset opportunities, in industry expansion strategies.
6.4	Work with the Federal Government to ensure that national greenhouse gas accounting frameworks for land use, land use change and forestry emissions use best available data and reflect provincial forestry priorities.

Next Steps

The Climate Change Mitigation Action Plan sets the course to reduce greenhouse gas emissions between 2025 and 2030 and provides a framework to meet the 2030 reduction target. It also sets the foundation for achieving net zero by 2050, strengthening transparency and accountability, and seeking to assist residents, businesses, communities, industry, and non-profit organizations to reduce their greenhouse gas emissions.

The impact of greenhouse gas emissions is evident from temperature increases, sea ice decline, larger storms, periods of drought, heavier rainfalls, and less snow cover that have been recorded in each part of Newfoundland and Labrador. To build resilience to the impacts of climate change, the province has also developed an Adaptation Action Plan for 2025-30, which outlines 31 new governance, program, partnership, and awareness-raising actions to increase the ability to adapt to the changing climate.

In addition to existing greenhouse gas reports and information published on government's [climate change website](#), the Provincial Government will report on progress taken on actions outlined in this Mitigation Action Plan in 2028 and 2030.

