

# Climate Change Consultations for Newfoundland and Labrador

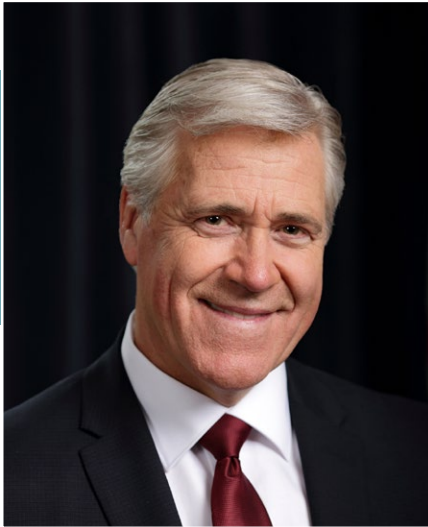


Discussion Guide 2016



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# Message from the Premier

Climate change is a pressing challenge affecting all parts of the world. It requires a sustained and serious global response and all jurisdictions must be part of the solution.

Important progress is being made. Last December, Canada and more than 190 countries from around the world gathered in Paris and agreed to strengthen efforts to tackle climate change. In March 2016, I met with Canada's First Ministers in Vancouver and we set out to develop a pan-Canadian framework on clean growth and climate change to reduce greenhouse gas emissions while creating well-paying, long-term jobs.

Our government is committed to ensuring that Newfoundland and Labrador is well-positioned to tackle climate change while taking advantage of opportunities for clean economic growth. This is why we have committed to develop a climate change strategy to help build strong communities and a prosperous, low-carbon economy.

Together, we have an opportunity to create an approach that meets our needs. Climate change is an issue that affects us all and I encourage you to share your ideas, perspectives and solutions.

A handwritten signature in black ink, appearing to read 'D. Ball'. The signature is fluid and cursive, with a long horizontal stroke at the end.

Honourable Dwight Ball  
Premier of Newfoundland and Labrador

# Message from the Minister



Climate change is happening and is mainly caused by human activities. This presents both challenges and opportunities for Newfoundland and Labrador.

Our people, communities, and economy are already being affected by climate change and we are at risk of further impacts such as more intense weather systems, increased flooding, and less sea ice in northern areas. Better understanding and planning will help us prepare and adapt to these changes.

However, climate change is not just an environmental issue but an economic and social issue that presents opportunities for job growth and development. Reducing greenhouse gas emissions and adapting to climate impacts can help grow our provincial green economy in areas such as renewable energy, sustainable natural resources, more energy-efficient buildings and sustainable transportation.

We all have a role to play in fighting climate change. To chart a prosperous and sustainable course for the years ahead, we need your views on how our province can best do this and grow the green economy. I invite all Newfoundlanders and Labradorians to participate in this important conversation and look forward to your ideas.

A handwritten signature in black ink that reads "Perry Trimper". The signature is fluid and cursive.

Honourable Perry Trimper  
Minister Responsible for the Office Climate Change and Energy Efficiency

# Introduction

This discussion guide can help Newfoundlanders and Labradorians contribute their ideas and suggestions to a new provincial **climate change strategy**.

Climate change is about shifts in long-term weather patterns due to human activities which release greenhouse gases (GHGs), such as carbon dioxide. These gases come from many sources; burning gasoline to fuel vehicles is an example of how our everyday activities contribute to GHGs. Climate change is expected to bring weather that is warmer and stormier to our province, with more intense periods of precipitation. This will affect our environment, society and economy.

On the one hand, communities are experiencing more frequent and intense storms, flooding, coastal erosion, new invasive species, and weather damage to properties and infrastructure.

On the other hand, a warming climate can also bring opportunities such as longer growing seasons, a longer summer tourism season, and lower heating demand in winter.

Taking action on climate change requires work in two areas:

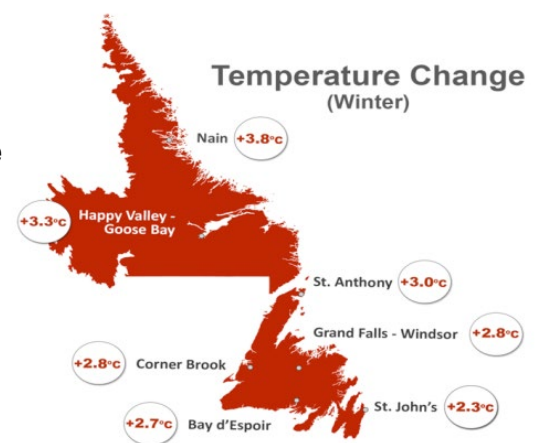
1. Adapting how we do things to take account of the impacts of rising temperatures; and,
2. Lowering the amount of GHGs we emit into the air from activities such as burning fossil fuels for energy, how we manage our waste, and how we look after the land and forests.

