GREEN BUDGET COALITION

RECOMMENDATIONS FOR BUDGET 2024

FEATURING

1. **Nature Protection and Recovery**
2. **Renovation Wave and Affordable Home Energy**
3. **Zero-Emissions Electricity**
4. **Sustainable Jobs**
5. **Sustainable Agriculture**

Alliance of Canadian Land Trusts / Alliance canadienne des organismes de conservation
ALUS
CAPE Canadian Association of Physicians for the Environment / Association canadienne des médecins pour l'environnement ACME
Canadian Environmental Law Association — Equity. Justice. Health.
CPAWS — Canadian Parks and Wilderness Society
Canadian Wildlife Federation
David Suzuki Foundation — One nature.
Ducks Unlimited Canada
ecojustice
Ecology Action Centre
Équiterre
Les Ami(e)s de la Terre / Friends of the Earth
IFC — where nature needs us most — International Conservation Fund of Canada
IISD — International Institute for Sustainable Development
Nature Canada
Nature Conservancy Canada
Nature United
PEMBINA institute
West Coast Environmental Law
Wildlife Habitat Canada / Habitat faunique
WWF

Contents

Cover photos: Jeremy Hynes and ICE

Likely lead departments & agencies

Department and agency acronyms are listed on page 91.

This document will be available, in English and French, at www.greenbudget.ca.

INTRODUCTION & EXECUTIVE SUMMARY

We are now in an emergency. Extreme heat, floods, fires, stronger storms, ecological disruption, dramatic loss of wildlife populations, and a rapidly warming Arctic are being felt in Canada and around the world, causing widespread harm and more so to low-income and vulnerable people. Science indicates that these and other impacts will intensify if climate change and ecosystem destruction remain unchecked.[1]

It is critical to take stronger action on the related climate and biodiversity crises.

The Green Budget Coalition, comprising 21 of Canada's leading environmental organizations, appreciated the major federal funding announcements for climate and nature in Budget 2023 and at the UN Convention on Biological Diversity COP15 in

Photo: Courtney Smith

1 See for example, the UN's International Panel on Climate Change 2021 report, "AR6 Climate Change 2021: The Physical Science Basis, Summary for Policy Makers", at https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM.pdf, and the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) May 2019 report at https://ipbes.net/global-assessment

Montreal, and urges the government to continue to seize this opportunity to address the twin climate and biodiversity crises, create sustainable jobs, make life more affordable, and ensure enduring prosperity and well-being for all.

Canada will need to effectively use such existing funding and make further large investments in order to meet important commitments and targets.

For nature and biodiversity, Canada's leadership in landing an ambitious new international framework for halting and reversing biodiversity loss (the Kunming-Montreal Global Biodiversity Framework) last December now must be followed by leadership to implement the agreement. Funding a comprehensive package of strategic measures to drive nature conservation and restoration in Canada is urgently needed and will also play a critical role in contributing to climate action.

On climate change, Canada needs to achieve a 60% reduction in GHG emissions below 2005 levels by 2030[2] and contribute our fair share to global emission reductions. Budget 2022 noted that $125-140 billion needs to be invested in climate action per year by 2050.[3] According to a 2023 report from the Canadian Centre for Policy Alternatives, quickly decarbonizing every sector of our economy would require investing 2% of Canada's GDP over five years for a total of $287 billion, averaging $57 billion per year in addition to spending planned for 2022-2023.[4]

Such investments will be amply repaid, with environmental, economic, and health benefits.

Building on the Green Budget Coalition's expertise and consultations, this document provides a comprehensive package of ambitious and timely budget and fiscal recommendations which would advance major progress on nature and climate, while creating jobs, increasing equity and protecting individual and collective health.

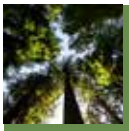
Photo: Christal Yuen Wu

2 While the Green Budget Coalition appreciates the federal government's recent efforts to meet the current 2030 GHG emission reduction target of 40-45% below 2005 levels is welcome, the GBC - and many others - considers this target largely insufficient for the country to do its fair share of the global effort to limit global warming to below 1.5°C. As such, leading Canadian environmental NGOs call for actions that lead to 60% emissions reductions below 2005 levels by 2030 domestically, and more action internationally. See, for example, Christian Holz, "Deriving a Canadian Greenhouse Gas reduction target in line with the Paris Agreement's 1.5°C goal and the findings of the IPCC Special Report on 1.5°C". https://climateactionnetwork.ca/wp-content/uploads/2019/12/CAN-Rac-Fair-Share-%E2%80%94-Methodology-Backgrounder.pdf

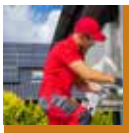
3 Government of Canada "A Plan to Grow Our Economy and Make Life More Affordable", Chart 3.1 (2022). https://budget.gc.ca/2022/pdf/budget-2022-en.pdf

4 Canadian Centre for Policy Alternatives, "Spending What It Takes" (2023). https://policyalternatives.ca/publications/reports/spending-what-it-takes

The Green Budget Coalition is featuring five recommendations for Budget 2024:

1 

Financing nature protection and recovery in Canada – Deliver on Canada's commitment to halt and reverse biodiversity loss by fully implementing the Kunming–Montreal Global Biodiversity Framework; creating a true nature–climate nexus by aligning the scale and maximizing complementarities between nature and climate investments, prioritizing permanent and long–term financing to support Indigenous–led conservation, and eliminating nature–negative subsidies;

2 

Renovation wave for climate resilient homes and affordable home energy – Recommending the federal government expand, complement, and coordinate existing investments and programs across all departments and centrally deliver home upgrades to ensure impactful investments that integrate health, affordability, and adaptation targets, and accommodate the unique needs of Indigenous, northern and remote communities ($24.3 billion over five years);

3 

Advancing a zero–emissions electricity grid based on renewables – Essential steps towards the major transformational investments required in the transmission, generation, and demand side of electricity, including remote Indigenous communities ($26 billion over five years);

4 

Sustainable jobs for a net–zero Canada – Scaling up investment in transition planning, job creation, and worker supports to ensure workers and communities have a smooth transition to a low–carbon economy ($12.2 billion over five years); and

5 

Sustainable agriculture – Key recommendations to help producers and Canada be leaders in sustainable and innovative agriculture with a resilient and diversified food system ($4.5 billion over five years, then $134 million per year, ongoing).

For all new and ongoing environmental programs, we emphasize the importance of effective implementation, monitoring, and evaluation to ensure successful outcomes.

Relatedly, it is critical to maintain the government's core capacity for environmental governance and environmental and climate science, programs, and policy, and to not sacrifice it in the interests of short-term financial savings. The Green Budget Coalition is concerned that the 3% cut to federal departments' base budgets, announced in 2023, will constrain core capacity at a critical time, especially at ECCC, and hinder Canada's ability to effectively implement environmental priorities.

Canada must also strive to advance and embed climate, biodiversity and environmental justice goals across government, using tools such as net-zero industrial policy, climate and biodiversity conditions on new funding transfers, climate and biodiversity lenses on spending and policy measures, and a national environmental justice strategy and screening tools.

Many of the recommendations in this document are relevant to the rights and authorities of Indigenous peoples—First Nations, Inuit, and Métis—whose traditional territories and knowledge are integral to the achievement of Canada's climate and conservation goals. These recommendations should be considered in the context of reconciliation, and pursued in a manner in keeping with the United Nations Declaration on the Rights of Indigenous People.

Implementing these Green Budget Coalition recommendations would lead to transformative progress in advancing enduring environmental, economic, and social prosperity for all peoples in Canada from coast to coast to coast.

GBC Feature Recommendations – Alignment with Government Priorities

		Mitigation: Reducing GHG emissions	Adaptation & resilience	Halt & reverse biodiversity loss	Clean growth & job creation	Equity, health & well-being
1	**Nature Protection & Recovery**	✔	✔	✔	✔	✔
2	**Renovation Wave & Affordable Home Energy**	✔	✔		✔	✔
3	**Zero-Emissions Electricity**	✔	✔		✔	✔
4	**Sustainable Jobs**	✔	✔	✔	✔	✔
5	**Sustainable Agriculture**	✔	✔	✔	✔	✔

Who We Are

The Green Budget Coalition (GBC), founded in 1999, brings together twenty-one leading Canadian environmental and conservation organizations, which collectively have over one million Canadians as members, supporters, and volunteers.

Our Mission

The mission of the Green Budget Coalition is to present an analysis of the most pressing issues regarding environmental sustainability in Canada and to make a consolidated annual set of recommendations to the federal government regarding strategic fiscal and budgetary opportunities.

Our Vision

The Government of Canada contributes to securing and maintaining the environmental sustainability of Canada through appropriate investments in environmental programs, and through the adoption of appropriate policies related to taxation, pricing, and subsidies.

Objectives

- To bring together the collective expertise of leading Canadian organizations regarding the important environmental issues facing Canada;
- To prepare and promote prioritized recommendations annually to the federal government on policies, actions and programs whose implementation would advance environmental sustainability and which could be reflected in the federal budget; and
- To monitor federal budget decisions and spending estimates and to track Green Budget Coalition recommendations with a view to assessing the likely effect of budgetary and fiscal decisions on the environment and to evaluating the Green Budget Coalition's impact on fiscal policy and budgetary actions.

The Green Budget Coalition's Co-Chairs are Sabine Jessen, Senior Strategic Advisor, Ocean Program, Canadian Parks and Wilderness Society (CPAWS) and Will Bulmer, Lead Specialist, Government Relations, World Wildlife Fund (WWF) Canada.

The Green Budget Coalition sincerely thanks the Catherine Donnelly, Echo, Gosling, Ivey, McConnell, McLean, Metcalf, Sitka, and Willow & Grace Foundations for their generous financial support. The Green Budget Coalition's efforts are funded by its members and these foundations.

Feature Recommendations

1 FINANCING NATURE PROTECTION & RECOVERY IN CANADA

Photo: Eelco Bohtlingk

In December 2022, Canada hosted the 15th Conference of the Parties (COP15) to the United Nations Convention on Biological Diversity (CBD) in Montreal. COP15 landed a historic global agreement to protect nature — the Kunming–Montreal Global Biodiversity Framework (KMGBF).[5] During the conference, Canada committed[6] to work with rights holders, provincial and territorial governments and stakeholders to develop a whole–of–government National Biodiversity Strategy and Action Plan to achieve Canada's targets, including protecting at least 30% of land and ocean by 2030. More and longer–term financial resources from all sources will be needed to implement this strategy and deliver nature–positive outcomes.

The stark realities of climate change and biodiversity loss are increasingly evident across Canada. These deeply intertwined issues pose existential threats to our society,

5 Convention on Biological Diversity, "Kunming-Montreal Global biodiversity framework". https://www.cbd.int/doc/c/e6d3/cd1d/daf663719a03902a9b116c34/cop-15-l-25-en.pdf

6 Environment and Climate Change Canada, "Statement by the Honourable Steven Guilbeault on the opening of the high-level segment of COP15". https://www.canada.ca/en/environment-climate-change/news/2022/12/statement-by-the-honourable-steven-guilbeault-on-the-opening-of-the-high-level-segment-of-cop15.html

environment, and economy. Studies show that more than half of global GDP, amounting to $44 trillion, depends on nature.[7] The World Economic Forum has identified biodiversity loss and ecosystem collapse as a top global risk.[8]

The biggest direct driver of biodiversity loss globally and in Canada is habitat destruction, with climate change growing in significance. Thus, protecting, managing, and restoring land and ocean ecosystems is key to halting and reversing biodiversity loss.[9] Such actions also contribute to climate change mitigation by safeguarding carbon stored in peatlands, wetlands, forests, grasslands, ocean and coastal ecosystems, and removing carbon dioxide from the atmosphere. These "nature-based solutions" promote environmental resilience, and directly support Canada's National Adaptation Strategy.

Much of the work to protect, restore and sustainably manage biodiversity hinges on the Government of Canada's recognition of Indigenous jurisdiction and title, and effective co-management of protected lands and ocean with Indigenous governments, through cooperative federalism. Indigenous-led and co-led conservation and stewardship initiatives offer a pathway to deliver on biodiversity and climate change goals, incorporating traditional knowledge, cultural values, and sustainable practices.

Nature loss and climate change are intrinsically interlinked – a failure in one sphere will cascade into the other. Without significant policy change or investment, the interplay between climate change impacts, biodiversity loss, food security and natural resource consumption will accelerate ecosystem collapse, threaten food supplies and livelihoods in climate-vulnerable economies, amplify the impacts of natural disasters, and limit further progress on climate mitigation.

—World Economic Forum Global Risks Report 2023

Photo: Andy Holmes

7 World Bank, Securing Our Future Through Biodiversity, https://www.worldbank.org/en/news/immersive-story/2022/12/07/securing-our-future-through-biodiversity

8 World Economic Forum (2023). Global Risks Report 2023, https://www.weforum.org/reports/global-risks-report-2023/digest

9 IPBES (2019), Global Assessment Report on Biodiversity and Ecosystem Services, https://www.ipbes.net/global-assessment

Permanent financing arrangements—including endowment funds and Project Finance for Permanence—co-designed and managed by Indigenous peoples and institutions, are needed to ensure long-lasting gains, while providing the reliability that Indigenous communities need to embark on ambitious conservation initiatives that uphold their socio-economic and cultural values.

Delivering the transformational change required to effectively tackle the twin crises of biodiversity loss and climate change requires that biodiversity and ecosystem services are recognized and factored into decision-making and investments across governments and society and that public policies and financial flows are aligned with framework goals and targets.[10]

Photo: Ivan Fox

The KMGBF commits Canada to "identify, phase out or reform incentives, including subsidies, harmful for biodiversity…".[11] This is the single biggest opportunity for catalyzing a nature-positive economy.[12,13] Current spending on practices that degrade nature far outstrips spending on those that conserve and restore it. Action is urgently needed to identify environmentally harmful subsidies in Canada[14] and to pursue innovations in federal subsidy and tax reform, budgeting and policymaking, and leadership in the expansion of green financial products, to improve coherence between economic and environmental policy, and reorient the flow of public capital to catalyze new nature-positive economic opportunities.

Recommendation:

To deliver on Canada's nature protection and recovery commitments, the federal government must:

- **Invest in long-term financing arrangements to support Indigenous-led and co-led conservation initiatives and partnerships** to protect, restore and steward land and ocean ecosystems, and to support provincial/territorial governments, civil society and others to be good partners in this work;
- **Increase investment to biodiversity and ecosystem services** closer to the level for climate change, sending a clear signal that the climate and biodiversity crises are interdependent, pose significant risk to society, and must be addressed in tandem; and

10 Government of Canada (2021), Canada's Climate Actions for a Healthy Environment and a Healthy Economy. https://www.canada.ca/en/services/environment/weather/climatechange/climate-plan/climate-plan-overview/actions-healthy-environment-economy.html

11 Kunming-Montreal Global Biodiversity Framework (cbd.int)

12 Deutz, A., Heal, G. M., Niu, R., Swanson, E., Townshend, T., Zhu, L., Delmar, A., Meghji, A., Sethi, S. A., and Tobin de la Puente, J. 2020. Financing Nature: Closing the global biodiversity financing gap. The Paulson Institute, The Nature Conservancy, and the Cornell Atkinson Center for Sustainability.

13 Target 18 of the Kunming-Montreal Global Biodiversity Framework requires governments to "identify by 2025, and eliminate, phase out or reform incentives, including subsidies, harmful for biodiversity[…]." This target is complemented by several other agreements to which Canada is a signatory. Under the G7 2030 Nature Compact (June 2021) governments committed to "lead by example by reviewing relevant domestic policies as soon as possible and […] take action as appropriate to develop replacements that are nature positive"; the Leaders' Pledge for Nature (September 2020) commits signatories to "eliminate or repurpose subsidies and other incentives that are harmful to nature, biodiversity and climate while increasing significantly the incentives with positive or neutral impact for biodiversity across all productive sectors.

14 Subsidies are fiscal policy tools used by governments that aim to benefit a specific population or sector through production support, income support, or reduced costs of inputs. Subsidies deemed harmful to biodiversity are those that induce production or consumption activities that exacerbate biodiversity loss, particularly important within the agriculture, fisheries, and forestry sectors. For more detail on approaches to defining subsidies that are harmful to biodiversity see Deutz et al. Financing Nature: Closing the global and Matthews and Karousakis (2022) https://doi.org/10.1787/3e9118d3-en

- **Identify, and eliminate or redirect subsidies that harm nature,** and realign existing federal funding programs (e.g., infrastructure) to support nature and climate-positive actions.

The Green Budget Coalition has developed a list of priority actions, costing $16 billion over seven years and $1.8 billion annually thereafter—for details, please see *Financing Nature Protection and Recovery in Canada – Detailed Recommendations*, later in this document.

Even if every recommendation in the *Financing Nature Protection and Recovery in Canada – Detailed Recommendations* section is implemented, there would be more work to do. Nonetheless, these recommended actions are a tangible start towards ensuring Canada's diverse and unique species, habitats, and ecosystems are safeguarded for future generations along with the prosperity and economic opportunities that depend on them.

[ECCC, NRCan, DFO, PC, FIN, PCO, TC, AAFC, CIRNAC, ISC, ISED, CFIA, PS, PHAC, HC, PMRA, GAC, StatCan]

Contacts

Gia Paola – g_paola@ducks.ca
Shaughn McArthur – shaughn.mcarthur@natureunited.ca
Sabine Jessen – sjessen@cpaws.org
Michael Polanyi – mpolanyi@naturecanada.ca
Will Bulmer – wbulmer@wwfcanada.org
Shannon Arnold – sarnold@ecologyaction.ca
Kilian Stehfest – kstehfest@davidsuzuki.org

Photo: Shivam Kumar

2 A RENOVATION WAVE FOR CLIMATE RESILIENT HOMES AND AFFORDABLE HOME ENERGY

Meeting Canada's emission reductions, climate adaptation, and affordability targets requires a massive building upgrade process and the elimination of carbon emissions from Canadian homes and buildings before mid-century. Achieving this entails:

1. Phasing out on-site combustion of fossil fuels;
2. Upgrading building envelope and ventilation systems;
3. Connecting to clean energy, mainly electricity from wind, solar, and hydro; and
4. Accommodating the unique needs of Indigenous communities.

This would ensure all homes are able to reduce energy costs, improve indoor air quality, and protect occupants and housing infrastructure from extreme weather, air pollution and earthquakes.

The government has made significant progress on policies and programs that support building retrofits and decarbonization. However, large capital investment and regulations that align with net-zero emissions targets are still required. The Deep Retrofit Accelerator Initiative allocated $185 million and the Greener Neighbourhood

Photo: iStock

Pilot Program (GNPP) allocated $33.5 million to programmatic supports for accelerating deep retrofits followed by a second GNPP call for applications for Energiesprong-inspired demonstration project capital support. The Oil to Heat Pump Affordability Program and the assistance available to provinces through the $250 million Low Carbon Economy Fund Home Heating Oil Transition have been effective, however many low-income energy users are left out of the program as it is currently designed. Canada Mortgage and Housing Corporation's recent Greener Affordable Homes Program awards up to $170,000 per unit in multi-unit residential buildings for a deep retrofit that achieves at least 80% GHG reductions and aggressive energy reductions for affordable rental buildings, which sets the bar for zero-cost deep retrofits. This is the level of funding needed to ensure Canadians living with energy poverty can live in healthy, safe, affordable and resilient homes.

The National Adaptation Strategy has set a goal to eliminate heat-related deaths but lacks any targets or strategies for deep retrofitting homes to be able to meet this goal. While we are anticipating that the Canada Green Building Strategy (CGBS) will fill this gap and be a catalyst to dramatically increase the rate of deep retrofits, resulting in fuel switching and increased energy-efficiency across the country, it has yet to be adopted. Canadian policy-makers urgently need to adopt the CGBS and empower it with targeted regulation and capital funding designed to stimulate labour and industry growth, and market demand, while addressing the needs of Canadians living with energy poverty.

Photo: Jeannette Gallant

The Canadian Urban Sustainability Practitioners network defines energy poverty as the experience of households or communities that struggle to heat and cool their homes and power their lights and appliances. While experience of energy poverty varies regionally, approximately one in five Canadian households struggle to pay energy bills and make choices between paying utility bills and for necessities such as housing and food.

The Green Budget Coalition recommends that the federal government coordinate existing investments and programs across all departments and centrally deliver home upgrades to ensure impactful investments that integrate health, affordability, and adaptation targets, and accommodate the unique needs of Indigenous, northern and remote communities. We also recommend that the federal government leverage investments in low-income housing retrofits by working directly with supply chains to simplify the incentive process and remove the need for upfront financial outlay by households living with energy poverty. Consideration should be given to the procurement and incentive tools that can also address embodied carbon and advance low-carbon materials. Channeling incentives through manufacturers, suppliers and installers sends a strong signal that industry should invest in supply chain growth and labour development to meet market growth.

Background:

To meet emissions reduction targets, Canada must develop a retrofit industry able to decarbonize 600,000 dwellings and more than 30 million square metres of commercial space each year by 2040.[15] This industry must be equipped to serve households of all income levels and in all regions of the country.

Federal government programs must be designed to both scale up industry capacity and ensure that households living with energy poverty can access programs designed to transition away from fossil fuels, afford their everyday energy needs, and benefit from clean energy.

15 Pembina Institute, *Canada's Renovation Wave: A plan for jobs and climate*. 2021. https://www.pembina.org/pub/canadas-renovation-wave

The federal government must establish a targeted effort to analyze and address the housing needs of Indigenous communities and members of urban Indigenous populations led by Indigenous agencies and community representatives who would set the priorities and determine investment needs and allocation.

- The total public investment needed to stimulate decarbonization and climate-proofing of Canada's existing building stock has been estimated at **$10- 15 billion per year for ten years**, covering 50-75% of the incremental cost of the required upgrades (above normal replacement costs).[16]
- The Indigenous Clean Energy (ICE) *Indigenous Housing Energy Efficiency Data Set*[17] estimates 209,000 homes in Indigenous communities across Canada (121,000 First Nation, 13,000 Inuit, 75,000 Métis) require energy efficiency upgrades. Combined with the need for about 72,000 new homes, **this represents an investment of $5.4 billion**. These numbers generally reflect rural, remote and on-reserve homes.

To be truly transformative, the early-stage retrofit accelerators and market development programs should be connected to last-mile capital funding to tie into cutting edge whole-building solutions, such as those that emerged from the Energiesprong program. In Europe, this has resulted in technologies like prefabricated retrofit panels and all-in-one HVAC units now being manufactured and implemented. Support for transformation of the construction industry is also necessary for scaling beyond one-off unicorn projects. Specific, targeted funds must also be directed to ensure households living with energy poverty have access to energy efficiency measures.

