



# Climate Change Plan for Clean Growth: Discussion Paper

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**Climate Change Plan for Clean Growth Discussion Paper**

Department of Environment and Climate Change

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# The consultation

We are asking for your thoughts on:

- New goals under the Sustainable Development Goals Act
- The new Climate Change Plan for Clean Growth.

In 2019, the provincial government passed a new law, the Sustainable Development Goals Act. It also promised a new climate change plan for Nova Scotia. This paper is about priorities for our Climate Change Plan for Clean Growth. You can read more about the Sustainable Development Goals Act here: [cleanfuture.ca](https://cleanfuture.ca)

This is only one way we are talking to Nova Scotians, but it's a very important one. Your feedback is one factor we'll take into account when setting new goals. We're looking forward to hearing from you.

## Preface

Nova Scotians care about a clean and healthy future for their families, communities, and businesses. Around the world, countries are cutting carbon pollution and creating new solutions. Here in Nova Scotia, we have the resources and the know-how to prepare for the impacts of climate change and thrive in a zero-carbon future.

Nova Scotia has strong goals to reduce greenhouse gas emissions that were included in the Sustainable Development Goals Act:

- **By 2020, at least 10 per cent below the levels that were emitted in 1990**
- **By 2030, at least 53 per cent below the levels that were emitted in 2005**
- **By 2050, net zero: this means we will balance greenhouse gas emissions with measures to remove greenhouse gases and other offsetting measures (e.g., managing forests to be a carbon sink, purchasing carbon offsets)**

Since then, the provincial government has announced other commitments to reduce greenhouse gas emissions:

- **By 2030, close coal plants**
- **By 2030, reach 80 per cent renewable electricity**
- **By 2025, power all government offices with 100 per cent renewable electricity**
- **Provide incentives to purchase electric vehicles**

Climate change is just one of the challenges we are facing. Nova Scotia is continuing to deal with the COVID-19 pandemic, and for many people this means job loss, stress, isolation, and many other serious problems.

We also know that many Nova Scotians, such as African Nova Scotians, people with low-income, and other groups, continue to face additional challenges due to racism and ongoing inequity. Climate change may impact those groups more than others. Our climate change plan will be written with that in mind, as we work together to build a fairer society.

## What's most important

As we make decisions about what actions we must take on climate change, we want to be sure we know what's important to Nova Scotians. We're thinking about the principles from the Sustainable Development Goals Act, which are:

- Netukulimk, a Mi'kmaq concept that means using the natural bounty provided by the Creator to feed and support people and communities without jeopardizing the environment.
- sustainable development, which considers the health of our economy, our communities and our planet.
- a circular economy, which aims to use products for as long as possible and eliminate waste.
- an inclusive economy that allows all Nova Scotians to share in our economic success.
- The Act recognizes that government can't achieve sustainable prosperity alone. It must work with the private sector, other levels of government and all Nova Scotians.
- The Act also recognizes that climate change is a global emergency that requires urgent action.

# Meeting our greenhouse gas reduction targets

Nova Scotia set three greenhouse gas reduction targets as part of the Sustainable Development Goals Act:

- **By 2020, reduce greenhouse gases to 10 per cent below what Nova Scotia was emitting in 1990:** We're on track to meet this goal. As of 2019, greenhouse gas emissions were about 30 per cent below 2005 levels.
- **By 2030, reduce greenhouse gases to at least 53 per cent below what Nova Scotia was emitting in 2005:** We will need to do more in this next nine years to get to this goal. We're currently emitting 5.3 million tonnes of greenhouse gases more than where we need to be by 2030.
- **By 2050, net zero:** To get to net zero, we need to do as much as we can with solutions we have now, and explore the potential of new ideas.

Figure 1: Nova Scotia's greenhouse gas emission targets



Burning fossil fuels such as coal, oil, and natural gas to produce electricity is our biggest source of greenhouse gas emissions. Nova Scotia has worked hard to cut coal use and add more renewable sources. As a result, greenhouse gas emissions from producing power dropped by over a third between 2005 and 2019.

