

Federal Government - Climate Change Information, Roles and Responsibilities



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Note to Reader

This supporting document (Federal Government – Climate Change Information, Roles and Responsibilities) was developed to help the reader understand that:

- various levels of government have responsibilities and programs for climate change (mitigation and adaptation). These responsibilities often include legislative and regulatory authority;
- actions at the local government cannot conflict with senior levels of government;
- senior levels of government have additional revenue generation opportunities to pay for climate change initiatives compared with municipal government that generally only have municipal taxes, municipal rates (e.g., water, wastewater) and user fees and charges;
- to be most effective, comments, questions, concerns and ability to influence change is best focused on the correct level of government; and
- to be most effective, collaboration and action across all levels of government must be viewed as a high priority.

The table on the next page highlights generally which level of government leads in these climate change areas. Also note that with respect to municipalities, legislation and regulation at the provincial and federal level dictates how items are to be implemented by municipalities. The work contained in this supporting document covers developments and actions up to November 30, 2021. Additions may have occurred since that date.

The details in this document will be of interest to:

- Individuals and community groups
- Businesses and business groups
- Institutions and networks
- Academia
- Energy stakeholders and service providers
- Government staff at all levels



This supporting document was a key piece of work that informed the creation of the CEAP and assisted with support and consensus building at various levels within the City and with external stakeholders and partners. The Federation of Canadian Municipalities (FCM) is an important organization with respect to the municipal-federal climate change relationship.

City of London	Province of Ontario	Government of Canada
• Building permits • By-laws • Community improvement plans • Cycling and pedestrian infrastructure • Development approval • Land use planning • Local improvement charges • Public awareness, engagement and collaboration • Public transit • Residential rental property licensing • Social Housing • Transportation planning • Urban design standards • Vehicle-for-hire licensing • Waste reduction and management	• Carbon pricing • Clean fuel standard • Electricity and natural gas conservation programs • Electricity grid operation • Flood plain management (via Conservation Authorities) • Funding for public transit, social housing • Climate change funding investments • Highway Traffic Act rules, other legislation and regulation • Natural gas distribution • Ontario Building code • Provincial land use policies • Regional and inter-city transit • Research	• Approval for new technologies • Carbon pricing • Clean fuel standards • Consumer product energy efficiency standards • Electric vehicles charging incentives • Electric vehicle purchase incentives • Funding for public transit, social housing • Climate change funding investments • Inter-city railways • Interprovincial pipelines • Legislation and regulation • Model National Building Code • Vehicles fuel economy



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1. The Role of the Federal Government in Climate Change Actions

At a high level, the Government of Canada plays the leading role in the following climate change actions:

- **Carbon pricing** – through Environment and Climate Change Canada, for those provinces without a federally-approved carbon pricing system in place, the federal “backstop” pricing system has two parts: a regulatory charge on fossil fuels like gasoline and natural gas, known as the fuel charge, and a performance-based system for industries, known as the Output-Based Pricing System.
- **Clean fuel standards** – through Environment and Climate Change Canada, the federal Clean Fuel Standard will require liquid fossil fuel primary suppliers (i.e., producers and importers) to reduce the carbon intensity of their liquid fossil fuels used in Canada from 2016 carbon intensity levels.
- **Climate action incentives** – through many federal departments, provide financial grants and incentives for climate change mitigation and adaptation actions.
- **Consumer product energy efficiency standards** – through Natural Resources Canada, regulated products (e.g., appliances, heating and air conditioning equipment, etc.) must meet federal energy efficiency standards to be imported into Canada or shipped from one province to another for the purpose of sale or lease.
- **Funding for housing** – In concert with the Province of Ontario, provides funding for subsidized housing programs to eligible low- and moderate-income households in Ontario under two main categories: social housing and affordable housing.
- **Funding for public transit** – through Infrastructure Canada, provides funding programs that municipalities can use to develop specific transit projects.
- **Inter-city railways** – through Transport Canada and VIA Rail, provides funding to support the operation and expansion of passenger rail service for London.
- **Interprovincial pipelines and power lines** – through Natural Resources Canada and the Canada Energy Regulator, regulates pipelines and power lines that cross provincial and/or international borders.

