



Government of Canada

Green Bond Allocation
and Impact Report
2022-23



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of Canada

Gouvernement
du Canada

Canada 

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Introduction

The Government of Canada recognizes that sustainable finance plays a key role in growing a cleaner, more prosperous economy and in attracting private investment required to build our net-zero emissions economy. The scale of private investments that Canada requires to reach net-zero by 2050 is significant, with estimates ranging from \$60 billion to \$140 billion per year, on average. Sustainable finance policy helps crowd-in private investment and amplifies existing climate policy signals in a business-friendly manner. It also promotes financial sector stability through the better understanding and disclosure of environmental and climate risk.

Canada recognizes the important role that capital markets play in financing public and private investments in support of our shared goals. Canada's Green Bond Program allows investors to support Canadian investments in climate action and environmental protection, while fostering further development of the Canadian sustainable finance market.

In March 2022, the Green Bond Program was launched with the publication of Canada's initial Green Bond Framework ("Framework"), which committed to allocate funds raised through the issuance of green bonds to eligible green expenditures and to provide transparency to investors by reporting on the allocation of funds to eligible green expenditures and on the environmental impact of those expenditures.

That same month, Canada issued its inaugural \$5 billion green bond under the Framework—Canada's largest ever green bond issuance. The first report on the allocation of the green bond proceeds to eligible green expenditures was released in March 2023 and reported on the partial allocation of the inaugural bond's proceeds to eligible green expenditures in fiscal year 2021-22.

This second report provides an update on Canada's climate and environmental priorities and details the allocation of the inaugural green bond's remaining unallocated proceeds to eligible green expenditures in fiscal year 2022-23, completing the allocation of the inaugural green bond's proceeds. The report also serves as the inaugural impact report for Canada's green bond program, highlighting the environmental impacts, social benefits, and impacts on Indigenous communities that were supported by the eligible green expenditures to which green bond proceeds were allocated.

In November 2023 as part of the Fall Economic Statement, the Government of Canada released an updated Green Bond Framework which added eligibility for certain nuclear expenditures. As stated in the Fall Economic Statement, green bonds issued under Canada's initial Framework continue under that Framework.

This allocation and impact report is for the inaugural green bond issued under Canada's initial Green Bond Framework issued in March 2022, which excludes nuclear related expenditures. No proceeds from the inaugural green bond have been allocated to nuclear expenditures.



Canada's Climate and Environmental Priorities

The Government of Canada is taking bold action to fight climate change and protect the environment, while strengthening the economy, creating good-paying jobs, and ensuring Canadian businesses and industry are globally competitive. The government has a comprehensive plan to tackle climate change, support adaptation and climate resilience, protect biodiversity and tackle waste.

Tackling Climate Change

Recognizing the importance of acting now to avert the worst impacts of climate change, the Government of Canada brought into law in June 2021 the *Canadian Net-Zero Emissions Accountability Act* to legislate its commitment to achieve its 2030 greenhouse gas (GHG) emissions-reduction target and net-zero emissions by 2050. The law ensures transparency and accountability as the government works to deliver on its targets.

As required under the legislation, in March 2022 the Government of Canada introduced the *2030 Emissions Reduction Plan* ("ERP"), which provides an ambitious and achievable roadmap for the Canadian economy to achieve a 40 per cent to 45 per cent reduction in emissions below 2005 levels, by 2030. Since the release of the ERP, the Government of Canada has been implementing more than 140 climate measures and working with partners, including provinces, territories and National Indigenous Organizations, to turn ideas into concrete and effective action.

In December 2023, the government released the first Progress Report on the ERP, which indicates that Canada is on a solid path toward its 2030 target. In 2015, Canada was trending to exceed 2005 greenhouse gas emissions levels by nine per cent by 2030, but since then, many sectors of the economy have made real and measurable progress to lower their emissions, helping Canada successfully bend the emissions curve and putting us on track to beat the previous 2030 target of 30 per cent reductions below 2005 levels. Canada is also currently tracking to exceed the interim objective of 20 per cent below 2005 levels by 2026. In accordance with the legislation, Canada will release two other progress reports in 2025 and 2027.

A major mechanism to achieve Canada's climate change objectives is the price on carbon emissions, which will reach \$170/tonne by 2030, to ensure that big polluters cannot pollute for free. Carbon pollution pricing is widely recognized as the most efficient means to reduce GHG emissions while also driving innovation and growing the economy.

The Government of Canada is also advancing other measures to build a clean economy, including:

- ▶ Strengthened oil and gas methane emission regulations, which commit to at least a 75 per cent reduction by 2030 from 2012 levels.
- ▶ A framework to cap pollution from the oil and gas sector to reduce emissions and remain competitive in a shifting global market.

- ▶ A zero-emission vehicle sales target that requires 100 per cent of new vehicles sold to be zero-emission by 2035.
- ▶ *Clean Fuel Regulations* requiring suppliers to reduce the carbon intensity of the gasoline and diesel they produce or import for use in Canada.
- ▶ *Clean Electricity Regulations* that will enable a net-zero emission electricity grid by 2035. The final regulations are expected to be published in 2024.

To reduce emissions and increase competitiveness, the Government of Canada also provides significant and targeted investments in areas where Canada has a competitive advantage, such as hydrogen, carbon capture, utilization, and storage, clean fuels, electric vehicle batteries, and zero-emission vehicle assembly, as well as a \$93 billion suite of major economic investment tax credits. Action also includes:

- ▶ Funding for businesses via programs such as the Strategic Innovation Fund – Net Zero Accelerator.
- ▶ Financial incentives to enable the consumer adoption of clean technologies, such as heat pumps and zero-emission vehicles.
- ▶ Major economic investment tax credits to de-risk clean tech capital investments, support clean tech development and deployment, and attract new private sector investment.
- ▶ Strengthening federal coordination on clean technology and climate innovation (commitment made in 2030 ERP) through development of a whole-of-government strategy.

Adaptation and Climate Resilience

Climate change is disproportionately affecting Canada, causing the country to warm two times faster than the global average — and 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 Government of Canada launched the first *National Adaptation Strategy*, developed in collaboration with provincial and territorial 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.

Protecting Biodiversity

In parallel to the challenge of climate change, global biodiversity loss further threatens the stability of our planet and the ecosystems that support all life. The 2019 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 the Intergovernmental Panel on Climate Change emphasized the inextricably connected nature of climate change and biodiversity loss, recognizing that neither will be successfully resolved unless both are tackled together.

Between 2018 and 2022 Parties to the United Nations Convention on Biological Diversity worked to develop a new Global Biodiversity Framework to 2030. As a strong advocate for conservation, and the seat of the Convention on Biological Diversity Secretariat, Canada stepped up as host of the final phase of framework negotiations and for the Conference of the Parties (COP 15) in December 2022 in Montreal. The Kunming-Montreal Global Biodiversity Framework (KMGBF) adopted at COP 15 is an ambitious global plan for nature. Among its twenty-three targets, the plan includes committing the global community to conserving 30 per cent of its lands and oceans by 2030, while ensuring that at least 30 per cent of the world's degraded ecosystems are under restoration by 2030. Canada had already set ambitious targets for protected and conserved areas and,

as a member of the High Ambition Coalition for Nature and People as well as the Global Ocean Alliance, advocated for the 30 per cent targets internationally. Canada also launched a ministerial-level Nature Champions Network in August 2023 to advocate for the rapid implementation of the KMGBF and support global ambition to protect nature.

As a vast, biodiversity-rich country, Canada is driving action with historic investments and world-leading ambition. The Government of Canada has the most ambitious plan to conserve nature in Canadian history, backed by over \$5 billion in investments, with a goal of protecting 30 per cent of land and water by 2030 and conserving species at risk, in full partnership with Indigenous Peoples. In December 2023, the government announced Canada's commitment to introduce legislation in 2024 for a federal nature accountability bill, which would intend to establish an accountability framework for the federal government in fulfilling its nature and biodiversity commitments under the Global Biodiversity Framework. The legislation would provide concrete steps from now until 2030 for the implementation of the government's commitments at the federal level, including requirements to develop *Canada's 2030 National Biodiversity Strategy and Action Plan* and to report on its implementation.

In addition to a rich biodiversity, Canada also has over two million lakes and rivers, and the most freshwater of any country in the world. In 2023, the Government of Canada created the Canada Water Agency to work together with the provinces, territories, Indigenous communities, local authorities, scientists, and other key partners to keep Canada's water safe and clean.

Tackling Waste

Canadians dispose of three million tonnes of plastic waste every year. Only 9 per cent is recycled, while the rest ends up in our landfills, waste-to-energy facilities or the environment. Plastic waste and marine litter burdens our economy and threatens the health of the environment including wildlife, rivers, lakes, and oceans. The Government of Canada has a goal of zero plastic waste by 2030, which the Federal Leadership Towards Zero Plastic Waste in Canada initiative is working to achieve. The initiative is supporting actions along the entire plastics lifecycle to address plastic pollution and waste, including actions to incentivize reuse, repair, and other value-retention processes, and to enhance 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 recognizes the urgency of the threat of ocean plastic waste and marine litter to ecosystems and the lost value of plastics in the waste stream and 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.

To help grow a more sustainable economy and provide opportunities for Canadians and communities across the country, the Government of Canada is also exploring solutions to 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. Canada is also a member of the High-Level Panel for a Sustainable Ocean Economy and endorsed its Transformations for a Sustainable Ocean Economy document, which included support for a global target to protect 30 per cent of the ocean by 2030. This endorsement affirms the Government of Canada's support towards sustainably managing 100 per cent of Canada's ocean area by 2025.



Canada's Green Bond Program

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 liquid and highly-rated environment, social, and governance ("ESG") assets to create a more mature and diverse market for investors.

The Green Bond Program was launched in March 2022 with the publication of Canada's initial Green Bond Framework (the Framework) and the issuance of Canada's inaugural \$5 billion green bond. The first report on the allocation of green bond proceeds to eligible green expenditures was released in March 2023 and reported on the partial allocation of the inaugural bond's proceeds in fiscal year 2021-22. This second report details the allocation of the inaugural bond's remaining proceeds to eligible green expenditures in fiscal year 2022-23, completing the allocation of the inaugural bond's proceeds. The report also serves as the inaugural impact report for Canada's green bond program, highlighting the environmental impacts, social benefits, and impacts on Indigenous communities that were supported by the eligible green expenditures to which green bond proceeds were allocated.

The initial Framework establishes robust criteria for the selection of eligible green expenditures, which are consistent with international standards and green investor expectations. The initial Framework aligns with the International Capital Market Association Green Bond Principles and reflects key climate and environmental priorities. The Framework was independently reviewed by Morningstar Sustainalytics, which confirmed that it is aligned with the International Capital Market Association Green Bond Principles 2021 in its February 2022 Second Party Opinion.

Interdepartmental Green Bonds Committee

The identification and selection of eligible green expenditures allocated to the proceeds of Government of Canada green bonds are supported by an Interdepartmental Green Bonds Committee (IGBC). This committee, co-chaired by Finance Canada and Environment and Climate Change Canada, includes representatives from 12 federal departments and Crown Corporations. The IGBC is currently comprised of representatives from:

- ▶ Finance Canada (Co-Chair);
- ▶ Environment and Climate Change Canada (Co-Chair);
- ▶ Natural Resources Canada;
- ▶ Innovation, Science and Economic Development;
- ▶ Housing, Infrastructure, and Communities Canada (formerly Infrastructure Canada);
- ▶ Agriculture and Agri-food Canada;
- ▶ Transport Canada;

- ▶ Public Safety Canada;
- ▶ Fisheries and Oceans Canada;
- ▶ Indigenous Services Canada;
- ▶ Crown-Indigenous Relations and Northern Affairs Canada; and,
- ▶ Canada Infrastructure Bank.

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

In accordance with the initial Green Bond Framework, the IGBC supports Finance Canada and Environment and Climate Change Canada with:

- ▶ Implementation and maintenance of the Green Bond Framework;
- ▶ Identification, evaluation, and selection of eligible green expenditures for green bond proceeds;
- ▶ Allocation and management of the green bond proceeds; and,
- ▶ Annual green bond reporting on the allocation and environmental impact of the net proceeds.

The IGBC is also responsible for reviewing the allocation of proceeds of all green bonds on an annual basis to ensure the consistency of all expenditures with the Framework.

Expenditure Selection

The initial Framework identifies the following nine categories of expenditures that are eligible for the allocation of green bond proceeds:

1. Clean transportation;
2. Circular economy: adapted products, production, technologies, and processes;
3. Climate change adaptation;
4. Energy efficiency;
5. Living natural resources and land use;
6. Pollution prevention and control;
7. Renewable energy;
8. Sustainable water and wastewater management; and,
9. Terrestrial and aquatic biodiversity.

The initial Framework excludes expenditures related to the transportation, exploration and production of fossil fuels, nuclear energy, arms manufacturing, gambling, and the manufacture and production of both tobacco products and alcoholic beverages. In the updated Framework, released in November 2023, nuclear energy expenditures were made eligible.

As indicated in the Framework, the Government of Canada recognizes that in order to achieve its 2030 and 2050 climate goals, significant innovation and emissions reductions will be needed from all sectors of the Canadian economy, including the energy sector. While some decarbonization expenditures are excluded from Canada's Green Bond Framework, in alignment with current green bond market expectations, the Government of Canada remains committed to supporting decarbonization, nature conservation, and environmental excellence in all sectors.

Updated Green Bond Framework

Since the introduction of Canada's Green Bond Framework, the European Union's Taxonomy for Sustainable Activities expressly included some nuclear activities as "green" until 2040-2045. The Sustainable Finance Action Council's Taxonomy Roadmap also considers certain nuclear expenditures to be green. Moreover, Bruce Power, Canada's largest nuclear electricity producer and Ontario Power Generation, have issued green bonds to fund their nuclear energy activities, which were well received by investors.

In November 2023 as part of the Fall Economic Statement, the Government of Canada released an updated Green Bond Framework which includes certain nuclear energy expenditures:

- ▶ Investments in new reactors;
- ▶ Refurbishment of existing facilities;
- ▶ Research and development; and,
- ▶ Some investments in Canada's nuclear supply chain.

