

Gouvernement

du Canada



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1. Introduction

Canada is committed to fighting climate change, conserving biodiversity, and protecting the environment, while growing a stronger economy that will thrive in an increasingly carbon-neutral world. Canada recognizes that any country that is not developing strategies and policies to move towards a nature-positive, carbon-neutral, and climate-resilient economy risks losing out in the global race to net-zero.

Canada's actions to address climate change, at home and abroad, are guided by the Paris Agreement goal of holding the increase in global average temperature to well below 2°C above pre-industrial levels, and pursuing efforts to limit the global average temperature increase to 1.5°C. Since the Paris Agreement entered into force in 2016, the evidence of climate change has continued to accumulate, reinforcing the need for urgent and ambitious climate and environmental action. The 2021 Intergovernmental Panel on Climate Change ("IPCC") 6th Assessment Report reinforces that climate change is widespread, rapid, and intensifying. Global warming of 1.5°C and 2°C will be exceeded during the 21st century unless there are rapid and large-scale reductions in greenhouse gas ("GHG") emissions in the coming decades.

In parallel, global biodiversity loss further threatens the stability of our planet and the ecosystems that support life and society. The 2020 Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services ("IPBES") Global Assessment Report on Biodiversity and Ecosystem Services found that the rate of species extinction is accelerating and that transformative changes are needed to restore and protect nature. In 2021, the first ever collaboration between scientists from both IPBES and IPCC emphasized the inextricably connected nature of climate change and biodiversity loss, recognizing that neither will be successfully resolved unless both are tackled together.

Canada recognizes that climate change and biodiversity loss are the twin environmental crises of our time. Canada also recognizes the scientific and socio-economic imperatives of climate and environmental action, and the important role that capital markets must play in financing public and private investments in support of our shared goals. The transition to a net-zero emissions economy will require substantial public and private sector investment and expertise; to this end, the Government of Canada (GC) has released this updated sovereign green bond framework. This broadens the scope of Canadian investments in climate action and environmental protection for investors to support, while fostering further development of the Canadian sustainable finance market.

1.1 Canada's Climate and Environmental Priorities

1.1.1 Pan-Canadian Framework on Clean Growth and Climate Change

In 2016, Canada's First Ministers adopted the Pan-Canadian Framework on Clean Growth and Climate Change (the "Pan-Canadian Framework"), Canada's first national climate change plan, to reduce GHG emissions, accelerate clean economic growth, and build resilience to a changing climate. The Pan-Canadian Framework was developed in collaboration with provinces and territories and with input from Indigenous Peoples, businesses, non-governmental organizations, and Canadians. The Pan-Canadian Framework features individual and joint federal, provincial, and territorial measures under four pillars: pricing carbon pollution; complementary measures to further reduce emissions across the economy; adaptation and climate resilience; and clean technology, innovation, and jobs. The Pan-Canadian Framework was not an endpoint, but a beginning, and several Canadian governments have updated their climate plans since its adoption.

1.1.2 Canada's Strengthened Climate Plan

In December 2020, Canada released its strengthened federal climate plan: A Healthy Environment and a Healthy Economy. The plan builds on the measures outlined in the Pan-Canadian Framework, with more than 60 strengthened and new federal policies, programs, and investments to cut pollution and build a stronger, cleaner, more resilient, and inclusive economy. The plan includes measures to: make the places Canadians live and gather more affordable by cutting energy waste; make clean, affordable transportation and power available in every community; continue to ensure that pollution is not free and households get more money back; build Canada's clean industrial advantage, including support for the development and adoption of clean technologies and the decarbonization of heavy industry; and, embrace the power of nature to support healthier families and more resilient communities.

The GC is also leading by example by taking action to transition to net-zero, through climate-resilient and green operations. The GC owns and manages the largest fixed asset portfolio in Canada and is also the largest purchaser of goods and services in the country. In August 2023, Canada released Powering Canada Forward, its vision for transforming the electricity sector with a goal to fully decarbonize the grid by 2035 while keeping Canada's electricity systems reliable and ensuring household energy costs are affordable. Through the Greening Government Strategy, the GC has committed to net-zero emissions by 2050 for its operations, including government-owned and leased real property, federal fleets and travel, procurement of goods and services, and national safety and security operations. The GC has already achieved emissions reductions of 41 per cent from 2005 levels from federal facilities and conventional fleets.

Since the release of the Pan-Canadian Framework, the GC has committed more than \$120 billion to climate action, clean growth, and a green recovery from the COVID-19 pandemic. Canada is committed to working with its partners to identify and support new actions, enabling Canada to achieve its enhanced 2030 emissions reduction target of 40-45 per cent below 2005 levels.

1.1.3 Canadian Net-Zero Emissions Accountability Act

In 2021, Canada joined over 120 countries by committing to achieving net-zero emissions by 2050. The *Canadian Net-Zero Emissions Accountability Act*, which received Royal Assent in June 2021, codified this commitment, requiring the GC to set national emissions reduction targets at five-year intervals for 2030, 2035, 2040, and 2045, and to develop emission-reduction plans for each target, as well as explain how each plan would contribute to reaching net-zero emissions by 2050. The GC is engaging key stakeholders and partners, such as provincial and territorial governments, and Indigenous Peoples, among others, in setting these national targets. In 2022, the GC issued its 2030 Emissions Reduction Plan: Canada's Next Steps for Clean Air and a Strong Economy which includes an interim GHG emissions reduction objective of 20 per cent below 2005 levels by 2026. The *Canadian Net-Zero Emissions Accountability Act* introduced new transparency measures, including progress reports and annual reports outlining how the GC is managing the financial risks and opportunities related to climate change.

