



The Registered Nurses' Association of Ontario (RNAO) recognizes that climate change is an immediate and growing threat to human health. We are in the midst of a climate emergency. Around the world, weather disturbances are causing historic droughts, raging wildfires and severe population dislocation. Temperatures are rising faster in Canada than the global average. By 2020, Canada was 1.8°C hotter than it was in 1948.¹ Human activities are driving this climate change, mainly by increasing emissions of greenhouse gases (GHG).

The fight against climate change demands urgent and sustained action from international, national and sub-national levels of government to mitigate a looming humanitarian catastrophe.

A climate emergency: The evidence

The evidence is clear: climate change is real and is caused by human activity that increases the concentration of GHGs in the air. The Intergovernmental Panel on Climate Change (IPCC) has concluded that:²

- humans have unequivocally warmed the atmosphere, ocean and land resulting in widespread and rapid changes
- global surface temperatures between 2011 and 2020 were 1.09°C above 1850–1900 levels, with 1.07°C attributable to humans
- global sea levels rose 0.20 metres between 1901 and 2018, with annual rises almost tripling over that time period
- climate systems are shifting due to warming
- extreme weather events are occurring with greater frequency and intensity, and are projected to intensify further -- including extreme precipitation, heat waves, wildfires and droughts

All these effects accelerate the warming of the planet and threaten to take it to dangerous tipping points. For example, thawing of the permafrost releases vast quantities of methane, a powerful GHG.

The Intergovernmental Panel on Climate Change

The Intergovernmental Panel on Climate Change (IPCC) is an intergovernmental body of the United Nations (UN) that evaluates published research on climate change in assessment reports. The IPCC was established in 1988 and has produced six assessment reports, released between 1990 and 2022. These reports conclude that concentrations of carbon dioxide, methane and nitrous oxide (key GHGs) continue to rise to levels unprecedented in the last 800,000 years. This has caused a corresponding rise in average temperatures.

Working Group 1 of the IPCC also issued a report, *Climate Change 2021: the Physical Science Basis*, approved by the 195 member governments of the UN on Aug. 9, 2021. The results tell us that the current climate disasters, such as lethal heat waves, droughts and wildfires across much of Canada and deadly flooding elsewhere, are unequivocally due to human releases of greenhouse gases.

Climate change: A health crisis

The fight against climate change is also a fight to protect health and life. Climate change impacts the health of Ontarians and Canadians in many ways. Some examples^{3 4 5 6 7}:

- temperature extremes cause more illness and death from heart attacks, heatstroke, and hypothermia. Increased temperatures are also associated with higher rates of suicide per season. They can also negatively affect those taking some psychotropic medication due to effects on the ability to thermoregulate.
- flooding, wildfires and other manifestations of climate change cause illness and fatalities through both immediate injury and chronic disease. For example:
 - smog and wildfires lead to deterioration of outdoor air quality that causes or worsens respiratory and heart diseases, allergies, cancer and asthma. Greater heat levels also promote higher pollen counts, worsening chronic respiratory conditions such as asthma.
 - mould caused by flooding of homes or workplaces leads to deterioration of indoor air quality that can worsen chronic respiratory conditions or have other adverse health implications over time.
- vector-borne diseases such as West Nile virus and Lyme disease are spreading into Ontario because milder winters impact the native ranges of the vectors and allow for more life cycles per season.
- drinking water and food security are imperiled in developing countries, but Ontarians and Canadians are not immune.

Climate change also exacerbates other health-related crises such as

- mass extinction
- pollution
- scarcity of food and resources
- environmental degradation and population displacements
- armed conflict related to all of these issues

Actions to mitigate and adapt to climate change have several co-benefits. For example, coal phase-outs also reduce smog and toxic emissions. Replacing automobile use with active transportation, such as cycling and walking, increases physical activity. Carbon sinks such as wetlands and forests also protect biodiversity, air quality and water supplies.

Climate change: A matter of justice

Those who are most vulnerable to the adverse impacts of climate change are usually those who have contributed the least to the crisis. People's vulnerability to climate change is related to their exposure, sensitivity and capacity to adapt. Under-resourced populations are generally more sensitive to stressors, and their lack of resources can make it harder for them to adapt. They are also most vulnerable to other impacts of climate change such as increased energy costs and job loss. And in many cases, they are at greater risk of exposure. For example, in developing countries, climate change makes drinking water and food even more inaccessible, and loss of coastal land mass can force migration.⁸

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The costs and benefits of climate action must be equitably shared. The evidence-based objective of net-zero emissions by 2050 requires a rapid transition away from carbon-intensive industries, methods of production and energy sources to a greener, cleaner and healthier economy. Justice, fairness and practicality require that no one be left behind in this transition.

An inclusive approach: Just transition and respecting all rights

In 2015, Canada entered the UN's [Paris Agreement](#), a binding international treaty. This agreement calls on signatories to

- acknowledge “that climate change is a common concern of humankind”
- “respect, promote and consider” their country’s human rights obligations, the right to health for all communities and other equity-based concerns when taking steps to fight it
- take “into account the imperatives of a **just transition** of the workforce and the creation of decent work and quality jobs in accordance with nationally defined development priorities”

The Canadian government elaborates that a [“just transition”](#) involves:

- preparing the workforce to fully participate in the low-carbon economy while minimizing the impacts of labour market transitions;
- identifying and supporting inclusive economic opportunities to support workers in their communities; and
- including workers and their communities in discussions that affect their livelihoods.”

Meeting these commitments is essential to a more equitable society and to a successful transition to a decarbonized economy.