The update was made to align Canada's Green Bond Framework with Canada's *2030 Emissions Reduction Plan*, updated taxonomies, international best practices, and evolving investor preferences. Sustainalytics, which provided the second party opinion on the initial Framework, provided an updated opinion for the revised framework which states: Sustainalytics is of the opinion that the Government of Canada Green Bond Framework is credible and impactful and aligns with the four core components of the Green Bond Principles 2021.

Green bonds issued under the initial Framework continue to meet the parameters of the initial framework; no proceeds from the inaugural green bond issued in March 2022 were allocated to nuclear related expenditures.



Part 1. Allocation of Remaining 2021-22 Green Bond Proceeds

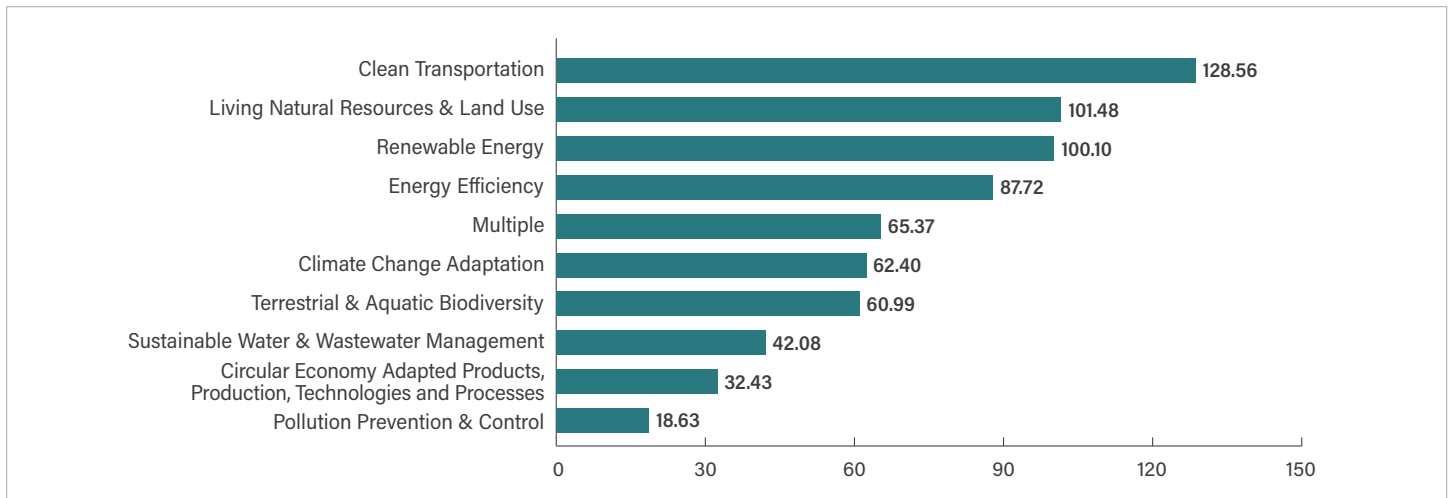
As outlined in the [Green Bond Allocation Report 2021-22](#), the inaugural green bond proceeds were partially allocated in fiscal year 2021-22 to eligible expenditures in each of the nine eligible expenditure categories. More than 85 per cent of the proceeds were allocated, with the balance of \$699.77 million available for allocation in fiscal year 2022-23.

Consistent with the process described in the Framework, this \$699.77 million is now being allocated in this report. Eligible expenditures highlight the wide variety of climate and environmental initiatives undertaken by the government. With this 2022-23 allocation, all proceeds of Canada's inaugural green bond have now been fully allocated to eligible expenditures. Despite availability of additional eligible expenditures, no further green bond proceeds were available for allocation in 2022-23.

The green bond allocation in 2022-23 highlights the Government of Canada's investment in the green categories identified in the Framework. In particular, it highlights Canada's investments to reduce emissions through renewable energy, improved energy efficiency, and clean transportation, with these categories representing 45 per cent of the total 2022-23 allocation, with the remaining 55 per cent distributed to other green initiatives.

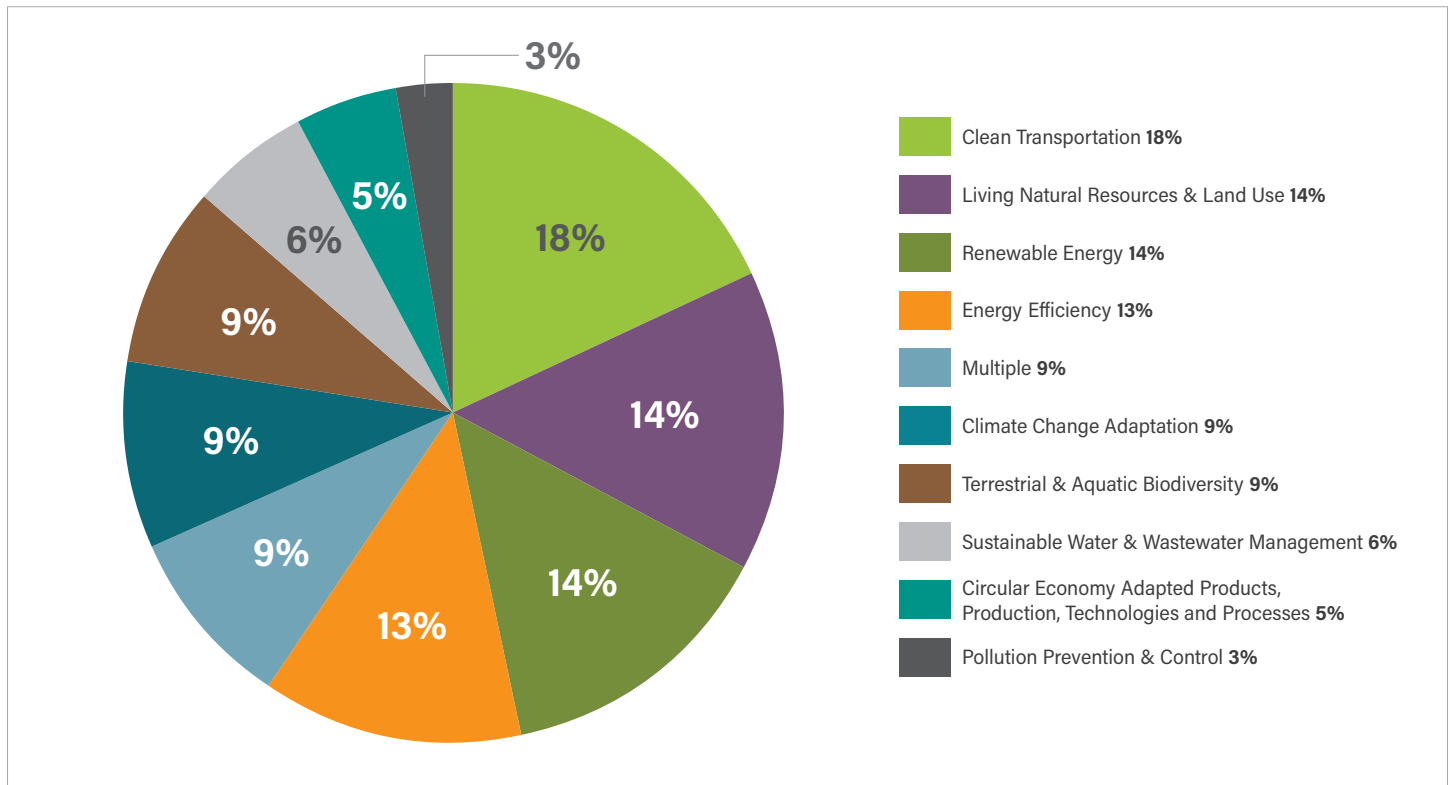
A schedule of programs and allocations is included in the audited Schedule of Allocation of Green Bond Net Proceeds, and Annex A provides a detailed overview of allocations to program expenditures by year. Expenditures relevant to more than one category are listed in the "Multiple" category, including support through the Strategic Innovation Fund. Figures 1 to 4 below show the distribution of the allocation in 2022-23 to green categories and expenditure types.

Figure 1. Allocation by Green Category, Amount (\$ millions)



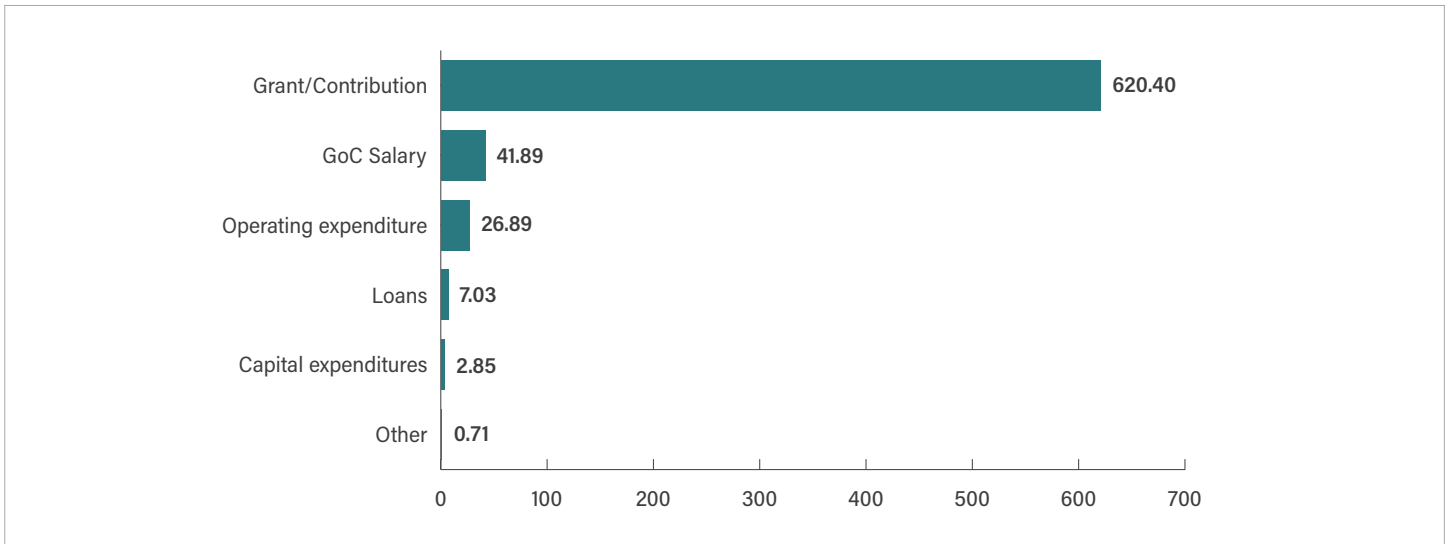
Source: Eligible green expenditures identified by the Interdepartmental Green Bonds Committee (IGBC) that were allocated green bond proceeds in 2022-2023. Calculations by Finance Canada. Numbers may not add due to rounding.

Figure 2. Allocation by Green Category, percentage



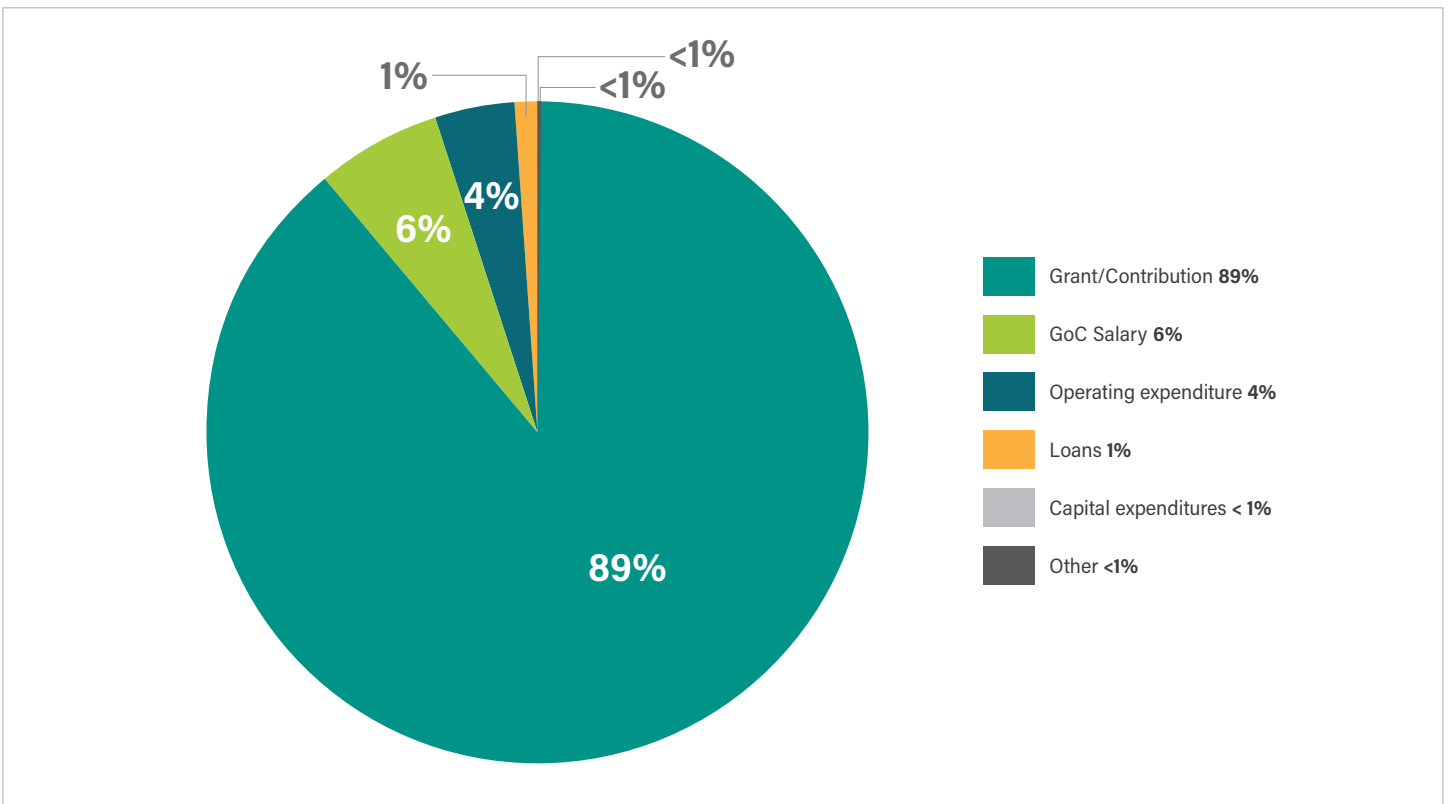
Source: Eligible green expenditures identified by the Interdepartmental Green Bonds Committee (IGBC) that were allocated green bond proceeds in 2022-2023. Calculations by Finance Canada. Numbers may not add due to rounding.