The Canadian Net-Zero Emissions Accountability Act also established, under federal law, an independent Net-Zero Advisory Body (the "Advisory Body"), which provides advice to the Minister of Environment and Climate Change on pathways for Canada to reach net-zero emissions by 2050. The Advisory Body also provides advice on emissions reduction milestones leading up to 2050 and identifies near-term actions and key building blocks that support this long-term target.

1.1.4 Nature Conservation

In addition to tackling climate change, Canada is committed to addressing the urgent need to protect and conserve nature across the country. In its 2023 Global Risk Report, the World Economic Forum ranked biodiversity loss and ecosystem collapse as the fourth-highest risk by severity over the long term. Canada is committed to conserving and protecting 25 per cent of its land and 25 per cent of its oceans by 2025, working towards conserving 30 per cent of each by 2030. Canada is also committed to advancing the protection and recovery of species at risk, and continuing to advance commitments under the United Nations ("UN") Convention on Biological Diversity and the Convention on International Trade in Endangered Species of Wild Fauna and Flora ("CITES").

Canada recognizes that nature can be an ally in tackling and adapting to climate change. Canada has made significant recent investments in nature-based climate solutions to build resilience and help Canada meet its 2030 and 2050 climate change targets. The United Nations Biodiversity Conference (COP 15) was held in Montreal, Canada in December 2022 and resulted in the adoption of the Kunming-Montreal Global Biodiversity Framework, a landmark proposal which outlines measures to address biodiversity loss, restore ecosystems and protect Indigenous rights as well as tackle the rising global rate of species extinction. Nature-based climate solutions embrace the power of nature to reduce the effects of, and adapt to, climate change, while supporting biodiversity. Forests, wetlands, grasslands, and farmland have the ability to absorb and store large amounts of carbon, reduce the effects of climate change, keep our air and water clean, and provide habitats for wildlife, including species at risk.

1.1.5 Adaptation and Climate Resilience

Climate change is disproportionately affecting Canada, causing the country to warm on average two times faster than the global average—three times faster in Canada's North. The effects of widespread warming are already evident across Canada and will continue to intensify. Heatwaves, wildfires, floods, rising sea levels, thawing permafrost, and other climate-related impacts are posing serious risks to Canadian society, economy, and environment. The economic and social costs associated with climate change impacts, which are incurred by governments, communities, the private sector, and individual Canadians, are also high and projected to grow.

In June 2023, the GC launched its first National Adaptation Strategy, developed in collaboration with provincial, territorial, and municipal governments, Indigenous Peoples, and other key partners. It establishes a shared vision for climate resilience, identifies key priorities for increased collaboration, and provides a framework for measuring progress at the national level. This work builds on Canada's broad suite of existing adaptation efforts across the country that aim to increase awareness of climate impacts, strengthen the capacity for action, and support on-the-ground adaptation projects, including those using nature-based climate solutions.

1.1.6 Environmental Protection

Canada is also taking steps to protect the environment from pollution and waste. The GC is working to protect the environment and Canadians from harmful substances through its Chemicals Management Plan and Air Quality Management System. Every year, Canadians throw away three million tonnes of plastic waste. Only 9 per cent of this waste is recycled, meaning that the vast majority of plastics end up in landfills, with 1 per cent finding its way into the natural environment. The Federal Leadership Towards Zero Plastic Waste in Canada initiative is working to achieve the GC's goal of zero plastic waste by 2030. It is supporting actions along the entire plastics lifecycle to address plastic pollution and waste, including those that incentivize reuse, repair, and other value-retention processes, and enhances recycling and composting infrastructure capacity. Canada has also adopted the Oceans Plastics Charter as part of the G7 Charlevoix

Blueprint for Healthy Oceans, Seas and Resilient Coastal Communities. The adoption of this blueprint commits to moving toward a more resource-efficient and sustainable approach to the management of plastics, taking a lifecycle approach to plastics stewardship on land and at sea. It also commits to recognizing the urgency of the threat of ocean plastic waste and marine litter to ecosystems and the lost value of plastics in the waste stream.

As Canada grows a more sustainable economy and provides opportunities for Canadians and communities across the country, the GC is also exploring solutions that underpin a circular economy. Canada proudly hosted the World Circular Economy Forum in September 2021 and will continue to promote the need to integrate circular economy approaches into climate change solutions. In addition, Canada is a member of the High Level Panel for a Sustainable Ocean Economy and endorsed its Transformations for a Sustainable Ocean Economy document, including a set of recommendations and actions to advance a sustainable ocean economy, prioritizing a healthy ocean alongside sustainable production to benefit people everywhere.

1.1.7 Role of Nuclear in Canada's Energy Future

Canada is a world leader in nuclear energy. In the 1950s, Canada began developing a unique and innovative nuclear reactor technology called the Canada Deuterium Uranium ("CANDU") reactor, which first went into operation in the early 1960s. Canada currently has 19 operating CANDU reactors at four nuclear generating stations across Ontario and New Brunswick. Overall, Canada's nuclear sector has and continues to yield significant social, economic, and industrial returns through the production of non-emitting and cost-effective electricity.