- **National Energy Code for Buildings** – through Natural Resources Canada, establishes minimum requirements for building energy efficiency, including building envelope (walls, windows, roof, etc.), lighting, heating, ventilation, air conditioning, hot water heating, and electrical power systems.
- **Research Funding** – funding provided for climate change by a number of federal departments, including Environment and Climate Change Canada, Natural Resources Canada, the Natural Sciences and Engineering Research Council of Canada, and Mitacs.
- **Vehicle Fuel Efficiency Standards** – through Environment and Climate Change Canada, establishes minimum average fuel efficiency standards for vehicles sold in Canada.
- **Zero Emission Vehicle Charging Incentives**– through Natural Resources Canada, providing incentives to increase the availability of electric vehicle charging and hydrogen refuelling opportunities.
- **Zero Emission Vehicle Purchasing Incentives**– through Transport Canada, providing incentives to encourage the purchase or leasing of zero-emission vehicles as well as tax write-offs for Canadian businesses.

2. Canada's Climate Plan

In December of 2020, the Government of Canada introduced *A Healthy Environment and a Healthy Economy*, an updated plan that built on the earlier efforts as part of the 2016 *Pan-Canadian Framework on Clean Growth and Climate Change*.

In April 2021, the Federal Government revised its 2030 target to reducing total Canada-wide emissions to 40 to 45 percent below 2005 levels by 2030. It is also committed to net-zero emissions by 2050.

The Federal Government's climate actions focusses on the following:

- **Making the Places Canadians Live and Gather More Affordable by Cutting Energy Waste:** Energy efficient homes and buildings are more comfortable and cost less to power. This plan will make it easier for Canadians to improve the places in which they live and gather – which will cut pollution, make life more affordable and create thousands of good jobs and new careers in construction, technology, manufacturing and sales.
- **Making Clean, Affordable Transportation and Power Available in Every Community:** Canada will expand the supply of clean electricity through investments in renewable and next generation clean energy and technology, and encourage cleaner modes of transportation, such as zero-emission vehicles and transit. This will make our communities healthier, less congested and more vibrant.
- **Continuing to Ensure Pollution isn't Free and Households Get More Money Back:** Canada's approach to carbon pollution pricing has proven that it is realistic to meet the country's economic needs and environmental goals at the same time. The Government will continue to put a price on carbon pollution, rising through to 2030, while ensuring that the majority of households receive more money back than they pay in the jurisdictions where the federal backstop applies. These payments will move from annual to quarterly payments starting as early as 2022.
- **Building Canada's Clean Industrial Advantage:** To make sure that Canadians have good-paying, long-lasting jobs, there is a need to make certain that Canadian businesses are making and providing the low-carbon products, services and technologies that the world increasingly wants to buy. Clean, "Made-in-Canada" products, services and technologies can and should be the most sought after in the world. Through performance standards, investments and incentives, Canada will accelerate the work that its companies and innovators are doing to cut pollution and move to a cleaner economy. This will protect and create jobs now and into the future.

- **Embracing the Power of Nature to Support Healthier Families and More Resilient Communities:** Just as nature is under threat by climate change, it is also an ally in the fight against it. By planting two billion trees and better managing, conserving and restoring natural spaces, Canada will protect and enhance the natural areas that surround us and that contribute to fighting climate change. This will help cut pollution, clean the air Canadians breathe, make communities more resilient to extreme weather and create thousands of jobs for tree planters, technicians, nursery growers, field biologists, urban planners, and many others. Canada will also continue to move forward on its plan to protect 25% of its lands and oceans, including through a ban on harmful single-use plastics by 2021.

2.1. Progress on Climate Change Mitigation to Date as Reported by the Federal Government

Progress, as of November 30, 2021 on climate change mitigation actions that will assist London include:

2.1.1. Home Energy Retrofits

- Creating a national housing strategy that requires energy efficiency improvements for both retrofits and new builds and that has made investments in social housing upgrades, improving energy efficiency by at least 25%.
- Launched the [Canada Greener Homes Grant](#), which is providing up to 700,000 Canadian households with grants, of up to \$5,000, to make energy efficiency and climate resilience home improvements, supported by an EnerGuide evaluation.
- Invested \$10 million to recruit, train and mentor up to 2,000 new EnerGuide energy advisors who will conduct evaluations and provide expert advice to homeowners to meet increased demand, including efforts to recruit more women into this growing field.
- Dedicated \$4.4 billion to the Canada Mortgage and Housing Corporation for interest-free loans up to a maximum of \$40,000 to help Canadians complete deep home retrofits for energy efficiency and climate resilience protect their homes from climate risks.
 - Recognizing that lower-income households may not have the means to invest in high-efficiency technologies or benefit from their energy-cost savings, especially if the benefits are only available to homeowners and not to renters, this program will have a stream of funding to support low-income

homeowners and rental properties serving low-income renters.