Work in both of these areas can support job creation and clean economic growth. Action on climate change must consider both the environment and the economy.

This discussion guide is divided into three discussion topics:

1. Growing the Green Economy
2. Adapting to Climate Change
3. Government Leadership

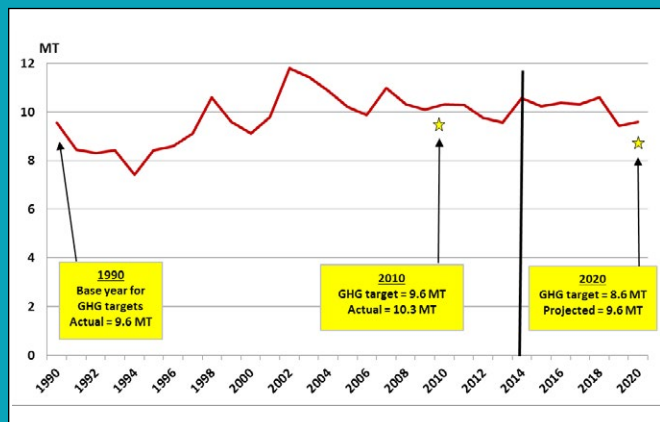
## Projected Temperature Increases by mid-century



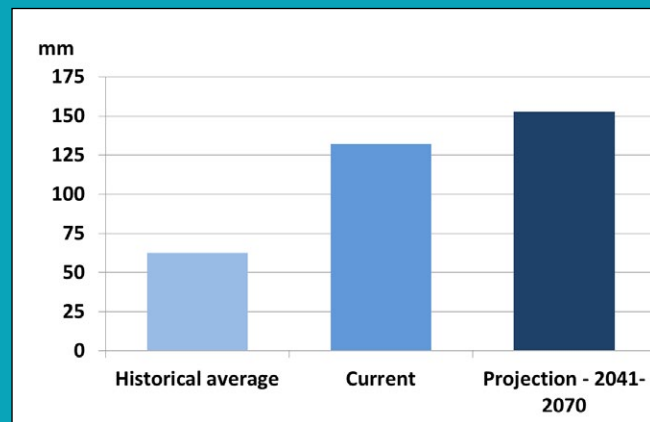
Source: Finnis, 2013

## Provincial GHG Emissions

1990-2014 actual; 2015-2020 projected



## Projected maximum rainfall over a 24 hour period in Stephenville



Newfoundland and Labrador has committed to reduce its GHG emissions by 10 per cent below 1990 levels by 2020. This graph shows business-as-usual projections for GHG emissions in the absence of new policies and measures. Government is committed to further action to help close this gap.

Source: NIR 2016; provincial projections

Climate change is expected to result in more intense precipitation across the province. Information on intense precipitation, such as the example above for Stephenville, is available for 19 locations in the province to assist planning.

Source: CRA Consultants, 2015

Your ideas will help develop a new **climate change strategy**. Please submit your input online or in writing by September 16, 2016. Visit [www.gov.nl.ca/TalkClimateChange](http://www.gov.nl.ca/TalkClimateChange) for more information or contact the Office of Climate Change and Energy Efficiency:

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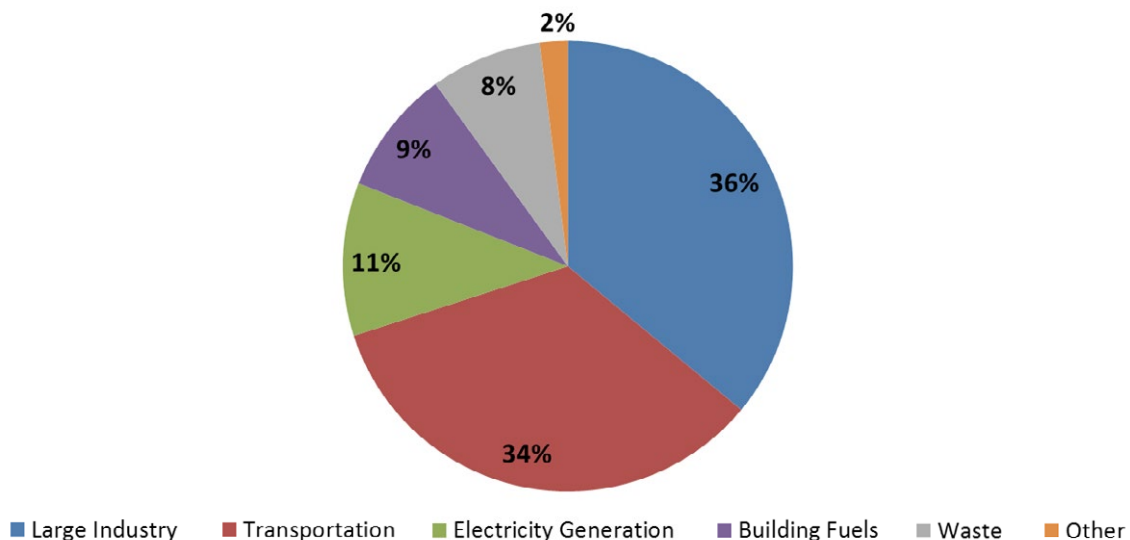
# Discussion Topic 1

## Growing the Green Economy

Action to address climate change can help to stimulate growth in the green economy. The green economy refers to the wealth and jobs generated by products and services that are environmentally sustainable. It includes activities in all sectors, such as:

- renewable energy sources;
- the design and construction of energy-efficient buildings;
- environmentally sustainable agriculture, aquaculture and forestry;
- innovative clean technologies like ocean and ice observation systems;
- modern waste management systems; and,
- environmentally sustainable tourism opportunities.

NL GHG Emissions for 2014  
(most recent data available)





Low-carbon products and services are those that emit little or no greenhouse gases (GHGs), which are the cause of climate change.

**Some things to consider:**

- The world will be seeking low-carbon products and services. Growing the green economy is an opportunity to create jobs while lowering GHG emissions.
- The Provincial Government has committed to creating GHG reduction targets for large industrial operators, and GHGs from electricity generation will be almost eliminated once the Muskrat Falls Project is complete.
- Reducing GHG emissions from some sectors, like transportation, is challenging in a province with a rural population where so many people rely on cars and trucks. Possible solutions include using cleaner fuel or renewable electricity, changing behaviour like encouraging more walking or carpooling, or driving more fuel-efficient vehicles.
- Energy efficiency can be a key part of taking action on climate change in other sectors too. For example better-insulated new and existing buildings use less energy to heat and save money.
- Several Canadian provinces are using carbon pricing to help reduce GHG emissions, including Alberta, British Columbia, Ontario and Quebec, and about 90 per cent of the Canadian population now live in a jurisdiction committed to carbon pricing.
- A price on carbon helps ensure the damage caused by climate change is paid for by those responsible for emitting GHGs. They can decide whether to stop emitting GHGs, reduce their GHGs, or continue emitting and pay for it. Carbon pricing stimulates markets to develop clean technologies.
- The main types of carbon pricing are:
  - emissions trading systems that limit GHG emissions by companies and require them to buy a permit for each tonne of GHGs they emit; and
  - a carbon tax paid by consumers on gas and other fossil fuels.
- Some jurisdictions return the revenue generated through carbon pricing back to citizens through lowering income or corporate taxes, providing programs for low income households, or funding initiatives to grow the green economy like energy efficiency programs or electric vehicle charging stations.



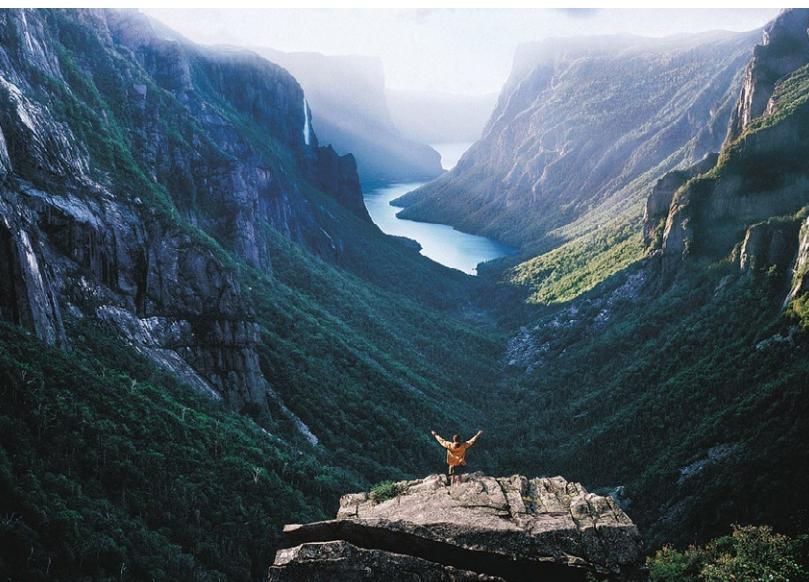
# Discussion Topic 2

## Adapting to Climate Change

As a result of the GHG emissions that have built up in the atmosphere, the planet will continue to get warmer. Given this, individuals, businesses, communities, and governments must understand, plan for and respond to the impacts of climate change.