Nuclear energy will play an essential role in Canada's goal to achieve net-zero emissions by 2050. Nuclear energy makes up approximately 14 per cent of the country's total electricity generation and displaces approximately 50 million tonnes of GHG emissions annually. In its Canada's Energy Future 2023 report, the Canada Energy Regulator outlines comprehensive modelling related to the refurbishment of existing nuclear generation facilities as necessary to extend the useful life of each unit as well as innovation coming from small modular reactors ("SMRs") to help meet rising electricity demand.

SMRs have the potential to be more cost effective than traditional reactors and can provide non-emitting heat and power to decarbonize carbon-intensive industries as well as rural and remote communities with no grid access. By 2050, energy generation from SMRs could make up 12 per cent of total electricity generation in Canada. Canada's SMR Roadmap and Canada's SMR Action Plan set out Canada's national strategy for SMR development with provincial-level efforts also underway.

Canada has a robust regulatory and legislative framework to ensure the highest level of safety at all stages of the nuclear energy lifecycle. Canada's legislative framework of the nuclear energy industry consists primarily of the following:

- Nuclear Safety and Control Act (Regulation of nuclear safety and substances)
- Nuclear Energy Act (Nuclear Research and Development)
- Nuclear Fuel Waste Act (Waste Management)
- · Nuclear Liability and Compensation Act (Liability in the event of a nuclear incident

Canada has been regulating nuclear energy since 1946 with the *Atomic Energy Control Act*, which was replaced in 2000 with the *Nuclear Safety and Control Act* that established the Canadian Nuclear Safety Commission ("CNSC"). The CNSC is an independent federal government agency which operates at arm's length from the government. Its decisions are not subject to government approval and can onlybe overturned by the Federal Court of Canada. The CNSC's mandate includes the following:

- Regulate the development, production and use of nuclear energy and substances including the safe disposal of nuclear waste;
- Implement Canada's non-proliferation policy and international commitments on the peaceful use of nuclear energy; and,
- Disseminate objective scientific, technical, and regulatory information to the public on the Commission's
 activities and the environmental and health effects of the development, production, possession, and use
 of nuclear energy.

Atomic Energy of Canada Limited ("AECL"), a Crown Corporation established in 1952 to develop peaceful applications of nuclear energy, also plays a key role in Canada's nuclear energy program. Its mandate is to fulfill the Government's waste and decommissioning responsibilities, provide nuclear expertise to support federal roles and responsibilities, and offer services to users of nuclear laboratories on commercial terms. AECL's nuclear laboratories are now being operated by Canadian Nuclear Laboratories Ltd.

Canada continues to advance its plan to address used nuclear fuel waste. In 2002, three nuclear energy corporations of the day—Ontario Power Generation, Hydro-Québec, and New Brunswick Power— established the Nuclear Waste Management Organization ("NWMO") as required under the *Nuclear Fuel Waste Act*. The NWMO is a not-for-profit organization responsible for implementing Canada's plan for the safe, long-term management of nuclear fuel waste and these organizations, along with AECL, are mandated to fund the NWMO's operations as required under the *Nuclear Fuel Waste Act*. The plan, known as Adaptive Phased Management, requires nuclear fuel waste to be contained and isolated in a deep geological repository. Identification of a preferred site for a deep geological repository is ongoing.

1.1.8 An Inclusive and Prosperous Transition to Net-Zero

Canada is committed to achieving its climate, nature, and environmental protection goals, while securing an inclusive and prosperous future for all Canadians. The GC is developing a climate lens to integrate both short- and long-term climate mitigation, resilience and adaptation considerations throughout federal government-decision making, policies and programs. In addition, the GC has created a Quality of Life Framework to incorporate quality of life measurements into government decision-making and budgets, including measurements connecting human well-being with the environment and ecological integrity. Monitoring and reporting on a broader set of measurements aims to better ensure that federal investments are focused on areas that have the greatest impact on Canadians' quality of life.

The GC has analytical tools in place to consider the social impacts of proposed policies and programs, including the application of gender-based analysis plus ("GBA+"). GBA+ is an analytical process which incorporates numerous identity factors into decision making (e.g., gender, ethnicity, region of residence, age, and sexual orientation), providing federal officials with evidence to ensure that initiatives are inclusive, equitable and barrier-free. Canada's strengthened climate plan was informed by a GBA+ assessment, and future environmental programs and policies will also undergo GBA+ assessments. The GC has also consulted Canadians on potential elements of proposed net-zero transition legislation, including the development of net-zero transition principles to inform policy and decision-making processes, and ensure that the people and communities affected by the transition to a low-carbon, nature-positive economy have the right supports in place to succeed and thrive. Canada's nuclear program is also well-positioned to support a net-zero transition through the creation of highly skilled jobs across the nuclear energy and technology supply chains.

Canada recognizes that Indigenous Peoples have been stewards and managers of the land and waters, and leaders in ecosystem conservation, since time immemorial. Indigenous Peoples are key partners in conserving and protecting nature, and have unique perspectives, knowledge, rights, and responsibilities, which can teach, inspire, and improve conservation results. The GC is committed to renewed nation-to-nation, Inuit-to-Crown and government-to-government relationships with First Nations, Inuit, and Métis peoples, based on the recognition of rights, respect, cooperation, and partnership. Canada's strengthened climate plan sets out a range of actions designed to respond to Indigenous Peoples' climate priorities, from infrastructure resilience to food security to clean energy. These initiatives include Government support for the implementation of Indigenous-led climate strategies for First Nations, Inuit and Métis peoples, such as the National Inuit Climate Change Strategy, working closely with Indigenous Peoples on the development of a National Adaptation Strategy, working closely with Indigenous Peoples to conserve and protect nature through the establishment of Indigenous Protected and Conserved Areas, continuation of the Indigenous Guardians program, and Indigenous-led natural climate solutions projects.