Photo: Gennifer Miller

16 Pembina Institute, Canada's Renovation Wave: A plan for jobs and climate. 2021. https://www.pembina.org/pub/canadas-renovation-wave

17 Indigenous Clean Energy, Energy Foundations. 2021 https://indigenouscleanenergy.com/wp-content/uploads/2022/06/Energy-Foundations-Report-FINAL.pdf

Recommended Investment:

To begin ramping up to the full investment level needed, the Green Budget Coalition recommends that the 2024 federal budget allocate **$24.3 billion over five years,** including:

- **$20 billion over five years** for no-cost home retrofits and heating electrification, including heat pumps, for households experiencing energy poverty, with assurances to include and protect renters. Within this funding stream, special attention should be paid to rental buildings, non-market, and social housing (through the National Housing Strategy) and include climate adaptation measures that not only reduce heating energy demand and carbon emissions, but also make them healthier, safer and resilient.[18] [NRCan, CMHC, HC, INFC]
- **$7.5 million over five years** for the development of a **National Affordable Home Energy Strategy** with clear actions and outcomes to address energy affordability in Canada. This national strategy should be developed with a focus on energy poverty, with the input of a new advisory group and in coordination with the National Adaptation Strategy and Canadian Green Building Strategy. This new Strategy would set targets for the reduction of energy poverty across the country, seek to identify which gaps should be addressed, and create new programs to address those gaps through federal programs or joint programs with the provincial governments. [NRCan, INFC]
- **$2.7 billion over five years** for retrofits and energy efficiency upgrades for housing in Indigenous communities, as identified by Indigenous Clean Energy.[19] [ISC, CMHC, CIB, INFC]
- **$1.5 billion over five years** for skill development, capacity building and recruitment, with funds earmarked to increase equity and diversity in the retrofit economy.[20] [NRCan, ISED, HC]
- **$125 million over five years** for last-mile capital investment in 15-20 transformative deep retrofit demonstration projects identified by deep retrofit accelerator and market development teams. [NRCan]
- Capitalizing a loan guarantee program to reduce the risk to private financing of building retrofits.[21] [CMHC, CIB, NRCan, INFC]

Photo: Pembina Institute

Contacts

Jessica McIlroy – jessicam@pembina.org
Jacqueline Wilson – jacqueline@cela.ca
Stephen Thomas – sthomas@davidsuzuki.org
Chris Benjamin – chris.benjamin@ecologyaction.ca

18 Based on the modeling used in the Pembina Institute report Canada's Renovation Wave: A plan for jobs and climate. 2021. https://www.pembina.org/pub/canadas-renovation-wave

19 Based on the costs estimate of Indigenous Clean Energy in their Energy Foundations report. 2021. https://indigenouscleanenergy.com/wp-content/uploads/2022/06/Energy-Foundations-Report-FINAL.pdf

20 This mirrors the recommendations of the Canada Green Building Council and Efficiency Canada: see https://electricenergyonline.com/article/energy/category/environment/18/834780/cagbc-tables-recommendations-for-canada-spost-covid-19-economic-recovery.html and https://www.efficiencycanada.org/wp-content/uploads/2020/09/EffCan-2020-Advocacy-federal-Pre-budget-submission.pdf

21 Équiterre and the Pembina Institute, "Federal Policies for Low-Carbon Buildings: A blueprint to implement the PanCanadian Framework buildings strategy." https://www.pembina.org/pub/federal-buildings-blueprint

3 ADVANCING A ZERO-EMISSIONS ELECTRICITY GRID BASED ON RENEWABLES

Canada has committed to achieving a zero-emissions electricity system by 2035. Analyses by the IEA and UNFCCC have determined that this is required to be in-line with the goal of the Paris Agreement.[22] It is a foundational climate solution that will unlock emissions reductions and affordable energy for other sectors. To reach this goal, the draft Clean Electricity Regulations must be strengthened and finalized without delay and paired with strategic investments in clean electricity infrastructure.

Budget 2023 saw unprecedented support for clean electricity infrastructure. This down-payment was crucial for kick-starting a transformation of Canada's electricity system, but more funding is needed to insure affordable, secure, zero-emissions

22 International Energy Agency "Ne Zero by 2050: A Roadmap for the Global Energy Sector" (2021). https://iea.blob.core.windows.net/assets/deebef5d-0c34-4539-9d0c-10b13d840027/NetZeroby2050-ARoadmapfortheGlobalEnergySector_CORR.pdf

United Nations "Secretary-General Calls on States to Tackle Climate Change 'Time Bomb' through New Solidarity Pact, Acceleration Agenda, at Launch of Intergovernmental Panel Report" (2023). https://press.un.org/en/2023/sgsm21730.doc.htm#:~:text=I%20have%20proposed%20to%20the,of%5D%201.5%C2%B0C%20alive.

Photo: Dan Meyers

electricity for everyone in Canada by 2035 through significant investment in the generation, transmission and demand side of electricity. Strong collaboration between all levels of government, including Indigenous governments, utilities and system operators will be required. As electricity investments require years to move from planning to commissioning, funding must be made available now, with clear signals for future federal support. Only with bold and strategic investments and regulatory certainty will we be able to successfully and equitably decarbonize the electricity sector across Canada. The untapped potential in distributed energy resources is significant and distributed energy resources can create resilience, manage the cost of electricity, reduce energy poverty, provide local jobs and economic development, help save grid infrastructure costs, and unlock new community capital from citizens eager to participate in climate action.

Low-income and vulnerable people — including remote and Indigenous communities — must have affordable and equitable energy access as Canada transitions to a clean electricity grid. Siting of renewable installations on traditional Indigenous territories, and reducing reliance on diesel in Indigenous and remote communities, requires special care and attention. With targeted renewable energy funds, there is significant opportunity to advance environmental and social equity while reducing emissions. The federal government can play a vital role in supporting clean electricity generation through the following investments in Budget 2024:

Total Recommended Investment: $25.97 billion over five years

Federal support for grid upgrades

1. **Interprovincial transmission: $20 billion over five years** for strategic interregional transmission projects to support clean electricity infrastructure deployment, system reliability, and to top up the existing Investment Tax Credit (ITC). As developing interties between key provinces has been difficult in the landscape of Canada's current electricity system, the Green Budget Coalition recommends that these funds be made available in the

Photo: Pembina Institute

form of a 50% ITC to develop key interprovincial interties, bringing demonstrable benefits to both ends of these new connections. Additionally, the ITC should be conditional on securing the support of Indigenous communities whose traditional territory or land right/claims apply to the project in question. [NRCan]

2. **Strategic support for Indigenous-led and community-led generation: $4.8 billion over five years** for investment in clean electricity projects and programs targeted to benefit Indigenous, low-income, and vulnerable communities. This could include, but not be limited to, renewables, energy storage, district energy, and grid reliability. These federal investments should take the form of grants, not loans, wherever possible. [NRCan]

3. **Allocate up to an additional $800 million** to programs specifically aimed at building Indigenous leadership and partnerships for **clean energy deployment in remote Indigenous communities**. Funding programs should be flexible and support Indigenous-led projects that reduce diesel consumption in homes and buildings through deep energy retrofits, and through renewable heat and power generation. [Lead: NRCan, involved: CIRNAC, ISC, INFC]

4. **$15 million over five years to enable specific Smart Renewables and Electrification Pathways (SREP) program and Canada Infrastructure Bank program streams** to support project development in equity-deserving communities such as communities affected by environmental injustice or lower income communities to build their capacity and increase their access to the programs that would deliver social, environmental, and economic benefits. [NRCan, CIB]

The Green Budget Coalition is also recommending targeted funding for low-income households to access affordable clean energy. *Please see A Renovation wave for climate resilient homes and affordable home energy, earlier in this document.*

Photo: Sergei Pesterev

Collaboration, and best practices in clean electricity governance, market design, planning and deployment

5. **$200 million over five years of additional funding** be made available to provinces who commit to making systematic improvements to their full electricity system. We applaud the requirement placed on access to the Clean Electricity ITC in Budget 2023 that federal funding be used to lower electricity bills and a commitment to achieving a net-zero electricity sector by 2035 in each province and territory. In developing the delivery mechanisms for the Clean Electricity ITC, how funding under the Clean Electricity Focus be delivered by the CIB and through the SREP, in addition to funding streams added in Budget 2024 we recommend that funding delivered be commensurate to provinces committing to making systematic improvements to their electricity systems. The federal government can facilitate follow through by making some of this funding available to support commissioning independent pathways assessments for decarbonisation of provincial electricity systems, consulting on and producing provincial energy plans, and improving the capacity and resources for regulators to mandate sustainability within utility regulations. [NRCan]

6. **$150 million over five years** to enhance strategic regional cooperation and provide additional research and planning capacity to support projects and analyses of interregional transmission to ensure reliability, efficiency and affordability for the grid of the future. This could include, but not be limited to, additional modeling, planning, procurement and market integration analysis. [NRCan]

7. **$5 million to fund a consultative process** with provinces, territories, municipalities, utilities, industry, NGOs, other regional partners and interested community members focused on least-cost pathways toward 100% clean electricity by 2035. [NRCan]

Contacts

Brenna Walsh – brenna.walsh@ecologyaction.ca
Stephen Thomas – sthomas@davidsuzuki.org
Jason Wang – jasonw@pembina.org

Photo: Anders J.

4 ADVANCING SUSTAINABLE JOBS FOR A NET-ZERO CANADA

The global transition to zero-carbon energy systems is affecting workers across sectors—from oil and gas to manufacturing to agriculture. Canada has taken positive steps forward in advancing a just transition in the past year, including introducing the *Sustainable Jobs Act;* committing to establish a Sustainable Jobs Secretariat, Partnership Council, and Training Centre; attaching labour conditions to new investment tax credits; and producing an interim Sustainable Jobs Plan. It is essential that workers and communities are engaged in social dialogue about the inevitable transition away from fossil fuels, and that the creation of sustainable jobs aligns with Canada's climate commitments. Actions must advance goals of reconciliation and equity to more fairly distribute the social and economic benefits of a clean economy.

This fiscal year and Budget 2024 will be crucial for building upon the foundation of this work and ramping up progress and investments informed by ongoing engagement and social dialogue. The scale of investment, and the coordination

Photo: Ux Indo

required, in planning and job creation, must match the scale of the energy transition, to save costs and prevent workers from being stranded. Investing in internal government coordination, data collection, skills training, worker supports and regional planning early on will result in a smoother transition with less disruption for workers and communities.

While there are many government supports for workers, additional programs and investments are needed to fill key gaps in current funding. The following recommendations include estimates of investment levels in key areas that would need to be refined through social dialogue with affected workers, employers, and direct government-to-government engagement with Indigenous communities. Special attention is needed to ensure that investments support people of colour, youth, women, migrant workers, and other groups facing workforce barriers in the move to low-carbon industries.

Total Recommended Investment: Approximately $12.2 billion over five years

Recommended Investments:

1. **Data collection, analysis and modelling to inform sustainable jobs planning: $30 million over five years** is needed for regional data and modelling initiatives that define and classify technologies and jobs, assess transition impacts, provide industry outlooks, model regional labour trends based on specific projects, and predict labour force requirements needed for each key sector and region, with particular attention to rural and remote communities. This modelling and strategic planning are needed at the national level to inform regional and sectoral decision-making, and could be coordinated through the proposed Sustainable Jobs Secretariat. [NRCan, ESDC, StatCan, CCEI]

Photo: Équiterre

Photo: C. Wocintectchat

2. **Indigenous participation in sustainable jobs governance and self-determined planning:** Create a transfer of at least **$1 billion per year for five years** with three distinctions-based streams to support Indigenous governments, organizations, and peoples involvement in sustainable jobs governance and planning, including via engagement with the Partnership Council and Secretariat. These funds could also support Indigenous-led community and regional planning in transition-affected areas. Specific budget requirements and funding allocation should be determined by Indigenous groups. [NRCan]

3. **Workforce development, training, and upskilling:** Program creation and funding should be informed by regional and sectoral data and modelling, to ensure resources match the workers and industries in need.

    a. **Direct the next generation toward sustainable jobs**: Support youth entering sustainable careers by establishing a **$150 million tuition credit program over five years**[23] that helps address labour demands and avoid shortages in net-zero compatible industries, prioritizing members of under-represented and equity-deserving groups. (Program details to be identified by stakeholders.) [ESDC]

    b. **Support workers navigating pathways to sustainable jobs**: Increase the $250 million previously allocated toward "investing in skills for the net-zero economy" with an **additional $250 million over five years** to total $500 million over five years[24] across the Sustainable Jobs Training Centre and Sustainable Jobs Stream under the Union Training and Innovation Program. This additional funding should include support for non-unionized workers, career development, business, finance, retirement, and mental health supports. Services should be delivered by trusted community stakeholders through local centres, similar to those established in Alberta[25] and Saskatchewan.[26] [NRCan, RDAs]

Photo: Melissa Bradley

23 **Assumptions:** 26,000 clean energy jobs created per year; 35,000 annual high school graduates; average tuition costs $6,800 per year ; funding 50% of first year tuition for ¼ of high school students
24 **Assumptions:** 170,000 fossil fuel workers; baseline of $1250 allocated per worker at similar centers
25 Evan J. Pretzer "New centre in Parkland County aims to help those hit by coal phase-out." (2020) https://www.stonyplainreporter.com/news/local-news/new-centre-in-parkland-county-aims-to-help-those-hit-by-coal-phase-out
26 Sask Coal Transition Centre. https://www.saskcoal.com/

4. **Regional planning and job-creating projects.**

   a. **Resource regional planning and capital investment:** Establish a new, regional coordination and funding delivery program, with an initial investment of **$6.5 billion over five years.**[27] Building off the work of the Regional Energy and Resource Tables and net-zero industrial policy, this program would allocate funding for each province or region to invest in jobs-generating regional planning and major capital projects in transitioning regions. This fund should have climate and biodiversity conditions attached to ensure that job creation and industrial development are advancing Canada's international commitments. (*See also Climate and biodiversity conditions on federal spending, later in this document*) [NRCan, RDAs]

   b. **Invest in community vitality:** Provide **$270 million over five years**[28] in dedicated funding to diversify the economies of 'transition-affected' communities and provide capacity support to implement new projects. Projects could include initiatives that bolster municipal services and enhance social security and wellbeing economies to address the ripple effects of the transition. This should include specific wrap-around supports for Indigenous communities, as well as translation services as needed. [NRCan, RDAs]

Contacts

Laura Cameron – lcameron@iisd.ca
Andréanne Brazeau – abrazeau@equiterre.org
Kendall Anderson – kendalla@pembina.org

Photo: E. Ikwuegbu

27 **Assumptions:** $500 million per province and territory; 13 provinces and territories
28 **Assumptions:** 18 communities with over 5% employment in fossil fuel industries; $15 million per community

5 SUSTAINABLE AGRICULTURE

Canada's agriculture and agri-food is a key economic sector, but faces particular challenges from both climatic and non-climatic stressors. Producers across Canada are experiencing the effects of climate change with more frequent and severe droughts, floods, and storms. They are also affected by global geopolitical challenges, including market disruptions and high costs. With the global demand for food expected to grow 60% by 2050, ensuring Canadian agriculture is well positioned to meet these challenges in an environmentally sustainable fashion must be a collective priority. The Sustainable Agriculture Strategy currently being developed by Agriculture and Agri Food Canada in collaboration with sector stakeholders can play a key role in addressing these challenges. To be successful, the Strategy must be adequately resourced, and look beyond the farm gate to accelerate and scale the implementation of climate-smart and nature-positive practices, tools, technologies, and innovations across agri-food value chains.

Photo: Raphael Rychetsky

The Green Budget Coalition envisions a future in which Canada is a leader in sustainable and innovative agriculture with a resilient and diversified food system. To achieve this, collaboration at all levels of government and with the private sector is essential. Outlined below are key recommendations for investments that are aimed at helping producers diversify their income by advancing or incentivizing stewardship activities that produce enhanced environmental benefits.

Total Recommended Investment:

$4.5 billion over five years, followed by $134 million per year, ongoing, as follows:

Photo: Marcus Spiske

Avoided land conversion and habitat retention

Conversion of threatened ecosystems (e.g., wetlands, grasslands, and forested areas) in productive and sustainable farmland, whether due to urban development or other significant agricultural land use changes, is a net loss for habitat preservation. In Canada, we have lost approximately 80-85% of native grasslands[29] and approximately 70% of wetlands in southern areas of Canada and up to 95% in densely populated areas.[30] Conversion, loss, and degradation of these ecosystems reduces their ability to support biodiversity and threatens to reduce critical services such as carbon storage, nutrient cycling, forage production, water storage, pollination, water quality, as well as water supply and management. Preventing the disturbance or conversion of grasslands alone can mitigate 12.4 MT of carbon emissions in Canada.[31]

Through the resources and habitats they support—soils, prairies and pastures, rivers and streams, forests and woodlots, fauna and flora—agricultural lands provide tremendous ecological goods and services and offer producers an opportunity to participate in efforts for climate change mitigation and adaptation as well as efforts to halt and reverse biodiversity loss. However, each year, Canada loses around 60,000 acres of prime farmland to urban expansion and has experienced a 192% price increase in the past 20 years. The increasing costs of land has exacerbated pressures for an aging agricultural community to sell land to real estate or industrial developers for a large profit. In addition, it has made accessing land increasingly difficult for young farmers. Canadian producers will need to employ sustainable intensification, an effort to increase yields with fewer inputs and without expanding land use. The Royal Bank of Canada estimates that "we can avoid 20MT of emissions by preventing land use change between now and 2050."[32]

29 CFGA National Grassland Inventory. https://www.canadianfga.ca/en/projects-projets/grassland-inventory/#:~:text=Approximately%2080%20to%2085%20per,for%20ongoing%2C%20comprehensive%20grasslands%20inventory

30 Ducks Unlimited Canada. https://www.ducks.ca/stories/wetlands/whats-happening-to-canadas-vanishing-wetlands/

31 RBC Green Revolution. https://thoughtleadership.rbc.com/the-next-green-revolution-how-canada-can-produce-more-food-and-fewer-emissions/

32 Ibid.

National Land Use Strategy

Recommendation: With the engagement of provinces, territories, and Indigenous peoples, develop and implement a comprehensive **National Land Use Strategy** that strikes a balance between environmental protection, agricultural production, and urban expansion and limits conversion of prime agricultural lands, grasslands, wetlands, and forested areas.

$25 million over three years, with option for renewal [AAFC, NRCan, ECCC]

Agricultural habitat incentive programs

Recommendation: Provide financial incentives and programs for producers to de-risk the uptake of innovative approaches that support the retention of agricultural habitat:

- Reinstate funding for a **National Perennial Forage Conversion Program**[33] aimed at field-scale conversion by enhancing cropped land with interspersed productive cropland and perennial cover. **$500 million over five years** [AAFC]
- **Maximize the economic and environmental return of marginal land** using precision/smart agriculture technology and implementing strategic and financial incentives for producers to convert marginal areas from annual crop production to natural infrastructure and features that provide a variety of ecosystem services. **$500 million over five years** [AAFC]
- Provide **financial incentives to producers** for the **avoided conversion** of native and tame grasslands, wetlands, and forested areas which sequester carbon and provide biodiversity and other ecosystem services. **$1 billion over five years** [AAFC]
- Develop and implement an **agri-gift program** in collaboration with all levels of government to facilitate agricultural lands' protection, especially in densely-populated regions where urban expansion is high. Integrate a cross-compliance principle to ascertain preserved lands are to be cultivated through best management practices for soil health. [AAFC, FIN]
- Develop and implement a **fund to support access to agricultural lands** for the farming community, accessible to farm businesses and agricultural land trusts. **$200 million over five years**, **then $25 million per year, ongoing** [AAFC in partnership with CRA]

Photo: Jonathan Kemper

33 Similar to the former GreenCover Canada

Improve environmental, climate, and socio-economic data collection and dissemination

Data and carbon accounting

Recommendation: Harmonize data across government departments and improve systems for measuring, reporting, and verifying greenhouse gas emissions across agricultural landscapes to better inform the National Inventory Report, agricultural policy-making and programs, and decisions across agriculture and agri-food value chains.

$50 million over three years, **then $2 million per year, ongoing** [AAFC, ECCC, StatCan]

- Fund, coordinate and scale research programs to develop refined, regionally-specific emission factors so that Canada can more accurately account for agricultural natural climate solutions impacts on GHG sources and sinks;
- Develop an accessible and integrated toolkit to support producers' efforts to measure and monitor GHG sources and sinks, while ensuring comprehensive collection and data channeling into the national inventory (e.g., integrate findings from remote sensing, computed models and soil samples);
- Develop a centralized platform to improve data sharing and utilization between government agencies (notably StatCan, AAFC and ECCC), crop insurance schemes, and address data gaps and discrepancies; and
- Scale and accelerate investment in agricultural natural climate solutions science, innovation and measurement systems, including data collection and integration on adoption and penetration rates of climate smart practice adoption.

Agricultural producers' adoption of natural climate solutions is not being effectively reported within Canada's National Inventory Report. Improved data integration, collection, management and quantification methodologies will help ensure that policies and programs aimed at encouraging natural climate solutions adoption are informed by accurate and accessible data. These features would also improve producers' understanding of the impacts of a given practice and their contributions to national GHG emission targets. Lastly, improving data collection and GHG quantification methodologies that inform the inventory would stimulate efforts to develop more robust baseline agri-environmental indicators, such as soil organic carbon (SOC) levels and nitrous oxide emissions, that are needed to scale the agriculture sector's participation in ecosystem service markets and programs.

See also recommendation on Accurate data, research, information, and knowledge for improved evidence-based monitoring and decision making, later in this document.

Photo: Tamiscomingue

Research to quantify economic, environmental, social benefits

Recommendation: Increase investments in research that quantifies the economic, environmental, and social benefits of agricultural practices to refine best management practices (BMP).

$100 million over five years, **followed by $20 million per year, ongoing** [AAFC, SSHRC, NSERC]

- Ensure that the **monitoring and evaluation results** and **return on investments** from government programs, such as the Agriculture Climate Solutions program, are **shared with producers and policymakers**.
- **Expand and strengthen the Living Labs program**, with a heightened emphasis on:
  - Informing regional adoption and national reporting with improved on-farm research and data collection.
  - Developing and deploying education and researcher programs.
- **Improve the transparency of public data** to identify and eliminate counter-productive incentives and subsidies for activities that directly or indirectly cause environmental harm. *See also Aligning policies and investments with halting and reversing biodiversity loss by 2030, later in this document.*

Conducting complementary research to determine the return on investment needed and behavioural considerations involved in the adoption of best management practices (i.e., the incentive value at which farmers will enroll in the best management practice) will support the optimization of future investments in agri-environmental programming. Investing in this will have a variety of benefits including quantifying carbon sequestration benefits from best management practices, ensuring that investments and efforts in environmental programming are maximized, and supporting improved decision-making for operators.

Photo: Jonathan Kemper

Valuing ecological services

Recommendation: Facilitate the development of a market-based system for valuing ecological services derived from the agricultural sector, to bring value to Canadians and transparency to international food consumers.

$25 million over three years [AAFC]

- Allocate start-up funding to **facilitate the development of the on-farm based EG&S market** that would enable credible claims and investments to improve overall biodiversity, increase sector resilience, and optimize future investments in agri-environmental programming.

Canada is rich in ecological goods and services, which is advantageous in marketing sustainable products. However, no marketplace exists that provides security to Canadian companies to make investments with an assured outcome. Establishing a Canadian standard for the production and trade of ecological services could provide an economic advantage to those farmers and ranchers producing superior environmental value and could also help ensure that investments intended to produce a desired environmental state actually produce that outcome.

Photo: S. Federava

Accelerate and augment the implementation of climate-smart and nature-positive practices, technologies, and innovations

Tools, technical assistance, and knowledge transfer

Recommendation: Increase investment in tools, technical assistance, and knowledge transfer to encourage and enable producers to accelerate the adoption of best management practices that will improve productivity, generate new income streams, educate/encourage nature-positive practices, and improve on-farm climate resilience.

$500 million over five years [AAFC]

- **Expand extension programs** to introduce practices, tools, and technologies that assist and incentivize producers;
- **Fund 1,000 new extension service agents** to support sustainable practices;
- **Improve and expand access to resources, training, and education** for technical assistance providers to adopt nature-based solutions;
- **Develop a training and certification program** for technical assistance providers to better connect producers to incentives for adopting nature-based solutions and advise on the associated opportunities and risks (e.g., supply chain interventions);
- Enhance, support, and expand upon **farmer-to-farmer** and **peer-to-peer learning opportunities;**
- **Top up the Agriculture Clean Technology Fund** to help producers reduce emissions by improving energy efficiency, fuel switch, and electrify farms; and
- Ensure that **best management practices** engage and encourage **full-spectrum participation,** are **fiscally sound** and **financially attractive** to large-scale farms and agri-businesses that exert a massive influence on the landscape and smaller operations alike.

For Canada to sustainably intensify production and drive broader food system outcomes by improving food security, adapting to climate change and managing demands on limited natural resources, it is important that producers are encouraged and enabled to adopt and augment climate-smart and nature-positive practices and technologies.

Soil health

Recommendation: Prioritize the resilience, productivity, and carbon storage capacity of Canada's soils.

$6 million over three years to develop a Soil Health Strategy, to grow over time ($1 million in 2024-25, $2 million in 2025-26, and $3 million in 2026-27) [AAFC]:

- Develop and implement a **Pan-Canadian Soil Health Strategy** as part of the Sustainable Agriculture Strategy that will enable farmers to access information and financial resources needed to improve soil practices; and

- Ensure that **support is available to producers** that want to **test, adopt, and measure best management practices** such as organic amendments, diverse crop rotations, conservation buffers, soil compaction prevention, and integrated pest management.