Figure 3. Allocation by Type of Expenditures, Amount (\$ millions)



Source: Eligible green expenditures identified by the Interdepartmental Green Bonds Committee (IGBC) that were allocated green bond proceeds in 2022-2023. Calculations by Finance Canada. Numbers may not add due to rounding.

Figure 4. Allocation by Type of Expenditures, percentage¹



Source: Eligible green expenditures identified by the Interdepartmental Green Bonds Committee (IGBC) that were allocated green bond proceeds in 2022-2023. Calculations by Finance Canada. Numbers may not add due to rounding.

¹ Allocation to capital expenditures and other categories represent 0.41 per cent and 0.10 per cent of total allocation respectively.



Part 2. Green Bond Program Impacts

In line with the initial Green Bond Framework, this section provides information on environmental impacts, social benefits, and impacts on Indigenous communities related to the eligible expenditures to which green bond proceeds have been allocated. Eligible expenditures and their impacts are organized into the nine eligible green expenditure categories, with each category also featuring one case study of a project with eligible green expenditures. If a program spans multiple categories, it is included under the Multiple Categories section. Annex B provides an overview of select impact indicators highlighted in the Green Bond Framework to which eligible green expenditures contributed between 2019 and 2023.

The allocated eligible green expenditure impacts presented in this report have been provided by IGBC members from existing data and reflect impacts achieved from fiscal years 2019-20 to 2022-23² of the eligible expenditure window of Canada's inaugural green bond. The impacts provide information on the environmental impacts and social benefits that the expenditures achieved, or are expected to achieve; however, the impacts may not be fully attributable to green bond expenditures as some programs and projects have multiple sources of funding and green bond proceeds may represent only a share of total program budgets. Nevertheless, reporting data on the overall program impact provides insight into the ways in which investors are supporting environmental priorities and net-zero initiatives.

This is the inaugural impact report for the Green Bond Program and, as noted in initial Green Bond Framework, the Government of Canada may update its approach to impact reporting over time to align with emerging reporting standards and methodologies.

² Due to different reporting cycles, some programs are reporting on results up to 2021-22.

Clean Transportation

The Government of Canada is making strategic investments to reduce carbon pollution from transportation, a sector that represents approximately 25 per cent of Canada's GHG emissions. Seven programs were allocated funding from the proceeds of Canada's inaugural green bond under the clean transportation category. These programs covered a wide range of activities, including purchase incentives for eligible zero-emission vehicles; installation of zero-emission charging and refueling stations throughout the country; construction, expansion, and improvement of public transit infrastructure; financing for zero-emission buses for municipal transportation systems and school bus operators; and funding to support the innovation of electric vehicle charging and hydrogen fueling infrastructure.

Electric Vehicle and Alternative Fuel Infrastructure Deployment Initiative

Department: Natural Resources Canada

The Electric Vehicle and Alternative Fuel Infrastructure Deployment Initiative provides funding to support the establishment of a coast-to-coast network of fast chargers along the national highway system and hydrogen refuelling stations in major metropolitan areas.

Green Bond Allocation

2021-2022 Allocation (\$ millions)				2022-2023 Allocation (\$ millions)					
2019-20	2020-21	2021-22	Total	2019-20	2020-21	2021-22	2022-23	Total	Total
22.08	10.23	21.66	53.97	-	-	-	-	-	53.97

Program impact: 1,096 electric and 15 hydrogen selected stations supported; 907 electric and 6 hydrogen stations opened.

Green Infrastructure Program - Electric Vehicles Infrastructure Demonstrations

Department: Natural Resources Canada

The Electric Vehicles Infrastructure Demonstrations stream aims to accelerate the market entry of next generation clean energy infrastructure, by supporting demonstration projects of innovative EV charging and hydrogen refuelling technologies, to encourage an increased uptake of zero-emission vehicles.

Green Bond Allocation

2021-2022 Allocation (\$ millions)				2022-2023 Allocation (\$ millions)					
2019-20	2020-21	2021-22	Total	2019-20	2020-21	2021-22	2022-23	Total	Total
10.31	6.01	12.27	28.60	-	-	-	1.37	1.37	29.97

Program impact: 17 demonstrations completed of innovative solutions to technical challenges and other barriers for the deployment of electric vehicle charging infrastructure as of 2023. Projects span across the country, covering six provinces and one territory, in a combination of urban, rural and remote settings, and in partnership with a variety of proponents including industry, utilities, municipal governments and not-for-profit organizations. As the program runs until 2024, many funded projects are ongoing.

Incentives for Zero-Emission Vehicles Program

Department: Transport Canada

The Incentives for Zero-Emission Vehicles (iZEV) Program contributes to a clean transportation system by helping to increase the adoption of zero-emission vehicles by Canadians and Canadian businesses through point-of-sale incentives of up to \$5,000, as a means to reduce air pollution and GHG emissions from light-duty on-road transportation. More specifically, the Program is targeted towards increasing the adoption of these clean vehicles by providing incentives of up to \$5000 for Canadians purchasing or leasing affordable zero-emission vehicles.

Green Bond Allocation

2021-2022 Allocation (\$ millions)				2022-2023 Allocation (\$ millions)					
2019-20	2020-21	2021-22	Total	2019-20	2020-21	2021-22	2022-23	Total	Total
170.94	91.31	243.72	505.98	-	-	-	51.22	51.22	557.19

Program impact: 121,000 light-duty zero-emission vehicles incentivized, leading to over 0.4Mt of GHG emission reductions annually and over 5.0Mt over their lifetime. These results have been prorated to the amount of green bonds allocated to the program.

Investing in Canada Infrastructure Program - Public Transit Infrastructure Stream

Department: Housing, Infrastructure, and Communities Canada (formerly Infrastructure Canada)

The Investing in Canada Infrastructure Program (ICIP) provides long-term, stable funding to help communities reduce air and water pollution, provide clean water, increase resilience to climate change and build a clean economy; build strong, dynamic and inclusive communities; and ensure Canadian families have access to modern, reliable services that improve their quality of life.

Through the ICIP Public Transit Infrastructure stream, the Government of Canada is investing in the construction, expansion, and improvement of public transit infrastructure for projects that improve the capacity of public transit infrastructure, the quality or safety of existing or future transit systems, and access to a public transit system.

Green Bond Allocation

2021-2022 Allocation (\$ millions)				2022-2023 Allocation (\$ millions)					
2019-20	2020-21	2021-22	Total	2019-20	2020-21	2021-22	2022-23	Total	Total
10.80	127.43	266.78	405.01	-	-	0.02	50.75	50.77	455.78

Program impact: 426 projects representing more than \$13 billion in federal investments had been approved under this stream. Measurable results for selected projects, such as GHG emissions reduced/avoided, will be achieved once their construction is completed, which takes several years. Outcome data will be provided as projects are completed.

Réseau Express Métropolitain

Crown Corporation: Canada Infrastructure Bank

The Réseau express métropolitain (REM) project involves construction of a new automated light-rail network serving the greater Montreal area. It will include 26 stations and span 67 km of tracks, almost doubling the current Métro network, which is 71 km long. The first phase of the REM came into service in July 2023.

Green Bond Allocation

2021-2022 Allocation (\$ millions)				2022-2023 Allocation (\$ millions)					
2019-20	2020-21	2021-22	Total	2019-20	2020-21	2021-22	2022-23	Total	Total
513.00	138.30	-	651.30	-	-	-	-	-	651.30

Program impact: 0.1 Mt CO₂e in avoided emissions per year beginning in 2023 with approximately 34,000 jobs expected to be created during construction phase of the overall REM project.

Zero-Emission Buses Initiative

Crown Corporation: Canada Infrastructure Bank

This Zero-Emission Buses Initiative provides loans to support the upfront costs of zero-emission buses (ZEB) for municipal transportation systems and school bus operators. This targets the accelerated adoption of over 5,000 ZEBs, comprising of a mix of transit and school buses.

Green Bond Allocation

2021-2022 Allocation (\$ millions)				2022-2023 Allocation (\$ millions)					
2019-20	2020-21	2021-22	Total	2019-20	2020-21	2021-22	2022-23	Total	Total
-	-	0.75	0.75	-	-	-0.01	7.04	7.03	7.79

Program impact: 0.2 Mt CO₂e in avoided emissions per year beginning in 2022 with over 20,000 jobs expected to be created from the manufacturing of zero-emission buses.

Zero-Emission Vehicle Infrastructure Program

Department: Natural Resources Canada

The Zero-Emission Vehicle Infrastructure Program provides funding towards the deployment of electric vehicle chargers and hydrogen refueling stations across Canada. It addresses a key barrier to the adoption of zero-emission vehicles—the lack of charging and refuelling stations in Canada—by increasing the availability of localized charging and hydrogen refueling opportunities.

Green Bond Allocation

2021-2022 Allocation (\$ millions)				2022-2023 Allocation (\$ millions)					
2019-20	2020-21	2021-22	Total	2019-20	2020-21	2021-22	2022-23	Total	Total
1.72	10.36	29.90	41.97	-	-	-	18.18	18.18	60.15

Program impact: 42,672 electric chargers and 14 hydrogen refuelling stations were funded, with 9,284 electric chargers already operational.

Case Study

Zero-Emission Buses Initiative

The Canada Infrastructure Bank's (CIB) Zero-Emission Buses (ZEB) Initiative targets the accelerated adoption of more than 5,000 ZEBs, comprising of a mix of transit and school buses. To date, the CIB has committed more than \$1 billion to help transit agencies such as Brampton, Edmonton, Ottawa, Durham Region and Calgary procure zero-emission vehicles. The CIB has also committed nearly \$500 million towards school bus operators in Quebec and B.C. to modernize their fleets. Bus owners can use CIB financing to upgrade their bus fleets on an accelerated basis. CIB financing, in the form of direct loans, can cover the higher upfront capital costs of ZEBs.

Economic benefits of zero-emission bus investments include creating new manufacturing and support service opportunities across the infrastructure supply chain.

Through the green bond initiative, \$7.79 million was allocated from the green bond to support clean public transit infrastructure.



Zero-emission bus in Brampton (photo credit: Canada Infrastructure Bank)

Circular Economy: Adapted Products, Production, Technologies, and Processes

The circular economy is about extracting as much value as possible from our resources while reducing environmental impacts. The Government of Canada is funding initiatives that are creating new economic opportunities that keep the value of Canada's resources in the economy, and out of the landfill. Four programs were allocated funding from the proceeds of Canada's inaugural green bond under the circular economy adapted products, production, technologies, and processes category. These programs focus on various areas related to circular-economy including new and innovative bioeconomy products and processes for the forest industry; decarbonization of the built environment; innovations and solutions to help address food waste and loss across the food supply chain; and activities to develop new high-value and low-carbon wood-based bioproducts for the Canadian forest sector.

Food Waste Reduction Challenge

Department: Agriculture and Agri-Food Canada

The Food Waste Reduction Challenge aims to increase food availability, save consumers and businesses money, increase farmers' revenue, and strengthen Canadian food systems, while also reducing GHG emissions. Funding from this program goes to support new innovations and solutions that can help address the problem of food waste and loss across the food supply chain, thereby reducing the associated economic, environmental, and social costs of food waste.

Green Bond Allocation

2021-2022 Allocation (\$ millions)				2022-2023 Allocation (\$ millions)					
2019-20	2020-21	2021-22	Total	2019-20	2020-21	2021-22	2022-23	Total	Total
0.29	1.88	2.89	5.05	-	-	-	1.94	1.94	7.00

Program impact: 5.2 million kg of waste prevented, minimized, or recycled from July 2022 and April 2023.

Forest Innovation Program

Department: Natural Resources Canada

The Forest Innovation Program (FIP) supports the first phase of the forest sector innovation process by enhancing work on wood fibre optimization, and facilitating R&D for innovative technologies, products, and processes in the emerging bioeconomy. FIP funds R&D and pilot projects that are aligned with future market and consumer demand, such as wood-fibre derived bioproducts, as well as collaborates with Government of Canada labs on forest biorefinery initiatives. As part of its 2023 renewal, the program will remain focused on enabling the growth of the forest bioeconomy and supporting environmental improvement for the sector.

Green Bond Allocation

2021-2022 Allocation (\$ millions)				2022-2023 Allocation (\$ millions)					
2019-20	2020-21	2021-22	Total	2019-20	2020-21	2021-22	2022-23	Total	Total
32.95	22.81	30.16	85.91	-	-	-	7.20	7.20	93.11

Program impact: From 2020 through 2023, six new processes or technologies and three transformative products were developed and/or adopted by the forest sector industry related to FIP research and development (R&D), such as substituting some asphalt mixture with wood-based lignin in roads. In addition, six codes and standards were developed to help determine the environmental credentials of key low-carbon products. Further, 90 scholarships were distributed to post-secondary students in studying forest-sector related topics who identify as being from an underrepresented group, such as Indigenous Peoples, women, visible minorities, or persons with a disability.

Green Construction through Wood Program

Department: Natural Resources Canada

The Green Construction through Wood (GCWood) program encourages the use of innovative wood-based building technologies in construction projects. The funding from this program goes to support decarbonization of the Canadian built environment through use of wood as a low-carbon building material. As part of its 2023 renewal, GCWood is shifting focus towards innovative, highly replicable wood building technologies, such as modular, prefabrication, retrofit, or disassembly, and low-carbon biomaterials for construction.

Green Bond Allocation

2021-2022 Allocation (\$ millions)				2022-2023 Allocation (\$ millions)					
2019-20	2020-21	2021-22	Total	2019-20	2020-21	2021-22	2022-23	Total	Total
6.46	6.68	10.86	24.00	-	-	-	2.91	2.91	26.91

Program impact: Updated the 2020 edition of the National Building Code to allow mass timber construction up to 12 storeys (from six), and adoption of this code edition by the Provinces of Alberta and Ontario, as well as 21 municipalities in British Columbia.

