



ECONOMIC IMPACTS OF CLIMATE CHANGE

AT A GLANCE



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QUICK FACTS:

Canada (including NL) has committed to reaching net-zero emissions by **2050** while maintaining a prosperous economy.¹



Renewable energies, such as wind and solar, are at **all-time low prices**, creating economic opportunities.² Despite this, the transition towards a low-carbon economy will present challenges; carbon-intensive industries face the biggest disruptions (e.g., loss of value and jobs).



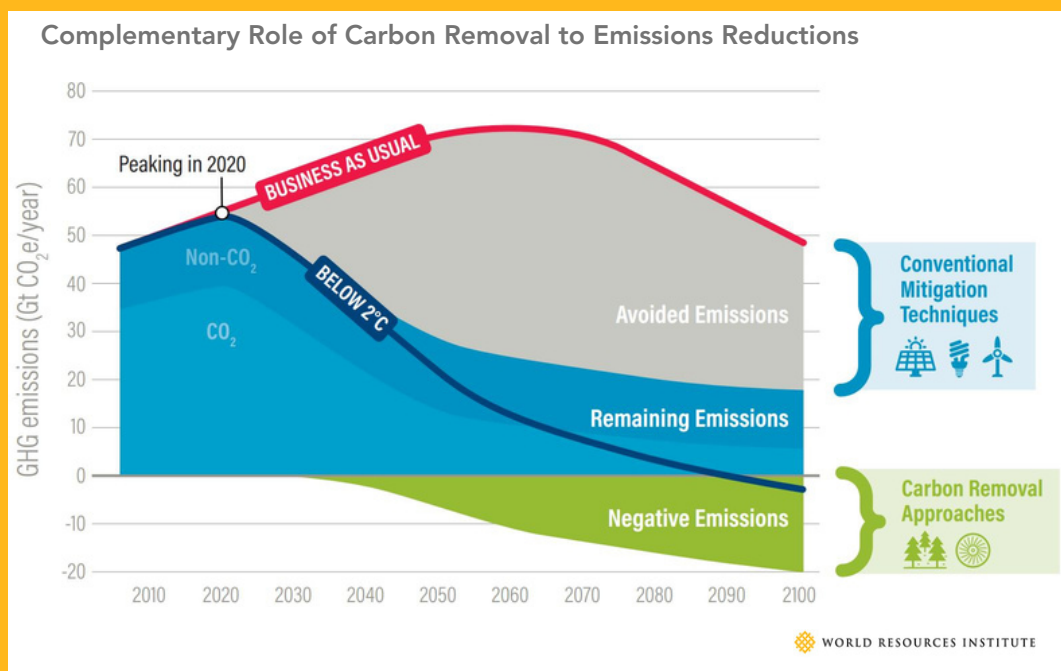
While there are significant costs to mitigating and adapting to climate change, the cost of not addressing climate change is much higher: avoiding and limiting climate damages could even produce an estimated cumulative savings of **US\$20-trillion** by 2100.³



WHAT DOES NET-ZERO MEAN?

NET-ZERO is the balance between the amount of greenhouse gas (GHG) produced and the amount removed from the atmosphere.

We will achieve net-zero emissions when human-caused GHG emissions are balanced out by removing GHGs from the atmosphere: first, human-caused emissions—like those from vehicles and factories—should be reduced as close to zero as possible; then, any remaining GHGs would be balanced with an equivalent amount of carbon removal (for example, by restoring forests).





HOW IS CLIMATE CHANGE IMPACTING OUR ECONOMY?

Climate change is expected to have widespread effects on the economy of Newfoundland and Labrador. **The effects of climate change through more extreme weather, reduced sea ice, rising sea levels, and changing temperatures are already in evidence in the province.** Moreover, the pressure to bring down energy-related emissions is reducing the viability of current and future offshore oil developments, an important source of provincial jobs, income, and government revenues over the past 20+ years.

Coastal communities around the province are **confronting high costs to upgrading infrastructure to meet the challenge of rising sea levels.** Building more resilient roads, bridges, water and waste-water systems and wharves will require a joint effort by all three levels of government, but will present a particular challenge for municipal governments, businesses, and property-owners, given their limited tax base.

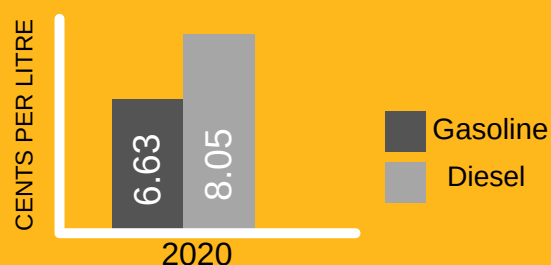
Homeowners are facing **higher home insurance costs** as Canadian insurers price in the rising costs of property damage due to extreme weather.⁴

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The push to a low-carbon economy will create more opportunities for investment in new **green-tech products**, as well as in clean energy fields such as hydrogen, hydro, wind, and solar electricity. While encouraging, to date these represent a drop in the bucket compared to the enormous investment that has taken place in the province's offshore oil industry in recent years. The decline in offshore revenues is a significant blow to the provincial economy.

NEWFOUNDLAND AND LABRADOR'S CARBON TAX ^{7, 8, 9}

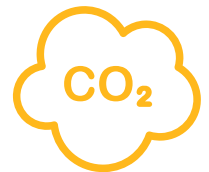
The numbers here average about \$30 per tonne; without any other climate action, the carbon tax would need to be around \$200 per tonne in order to reach Canadian climate targets, indicating the need for other GHG emissions-reducing programs.





WHAT STEPS ARE GOVERNMENTS TAKING TO ADDRESS CLIMATE CHANGE?

- The Canadian government has embraced market-based strategies as the core element of its national framework to address climate change. Carbon pricing policies create incentives for people to choose cleaner energy options by making it cost something to pollute.
- The Canadian carbon pricing plan combines two elements: a minimum price on carbon and a performance-based system for industry.⁵ The price on carbon (the fuel charge) will gradually increase with the intent to price out emissions over time. This is currently \$30 per tonne, expected to rise to a minimum of \$170/tonne by 2030.⁶
- From 2019 to 2030, the provincial carbon tax is projected to reduce cumulative GHG emissions by more than 0.65 million tonnes.¹⁰
- In December 2020, the federal government bolstered its climate plan with a range of new spending and regulations focused on clean power transmission, electric vehicles and transportation, and further incentives for green economy jobs.



WHAT ECONOMIC OPPORTUNITIES DOES CLIMATE CHANGE PRESENT?

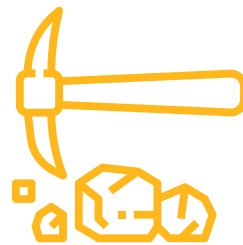
Climate change presents **significant economic opportunities** in clean energy, resilient buildings, alternative energy production, energy saving technology, agricultural innovations, and bio-economy, among many others.

The **technological advances** associated with the shift to a low-carbon economy are expected to add considerable value to global jobs and output.

Canada aims to be a global leader in **battery production** for zero-emission vehicles and renewable energy storage.¹¹

These plans may put Newfoundland and Labrador in a promising position given the province's **mining** activity and production.

The demand for raw materials that are used in electric vehicle batteries such as **cobalt and nickel** (which are both mined in Newfoundland and Labrador) are expected to rise in the coming years.¹²



ENDNOTES

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