Soils are the basis for agricultural production in Canada and are important for resilience, productivity, and carbon storage capacity. The protection and regeneration of soils has been identified as a key action in a suite of recent federal announcements (e.g., Guelph Statement, On Farm Climate Action Fund, Agricultural Climate Solutions, Emissions Reduction Plan, and the Sustainable Agriculture Strategy). The adoption of soil management practices such as reduced tillage, diverse crop rotations, proper maintenance of soil nutrients, inclusion of cover crops and/or perennials in rotation, and modified grazing practices can make meaningful contributions towards Canada's climate change and biodiversity commitments. Healthy Canadian soils will ensure productivity, profitability, and resilience in food production.

Business Risk Management (BRM)

Recommendation: Ensure that Business Risk Management (BRM) programs integrate climate risk management, environmental practices, and climate readiness. Any changes to the federally funded business risk management program are recommended to be additive and incentive-based.

$1.08 billion over five years followed by $87 million per year, ongoing

- Create a specialized **Climate Risk Reduction Fund** to provide voluntary incentives such as premium discounts or enhanced payouts for producers that adopt best management practices. **$435 million over five years, then $87 million per year, ongoing** [AAFC]
- Develop a **program to pilot innovations** in business risk management design including encouraging the adoption of specific best management practices. **$10 million over three years** [AAFC]
- Enhancing the **transparency and accessibility of data** on the effectiveness of business risk management programs, including performance measures and reporting, working towards a quantification of the risk reduction benefits of best management practices adoption and preventive measures. **$5 million over five years** [AAFC, StatCan]
- **Establish early warning signs** (e.g., drought, floods, etc.) and related recommendations for regionally-appropriate best management practices in collaboration with provinces and territories. **$280 million over three years** [AAFC]
- Integrate **Livestock Price Insurance** as part of the AgriInsurance program and subsidize the cost shared premium to encourage uptake, an amount shared between the federal and provincial governments. **$350 million for five years** [AAFC]

The costs of business risk management programs are increasing due to the significant risks climate change poses to farm operations. In contrast to similar programs elsewhere, business risk management programs in Canada do not yet compensate for measures taken by producers to mitigate these risks through adaptive practices such as environmental

Photo: Tamiscomingue

best management practices. While business risk management programmes have been primarily aimed at income stabilization, they also offer a means to reward new practices that enhance medium and long-term climate resilience and produce positive agri-environmental outcomes.

Support a Sustainable Agricultural Value Chains Initiative

Recommendation: Launch three to five farmer-centric multi-stakeholder collaborations to accelerate the uptake of beneficial management practices at a regional scale, while driving better outcomes for the sector as a whole.

$550 million over five years for five pilot projects [AAFC, ISED]

Long-term sustainability relies on new approaches that stimulate large-scale, transformative change by linking on-farm practices with those beyond the farm gate with the greatest promise to return value to farm level.

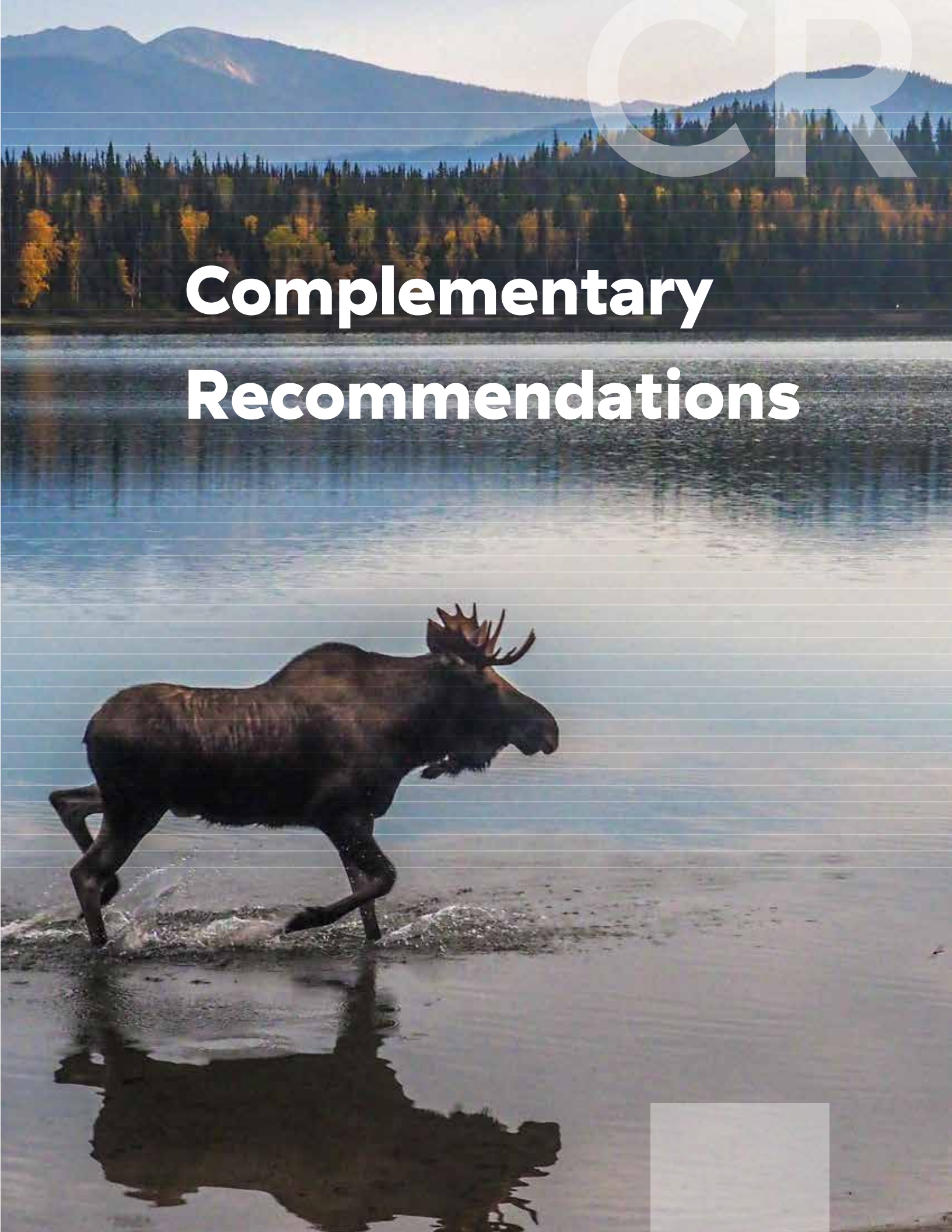
A Sustainable Value Chains Initiative would align public incentives with market-based approaches through a series of farmer-centric, multi-stakeholder collaborations tailored to the needs and realities of context-specific value chains, providing solutions for producers in four key areas: finance to de-risk the uptake of new practices; peer-to-peer learning and extension; improved data collection and dissemination; and verified sustainability performance standards.

Building on the model set by the U.S. Climate Smart Commodities Partnership,[34] the Sustainable Agricultural Value Chains Initiative would stimulate partnerships and collaborations, enabling Canada's agri-food sector to navigate emerging trends, and helping markets to respond to climate-smart choices by actors along agri-food supply chains while driving progress towards Canada's climate, productivity, and sustainability goals.

Contacts

Gia Paola – g_paola@ducks.ca
Shaughn McArthur – shaughn.mcarthur@natureunited.ca
Carole-Anne Lapierre – calapierre@equiterre.org
Carolyn Callaghan – carolync@cwf-fcf.org

34 US Department of Agriculture, " Partnerships for Climate-Smart Commodities." https://www.usda.gov/climate-solutions/climate-smart-commodities



Complementary Recommendations

INTEGRATING CLIMATE AND NATURE ACROSS GOVERNMENT FISCAL POLICY, BUDGETING, AND SPENDING DECISIONS

Transforming Canada's economy through a net-zero industrial policy

As the world transforms and moves towards net-zero, some countries are taking the lead in developing domestic industries that will support future consumption needs that are compatible with 1.5-degrees while also strengthening energy and supply chain security.

Canada has a lot at stake due to the high carbon intensity of its primary exports: crude oil and bitumen. As Canada's Net-Zero Advisory Board put it, "A net-zero industrial policy would provide certainty about the transformations required, increase accountability in the transition to net-zero, ensure Canadians benefit from emerging global economic opportunities, reduce risks in an uncertain world, and build coalitions of support for climate action."[35] But Canada's provinces and territories are diverse, so net-zero industrial policy should be too.

Partly in response to the U.S. Inflation Reduction Act, Canada's Budget 2023 made significant investments in climate mitigation and industrial policy. The federal government should do more to use its substantial procurement spending to buy clean materials and act on its Greening Government Strategy objectives by 2025. These include procuring 100% clean electricity for government properties and structural materials with 30% lower embodied carbon.[36] Investments that improve the government's ability to buy clean would help to create low-carbon product markets and industries in Canada while having limited impact on Canada's fiscal framework. Products from agriculture and forestry should be included. These are working, land-based industries that, with the right practices, have the potential to sequester carbon, and grow in a net-zero world.

35 Compete and Succeed in a Net Zero Future: First Annual Report to the Minister of Environment and Climate Change, January 2023, Net-Zero Advisory Body. https://www.canada.ca/en/services/environment/weather/climatechange/climate-plan/net-zero-emissions-2050/advisory-body/first-annual-report-to-minister.html

36 Government of Canada, "Greening Government Strategy: A Government of Canada Directive." https://www.canada.ca/en/treasury-board-secretariat/services/innovation/greening-government/strategy.html#toc3-5

Consistent with advice from the Buy Clean Industry Alliance,[37] the Green Budget Coalition recommends **$845 million over five years, starting in 2023–24, including:**

- **$500 million over five years** for the Clean Infrastructure Incentive Fund to activate the Canadian market for commercially-viable low-carbon building materials and practices by offsetting the incremental costs of using commercially viable low-carbon materials and practices in public infrastructure. [INFC]
- **$15 million over five years** to build capacity across the broader public sector to increase adoption of Buy Clean practices, develop tools to increase capacity and education on Buy Clean and federal support staff to provide training. [NRCan, PSPC, ISED]
- **$300 million over five years** to invest in Canadian innovation to decarbonize industry, ensure governments are ready to procure emerging technology, develop, test, demonstrate and deploy pre-commercial and innovative low-carbon building materials. [NRCan, ISED]
- **$30 million over five years** to fund non-profit and non-partisan organizations to design and host inclusive, well-informed, and healthy conversations on energy and climate. [NRCan, ECCC]
- **Deploy a Futures Fund for regional economic development agencies** to help design regional-specific industrial policies that align with national-level policy.[38] [ISED, NRCan]

Consistent with advice from the Net-Zero Advisory Body, the Green Budget Coalition recommends improved real-time reporting on: Canada's emissions data, modeling, and climate risk assessments; impacts of major government spending on Canada's climate goals; and performance metrics important to a robust net-zero aligned sustainable jobs plan. [ECCC, NRCan, ISED, CER, CCEI]

Please also refer to these other recommendations in this document: Advancing sustainable jobs for a net-zero Canada (earlier); Moving towards a more circular economy through reuse and repair (later); and Re-orienting domestic public finance and subsidies away from fossil fuels (later).

Contacts

Scott MacDougall – scottm@pembina.org
Andréanne Brazeau – abrazeau@equiterre.org

Photo: Zia Syed

37 Clean Energy Canada, "2023 Federal Pre- Budget Consultations." https://cleanenergycanada.org/report/submission-2023-pre-budget-consultations/

38 Potentially modelled on this proposal https://liberal.ca/our-platform/ensuring-workers-and-communities-prosper-as-we-move-to-net-zero/

Climate and biodiversity conditions on federal spending

Canada needs a whole-of-government approach to ensure major government regulation, policy, and spending align with its targets for emissions reductions and halting and reversing biodiversity loss, as well as the National Adaptation Strategy. It is critical to ensure that major federal budget allocations are leveraged as effectively as possible, and that funding recipients advance Canada's climate change mitigation, nature and adaptation objectives.[39]

Application of ambitious climate and biodiversity conditions to funds would strengthen the country's net-zero, adaptation and nature-positive governance by helping mainstream priorities across programs and departments, including large federal mechanisms like the Canada Infrastructure Bank and the Canada Growth Fund. Failure to apply conditions could result in inefficient or risky spending (e.g., on unproven or costly solutions), creating opportunity costs for climate spending.

All departments have important roles in implementing these conditions. In our view, these conditions are of particular importance for PCO, PMO, ISED, NRCan, FIN, TC, DFO, and CIB, given these actors' roles in moving Canada's public and private sectors towards net-zero and nature-positive outcomes, and improving resilience.

Recommendations:

1. **Implement an Integrated Climate and Biodiversity Lens to evaluate Budget 2024 proposals.** Budget 2024 should publish a summary of the Budget's overall climate and biodiversity impact, using transparent methodologies and measurable indicators, including assessment against 1.5-degree scenarios. Further, this Integrated Climate and Nature Lens should be part of the Impacts Reports[40] included in federal budgets. [PCO, FIN, ECCC]

2. **Align spending by large mechanisms, programs, and budgets[41] with 1.5-degree and nature-positive scenarios through robust criteria and conditions.** [All departments]

   a. Make access to major funding, across all streams and programs, conditional on commitments by private and public recipients to achieve Canada's climate and nature goals.

      i. **For climate-related funding**, recipients must have: (1) 2030 and 2050 emissions-reduction targets consistent with or exceeding Canada's goals; (2) plans to meet these targets informed by the High-Level Expert Group on the Net-Zero Emissions Commitments of Non-State Entities recommendation that net-zero commitments align with 1.5°C pathways with no or limited overshoot; and (3) robust climate and nature-related risk disclosure.

         1. **For electricity,**[42] require provinces to commit to systematic improvements to their electricity systems, including mandating public electricity utilities to have net-zero plans (*see Advancing a zero-emissions electricity grid based on renewables, earlier in this document*).

         2. **For adaptation funding** granted to municipalities, provinces and territories that have an adaptation plan or that wish to develop one, plans must be aligned with 1.5-degree scenarios (*see Ramping up core adaptation investments to increase resiliency in the face of climate change, later in this document*).

      ii. **For nature-related funding**, recipients must have goals and plans aligned with Canada's goal of halting and reversing biodiversity loss by 2030, including by protecting at least 30% of land and ocean

39 IISD, "Green Strings: Principles and conditions for a green recovery from COVID-19 in Canada". https://www.iisd.org/publications/green-strings-recovery-covid-19-canada

40 Government of Canada, "Budget 2022 Impacts Report". https://www.budget.canada.ca/2022/report-rapport/gdql-egdqv-02-en.html

41 Including the Canada Infrastructure Bank, Canada Growth Fund, Net-Zero Accelerator, investment tax credits, other electricity and infrastructure spending, and bilateral nature agreements

42 Including the Clean Electricity ITC, the Canada Infrastructure Bank, Smart Renewables and Electrification Pathways Program.

by 2030, and supporting Indigenous-led conservation;

iii. Funding should come with penalties and corrective actions if conditions are not met (e.g., grants are converted into loans if the commitment to net-zero has not been developed within a reasonable time period).

b. **Ensure selection criteria maximize climate- and nature-positive outcomes and are based on:**

i. The largest net GHG reduction per dollar invested;

ii. Focus on proven solutions to achieve near-term reductions to reach Canada's 2030 target versus longer-term emerging technologies;

iii. Use of best-in-class technology for industrial emissions reduction projects;

iv. Projects that support long-term and net-zero-consistent job creation and fully integrate sustainable transition elements (i.e., retraining, skill development, community-benefits agreements), with a focus on equity-deserving communities;

v. **For infrastructure funding,** for example, funding for linear infrastructure (e.g., highways and railways) should require the incorporation of wildlife mitigation considerations and measures (e.g., underpasses, overpasses, fencing);

vi. **Bilateral Nature Agreements** providing federal nature funding to provinces and territories should require commitment to measurable and specific additional conservation outcomes that meet agreed-to standards and make a significant contribution to the 30% land protection targets, including Indigenous-led conservation initiatives.

3. **Support transparency and accountability for climate and nature outcomes with robust reporting requirements for programs and participants.**

a. Details of funding agreements should be made public, and recipients should have an obligation to disclose information on actual investments made and measurable outcomes achieved, especially in terms of GHG reductions, protection and/or restoration of nature, and job creation/retention;

b. The government should provide timely, public, monitoring and evaluation reports that assess whether funds are contributing to net-zero and nature-related goals, and reaching the right types of applicants and projects.

4. **Ensure that Indigenous authority is upheld,** including through the integration of free, prior and informed consent and adherence to the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) in project-information disclosure and Nation-to-Nation funding arrangements (e.g., through direct transfers to Indigenous recipients).

See also, elsewhere in this document, Transforming Canada's economy through a net-zero industrial policy (earlier) and Re-orienting domestic public finance and subsidies away from fossil fuels (later).

Contacts

Bernard Soubry – bsoubry@iisd.ca
Scott MacDougall – scottm@pembina.org
Andréanne Brazeau – abrazeau@equiterre.org
Shaughn McArthur – shaughn.mcarthur@natureunited.ca

Photo: Eduardo Bergen

Canada's carbon pricing still needs greater certainty to unlock decarbonization investments

Canada is a leader at using carbon pricing to reflect the value of reduced emissions, and has made important proposals to develop carbon contracts for differences to improve the certainty and investability of the carbon pricing system. Canada now needs to act with greater urgency on its proposals to deliver that certainty.

One proposal is to use the $15 billion Canada Growth Fund to deliver an initial round of contracts for differences to backstop the value of carbon credits, and perhaps the carbon price. Those contracts are urgently needed in 2023, and should be finalized to help get Canada on track to achieve its 2030 climate target, compete with the US to grow its low-carbon industry and supply chains, and support long-term sustainable jobs and prosperity for Canadians.

Canada also proposed to consult on the design of a broader contracts for difference system. Such a program is also urgently needed. Canada should deliver on this consultation in 2023 and set ambitious timelines to design and implement that system. Canada is taking an important, global leadership role in developing this broad program. And, by launching a limited set of contracts prior to developing the broad program, is starting off on the right foot with a learn by doing approach that balances the urgency to reduce Canada's emissions, compete with the US for investments, and make measured bets then scale and adapt innovative policies. Canada should also commit to knowledge sharing about details of these contracts, which projects they are with, program performance reporting and lessons learned, so Canadians and other jurisdictions can learn and benefit from Canada's leadership.

Since Canada's carbon pricing system is a combination of federal, provincial and territorial policies, Canada should engage with the provinces and territories as it designs contracts for differences. Doing so recognizes their shared stakes in: reducing emissions; attracting investment and sustainable jobs; and sound fiscal policy. Making existing carbon pricing policies more investable is more fiscally prudent than offering new funding or tax breaks.

Recommended Investment:

The Canada Growth Fund should urgently execute on its mandate to "help transform and grow Canada's economy at speed and scale on the path to net-zero" using its current $15 billion budget, with an initial round of contracts for differences signed in 2023. Contracts should primarily focus on difficult to decarbonize sectors with low stranded asset risk, and use competitive or targeted contract calls to drive cost-efficient emissions reductions across the economy. The program should report on its role in subsidizing sectors, program costs and revenues, lessons learned, contract details, and emissions reduction achieved. To enable these contracts, federal and provincial carbon pricing systems must make credit prices public information, their stringency tightening rates must predictably align with Canada's commitment to net-zero emissions by 2050, and transparent processes are needed to monitor and make recommendations on credit market management, such as a national carbon credits exchange commission. [ECCC, FIN]

Contact

Scott MacDougall – scottm@pembina.org

Photo: V. Yelizarov

Re-orienting domestic public finance and subsidies away from fossil fuels

Photo: Frank Mezthi

Canada has introduced policies to end subsidies and international public financing for unabated fossil fuel projects. Building upon this, Canada must now close gaps in existing policies and introduce a policy to end domestic public finance for fossil fuels.

Canada first committed to phase out inefficient fossil fuel subsidies in 2009 at the G20, and recently published its framework assessment for fossil fuel subsidies.[43] Canada also committed to ending domestic public finance for fossil fuels, and to publish a plan to do so by fall 2024.[44,45]

Meanwhile, federal fossil fuel subsidies and supports totaled at least $20.2 billion in 2022, including direct transfers and foregone tax revenues as well as public financing.[46] Domestic public finance occupies a significant portion of Canada's fossil fuel support, and is not covered by existing phase-out policies. Export Development Canada provided at least $4.3 billion annually on average for domestic fossil fuel projects from 2019-2021.[47,48]

The urgency of the climate crisis and the need for rapid emissions reductions means new government investments must be focused on carbon-free energy systems and not prolong reliance on fossil fuels. In keeping with the polluter pays principle, the costs of reducing emissions in oil and gas production and other high-emitting industries should be borne by industry.

Recommendations:

1. **Close gaps in fossil fuel subsidies and international public finance policies** [FIN, ECCC]
    a. Publish the results of Canada's long overdue self-review by fall 2023, including a full inventory of all federal fossil fuel tax and non-tax subsidies and supports, and a rationale for any deemed 'efficient'. [FIN, ECCC]

43 Government of Canada. "Inefficient Fossil Fuel Subsidies Government of Canada – Self-Review Assessment Framework" https://www.canada.ca/en/services/environment/weather/climatechange/climate-plan/inefficient-fossil-fuel-subsidies/assessment-framework.html

44 Liberal Party of Canada, "Eliminating Subsidies and Public Financing for Fossil Fuel." https://liberal.ca/our-platform/eliminating-subsidies-and-public-financing-for-fossil-fuel/

45 Government of Canada. "Inefficient Fossil Fuel Subsidies Government of Canada – Self-Review Assessment Framework" https://www.canada.ca/en/services/environment/weather/climatechange/climate-plan/inefficient-fossil-fuel-subsidies/assessment-framework.html

46 Environmental Defense, "2022 Federal Fossil Fuel Subsidies". https://environmentaldefence.ca/federal-fossil-fuel-subsidies-tracking/

47 Public Finance for Energy Database. http://energyfinance.org

48 Note: an additional $5.9 billion in public finance was provided but with insufficient transparency to determine what portion was domestic

b. Close gaps in existing subsidies and public finance policies to ensure no further support for 'abated' oil and gas production, including through carbon capture and storage. [FIN, NRCan, ISED, ECCC]

c. Create a central mechanism for transparency, accountability, and enforcement of current policies to ensure they are upheld across departments. This could include annual government audits of departmental spending. [ECCC]

d. Ensure Budget 2024 reflects the updated policy, in particular through the elimination of tax-related subsidies (e.g., development expense reductions, accelerated investment incentive).[49] [FIN]

Photo: Wassim Chouak

2. **End domestic public financing for fossil fuels, particularly from Export Development Canada (EDC), by Budget 2024 [FIN, GAC]**

   a. Building upon Canada's international public finance policy, introduce a policy to end EDC's support for fossil fuels domestically, with robust exclusionary policies that include indirect support and at minimum align with those in the international policy.[50]

   b. Align EDC's entire portfolio with Canada's climate commitments and a robust 1.5°C degree scenario. Substantially improve EDC's target for reducing carbon-intensive investments and develop concrete plans for reducing these investments in order to support the transition to clean energy.

   c. Increase transparency on public finance transactions through EDC and GHG emissions associated with investments.

Regarding eliminating subsidies that are harmful to nature, please see Aligning policies and investments with halting and reversing biodiversity loss by 2030, later in this document.

Contact

Laura Cameron – lcameron@iisd.ca

49 See page 10 for a list of measures: https://www.iisd.org/system/files/2021-02/fossil-fuel-subsidies-canada-covid-19.pdf

50 Government of Canada. 2022. https://www.canada.ca/en/natural-resources-canada/news/2022/12/government-of-canada-delivers-on-key-international-climate-commitment-to-end-new-public-support-for-the-international-unabated-fossil-fuel-energy-s.html

Moving towards a more circular economy through reuse and repair

Photo: Raeng

Canada must embrace circularity and move away from linear production and consumption to modernize its industrial activities and economy. A circular economy is a system of production, exchange and consumption that optimizes the use of resources at all stages of the life cycle of a good, while reducing the environmental footprint of individuals and communities.[51] In 2020, Canada had a circularity rate of only 6%,[52] an issue that needs to be addressed in a context of increasingly scarce natural resources.