2.1.2. Municipal and Community Buildings

- Investing \$1 billion in Budget 2019 in municipal energy efficiency initiatives delivered by the Federation of Canadian Municipalities. The funding is divided into four streams that are supporting:
 - municipalities in establishing innovative financing programs to support homeowners in undertaking home energy retrofits,
 - affordable housing providers in pursuing significant energy-savings through the retrofitting of existing units or the construction of new net-zero energy ready buildings, and
 - increased energy efficiency in community recreational buildings through energy monitoring and analysis, commissioning, and retrofits
- Launched the [Green and Inclusive Community Buildings](#) program which commits \$1.5 billion in projects that improve retrofits, repairs or upgrades, and new builds.

2.1.3. Commercial and Large-Scale Building Retrofits

- Canada Infrastructure Bank's \$2 billion target for green infrastructure, as part of its Growth Plan, will use innovative financing tools to work with public and commercial building owners on energy efficient retrofits.

2.1.4. Long-term Infrastructure Planning

- Working with provincial and territorial governments to develop and adopt increasingly stringent model building codes, with the ultimate goal of a net-zero energy-ready model building code by 2030 and a new model retrofit code for existing buildings.
- Taking action to ensure new federal buildings are net-zero and that all major building retrofits will be low-carbon as part of the updated greening government strategy.
- Published an Engagement Paper on Canada's first-ever [National Infrastructure Assessment, Building the Canada We Want in 2050](#), which will help identify needs and priorities for Canada's built environment.

2.1.5. Investments in Public Transit Networks

- In 2019, invested \$123 million in transit projects in London, including the creation of the three bus rapid transit routes (Wellington Gateway, Downtown Loop, and East Link).
- Setting aside \$28.7 billion through the Investing in Canada Plan to support public transit projects, including \$5 billion available for investment through the Canada Infrastructure Bank.
- Invested an additional \$14.9 billion in public transit funding over 8 years, which includes permanent funding of \$3 billion per year for Canadian communities beginning in 2026-27.

2.1.6. Zero-emission Buses and School Buses

- Announced \$2.75 billion investment for zero-emission buses over the next 5 years starting in 2021.
- Announced 3 agreements in principle between the Canada Infrastructure Bank and partners to support the purchase of zero-emission buses and school buses.

2.1.7. Zero-emission Vehicles

- Making zero-emission vehicles more affordable by providing Canadians with up to \$5,000 off their purchase of such a vehicle and full tax write-offs for businesses purchasing them.
- Investing more than \$460 million to ensure Canadians have access to EV chargers and alternative refueling where and when needed.
- Committed to provide \$295 million to the Ford Motor Company of Canada's \$1.8 billion project to build electric vehicles at its Oakville Assembly Complex.
- Announced new mandatory sales targets of 100% new light-duty vehicle and passenger trucks in Canada to be zero-emission by 2035.
- Introduced a 50% corporate tax cut for small and medium-sized businesses manufacturing zero-emission vehicles and components in Canada.

2.1.8. Promoting Active Transportation

- Announced the first-ever federal fund dedicated to building active transportation through Canada, supported by \$400 million in new investments that will help build new and expanded networks of pathways, bike lanes, trails, and pedestrian bridges.
- Launched consultations on Canada's first-ever national Active Transportation Strategy.

2.1.9. Clean Power

- Launched the Smart Renewables and Electrification Pathways Program to support projects that will lower emissions by investing in clean energy technologies, like wind, solar, storage, hydro, and geothermal.
- Purchasing renewable energy certificates for all federal government buildings and support the government's commitment to power federal buildings with 100% clean electricity by 2022.
- Signed an agreement in principle between the Canada Infrastructure Bank (CIB) and ITC Investment Holdings to invest \$1.7 billion in the Lake Erie Connector Project – a 117 kilometre underwater transmission line connecting Ontario with the PJM Interconnection - the largest electricity market in North America. The project will help lower electricity costs for customers in Ontario, improve reliability and security of Ontario's energy grid, and reduce emissions on both sides of the border.
- Launched a Small Modular Reactor (SMR) Action Plan which builds on the SMR Roadmap released in 2018, to lay out the next steps to develop and deploy this technology.
- Worked, and will continue to work, with provinces, territories, utilities, industry and interested Canadians to ensure that Canada's electricity generation achieves net-zero emissions before 2050.