1.2 The Role of Sustainable Finance

The GC recognizes that sustainable finance plays a key role in accelerating the transition to a cleaner economy. Mobilizing capital is a crucial part of Canada's work to meet its 2030 emissions reduction target and achieve net-zero emissions by 2050. In 2018, Canada's Minister of Finance and Canada's Minister of Environment and Climate Change jointly appointed the Expert Panel on Sustainable Finance to explore opportunities and challenges facing Canada in this field, and to present the Government with a set of recommendations to scale and align sustainable finance with the country's climate and economic goals. Acting on these recommendations, in May 2021, the GC launched the Sustainable Finance Action Council, bringing together public and private sector financial expertise to support the growth of a strong, well-functioning, sustainable finance market. The council's principal mandate is to make recommendations on critical market infrastructure needed to attract and scale sustainable finance in Canada, including: enhanced assessment and disclosure of climate risks and opportunities; better access to climate data and analytics; and common standards for sustainable and low-carbon investments.

The Paris Agreement is expected to require over \$100 trillion in global investment over the next decade, with more than \$2 trillion invested in Canada.¹ The transition to net-zero emissions by 2050 will require substantial investment, beyond the public sector, and an alignment of financial flows with Canada's climate goals. Tapping into private sector capital requires a strong sustainable finance landscape where transparency and clear standards are guiding tenets.

The GC issued its first green bond in March 2022 to help finance government investments in green infrastructure and other environmental initiatives. Through green bond issuances, Canada intends to mobilize capital in support of its climate plan and environmental objectives, and to further develop the Canadian sustainable finance market by adding liquidity and highly-rated environment, social and governance ("ESG") assets to create a more mature, liquid, and diverse market for investors.

¹ The New Climate Economy, "The Sustainable Infrastructure Imperative: Financing for Better Growth and Development", 2016; Royal Bank of Canada, "The \$2 Trillion Transition: Canada's Road to Net Zero", 2021.

2. Green Bond Framework

The updated Government of Canada Green Bond Framework (the "Framework") has been developed in accordance with the International Capital Market Association ("ICMA") Green Bond Principles (2021) ("GBP"). An independent external reviewer, Sustainalytics, has confirmed that the Framework aligns with the core components and key recommendations of the Green Bond Principles (2021).

Core Components:

- i. Use of Proceeds
- ii. Process for Project Evaluation and Selection
- iii. Management of Proceeds
- iv. Reporting

Key Recommendations:

- i. Green Bond Framework
- ii. External Review

2.1 Use of Proceeds

The GC intends to allocate an amount equal to the net proceeds of any green bonds issued (the "Green Bonds") to finance and/or refinance, in whole or in part, expenditures that meet any of environmental eligibility criteria set out in this Framework (the "Eligible Green Expenditures"), with the intent that these expenditures would not cause significant harm to any of the priorities identified in Section 1.1.

Eligible Green Expenditures can include any government expenditures, including but not limited to transfer payments (e.g., grants, contributions, etc.), loans, subsidies, fiscal measures (e.g., tax credits and tax expenditures) and capital and operational expenditures (e.g., salaries and operating expenses). Expenditures related to research and development, funding for scientific purposes, and international transfers in support of the eligible green expenditure categories can also be included, as appropriate. Eligible Green Expenditures are limited to federal government expenditures, including those of departments, agencies and select Crown corporations occurring no earlier than two fiscal years prior to the issuance and no later than two fiscal years following the fiscal year of issuance (the "Eligible Expenditure Window"). In the case of fiscal measures (e.g., tax credits and tax expenditures), the Eligible Expenditure Window on a lookback basis is three fiscal years prior to the issuance to account for timing of the availability of tax-related data.

2.1.1 Eligible Green Expenditures

<u>Table 1</u> identifies the categories of Eligible Green Expenditures and maps out the relevant ICMA Green Bond Principles project categories as well as the relevant UN Sustainable Development Goals ("SDGs"). It provides high-level information as well as a non-exhaustive list of subcategories and example expenditures.

ICMA Green Bond Principles Green Project Categories	UN SDG Mapping	Subcategories
Clean Transportation	11 SUSTAINABLE CITIES AND COMMUNITIES	 Measures supporting low-carbon mobility, including the development and deployment of low and zero-emission vehicles (<50gCO₂/km for tailpipe emissions), and low and zero-emission public transportation vehicles (<50gCO₂/p-km for tailpipe emissions).² Measures supporting new and upgraded transportation infrastructure (e.g., public transit, rail, charging stations, active transportation), as well as infrastructure maintenance, that promotes a shift to lower-emission modes of transportation, or could support low and zero-emission mobility in the future. Example Expenditures The Zero Emission Vehicle (ZEV) Infrastructure Program addresses the lack of charging and refueling stations in Canada; one of the key barriers to ZEV adoption, by increasing the availability of localized charging and hydrogen refueling opportunities where Canadians live, work, and play. The Incentives for Zero-Emission Vehicles Program (iZEV) provides Canadian residents and businesses with incentives to purchase or lease eligible zero-emission vehicles.
Living Natural Resources & Land Use	2 ZERO HUNGER SSS CONSUMPTION AND PRODUCTION CONSUMPTION	 Measures supporting reforestation and afforestation, the conservation or restoration of nature, climate smart farming and agricultural practices, sustainable fisheries and aquaculture, as well as sustainable forestry practices. Measures supporting projects that restore and enhance wetlands, peatlands, and grasslands to, among other outcomes, store and capture carbon.