In this circular model, the initial strategies involve "rethinking" production to minimize virgin resource consumption and reduce extraction at the source. Next, there is a focus on "optimizing" product use and extending the lifespan of goods, including promoting reuse and repair. Lastly, resources are given new life through recycling.[53]

Priority circular economy strategies, including reuse and repair, lack financial support. In this regard, several stakeholders participating in the Reuse Symposium co-hosted by ECCC in 2022 highlighted "the difficulties in moving from government-supported funding to larger-scale [reuse] initiatives."[54] Indeed, efforts and funding are primarily directed to recycling.

Reuse to reduce single-use

Canada has several public policies in place to reduce the use of single-use plastics, including a Management framework for single-use plastics and the adoption of a roadmap to strengthen the management of single-use and disposable plastic products in September 2022.[55] However, there is no funding to support reuse initiatives, which the Green Budget Coalition believes would be vital to successfully deploy reusable alternatives, particularly in the food sector. Increased funding for businesses to scale up reusable alternatives would give the public greater access to zero waste solutions.

Access to repair to support the Canadian economy and population

In Canada, the repair industry is predominantly composed of small and medium-sized enterprises.

51 RECYC-QUÉBEC, "Lexique" (2022). https://www.recyc-quebec.gouv.qc.ca/lexique/

52 CAC, "Turning Point:The Expert panel on the Circular Economy in Canada" (2021). https://www.cca-reports.ca/wp-content/uploads/2022/01/Turning-Point_digital.pdf

53 Equiterre, "Working Towards Repairable Appliances and Electronics in Canada" (2022). https://www.equiterre.org/en/resources/rapport-pour-des-appareils-electromenagers-et-electroniques-reparables-au-canada

54 Séguin, Jacinthe and Laurie Giroux, "What We Heard Report: Reuse Symposium and Policy Dialogue on Reuse in Canada 2022" (2023). https://plasticactioncentre.ca/wp-content/uploads/2023/03/Symposium-on-Reuse-and-Policy-Dialogue-WHAT-WE-HEARD-REPORT-January-2023-final-2.pdf

55 Canadian Council of Ministers of the Environment (CCME), "Strategy on Zero Plastic Waste" (2019). https://ccme.ca/en/res/strategyonzeroplasticwaste.pdf

In 2021, 61.8% of 36,407 repair businesses identified were micro businesses and 38% were small businesses.[56] A socio-economic and environmental study of the Canadian remanufacturing and value retention processing sector conducted for ECCC analyzed the expansion of these activities by 2030 in the context of a circular economy. The findings suggest that these activities could generate annual revenues of $47-51 billion and create 402,000-452,000 jobs, showcasing the sector's promising economic potential.

91% of Canadians have purchased at least one household appliance or piece of electronic equipment (HAEs) in the last two years, and in 2019, Canadian households spent $972 per year on these appliances. However, only 18.6% of those surveyed had their last broken appliance repaired. That's 63.4% of people who have experienced broken appliances in an average of 2.6 years after purchase.[57]

The government has committed to create a 15% tax credit, up to $500, "To extend the life of household appliances […] to cover the cost of repairs performed by technicians.[58] However, tax credits do not reduce the initial payment for a repair, reducing the incentive to repair. For this reason, we prefer a different approach.

In France, a repair fund was established in the fall of 2022, and will reach €102 million (CAD $150 million) annually in 2028 to cover the entire HAEs sector. This fund allows people who are faced with a broken appliance out of warranty to obtain a discount at the time of the repair.[59]

Recommended Investments:

The federal government should support reuse initiatives as alternatives to single-use plastics as well as reducing the cost of repair to ensure greater access.

- **$87 million over three years** to implement a repair fund to reduce the cost of repairing electronics and appliances, **then $87 million per year, ongoing**. [ISED, FIN]
- **$100 million over three years** to establish a reuse fund to support businesses and organizations developing reusable container and packaging solutions as alternatives to single-use plastics, **then $35 million per year, ongoing, until the effective implementation of reusable containers and packaging in Canada**. [ECCC, ISED]

Contact

Amélie Côté – acote@equiterre.org

Photo: James Kovin

56 Government of Canada, "Businesses - Canadian Industry Statistics" (2023). https://ised-isde.canada.ca/app/ixb/cis/businesses-entreprises/811?lang=eng

57 Equiterre, "Working Towards Repairable Appliances and Electronics in Canada" (2022). https://www.equiterre.org/en/resources/rapport-pour-des-appareils-electromenagers-et-electroniques-reparables-au-canada

58 Prime Minister of Canada, "Deputy Prime Minister and Minister of Finance Mandate Letter" (2021). https://www.pm.gc.ca/en/mandate-letters/2021/12/16/deputy-prime-minister-and-minister-finance-mandate-letter

59 Equiterre, "Annex 8: Description and issues relating to France's Repair Fund" (2022). https://cms.equiterre.org/uploads/Initiatives/150_Pour-des-objets-durables-et-r%C3%A9parables/EQT_rapport_reparation_annexes_EN8.pdf.

CLIMATE ACTION THROUGH EMISSIONS REDUCTIONS

Photo: Nabel Sayed

Introduction

In the last few years, Canada has made increasingly ambitious global commitments and important budget and policy actions on climate mitigation, leading to the suite of actions included in the 2022 emissions reduction plan (ERP). Budget 2023 signaled a turning point for climate action and funding, notably in the clean electricity sector.

While these recent efforts to meet the current 2030 GHG emission reduction target of 40-45% below 2005 levels are welcome, the Green Budget Coalition—and many others—considers this target largely insufficient for the country to do its fair share of the global effort to limit global warming to below 1.5°C. As such, leading Canadian environmental NGOs call for actions that lead to 60% emissions reductions below 2005 by 2030 domestically, and more action internationally.[60]

In addition, the quantity and nature of funding solutions still fall short of experts' recommendations to effectively address the climate crisis and reach the Paris Agreement goals. While the IPCC estimates that around 2.5% of GDP must be invested annually in the energy system to limit warming to 1.5 degrees C,[61] Canadian federal climate mitigation spending only accounts for 0.5% of GDP.[62] According to a recent report from the Canadian Centre for Policy Alternatives, quickly decarbonizing every sector of our economy would require investing 2% of Canada's GDP over the next five years for a total of $287 million, averaging $57 billion per year in addition to spending planned for the year 2022-2023.[63]

Regarding the nature of solutions to pursue, the IPCC clearly states that net emission reductions in the energy system will come from solar and wind penetration, while fossil carbon capture and storage comes last. In terms of infrastructure, key solutions

60 Christian Holz, "Deriving a Canadian Greenhouse Gas reduction target in line with the Paris Agreement's 1.5°C goal and the findings of the IPCC Special Report on 1.5°C". https://climateactionnetwork.ca/wp-content/uploads/2019/12/CAN-Rac-Fair-Share-%E2%80%94-Methodology-Backgrounder.pdf

61 Intergovernmental Panel on Climate Change (IPCC), "Special Report: Global Warming of 1.5°C Summary for Policymakers" (2019). https://www.ipcc.ch/sr15/chapter/spm/

62 Canadian Centre for Policy Alternatives, "Spending What It Takes" (2023). https://policyalternatives.ca/publications/reports/spending-what-it-takes

63 Canadian Centre for Policy Alternatives, "Spending What It Takes" (2023). https://policyalternatives.ca/publications/reports/spending-what-it-takes

include more efficient buildings and vehicles, as well as public transit and active transportation.[64]

Effective action in these sectors requires collective action—by all orders of government (federal, provincial, territorial, Indigenous and municipal), industry and businesses, labour, civil society, communities, and individuals. In this context, the federal government has a critical role to play as a key leader to position investments and policy to drive emission reductions, as well as to create market certainty and draw in private investments that will secure a sustainable, net-zero economy that leaves no one behind.

With the United States having adopted its USD $390 billion Inflation Reduction Act, its biggest piece of legislation to combat climate change to date, supported by the Infrastructure Act (USD $1.2 trillion) and the Chips and Science Act (USD $280 billion), Canada needs to shape its own vision for its future economic activities. *For more details, see recommendations elsewhere in this document, particularly in the first section, Integrating Climate and Nature Across Government Fiscal Policy, Budgeting, and Spending Decisions, starting with Transforming Canada's economy through a net-zero industrial policy.*

Additionally, with worldwide photovoltaic and electric vehicle deployments that are far ahead of experts' scenarios in many countries around the world, Canada is lagging behind in developing the infrastructure needed to support these technologies. In short, more money will be needed overall to ensure the full decarbonization of Canada's economy in a just and timely manner to fulfill its fair share of the global effort and to ensure Canada's future prosperity.

This document outlines strategically chosen fiscal and budget actions that the Green Budget Coalition sees as the best options to make further progress to reduce emissions over the coming years, providing benefits for the climate and the environment, as well as the economy, and improving equity, human health, affordability and quality of life.

To be successful in its transition, Canada must continue its efforts towards, and take advantage of, low-hanging fruit in the electricity and transportation sectors, as well as plan and lead the phase-out of fossil fuel dependence. Budget 2024 must support further reductions in emissions and continue the important work of building an equitable, carbon-neutral and nature-positive world in alignment with the urgency of the crisis.

For the Green Budget Coalition's feature recommendations for climate action, please see earlier in this document for:

- *A renovation wave for climate resilient homes and affordable home energy;*
- *Advancing a zero-emissions electricity grid based on renewables; and*
- *Advancing sustainable jobs for a net-zero Canada.*

64 IPCC, "Synthesis Report of the IPCC Sixth Assessment Report (AR6) - Summary for Policymakers" (2023). https://www.ipcc.ch/report/ar6/syr/downloads/report/IPCC_AR6_SYR_SPM.pdf

Ensuring accurate, measurement–based oil and gas methane data

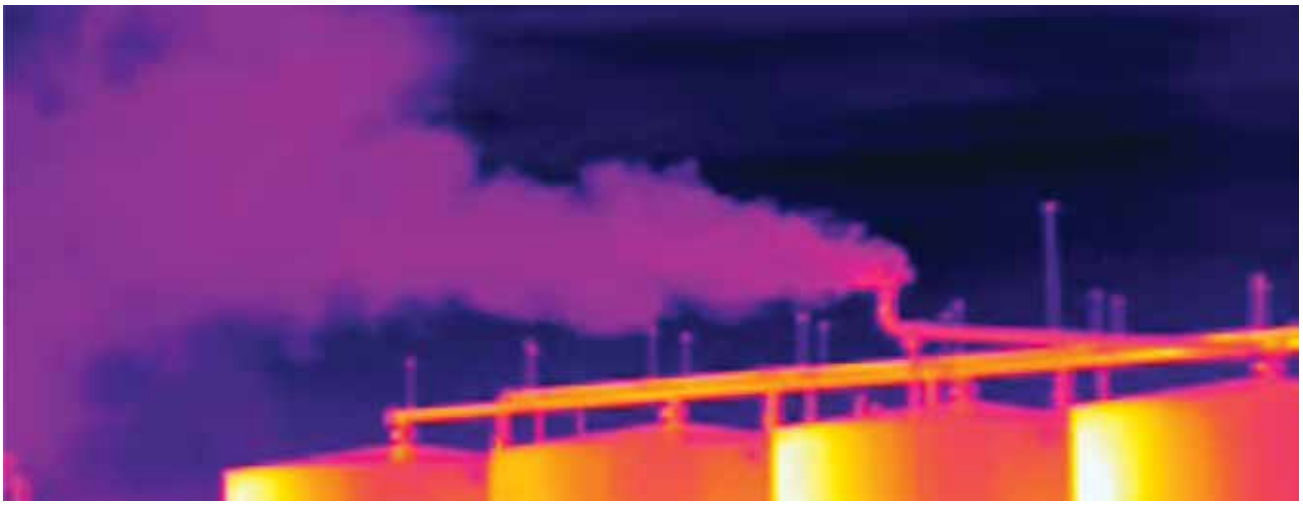


Photo: Clean Air Taskforce

Methane is a potent greenhouse gas with more than 80 times the climate warming impact of carbon dioxide; it is thus imperative to aggressively reduce methane emissions. Addressing methane is one of a few early opportunities for rapid, deep emissions reductions in the oil and gas sector. ECCC is moving forward with new methane regulations to meet the government's commitment to ensure the oil and gas industry eliminates at least 75% of methane emissions by 2030.

The Commissioner of the Environment and Sustainable Development's report on Emissions Reductions through Greenhouse Gas Regulations[65] identified concerns with the accuracy of current methane estimates and recommended shifting towards measurement based estimates.

Current methane emission estimates are based on industry reported data that have been proven to be inaccurate. Canada's methane strategy acknowledges that the current inventory underestimates emissions by 25 to 90%.

The mandate letter to the Minister of Natural Resources includes the establishment of a Centre of Excellence for oil and gas methane abatement.

Canadian researchers are at the forefront of global efforts to accurately measure these emissions, but there is a need for greater collaboration between provinces, academics, industry, and environmental organizations.

The Green Budget Coalition recommends:

1. Funding to continue regular measurement initiatives (in which ECCC has been involved) to allow tracking progress against goals; and
2. Setting up a data hub to foster transparency and collaboration among key stakeholders.

A Canadian methane census and data hub are critical to achieving Canada's methane targets and would position Canada as a global leader on methane.

Recommended Investment:

$75 million dollars over five years starting in 2024 for methane measurement initiatives and a data hub to foster transparency and collaboration among stakeholders, potentially housed in the NRCan methane Centre of Excellence. [NRCan]

Contacts

Jan Gorski – jgorski@pembina.org
Tom Green – tgreen@davidsuzuki.org

65 Office of the Auditor General of Canada, "2023 Reports 1 to 5 of the Commissioner of the Environment and Sustainable Development to the Parliament of Canada." https://www.oag-bvg.gc.ca/internet/English/parl_cesd_202304_05_e_44243.html

TRANSPORTATION

Save and improve public transit service

Canada is set to miss its 2030 transport emissions target by eight million tonnes, as GHG reductions from individual zero-emission vehicles will largely occur post-2030. Experts agree that increasing transit service is the best way to induce ridership growth, but ridership will only rise at the scale required to meet our climate goals with federal operations funding.

The federal government's policy of funding capital but not operations has led to an explosion in the number of unutilized transit vehicles sitting in garages, while we know that only 8 riders in a bus make it more efficient than individual vehicles. Montreal's STM deploys only 1,343 buses out of a fleet of 2,031 and across the country, nearly 2,000 buses sit idle. Canada now has fewer buses in peak service than it did in 2012.

Funding capital but not operations deepens social and regional inequities. Capital funding favours rail projects, while low-income and racialized riders disproportionately rely on buses. Capital funding disadvantages expansion projects — like bus rapid transit — that can be done quickly and help meet near-term climate targets. The emphasis on capital is also out of step with post-pandemic travel patterns: bus ridership recovery has been faster than rail.

The operating budget crisis highlights a long-standing need for permanent solutions. The rollout of the permanent transit fund should be accelerated to 2024 rather than 2026, and it should be tied to land-use standards and zero-emission-bus procurement.

Total Recommended Investment [INFC]:

$5.25 billion in 2024–25, $4.5 billion in 2025–26, and then $1.5 billion per year, ongoing

1. Match emergency provincial **operating funding** for transit by renewing emergency funding provided in 2022. (**$750 million in 2024-25**)
2. Accelerate and expand the **permanent public transit fund**:
   - **a. $3 billion per year in 2024 and 2025,** for major capital projects, **plus**
   - **b. $1.5 billion per year, ongoing**, for additional permanent core funding divided as follows:
     - a. In addition to the existing commitment of $3 billion per year for major capital projects that is tied to *Supportive Policies Agreements*, the Green Budget Coalition recommends creating a core funding stream that goes directly to municipalities, modeled on Ontario's gas tax program. This stream should fund both capital and operating expenses to improve bus service, reduce fares for low-income riders and electrify fleets, and specify that funds are not to exceed 75% of municipal own-spend on transit in order to push municipalities to increase transit spending from own-source revenues. (**$1 billion per year, ongoing**)
     - b. Create a per-ride subsidy of $0.86 for each additional ride above 2019 ridership levels, with the subsidy pegged to inflation. This will create an incentive for transit systems to adapt to post-pandemic travel patterns to attract new riders; increase service expansion following ridership recovery; and ensure operating subsidies have an efficient pass-through to service increases rather than increased costs. (**$500 million per year, ongoing**)

Contact

Gideon Forman – gforman@davidsuzuki.org

Decarbonizing Canadian medium– and heavy–duty vehicles

Emissions from medium- and heavy-duty vehicles (MHDVs) need to be a priority for Canada's climate ambitions — they account for approximately 35% of national transportation-related greenhouse gas emissions, the largest of any sub-sector. By 2030, freight emissions are expected to surpass passenger-vehicle emissions in Canada. The 2030 Emissions Reduction Plan in March 2022 set out ambitious targets to reach 35% of new MHDV sales being zero emission by 2030, and 100% by 2040 (based on feasibility).[66] However, the current suite of MHDV policies will not achieve these targets without additional near-term supports to defray the cost of adopting zero-emission vehicles (ZEVs).

1. Medium- and Heavy-Duty Zero-Emission Vehicles (iMHZEV) Program

Budget 2022 announced $547.5 million over four years for the Incentives for Medium- and Heavy-Duty Zero-Emission Vehicles (iMHZEV) program, which offers up to $200,000 or 50% of the purchase costs of the ZEV.[67] To achieve a target of most MDVs reaching 50% ZEV sales by 2030, we estimate that the federal government will need to increase its financial support by approximately $4 billion through 2030, by which time ZEVs are expected to reach cost parity with diesel vehicles in terms of total cost of ownership.

Recommended Investment:

$4 billion over six years (to 2029–30) to iMHZEV [TC]

2. Green Freight Program

NRCan is launching Stream 2 of the Green Freight Program in 2023.[68] This program provides 50% cost-share contributions up to a maximum of $5,000,000 to truck owners who retrofit their diesel exhaust systems with alternative cleaner technologies. Retrofitting, in general, consists of removing certain mechanical components of a vehicle (e.g., engine, transmission) and replacing them with newer, cleaner systems such as a compressed natural gas engine,[69] or an electric drive train/propulsion system, and in some cases with a hydrogen range extender (H2 tanks).[70] We support this initiative, and recommend that the program's scope be expanded to include electric engine retrofits. Retrofitting a diesel truck with an electric engine costs about two-thirds the price of buying a new electric truck ($200,000 vs $300,000).[71] Other jurisdictions such as France and New York have already been including electric engines in their retrofit programs. To ensure an adequate number of trucks receive support under the Green Freight Program, more funding is needed.

Recommended Investment:

At least $1 billion for the Green Freight program [NRCan]

Contact

Adam Thorn – adamt@pembina.org

66 Government of Canada, "2030 Emissions Reduction Plan", https://www.canada.ca/en/services/environment/weather/climatechange/climate-plan/climate-plan-overview/emissions-reduction-2030.html

67 Government of Canada, "Incentives for Medium and Heavy Duty Zero Emission Vehicles", https://tc.canada.ca/en/road-transportation/innovative-technologies/zero-emission-vehicles/medium-heavy-duty-zero-emission-vehicles/incentives-medium-heavy-duty-zero-emission-vehicles

68 Government of Canada, "Now Accepting Project Applications: Green Freight Program Stream 2", https://www.canada.ca/en/natural-resources-canada/news/2023/08/now-accepting-project-applications-green-freight-program-stream-2.html

69 Giorgis, Robert. 2019. Gas Technology Institute: Medium- and Heavy-Duty Vehicle Technologies: Thirteen-Liter Dual-Fuel Natural-Gas Engine Demonstration. California Energy Commission. Publication Number: CEC-600-2019-026 https://www.energy.ca.gov/sites/default/files/2021-05/CEC-600-2019-026.pdf

70 Hydrogen Central, "New System Retrofits Diesel Engines to Run on 90 Per Cent Hydrogen", https://hydrogen-central.com/new-system-retrofits-diesel-engines-run-90-per-cent-hydrogen/

71 Fleet Owner, " Diesel trucks may get new life in electrified world", https://www.fleetowner.com/emissions-efficiency/electric-vehicles/article/21169611/diesel-trucks-may-get-new-life-in-electrified-world

Electrifying school buses: a low-hanging fruit in transportation decarbonization

School buses can play a vital role in decarbonizing transportation because their routes are predictable, they have short distances, and can recharge at central locations.

Although the Zero Emission Transit Fund (ZETF) and Zero Emission Vehicle Infrastructure Program (ZEVIP) offer federal funding support, addressing funding sufficiency and accessibility is essential amid evolving policies.

Based on extensive research and consultations, the Green Budget Coalition has developed a detailed recommendation to accelerate progress in deploying and utilizing ESBs in Canada, primarily by improving the effectiveness of current federal programs.

This detailed recommendation provides advice for four priority areas:

1. Ensuring sufficient supply of ESBs.
2. Ensuring federal funding for ESBs is sufficient and easily accessible.
3. Facilitating data collection and knowledge sharing.
4. Building knowledge and expertise of fleet operators and workforce on ESBs.

Please see greenbudget.ca/recommendations/2024/electrifying-school-buses-a-low-hanging-fruit-in-transportation-decarbonization-detailed-recommendation/ for the Green Budget Coalition's more detailed recommendation on electric school buses.

Contacts

Marc-André Viau – maviau@equiterre.org
Thomas Arnason McNeil – thomas.arnasonmcneil@ecologyaction.ca

Photo: Aly Ambler

Reducing carbon emissions from road transportation through electric-assisted bikes, equity and subsidy solutions

In March 2022, through its Emissions Reduction Plan, Canada made its zero-emission vehicle (ZEV) sales target of 100% by 2035 official and has set new targets of 20% by 2026 and 60% by 2030. Canada will soon adopt a regulation that aims to increase the supply of ZEVs.

However, recent modeling shows that the policies announced or in effect as of 2022 were far too weak to reach these targets.[72] This challenge is compounded by an ever growing share of large, energy-inefficient vehicles such as sport utility vehicles (SUVs) among new vehicle sales. Energy-inefficient vehicles represented more than 80% of sales in 2022, while ZEVs accounted for just 8.9%. As a result, Canada has the world's highest emitting vehicle fleet, and efforts to electrify our cars and trucks, including massive investments, are being canceled out.

Achieving Canada's ZEV sales targets and reducing carbon emissions from the transport sector will require a comprehensive and coherent combination of measures aimed at sectoral transformation. Transportation represents the second largest household expense after housing. Transportation—especially the choice to use clean transportation—needs to be less of a burden on Canadians.

To achieve significant GHG emission reductions and transform Canada's transportation system, the Green Budget Coalition recommends prioritizing solutions that help reduce the number of personal vehicles on our roads, as well as their size. Notably, transition should occur using active, collective and shared transportation where possible (*see Save and improve public transit service, earlier in this document*), and be supported by smart and equitable electrification that rapidly boosts both demand and supply of ZEVs.

1. Rewarding sustainable mobility choices through electric-assisted bike subsidies and a new scrappage program

For a fair transition to low-emission, energy-efficient mobility, policies should focus on moving away from personal vehicles and towards collective and active modes of transport such as car sharing and cycling. The literature is clear on the fact that transitioning Canada's vehicle fleet to a fully electric fleet will not be enough to reach our climate targets. Additionally, fleet transition won't solve other issues related to personal car or truck dependency, such as traffic, safety and public health. To reduce the number of vehicles on the roads, rewarding individuals who leave their car at home or get rid of it altogether is key, especially when lower-income households are prioritized such as in Denver, Colorado.[73]

The federal government could also take inspiration from Nova Scotia's EV Assist program and France's subsidy programs, both of which provide a partial refund of the costs associated with purchasing an e-bike. Nova Scotia's EV Assist has been the most subscribed to portion of the provincial ZEV incentive program and has helped increase the socioeconomic diversity in program participants, offering equity and affordability benefits, in addition to the co-benefits associated with bike travel.[74]

72 Axsen, John & Chandan Bhardwaj, "Modelling a Zero-Emission Vehicle Standard and Subsidies in Canada's Light-Duty Vehicle Sector (2023-2035)", START (2022). https://cms.equiterre.org/uploads/Clean_Car_Standard_Technical_Report_FINAL_ENG.pdf (report commissioned by Environmental Defence and Équiterre)

73 Base subsidy of $350 for a conventional electric-assisted bike (EAB) and $500 for a cargo version ; low-income household subsidy of $1,200 for a conventional EAB and $1,400 for a cargo version ; subsidy of $1,400 for adapted EAB purchased by disabled people.