2.1.10. Carbon Pricing

- Established a national minimum price on pollution starting at \$20 per tonne in 2019, increasing at \$10 per tonne annually to \$50 in 2022.
 - In Ontario, approximately 90% goes directly to people when they file their taxes through Climate Action Incentive payments, with the majority of households receiving more money back than they pay. Households that have reduced their fossil fuel use will have larger net savings. The remaining amount goes towards federally administered climate actions programs for Indigenous groups, small and medium-sized enterprises, and farmers.
 - The minimum price on carbon pollution will increase by \$15 per tonne each year starting in 2023 through to 2030, when it will reach \$170 per tonne.
- Creating an offset system to create opportunities for foresters, farmers, Indigenous communities and other project developers who implement innovative projects to reduce carbon pollution. In March 2021, announced draft regulations to establish the Federal Greenhouse Gas Offset System.

2.1.11. Supporting Clean Technology

- Invested more than half a billion dollars in Canadian clean technology firms since 2018 through the Business Development Bank of Canada (BDC), who is working with some 62,000 Canadian entrepreneurs.
- Invested \$750 million for Sustainable Development Technology Canada (SDTC) to support more Canadian entrepreneurs as they create and commercialize clean technologies and bring Canadian innovations to market.
- Introduced a 50% corporate clean technology tax cut in Budget 2021 for small and medium-sized businesses manufacturing zero-emissions technologies.
- Invested \$44.3 million in 11 Canadian clean technology companies that are leading breakthrough Canadian clean technology innovations through SDTC.
- Committed to investing up to \$1 billion in Budget 2021 to help draw in private sector investment for clean tech projects

2.1.12. Achieving Net-Zero Emissions

- Introduced and passed the Canadian Net-Zero Emissions Accountability Act. The legislation establishes in law Canada's 2030 emissions reduction target as our National Determined Contribution under the Paris Agreement of 40-45% below 2005 levels, our 2050 target of net-zero emissions, and sets legal requirements on the current government and future governments to plan, report, and course correct on the path to net-zero emissions by or before 2050.
- Initiated the Net-Zero Challenge for large emitters to support Canadian industries in developing and implementing plans to transition their facilities to net-zero by 2050.
- Partnered with the Canadian cement sector to support a roadmap to net-zero carbon concrete.
- Invested \$36.2 million in Budget 2021 to develop and apply a climate lens that ensures climate considerations are integrated throughout federal government decision-making.
- Announced a \$3 billion top-up to the Net-Zero Accelerator Fund in Budget 2021, bringing the total to \$8 billion to help expedite decarbonization projects with large emitters, scale-up clean technology, and accelerate Canada's industrial transformation across all sectors

2.1.13. Cleaner Fuels

- Launched the Hydrogen Strategy for Canada.
- Launched the \$1.5 billion Clean Fuels Fund to support the production and distribution of low-carbon and zero-emission fuels, including hydrogen and biomass.
 - This fund complements the Clean Fuel Standard which is a regulation that will increase the development and adoption of clean fuels and technologies by requiring that the fossil fuels that we use become progressively cleaner over time.

2.1.14. Carbon Capture, Utilization, and Storage (CCUS)

- Announced its intent in Budget 2021 to introduce an investment tax credit for capital invested in CCUS projects with the goal of reducing emissions by at least 15 million tonnes of CO₂ annually.
- Committed \$319 million over 7 years to support research, development, and demonstrations that would improve the commercial viability of carbon capture, utilization, and storage technologies.
- Begun the development of a CCUS Strategy for Canada, much like the Hydrogen Strategy, to ensure these decarbonisation technologies help us reach our GHG reduction goals and to keep Canada globally competitive in this growing industry.

2.1.15. Agricultural Solutions

- Investing over \$65 million across the federal Government to tackle food waste in Canada. This includes the \$20 million Food Waste Reduction Challenge, which is incentivizing dozens of Canadian innovators to identify, develop, and bring new solutions to market to reduce food waste.
- A \$50 million Surplus Food Rescue Program that was launched as part of Canada's response to the pandemic to redirect surplus food caused by disruptions across the restaurant and hospitality industry to food banks and other organizations addressing food insecurity in communities across Canada, which resulted in almost 8 million kilograms of food that was rescued.
- Investing almost \$25 million to advance innovation in the agricultural bioeconomy, through investments in bioplastics, bioproducts and \$20 million Food Waste Challenge.
- Investments of over \$19 million in biomass and bioproducts research clusters.
- Launched the \$165.7 million Agricultural Clean Technology Program to provide farmers and agri-businesses funding to develop and adopt the latest clean technologies to reduce greenhouse gas emissions and enhance their competitiveness.