Demonstration of four tall wood and ten low-rise non-residential buildings, and two mass timber bridge projects completed or currently underway, projected to result in a direct carbon benefit of 38,000 tonnes of CO₂ by 2025.

Investments in Forest Industry Transformation Program

Department: Natural Resources Canada

The Investments in Forest Industry Transformation (IFIT) program facilitates the adoption of transformative technologies and products in the Canadian forest sector by bridging the gap between development and commercialization. Funding supports studies and capital investment projects of new and innovative bioeconomy products and processes for the forest industry at the pre-commercialization stage for a sustainable forest sector. As part of its 2023 renewal, the IFIT program will increase its efforts to help improve the environmental performance of the forest sector by supporting demonstration and adoption projects that contribute to the decarbonization of industrial processes, as well as improved fibre utilization.

Green Bond Allocation

2021-2022 Allocation (\$ millions)				2022-2023 Allocation (\$ millions)					
2019-20	2020-21	2021-22	Total	2019-20	2020-21	2021-22	2022-23	Total	Total
18.47	13.75	49.26	81.48	-	-	-	20.38	20.38	101.86

Program impact: About 280 jobs expected to be created or maintained through projects signed in 2022-23 and at least 16 new products and/or production processes created or implemented by 2025. Products such as advanced biofuels, biomaterials, and corrugated packaging directly contribute to Canada's net-zero future by offering alternatives to traditional, non-circular products such as oil-based plastics and cement. Next generation wood-based building products help to decarbonize buildings by storing carbon over the long-term, and process improvements in the pulp and paper mills are moving them towards being carbon neutral.

Case Study

Food Waste Reduction Challenge's - Food Cycle Science

Food Cycle Science created The FoodCycler™ to transform residential food waste into a nutrient-rich soil amendment that can be used in the garden or finished in compost. This odorless process requires little power and does not create methane. Food Cycle Science has partnered with small, northern, remote, and Indigenous communities to divert food waste from landfills, reduce emissions, and promote circularity.

As a semi-finalist and finalist under Agriculture and Agri-Food Canada's Food Waste Reduction Challenge, Food Cycle Science received \$500,000 to increase the number of municipal partners from two to 98 in Canada. For example, the FoodCycler was chosen over curbside collection in Nelson, B.C., where it is now their exclusive food waste recycling solution. This program provides every resident in Nelson access to FoodCycler technology, drop-off sites, and training that will result in a net reduction of 2.18 kt CO₂e annually.

The project is expected to divert 920.7 tonnes of food waste. A total of 7,355 FoodCycler units have been deployed through the Municipal Program, and each FoodCycler deployed nets an annual GHG reduction of approximately 0.0006 kt of CO₂e, or the equivalent of approximately 24 trees per year. As of March 31, 2023, Food Cycle Science's sales increased 1000 per cent in the Municipal Division and overall business revenue is forecasted to grow 150 per cent year over year by the end of fiscal 2024.

By 2024, more than 150 municipalities are expected to adopt the solution. In addition, Food Cycle Science is developing options to break down bioplastics, building commercial units, releasing units designed for high-density communities, and integrating Internet-of-Things and Artificial Intelligent technology to empower users to make better data-driven decisions around waste reduction.



Climate Change Adaptation

The Government of Canada is taking action to grow the economy, meet emissions reduction targets, and build resilience to a changing climate. Part of building resilience is adapting to the impacts of climate change that have already occurred and continue to be felt across the country. Five programs were allocated funding from the proceeds of Canada's inaugural green bond under the climate change adaptation category. These programs provide funding for various climate change adaptation efforts including strengthening the resilience of Canadian communities through public infrastructure projects, including natural infrastructure projects; structural mitigation and adaptation projects in First Nations communities; monitoring by Indigenous communities of the effects of climate change on their communities; and, climate change adaptation projects in Yukon, Northwest Territories, Nunavut, Nunavik, and Nunatsiavut.

Capital Facilities and Maintenance Program

Department: Indigenous Services Canada

Under the Capital Facilities and Maintenance Program, First Nations communities receive support to increase the resiliency of infrastructure in response to a changing climate by investing in structural mitigation projects.

Green Bond Allocation

2021-2022 Allocation (\$ millions)				2022-2023 Allocation (\$ millions)					
2019-20	2020-21	2021-22	Total	2019-20	2020-21	2021-22	2022-23	Total	Total
15.23	10.74	17.66	43.63	-	-	-	3.02	3.02	46.64

Program impact: 120 structural mitigation projects underway or completed.

Climate Change Preparedness in North

Department: Crown-Indigenous Relations and Northern Affairs Canada

This program funds climate change adaptation projects in Yukon, Northwest Territories, Nunavut, Nunavik, and Nunatsiavut. The program works with Indigenous and northern communities, territorial and regional governments, and other stakeholders to identify priorities for climate change adaptation in the North. The program provides support to northern communities and organizations to help them adapt to climate change impacts by funding projects that address the vulnerability and risk assessment of climate change impacts, the development of hazard maps and adaptation plans, the development of adaptation options, and the implementation of non-structural and structural adaptation measures.

Green Bond Allocation

2021-2022 Allocation (\$ millions)				2022-2023 Allocation (\$ millions)					
2019-20	2020-21	2021-22	Total	2019-20	2020-21	2021-22	2022-23	Total	Total
12.00	6.07	8.70	26.77	-	-	-	2.96	2.96	29.73

Program impact: 142 climate adaptation projects funded.

Disaster Mitigation and Adaptation Fund

Department: Housing, Infrastructure, and Communities Canada (formerly Infrastructure Canada)

The Disaster Mitigation and Adaptation Fund invests in public infrastructure projects designed to mitigate current and future climate-related risks and disasters triggered by climate change, such as floods, wildland fires, droughts, and seismic events. Eligible infrastructure projects include new construction of public infrastructure and/or modification or reinforcement of existing public infrastructure including natural infrastructure that prevent, mitigate, or protect against the impacts of climate change, disasters triggered by natural hazards, and extreme weather.

Green Bond Allocation

2021-2022 Allocation (\$ millions)				2022-2023 Allocation (\$ millions)					
2019-20	2020-21	2021-22	Total	2019-20	2020-21	2021-22	2022-23	Total	Total
10.86	32.78	43.34	86.98	-	-	-0.04	53.46	53.42	140.40

Program impact: 115 projects approved to improve resilience and adaptation measures to natural disasters.

First Nation Adapt

Department: Crown-Indigenous Relations and Northern Affairs Canada

The First Nation Adapt program provides support to First Nation communities and organizations located south of the 60th parallel to assess and respond to the impacts of climate change, and increase climate resilience, in support of self-determined priorities. The program works with First Nations to identify context-specific priorities for climate change adaptation projects. Priority areas identified through discussions with First Nations include sea level rise, flooding, wildfires, drought, winter road failures, risks to archeological and cultural sites, water source vulnerabilities, and other emerging priorities.

Green Bond Allocation

2021-2022 Allocation (\$ millions)				2022-2023 Allocation (\$ millions)					
2019-20	2020-21	2021-22	Total	2019-20	2020-21	2021-22	2022-23	Total	Total
10.00	5.82	10.10	25.92	-	-	-	1.41	1.41	27.33

Program impact: 103 projects funded for First Nation communities on-reserve to assess climate change impacts on infrastructure and disaster risk reduction.

Indigenous Community-Based Climate Monitoring

Department: Crown-Indigenous Relations and Northern Affairs Canada

The Indigenous Community-Based Climate Monitoring Program supports Indigenous Peoples in the design, implementation, or expansion of community-based climate monitoring projects. Specifically, the program supports Indigenous led projects that monitor climate and the environmental effects of climate change within community boundaries and on traditional territories using Indigenous Knowledge Systems and western science.

Green Bond Allocation

2021-2022 Allocation (\$ millions)				2022-2023 Allocation (\$ millions)					
2019-20	2020-21	2021-22	Total	2019-20	2020-21	2021-22	2022-23	Total	Total
6.50	4.19	6.60	17.29	-	-	-	1.60	1.60	18.89

Program impact: 72 climate monitoring projects funded.

Case Study

Capital Facilities and Maintenance Program - Woodstock First Nation Stormwater Project

For years, recurring seasonal flooding events have damaged homes, yards, and roads, and negatively impacted the wastewater collection system and other community infrastructure in Woodstock First Nation, New Brunswick. The Stormwater Project, which was part of the Capital Facilities and Maintenance Program's Structural Mitigation stream, involved the repair of faulty sanitary pipes and installation of curbs and asphalt to direct surface water that was bypassing existing stormwater management systems and causing major erosion of road shoulders, driveways, and basement flooding. The project also installed a storm system on the lower section of the First Nation community, which was a complex operation as the residential neighborhood was older with narrow streets and houses closer to the street limits. A rollover butterfly curb was installed to address these structural challenges and channel surface water without confining vehicle circulation and snow removal.

The project was completed in 2020 at a total cost of \$6.78 million. This new storm water management system will continue to help mitigate future flooding occurrences and reduce costs to the community for flood rehabilitation, where housing repair costs average above \$125 per year, not including the social impact of finding temporary arrangements for residents leaving their houses due to flooding and mold issues.



Energy Efficiency

The Government of Canada is supporting innovative projects and initiatives aimed at helping communities and industries take advantage of the benefits of energy efficiency to lower GHG emissions and reduce energy costs for Canadians. Three programs were allocated funding from the proceeds of Canada's inaugural green bond under the energy efficiency category. These programs aim to improve energy efficiency through various approaches including supporting the development and adoption of clean technology in Canada's agriculture and agri-food sector; supporting large-scale, transformative and collaborative projects that help position Canada to prosper in the global knowledge-based economy; providing homeowners grants to make their homes more energy efficient and resilient; and supporting the development and implementation of building codes for existing buildings and net-zero, energy-ready buildings R&D initiatives.

Agricultural Clean Technology Program

Department: Agriculture and Agri-Food Canada

The Agricultural Clean Technology Program aims to create an enabling environment that supports businesses and other organizations develop and adopt clean technology that will reduce GHG emissions and support other environmental benefits in Canada's agriculture and agri-food sector.

Green Bond Allocation

2021-2022 Allocation (\$ millions)				2022-2023 Allocation (\$ millions)					
2019-20	2020-21	2021-22	Total	2019-20	2020-21	2021-22	2022-23	Total	Total
1.19	4.67	14.77	20.63	-	-	-	14.26	14.26	34.90

Program impact: 44 agricultural clean technologies developed, assessed, or demonstrated between 2021 and 2023. 58 agricultural clean technologies were adopted in 2021-22, most often related to grain drying and handling (23), solar energy (16), and precision agriculture (7).

Across all clean technology adoption projects completed in 2021-22, projects proponents reduced inorganic nitrogen fertilizer use by 165 tonnes. They also reduced fossil fuel use, including 892 tonnes of coal, 175,000 litres of diesel, 485,000 litres of propane, and 252,000 m³ of natural gas.

Canada Greener Homes Grant Initiative

Department: Natural Resources Canada

The Canada Greener Homes Grant, part of the broader Canada Greener Homes Initiative aims to help homeowners save money, create new jobs across Canada for energy advisors and fight climate change. It provides eligible homeowners grants of up to \$5,000 to make their homes more energy efficient and resilient. These retrofit grants are supported by a home energy evaluation for which the program will provide a grant of up to \$600 to undertake.

Green Bond Allocation

2021-2022 Allocation (\$ millions)				2022-2023 Allocation (\$ millions)					
2019-20	2020-21	2021-22	Total	2019-20	2020-21	2021-22	2022-23	Total	Total
-	0.75	26.16	26.92	-	-	-	72.26	72.26	99.17

Program impact: 1.06 petajoules in total energy savings and 0.9 Mt GHG emission reductions were achieved by households that completed an energy efficiency retrofit through the program between 2021 and 2022. 2,366 homeowners fully completed the process through the program, resulting in \$8,903,444 in grants disbursed between 2021 and 2022.

Green Infrastructure Program - Energy Efficient Buildings RD&D

Department: Natural Resources Canada

The Green Infrastructure Energy Efficient Buildings Research, Development and Demonstration Program seeks to increase energy efficiency and address climate change by improving how homes and buildings are designed, renovated, and constructed. The Program funds projects that will accelerate the development and adoption of net-zero energy-ready codes and cleaner technologies to promote highly energy-efficient building design and construction practices, provide cost-effective building solutions, and validate their applications with real-world demonstrations.

Green Bond Allocation

2021-2022 Allocation (\$ millions)				2022-2023 Allocation (\$ millions)					
2019-20	2020-21	2021-22	Total	2019-20	2020-21	2021-22	2022-23	Total	Total
5.25	3.95	8.14	17.34	-	-	-	1.20	1.20	18.55

Program impact: Ten projects advancing research, development and demonstrations of innovative energy efficient buildings technologies pathways have been completed as of 2023. As the program runs until 2026, many projects are ongoing. The program target is 12 energy-efficient building demonstration projects.

Case study

Strategic Innovation Fund Algoma Steel

Algoma Steel Inc. will receive up to \$200 million from the Strategic Innovation Fund (SIF) for a \$703 million project to retrofit their operations and phase out coal-fired steelmaking processes at their facility in Sault Ste. Marie, Ontario. The project is expected to be completed by March 31, 2025.

Investment support from SIF will enable the company to purchase state-of-the-art equipment to support its transition to Electric-Arc Furnace production.

The project is expected to reduce GHG emissions by more than 3.0 Mt per year by 2030, making a meaningful contribution to achieving Canada's climate goals. This is equivalent to taking more than 900,000 passenger vehicles off the road, almost the number of passenger vehicles in Toronto. This project also ensures Canada's steel industry remains a vital part of the Canadian economy, as the economy transitions to a cleaner future.

These retrofits will help the company maintain 2,040 full-time equivalent positions, train 75 employees for high-skilled jobs in the science, technology, engineering, and mathematics fields and create 600 student employment opportunities over the course of the project.