² The calculation of the emissions footprint is conducted based on the vehicle's direct emissions per km and would exclude emissions from ancillary equipment or technologies that may be required to support operation of eligible vehicles (e.g., ancillary diesel heaters utilized on public transit in colder months).

ICMA Green Bond Principles Green Project Categories	UN SDG Mapping	Subcategories
Living Natural Resources & Land Use	14 LIFE BELOW WATER TO ONLAND TO ONLAND	 Example Expenditures The Nature Smart Climate Solutions Fund supports projects that restore and enhance wetlands, peatlands, and grasslands to store and capture carbon by restoring degraded ecosystems; improving land management practices, especially in agriculture, forestry, and urban development sectors; and conserving carbon-rich ecosystems at high risk of conversion to other uses that would release their stored carbon. The Two Billion Trees Program supports Canada's commitment to plant 2 billion trees over 10 years, through a mix of reforestation and afforestation, in both rural and urban areas.
Energy Efficiency	7 AFFORDABLE AND CLEAN ENERGY 11 SUSTAINABLE CITIES AND COMMUNITIES	 Measures supporting or promoting energy efficiency or fuel switching in industrial, commercial, agricultural, public, or residential sectors. Measures supporting the construction of new, ow-carbon buildings as well as energy efficiency and/or low-carbon retrofits to existing buildings. Example Expenditures The Greener Homes Grant program supports homeowners to improve energy efficiency, create new jobs across Canada for energy advisors, grow our domestic green supply chains, and fight climate change.
Terrestrial & Aquatic Biodiversity	14 LIFE BELOW WATER TO ONLAND TO ONLAND	 Measures supporting the protection and restoration of biodiversity and terrestrial and marine ecosystems, including protecting species at risk, and other related priorities. Example Expenditures The Canada Nature Fund supports the protection of Canada's biodiversity through the creation of protected and conserved areas and through initiatives that help to recover species at risk.

ICMA Green Bond Principles Green Project Categories	UN SDG Mapping	Subcategories
	7 AFFORDABLE AND CLEAN ENERGY	 Measures supporting the development, deployment, and distribution of renewable energies, such as solar, wind, geothermal (direct emissions <100gCO₂/kwh), hydrogen (<36.4g CO₂e/MJ), marine renewables, clean fuels, and bioenergy. Measures supporting development of hydropower, as well as refurbishment, operation, or maintenance of
Clean Energy		 existing hydroelectric facilities.³ Measures supporting the deployment of nuclear energy to generate electricity and/or heat.
		 Measures supporting grid modernization.
		Example Expenditures
		 The Smart Renewables and Electrification Pathways Program supports smart renewable energy and electrical grid modernization projects.
		 The Enabling Small Modular Reactors Program supports research and development on SMR wasteand supply chains.
		 Measures supporting enhancing resiliency and managing risks associated with the effects of climate change, including flooding, wildfires, drought, and extreme weather events.
		Measures supporting the monitoring and prediction of weather and environmental conditions.
Climate Change Adaptation	13 CLIMATE ACTION	 Measures supporting community monitoring of climate change, outreach and capacity building, risk assessments, risk mitigation, and increasing preparedness.
		Example Expenditures
		The Disaster Mitigation and Adaptation Fund aims to strengthen the resilience of Canadian communities through investments in public infrastructure projects, including natural infrastructure projects, enabling them to better manage the risk associated with current and future natural hazards, such as floods, wildfires, and droughts.

³ Hydropower projects in operation before 2020 must have a power density of over 5 W/m² or operate with lifecycle emissions below a threshold of 100g CO₂e/kWh; hydropower projects in operation in 2020 or after must have a power density of over 10 W/m² or operate with lifecycle emissions below a threshold of 50g CO₂e/kWh. These projects must undergo additional assessments of environmental and social risks based on recognized best practice guidelines and applicable national/provincial laws, and incorporate measures to address risks.