Our next biggest sources of greenhouse gas emissions are:

- Burning gasoline and diesel in our vehicles
- Burning heating oil, natural gas, and propane to heat our homes

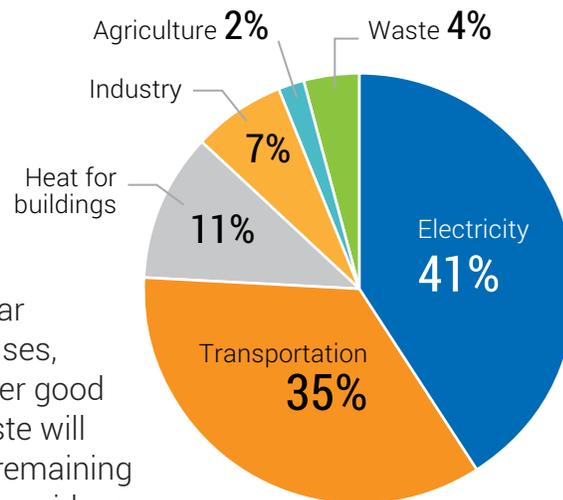
To get to net zero greenhouse gas emissions, we'll have to make major changes to how we live, like these:

- **How we make electricity:** Generating electricity without any greenhouse gas emissions, with sources like wind and solar
- **Buildings where we live and work:** Making sure that our new and existing buildings are energy efficient, increasing the number of heat pumps, and other green heat sources

- **How we move:** Making more trips by public transit, walking, or biking, and buying zero-emission vehicles like electric cars and buses
- **How we do business:** Ensuring that our businesses are ready to compete in a changing climate and in a zero-emission world

Most of this is already possible with technology we already have. Wind and solar power, well-insulated buildings, electric buses, and sidewalks for walking will all help. Other good environmental practices, like reducing waste will help too. But eliminating some of the last remaining greenhouse gas emissions might rely on new ideas.

**Figure 2: Nova Scotia's greenhouse gas emission sources (2019)**



## Meeting our greenhouse gas reduction targets could mean:

### Keeping a price on carbon pollution

Carbon pricing is a strategy used across Canada to create an incentive to cut emissions. The federal government says it will be required across Canada until at least 2030, with a price that will continue to go up over time.

Nova Scotia has a cap and trade system right now that is approved by the federal government until 2022. We auction off allowances for greenhouse gas emissions, and put the money into a Green Fund. We use that money on projects like renewable energy and home energy retrofits to further cut greenhouse gas emissions, and save Nova Scotians money.

We're considering our options for carbon pricing after 2022.

### Transitioning to 100 per cent clean electricity

We have promised Nova Scotia will have at least 80 per cent renewable electricity by 2030, and that we'll phase out coal by then. This will create cleaner air, and jobs in renewable energy across the province as we electrify transportation and buildings.

We're currently on track to reach 60 per cent by 2022. That's because of the renewable energy projects we already have, and new renewable energy that will come online soon through the Muskrat Falls project. Local solar and wind power, new batteries and advanced storage for renewable energy, and transmission upgrades that will give us better connections to renewable energy from other provinces will all help.

## Making our buildings net zero

We want our buildings to be warm, comfortable, and energy efficient. We are expanding energy efficiency programs in Nova Scotia, especially for low-income and vulnerable groups. We plan to update our building codes. It will take time to transition all of our buildings to produce zero greenhouse gases, which means we need to start now.

By making homes more energy efficient, we can make homes more comfortable while we save money for people living on lower incomes in Nova Scotia.

Making homes more energy efficient creates good jobs and reduces greenhouse gas emissions.

Almost half of the homes in Nova Scotia are heated with oil, far more than most other provinces. Heating homes with oil creates more greenhouse gas emissions than using electricity. This means that moving homes off heating oil, making homes more energy efficient, and building new buildings so they are as efficient as possible will make a big difference in cutting greenhouse gases.

## Changing the way we move around the province

To reach our goals, we'll need to move to sustainable transportation. This means everything from getting more electric vehicles on the road, to sidewalks, bike lanes, and electric buses. In February 2021, we announced incentives for new and used electric vehicles and e-bikes, to help Nova Scotians to make the switch.

The way we move around the province depends on what is available and affordable where we live. Driving a car is the most common way we commute to work in Nova Scotia, but low-income Nova Scotians, particularly in Halifax, are much more likely to walk, bike, and take transit to get to work. We need to keep this in mind as we change our transportation system. For example, this year, we are putting money into public transit and active transportation networks around the province.