74 EV Assist, Nova Scotia, "Rebate" (2022). https://evassist.ca/rebates/

In France, a subsidy is available to citizens who "scrap" an old car or truck, whether it is replaced by a ZEV, an e-bike or a regular bike, as part of a "conversion" component of its programs, and this subsidy can be partially combined with the existing ZEV purchase subsidy, an approach worth exploring in Canada.[75] Equity considerations are well integrated into the design of its programs.

Recommended Investment: $250 million over two years [TC]

- **$75 million** to expand the iZEV program to help support the purchase of 50,000 electric-assisted bikes by offering, for example, a 50% purchase subsidy for low-income households (up to $2,000) and 20% for medium- and high-income households (up to $1,000).
- **$175 million** to create a new scrappage program.
- Develop these new programs/sections with equity considerations.

2. Making zero-emission vehicles more accessible to people

To increase ZEV accessibility among Canadians, the House of Commons Standing Committee on Environment and Sustainable Development recently recommended that the Government of Canada allow used ZEVs to be eligible for incentives, taking inspiration from Québec, Nova Scotia and British Columbia among others, as well as scaling iZEV incentives to income.[76]

Such considerations can help broaden ZEV uptake by targeting low-income individuals and households. Where alternatives to automobile ownership are not viable, people must not be left behind. Studies show that, in addition to increasing equity, targeting incentives to low-income households makes purchase subsidy programs more cost-effective, "as wealthier households are more likely to buy an EV without any subsidy."[77]

Québec's *Roulez vert* program offers a rebate for used vehicles that is equal to 50% of the rebate that would be offered for the same vehicle if it was new (up to $3,500), but the vehicle can only be eligible for a rebate once. Ontario offers a smaller rebate of $1,000 when registering a used, fully electric vehicle without a limit on the number of registrations that qualify for the rebate.[78]

Additionally, an income cap for admissibility to the iZEV program could result in benefits being distributed among more families throughout Canada. For example, to be eligible for British Columbia's full purchase incentive, an individual's income must be below $80,000, and a lower rebate is offered to those earning less than $100,000 annually.[79] In California, in addition to its income cap for rebate eligibility, higher incentives are offered to low-income households, with a maximum qualifying income based on the household size (from USD $51,520 to USD $178,640).[80]

Recommendations [TC] :

- Update the iZEV subsidy program:
  - Make used EVs eligible for the iZEV subsidy program; and
  - Scale ZEV purchase incentives to household income and put a cap on eligibility based on household income (e.g., $100,000).

Contact

Marc-André Viau – maviau@equiterre.org

75 Service-Public.fr, "Bonus vélo : les aides de l'État étendues jusqu'au 31 décembre 2023". https://www.service-public.fr/particuliers/actualites/A15906#:~:text=Le%20bonus%20est%20de%20400,%C3%AAtes%20en%20situation%20de%20handicap. ; Ministère de la Transition écologique et de la Cohésion des territoire, "Prime à la conversion, bonus écologique : toutes les aides en faveur de l'acquisition de véhicules propres" (2023). https://www.ecologie.gouv.fr/prime-conversion-bonus-ecologique-toutes-aides-en-faveur-lacquisition-vehicules-propres

76 ENVI Committee, "Report 3 – The Road Ahead: Encouraging the Production and Purchase of Zero-Emission Vehicles in Canada" (2021). https://www.ourcommons.ca/Content/Committee/432/ENVI/Reports/RP11209745/envirp03/envirp03-e.pdf

77 Sharpe, Ben & Gordon Bauer, "Low-income households could benefit the most from EVs, but we need policy fixes to make that happen," Electric Autonomy Canada (2021). https://electricautonomy.ca/2021/04/13/ev-equity-incentive-policies/

78 However, the vehicle has to be registered and insured under the same owner for at least 12 months in order to be eligible another time.

79 British Columbia, "Passenger Vehicle Rebates" (2023). https://goelectricbc.gov.bc.ca/personal-rebate-offers/passenger-vehicle-rebates/

80 Asadollahi & Rous, "The Road Ahead to Low-Carbon Mobility" (2020). https://legacy.equiterre.org/sites/fichiers/report_the_road_ahead_to_low-carbon_mobility_low_0.pdf

Marine shipping

The shipping industry is one of the world's largest emitters of greenhouse gases (GHGs). If it were a country, it would be the world's sixth-biggest climate polluter. Canada must take steps to address the climate impacts of marine shipping and to ensure the industry is held to account. Disturbance, oil spills, whale strikes, and pollution from ships can severely impact critical habitat as well as Indigenous and community food security and health.

Total Recommended Investment: $135 million over five years

Accelerating zero-emission shipping:

1. **Zero-emission vessels: $20 million over two years** for R&D and sea trials to meet the target of 100% zero-emission vessels in Canadian inland waters by 2030. [TC]
2. **GHG emission reduction innovation fund: $10 million over two years** towards a GHG reduction innovation fund to provide advisory and capacity-building services to assist with vessel design, retrofit and testing for wind-assist, solar, electrification, autonomous technology and digitalization, and hull appendages. [TC, NRCan]
3. **Alternative fuels: $100 million over five years** to ensure alternative fuels are available at Canadian ports to ensure full decarbonization of Canadian shipping before 2050. Consideration should *only* be given to alternative fuels that offer significant life-cycle GHG benefits on a well-to-wake basis, including land-use change emissions. Liquified natural gas, liquified petroleum gas, and other fossil fuels should be explicitly excluded. [TC, ECCC, INFC]
4. **Marine fuel carbon pricing: $5 million over two years** to develop and implement a policy instrument to explicitly include domestic shipping in the Canadian carbon pricing system. [TC, ECCC, DFO]

Tools to generate revenue:

- **Vessel pollution control fund:** Require the collection of fees from vessels and deposit such fees in the fund to apply in the innovation programs specified above. [TC]
- **Cruise tourism fee:** Require the collection of a fee for every cruise passenger who comes into Port in Canadian waters to fund an initiative, equivalent to the Indigenous Guardians Program or Alaska's Ocean Ranger Program, to monitor and enforce compliance with federal requirements pertaining to marine discharge. [TC]
- **Insurance fund:** Establish a legally enforced insurance fund paid by the marine sector for public health and environmental impacts on local and Indigenous communities. This fund would ensure that there is proper compensation for those people amid any potential disruption or disaster. [TC]

Contact

Sam Davin – sdavin@wwfcanada.org

Photo: Thais Morais

Canada's international climate finance

Canada's climate finance commitment of $5.3 billion over five years (2021–2026) will help developing countries follow low-emissions pathways in developing their economies and advancing climate adaptation and mitigation. However, the Green Budget Coalition recommends an annual contribution of $3.5 billion as Canada's fair share of the $100 billion commitment from industrial countries, based on our responsibility for cumulative global emissions starting in the 1850s.

The Green Budget Coalition recognizes the importance of Canada's role in co-leading the Climate Finance Delivery Plan. Along with encouraging larger pledges and follow-through in applying funding, we recommend the advancement of: (1) transparent reporting on how much assistance is provided through grants versus loans, with the "grant equivalent" value given for loans, equity and loan guarantees; and (2) limiting loans to projects that will generate revenue or savings that enable repayments.

Recommended Investment:
$14 billion over four years [GAC, ECCC]

Contacts

Anne Lambert – anne@ICFCanada.org
Will Bulmer – wbulmer@WWFCanada.org

Photo: Lachlan Cruikshank

CLIMATE ADAPTATION

Photo: Matt Palmer

Ramping up core adaptation investments to increase resiliency in the face of climate change

Climate change threatens Canadian communities and ecosystems. The World Meteorological Organization forecasts that average global temperatures will surge to record levels in the next five years, likely exceeding the 1.5°C threshold in one or more months for the next 5 years.[81] We can expect more frequent and extreme weather events making adaptation more challenging – and more urgent. In June 2023, the federal government published Canada's first National Adaptation Strategy (NAS),[82] which outlines a path for improving climate change resilience in Canada across five interconnected systems: disaster resilience, health and well-being, nature and biodiversity, infrastructure, and economy and workers.

The federal government calculates that it has invested more than $6.5 billion since 2015 in **core adaptation**—programs and initiatives that are designed to directly enhance adaptation.[83]

The Green Budget Coalition recommends scaling up core adaptation investments by an order of magnitude in the next decade and establishing a National Adaptation Centre to support implementation of the NAS.

As noted in the Canadian Climate Institute's independent assessment of the NAS, "The scale of new action and investment proposed in the Action Plan is inadequate to address the growing national adaptation shortfall."[84] While the government announced an annual "down payment" of $1.6 billion for adaptation in November 2022, this represents an average increase of only about $200 million, and other adaptation funding envelopes will sunset in 2024.

81 https://library.wmo.int/doc_num.php?explnum_id=11173
82 https://www.canada.ca/en/services/environment/weather/climatechange/climate-plan/national-adaptation-strategy/full-strategy.html#toc20
83 https://www.canada.ca/en/environment-climate-change/news/2023/06/funding-climate-change-adaptation.html
84 https://climateinstitute.ca/wp-content/uploads/2022/12/Toward-a-safer-and-more-resilient-canada.pdf

Photo: Michael Weidner

"Finalizing this national strategy is an important milestone. Ensuring it delivers the results Canadians are counting on will take significant new funding, sustained focus and coordinated action by governments across the country."
—Ryan Ness, Director of Adaptation for the Canadian Climate Institute, June 27, 2023

Scaling up investments to date and addressing gaps

Existing programs and initiatives, such as those identified in the ECCC Backgrounder, *Funding climate change adaptation* (June 2023),[85] can be rapidly expanded and/or scaled up. Examples include the Natural Infrastructure Fund and incentives to integrate natural infrastructure in projects funded through other federal infrastructure funding streams (through INFC), the Infectious Disease and Climate Change Program/Fund (PHAC), and the Disaster Mitigation and Adaptation Fund (INFC).[86,87]

There are gaps in current funding streams. Priorities for new core adaptation investments include:

- Supporting Indigenous food sovereignty and resilient ecosystems that are a key source of food and clean drinking water;
- Integrating measures to advance equity, climate and environmental justice (a guiding principle of the NAS) across all core adaptation investments, and engagement with impacted communities;

85 https://www.canada.ca/en/environment-climate-change/news/2023/06/funding-climate-change-adaptation.html

86 A priority for DMAF top-up funding is supporting emergency planning and disaster recovery in equity-deserving and low-income communities.

87 A full list of federal adaptation actions can be found in Annex 3 of the Government of Canada Adaptation Action Plan, including both core adaptation investments and other programs. https://www.canada.ca/content/dam/eccc/documents/pdf/climate-change/climate-plan/national-adaptation-strategy/23062.07%20-%20Government%20of%20Canada%20Adaptation%20Action%20Plan%20GOCAAP-EN_V02.pdf

- Integrating measures to promote adaptation of forests, grasslands, wetlands and aquatic ecosystems in restoration and protection plans;
- Addressing flooding and erosion at a watershed scale that goes beyond municipal and/or jurisdictional boundaries with a focus on natural infrastructure solutions, and including regional collaboration of watershed health monitoring, and assessment of hydrology to manage flow regimes during periods of sporadic precipitation; and
- Targeted support for local governments to access predictive tools such as flood maps, and disaster mitigation funding. *See also the recommendation for a Municipal Climate Fund, later in this document.*

National Adaptation Centre

A National Adaptation Centre would enhance the public profile of the adaptation agenda, help facilitate access to core adaptation funding, support coordination and collaboration across federal departments and with other actors, and support mainstreaming adaptation considerations across other government programs. Effective coordination mechanisms will be essential to the success of Canada's NAS.

Recommended Investments:

- **At least $8 billion per year for the next eight years for core adaptation programs** [NRCan, INFC, ECCC, HC, CIRNAC and other departments]**.**
- **$25 million over two years to establish a National Adaptation Centre** [ECCC] to champion the NAS, assist with coordination, and facilitate community access to federal programs and funds.

In addition to core adaptation investments, funding for disaster response and recovery and other programs that include adaptation as a secondary outcome will continue to be important.

Detailed recommendations for additional investments in the following adaptation-relevant programs are included earlier in this document:

- *Aquatic Ecosystem Restoration Fund (see Decade of Restoration: our shared pathway to Target 2);*
- *Habitat Infrastructure Renewal Fund and Canada Target 2 Restoration Fund (see Decade of Restoration: our shared pathway to Target 2); and*
- *Indigenous-led conservation and protected areas.*

As well, all federal infrastructure funding programs need to be brought into alignment with the NAS. Infrastructure Canada's climate lens should be strengthened and expanded to apply to all federal infrastructure investments. Climate change impacts will require increased investment in infrastructure renewal and resilience.

The Green Budget Coalition supports the request of the Métis Nation for emergency preparedness funding.

See also Establishing a municipal climate fund, later in this document.

Contact

Clarissa Samson – csamson@davidsuzuki.org

Establishing a municipal climate fund

Targeted climate funding for cities, towns and communities is essential if emissions are to be significantly reduced in Canada. Almost 50% of Canada's emissions come largely from activities in cities and communities. At the same time, while municipal governments are responsible for 60% of infrastructure costs, they collect only 10% of tax dollars. Thus, while the imperative for municipal climate action grows, so too does the infrastructure deficit. Robust municipal climate action cannot be adequately funded by the property tax base and current funding programs are too restrictive. Recent federal budgets have included mostly limited and non-permanent funding to help municipalities reduce emissions and address other municipal priorities, such as infrastructure. A permanent funding mechanism is needed to enable municipal action on local climate priorities.

Flexible and dependable climate-focused funding options remain rare. It is critical to move away from one-off grants and loans or the requirement for matching funds, which bias the funds towards municipalities that have the capacity to design projects and write grant applications. Sustained long-term funding that enables coherent community climate response would also address the differing needs among municipalities. Building on past investments including the five-year Municipalities for Climate Innovation Program, a new climate fund would provide municipalities with resources to take climate action and implement climate action plans that are not funded by other sources. Projects supported via the fund would need to demonstrate their benefits in terms of reduced emissions and improved resilience to a changing climate.

Recommendation:

The Green Budget Coalition recommends creating a new municipal climate action fund, complementing existing funding streams, that municipalities can access for the following:

- Developing climate plans, climate data collection and acquisition, and translation. Gaps in consistent GHG emission data at the municipal level are enormous and need to be resolved to ensure effective and methodologically consistent climate action. Funding is also needed to undertake standardized climate risk assessments. Resources such as climatedata.ca exist, but most municipalities do not have the expertise and resources to use that data to inform their work. Equity should be a requirement of these plans (including impacts and benefits for low-income communities);
- Climate mitigation actions. As mentioned above, dedicated funding for implementation of action plans that demonstrate evidence-based and science-aligned outcomes;
- Climate resilience and resilient infrastructure — beyond the current scope of the Disaster Mitigation and Adaptation Fund; and
- Support for full municipal and Indigenous community engagement in the implementation of the National Adaptation Strategy, recognizing the local nature of addressing resilience in the face of worsening climate impacts that disproportionately affect low-income and vulnerable people.

Recommended Investment: $3 billion per year until at least 2030–31, to establish a municipal climate fund. [INFC]

See also Advancing a zero-emissions electricity grid based on renewables and Ramping up core adaptation investments to increase resiliency in the face of climate change, earlier in this document.

Contact

Julius Lindsay – jlindsay@davidsuzuki.org

ENVIRONMENTAL JUSTICE

Office of Environmental Justice

The Green Budget Coalition recommends funding the establishment of a permanent, high-level Office of Environmental Justice, housed at ECCC, to:

- Lead development of a national strategy on environmental racism and environmental justice and support its implementation;
- Work with ECCC's enforcement branch to advance environmental justice through the enforcement of federal environmental laws in underserved communities;
- Develop a publicly-accessible screening and mapping tool that overlays environmental and socio-demographic data; and
- Develop collaborative partnerships and manage a new environmental justice communities grants fund.

Background

Too often in Canada, racialized and disadvantaged communities bear a disproportionate burden from environmental degradation and preventable environmental health hazards, such as pollution and toxic substances in consumer products. Environmental injustice exacerbates climate change impacts and other inequities that these communities experience.

The Government of Canada needs to invest in institutional capacity, as well as research and policy development, to ensure that environmental protection programs, policies, investments and laws account for population-level inequities and advance environmental justice.

Photo: Jouris Buegels

Environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies. Fair treatment means no group of people should bear a disproportionate share of the negative environmental consequences resulting from industrial, governmental and commercial operations or policies.[88]

Source: U.S. EPA Office of Environmental Justice

National strategy

Bill C-226, the *National Strategy Respecting Environmental Racism and Environmental Justice Act,* requires the minister of environment and climate change to develop a strategy to advance environmental justice and assess, prevent and address environmental racism. The Green Budget Coalition notes that ECCC reallocated resources in 2022 to initiate work and prepare for consultations on the strategy.

We recommend Budget 2024 confirm funding to complete development of the strategy, and formally establish a permanent and high-level Office of Environmental Justice. This Office would provide institutional capacity needed to support implementation of the strategy, on an on-going basis, as well as related environmental justice requirements in recent amendments to the Canadian Environmental Protection Act (Bill S-5). This Office should also be consulted on program design to ensure that federal climate and nature programs will benefit communities that have historically been overburdened by environmental harm.

A model exists in the United States; the EPA Office of Environmental Justice was established in the early 1990s. In 2021, President Biden established a White House Environmental Justice Advisory Council to "bring greater visibility to environmental justice issues across the Federal Government."[89]

Recommended Investment:
$125 million over five years, and then $25 million per year, ongoing [ECCC]

Environmental enforcement

Uneven enforcement of environmental protection laws contributes to environmental racism and environmental injustice. Holding polluters accountable for violations that disproportionately impact Indigenous, BIPOC, and low-income communities is an environmental justice priority. However, these communities face multiple barriers in accessing justice.

In 2022, the U.S. Department of Justice (DoJ) announced a new comprehensive environmental justice enforcement strategy and established a dedicated Office of Environmental Justice. The DoJ Office of Environmental Justice will support investigations and litigation in relation to violations with environmental justice impacts, as well as outreach to communities facing environmental justice concerns.

The Canadian Office of Environmental Justice should play a similar role. Additional resources are needed to enable ECCC's enforcement branch to prioritize and enhance compliance and enforcement activities that will have the greatest impact on communities most overburdened by environmental harm. Funds received from fines, court orders and voluntary payments as a result of enforcement action should be earmarked for projects that will benefit the affected community and advance environmental justice.

Recommended Investment:
$200 million over five years, and then $40 million per year, ongoing [ECCC]

Screening and mapping tool

Canada's Anti-Racism Strategy 2019-2022 included a commitment to enhance collection of disaggregated data (i.e., data that can be broken down by meaningful categories of race and/or ethno-cultural origins). However, this information is missing from important environmental databases and indicators, such as the National Pollutant Release Inventory, the Canadian Environmental Sustainability Indicators, and ambient air quality reporting.

The U.S. EPA Office of Environmental Justice

88 Environmental Protection Agency, "Learn About Environmental Justice, US EPA.". https://www.epa.gov/environmentaljustice/learn-about-environmental-justice.
89 https://www.whitehouse.gov/environmentaljustice/white-house-environmental-justice-advisory-council/

developed "EJScreen", an online mapping and screening tool that provides a nationally consistent dataset and approach for integrating environmental and sociodemographic indicators. We recommend ECCC develop a screening tool in consultation with the public. It should include data on Indigeneity, race, income and other socio-demographic indicators. Not only will this help identify locations with potential environmental justice concerns and environmental health risks, it will also enable ECCC to measure and track the effectiveness of the new strategy. Federal environmental databases and indicators should also be expanded to enable environmental justice analysis.

Recommended Investment:
$30 million in 2024 to develop the tool, **then $10 million per year, ongoing, starting in 2025** for ongoing data collection. [ECCC]

Collaborative partnerships and grants

The Canadian Office of Environmental Justice will be well-placed to play a convening role, bringing together relevant federal departments and agencies (e.g., inter-departmental working groups), leveraging external expertise (e.g., an independent advisory committee), explore collaboration with Indigenous and provincial/territorial governments, and engaging with communities. We also recommend a new environmental justice community grants fund to be managed by the Office of Environmental Justice. The fund could be used to enable community groups to hire technical experts, participate in consultative processes, and fund local solutions (among other needs).

Recommended Investment [ECCC]**:**

- **$10 million over five years, and then $2 million per year, ongoing,** to support collaborative partnerships; and
- **$150 million over five years** for community grants.

Total Recommended Investment [ECCC]**:**
$555 million over five years, followed by $77 million per year, ongoing

Contacts

Lisa Gue – lgue@davidsuzuki.org
Jacqueline Wilson – jacqueline@cela.ca
Muhannad Malas – mmalas@ecojustice.ca

Photo: Mapbox

Chemicals Management Plan renewal: protecting all people in Canada from toxic chemicals and pollution

Under the Chemicals Management Plan (CMP), ECCC and HC assess, manage and aim to reduce risks posed by chemical substances. The CMP was launched in 2006, and most recently renewed in Budget 2021 ($476.7 million over three years). **The Green Budget Coalition recommends that funding for CMP be renewed on a permanent basis at the earliest opportunity.**

With renewal, additional resources will be needed to implement recent amendments to the *Canadian Environmental Protection Act.* Bill S-5[90] became law in June 2023, updating the legislative framework for chemicals management for the first time in more than two decades. Among other changes, the amendments recognize the right to a healthy environment and require chemical assessments to consider cumulative effects and effects on vulnerable populations.[91]

The Green Budget Coalition recommends that CMP renewal invest in building science and policy capacity for these important new approaches, including:

- Identifying and prioritizing prohibition of carcinogens, mutagens, reproductive toxicants and other chemicals of highest risk;
- Cumulative effects and class assessment;
- New mechanisms to monitor and manage exposure to toxic chemicals in consumer products;
- A full review of measures required to protect Indigenous peoples' rights and nature from the risks of genetic engineering of animals;
- Addressing data gaps to identify and protect populations that are more vulnerable to the harmful effects of pollution;
- Requests for information regarding releases, specifically hydraulic fracturing and tailings ponds; and
- Developing and applying the required framework to implement the right to a healthy environment in the administration of CEPA, including action on air pollution.

The Green Budget Coalition also recommends moving the CMP budget to A-base to build and maintain scientific capacity for this important, legally mandated work. While the program was focused on assessing an initial batch of 4,300 "high priority" substances, Health Canada and ECCC must retain capacity to assess new substances and update assessments in light of new science and approaches, and to develop and implement control measures for the increasing number of substances assessed as toxic under CEPA. The ongoing task of chemicals management requires permanent capacity.

Recommended Investment: $200 million in 2024–25, then $300 million per year, ongoing, starting in 2025–26 to renew the Chemicals Management Plan and implement new legislative requirements. [ECCC, HC]

Contacts

Lisa Gue – lgue@davidsuzuki.org
Elaine MacDonald – emacdonald@ecojustice.ca
Jane McArthur – jane@cape.ca

90 *An Act to amend the Canadian Environmental Protection Act,* 1999, to make related amendments to the Food and Drugs Act and to repeal the Perfluorooctane Sulfonate Virtual Elimination Act See: https://www.parl.ca/DocumentViewer/en/44-1/bill/S-5/royal-assent

91 CEPA defines *vulnerable population* as "a group of individuals within the Canadian population who, due to greater susceptibility or greater exposure, may be at an increased risk of experiencing adverse health effects from exposure to substances."

Youth employment programs to build a more equitable and inclusive future for conservation

As communities, businesses, and industry seek to work in a more integrated way with nature and seek natural solutions to global challenges like climate change, severe weather and biodiversity loss, conservation experience will be an increasingly important asset for youth seeking to enter the workforce. Historically in Canada, workers in conservation have not come from diverse backgrounds. This is changing. Now more than ever before Indigenous people, racialized youth, youth with disabilities and youth facing barriers to employment are seeking and finding opportunities for jobs and careers in conservation.