**As the SIF supports projects that fall under multiple categories within the Green Bond Framework, the allocated funding for this project is reflected under the Multiple Categories section on page 37 of this report.*

Living Natural Resources and Land Use

The Government of Canada is providing funding to support the environmentally sustainable management of living natural resources and land use. Six programs were allocated funding from the proceeds of Canada's inaugural green bond under this category. These programs focus on a variety of areas related to living natural resources and land use including environmentally beneficial agricultural practices and technologies, sustainable forest management, tree planting projects, and conservation and restoration of ecologically sensitive habitats.

2 Billion Trees Program

Department: Natural Resources Canada

The 2 Billion Trees program aims to motivate and support new tree planting projects. Over a period of 10 years, by 2031, up to \$3.2 billion will be invested in tree planting efforts to support provinces, territories, third-party organizations (for-profit and not-for profit) and Indigenous organizations to plant 2 billion trees across Canada.

Green Bond Allocation

2021-2022 Allocation (\$ millions)				2022-2023 Allocation (\$ millions)					
2019-20	2020-21	2021-22	Total	2019-20	2020-21	2021-22	2022-23	Total	Total
-	-	66.59	66.59	-	-	-	18.85	18.85	85.45

Program impact: In 2022-23, the program supported the planting of an additional 27.9 million trees. This brings the total trees planted since the program's start in 2021 to over 110 million, including over 54 million planted under Environment and Climate Change Canada's Low Carbon Economy Fund in 2021. Tree planting in 2022-23 represented 197 species, at more than 1,100 sites across 10 provinces. Tree planting projects ranged from restoration of habitat for species at risk, enhancement of biodiversity, creation of forest ecosystems on fire-damaged land, increased carbon capture, capacity building, and the creation of parks and greenspaces in and around cities. In 2022-23, 41 per cent of all supported projects were urban, and 22 per cent were Indigenous led.

Reporting on GHG emission reductions will start in 2024. The program is expected to annually reduce GHG emissions, by up to 2.0 Mt CO₂e per year. Projected long-term GHG emission reduction of 11-12 Mt CO₂e per year by 2050.

Agricultural Climate Solutions

Department: Agriculture and Agri-Food Canada

Agricultural Climate Solutions provides funding to support collaborative research (farmers and scientists) in the development of new beneficial management practices (BMPs), which are agricultural practices and technologies that reduce GHG emissions from the agricultural sector, sequester carbon in the soil, and provide other environmental benefits related to soil health and water.

Green Bond Allocation

2021-2022 Allocation (\$ millions)				2022-2023 Allocation (\$ millions)					
2019-20	2020-21	2021-22	Total	2019-20	2020-21	2021-22	2022-23	Total	Total
-	-	2.10	2.10	-	-	-	25.38	25.38	27.48

Program impact: Over 4,300 producers implementing new BMPs or expanding BMP adoption on new acres of land through the Agricultural Climate Solutions - On-Farm Climate Action Fund (OFCAF). Through OFCAF, over 1,000 agrologists, agronomists, or certified crop advisors were provided with training on BMP implementation.

In the first year of the Living Labs stream of the Agricultural Climate Solutions program, 34 BMPs were developed or improved that will reduce GHG emissions.

Agricultural Greenhouse Gases Program

Department: Agriculture and Agri-Food Canada

The Agricultural Greenhouse Gases Program (AGGP) (ended 2020-21) provided funding to support research of the development of new agricultural practices and technologies with the goal to reduce GHG emissions from the agricultural sector and to provide other environmental benefits related to soil health and water. The AGGP contributed to the Government of Canada's continued commitment to the Global Research Alliance on Agricultural Greenhouse Gases' efforts to mitigate agricultural GHGs worldwide. The AGGP promoted environmentally responsible agriculture and support the development of approaches and tools that more effectively and efficiently assist the agriculture sector and its partners in mitigating GHGs.

Green Bond Allocation

2021-2022 Allocation (\$ millions)				2022-2023 Allocation (\$ millions)					
2019-20	2020-21	2021-22	Total	2019-20	2020-21	2021-22	2022-23	Total	Total
5.67	3.01	-	8.68	-	-	-	-	-	8.68

Program impact: 108 information products, such as factsheets and brochures, to help farmers mitigate of GHG emissions were produced.

Canadian Forest Service Scientific Program

Department: Natural Resources Canada

The Canadian Forest Service Scientific Program contributes to the scientific understanding of the complexity of forest ecosystems, including addressing climate change, though designing and implementing climate change mitigation and advancing the understanding and practice of sustainable forest management. Scientists provide expertise and tools on topics such as forest fire monitoring, insect and disease identification, forest monitoring, climate change research, biodiversity, conservation, protection, industry innovation, and more.

Green Bond Allocation

2021-2022 Allocation (\$ millions)				2022-2023 Allocation (\$ millions)					
2019-20	2020-21	2021-22	Total	2019-20	2020-21	2021-22	2022-23	Total	Total
33.58	24.49	40.68	98.75	-	-	-	10.02	10.02	108.77

Program impact: 208 peer reviewed publications and 200 presentations at conferences and events to strengthen relationships with stakeholders in 2022-23.

Habitat Conservation and Protection

Department: Environment and Climate Change Canada

The Habitat Conservation and Protection program provides funding to secure, protect, conserve, improve, and restore ecologically sensitive habitat, including wetlands, to contribute to the conservation and protection of migratory birds, species at risk and other wildlife, and reduce GHG emissions.

Green Bond Allocation

2021-2022 Allocation (\$ millions)				2022-2023 Allocation (\$ millions)					
2019-20	2020-21	2021-22	Total	2019-20	2020-21	2021-22	2022-23	Total	Total
92.20	93.93	160.20	346.33	-	-	-	45.83	45.83	392.16

Program impact: 12,575,300 hectares of land secured between 2020 and 2022. 347 full-time jobs and 208 part-time jobs created for Indigenous peoples, as of 2022-23 with 14 Indigenous led Natural Climate Solutions projects supported as of March 2023.

Living Laboratories Initiative

Department: Agriculture and Agri-Food Canada

The Living Laboratories Initiative (ended 2022-23) brought together farmers, scientists, and other collaborators to co-develop and test innovative practices and technologies to address agri-environmental issues, including: mitigating and adapting to climate change, protecting soil and water quality, and maximizing biodiversity in agricultural landscapes. It provided funding to conduct science in the agricultural landscape across rural communities to develop and implement new mitigation technologies and beneficial management practices that improve the sustainability of the sector.

Green Bond Allocation

2021-2022 Allocation (\$ millions)				2022-2023 Allocation (\$ millions)					
2019-20	2020-21	2021-22	Total	2019-20	2020-21	2021-22	2022-23	Total	Total
4.36	3.96	6.03	14.35	-	-	-	1.40	1.40	15.75

Program impact: Seven new technologies, products, practices, processes, or systems were developed for transfer to the sector. Meanwhile, 37 existing technologies, products, practices, processes, systems, or beneficial management practices were implemented, demonstrated, piloted, tested or refined. 165 information products such as factsheets and brochures, produced.

Case Study

Habitat Conservation and Protection – TransCoastal Adaptations: Making Room for Wetlands

TransCoastal Adaptations, funded through the Habitat Conservation and Protection program’s Nature Smart Climate Solutions Fund, aims to restore tidal wetlands and hydrological conditions in the Bay of Fundy, Nova Scotia, and enable natural migration of wetlands in response to sea-level rise. For 2022 through 2027, \$4 million was allocated to this collaborative project with Mi’kmaq communities, and provincial and industry partners, focused on climate mitigation and adaptation through coastal wetland restoration and enhancement. The project will improve agricultural drainage and reduce the risks (e.g., flooding, erosion) posed by climate change to agricultural lands and coastal infrastructure. Furthermore, the project will increase carbon storage, wildlife habitat and resiliency of dykeland communities. The project will contribute to the Nature Smart Climate Solutions Fund emission reduction objectives of 5.0 Mt to 7.0 Mt of carbon by 2030.

Project activities are taking place in Eastern Habitat Joint Venture Priority Areas which encompass tidal salt marsh – a key habitat for migratory birds. The key benefits of this project include the restoration of tidal wetlands and enhanced management of dyked agricultural lands to improve drainage.



Belcher Street restoration site five-years post-breach, following a managed dyke realignment project undertaken in 2017 (photo credit: CBWES Inc.)

Pollution Prevention and Control

The Government of Canada is determined to look at the causes of waste and pollution and figuring out ways to best prevent these causes from occurring to avoid negative impacts on the environment and human health. Two programs were allocated funding from the proceeds of Canada's inaugural green bond under the pollution and prevention control category. These programs tackle pollution in a variety of ways. One program provides funding to support First Nations to develop sustainable waste management systems through modern infrastructure, operations, training, and partnerships. Another program provides funding to support projects, such as deploying proven low-carbon technologies, that help reduce Canada's GHG emissions, generate clean growth, build resilient communities, and create good jobs for Canadians.

Capital Facilities and Maintenance Program – Solid Waste Management

Department: Indigenous Services Canada

As part of the Capital Facilities and Maintenance Program, this stream focuses on investing in physical assets relating to solid waste management to support First Nations in developing sustainable waste management systems through modern infrastructure, operations, training, and partnerships.

Green Bond Allocation

2021-2022 Allocation (\$ millions)				2022-2023 Allocation (\$ millions)					
2019-20	2020-21	2021-22	Total	2019-20	2020-21	2021-22	2022-23	Total	Total
14.70	22.43	16.94	54.07	-	-	-	2.17	2.17	56.24

Program impact: 40.5 per cent of First Nation communities have adequate solid waste management systems as of March 2023, up from 10.4 per cent in March 2019, and 75 per cent of First Nations communities undertaken solid waste management improvement projects as of March 2023, surpassing the March 2024 target of 52 per cent.

Low Carbon Economy Fund

Department: Environment and Climate Change Canada

The Low Carbon Economy Fund (LCEF) supports projects that help reduce Canada's GHG emissions, generate clean growth, build resilient communities, and create good jobs for Canadians. The LCEF has four streams:

1. **Low Carbon Economy Challenge** supports the use of proven, low-carbon technologies to reduce GHG emissions.
2. **Low Carbon Economy Leadership Fund** supports provinces and territories to help them deliver on commitments to reduce GHG emissions.
3. **Indigenous Leadership Fund** supports clean energy and energy efficiency projects led by First Nations, Inuit, and Métis governments, communities, and organizations.
4. **Implementation Readiness Fund** supports activities and investments that increase the readiness of GHG emissions reduction projects.

Green Bond Allocation

2021-2022 Allocation (\$ millions)				2022-2023 Allocation (\$ millions)					
2019-20	2020-21	2021-22	Total	2019-20	2020-21	2021-22	2022-23	Total	Total
71.05	46.56	59.88	177.49	-0.18	0.18	9.18	7.27	16.45	193.94

Program impact: An estimated 2.2 Mt of annual GHG emissions reduced and avoided with almost 13 PJ of annual energy savings expected by 2030. Up to 13,300 cumulative estimated full-time-equivalent jobs may be created by the implementation of LCEF eligible projects by 2024.

Case Study

Low Carbon Economy Fund – ZooShare Biogas Co-operative Inc.

The Low Carbon Economy Fund’s ZooShare Biogas Plant project was a \$6.2 million project that received \$1.9 million from the Low Carbon Economy Challenge Fund. Completed in December 2021, the project built a new digestion tank and installed self-cleaning digestion equipment at a biogas plant in Toronto, Ontario. This expanded their processing capacity and improved their ability to manage organic waste resulting in over 15,000 tonnes of CO₂e GHG reductions in 2030. In addition, the initiative diverted organic waste away from landfills, contributed to improved air quality by reducing truck transportation and enhanced biogas production, while leveraging economies of scale.



Biogas plant at the Toronto Zoo that turns animal feces and inedible food waste into renewable power for the Ontario grid (photo credit: Zooshare Biogas LP)

Renewable Energy

Canada has substantial renewable resources that can be used to produce energy, including moving water, wind, biomass, and solar. The government aims to harness these immense clean energy resources to expand Canada's clean electricity grid, in line with our goal of net-zero electricity generation by 2035.

The Government of Canada is funding renewable energy and upgrades to the electricity grid to make clean, affordable electricity options more accessible across the country. Eight programs were allocated funding from the proceeds of Canada's inaugural green bond under the renewable energy category. These programs take different approaches to promote renewable energy including funding incentive programs for electricity produced from renewable energy projects; supporting renewable power and energy efficiency projects for Indigenous, northern, and remote communities; and supporting and facilitating the replacement of fossil-fuel-generated electricity with renewables to encourage an equitable transition to a net-zero economy.

Capital Facilities and Maintenance Program – Energy

Department: Indigenous Services Canada

Under the Capital Facilities and Maintenance Program, this stream supports First Nations communities in having reliable and sustainable energy to operate community infrastructure by investing in renewable power and energy efficiency projects.

Green Bond Allocation

2021-2022 Allocation (\$ millions)				2022-2023 Allocation (\$ millions)					
2019-20	2020-21	2021-22	Total	2019-20	2020-21	2021-22	2022-23	Total	Total
10.10	8.70	18.85	37.64	-	-	-	1.18	1.18	38.82

Program impact: 28 energy efficiency or clean energy related projects completed in First Nations communities.

Clean Energy for Rural and Remote Communities

Department: Natural Resources Canada

The Clean Energy for Rural and Remote Communities (CERRC) program provides funding for renewable energy and capacity building projects and related energy efficiency measures in Indigenous, rural, and remote communities across Canada. CERRC seeks to reduce the use of fossil fuels for heating and electricity by increasing the use of local renewable energy sources and energy efficiency. Investing in clean energy solutions in Indigenous communities is a small but important link to energy security, reconciliation, self-determination, and economic development for Indigenous Peoples.

Green Bond Allocation

2021-2022 Allocation (\$ millions)				2022-2023 Allocation (\$ millions)					
2019-20	2020-21	2021-22	Total	2019-20	2020-21	2021-22	2022-23	Total	Total
35.96	20.64	48.68	105.28	-	-	-	14.12	14.12	119.40

Program impact: As of August 2023, 81 projects received funding with an expected to result in approximately 0.11 Mt of CO₂e in GHG emissions avoided annually, as well as 46.1 MW of new renewable energy, storage, and heating capacity. Around 90 per cent of CERRC funded projects are Indigenous led.