ICMA Green Bond Principles Green Project Categories	UN SDG Mapping	Subcategories
Sustainable Water & Wastewater Management	6 CLEAN WATER AND SANITATION	 Measures supporting water and wastewater treatment and management. Example Expenditures The Investing in Canada Infrastructure Program includes capital infrastructure investments to support access to drinking water, wastewater treatment, and other environmental objectives.
Circular Economy Adapted Products, Production,Technologies, and Processes	7 AFFORDABLE AND CLEAN ENERGY 11 SUSTAINABLE CITIES AND COMMUNITIES 12 RESPONSIBLE CONSUMPTION AND PRODUCTION CONSUMPTION AND PRODUCTION	 Measures supporting product and service design, manufacture and use aimed at increasing life span and value retention of goods (e.g., reuse, repair, refurbish, remanufacture, repurpose) and useful application (i.e., recycle and recover) for materials, technologies, services, and processes (including business model changes). Measures supporting the development of technologies, products, and processes for the bioeconomy (biomaterials, biochemicals, and next generation building products).⁴ Example Expenditures The Forest Innovation Program facilitates the initial R&D of innovative technologies, products, and processes in the emerging bioeconomy. This is done by supporting R&D and pilot projects that are aligned with future market demand and consumer preferences, and help the sector adapt to current and upcoming challenges related to wood fibre supply. It also accelerates the development of clean growth technologies and products.
Pollution Prevention & Control	7 AFFORDABLE AND CLEAN EVERCY 12 CONSUMPTION AND PRODUCTION AND PRODUCTION 11 SUSTAINABLE CITIES BELOW WATER BELOW WATER	 Measures supporting the reduction of air pollutants and greenhouse gas emissions, including carbon capture, utilization, and storage (subject to exclusionary criteria). Measures supporting the development of waste management activities such as waste prevention, waste reduction and recycling. Example Expenditures The Low-Carbon Economy Fund Challenge supports the Pan-Canadian Framework by leveraging investments in projects that will generate clean growth and reduce greenhouse gas emissions to help deliver on Canada's Paris Agreement commitments.

⁴ All related projects support production of products for which inputs are sustainably sourced, (e.g., for the forest sector, product inputs are either waste feedstock or sourced from sustainably managed forests, where management practices respect applicable laws.)

2.1.2 Exclusionary Criteria

The GC will exclude from the Eligible Green Expenditures the portion of any expenditures financed and/or refinanced by green bonds issued by Crown Corporations or other public sector entities. In addition, the GC will exclude from Eligible Green Expenditures any expenditures relating to the categories identified below.

The GC recognizes that no credible plan to achieve significant emissions reductions by 2030, and net-zero emissions by 2050, can ignore the emissions-reduction and innovative potential of heavy industry, including the Canadian energy sector. At the intersection between ambitious decarbonization and ensuring a net-zero transition are new economic opportunities for communities and individuals across Canada. The GC remains committed to supporting decarbonization, nature conservation, and environmental quality in all sectors and Canadian regions.

Summary of Exclusions

- Transportation, exploration, and production of fossil fuels
- · Arms manufacturing
- Gambling
- · Manufacture and production of tobacco products
- Manufacture and production of alcoholic beverages

2.2 Process for Project Evaluation and Selection

Finance Canada (FIN) and Environment and Climate Change Canada (ECCC) lead an Interdepartmental Green Bonds Committee ("IGBC"), with representation from relevant federal departments and Crown Corporations. The IGBC meets at least twice per year and supports FIN and ECCC with the following tasks: implementation and maintenance of this Framework, identification and evaluation of Eligible Green Expenditures, allocation and management of Green Bond net proceeds, and reporting on the allocation and impact of Green Bond net proceeds. FIN and ECCC, as co-chairs of the IGBC, select the recommended Eligible Green Expenditures to be included in each issuance based on IGBC recommendations. Final allocation decisions will be taken by FIN.

The IGBC will be responsible for updating the list of potential Eligible Green Expenditures (the "Eligible Pool"). FIN and ECCC will engage relevant federal departments or Crown Corporations to verify the eligibility of each such potential Eligible Green Expenditure. FIN will be responsible for tracking and maintaining the Eligible Pool as co-chair of the IGBC.

The IGBC will review the allocation of proceeds of all Green Bonds on an annual basis to determine if any changes are necessary. If any such expenditure has been cancelled, postponed or is otherwise no-longer eligible, FIN intends to replace such expenditure with another Eligible Green Expenditure in consultation with ECCC and relevant federal departments or Crown Corporations. Federal departments and Crown Corporations are responsible for monitoring the implementation of Eligible Green Expenditures and alerting FIN and ECCC to any potential issues or concerns related to the eligibility of specific expenditures.

Policy, plan, and program proposals that are submitted to a Minister or Cabinet are subject to strategic environmental assessment requirements as per the Cabinet Directive on the Environmental Assessment of Policy, Plan and Program Proposals, to identify the likely environmental effects, and develop mitigation strategies to reduce or eliminate adverse effects. Such policies and programs are also informed by gender and diversity analysis (including through GBA+) to ensure that decisions are undertaken with an understanding of how diverse groups of Canadians would be affected, and that initiatives are responsive to Canada's long-term sustainable and inclusive growth. Identity factors considered could include gender, age, sexual orientation, disability, education, language, geography, culture, and income, amongst others.

Interdepartmental Green Bonds Committee

The IGBC is comprised of representatives from:

- Finance Canada (Co-Chair)
- Environment and Climate Change Canada (Co-Chair)
- · Natural Resources Canada
- · Innovation, Science and Economic Development
- · Infrastructure Canada
- · Agriculture and Agri-food Canada
- · Transport Canada
- · Public Safety Canada
- · Fisheries and Oceans Canada
- · Indigenous Services Canada
- Crown-Indigenous Relations & Northern Affairs Canada
- · Relevant Crown Corporations

The IGBC will support FIN and ECCC:

- Implementation and maintenance of the Green Bond Framework
- Identification, evaluation, and selection of Eligible Green Expenditures for Green Bond proceeds
- Identification of potential expenditures for Green Bond proceeds
- Allocation and management of the Green Bond proceeds
- Annual Green Bond reporting on the allocation and environmental impact of the net proceeds

Other departments, agencies, and Crown Corporations may be added to the IGBC as required

2.3 Management of Proceeds

FIN will be responsible for the issuance of Green Bonds by the GC and the management of the Green Bond net proceeds. The Green Bond proceeds will be deposited to the GC's Consolidated Revenue Fund and managed in the same way as funds raised through conventional GC debt issuances. On an annual basis, FIN will monitor the level of realized Eligible Green Expenditures via a virtual register and determine the allocation of the Green Bond net proceeds towards Eligible Green Expenditures.

