

Addressing the Climate Emergency

“Our house is on fire. I am here to say, our house is on fire. [...] I want you to act as you would in a crisis. I want you to act as if our house is on fire. Because it is... We cannot solve a crisis without treating it as a crisis. [...] And if solutions within the system are so impossible to find, then maybe we should change the system itself...”

- Youth climate activist Greta Thunberg, speech to the World Economic Forum, January 2019.

On June 17, 2019, the Canadian parliament followed the example of several other countries, states, provinces and dozens of Canadian municipalities and passed a resolution declaring we are in a climate emergency. The next day, the Liberal government, supported by the Conservative opposition, announced its approval, with public funding of at least \$10-13 billion, of the expansion of the Trans Mountain pipeline, a project that will enable the expansion of bitumen mining in northern Alberta and, in turn, growth in Canada’s climate-changing pollution. This is not treating the climate crisis as an emergency.

Time has run out on this kind of political doublespeak. We must take on our responsibilities as grown-ups, or accept Greta’s condemnation:

“If we fail...all our achievements and progress have been for nothing, and all that will remain of our political leaders’ legacy will be the greatest failure of human history. And they will be remembered as the greatest villains of all time, because they have chosen not to listen and not to act.”

- Greta Thunberg, speech to the European Economic and Society Committee, February 2019.

The Green Party has been telling the truth about global warming and climate change for decades. Alone among political parties, the Green Party has a climate emergency response plan that recognizes our house is on fire. We call it *Mission: Possible*.

Mission: Possible - The Challenge

1.2 degrees C

Climate scientists tell us that if the world does not hold global warming to no more than 1.5 degrees C global average temperature increase above the 1850 baseline we risk triggering runaway heating and a climate catastrophe. Already, the Earth has warmed by 1 degree C on average. Canada has warmed by 2 degrees C and the Arctic by 3-4 degrees C. Even this level of warming is producing unprecedented heat waves, polar ice melting, flooding and extreme storms.

To hold to this critical limit, global emissions of climate-changing pollutants – carbon dioxide, methane and nitrous oxide – must be cut by about half by 2030, and we must get to net-zero emissions by 2050.

Carbon dioxide is by far the largest contributor to climate pollution. In Canada, most of our carbon dioxide emissions (54 per cent) come from producing and burning coal, oil and natural gas. Transportation adds another 28 per cent. Industrial agriculture contributes methane from livestock and nitrous oxide from fertilizer, totaling eight per cent of climate pollution followed by non-energy heavy industries (7.5 per cent) and methane from solid waste landfills (2.5 per cent).³

40-45% reduction

The current federal target is a 30 per cent reduction in greenhouse gas emissions below 2005 levels by 2030. This was set by Conservative Prime Minister Harper in 2015 and adopted by Liberal Prime Minister Trudeau in 2016⁴. Not only is this too low, the Liberal and Conservative climate action plans will not even achieve that insufficient reduction, let alone the target that climate scientists say we must meet.

was announced by Liberal Prime Minister Trudeau in June 2021

A Green government will pass into law a Climate Change Act requiring a 60 per cent cut in climate-changing emissions below 2005 levels by 2030, reaching net zero in 2050. ⁵Interim targets would be set at five-year intervals beginning with 2025.

To achieve this, the government of Canada must utilize every tool in the federal toolkit, including regulations, public spending, and pollution pricing⁶. Indigenous leadership is critical to the climate goals of *Mission: Possible*.

3 Government of Canada, <https://www.canada.ca/en/environment-climate-change/services/climate-change/greenhouse-gas-emissions/sources-sinks-executive-summary-2019.html>.

4 Baseline year is 2005.

5 This steeper cut is for Canada to do our fair share and to encompass all greenhouse gases. Baseline year?

6 Part 4 of the Canadian Environmental Protection Act empowers the Minister of Environment to bring in regulated limits of emissions of GHG from any facility in Canada.