## Using new ideas and nature-based solutions to cut emissions

We can get most of the way to our 2050 goal with solutions we know will work.

To get to zero emissions, we'll need to do everything we can and be open to new ideas.

Some of what we'll need to do may involve emerging technologies like green hydrogen, direct air capture and renewable fuels. We may be able to cut down on waste, to help lower the emissions that landfills produce. We may also be able to sink and store more carbon in our forests, soils, and wetlands. This can help us fight climate change, protect plants and species at risk, and help us keep our air and water clean.

# Preparing for climate change

Climate change is already happening, in Nova Scotia and around the world. These changes don't just hurt the environment. They impact our people and the way we live, too. When a bad storm washes out a road, people can't travel to work or school, get groceries, or visit family and friends. Ambulances have trouble getting to people when they're needed, and garbage can't be picked up.

We want everyone in Nova Scotia to be ready for climate change. We can work together to:

- Protect essential services, infrastructure and properties from the worst effects of more frequent and severe storms
- Manage coastal areas that are at risk from rising sea levels and storm surges, and improve tourism, cultural, economic and recreational opportunities
- Plan for the effects of flooding and droughts on our farms and communities
- Make energy efficient heating and cooling systems affordable so people can stay comfortable in extreme temperatures
- Protect forests, rivers, wetlands and other ecosystems
- Take advantage of new business opportunities and create jobs in the clean economy.

Here's some of what we're already doing:

- In 2021, we'll launch a new Atlantic Regional Climate Data Services Centre. It will help government, businesses, and communities get better information about our changing climate, which will help us all make smarter decisions.
- In 2022, we'll release a provincial climate change risk assessment. It will assess climate change risks now and in the future, both for our environment and for our way of life. This will tell us what we need to research and plan for in years to come.
- Provincial government departments are doing their own climate change plans, with the industries and communities they serve. As of this year, five departments are taking part.
- We're working on regulations for the Coastal Protection Act. These will set clear rules that will ensure new construction is built in places safer from sea level rise and coastal flooding.

## Preparing for climate change could mean:

### Understanding risks and opportunities so we can do what's most important

We need to make sure people in government, key economic sectors, and communities are knowledgeable about the risks, opportunities and uncertainties. We need the best available science, local, and traditional knowledge to help us make smart decisions. Producing reports is not enough. Governments, businesses, and communities need to apply this information to the real world.

We will be looking for ways to work with and train leaders across communities and sectors so they can help set priorities and take action. We know some groups will be more impacted by climate change than others, and we will be making a special effort to work with them.

### Taking action and adjusting over time

This can mean passing laws, setting new policies, or creating new government programs. It can also mean teaching and talking with communities about climate action. It may also mean helping communities and businesses take action. The new Agriculture Clean Technology Program, for example, provides money for farmers and food businesses to reduce their greenhouse gases and prepare for a changing climate.

We will need to adjust as we learn and gain new information. We'll track our progress, learn from our experiences, and keep improving.

## Creating new opportunities in the clean economy

We know there are opportunities for Nova Scotia as we move to a clean economy. Everything we do to cut greenhouse gas emissions can create new jobs across the province. Businesses can cut their carbon footprint and their energy costs at the same time. This will make them more competitive in a global economy.

As we do this, we have to keep in mind that many Nova Scotians face more challenges than others. There is systemic discrimination against African Nova Scotians and the Mi'kmaq, gender inequity, and poverty. New jobs, investments, and business growth must include these groups.

## Creating new opportunities in the clean economy could mean:

### Encouraging innovation

We want to support new ideas and new technologies in Nova Scotia. That will allow our businesses to sell solutions around the world. There are Nova Scotian experts in important fields, like tidal energy, coastal wetlands, and cutting-edge batteries. Our businesses are implementing new technologies and meeting the growing need for green goods and services.

### Supporting greening businesses

We will support businesses to be part of this shift. The clean economy can have a place for everyone, including local farms and food processors, industries like fishing and forestry, high-tech and service-based companies. We want to help businesses in orienting to sustainability and becoming more competitive by going green. One example is hiring on-site energy managers that will help sectors from farms to factories save money on energy. The new Green Choice program will allow large electricity customers to buy 100 per cent renewable electricity from Nova Scotian companies.