FIN will seek to allocate at least 50 per cent of the Green Bond net proceeds to expenditures related to the fiscal year of issuance or two fiscal years following the fiscal year of issuance, subject to expenditure availability, target issuance size, and other considerations.

Pending the full allocation of the Green Bond proceeds to Eligible Green Expenditures, FIN will manage the unallocated proceeds in line with the GC's cash management policy, as set out in Canada's Funds Management Governance Framework and updated as necessary.

The allocation of the Green Bond proceeds to Eligible Green Expenditures will be reviewed annually and reported to investors in accordance with Section 2.4.1.

2.4 Reporting

For all Green Bond issuances under this Framework, the GC is committed to providing investors with transparent reporting on the allocation of proceeds towards Eligible Green Expenditures ("Allocation Reporting"), as well as to report on the positive environmental impact of those expenditures ("Impact Reporting"). Allocation and impact reports for Green Bond issuances will be published on the FIN website.

2.4.1 Allocation Reporting

After each Green Bond issuance, the GC will publish a report in the following fiscal year on the allocation of the net proceeds of the Green Bond(s), including:

- An overview of the allocation of the issued Green Bond(s) to the Eligible Green Expenditure categories;
- A breakdown of allocated proceeds by Eligible Green Expenditure category;
- A breakdown of allocated proceeds per type of expenditure (e.g., transfer payments, subsidies, fiscal measures (tax credits), operational expenditures, loans, and financing, etc.); and,
- The amount of unallocated proceeds.

The allocation report will be updated annually, until full allocation of the net proceeds of the issued Green Bond(s) is achieved.

2.4.2 Impact Reporting

The GC will publish an impact report addressing the positive environmental impacts (e.g., GHG emissions avoided, hectares of land conserved) of the Eligible Green Expenditures on an annual basis, until full allocation of the net proceeds of the issued Green Bonds is achieved. In addition, and consistent with commitments to a net-zero transition, Indigenous climate leadership and other priorities, the GC intends to report on the social co-benefits (e.g., number of jobs created, number of households benefitted) and impacts on Indigenous communities, where available, of the Eligible Green Expenditures.

The impact report will provide information on:

- Environmental impact indicators (e.g., GHG emissions avoided) related to the Eligible Green Expenditures to which Green Bond proceeds have been allocated; or,
- Where appropriate, using case studies outlining qualitative and/or quantitative metrics to discuss expenditure impacts.

As necessary, the GC may provide additional updates due to the time-lag in the publication of specific environmental impact indicators. The approach to impact reporting may be updated over time to align with emerging reporting standards and methodologies.

Examples of the potential environmental impact indicators per Green Project Category are provided in <u>Table 2</u>. This list is non-exhaustive, and the GC may update or add metrics in the future.

Table 2 – Example Impact Reporting Indicators

Green Project Category	Example Environmental Impact Indicators
Clean Transportation	 Annual GHG emissions reduced/avoided in tonnes of CO₂ equivalent Number of ZEVs deployed
Living Natural Resources & Land Use	 Number of trees planted Annual GHG emissions reduced/avoided in tonnes of CO₂ equivalent Hectares of land improved or conserved Number of species benefitted
Energy Efficiency	 Annual energy savings in MWh/GWh (electricity) and GJ/TJ (other energy savings) Annual GHG emissions reduced/avoided in tonnes of CO₂ equivalent Number of buildings benefitted
Terrestrial & Aquatic Biodiversity	 Hectares protected and conserved Biodiversity value based on applying a standardized indicator Number of species at risk benefitting from conservation action Number of conservation areas developed
Clean Energy	 Annual GHG emissions reduced/avoided in tonnes of CO₂ equivalent Annual kWh/MWh of clean energy produced
Climate Change Adaptation	 Number of communities that have completed hazard mapping, risk assessments, or adaptation plans Number of buildings better protected Number of kilometers of coastline better protected Number of communities benefiting Number of structural and/or natural assets with an improved structural capacity to adapt to climate change, disasters, and weather
Sustainable Water & Wastewater Management	 Annual volume of water managed Annual volume of water saved Number of wastewater systems meeting government requirements Number of wastewater assets receiving investments

Circular Economy Adapted Products, Production, Technologies, and Processes	 Percent increase in materials that are reusable, recyclable, and/or certified Percent increase of waste that is prevented, minimized, reused, or recycled Annual greenhouse gas emissions reduced/avoided in tonnes of CO₂ equivalent
Pollution Prevention & Control	 Amount of waste that is disposed or recycled Number/percentage of communities undertaking solid waste management improvement projects Number of projects benefitted GHG emissions reduced/avoided in tonnes of CO₂ equivalent

3. External Review

3.1 Second Party Opinion

The GC engaged Sustainalytics to provide an independent Second Party Opinion ("SPO") on this updated Framework. The SPO provides investors with an independent assessment of the expected environmental benefits of the Green Bond project categories and the alignment of this Framework with the ICMA GBP.