Clean Fuels Fund

Department: Natural Resources Canada

The Clean Fuels Fund aims to de-risk the capital investment required to build new or expand existing clean fuel production facilities (including facility conversions). The program supports the feasibility and front-end engineering and design studies, and the establishment of biomass supply chains to improve logistics for the collection, supply, and distribution of biomass materials (e.g. forest residues, municipal solid waste, and agriculture crop residues) as a feedstock in clean fuel production facilities. The program also seeks to address gaps and misalignment in codes, standards, and regulations related to the production, distribution, and end-use of clean fuels.

Green Bond Allocation

2021-2022 Allocation (\$ millions)				2022-2023 Allocation (\$ millions)					
2019-20	2020-21	2021-22	Total	2019-20	2020-21	2021-22	2022-23	Total	Total
-	-	10.38	10.38	-	-	-	3.22	3.22	13.60

Program impact: Contributing to the commissioning of ten hydrogen facilities and eight other clean fuel facilities by 2026, supporting the Government of Canada's target to increase clean fuel production capacity by 10 per cent over 2021 levels. The program is on track to meet these objectives and is currently negotiating contribution agreements with successful applicants. Once agreements are finalized, they will be announced on the Government of Canada's Open Government platform.

The program also supports the establishment of at least seven biomass supply chains by the end of 2026 and will develop at least 24 new or revised codes of standards by the end of 2026.

ecoENERGY for Renewable Power

Department: Natural Resources Canada

The ecoENERGY for Renewable Power program aims to increase Canada's supply of clean electricity from renewable sources such as wind, biomass, low-impact hydro, and solar photovoltaic energy. The program has contributed to the installation of almost 4,460 MW of renewable power capacity, the majority of this capacity derived from wind power. It is intended to help position low-impact renewable energy technologies to make an increased contribution to Canada's energy supply and thereby contribute to a more sustainable and diversified energy mix.

Green Bond Allocation

2021-2022 Allocation (\$ millions)				2022-2023 Allocation (\$ millions)					
2019-20	2020-21	2021-22	Total	2019-20	2020-21	2021-22	2022-23	Total	Total
70.15	25.22	-	95.37	-	-	-	-	-	95.37

Program impact: 1.8 Mt CO₂e of GHG emissions reductions. These results have been prorated to the amount of green bonds allocated to the program.

In 2019-20 and 2020-21, total ecoERP funding contributed to the reduction of 5 Mt of CO₂e.

Emerging Renewable Power Program

Department: Natural Resources Canada

The Emerging Renewable Power Program (ERPP) provides funding to expand the portfolio of commercially viable renewable energy sources available to provinces and territories as they work to reduce GHG emissions from their electricity sectors. ERPP seeks to mitigate the risk of emerging renewable power projects through federal government funding, allowing emerging renewables to play a larger role in Canada's electricity supply mix.

Green Bond Allocation

2021-2022 Allocation (\$ millions)				2022-2023 Allocation (\$ millions)					
2019-20	2020-21	2021-22	Total	2019-20	2020-21	2021-22	2022-23	Total	Total
45.75	22.75	22.49	90.98	-	-	-	6.00	6.00	96.99

Program impact: Approved six emerging renewable power projects, including Canada's first bifacial solar plant which avoids an estimated 28 kt CO₂e per year in GHGs. 23 MW of new renewable capacity have been installed, with another 10-15 MW in planned installations under development. The program also supported Canada's first 100 per cent Indigenous-owned geothermal project, which has created four long-term jobs for Indigenous employees.

Northern REACHE

Department: Crown-Indigenous Relations and Northern Affairs Canada

The Northern Responsible Energy Approach for Community Heat and Electricity (REACHE) program funds renewable energy and energy efficiency projects, and related capacity building and planning. The program objective is to reduce Northern communities' reliance on diesel for heating and electricity by increasing the use of local renewable energy sources and energy efficiency. This will result in environmental, social, and economic benefits to support developing healthier, more sustainable Northern communities.

Green Bond Allocation

2021-2022 Allocation (\$ millions)				2022-2023 Allocation (\$ millions)					
2019-20	2020-21	2021-22	Total	2019-20	2020-21	2021-22	2022-23	Total	Total
4.80	3.57	12.10	20.47	-	-	-	7.28	7.28	27.74

Program impact: 1,224 kW of installed renewable energy capacity resulting in 1.3 million litres of diesel avoided, equivalent to 3,537 tonnes of CO₂e avoided.

Smart Grid Program

Department: Natural Resources Canada

The Smart Grid Program promotes the modernization of grid infrastructure by funding the demonstration of promising, near-commercial smart grid technologies and the deployment of smart grid integrated systems across Canada. Projects deliver a range of benefits including reducing GHGs, economic and social benefits, and increasing renewable integration, flexibility, reliability, resiliency, and efficiency of the grid.

Green Bond Allocation

2021-2022 Allocation (\$ millions)				2022-2023 Allocation (\$ millions)					
2019-20	2020-21	2021-22	Total	2019-20	2020-21	2021-22	2022-23	Total	Total
25.87	13.46	17.91	57.24	-	-	-	2.94	2.94	60.18

Program impact: The program funded 22 projects, supporting 0.02 Mt of CO₂e of GHG emissions reductions in 2023.

Smart Renewables and Electrification Pathways Program

Department: Natural Resources Canada

The Smart Renewables and Electrification Pathways Program (SREP) provides funding for smart renewable energy and electrical grid modernization projects. Projects must use market ready technologies and apply workplace equity, diversity, and inclusion components. SREP seeks to significantly reduce emissions and create sustainable jobs by continuing to support the deployment of energy storage and renewables in every region of Canada.

Green Bond Allocation

2021-2022 Allocation (\$ millions)				2022-2023 Allocation (\$ millions)					
2019-20	2020-21	2021-22	Total	2019-20	2020-21	2021-22	2022-23	Total	Total
-	-	103.83	103.83	-	-	-	65.36	65.36	169.19

Program impact: Upon completion, the 69 approved projects will result in 3.5 Mt of CO₂e in GHG emissions avoided annually, as well as 2,590 MW of new renewable energy capacity and 2,210 MWh of new storage capacity. The projects supported via SREP are expected to create around 34,000 job years in total, with 41 approved deployment projects having Indigenous ownership.

Case Study

Smart Renewables and Electrification Pathways Program - Burchill Wind Energy Project

The Burchill Wind Energy Project consists of ten wind turbine generators, producing up to 42 MW of clean, renewable energy coupled with a 5.8 MW/11.6 MWh utility-scale battery energy storage system. The Project is a partnership between Wolumseket, owned by Neqotkuk Maliseet Nation (also known as Tobique First Nation), and Natural Forces Development to deploy renewable energy and grid modernization technologies to support clean energy to Saint John, New Brunswick. The Project creates a new revenue source from renewable energy for Neqotkuk Maliseet Nation and other participating Wolastoqiyik Nations, while creating new employment opportunities during construction and operations. The Project supports a greener grid in New Brunswick and reduce GHG emissions, while ensuring an equitable transition to an electrified economy. The \$94 million project received around \$50 million in Federal funding, provided by Natural Resources Canada's Smart Renewables and Electrification Pathways Program.

This project was completed in June 2023, and environmental benefits are expected to reach 0.08Mt of expected annual GHG emissions reductions; and 158,200 MWh of expected annual generation. Economic benefits include the creation of over 120 jobs and \$5 million in tax revenue.



Sustainable Water and Wastewater Management

Wastewater effluents are the largest source of pollution to surface water in Canada. To address this, the Government of Canada worked with the provinces, territories, municipalities, Indigenous communities and other stakeholders to amend the [Wastewater Systems Effluent Regulations](#), which came into force in October 2023 and set achievable national effluent quality standards for owners and operators of wastewater systems that collect and discharge up to 100 cubic metres or more of effluent per day.

The government is also investing to support better wastewater infrastructure in Canada, particularly for historically marginalized First Nations communities. One program was allocated funding from the proceeds of Canada's inaugural green bond under the sustainable water and wastewater management category. This program focuses on working in partnership with First Nations communities and provides funding to support improved wastewater infrastructure on-reserve.

Capital Facilities and Maintenance Program – Wastewater

Department: Indigenous Services Canada

Under the Capital Facilities and Maintenance Program, this stream aims to work in partnership with First Nations communities, to support improved wastewater infrastructure on-reserve.

Green Bond Allocation

2021-2022 Allocation (\$ millions)				2022-2023 Allocation (\$ millions)					
2019-20	2020-21	2021-22	Total	2019-20	2020-21	2021-22	2022-23	Total	Total
88.73	41.68	141.78	272.19	-	-	-	42.08	42.08	314.27

Program impact: 59.8 per cent of wastewater systems in First Nations communities produced treated effluent that met regulated requirements in 2021-22. For 2021-22 data, inspections were only partially completed due to on-going disruptions by the COVID-19 pandemic – data collected for this period is not wholly representative of the status of wastewater assets in First Nations.

The government is targeting 85 per cent of wastewater systems on-reserve will achieve effluent standards by March 2030.

Case Study

Capital Facilities and Maintenance Program – Ahousaht Wastewater Treatment Plant

The Ahousaht First Nation, located on Flores Island in Clayoquot Sound, British Columbia, successfully implemented their Wastewater Treatment Plant project to address the environmental and health hazards resulting from their original wastewater collection system. This program was part of the Capital Facilities and Maintenance Program’s Wastewater stream.

Serving approximately 200 residences, commercial establishments, schools, and institutional buildings, the system failed to meet provincial and federal wastewater regulations, leading to the closure of marine shellfish harvesting in 2017 over water quality concerns. To address these issues, a new wastewater treatment plant was constructed beginning in 2019, featuring a pump station, force mains, a new mechanical treatment system, operations buildings, and a marine outfall, designed for a 20-year growth projection of 1,300 people. Despite significant delays experienced due to the COVID-19 pandemic, the project was completed on budget and the new plant is fully operational as of May 2022.

The Ahousaht Wastewater Treatment Plant project yielded significant positive impacts including a safer and more reliable wastewater management system, mitigating contamination risks, and addressing environmental hazards. It also helps improve water quality in adherence to wastewater regulations, facilitating the reopening of marine shellfish harvesting and local beaches.

The project also supports community well-being by improving public health and increased economic opportunities. It also creates opportunities for community expansion, including planned subdivision and housing projects.

The total project budget from 2018-19 to 2023-24 for this project is \$25.4 million. Total expenditures during the green bonds allocation period (2019-20 to 2022-23) amounted to \$22.7 million.



Terrestrial and Aquatic Biodiversity

In recent years, climate change, habitat loss, and impacts of industrial activities have negatively affected terrestrial and aquatic biodiversity. In response, the Government of Canada is funding ambitious marine conservation targets of conserving 25 per cent of Canada's oceans by 2025 and 30 per cent by 2030. Three programs were allocated funding from the proceeds of Canada's inaugural green bond under the terrestrial and aquatic biodiversity category. These programs take different approaches to conserve terrestrial and aquatic biodiversity including supporting the protection of species at risk and their critical habitats, as well as development and delivery of stewardship programs and actions to achieve conservation objectives; supporting the establishment of new federal marine protected areas; and supporting the conservation and restoration of Pacific salmon populations and their ecosystems.

Marine Conservation Targets

Department: Fisheries and Oceans Canada

The Marine Conservation Targets program invests in initiatives that support the well-being of important habitats, species, and ecosystems, and help support the livelihoods of Canadians by ensuring that Canada's oceans continue to provide sustainable benefits to our economy for generations to come. The program provides funding to support establishing new federal marine protected areas and other effective area-based conservation measures, such as marine refuges to meet the government's commitments to conserve 25 per cent of its oceans by 2025 and 30 per cent by 2030.

Green Bond Allocation

2021-2022 Allocation (\$ millions)				2022-2023 Allocation (\$ millions)					
2019-20	2020-21	2021-22	Total	2019-20	2020-21	2021-22	2022-23	Total	Total
4.30	2.50	36.40	43.20	-	-	-	22.73	22.73	65.93

Program impact: 84,282,100 hectares of marine and coastal areas conserved, representing 14.66 per cent of Canada's total marine territory.

Pacific Salmon Strategy Initiative

Department: Fisheries and Oceans Canada

The Pacific Salmon Strategy Initiative (PSSI) represents the federal government's long-term strategy to stop serious declines in key Pacific salmon populations through a series of science-based approaches, achieved through collaboration across governments, First Nations partners, stakeholders and interested parties to protect and rebuild stocks. The PSSI provides funding to conserve and restore Pacific salmon populations and their ecosystems.

Green Bond Allocation

2021-2022 Allocation (\$ millions)				2022-2023 Allocation (\$ millions)					
2019-20	2020-21	2021-22	Total	2019-20	2020-21	2021-22	2022-23	Total	Total
-	-	15.40	15.40	-	-	-	13.75	13.75	29.15

Program impact: Launched the renewed British Columbia Salmon Restoration and Innovation Fund which funds projects to support the protection and restoration of wild Pacific salmon. Various harvest transformation partnership projects are also underway involving 30 First Nations across B.C. and Yukon. Collaborative partnerships with First Nations contribute progress towards building new community-based hatcheries.

Species at Risk

Department: Environment and Climate Change Canada

The Species at Risk program seeks to support initiatives that support the Government of Canada’s obligations under the Species at Risk Act. Funding from this program aims to support the recovery of extirpated, endangered or threatened wildlife species, and manages species of special concern to prevent them from becoming endangered or threatened. This includes activities aimed at protecting species at risk and their critical habitat, as well as developing and delivering stewardship programs and actions to achieve conservation objectives.