Climate change: Indigenous rights and consent

Both internationally and here in Canada, climate action must align with the UN Declaration on the Rights of Indigenous Peoples (UNDRIP).⁹ Article 25 of UNDRIP recognizes the right of Indigenous peoples “to maintain and strengthen their distinctive spiritual relationship with their traditionally owned or otherwise occupied and used lands, territories, waters and coastal seas and other resources and to uphold their responsibilities to future generations in this regard.”

Further, Article 29 of UNDRIP acknowledges the right of Indigenous peoples to “the conservation and protection of the environment and the productive capacity of their lands or territories and resources. States shall establish and implement assistance programs for indigenous peoples for such conservation and protection, without discrimination.”

Consent from Indigenous communities is critical. Article 32.2 of UNDRIP provides: “States shall consult and cooperate in good faith with the indigenous peoples concerned through their own representative institutions in order to obtain their free and informed consent prior to the approval of any project affecting their lands or territories and other resources, particularly in connection with the development, utilization or exploitation of mineral, water or other resources.”¹⁰

Government commitment to UNDRIP—Bill C-15

On Dec. 3, 2020, the Canadian federal government introduced Bill C-15 (the United Nations Declaration on the Rights of Indigenous Peoples Act). This bill mandates the government of Canada to:

- prepare and implement an action plan to achieve the objectives outlined in UNDRIP
- make sure that all Canadian laws are consistent with UNDRIP

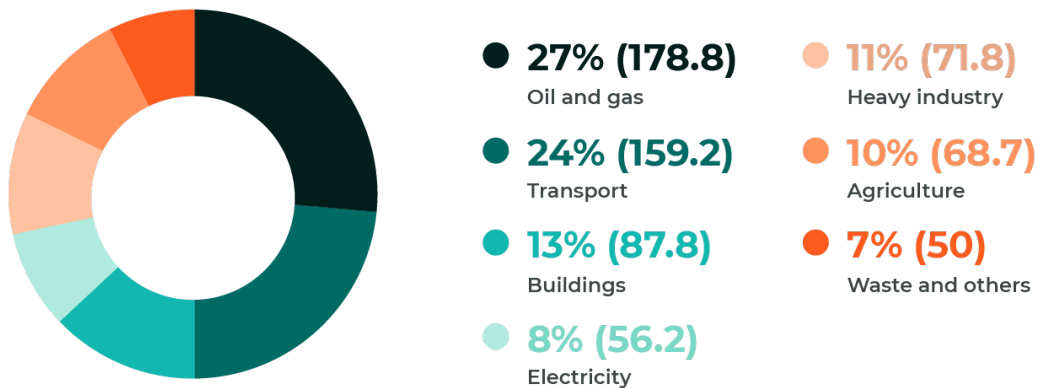
This [bill](#) received royal assent on June 21, 2021.

Sources of GHGs in Canada and the need for a comprehensive GHG reduction strategy

Much of human activity creates GHGs, and a comprehensive GHG reduction strategy must address all emitting sectors. In 2020, the emitting sectors from largest to smallest were oil and gas, transportation, buildings, heavy industry, electricity, agriculture and waste.¹¹ Each sector requires its own distinct GHG reduction strategy. Even the food we eat has a carbon footprint, and some types of food like meat have much larger carbon footprints. It is important to note that this production-based analysis omits GHGs due to consumption. Canada relies heavily on imported goods whose production often has a large carbon footprint, and must account for those emissions as well.

Canadian 2020 GHG Emissions by Sector

Megatonnes of Carbon Dioxide Equivalent



Calls to action

RNAO will advocate for all levels of government to place central priority on combatting and adapting to climate change while assuring that costs and benefits are equitably shared.

RNAO calls on federal, provincial and municipal governments to:

1. establish GHG emission targets consistent with current scientific evidence and Canada's fair share: no less than 60 per cent below 2005 levels by 2030¹² ¹³, taking into consideration both the domestic and international emissions of Canadians.
2. fund and implement an aggressive program of GHG mitigation or reduction which addresses all sources of GHGs including oil and gas, transportation, heating, manufacturing, power generation, land use, waste and consumption of imports.
3. ensure transparent reporting of the GHG reduction program with annual benchmarks and remediation.
4. take a leading role in building and housing programs by transitioning all public buildings and infrastructure to high efficiency, electrified and no/low emissions options, and by subsidizing energy efficiency in the homes of those with fewer resources.
5. fund and implement an aggressive program to adapt to climate change, including emergency strategies, strengthening of health-care systems, green infrastructure and safe and affordable housing supply as essential protection against climate extremes.
6. adopt a community benefits and environmental equity approach to make sure that costs and benefits are equitably shared.
7. commit to a just transition by providing strong support for workers to train for and move to greener employment.
8. make sure that all actions to mitigate or adapt to climate change respect the rights of Indigenous peoples and comply with UNDRIP.
9. take a decisive leadership role in international negotiations to combat and adapt to climate change.
10. strengthen the carbon pricing regime and aggressively implement it, while using the revenue to restore the damage of climate change and raise incomes of those with the least resources to living levels and to ensure that they are not adversely affected by carbon pricing.
11. phase out the fossil fuel industry to fit Canada's climate action plan by immediately eliminating fossil fuel subsidies and banning new major fossil fuel infrastructure in Canada such as pipelines.
12. work with all levels of government to expand transit and active transportation and to transition to sustainable transportation networks.
13. integrate evidence regarding the need for a transition to a lower-meat diet into the implementation of the Canada Food Policy in line with the EAT-Lancet report¹⁴ and IPCC¹⁵.
14. collaborate with Indigenous nations and leaders to protect at least 30 per cent of the natural space in Canada¹⁶ including critical intact large forest biomes and parks in both urban and rural areas.

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