3.2 Verification

The GC will engage an independent body to provide third-party verification on the allocation of proceeds of issued Green Bonds to Eligible Green Expenditures. The report will be provided annually until full allocation of the proceeds of the issued Green Bond. The verification report(s) will be made publicly available on the GC website.

4. Amendments

FIN and ECCC, with input from the IGBC, will review this Framework on a regular basis, and at least every five years, including its alignment to the ICMA GBP. The Framework may be amended from time to time to take account of increasing standards, evolving science, updates to the ICMA GBP as and when they are released, or any other changes that FIN and ECCC consider appropriate. Amendments will be subject to the review of an external second party opinion provider in alignment with market expectations and the latest international climate and environmental standards, unless the amendments are immaterial, required to reflect a change in applicable laws, rules, or regulatory requirements, or of a housekeeping nature (for greater certainty, which shall include any amendments for the purpose of curing any ambiguity or clerical or typographical error). Any updates to this Framework will be published on the GC website.

Disclaimer

This Framework does not constitute, or form part of, a prospectus or other offering document. This Framework is not, and should not be construed as, an invitation or offer for sale or subscription of, or a solicitation of any offer to buy or subscribe for, any securities of the GC in any jurisdiction or an inducement to enter into investment activity.

This Framework is provided for general information purposes only and is subject to change without notice. This Framework may contain or incorporate by reference public information or information from third parties that is not separately reviewed, approved or endorsed by the GC. Accordingly, no representations, warranties, or assurances of any kind, express or implied, are made and no responsibility or liability is accepted by the GC in relation to the accuracy or completeness of the information contained herein. The GC has no responsibility or obligation to update or revise any statements or information in this Framework to reflect actual changes in assumptions or changes in factors affecting these statements or to otherwise notify any readers if any information, opinion, projection, forecast or estimate set forth herein changes or subsequently becomes inaccurate.

This Framework may contain statements about future events and expectations that are forward looking statements. Readers are cautioned not to place undue reliance on these statements as a number of risk factors, including market uncertainty and Parliamentary approval of future expenditures, could cause actual results to differ materially from the expectations expressed in such forward-looking statements. The projects shown in the Framework are for illustrative purposes only. Forward-looking statements contained herein may include, but are not limited to statements indicating that the net proceeds from the Green Bonds will be used to finance the GC's green and/or social projects without being committed or earmarked for lending to any particular projects. While it is the intention of the GC to apply an amount equivalent to the proceeds of any Green Bond to Eligible Green Expenditures and to report on the Eligible Green Expenditures as described herein, there is no contractual obligation or other to do so. There can be no assurance that any such Eligible Green Expenditures will be available or capable of being implemented in the manner anticipated. Furthermore, no assurance is given that any projects or uses the subject of, or related to, Eligible Green Expenditures will be completed as expected, that the stated aims and/or impacts of any projects or uses the subject of, or related to, any Eligible Green Expenditures will be met or made, nor that adverse environmental, social and/or other impacts will not occur during the implementation of any projects or uses the subject of, or related to, any Eligible Green Expenditures. None of these events, nor a failure by the GC to allocate the proceeds of any Green Bond to Eligible Green Expenditures, nor to report on Eligible Green Expenditures as described herein, nor a failure by a third party to issue (or its withdrawal of) an opinion or certification in connection with any Green Bond will constitute an event of default or breach of contract with respect to any Green Bond.

There is currently no clear definition (legal, regulatory or otherwise) of, nor clear market consensus as to what constitutes, a "green" or "sustainable" or equivalently labelled project or as to what precise attributes are required for a particular project to be defined as "green" or "sustainable" or such other equivalent label, nor can any assurance be given that a clear definition or consensus will develop over time nor if a definition or consensus develops, that it will not change over time. Accordingly, no assurance is given that the Eligible Green Expenditures will satisfy any present or future investment criteria or guidelines with which an investor is required, or intends, to comply, in particular with regard to any direct or indirect environmental or sustainability impact of any project or uses, nor that it will meet investor expectations or requirements regarding such "green", "sustainable", "social" or similarly labelled performance objectives. Investors should have regard to the factors described in this Framework and determine for themselves the relevance of such information for the purposes of an investment in Green Bonds, before deciding to invest.

No representation or assurance is given as to the relevance, suitability or reliability of any opinion or certification of any third party made available in connection with this Framework. Any such opinion or certification is not a recommendation by the GC or any other person to buy, sell, hold, or invest. As at the date of this Framework, the providers of such opinions and certifications are not subject to any specific regulatory or other regime or oversight. Prospective investors must determine for themselves the relevance, suitability, and reliability of any such opinion or certification and/or the information contained therein.

This Framework is not intended to be and should not be construed as providing legal, regulatory, financial, tax, investment, professional or expert advice. Prospective investors should make their own independent investment decisions based on information current at the time of investment. It does not constitute an offer or invitation to sell or any solicitation of any offer to subscribe for or purchase or a recommendation regarding any securities, nothing contained herein shall form the basis of any contract or commitment whatsoever and it has not been approved by any security regulatory authority. No assurance can be given that the Green Bond proceeds will satisfy, whether in whole or in part, any present or future investor expectations or requirements as regards any investment criteria or guidelines with which such investor or its investments are required or intended to comply.

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For greater certainty, the Green Bond issued by the GC on March 29, 2022, continues to be subject to the Government of Canada Green Bond Framework in effect as of that date.