MISSION POSSIBLE - THE GREEN CLIMATE EMERGENCY ACTION PLAN



- Establish a cross-party inner cabinet to deal with climate change to limit the destructive impact of partisan politics which has thwarted strong climate action for two decades. Its mandate would be to ensure that Canada does its part to limit global warming to a level civilization can survive, and mitigate the impacts of climate change on Canadians.
- Set legal emissions limits for industries that decline over time, with penalties for exceeding those limits.
- Maintain a broad-based, revenue neutral carbon fee on all sources of carbon dioxide pollution. Revenues from the carbon fee would be returned to Canadians as a dividend.

ENERGY

- Since producing and burning fossil fuels is the largest source of emissions, we need to keep fossil fuels in the ground, and retool society to run on non-polluting, renewable energy sources. This is entirely possible, according to studies by the Stanford University researchers and the Deep Decarbonization Pathways Project.⁷
- No new pipelines, or coal, oil or gas drilling or mining, including offshore wells, will be approved. Existing oil and gas operations will continue on a declining basis, with bitumen production phased out between 2030 and 2035. Hydraulic fracturing (fracking) operations will be banned outright due to impacts on groundwater quality, methane release and seismic activity.
- Cancel the Trans Mountain pipeline (and its \$10-13 billion cost) as well as other subsidies to fossil fuel industries, totaling an additional several billion dollars a year. This money will be redirected to the Canadian Grid Strategy and renewable energy transition.
- Implement a major ramp-up of renewable electricity. By 2030, 100 per cent of Canada's electricity will come from renewable sources. This includes getting remote and northern communities off diesel generators.
- To enable renewable electricity to flow across provincial and territorial boundaries, implement a

⁷ See https://spectrum.ieee.org/energywise/energy/renewables/100-percent-renewable-energy-for-139-countries-by-2050?utm_source=Stanford+Energy+News&utm_campaign=3ea6499ddc-EMAIL_CAMPAIGN_201
Bataille, C. et al. (2015). Pathways to deep decarbonization in Canada, SDSN - IDDRI.

national electrical grid strategy, including building connections between eastern Manitoba and western Ontario, and upgrading connections between New Brunswick and Nova Scotia. This will be paid for with money now allocated for expanding the Trans Mountain pipeline (\$1.6 billion announced in December 2018, towards an estimated \$10-13 billion), and create thousands of jobs nation-wide.

- ~~Work with provincial governments to determine which orphaned oil and gas wells are geologically suited to produce geothermal energy. This will turn provincial liabilities into potential income-generating renewable energy, ideally in partnership with First Nations. Those with weaker geothermal energy potential may be used in district energy, including for greenhouses.~~

[new bullet] Work with provincial governments to determine which orphaned oil and gas wells are suited to store energy using pumped hydro or compressed air techniques. Also, some wells may be able to provide sufficient heat for greenhouses or even geothermal power generation. These actions will turn provincial liabilities into potential income-generating assets, ideally in partnership with First Nations^{8.1}.

- Launch a massive energy efficiency retrofit of residential, commercial and institutional buildings. To make a renewable energy transition possible, we have to eliminate energy waste. According to trade union research, this will create over four million jobs.
- ~~Finance building retrofits and installation of renewable energy technologies such as solar and heat pumps through direct grants, zero-interest loans and repayments based on energy/cost savings.~~ [delete]
- Change the national building code to require new construction to meet net-zero emission standards by 2030 and work with the provinces to enact it.⁸

[new bullet] Finance building energy efficiency retrofits such as passive house techniques, heat pumps and district heating/cooling through direct grants, zero-interest loans and repayments based on energy/cost savings^{8.2}.

TRANSPORTATION

The transportation sector produces over a quarter of Canada's climate pollution and this is growing. A Green government will develop a national transportation strategy with a goal of reaching zero-carbon public ground transportation everywhere in Canada by 2040. Rail will be the hub, with spokes of light rail and electric bus connections. This includes service to rural and remote communities, since everyone in Canada must have access to reliable transportation options at affordable rates. Besides reducing pollution, this measure responds to the findings of the Inquiry into Missing and Murdered Indigenous Women and Girls.