Green Bond Allocation

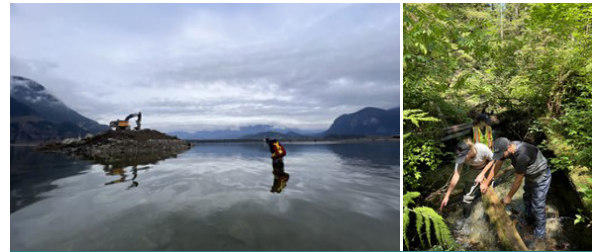
2021-2022 Allocation (\$ millions)				2022-2023 Allocation (\$ millions)					
2019-20	2020-21	2021-22	Total	2019-20	2020-21	2021-22	2022-23	Total	Total
39.80	33.61	76.60	150.01	-	-	-	24.51	24.51	174.52

Program impact: 860,000 hectares of land secured and a further 370,000 hectares of land stewarded. Around 1,100 km of shoreline was stewarded with 315 species at risk expected to benefit from actions implemented.

Case Study

Pacific Salmon Strategy Initiative – DFO Habitat Restoration Centre of Expertise

The Pacific Salmon Strategy Initiative’s Habitat Restoration Centre of Expertise is building on the success of previous salmon habitat restoration efforts and expanded Fisheries and Oceans Canada’s capacity to coordinate and deliver complex Pacific salmon habitat restoration projects, including responding to climate-driven emergencies, such as fires, floods, and drought, across British Columbia and Yukon. Over the last year, in response to the Atmospheric River event in 2021, Fisheries and Oceans Canada has worked hand in hand with local First Nations and the Province of British Columbia to identify and address the impacts of the floods on salmonid habitat and populations. Teams worked together to restore passage for adult salmon where flood impacts presented an immediate threat to fish survival and productivity. Fish and fish habitat assessment and monitoring was also conducted and is ongoing. These assessments are a critical investment which will inform and guide ongoing and future restoration actions by Fisheries and Oceans Canada and external partners.



DFO staff undertaking habitat restoration work in BC, to support Pacific salmon conservation (photo credit: DFO/Natalie Mahara)

Multiple Categories

The expenditures that fall under this category contribute to multiple categories identified under the Green Bond Framework. These projects cover a wide range of environmental and climate objectives across multiple sectors of the economy.

Strategic Innovation Fund

Department: Innovation, Science and Economic Development Canada

The Strategic Innovation Fund (SIF) provides major investments in innovative projects that will help grow Canada's economy. SIF covers all sectors of the economy with the goal of supporting the Canadian innovation network. It provides funding to support large-scale, transformative, and collaborative projects that help position Canada to prosper in the global knowledge-based economy. As one of its many funding objectives, SIF supports investments that drive industrial transition, significantly reduce greenhouse gas emissions, and transform Canadian industry to lead in a net-zero emissions future.

Green Bond Allocation

2021-2022 Allocation (\$ millions)				2022-2023 Allocation (\$ millions)					
2019-20	2020-21	2021-22	Total	2019-20	2020-21	2021-22	2022-23	Total	Total
-	-	44.67	44.67	-	-	-11.55	47.45	35.89	80.56

Program impact: An estimated 11.0 Mt CO₂e is expected to be reduced or avoided annually by 2030 through the six SIF-supported projects eligible under the green bond.

Projects are in their infancy and just starting to report on jobs created. For example, just one project created around 41 full-time equivalent positions, with about \$210,000 invested into clean tech.

Sustainable Development Technology Canada – SD Tech Fund

Department: Innovation, Science and Economic Development Canada

Sustainable Development Technology Canada helps Canadian companies develop and deploy sustainable technologies by delivering critical funding support at every stage of the product's development. The SD Tech Fund provides funding to support Canadian companies with the potential to become world leaders in their efforts to develop and demonstrate new environmental technologies that address climate change, clean air, clean water, and clean soil.

Green Bond Allocation

2021-2022 Allocation (\$ millions)				2022-2023 Allocation (\$ millions)					
2019-20	2020-21	2021-22	Total	2019-20	2020-21	2021-22	2022-23	Total	Total
131.49	105.47	91.23	328.19	-	-	-	29.48	29.48	357.67

Program impact: Almost 6.0 Mt of GHG emissions were reduced between 2019 and 2022 with 425 clean technology projects eligible under the green bond.



Legal Considerations

This Allocation Report does not constitute, or form part of, a prospectus or other offering document.

This Allocation Report 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 Government of Canada in any jurisdiction or an inducement to enter into investment activity.

For further information, please refer to the Government of Canada's Green Bond Framework and, in particular, the Disclaimer section at the end of the document.



Office of the
Auditor General
of Canada

Bureau du
vérificateur général
du Canada

INDEPENDENT AUDITOR'S REPORT

To the Minister of Finance

Opinion

We have audited the schedule of allocation of green bond net proceeds of the Government of Canada (managed by the Department of Finance) for the year ended 31 March 2023 and notes to this schedule (together "the schedule").

In our opinion, the schedule is prepared, in all material respects, in accordance with the basis of accounting described in Note 2 to the schedule.

Basis for Opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Schedule* section of our report. We are independent of the Department of Finance in accordance with the ethical requirements that are relevant to our audit of the schedule in Canada, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Emphasis of Matter – Basis of Accounting

We draw attention to Note 2 to the schedule, which describes the basis of accounting. The schedule is prepared to assist the Department of Finance to meet the allocation reporting requirements of the Green Bond Framework. As a result, the schedule may not be suitable for another purpose. Our opinion is not modified in respect of this matter.

Other Matter

Our audit was limited to the allocation of green bond net proceeds. The eligibility of green expenditures, under the Green Bond Framework, and ensuring the amounts allocated have been used for eligible programs were not within the scope of our audit and accordingly we do not express an opinion thereon.

Other Information

Management is responsible for the other information. The other information comprises the information included in the Government of Canada Green Bond Allocation and Impact Report, but does not include the schedule and our auditor's report thereon.

Our opinion on the schedule does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the schedule, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the schedule or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of Management and Those Charged with Governance for the Schedule

Management is responsible for the preparation of the schedule in accordance with the basis of accounting described in note 2, and for such internal control as management determines is necessary to enable the preparation of the schedule that is free from material misstatement, whether due to fraud or error.

Those charged with governance are responsible for overseeing the Department of Finance's financial reporting process.

Auditor's Responsibilities for the Audit of the Schedule

Our objectives are to obtain reasonable assurance about whether the schedule is free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of this schedule.

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the schedule, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Department of Finance's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates, if any, and related disclosures made by management.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

A handwritten signature in black ink, reading "Normand Lanthier". The signature is written in a cursive style with a long horizontal flourish extending to the right.

Normand Lanthier, CPA, CA
Principal
for the Auditor General of Canada

Ottawa, Canada
20 March 2024

**Schedule of Allocation of Green Bond Net Proceeds (\$ millions)
for the fiscal year ending March 31, 2023**

Unallocated net proceeds as at March 31, 2022	699.77
Allocation to Eligible Green Expenditures:	
2 Billion Trees Program	18.85
Agricultural Clean Technology Program	14.26
Agricultural Climate Solutions	25.38
Canada Greener Homes Grant Initiative	72.26
Canadian Forest Service Scientific Program	10.02
Capital Facilities and Maintenance Program - Other Community Infrastructure and Activities - Energy	1.18
Capital Facilities and Maintenance Program - Other Community Infrastructure and Activities - Structural Mitigation	3.02
Capital Facilities and Maintenance Program - Solid Waste Management	2.17
Capital Facilities and Maintenance Program - Wastewater	42.08
Clean Energy for Rural and Remote Communities (CERRC)	14.12
Clean Fuels Fund Program	3.22
Climate Change Preparedness in North	2.96
Disaster Mitigation and Adaptation Fund	53.42
Emerging Renewable Power Program (ERPP)	6.00
First Nation Adapt Program	1.41
Food Waste Reduction Challenge	1.94
Forest Innovation Program	7.20
Green Construction through Wood (GCWood) Program	2.91
Green Infrastructure - Electric Vehicles Infrastructure Demonstration Program	1.37
Green Infrastructure - Energy Efficient Buildings Research, Development and Demonstration (RD&D)	1.20
Habitat Conservation and Protection	45.83
Incentives for Zero-Emission Vehicles Program	51.22
Indigenous Community-Based Climate Monitoring	1.60
Investing in Canada Infrastructure Program - select Public Transit projects	50.77
Investments of Forest Industry Transformation Program	20.38
Living Laboratories Initiative	1.40

Low Carbon Economy Fund	16.45
Marine Conservation Targets	22.73
Northern REACHE	7.28
Pacific Salmon Strategy Initiative	13.75
Smart Grid Program	2.94
Smart Renewables and Electrification Pathways Program (SREP)	65.36
Species at Risk	24.51
Strategic Innovation Fund	35.89
Sustainable Development Technology Canada (SDTC) - SD Tech Fund	29.48
Zero-Emission Buses Initiative	7.03
Zero-Emission Vehicle Infrastructure Program	18.18
Total allocated net proceeds	699.77
Unallocated net proceeds as at March 31, 2023	0.00

Notes to the Schedule of Allocation of Green Bond Net Proceeds

1. Background

In March 2022, the Government of Canada published Canada's inaugural Green Bond Framework (the Framework) which aligns with Canada's climate and environmental priorities and identifies expenditures that are eligible for allocation ("Eligible Green Expenditures") to issued green bonds.

Under the Framework the Department of Finance is responsible for the issuance of green bonds and the management of the green bond net proceeds³. The green bond net proceeds are deposited to the Government of Canada's Consolidated Revenue Fund and managed in the same way as funds raised through conventional Government of Canada debt issuances. On an annual basis, the Department of Finance 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.

In March 2022, the Government of Canada issued its inaugural green bond with a \$5 billion, 7.5-year issuance under the Framework. In March 2023, the Department of Finance reported on the partial allocation of the net proceeds of this inaugural green bond as at March 31, 2022.

Subsequently, the Government of Canada issued an updated Green Bond Framework in November 2023. Net proceeds from green bonds issued under the updated framework will be allocated in accordance with the updated framework.

The issuance in March 2022 continues to be subject to the initial Green Bond Framework in effect at the time of its issuance.

³ Net proceeds result from the deduction of issuance fees including syndication fees, from the total proceeds of the bonds.

2. Basis of Accounting

The Schedule of allocation of green bond net proceeds presents the allocation of remaining unallocated net proceeds from the inaugural green bond to Eligible Green Expenditures that occurred between April 1, 2022 and March 31, 2023.

Eligible Green Expenditures are limited to federal government expenditures of relevant departments, agencies and Crown corporations occurring no earlier than two fiscal years prior to the issuance, the fiscal year of issuance, and no later than two fiscal years following the fiscal year of issuance ("Eligible Expenditure Window"). The Department of Finance seeks to allocate at least 50 per cent of the net proceeds to Eligible Green Expenditures related to the fiscal year of issuance or two fiscal years following the fiscal year of issuance, subject to expenditure availability and other considerations.

On an annual basis, the allocation is reviewed to determine if any changes are necessary. If any expenditure has been cancelled, postponed, or is otherwise no-longer eligible, the Department of Finance intends to replace such expenditure with another Eligible Green Expenditure.

Subsequent Event

On March 5, 2024, the government issued a second green bond with a face value of \$4 billion for a 10-year term under the updated Green Bond Framework published in November 2023. The allocation of the net proceeds for this second bond will be made in the future in accordance with the updated Green Bond Framework.

Annex A – Detailed Allocation of Net Proceeds (Unaudited)

Table of Allocations

Program	Category	2021-22 Allocation (\$ millions)				2022-23 Allocation (\$ millions)				Total	Total
		2019-20	2020-21	2021-22	Total	2019-20	2020-21	2021-22	2022-23		
2 Billion Trees Program	Living Natural Resources & Land Use	-	-	66.59	66.59	-	-	-	18.85	18.85	85.45
Agricultural Clean Technology Program	Energy Efficiency	1.19	4.67	14.77	20.63	-	-	-	14.26	14.26	34.90
Agricultural Climate Solutions	Living Natural Resources & Land Use	-	-	2.10	2.10	-	-	-	25.38	25.38	27.48
Agricultural Greenhouse Gases Program	Living Natural Resources & Land Use	5.67	3.01	-	8.68	-	-	-	-	-	8.68
Canada Greener Homes Grant Initiative	Energy Efficiency	-	0.75	26.16	26.92	-	-	-	72.26	72.26	99.17
Canadian Forest Service Scientific Program	Living Natural Resources & Land Use	33.58	24.49	40.68	98.75	-	-	-	10.02	10.02	108.77
Capital Facilities and Maintenance Program - Other Community Infrastructure and Activities - Energy	Renewable Energy	10.10	8.70	18.85	37.64	-	-	-	1.18	1.18	38.82
Capital Facilities and Maintenance Program - Other Community Infrastructure and Activities - Structural Mitigation	Climate Change Adaptation	15.23	10.74	17.66	43.63	-	-	-	3.02	3.02	46.64
Capital Facilities and Maintenance Program - Solid Waste Management	Pollution Prevention & Control	14.70	22.43	16.94	54.07	-	-	-	2.17	2.17	56.24

Program	Category	2021-22 Allocation (\$ millions)				2022-23 Allocation (\$ millions)					Total
		2019-20	2020-21	2021-22	Total	2019-20	2020-21	2021-22	2022-23	Total	
Capital Facilities and Maintenance Program - Wastewater	Sustainable Water & Wastewater Management	88.73	41.68	141.78	272.19	-	-	-	42.08	42.08	314.27
Clean Energy for Rural and Remote Communities (CERRC)	Renewable Energy	35.96	20.64	48.68	105.28	-	-	-	14.12	14.12	119.40
Clean Fuels Fund Program	Renewable Energy	-	-	10.38	10.38	-	-	-	3.22	3.22	13.60
Climate Change Preparedness in North	Climate Change Adaptation	12.00	6.07	8.70	26.77	-	-	-	2.96	2.96	29.73
Disaster Mitigation and Adaptation Fund	Climate Change Adaptation	10.86	32.78	43.34	86.98	-	-	-0.04	53.46	53.42	140.40
ecoENERGY for Renewable power program (ecoERP)	Renewable Energy	70.15	25.22	-	95.37	-	-	-	-	-	95.37
Electric Vehicle and Alternative Fuel Infrastructure Deployment Initiative	Clean Transportation	22.08	10.23	21.66	53.97	-	-	-	-	-	53.97
Emerging Renewable Power Program (ERPP)	Renewable Energy	45.75	22.75	22.49	90.98	-	-	-	6.00	6.00	96.99
First Nation Adapt Program	Climate Change Adaptation	10.00	5.82	10.10	25.92	-	-	-	1.41	1.41	27.33
Food Waste Reduction Challenge	Circular Economy: Adapted Products, Production, Technologies, and Processes	0.29	1.88	2.89	5.05	-	-	-	1.94	1.94	7.00
Forest Innovation Program	Circular Economy: Adapted Products, Production, Technologies, and Processes	32.95	22.81	30.16	85.91	-	-	-	7.20	7.20	93.11
Green Construction through Wood (GCWood) Program	Circular Economy: Adapted Products, Production, Technologies, and Processes	6.46	6.68	10.86	24.00	-	-	-	2.91	2.91	26.91