The integrated outcomes that can result from funding youth employment programs include local community and economic benefits, ecosystem wellbeing, the development of youth career paths, mental and physical health benefits, and growing a sense of inclusion and belonging.

The Green Budget Coalition appreciated the $802 million announced in the 2022 Fall Economic Statement for the Youth Employment and Skills Strategy (YESS), Canada Summer Jobs (CSJ), and the Income Assistance-First Nations Youth Employment Strategy Pilot through 2024-25. However, these programs' effectiveness and benefits for employees and employers continues to be limited by the program requirements (number of youth hired per funding amount), which prevent full-time terms beyond 4 months.

The Green Budget Coalition recommends that the government continue and improve its support for conservation and other organizations in developing the workforce of the future.

Recommended Investments and Improvements: [ESDC with PC and ECCC]

- For the Youth Employment and Skills Strategy, Canada Summer Jobs, Indigenous youth employment programs, and the Green Jobs initiative led by Parks Canada:
  - Amend the program funding rules to allow all work terms to be at least six months long, full-time, at geographically-appropriate wage levels;
  - **$80 million in 2024-25** to provide the ability for 20% of such work terms to be double-length, roughly 6-8 months, while facilitating the same number of young people to be hired;
  - **$500 million per year, ongoing, starting in 2025-2026**, to create permanent funding including the ability for 25% of young people hired to be employed for roughly 6-8 months;
- Work with the environmental NGO and funding communities to develop increased match funding to further expand these programs' reach and benefits for youth employment in the environmental sector.

Contacts

Emily McMillan – emcmillan@naturecanada.ca
Gia Paola – g_paola@ducks.ca

NATURE PROTECTION AND RECOVERY IN CANADA — DETAILED RECOMMENDATIONS

Photo: Thom Holmes

Introduction

In December 2022, Canada hosted the 15th Conference of the Parties (COP15) to the United Nations Convention on Biological Diversity (CBD) in Montreal. Already two years behind schedule, COP15 landed a historic agreement to protect nature —the Kunming-Montreal Global Biodiversity Framework (KMGBF).[92] During the conference, Canada's Minister of Environment and Climate Change committed[93] to work with rights holders and stakeholders to develop a whole-of-government national biodiversity strategy and accountability act towards Canada's biodiversity targets, including protecting at least 30% of land and ocean by 2030. The Minister also signaled his intention to review subsidies that are harmful to biodiversity.

To meet the ambitions of the KMGBF, countries committed to develop coherent national biodiversity strategies and action plans, as well as associated biodiversity finance plans. Canada's biodiversity finance plan should detail financing needs for reaching Canada's KMGBF targets, and the mechanisms by which the Government of Canada can catalyze new investments to achieve these targets (e.g., federal budgets and taxes, blended finance, impact funds, biodiversity bonds, payments for ecosystem services and offset mechanisms). Canada's biodiversity finance plan should be underpinned by a robust mitigation hierarchy[94] to, first, avoid and minimize impacts to natural habitats and, second, implement biodiversity offsets to, at a minimum, achieve no net biodiversity loss and where possible, net biodiversity gain. The Green Budget Coalition nature recommendations below outline some of the key elements that should be reflected in a 2030 Biodiversity Strategy Financing Plan and are detailed in the categories Protect, Restore, Manage, and Mainstream and Mobilize.

92 UN Environment Program. "Kunming-Montreal Global biodiversity framework." https://www.cbd.int/doc/c/e6d3/cd1d/daf663719a03902a9b116c34/cop-15-l-25-en.pdf

93 Government of Canada. "Statement by the Honourable Steven Guilbeault on the opening of the high-level segment of COP15." https://www.canada.ca/en/environment-climate-change/news/2022/12/statement-by-the-honourable-steven-guilbeault-on-the-opening-of-the-high-level-segment-of-cop15.html

94 195 State Parties to the UN Biodiversity Convention have specifically endorsed and recommended the use of the mitigation hierarchy as the key to mainstreaming biodiversity in the energy, mining, and infrastructure sectors.

Index of Recommendations

	KMGBF Target
Protect Land and Ocean Ecosystems	
➔ Indigenous-led conservation and protected areas	1, 3, 22
➔ Species at risk	4
➔ Ecological connectivity	1, 2, 3, 4, 12
➔ Key Biodiversity Areas	1, 2, 3, 4
➔ Endowment fund to strengthen private land conservation sector	1, 3, 4
➔ Conserving Canada's ocean	
• Marine protected area network planning	1, 3
• Marine Spatial Planning (MSP)	1, 3
Restore Degraded Terrestrial and Aquatic Ecosystems	
➔ Decade of Restoration: our shared pathway to Target 2	
• Create a restoration coordinating body	2
• Support a national seed supply for land-based restoration	2
• Direct and establish funds to achieve Canada's restoration goals	2
Manage and Use Biodiversity Sustainably	
➔ Managing ocean fisheries	
• Advancing the ecosystem approach to fisheries management	5, 9, 10
• Build a modern fisheries catch monitoring and observer system	5, 9, 10
• Renew and revamp the Atlantic Fisheries Fund	8, 9, 10, 11
➔ Underwater noise pollution	7, 21
➔ Freshwater management	11
➔ Managing and reducing negative impacts to biodiversity	6, 7, 12
• Controlling the economic, social, and environmental impacts of invasive species	6
• Advancing a One Health approach	7, 12
• Data collection to support regulatory evaluation of pesticides	7, 21
• Halt and reverse bird population declines	1, 2, 3, 4, 7
Mainstream Biodiversity and Mobilize Financial Resources	
➔ Aligning policies and investments with halting and reversing biodiversity loss by 2030	1, 2, 3, 4, 14, 15, 18, 19
➔ Increasing Canada's international biodiversity assistance	19, 20
➔ Accurate data, research, information, and knowledge for improved evidence-based monitoring and decision-making	1, 2, 3, 4, 6, 8, 11, 21
• Cataloguing, updating, and developing geospatial inventories	1, 2, 3, 4, 6, 8, 11, 21
• Understanding, mapping, and monitoring Canada's coastal blue carbon ecosystems	1, 2, 3, 4, 6, 8, 11, 21

Protect Land and Ocean Ecosystems

Photo: Thom Holmes

As of December 2022, only 13.6% of Canada's national terrestrial area, and 14.7% of marine area were protected.[95] The number of species at risk continues to climb. Urgent action is needed to deliver on Canada's commitment to protect at least 30% of land, freshwater and ocean by 2030, and to recover species at risk. Over 40%[96] of the land and ocean that makes up Canada's commitments is subject to Indigenous title. Much of the required protection progress therefore hinges on recognition by Crown governments of Indigenous jurisdiction and title, and effective co-management of protected land and ocean with Indigenous governments, through cooperative federalism.

The Nature Legacy investment in Budget 2018 committed $1.3 billion over five years to support protection of Canada's land and freshwater, and recovery of species at risk. This Nature Legacy funding has had significant positive impacts, including support for Indigenous-led conservation initiatives. With that funding sunsetting this year, a renewed and enhanced long-term Nature Legacy investment is needed. Applying the lessons learned over the past five years, a new Nature Legacy investment should expand and optimize support for the critical work of Indigenous partners, other levels of government, and NGOs to implement KMGBF targets focused on permanently protecting and stewarding land, freshwater and wildlife.

Federal investments have also supported significant progress in ocean conservation, including almost $1 billion over five years in Budget 2021. However, additional and longer-term investments are needed to deliver on the ocean components of the KMGBF, in particular to support Target 1 through more effective and integrated Marine Protected Area (MPA) network planning and marine spatial planning (MSP).

Investing in conservation contributes significant environmental and societal benefits.

95 Government of Canada, "Canadian Protected and Conserved Areas Database." https://www.canada.ca/en/environment-climate-change/services/national-wildlife-areas/protected-conserved-areas-database.html

96 Government of Canada, "Fact Sheet: Implementation of Final Agreements." https://www.rcaanc-cirnac.gc.ca/eng/1100100030580/1542728997938

Indigenous-led conservation and protected areas

The achievement of Canada's conservation targets to protect 30% of land and ocean by 2030 (Target 3 of KMGBF) requires a new approach for funding and supporting Indigenous communities' articulation, implementation, and stewardship of land and water use visions and plans over time. Article 26 of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) requires states to give legal recognition and protection to Indigenous peoples' "right to own, use, develop and control the lands, territories and resources that they possess by reason of traditional ownership or other traditional occupation or use, as well as those which they have otherwise acquired."

The Green Budget Coalition commends the Government of Canada's support for Indigenous self-determined conservation and stewardship priorities, including investments in up to four Indigenous-led Project Finance for Permanence (PFP) initiatives and the launch of a First Nations Guardians Network announced at COP15.[97,98] However, current funding programs do not match the demand and the extent of resourcing needed.[99] Most of the funding presently committed to IPCAs is focused on establishing new protected and conserved areas, with little funding set aside for spatial planning or long-term stewardship. The Indigenous Guardians program is still in "pilot" phase, with demand for Guardians programs far outstripping opportunities.[100] More fundamentally, it is increasingly clear that the current federal 'program funding' model does not adequately advance the Nation-to-Nation relationships required to further reconciliation and implement Indigenous rights.

Long-term stewardship depends on sustainable funding that Indigenous communities can direct towards capacity- and leadership- building priorities. As highlighted in recommendation 4.12 in the Indigenous Circle of Experts' landmark We Rise Together report, "a more streamlined, predictable and flexible funding model is required."[101] Permanent financing arrangements – including endowment funds and Project Finance for Permanence – co-designed with Indigenous peoples and managed and implemented by Indigenous-led institutions, can provide the confidence and predictability that project proponents need to embark on new and ambitious conservation initiatives that uphold their socio-economic and cultural values.

Long-term funding for Crown governments, NGOs and other partners is also necessary to ensure they have the capacity necessary to meaningfully support Indigenous-led and co-led conservation initiatives.

The following key considerations should guide long-term funding allocations in support of Indigenous-led and co-led efforts to meet KMGBF Targets 1 and 3:

- Set up IPCA establishment funds (terrestrial and marine), similar to the Target 1 Challenge Fund. [ECCC, PC]
- Establish and contribute to a Project Finance for Permanence fund that supports long-term IPCA implementation. [ECCC, PC]

97 Prime Minister's Office. "Protecting more nature in partnership with Indigenous Peoples", https://www.pm.gc.ca/en/news/news-releases/2022/12/07/protecting-more-nature-partnership-indigenous-peoples

98 Government of Canada. "Introducing the New First Nations Guardians Network", https://www.canada.ca/en/environment-climate-change/news/2022/12/introducing-the-new-first-nations-guardians-network.html

99 Indigenous Leadership Initiative, "Indigenous-led Conservation: IPCAs & Guardians." https://www.ilinationhood.ca/ publications/ backgrounderipcasguardians

100 Social Ventures Australia, "Analysis of the Current and Future Value of Indigenous Guardian Work in Canada's Northwest Territories" (2016). Current and potential value of Indigenous guardian work in Canada FINAL.docx (Indigenousguardianstoolkit.ca)

101 Indigenous Circle of Experts, "We Rise Together: Achieving Pathway to Canada Target 1 through the creation of Indigenous Protected and Conserved Areas in the spirit and practice of reconciliation." pg 51. https://static1.squarespace.com/static/57e007452e69cf9a7af0a033/t/5ab94aca6d2a7338ecb1d05e/1522092766605/PA234-ICE_Report_2018_Mar_22_ web.pdf

Photo: Malachi Brooks

- Increase long-term funding for Indigenous Guardians programs and distinctions-based networks.[102]
- Support lndigenous-led or co-led land use/ land relationship planning initiatives.
- Include long-term funding to encourage and enable provincial and territorial governments, NGOs and others to meaningfully support Indigenous-led and co-led conservation initiatives.

Recommended Investment:
Financing needs should be determined by national and regional Indigenous Governments and Organizations, and allocated to reflect the diverse distinctions and needs of their communities. In the interim, the Green Budget Coalition supports a **minimum investment of $1 billion per year in permanent funding, increasing to $1.5 billion per year by 2030.** [ECCC, PC]

Contacts

Shaughn McArthur – shaughn.mcarthur@natureunited.ca
Alison Woodley – awoodley@cpaws.org

102 These recommendations are consistent with shared priorities 42, 47, and 96 of the Action Plan for the implementation of the United Nations Declaration on the Rights of Indigenous Peoples Act. Shared priority 42 states, "Through meaningful consultation and collaboration and partnerships with Indigenous governments, organizations, communities and other partners, advance marine Indigenous Protected and Conserved Areas to support Canada's commitments to reconciliation and marine conservation." Shared priority 47 states, "Continue to support Indigenous leadership in conservation through initiatives such as Indigenous Guardians, Indigenous Partnerships Initiative and Indigenous-Led Area Based Conservation that will provide capacity support until 2026, as well as the Project Finance for Permanence." Shared priority 96 states, "In coordination with other action plan measures, advance policy and on-the-land initiatives within the heritage places it has a role in administering to support and revitalize the relationships and connections of Indigenous peoples with lands, waters and ice that are essential to the overall well-being of Indigenous communities and individuals. A range of initiatives that will result in economic and employment opportunities will be implemented including, among other things, enhanced and sustainable Indigenous Guardian programs, support for on-the-land language and cultural learning by and for Indigenous peoples including youth, Indigenous-led place-renaming and revitalization of the stories of these places, promotion of public education to build understanding of Indigenous histories and stewardship approaches, and other policy-based initiatives that promote cultural continuity and revitalization. This work will be guided by the Indigenous Stewardship Circle, a diverse group of Indigenous leaders providing advice on how Parks Canada can support the implementation of the UN Declaration."

Species at risk

While the Budget 2021 Enhanced Nature Legacy investment added $377 million over five years to support recovery actions for priority species, renewal of the main program in Budget 2023 was at a much lower level and shorter time frame compared to 2018 levels – $184 million over three years. Meanwhile populations of species at risk continue to decline, threats to wildlife populations across the country are increasing, and the list of Schedule 1 species under the *Species at Risk Act* (SARA) continues to grow. A top-up of resources is needed in the 2024 budget, along with stronger action at the political level, to fulfill legal responsibilities under SARA and commitments in the KMGBF.

Recommended Investment: $313 million over two years, then $293 million per year, ongoing [ECCC, DFO, PC]

Contacts

David Browne – davidb@cwf-fcf.org
Emily Giles – egiles@wwfcanada.org

Photo: Jeremy Hines

Ecological connectivity

Ecological connectivity is vitally important to ensuring effective protected area networks that conserve nature. It is also critical to tackle top threats to biodiversity: habitat loss, fragmentation, and climate change. A number of goals and targets of the Kunming-Montreal Framework emphasize the fundamental contribution that ecological connectivity makes to healthy functioning ecosystems and species, and achieving the framework's objectives. Federal investment is needed for a nation-wide connectivity fund to support work by Crown and Indigenous governments, NGOs, and private interests to conserve areas identified as important for ecological connectivity, create effective mitigation measures to improve connectivity of fragmented landscapes, and to advance connectivity conservation.

Recommended Investment: $500 million over five years [ECCC, PC]

Contact

Anna Pidgorna – apidgorna@cpaws.org

Key Biodiversity Areas

Key Biodiversity Areas (KBAs) are sites that contribute significantly to the global persistence of biodiversity, and are essential to meeting targets in the Kunming-Montreal Global Biodiversity Framework.[103] Many KBAs will be in southern Canada, including in and around urban areas, and their conservation will provide benefits to Canadians (Targets 11 & 12). An initiative to identify KBAs in Canada began in 2019, and work to identify additional ecosystem KBAs will continue until December 2025. As the identification period of the program winds down, efforts to develop and implement national monitoring and stewardship plans for KBAs will increase. Canada's Nature Legacy renewal should include funding to finalize the identification of Canada's Key Biodiversity Areas. It should also implement a monitoring and stewardship

103 KBAs are a critical component of spatial planning (Target 1) to ensure that we direct conservation action to the most critical places for nature. The identification of KBAs will support the strategic design of protected and conserved areas (Target 3), focus restoration efforts to priority ecosystems (Target 2), and support the recovery of threatened species (Target 4) by conserving critical habitats.

program to bring the loss of areas of high biodiversity importance, including ecosystems of high ecological integrity, close to zero by 2030 (Target 1).

Recommended Investment: $3 million over six years [ECCC, PC]

Contact

David Browne – davidb@cwf-fcf.org

Endowment fund to strengthen private land conservation sector

The land trust sector plays an important role in implementing the KMGBF's goals and the protection of land in the most threatened areas of Canada. The Green Budget Coalition recommends establishing a Canada Conservation Endowment Fund, modelled on the Canada Cultural Investment Fund[104]or the Green Municipalities Fund, to strengthen the private land conservation sector by providing long-term financial stability for land trusts and other organizations that hold conserved private land in perpetuity. Such a fund would help meet KMGBF Targets 1, 3, and 4 and propel the acquisition and effective stewardship of protected lands.[105]

Recommended Investment: $300 million over three years, that would be matched 1:1 by private sources. [ECCC]

Contact

Renata Woodward – info@acoc.ca

Conserving Canada's ocean

Marine protected area (MPA) network planning and marine spatial planning (MSP) are essential tools to implement Target 1 of the KMGBF for coasts and oceans. Target 1 seeks to "[e]nsure that all areas are under participatory, integrated and biodiversity inclusive spatial planning and/or effective management processes addressing land-and sea-use change" and aims to stop the loss of areas of high ecological importance and integrity.

If the current serious declines in ocean biodiversity are to be halted and reversed, it is critical that Marine Protected Area networks are the first priority in any spatial planning initiatives. MSP can enhance the performance of MPA networks by ensuring that the management of any marine uses outside of MPAs is complementary to the conservation objectives, thereby supporting connectivity between MPAs and providing for buffer zones around MPAs.

Marine protected area network planning

The Government of Canada has committed to completing marine protected area (MPA) networks in five priority marine bioregions though none have yet been completed. By ensuring ecological connectivity between protected areas, MPA networks amplify conservation benefits and more effectively address climate impacts by allowing species to move between sites while remaining protected. MPA network planning processes in BC's Northern Shelf Bioregion and the Scotian Shelf-Bay of Fundy region are furthest ahead, but there remains considerable work to do and significant funding will be needed to support successful implementation. MPA network planning is an integrated and inclusive process that requires considerable investment to ensure effective stakeholder engagement, science support, and capacity building and engagement of partner organizations, including other federal agencies, Indigenous, provincial and territorial governments.

Recommended Investment: $160 million over five years to complete MPA network planning processes already underway and to start MPA network planning in four additional bioregions by 2030. [DFO, PC, ECCC]

104 The Canada Cultural Investment Fund (CCIF) encourages private sector investment, partnership, and sound business practices to help arts and heritage organizations be better rooted and recognized in their communities through Endowment Incentives.

105 Canada's land trust sector has shown its ability to conserve and steward lands effectively. A 2019 revision of the Canadian Land Trust Standards & Practices has seen renewed support and endorsement to build the sector's long-term success and capacity. Similar to the culture sector, the land trust community must exist organizationally – it must have long-term offices, legal expertise, communications, education, and outreach to successfully steward protected lands and acquire more lands while combating the impacts of climate change and the immediate threat of biodiversity loss.

Contacts

Sabine Jessen – sjessen@cpaws.org
Kilian Stehfest – kstehfest@davidsuzuki.org

Marine Spatial Planning (MSP)

Marine Spatial Planning is an inclusive, comprehensive, and strategic approach to the use and management of ocean space and marine resources with a view to protecting ecosystems, ensuring sustainability, and reducing overlap and conflicts between uses. MSP optimizes societal benefits from human activities while at the same time providing long-term protection of nature. MSP is a process that is being used by countries around the world.[106]

MSP requires new governance arrangements that bring together various levels of government, including Indigenous governments, and the variety of stakeholders with an interest in the ocean region. The success of MSP hinges on a participatory approach and comprehensive governance. New governance arrangements, particularly with Indigenous peoples, is a critical component of successful MSP, and will require capacity support and ongoing funding. Building relationships and ensuring effective Indigenous and stakeholder engagement requires funding certainty that cannot be met with short term budget commitments.

The Government of Canada is currently proceeding with MSP in five regions, including: Southern BC; Newfoundland and Labrador Shelves; Estuary and Gulf of Saint Lawrence; and Scotian Shelf and Bay of Fundy.[107] In the fifth region, the Pacific North Coast (also known as Northern Shelf Bioregion) in BC, the federal government can enhance the work by Coastal First Nations (CFN) and the provincial government in their marine spatial planning process, the Marine Planning Partnership (MaPP). DFO is already working with CFN and the province on co-developing an MPA network as a priority output of the MSP process.[108] Initial plans for the five regions are to be completed in 2024, but ongoing funding is required to continue collaborative processes, support implementation and consultation, and to begin MSP in other regions.

The original investment for MSP was made in 2018 with a one-year extension in 2023.

Recommended Investment: $75 million over five years, then $15 million per year, ongoing [DFO, ECCC, PC, NRCan, TC]

Contacts

Sabine Jessen – sjessen@cpaws.org
Kilian Stehfest – kstehfest@davidsuzuki.org

Photo: K. Makagonova

106 UNESCO-IOC/European Commission. 2021. MSP Global International Guide on Marine/Maritime Spatial Planning. Paris, UNESCO. (IOC Manuals and Guides no 89). https://unesdoc.unesco.org/ark:/48223/pf0000379196

107 Fisheries and Oceans Canada. "Marine Spatial Planning",- https://www.dfo-mpo.gc.ca/oceans/planning-planification/index-eng.html

108 MaPP http://mappocean.org

Restore Degraded Terrestrial and Aquatic Ecosystems

Decade of Restoration: our shared pathway to Target 2

Total Recommended Investment: $1.045 billion over seven years, coupled with redirecting $2.55 billion in existing funds to achieving Target 2.

This investment is to ensure that by 2030 at least 30% of areas of degraded terrestrial, inland water, coastal and marine ecosystems are under effective restoration to enhance biodiversity and ecosystem functions and services, ecological integrity and connectivity. [NRCan, ECCC, PC, DFO, AAFC]

Context: Robust efforts and a highly ambitious plan are required to meet Target 2 in the Kunming-Montreal Global Biodiversity Framework (KMGBF) to restore 30% of degraded habitat on land, in freshwaters, and along our coasts, as well as to meet the Bonn Challenge to restore 19 million hectares of terrestrial ecosystems. Achieving Canada's restoration goals will require:

- A commitment of funds and the establishment of targets for the restoration of degraded lands, coastal areas, and freshwater habitats;
- The support and mobilization of land and water stewards with jurisdiction and authority over degraded habitats (Indigenous Peoples, federal-land stewards, land stewards in other levels of government, private landowners);
- Policies and programs ensuring benefit sharing with Indigenous Peoples in the restoration economy;
- An increase in the number of trained restoration professionals working to identify and apply the restoration approaches necessary to achieve the targets for specific regions and habitats (e.g., on land: active and passive restoration, fire, revegetation, invasive species control); and
- Establishing the regional demand for restoration materials (primarily seeds and trees) so that a regionally appropriate supply of materials can be built over time.

Photo: Ducks Unlimited

Create a restoration coordinating body

The coordinating body would drive collaboration within the federal government and across governments and sectors, support work to define baselines and set targets, and work toward the following goals:

- Improving the integration of existing restoration programs to measure impact and maximize cross jurisdictional efforts;
- Supporting work to direct and expand existing funds, or establish new funds;
- Developing clear national degraded-habitat restoration targets in the National Biodiversity Strategy and Action Plan (NBSAP);
- Developing policies favouring and promoting use of local, native plants in restoration and reclamation;
- Creating a robust native-seed supply that does not deplete natural seed sources;
- Supporting Indigenous-led restoration and Indigenous participation in the restoration economy, including the native seed and tree supply system; and
- Supporting the agricultural sector to contribute to the restoration of degraded habitat, for example on marginal lands and riparian areas, and to build a native seed supply on agricultural lands.