To get there, Canada needs regulations to shift from gasoline-powered transportation.

- Ban the sale of internal combustion engine passenger vehicles by 2030.
- Exempt new and used electric and zero-emission vehicles from federal sales tax.
- Expand charging stations for electric vehicles, including all parking lots associated with federal facilities.

⁸ Building codes are regulated provincially, based on a national code. Achieving this would require provincial cooperation. A net-zero building produces as much energy as it uses.

[new footnote] 8.1 <https://arpa-e.energy.gov/sites/default/files/Michael-Campos-Fast-Pitch-2018.pdf>

[new footnote] 8.2 100% Clean, Renewable Energy and Storage for Everything (2021) by Dr Mark Jacobson, page 38

- ~~Maximize emissions reductions in all transportation through the use of sustainably produced biofuels, made from waste wood by-products and used vegetable oils, where electric and fuel cells not viable, as is the case for fishing, mining and forestry equipment.~~

[delete]

- Enact the Via Rail Act to implement a passenger rail transportation policy. Invest \$500 million in 2020-21, rising to \$720 million by 2023 to develop regional rail networks and strengthen rail connections between regions. This will include building several sections of 10 km of track to avoid bottlenecks where heavy freight pushes passenger rail to the siding.
- Build high-speed rail in the Toronto-Ottawa-Quebec City triangle and the Calgary-Edmonton corridor.
- Require all passenger ferries to convert to electric or hybrid systems by 2030.

[new bullet] Restrict the sale of new light/medium/heavy duty trucks to zero-emission vehicles by 2035^{8,3}.
transportation.

- Develop a Green Freight Transport program to address greenhouse gas emissions and pollution in partnership with the freight industry, shipping companies and delivery businesses. Fund the re-routing of tracks for freight and rail yards away from populated areas and strengthen Canada's rail safety rules, giving regulators the tools they need to protect neighbourhoods from train shipments of hazardous materials.
- Lead an international effort to bring international shipping and aviation into the Paris framework. Introduce an international tax for aviation and shipping fuels earmarked for the Global Climate Fund

[new footnote] 8.3 www.geotab.com/white-paper/heavy-duty-fleet-electrification-trends/



AGRICULTURE

In August 2019, climate scientists released a report warning that agriculture must be transformed in order to meet climate change goals. Canada has a huge opportunity to become a world leader in reversing climate change through regenerative agriculture practices. The soil will be the unsung hero, a game-changer in fighting climate change.

- Implement national standards for reducing the use of nitrogen fertilizers in crop agriculture, reducing erosion and rebuilding soils to retain carbon, and transitioning away from industrial livestock production (see Food and Food Security).
- Support the transition of industrial agriculture systems to regenerative agriculture. (See Food and Food Security).

ADAPTING TO CLIMATE CHANGE: INVESTING IN CRITICAL INFRASTRUCTURE

Even the one-degree warming already reached is producing unusually severe flooding, fires, drought and extreme weather events. It is essential that public infrastructure and natural landscapes can withstand and protect Canadians from natural and climate change induced disasters.

- Direct the Canada Infrastructure Bank, revamped to exclude private profit in infrastructure, to invest in climate-proofing essential infrastructure, prioritizing upgrades to drinking water and waste water systems to protect against flooding, droughts and contamination.
- Using the existing Green Infrastructure Fund, launch a national program to restore natural buffer zones along waterways, and carbon sinks through ecologically sound tree-planting and soil re-building.
- Invoke federal powers for peace, order and good government to develop non-commercial aspects of forest management, such as massive tree planting, creating fire breaks and fire suppression, for climate change adaptation.⁹
- Renew the abandoned process of a National Forest Strategy, with the focus on restoring ecologically sound and climate resilient forests, and restoring forests as carbon sinks, in partnership with Indigenous Peoples. Orient federal forest science towards this goal.
- Increase forest fire preparedness, including buying water bombers and ensuring they can be deployed rapidly in high-risk zones.

⁹ Forest management in areas of commercial forest is provincial jurisdiction, but the climate emergency requires that the federal government engage.