2.1.16. Factoring Climate Risk into Decision Making

- Passed the Canadian Net-Zero Emissions Accountability Act which includes a requirement for the Government to publish an annual report outlining key measures that federal departments and Crown corporations have taken to manage the financial risks and opportunities related to climate change.
- Requiring companies who receive funding through the Large Employer Emergency Financing Facility (LEEFF) program to report on how their financial flows align with Canada's net-zero goals.
- Launched the Sustainable Finance Action Council, whose mandate is to support the growth of a well-functioning sustainable finance market in Canada and strengthen the mobilization of private capital in support of Canada's climate goals. The council comprises 25 organizations, which, combined, have more than \$10 trillion in assets.
- Committed in Budget 2021 to issue its first ever green bond in 2021-22. The inaugural green bond issuance will target \$5 billion, subject to market conditions, and will be the first of many issuances. These green bonds will give investors opportunities to finance Canada's work to fight climate change and protect the environment.
- Committed in Budget 2021 to ensuring more stringent reporting standards around climate risk, such as those developed by the Task Force on Climate-related Financial Disclosures Standards.
- Joined the Task Force on Nature-related Financial Disclosures, which is developing a framework for corporations and financial institutions to assess, manage, and report on dependencies and impacts on nature.

2.1.17. Nature-based Solutions

- Making \$3 billion available through the COVID-19 Resilience Infrastructure Stream to provinces and territories with added flexibility to fund quick-start, short term projects, including natural infrastructure and tree planting initiatives.
- Investing \$15 million in Forests Ontario to help ensure they can meet their goal of planting 50 million trees.
- Committed to, and confirmed to be on track to plant 2 billion trees over the next 10 years and is creating 4, 300 jobs in the process by:

- Signing agreements with a number of partners to ensure an initial 30 million trees will be planted in 2021 in both urban and rural areas.
- The new trees represent a 40% annual increase in the number of trees already being planted in the country and will sequester up to 12 million tonnes of GHGs annually by 2050.
- Launched the Agricultural Climate Solutions (ACS) program to establish regional hubs of collaborations in every province made up of farmers, scientists, and other sectoral stakeholders to develop and share best management practices that store carbon and mitigate climate change.
 - An additional \$200 million over 2 years was announced in Budget 2021 to support immediate, on-farm climate action under the program, which will target projects that accelerate emission reductions by improving nitrogen management, increasing adoption of cover cropping, and normalizing rotational grazing.
- Made progress in advancing the Nature Smart Climate Solutions Fund (NSCSF) which will provide \$631 million over 10 years towards projects that restore degraded ecosystems; improve land management practices; and conserve carbon-rich ecosystems at high risk of conversion to other uses that would release their stored carbon.
 - Committed \$60 million over the next 2 years, for the Nature Smart Climate Solutions Fund to target the protection of existing wetlands and trees on farms, including through a reverse auction pilot program

2.2. Progress on Climate Change Adaptation

- Invested an additional \$1.4 billion toward the Disaster Mitigation and Adaptation Fund (DMAF) to further support projects such as wildfire mitigation activities, rehabilitation of storm water systems, and restoration of wetlands and shorelines.
- Established a Natural Infrastructure Fund to support natural and hybrid infrastructure projects and help to improve well-being, mitigate the impacts of climate change, and prevent costly natural events.
- Renewed the Standards to Support Resilience in Infrastructure Program, continuing work to update standards and guidance in priority areas such as flood mapping and building in the North.

- Worked with provinces and territories to complete flood maps for higher-risk areas (Note: an additional \$32 million has been allocated and budget approved to assist provincial governments in flood hazard identification and hazard mapping with Ontario to get a 'significant' portion based on population (Nov/21).
- Better supported First Nations and Inuit as they manage the health impacts of climate change, such as access to country food, impacts of extreme weather events, and mental health impacts of climate change on youth.
- Invested \$1.9 billion over 5 years, on a cash basis, starting in 2021–22, to Public Safety Canada to support provincial and territorial disaster response and recovery efforts.
- Advanced early engagement with partners and stakeholders on the development of Canada's National Adaptation Strategy, which the Government committed to developing in A Healthy Environment and A Healthy Economy.
- As noted earlier, dedicated \$4.4 billion to the Canada Mortgage and Housing Corporation for interest-free loans up to a maximum of \$40,000 to help Canadians complete deep home retrofits for energy efficiency and climate resilience protect their homes from climate risks. Eligible climate resilience measures could include flood proofing basements.