$20 million over six years
[NRCan or ECCC]

Support a national seed supply for land–based restoration

For Canada to meet Target 2, approximately 95 million kilograms of ecologically appropriate native grass and wildflower seed would be required. Current supply is insufficient.

- Support Indigenous-led native seed-needs assessment and priority setting for restoration.
- Build horticultural capacity within Indigenous communities to enable more equitable participation in the restoration economy.
- Create an inter-departmental working group to pinpoint native seed needs for federal land restoration and address procurement and funding timeline barriers to provide assurance of demand to the native seed industry.
- Create and staff native plant materials development centres in each priority place to collect and track wildtype seed and coordinate seed supply with local producers.
- Support regional native plant restoration jobs training and best-practices guidelines.
- Develop an ecoregional seed tracking and labeling program (in collaboration with the Canadian Seed Growers Association and/or the Society for Ecological Restoration (SER)) at no cost to native plant producers.

$50 million over six years
[NRCan, AAFC, ECCC]

Photo: Jeffrey Eisen

Direct and establish funds to achieve Canada's restoration goals

$3.53 billion over seven years:

- $2.55 billion in existing funds,
- plus **$975 million in new funding**

Directing existing federal and provincial/territorial program funds toward achieving the following goals, while being supported by key infrastructure and capacity, would go a long way:

- Using existing funds to contribute to Canada's goals for the restoration of degraded terrestrial and aquatic habitat. **$2.55 billion over seven years** [*multiple departments, see table below*]
- Establishing the Canada Target 2 Restoration Fund to restore degraded terrestrial habitat that is not included within the Nature Smart Climate Solutions Fund or the 2 Billion Tree program. **$500 million over seven years** [ECCC, NRCan]
- Establishing a new Habitat Infrastructure Renewal Fund to upgrade and extend the lifespan and functionality of existing conservation assets on public and private lands. This fund will protect and enhance their climate and biodiversity benefits. **$150 million over four years** [ECCC]
- Establishing a new funding stream to implement Agriculture and Agri-Food Canada (AAFC) Living Labs techniques for best practices to restore degraded habitat for on-farm carbon sequestration. **$25 million over five years** [AAFC]
- Expanding the Aquatic Ecosystem Restoration Fund to include coastal and inland habitat and support a federal program to:
  - Build and sustain partnerships to restore degraded or destroyed fish habitat in priority watersheds and for priority species;
  - Support the development and implementation of regional habitat restoration plans;
  - Increase the capacity of Indigenous and non-governmental organizations to deliver high-quality fish-habitat restoration projects;
  - Restore and improve fish habitat through cost-shared projects identified by the regional restoration plans; and
  - Establish a fish-passage program to restore access to habitat for focal species in priority watersheds.

$250 million over six years [DFO]

- Expanding the Parks Canada Conservation and Restoration Program to restore degraded terrestrial, freshwater, and coastal habitat within Canada's system of National Parks and National Historic Sites, including fully funding the Southern Alberta Seed Strategy for restoration. **$50 million over six years** [PC]

Contacts

David Browne – davidb@cwf-fcf.org
Gia Paola – g_paola@ducks.ca
Will Bulmer – wbulmer@wwfcanada.org

Allocating existing funds to contribute to Canada's restoration goals and targets

Program	Existing Allocation ($ CAD)	Duration	Can funds be used to restore degraded habitat?	Is restoration a priority for the fund?	Opportunity
Nature Smart Climate Solutions Fund (NSCSF)	$1.4 billion	10 years (2021-2031)	Yes	No	Direct 20% ($280 million) of fund to restoration NBS pathways: riparian tree planting; wetland restoration; meadow and grassland restoration; restoration of forest cover.
2 Billion Trees	$3.19 billion	10 years (2021-2031)	Yes	Partial	Direct 70% ($2.2 billion) of budget to restoration of degraded forest habitat. Focus on Priority Places, IPCAs, and Freshwater Action Plan (FAP) Priority Watersheds
Agricultural Climate Solutions – Living Labs	$185 million (Living Labs)	10 years (2021-2031)	Yes	No	Establish new funding stream ($25 million) to implement living lab techniques for best practices to restore degraded habitat for on farm carbon sequestration
National Adaptation Strategy	$1.6 billion of which $530 million for a Green Municipal Fund	5 years (2022-2027)	Yes	Partial	Direct 10% ($53 million) of the GMF to restoration of degraded ecosystems that would help prevent and mitigate extreme weather events.
Habitat Stewardship Program	$6.5 million	1 year (2022-2023)	Yes	Partial	Direct 30% ($1.95 million) of the fund to restoration of habitat for priority species.
Wildlife Habitat Canada - Canadian Wildlife Habitat Conservation Stamp	$1.2 million per year		Yes	Yes	Increase the value of the stamp to $16 and direct 30% ($0.72 million) of WHC funds for restoration.
Aquatic Ecosystem Restoration Fund	$75 million	5 years (2022-2027)	Yes	Yes	Allocate an additional $250 million and expand the fund to cover FAP priority watersheds.
North American Waterfowl Management Plan (NAWMP)	$4,416,439 (total ECCC funding issued)	2015-2016 (last GoC funding update found)	Yes	Yes	Maintain existing priorities
Parks Canada Conservation and Restoration Program	$14.7 million	5 years (2021-2026)	Yes	Yes	Allocate an additional $50 million focused on degraded habitat restoration.

Manage and Use Biodiversity Sustainably

Photo: Nick Hawkins

As signatory to the Kunming-Montreal Global Biodiversity Framework (KMGBF), Canada has committed to increasing the abundance of native wild species to healthy and resilient levels, maintaining the genetic diversity within populations of wild species (Goal A) and ensuring that biodiversity is sustainably used and managed (Goal B) by 2050. Efficient management actions and use of natural assets is a critical component necessary to halt and reverse biodiversity loss by 2030 and live in harmony with nature by 2050. Effective management was also reflected in a number of targets in the final KMGBF, including: target 4 on species conservation; target 5 on the sustainable use, harvest, and trade of wild species; target 6 on the elimination, minimization, reduction, or mitigation of the impacts of invasive species; target 7 to reduce pollution risk; target 9 on the sustainable management and use of wild species; target 10 on the sustainable management of agriculture, aquaculture, fisheries, and forestry; and target 11 on the restoration, maintenance, and enhancement of ecosystem services and functions.

Achieving these goals and targets will require:

Managing ocean fisheries

Globally, and in Canada the direct exploitation of wildlife is the second largest direct driver of biodiversity loss[109] or degradation. Commercial fisheries represent by far the largest harvest of wild Canadian species with a total volume of 805,000 tonnes of fish in 2021.[110] Despite a strong legal and policy framework for fisheries management, Canada's fisheries have been marred by serial depletions of stocks, and fish populations have decreased on average by 21% between 1970 and 2016.[111]

Meeting the ambitions of the KMGBF with regards to the use of wild species (Target 5) and responding to the challenges of a rapidly warming ocean will require a shift from the current single-species management regime to an ecosystem approach to fisheries management. This shift to an

109 Ray, J. et al 2021. https://www.facetsjournal.com/doi/10.1139/facets-2020-0075
110 Government of Canada, "Landings." https://www.dfo-mpo.gc.ca/stats/commercial/land-debarq-eng.htm
111 Government of Canada, "Canadian species index." https://www.canada.ca/en/environment-climate-change/services/environmental-indicators/canadian-species-index.html

ecosystem-based approach needs to be supported by robust science, stock assessments, strong policy implementation, and a modern fisheries catch monitoring and observer system.

Advancing the ecosystem approach to fisheries management

In 2011, Canada committed to implementing an ecosystem approach to fisheries management (EAFM) under the Aichi targets (Canada target 9). While the EAFM has long been a departmental direction for DFO, implementation has been opportunistic and inconsistent rather than comprehensive which is why Canada ultimately failed to meet its target by the 2020 deadline.[112] The commitment has now been renewed under the KMGBF under targets 5 and 9. It is critical that the necessary resources be put in place to ensure success and speed up progress toward this commitment. As the House Standing Committee on Fisheries and Oceans recently highlighted,[113] climate change is already having significant impacts on Canada's oceans and fish stocks, making the critical shift to an EAFM more urgent than ever.

Key legislative and regulatory tools are already in place to support the operationalization of the ecosystem approach through the Sustainable Fisheries Framework (SFF) and the Fish Stock Provisions under the *Fisheries Act*. The SFF is the primary tool available to ensure the sustainability of Canadian Fisheries. However, even this existing foundational element has not been fully implemented to date, with less than a third of Canadian fish stocks considered to be in the healthy zone and 37% lacking a comprehensive assessment.[114] The Green Budget Coalition acknowledges the significant investments made in the implementation of the updated *Fisheries Act* in previous budgets and recommends building on the critical progress that this investment has enabled.

The Fish Stock provisions provide a critical framework for implementing DFO's Precautionary Approach policy and for considering fish biology and environmental conditions in fisheries management – key aspects of the ecosystem approach. DFO has already begun work on an operational plan to employ these tools in support of an ecosystem approach and it is paramount that this work be fully supported through necessary capacity funding. Additionally, funding is required to fill immediate data gaps so that the EAFM can be operationalized for priority species – primarily forage fish.

Recommended Investment: $175 million over five years [DFO]

Contacts

Shannon Arnold – sarnold@ecologyaction.ca
Kilian Stehfest – kstehfest@davidsuzuki.org

Photo: Nick Hawkins

112 Biodivcanada, "Canada Target 9". https://www.biodivcanada.ca/national-biodiversity-strategy-and-action-plan/2020-biodiversity-goals-and-targets-for-canada/canada-target-9

113 House of Commons, "Science at the Department of Fisheries and Oceans". https://www.ourcommons.ca/DocumentViewer/en/44-1/FOPO/report-8/page-30

114 Oceana. "2022 Fisheries Audit." http://fisheryaudit.ca/

Build a modern fisheries catch monitoring and observer system

Fisheries catch monitoring is essential for science, compliance, improving business performance for fleets, and verification of standards. Canada's assessments and management of fish populations, including species at risk, rely heavily on at-sea observer coverage and dockside monitoring. There is a global call for a significant increase in monitoring, reporting, and transparency to ensure sustainable fishing.

Canada is supporting improved compliance and monitoring schemes of countries around the globe, leading efforts to adopt high seas inspection schemes, funding global tracking systems, and engaged in negotiations on electronic monitoring standards. However, at home, Canada's fisheries monitoring is failing to achieve target coverage levels across a wide array of fisheries despite those levels being set at embarrassingly low targets for a leading fishing nation. Moreover, the Auditor General of Canada identified severe shortcomings in Canada's fisheries monitoring programs.

2024 will be a pivotal year for investing in an overhaul of the systems, and funding the needs identified by the current risk assessment phase of work underway for the National Catch Monitoring policy. Canada will also be required to adopt international electronic monitoring standards and should ensure a domestic standard is in place. Therefore, the Green Budget Coalition is recommending the government invests directly in key areas of the system to kick start an immediate overhaul:

Recommended Investment: **$60 million over three years** [DFO]

- Support up-front costs of electronic monitoring pilots and increased coverage for high risk fisheries. (**$30 million**)
- Establish electronic monitoring standards, data management policies, working groups, and modern data processing tools. (**$20 million**)
- Support recruitment and training for well-paying observer jobs, especially in community and Indigenous based businesses. (**$10 million**)

Contacts

Shannon Arnold – sarnold@ecologyaction.ca
Kilian Stehfest – kstehfest@davidsuzuki.org

Renew and revamp the Atlantic Fisheries Fund

The Green Budget Coalition recommends that the Atlantic Fisheries Fund be renewed and revamped to focus on improving sustainability, reducing ecosystem impacts and supporting adaptation strategies in the Atlantic fishing, shellfish, and marine plant aquaculture, and processing sectors.

Recommended Investment: **$250 million over five years** [DFO]

- Support initiatives that reduce ecosystem impacts, support adaptation to changing ocean conditions, and contribute to climate mitigation efforts;
- Ensure funding allocations have clear criteria, consistent selection processes and transparent decision-making processes;
- Ensure funding is accessible for small businesses and non-profit organizations, inshore fleets, regenerative aquaculture of shellfish and marine plants, Indigenous and community owned businesses and organizations; and
- Invest in research, development, and implementation of projects aimed at improving sustainability of fishing gear and aquaculture practices.

Contacts

Shannon Arnold – sarnold@ecologyaction.ca
Kilian Stehfest – kstehfest@davidsuzuki.org

Underwater noise pollution

Sound is the most effective means for marine life to sense their surroundings and communicate across the ocean's vast expanse. Impulsive noise, including seismic activity, sonar and pile driving, can result in temporary or permanent damage to aquatic species at risk. Continuous radiated noise, primarily generated by shipping traffic, leads to acoustic masking and reduces aquatic species' ability to communicate, sense danger, forage, and mate. Underwater noise also compromises the ability of at-risk cetaceans to perceive their environment, and is considered a principal threat to the recovery of two priority species in Canada's Whales Initiative, and a significant stressor for the third.

Recommended Investment: $200 million over five years to:

identify and implement regional, science-based underwater noise targets for key Canadian ecosystems, including the Salish Sea, Saguenay-St. Lawrence, and the Eastern Arctic; develop and establish regional noise management frameworks to achieve those targets; and begin implementation of the management frameworks, including integration into other government programs. [DFO, TC]

To meet Target 7 of the GBF, this investment should prioritize:

- Support for Transport Canada initiatives to reduce underwater vessel noise and disturbance impacts, such as the Quiet Vessel Initiative; completing work on the national Underwater Vessel Noise Reduction advisory group and operationalizing Underwater Noise Management Planning and target requirements for vessel owners and operators; and for complementary work at the International Maritime Organization. [TC]
- Support for DFO to develop and integrate noise monitoring into ongoing and developing implementation of MPAs and MPA networks, OECMs, IPCAs, and Critical Habitat for at-risk marine mammals. Data should be made publicly available. [DFO]
- Mandating DFO and TC to collaborate to enforce, adaptively implement, and expand as appropriate TC initiatives for the management of vessel noise and disturbance for at-risk whales. [DFO, TC]

Contact

Will Bulmer – wbulmer@wwfcanada.org

Photo: iStock

Freshwater management

The sustainable management and stewardship of Canada's freshwater environments is one of the great challenges of our time, and one of the most important means by which Canada can demonstrate global natural resource leadership.

Recent investments, while encouraging, should be seen as a first step towards a coordinated national approach to protecting all of Canada's freshwater resources, which are central to our nation's health and prosperity. Ongoing investments in freshwater are needed to protect and restore our large lakes and river systems, and the surrounding watersheds that support them.

Total Recommended Investment:

$675 million over five years, and $200 million over the following five years (2029–2034)

- **$475 million over five years to expand freshwater management practices nationally:**
  - **$280 million** in additional funding for the Freshwater Action Plan to improve water quality, manage water quantity, and protect aquatic biodiversity through implementing watershed action plans and in-water actions nationally, starting with:
    - Saint John River (Wolostoq) and watershed
    - Great Lakes
    - St. Lawrence River System
    - Lake Winnipeg Basin
    - Fraser River
    - Mackenzie River
    - Canadian Columbia Basin

    Investments should be prioritized through a risk-based analysis using science and research and in collaboration with Indigenous peoples. [ECCC]
  - **$195 million** to address the funding gap in the rest of the country for projects that address issues including climate mitigation, climate adaptation, truth and reconciliation through capacity building and partnerships with Indigenous peoples, habitat restoration, water technology and innovation, community-based water monitoring, fish population recovery, planning, and natural infrastructure. [ECCC]
- **$400 million over ten years** to build on the BC Watershed Security Fund to address water quantity and quality challenges and improve freshwater environments for Pacific salmon and steelhead in the Fraser River Basin and other priority watersheds (coordinate this funding with the Pacific Salmon Strategy Initiative). [ECCC]

Many of Canada's vast freshwater resources are located on Indigenous lands, whose people have stewarded these resources since time immemorial. Their inherent rights, traditional knowledge and understanding of these ecosystems should be a core component of any plans or actions taken. Additional funding for freshwater ecosystems should directly support both Indigenous-led water stewardship efforts and progress towards the implementation of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) in Canada.

Contacts

Liz Hendriks – ehendriks@wwfcanada.org
Gia Paola – g_paola@ducks.ca

Photo: Laro Photo

Managing and reducing negative impacts to biodiversity

Controlling the economic, social, and environmental impacts of invasive species

The impact of invasive species on native ecosystems, habitats, and species is catastrophic and often irreversible. In Canada, invasive species are frequently and increasingly identified as a top threat to species at risk[115] and economic impacts result in billions of annual losses. In the early 1960s, invasive species cost North America $2 billion per year, which has increased to over $26 billion per year since 2010.[116] Significant impacts to the agriculture, forestry, fisheries, and tourism sectors are experienced, with the Canadian agriculture sector alone estimating a $2.2 billion annual economic impact from invasive plants.[117]

Recommended Investment: Additional $250 million over five years

Prevent new introductions of invasive species into and across Canada by identifying key pathways for introduction and providing education, resources, training, and support to address key pathways. [ECCC, PS, CFIA, AAFC]

- Develop, implement, and monitor a National Framework for Early Detection and Rapid Response Initiatives to ensure effective and early response to new and emerging invasive species. [CFIA, AAFC, ECCC, DFO, NRCan, HC]
- Enable and support cross-sectoral partnerships, collaboration, and Indigenous leadership and knowledge in planning, control, monitoring, and reporting to restore and improve habitat by controlling invasive species. [ECCC, DFO, AAFC, CFIA, NRCan, PS]
- Ensure access to and encourage strong science, management, and reporting that provides accessible and transparent research and data, and that helps evaluate policies and programs to ensure effectiveness. [ECCC, DFO] *See also Accurate data, research, information, and knowledge for improved evidence-based monitoring and decision-making, later in this document.*

Contact

Gia Paola – g_paola@ducks.ca

Photo: Nick Hawkins

115 McCune et al. 2013, Woo-Durand et al. 2020 https://cdnsciencepub.com/doi/pdf/10.1139/er-2020-0032?download=true
116 Crystal-Ornela, R. et al. 2021 https://neobiota.pensoft.net/article/58038/
117 Environment Canada, 2010

Advancing a One Health approach

There is increasing recognition that the health of humans, animals (domestic and wild), and ecosystems are interconnected. The Global Biodiversity Framework calls for countries to implement the framework with consideration of the One Health Approach.[118] Compared to livestock and public health sectors, Canada's current approach to wildlife health is under-resourced and reactive. The Green Budget Coalition recommends that the federal government fund the Pan-Canadian Approach to Wildlife Health, as follows:

Recommended Investment: $120 million over five years

- **$45 million** for the Canadian Wildlife Health Cooperative and other non-government coordinating bodies, to build professional capacity within Canada, coordinate monitoring and surveillance, and provide access to diagnostics, data management and synthesis of information that is accessible across the country. [ECCC]
- **$20 million** for application-based program funding to support non-government partners to deliver One Health programs including a Northern Wildlife Health Program. [ECCC, PHAC]
- **$45 million** to build federal/provincial/territorial government capacity to implement wildlife health programs that collaborate with livestock and public health sector partners. [ECCC, CFIA]
- **$10 million** for governance, targeted Indigenous hunter communication tools, professional exchange programs, research fellowships, and State of Wildlife Health reports. [ECCC]

Contact

David Browne – davidb@cwf-fcf.org

Data collection to support regulatory evaluation of pesticides

The PMRA frequently lacks data on environmental concentrations and use patterns (e.g., information on the timing, location, and quantity of pesticide applications) for the pesticides it is responsible for evaluating and regulating. This is an unacceptable gap. In 2021, the government invested $50 million over three years to strengthen pesticide oversight, including a pilot water monitoring program and development of a reporting system to collect data on pesticide use. These programs should be expanded and extended, taking into account lessons learned in the pilot phase. Systematic data collection on localized pesticide use and more comprehensive environmental monitoring data would allow the PMRA to perform trend analysis, validate models used in re-evaluation and special review assessments, identify early warnings, and better plan and target compliance and enforcement activities. However, environmental monitoring will never be comprehensive and should not be used as a pretext for disregarding precautionary modeling of exposure estimates. The collection of these data is also required to measure Canada's progress towards meeting Target 7 in the Global Biodiversity Framework (reducing pesticide risks by 50% by 2030).

In June 2023, the government announced proposed regulatory changes to strengthen consideration of species at risk in pesticide risk assessments. The Green Budget Coalition recommends that ECCC's Canadian Wildlife Service be funded to lead this work, and to assess and track overall risks to biodiversity from pesticides.

Recommended Investment: $95 million over five years

- **$40 million over five years** (and renewal in 2029) to expand and extend the new pesticide water monitoring program. [PMRA, in collaboration with ECCC]
- **$25 million over five years** to get a system for collecting pesticide use data off the ground, **plus $5 million in 2024** to design and develop a publicly-accessible portal to communicate real-time pesticide use data. [PMRA, in collaboration with AAFC]

118 Canada supported the G7 Joint Statement in February 2021 and the Rome Declaration of May 2021 calling for strengthened implementation of the One Health approach to the prevention and control of diseases that can transfer between animals and humans.

- **$25 million over five years** to support consideration of species at risk in pesticide assessments, and to assess and monitor overall risks to biodiversity from pesticide use in Canada. [ECCC]

Contacts

Lisa Gue – lgue@davidsuzuki.org
Elaine MacDonald – emacdonald@ecojustice.ca
Fe de Leon – deleonf@cela.ca
Beatrice Olivastri – beatrice@foecanada.org

Photo: Ted Cheskey

Halt and reverse bird population declines

Canada's 451 native bird species help to keep forests and other ecosystems healthy through pest control, pollination, seed dispersal, and nutrient cycling. Canada continues to lose significant numbers of birds to human-related causes, despite protections found in Canada's oldest nature law, the *Migratory Bird Convention Act*. Focused action and investments are required to restore migratory bird populations and protect their habitats, including wintering habitats for Canada's migratory birds in Latin America. Wintering habitats are integral to meeting the energy demands of incubation (*see also Increasing Canada's international biodiversity assistance, later in this document*). The following investments and actions are recommended to urgently address the five main threats to all birds: habitat loss, pesticides and contaminants, invasive species and cats, collisions, and the climate crisis.[119]

Recommended Investment: **$42 million over six years** [ECCC, PC]

- Invest in habitat restoration and protection programs, and activities that address the five human-related threats to birds in urban and working landscapes. (**$18 million over six years**)
- Identify, prioritize, protect, and restore key habitats and areas for grassland birds, aerial insectivores and shorebirds. (**$18 million over six years**)
- Maintain strong science programs including education and support for participatory science to inform conservation efforts (*see also Accurate data, research, information, and knowledge for improved evidence-based decision-making, later in this document*). (**$6 million over six years**)

Contacts

Ted Cheskey – tcheskey@naturecanada.ca
Gia Paola – g_paola@ducks.ca

119 Birds Canada. "Major threats to birds in Canada." https://www.birdscanada.org/conserve-birds/major-threats-to-birds

Mainstream Biodiversity and Mobilize Financial Resources

To achieve the ambitious commitments outlined in the Kunming-Montreal Global Biodiversity Framework (KMGBF), it is necessary to ensure that biodiversity, and the services it provides, are mainstreamed and factored into public policies, investments, and practices. Targets 14 to 23 address the tools and solutions this requires, including mainstreaming biodiversity across public policy and spending; nature-impact disclosure by business; sustainable consumption; quantified targets for resource mobilization; enhanced mechanisms and resources for implementation; and specific targets for equity, inclusivity, and gender responsiveness.

Target 19 commits countries to mobilizing increased biodiversity financing from all sources. Mechanisms by which the Government of Canada can catalyze new investments to achieve KMGBF targets using the full suite of tools available include but are not limited to federal budget and taxes, blended finance, impact funds, biodiversity bonds, payments for ecosystem services and offset mechanisms. Additional provisions needed to stimulate contributions to Canada's KMGBF targets among public and private actors include: accurate data, research, information, knowledge for improved evidence-based decision-making, and other enabling policies.

The recommendations below are designed to help the Government of Canada deploy resources that will enable diverse financial actors to make smarter policy and investment choices, and navigate the shift from harmful behaviours toward outcomes that benefit nature.