### Growing the workforce

We will create job opportunities for young people and underrepresented groups, and help our existing workforce learn new skills. There are at least 370 energy efficiency businesses in the province, and more than 2,500 people work for them. There are more than 60 solar businesses and hundreds of jobs. There will be more jobs as we move to a clean economy. We want to support workers to move out of the fossil fuel industry. We also want to make underrepresented groups, including women, African Nova Scotians, the Mi'kmaq, our young people, and people of all abilities can work in this field.

### Greening our government

The Nova Scotia government is considering how its own operations and practices can better support our shared climate goals to reduce greenhouse gases, prepare for climate change and support clean growth. The provincial government manages its own buildings, vehicle fleets, and millions of dollars of procurement for goods and services. There are opportunities here for our province to lead too.

We've already begun the process of looking at how government's internal operations and decision-making can help drive greenhouse gas reduction and climate preparedness. As of 2021, climate change is included in the mandate letters of all government departments. We've also committed to purchase 100 per cent renewable electricity for core government operations by 2025.

# We need to work together

We need to take on climate change together. We're already seeing ambitious action from municipalities and Mi'kmaq communities. Youth are taking a leadership role too. Creative community groups are organizing and calling for action. Artists and cultural institutions are sparking insight for our present and future. We're learning from communities and other provinces.

## Working together could mean:

### Supporting municipal and community action

Communities and municipalities are already leading change.

- Energize Bridgewater is doing groundbreaking work as part of the national Smart Cities Challenge.
- The new HalifACT: Acting on Climate Together plan for Halifax commits to net zero emissions and preparing for climate change in Nova Scotia's biggest city.
- Communities across the province are taking on projects to reduce greenhouse gases and prepare for climate change.

We're planning to launch a new Sustainable Communities Challenge Fund to support climate change projects. We're reaching out to municipalities and community leaders to learn more about how we can support their great work.

### Encouraging youth leadership, education, and culture

Young people are leading action on climate change here in Nova Scotia and around the world. Our diverse cultural sector, including libraries, arts institutions and museums, are also helping us learn about what climate change means for our present and future. We want to learn from youth leadership, and broaden our ways to learn and work with others.

### Working with other governments

We will find ways to work with other governments, including with Mi'kmaq governments, to share the benefits of climate action.

Our work is stronger when we work with others. We work closely with the federal government on policies and programs they develop, to ensure they work for Nova Scotia. We collaborate with our regional partners in Atlantic Canada. We also work closely with Mi'kmaq governments. One example is the Mi'kmaq Home Energy Efficiency Program, which is targeting energy efficiency retrofits for 90 per cent of band-owned homes in First Nations.

## Being accountable and transparent

We want Nova Scotians to know what we are doing and what progress we're making.

The Minister of Environment and Climate Change will need to report annually on progress under the Sustainable Development Goals Act. This includes reporting on progress towards our greenhouse gas reduction goals for 2020, 2030, and 2050.

We also report what we are spending our Green Fund on each year.

In order to make progress on our climate change goals, we need to tell Nova Scotians how we're doing, and review our commitments regularly.

## We want to hear from you

Your input will help shape our new Climate Change Plan for Clean Growth.

These are guiding questions only. You can choose to use them to help with your input, but it's not required.

Tell us about **your community**:

- How is climate change affecting your community, what changes are you seeing?
- What is working in your community to address climate change?
- What else could be done?
- What barriers do you face in taking climate action?

Tell us about **what's most important to you**:

- When you think about our climate changing, what are you most worried about?
- What opportunities could come from taking action?
- What values and principles should guide the choices we make?

Tell us about **what action we should take**:

- What has Nova Scotia done well so far in taking action on climate change?
- What can we do better?
- What's the most important thing that we should do next?

Tell us about **how we can work together**:

- Who should be involved?
- How can our work on climate change help to create a fairer and more inclusive society?
- How can we measure success?

**Please send your input to:**

**E-mail address:**

info@cleanfuture.ca

**Mailing address:**

Attention: Engagement Coordinator  
Clean Foundation  
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Dartmouth, NS  
B2Y 1H8

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