### **Some things to consider:**

Adapting to climate change could include actions like developing an emergency management plan to prepare for increased flooding, ensuring the site for a new fire station is not in an area projected to flood in future, or identifying opportunities provided by longer growing or summer tourism seasons.



The earlier onset of summer and milder fall may create opportunities to extend the summer tourism season.



Photo courtesy of Wayne March

Hurricane Igor caused flooding in many communities, including Lady Cove, resulting in damage to public and private infrastructure.



The Provincial Government has been helping decision-makers understand how climate change could affect their communities and businesses by:

- Releasing projections on how temperature and precipitation are expected to change in the coming decades to help engineers build road infrastructure to deal with water run-off from more intense storms;
- Updating flood risk maps to take account of increases in precipitation to help communities safely locate new developments. Maps have been developed for a number of communities, including, most recently, Portugal Cove-St. Philips;
- Monitoring coastal erosion at 112 sites around the province to give planners information on how storm surges and sea-level rise are affecting the coastline, along which over 90 per cent of the province's population lives; and,
- Supporting the Nunatsiavut Government with its work to determine how building codes in the north should take account of changing climactic conditions, such as melting permafrost.



Photo courtesy of Stacey Cheater

## **Adaptation in practice:**

When the Town of Bay Bulls rebuilt its wharf following Hurricane Igor, it considered the climate change projections. The Town built the wharf higher than it was before to withstand storm surges from extreme weather and rising sea-level.



# Discussion Topic 3

## Government Leadership

As a purchaser of a wide range and large quantity of goods and services annually, the Government of Newfoundland and Labrador is a significant consumer. What it purchases can create new business opportunities or influence which products or services are available in local markets.

Buying energy-efficient vehicles, using virtual technologies that allow people to interact without traveling, and constructing energy-efficient buildings, are just some of the ways that the Provincial Government is reducing its own GHG emissions, helping to grow markets for cleaner products and technologies, and save money.

Governments can help move markets toward low-carbon activities through establishing programs, codes and standards or by adopting GHG emissions targets.

### **Some things to consider:**

- The Provincial Government currently provides grants to low-income households for energy efficiency home retrofits.
- Some Canadian provinces have adopted energy efficiency standards for buildings and products such as home appliances, with the aim of ensuring that they consume less energy and emit fewer GHGs.
- The Government of Newfoundland and Labrador has established GHG emissions targets for 2020 and 2050 but more action is needed to meet them. Some jurisdictions have also adopted targets for 2030.
- The *Turn Back the Tide* campaign helps raise awareness of climate change and promote energy efficiency. Visit [www.turnbackthetide.ca](http://www.turnbackthetide.ca) for tips and information about how residents of the province can take action.





The Provincial Government's Build Better Buildings Policy aims to ensure that new buildings are constructed using environmentally-friendly and energy-efficient practices, such as those used in constructing the new St. John's long-term care facility, Pleasant View Towers.







# Next Steps

This guide is intended to support a public discussion on the actions that the Provincial Government should consider in developing a climate change strategy for Newfoundland and Labrador.

Public consultations on a climate change strategy for Newfoundland and Labrador will include in-person sessions and online opportunities for individuals, businesses and communities to join the conversation. Input is requested by September 16, 2016. Information can be found at [www.gov.nl.ca/TalkClimateChange](http://www.gov.nl.ca/TalkClimateChange).

Organizations and interested parties are also encouraged to hold their own consultation sessions and feed the results back to government. A guide on how to do this, as well as a presentation deck that can be used, are available at the website above.

Input received will be made public and compiled and included in a “What We Heard” document that will be released by the Office of Climate Change and Energy Efficiency by fall 2016.

This information will form the foundation of a climate change strategy for Newfoundland and Labrador that will be released in 2017.

If you would like more information on climate change and how to make a difference, visit [www.turnbackthetide.ca](http://www.turnbackthetide.ca).





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