Aligning policies and investments with halting and reversing biodiversity loss by 2030

The new KMGBF commits Canada to "identify, phase out or reform incentives, including subsidies, harmful for biodiversity…" (Target 18). This is the single biggest opportunity for catalyzing a nature positive economy.[120,121]

Target 14 requires the full integration of biodiversity values into policies, planning and accounting, and aligning fiscal and financial flows with framework goals and targets.

Current spending on practices that degrade nature far outstrips spending on those that can conserve and restore it. Action is urgently needed to identify environmentally harmful subsidies (EHS) in Canada[122] and to pursue innovations in federal subsidy and tax reform, budgeting and policymaking, and leadership in the expansion of green financial products, to improve coherence between economic and environmental policy, and reorient the flow of public capital to catalyze new nature-positive economic opportunities.

120 Deutz, A., Heal, G. M., Niu, R., Swanson, E., Townshend, T., Zhu, L., Delmar, A., Meghji, A., Sethi, S. A., and Tobin de la Puente, J. 2020. Financing Nature: Closing the global biodiversity financing gap. The Paulson Institute, The Nature Conservancy, and the Cornell Atkinson Center for Sustainability.

121 Target 18 of the Kunming-Montreal Global Biodiversity Framework requires governments to "identify by 2025, and eliminate, phase out or reform incentives, including subsidies, harmful for biodiversity[…]." This target is complemented by several other agreements to which Canada is a signatory. Under the G7 2030 Nature Compact (June 2021) governments committed to "lead by example by reviewing relevant domestic policies as soon as possible and […] take action as appropriate to develop replacements that are nature positive"; the Leaders' Pledge for Nature (September 2020) commits signatories to "eliminate or repurpose subsidies and other incentives that are harmful to nature, biodiversity and climate while increasing significantly the incentives with positive or neutral impact for biodiversity across all productive sectors.

122 Subsidies are fiscal policy tools used by governments that aim to benefit a specific population or sector through production support, income support, or reduced costs of inputs. Subsidies deemed harmful to biodiversity are those that induce production or consumption activities that exacerbate biodiversity loss, particularly important within the agriculture, fisheries, and forestry sectors. For more detail on approaches to defining subsidies that are harmful to biodiversity see Deutz et al. Financing Nature: Closing the global and Matthews and Karousakis (2022) https://doi.org/10.1787/3e9118d3-en

As a starting point for delivering on these targets, the Green Budget Coalition recommends that the federal government immediately develop:

- A plan to eliminate subsidies that are harmful to nature. The Government of Canada should immediately launch an initiative to identify all nature-negative subsidies, and then—by 2024—complete and commit to a plan to phase out, re-design, or re-orient nature-negative subsidies by 2027. (Target 18). [FIN, ECCC, DFO, AAFC, NRCan]
- An Integrated Climate and Nature Lens for federal policy- and budget-making. The Government of Canada's 2020 Strengthened Climate Plan committed to creating a "climate lens" as an assessment tool for all major government decisions, including federal budgets. Biodiversity should be embedded in this tool. Further, this Integrated Climate and Nature Lens should be part of the Impacts Reports included in federal budgets. *See also Climate and biodiversity conditions on federal spending, earlier in this document.* [PCO, FIN, ECCC]

Contacts

Shaughn McArthur – shaughn.mcarthur@natureunited.ca
Michael Polanyi – mpolanyi@naturecanada.ca
Alison Woodley – awoodley@cpaws.org

Photo: Jeffrey Eisen

Increasing Canada's international biodiversity assistance

Target 19 of the KMGBF commits developed country Parties to raise at least US$20 billion annually by 2025 and US$30 billion annually by 2030 for developing countries. Based on Canada's 2% share of global GDP, Canada's obligation would be US$400 million annually by 2025 and US$600 million by 2030 (approximately CAD $540 million and CAD $810 million, respectively). Canada's current investments in international biodiversity are approximately $370 million annually. This includes Canada's contributions to the Global Environment Facility, the biodiversity-related portion of its climate finance, bilateral aid, and the commitment announced at the UN Convention on Biological Diversity COP15 in Montreal to spend an additional $350 million over three years.

The Green Budget Coalition applauds Canada's increased investment and commitment to international biodiversity. However, preventing further loss and degradation of tropical ecosystems is vital for biodiversity as well as climate change adaptation and mitigation. Canada's migratory birds are being impacted by habitat loss at their wintering areas and migration stopovers in Latin America.

To immediately address threats to biodiversity, Canada should seek efficient ways for funds to directly support on-the-ground conservation efforts by local NGOs and Indigenous and local communities. Conservation organizations that partner with Indigenous people—key conservation allies in developing countries—are achieving conservation gains on a large geographic scale. Similarly, gains can be made in empowering local communities for forest management and fisheries co-management with governments.

Other actions can address policy issues impacting biodiversity, bring improvements to commodity supply chains, help create national conservation strategies, and perhaps include debt-for-nature swaps. Finally, the widespread and serious problem of "paper parks" can be addressed through contributions from Canada to finance mechanisms for public protected areas.

Recommended Investment:
$1.2 billion over two years [GAC, ECCC]

For a more detailed recommendation, including regarding the $1.2 billion amount, please see https://icfcanada.org/docs/GBC_intl_biodiversity_Budget-2024.pdf

Contacts

Anne Lambert – anne@icfcanada.org
Will Bulmer – wbulmer@wwfcanada.org
Gia Paola – g_paola@ducks.ca

Accurate data, research, information, and knowledge for improved evidence-based monitoring and decision-making

Accurate data, research, information, and knowledge is fundamental to support evidence-based monitoring and decision making to support the global mission to halt and reverse biodiversity loss by 2030 and live in harmony with nature by 2050. Public investments in data and monitoring are critical to making informed investments in habitat, including species-at-risk recovery, biodiversity enhancements, increases in carbon sequestration, and climate change adaptation.

In October 2021, the European Union launched Biodiversa+ as part of the European Biodiversity Strategy for 2030.[123] In collaboration with partners, it is a comprehensive, ambitious, and long-term plan to put Europe's biodiversity on a path to recovery by 2030. It aims to connect science, policy, and practice for transformative change seeking to: support biodiversity research and innovation; improve monitoring of biodiversity and ecosystem services; deploy nature-based solutions and valuation of biodiversity in the private sector; and ensure sufficient science-based support for policy-making and implementation.

The Green Budget Coalition recommends that Canada's National Biodiversity Strategy and Action Plan adopts a similar approach as Biodiversa+ in order to advance efforts towards achieving the KMGBF targets and goals.

Total Recommended Investment:
$400 million over five years

123 European Commission, "Biodiversity strategy for 2030." https://environment.ec.europa.eu/strategy/biodiversity-strategy-2030_en

Cataloguing, updating, and developing geospatial inventories

Cataloging all the ecosystems in Canada will help ensure evidence-based decisions are made to protect, rehabilitate, enhance, and sustain our environment, inform nature-based climate solutions, and measure habitat conversion across Canada. Moreover, the establishment of a comprehensive baseline of geospatial data is essential for biodiversity to be accurately valued, conserved, and restored. The following should be top priorities in this effort:

- Conduct and complete audits of existing geospatial datasets to identify gaps in collaboration with subnational governments, Indigenous communities and groups, NGOs, and other federal departments and agencies. [AAFC, DFO, ECCC, NRCan, StatCan]
- Develop and update geographic and landscape-feature data to establish the following national geospatial habitat inventories: Canadian National Wetland Inventory [ECCC]; National Grasslands Inventory [AAFC]; Terrestrial Species at Risk Inventory [ECCC]; Aquatic Species at Risk Inventory with continued management and updates [DFO]; National Forest Inventory [NRCan]; and National Invasive Species Inventory [ECCC]. *See also Controlling the economic, social, and environmental impacts of invasive species, earlier in this document.*

$300 million over five years [AAFC, DFO, ECCC, NRCan, StatCan]

Contact

Gia Paola – g_paola@ducks.ca

Understanding, protecting, and restoring Canada's coastal blue carbon ecosystems

Healthy coastal blue carbon ecosystems — such as seagrass meadows and salt marshes — provide climate, biodiversity and development benefits. Coastal wetlands provide valuable habitat for many economically and culturally important species, protect coastal communities from flooding, improve water quality, and act as carbon sinks. Rising sea levels, warming ocean temperatures, coastal development, and invasive species threaten the resiliency of coastal wetlands, resulting in the loss of these critical ecosystems.

While efforts are ongoing to map blue carbon ecosystems nationally, we also need to understand local and regional variations in carbon sequestration, as well as the full suite of ecosystem services provided by these habitats. This work should happen alongside efforts to protect, restore, and effectively manage coastal habitats (*see Decade of Restoration: our shared pathway to Target 2, earlier in this document*), which need to recognise the interconnections between terrestrial and marine systems (*see the Protecting Land and Ocean Ecosystems sub-section, earlier in this document*) and should be led by DFO with support from PC, StatCan, and ECCC.

- Develop intergovernmental mechanisms that address the jurisdictional complexity of coastal ecosystems and strengthen efforts to steward and protect, restore and manage coastal blue carbon ecosystems;
- Mapping and monitoring of blue carbon ecosystems by coastal communities;
- Research by large-scale multidisciplinary collaborations and small-scale community groups to fill key knowledge gaps;
- Protection and restoration of coastal blue carbon ecosystems to increase ecosystem resilience, support key coastal processes, and maintain ecosystem services; and
- Creation of a sustainable funding mechanism for monitoring and stewardship of coastal ecosystems.

$100 million over five years [DFO]

Contacts

Marianne Fish – mfish@wwfcanada.org
Shannon Arnold – sarnold@ecologyaction.ca

Appendix 1
SUMMARY TABLE OF RECOMMENDATIONS' RECOMMENDED INVESTMENTS

millions of dollars

Recommendation *Subrecommendation*	Likely Lead Department(s)	2024-25	2025-26	2026-27	2027-28	2028-29	ongoing	(end-year)
FEATURE RECOMMENDATIONS								
FINANCING NATURE PROTECTION & RECOVERY IN CANADA	ECCC, NRCan, DFO, PC, TC + PCO, FIN, AAFC, CFIA, PS, PHAC, HC, PMRA, GAC, StatCan	See Financing Nature Protection & Recovery – Detailed recommendations, below.						
RENOVATION WAVE FOR CLIMATE RESILIENT HOMES AND AFFORDABLE HOME ENERGY								
No-cost retrofits for low-income households	NRCan, CMHC, HC, INFC	4,000	4,000	4,000	4,000	4,000		
National Affordable Home Energy Strategy	NRCan, INFC	1.5	1.5	1.5	1.5	1.5		
Retrofits for Indigenous communities	ISC, CMHC, CIB, INFC	540	540	540	540	540		
Skill development, capacity, & recruitment	NRCan, ISED, HC	300	300	300	300	300	2033-2034	
Last-mile investment for deep retrofit demonstration projects	NRCan	25	25	25	25	25	2033-2034	
Loan-guarantee program	CMHC, CIB, NRCan	No additional cost – we expect this could be achieved using existing capacity.						
ADVANCING A ZERO-EMISSIONS ELECTRICITY GRID BASED ON RENEWABLES								
Federal support for grid upgrades								
Interprovincial transmission	NRCan	4,000	4,000	4,000	4,000	4,000		
Indigenous-led & community-led generation	NRCan	960	960	960	960	960		
Clean energy deployment in remote Indigenous communities	NRCan, CIRNAC, ISC, INFC	800						
Clean energy projects in equity-deserving communities	NRCan, CIB	3	3	3	3	3		
Best practices in clean electricity governance								
Funding for provinces to improve their electricity system	NRCan	40	40	40	40	40		
Enhance regional cooperation and research	NRCan	30	30	30	30	30		
Consultative process	NRCan	5						
ADVANCING SUSTAINABLE JOBS FOR A NET-ZERO CANADA								
Data collection for planning	NRCan, ESDC, StatCan, CCEI	6	6	6	6	6		
Indigenous participation in governance	NRCan	1,000	1,000	1,000	1,000	1,000		
Workforce development								
Tuition credit program	ESDC	30	30	30	30	30		
Support for workers navigating pathways	NRCan, RDAs	50	50	50	50	50		
Regional planning and job-creating projects								
Regional planning and capital investment	NRCan, RDAs	1,300	1,300	1,300	1,300	1,300		
Economic supports for transition-affected regions	NRCan, RDAs	54	54	54	54	54		
SUSTAINABLE AGRICULTURE								
Avoided land conversion and habitat retention								
National Land Use Strategy	AAFC, NRCan, ECCC	9	8	8				
Agricultural habitat incentive programs								
National Perennial Forage Conversion Program	AAFC	100	100	100	100	100		
Maximizing the return of marginal land	AAFC	100	100	100	100	100		
Financial incentives to producers	AAFC	200	200	200	200	200		
Agri-Gift program	AAFC, FIN	No additional cost.						
Support access to agricultural lands	AAFC, CRA	40	40	40	40	40	25	ongoing
Environmental, climate, & socio-economic data collection & dissemination								
Data and carbon accounting	AAFC, ECCC, StatCan	17	17	16	2	2	2	ongoing
Research to quantify economic, environmental, social benefits	AAFC, SSHRC, NSERC	20	20	20	20	20	20	ongoing
Valuing ecological services	AAFC	9	8	8				
Accelerate and augment implementation of climate-smart & nature-positive practices, technologies, innovations								
Tools, technology transfer, & technical assistance	AAFC	100	100	100	100	100		
Soil Health Strategy	AAFC	1	2	3				

millions of dollars

Recommendation *Subrecommendation*	Likely Lead Department(s)	2024-25	2025-26	2026-27	2027-28	2028-29	ongoing	(end-year)
FEATURE RECOMMENDATIONS								
Business Risk Management programs								
Climate Risk Reduction Fund	AAFC	87	87	87	87	87	87	ongoing
Program to pilot inovations	AAFC	4	3	3				
Enhance transparency/accessibility of data	AAFC, StatCan	1	1	1	1	1		
Establish early warning signs	AAFC	94	93	93				
Livestock Price Insurance	AAFC	70	70	70	70	70		
Sustainable Value Chains Initiative	AAFC, ISED	110	110	110	110	110		
COMPLEMENTARY RECOMMENDATIONS								
INTEGRATING CLIMATE & NATURE ACROSS GOVERNMENT FISCAL POLICY, BUDGETING & SPENDING DECISIONS								
Transforming Canada's economy through a net-zero industrial policy								
Clean Infrastructure Incentive Fund	INFC	100	100	100	100	100		
Buy Clean practices	NRCan, PSPC, ISED	3	3	3	3	3		
Canadian innovation to decarbonize industry	NRCan, ISED	60	60	60	60	60		
Non-profit organizations host conversations	NRCan, ECCC	6	6	6	6	6		
Futures Fund for regional economic development agencies	ISED, NRCan	Please contact us for more details.						
Improve real-time reporting	ECCC, NRCan, ISED, CER, CCEI	No additional cost – we expect this could be achieved using existing capacity.						
Climate & biodiversity conditions on federal spending	PCO, FIN, ECCC, all departments	No additional cost – we expect this could be achieved using existing capacity.						
Canada's carbon pricing system	ECCC, FIN	No additional cost, utilizing previously announced funds.						
Fossil fuels – re-orienting domestic public finance & subsidies	FIN, NRCan, ISED, ECCC, GAC	No additional cost – we expect this could be achieved using existing capacity.						
Moving towards a more circular economy through reuse and repair								
Repair fund	ISED, FIN	29	29	29	87	87	87	ongoing
Reuse fund	ECCC, ISED	34	33	33	35	35	35	ongoing
CLIMATE ACTION THROUGH EMISSIONS REDUCTIONS								
Ensuring accurate, measurement-based oil and gas methane data	NRCan	15	15	15	15	15		
Save and improve public transit service								
Emergency operational funding	INFC	750						
Major capital projects	INFC	3,000	3,000					
Core funding stream for municipalities	INFC	1,000	1,000	1,000	1,000	1,000	1,000	ongoing
Per-ride subsidy funding	INFC	500	500	500	500	500	500	ongoing
Decarbonizing medium- and heavy-duty vehicles								
iMHZEV program	TC	667	667	667	667	666	666	2029-2030
Green Freight Program	NRCan	1,000						
Electrifying school buses	TC, ECCC, INFC, NRCan	Cost to be determined by program design.						
Reducing carbon emissions from road transportation through electric-assisted bikes, equity and pricing solutions								
Electric-assisted bike subsidies and scrappage program	TC	125	125					
Increase zero-emission vehicles accessibility	TC	No additional cost.						
Marine Shipping								
Zero-emission vessels	TC	10	10					
GHG emission reduction innovation fund	TC, NRCan	5	5					
Alternative fuels	TC, ECCC, INFC	20	20	20	20	20		
Marine fuel carbon pricing	TC, ECCC, DFO	2.5	2.5					
Canada's international climate finance	GAC, ECCC	3,500	3,500	3,500	3,500			

millions of dollars

Recommendation *Subrecommendation*	Likely Lead Department(s)	2024-25	2025-26	2026-27	2027-28	2028-29	ongoing	(end-year)
COMPLEMENTARY RECOMMENDATIONS								
CLIMATE ADAPTATION								
Ramping up core adaptation investments								
Core adaptation programs	NRCan, INFC, ECCC, HC, CIRNAC, and other departments	8,000	8,000	8,000	8,000	8,000	8,000	2031-2032
National Adaptation Centre	ECCC	12.5	12.5					
Municipal Climate Fund	INFC	3,000	3,000	3,000	3,000	3,000	3,000	2030-2031
ENVIRONMENTAL JUSTICE								
Office of Environmental Justice								
Establish Office of Environmental Justice	ECCC	25	25	25	25	25	25	ongoing
Environmental enforcement	ECCC	40	40	40	40	40	40	ongoing
Screening and mapping tool	ECCC	30	10	10	10	10	10	ongoing
Collaborative partnerships and grants								
Collaborative partnerships	ECCC	2	2	2	2	2	2	ongoing
Community grants	ECCC	30	30	30	30	30		
Chemical Management Plan	ECCC, HC	200	300	300	300	300	300	ongoing
Youth employment programs	ESDC, PC, ECCC	80	500	500	500	500	500	ongoing
FINANCING NATURE PROTECTION & RECOVERY — DETAILED RECOMMENDATIONS								
PROTECT LAND AND OCEAN ECOSYSTEMS								
Indigenous-led conservation and protected areas	ECCC, PC	1,000	1,075	1,150	1,225	1,300	1,375	Increasing to $1.5 billion/year by 2030, then ongoing
Species at risk	ECCC, DFO, PC	156.5	156.5	293	293	293	293	ongoing
Ecological connectivity	ECCC, PC	100	100	100	100	100		
Key Biodiversity Areas	ECCC, PC							
Endowment fund to strengthen private land conservation sector	ECCC	100	100	100				
Conserving Canada's ocean								
Marine protected area network planning	DFO, PC, ECCC	32	32	32	32	32		
Marine Spatial Planning	DFO, ECCC, PC, NRCan, TC	15	15	15	15	15	15	ongoing
RESTORE DEGRADED TERRESTRIAL & AQUATIC ECOSYSTEMS								
Decade of Restoration: our shared pathway to Target 2								
Restoration coordinating body	NRCan or ECCC	4	4	3	3	3	3	2029-2030
National seed supply	NRCan, AAFC, ECCC	9	9	8	8	8	8	2029-2030
Direct and establish restoration funds								
Use existing funds to restore degraded terrestrial habitat	Multiple departments	No additional cost – we expect this could be achieved using existing capacity.						
Establish Canada Target 2 Restoration Fund	ECCC, NRCan	72	72	72	71	71	71	2030-2031
Habitat Infrastructure Renewal Fund	ECCC	37.5	37.5	37.5	37.5			
AAFC Living Labs techniques	AAFC	5	5	5	5	5		
Aquatic Ecosystem Restoration Fund	DFO	42	42	42	42	41	41	2029-2030
Parks Canada Conservation & Restoration Program	PC	9	9	8	8	8	8	2029-2030
MANAGE AND USE BIODIVERSITY SUSTAINABLY								
Managing ocean fisheries								
Ecosystem approach to fisheries management	DFO	35	35	35	35	35		
Catch monitoring and observer system	DFO	20	20	20				
Renew and revamp Atlantic Fisheries Fund	DFO	50	50	50	50	50		
Underwater noise pollution	DFO, TC	40	40	40	40	40		
Freshwater management								
Freshwater Action Plan	ECCC	56	56	56	56	56		
Freshwater management projects funding	ECCC	39	39	39	39	39		
BC Watershed Security Fund	ECCC	40	40	40	40	40	40	2033-2034
Managing and reducing negative impacts to biodiversity								
Invasive species	ECCC, PS, CFIA, AAFC, DFO, NRCan, HC	50	50	50	50	50		

millions of dollars

Recommendation *Subrecommendation*	Likely Lead Department(s)	2024-25	2025-26	2026-27	2027-28	2028-29	ongoing	(end-year)
COMPLEMENTARY RECOMMENDATIONS								
One Health approach	ECCC, PHAC, CFIA	24	24	24	24	24		
Pesticides – data for regulatory evaluation								
Water monitoring	PMRA, ECCC	8	8	8	8	8	Fund renewal in 2029	
Collecting use data	PMRA, AAFC	10	5	5	5	5		
Monitoring risk to biodiversity	ECCC	5	5	5	5	5		
Halt and reverse bird population declines	ECCC, PC	7	7	7	7	7	7	2029-2030
MAINSTREAM BIODIVERSITY AND MOBILIZE FINANCIAL RESOURCES								
Aligning policies & investments with halting and reversing biodiversity loss by 2030	FIN, ECCC, DFO, AAFC, NRCan, PCO	No additional cost – we expect this could be achieved using existing capacity.						
International biodiversity assistance	GAC, ECCC	600	600					
Accurate data, research, information, and knowledge for improved evidence-based decision-making								
Geospatial inventories	AAFC, DFO, ECCC, NRCan, StatCan	60	60	60	60	60		
Blue carbon	DFO	20	20	20	20	20		

Department and Agency Acronyms

AAFC	Agriculture and Agri-Food Canada
CCEI	Canadian Centre for Energy Information
CER	Canada Energy Regulator
CFIA	Canadian Food Inspection Agency
CIB	Canada Infrastructure Bank
CIRNAC	Crown-Indigenous Relations and Northern Affairs Canada
CMHC	Canada Mortgage and Housing Corporation
CRA	Canada Revenue Agency
DFO	Fisheries and Oceans Canada
ECCC	Environment and Climate Change Canada
ESDC	Employment and Social Development Canada
FIN	Finance Canada
GAC	Global Affairs Canada
HC	Health Canada
INFC	Infrastructure Canada
ISC	Indigenous Services Canada
ISED	Innovation, Science & Economic Development Canada
NRCan	Natural Resources Canada
NSERC	Natural Sciences and Engineering Research Council of Canada
PC	Parks Canada
PCO	Privy Council Office
PHAC	Public Health Agency of Canada
PMRA	Pest Management Regulatory Agency
PS	Public Safety Canada
PSPC	Public Services and Procurement Canada
RDAs	Regional Development Agencies
SSHRC	Social Sciences and Humanities Research Council
StatCan	Statistics Canada
TC	Transport Canada

Photo: Andy Holmes

GREEN BUDGET COALITION

Co-Chair:	Sabine Jessen, Senior Strategic Advisor, Ocean Program, Canadian Parks and Wilderness Society (CPAWS)
Co-Chair:	Will Bulmer, Lead Specialist, Government Relations, World Wildlife Fund (WWF) Canada
Director:	Shannon Arnold, Associate Director, Marine Programs, Ecology Action Centre
Director:	David Browne, Director of Conservation, Canadian Wildlife Federation
Director:	Lisa Gue, Manager, National Policy, David Suzuki Foundation
Director:	Marc-André Viau, Director, Government Relations, Équiterre

Contact

Andrew Van Iterson, Manager, Green Budget Coalition

avaniterson@naturecanada.ca, 613-562-3447, ext. 243

300-240 Bank Street, Ottawa, ON K1P 5E7

Photo: Gatis Marcinkevics | Design: Terra Firma Digital Arts / terrafda.com