Program	Category	2021-22 Allocation (\$ millions)				2022-23 Allocation (\$ millions)					Total
		2019-20	2020-21	2021-22	Total	2019-20	2020-21	2021-22	2022-23	Total	
Green Infrastructure - Electric Vehicles Infrastructure Demonstration Program	Clean Transportation	10.31	6.01	12.27	28.60	-	-	-	1.37	1.37	29.97
Green Infrastructure - Energy Efficient Buildings Research, Development and Demonstration (RD&D)	Energy Efficiency	5.25	3.95	8.14	17.34	-	-	-	1.20	1.20	18.55
Habitat Conservation and Protection	Living Natural Resources & Land Use	92.20	93.93	160.20	346.33	-	-	-	45.83	45.83	392.16
Incentives for Zero-Emission Vehicles Program	Clean Transportation	170.94	91.31	243.72	505.98	-	-	-	51.22	51.22	557.19
Indigenous Community-Based Climate Monitoring	Climate Change Adaptation	6.50	4.19	6.60	17.29	-	-	-	1.60	1.60	18.89
Investing in Canada Infrastructure Program - select Public Transit projects	Clean Transportation	10.80	127.43	266.78	405.01	-	-	0.02	50.75	50.77	455.78
Investments of Forest Industry Transformation Program	Circular Economy: Adapted Products, Production, Technologies, and Processes	18.47	13.75	49.26	81.48	-	-	-	20.38	20.38	101.86
Living Laboratories Initiative	Living Natural Resources & Land Use	4.36	3.96	6.03	14.35	-	-	-	1.40	1.40	15.75
Low Carbon Economy Fund	Pollution Prevention & Control	71.05	46.56	59.88	177.49	-0.18 A	0.18 B	9.18	7.27	16.45	193.94
Marine Conservation Targets	Terrestrial & Aquatic Biodiversity	4.30	2.50	36.40	43.20	-	-	-	22.73	22.73	65.93
Northern REACHE	Renewable Energy	4.80	3.57	12.10	20.47	-	-	-	7.28	7.28	27.74
Pacific Salmon Strategy Initiative	Terrestrial & Aquatic Biodiversity	-	-	15.40	15.40	-	-	-	13.75	13.75	29.15
Réseau express métropolitain (REM)	Clean Transportation	513.00	138.30	-	651.30	-	-	-	-	-	651.30

Program	Category	2021-22 Allocation (\$ millions)				2022-23 Allocation (\$ millions)					Total
		2019-20	2020-21	2021-22	Total	2019-20	2020-21	2021-22	2022-23	Total	
Smart Grid Program	Renewable Energy	25.87	13.46	17.91	57.24	-	-	-	2.94	2.94	60.18
Smart Renewables and Electrification Pathways Program (SREP)	Renewable Energy	-	-	103.83	103.83	-	-	-	65.36	65.36	169.19
Species at Risk	Terrestrial & Aquatic Biodiversity	39.80	33.61	76.60	150.01	-	-	-	24.51	24.51	174.52
Strategic Innovation Fund	Multiple	-	-	44.67	44.67	-	-	-11.55 C	47.45	35.89	80.56
Sustainable Development Technology Canada (SDTC) - SD Tech Fund	Multiple	131.49	105.47	91.23	328.19	-	-	-	29.48	29.48	357.67
Zero-Emission Buses Initiative	Clean Transportation	-	-	0.75	0.75	-	-	-0.01	7.04	7.03	7.79
Zero-Emission Vehicle Infrastructure Program	Clean Transportation	1.72	10.36	29.90	41.97	-	-	-	18.18	18.18	60.15
Total		1,526.55	969.70	1,796.48	4,292.73	-0.18	0.18	-2.40	702.16	699.77	4,992.50

Source: Eligible green expenditures identified by the Interdepartmental Green Bonds Committee (IGBC) that were allocated green bond proceeds. Calculations by Finance Canada.

Notes

A positive number indicates net positive allocation, while a negative number shows a net de-allocation.

"-" Indicates no allocation.

A: One of the projects allocated to under the Low Carbon Economy Fund in 2019-20 was unable to fulfill its commitments within the specified time frame and was cancelled, so its allocated amount was re-allocated.

B: New programs under the Low Carbon Economy Fund were determined to be eligible and allocated to.

C: One of the programs under the Strategic Innovation Fund was erroneously included in last year's allocation, so its allocated amount was re-allocated.

Numbers may not add due to rounding. Some figures in the 2022 Allocation have been updated from those in the Green Bond Allocation Report 2021-22 to reflect consistent rounding methodology

Annex B – Overview of Key Impacts

The table below provides an overview of the key environmental and social benefits to which programs contributed between 2019-20 and 2022-23.

It is not advisable to aggregate or roll-up the impacts across the various programs as they may overlap or interact with each other and other federal or provincial policies. For example, aggregating GHG emission reduction data could result in double counting and an overestimation of the amount of emissions reduced. Further, programs measure impacts using different metrics (e.g., annual emission reductions versus lifetime emission reductions) and baselines (e.g., year against which emissions are being measured) which limits the ability and accuracy of aggregating impacts across multiple programs.

Impact Indicator	Green Project Category	Program Reporting on Indicator	Impact
GHG emissions reduced/avoided, in tonnes of CO ₂ equivalent	Clean Transportation	Incentives for Zero-Emission Vehicles Program	0.4 Mt of GHG emission reductions annually and over 5.0 Mt over their lifetime from 2019-23.
		Réseau express métropolitain	0.1 Mt CO ₂ e in avoided emissions per year starting in 2023.
		Zero-Emission Buses Initiative	0.2 Mt CO ₂ e in avoided emissions per year starting in 2022.
	Living Natural Resources & Land Use	2 Billion Trees Program	Annually increasing GHG emissions reductions, reaching up to 2 Mt CO ₂ e per year. Projected long-term (2050) GHG emission reduction of 11-12 Mt CO ₂ e per year by 2050.
	Pollution Prevention & Control	Low Carbon Economy Fund	2.2 Mt annual reduction of CO ₂ e expected by 2030 (reduced + avoided).
	Multiple	Sustainable Development Technology Canada - SD Tech Fund	5.908 Mt of CO ₂ e reduced between 2019 and 2022.
Strategic Innovation Fund		11 Mt annual reduction of CO ₂ e expected by 2030 (reduced & avoided).	

Impact Indicator	Green Project Category	Program Reporting on Indicator	Impact
GHG emissions reduced/avoided, in tonnes of CO ₂ equivalent	Renewable Energy	Northern REACHE	0.0035 Mt of CO ₂ e emissions avoided (equivalent of 1.3 million litres of diesel avoided).
		Smart Renewables and Electrification Pathways Program	3.5 Mt of CO ₂ e in GHG emissions are expected to be avoided annually (when all projects are complete).
		Clean Energy for Rural and Remote Communities	0.11 Mt of CO ₂ e in GHG emissions expected to be avoided annually (when all projects are complete).
		ecoENERGY for Renewable Power	1.8 Mt CO ₂ e were reduced in 2019-20 and 2020-21 (proportionate to amount of green bonds allocated. The program contributed to the reduction of 5Mt in 2019-20 and 2020-21).
		Emerging Renewable Power Program	0.28 Mt CO ₂ e per year avoided (2019-20 to 2022-23).
		Smart Grid Program	0.02 Mt of CO ₂ e reduced (2019-20 to 2022-23).
	Energy Efficiency	Canada Greener Homes Grant Initiative	0.9 Mt GHG emission reductions achieved by households that completed an energy efficiency retrofit through the program between 2021-22.
Annual reduction in fossil fuel use	Energy Efficiency	Agricultural Clean Technology Program	In 2021-22 project proponents reduced fossil fuel use including: 892 tonnes of coal, 175,000 litres of diesel, 485,000 litres of propane and 252,000 m³ of natural gas.
Zero-Emission Vehicles deployed	Clean Transportation	Incentives for Zero-Emission Vehicles Program	121,000 light-duty vehicles incentivized.
		Zero-Emission Bus Initiative	Targeting the accelerated adoption of over 5,000 zero-emission buses .

Impact Indicator	Green Project Category	Program Reporting on Indicator	Impact
Zero-Emission Vehicle charging infrastructure or changing technologies developed	Clean Transportation	Green Infrastructure Program – Electric Vehicles Infrastructure Demonstrations	17 demonstrations completed of innovative solutions to technical challenges and other barriers for the deployment of electric vehicle charging infrastructure as of 2023.
		Electric Vehicle and Alternative Fuel Infrastructure Deployment Initiative	1,096 electric and 15 hydrogen selected stations ; 907 electric and 6 hydrogen stations were opened.
		Zero-Emission Vehicle Infrastructure Program	42,672 electric chargers and 14 hydrogen refuelling stations were selected for funding, with 9,284 electric chargers currently operational.
Number of trees planted	Living Natural Resources & Land Use	2 Billion Trees Program	110 million trees planted in 2021 and 2022.
Land or coastline improved, protected, stewarded, or conserved	Living Natural Resources & Land Use	Habitat Conservation and Protection	12,575,300 hectares of land secured in 2020-21 and 2021-22.
	Terrestrial & Aquatic Biodiversity	Species at Risk	860,000 hectares of land secured (2019-20 to 2021-22).
			370,000 hectares of land stewarded (2019-20 to 2021-22).
			1,100 km of shoreline stewarded (2019-20 to 2021-22).
		Marine Conservation Targets	84,282,100 hectares of marine and coastal areas conserved.
Number of species benefitted, including species at risk	Terrestrial & Aquatic Biodiversity	Species at Risk	315 species at risk expected to benefit from actions implemented (2019-20 to 2021-22).
Annual reduction in the use of fertilizers harmful to environment	Energy Efficiency	Agricultural Clean Technology Program	165 tonnes of inorganic nitrogen fertilizer reduced in 2021-22.

Impact Indicator	Green Project Category	Program Reporting on Indicator	Impact
Annual energy savings in MWh/GWh (electricity) and GJ/TJ (other energy savings)	Energy Efficiency	Canada Greener Homes Grant Initiative	1.06 PJ in total energy savings achieved by households that completed an energy efficiency retrofit through the program between 2021-22.
Buildings benefitted and protected	Energy Efficiency	Green Infrastructure Program - Energy Efficient Buildings RD&D	10 projects advancing research, development and demonstrations of innovative energy efficient buildings technologies pathways have been completed as of 2023.
		Canada Greener Homes Grant Initiative	2,366 homeowners completed an energy retrofit in 2021-22.
kWh/MWh of clean energy produced	Renewable Energy	Northern REACHE	1,224 kW of installed renewable energy capacity.
		Smart Renewables and Electrification Pathways Program	When all 69 approved projects are completed, this will result in 2,590 MW of new renewable energy capacity and 2,210 MWh of new storage capacity.
		Clean Energy for Rural and Remote Communities	Approximately 46.1 MW expected of new renewable energy, storage, and heating capacity.
		ecoENERGY for Renewable Power	Contributed to the installation of almost 4,460 MW of renewable power capacity.
		Emerging Renewable Power Program	23 MW of new renewable capacity have been installed, with another 10-15 MW in planned installations under development.

Impact Indicator	Green Project Category	Program Reporting on Indicator	Impact
Communities completed hazard mapping, risk assessments, or adaptation plans	Climate Change Adaptation	Indigenous Community-Based Climate Monitoring	72 new community-based climate monitoring projects funded since 2019.
		Climate Change Preparedness in North	142 new projects funded since 2019 including projects relating to the development of hazard maps and adaptation plans and the development of adaption options.
		First Nation Adapt Program	103 projects funded to assess climate change impacts on infrastructure and disaster risk reduction.
Number of jobs created	Pollution Prevention & Control	Low Carbon Economy Fund	13,300 cumulative estimated full-time-equivalent jobs created by the implementation of projects by 2024.
	Living Natural Resources & Land Use	Habitat Conservation and Protection	347 full-time jobs and 208 part-time jobs created for Indigenous peoples, as of 2022-23.
	Renewable Energy	Smart Renewables and Electrification Pathways Program	Projects supported via the Program are expected to create around 34,000 job years in total.
	Clean Transportation	Réseau express métropolitain	Approximately 34,000 jobs expected to be created during construction phase of the overall REM project.
		Zero-Emission Buses Initiative	Over 20,000 jobs expected to be created.
	Circular economy: adapted products, production, technologies and processes	Investments in Forest Industry Transformation Program	Around 280 jobs expected to be created and/or maintained through projects signed in 2022-23.

Impact Indicator	Green Project Category	Program Reporting on Indicator	Impact	
Benefits to underrepresented groups	Multiple	Sustainable Development Technology Canada - SD Tech Fund	30 per cent of firms approved for funding under the SD Tech Fund in 2022-23 are led by women.	
	Circular Economy: Adapted Products, Production, Technologies, and Processes	Forest Innovation Program	90 scholarships distributed to post-secondary students in 2020-23 studying forest-sector related topics and identifying as being from underrepresented groups.	
	Sustainable Water & Wastewater Management	Capital Facilities and Maintenance Program – Wastewater	59.8 per cent of wastewater systems in First Nation communities produced treated water that met regulated requirements in 2021-22.	
	Pollution Prevention & Control	Capital Facilities and Maintenance Program - Solid Waste Management	40.5 per cent of First Nation communities have adequate solid waste management systems as of March 2023. 75 per cent of First Nations communities have undertaken solid waste management improvement projects as of March 2023.	
	Climate Change Adaptation	Indigenous Community-Based Climate Monitoring		72 new Indigenous led projects funded since 2019 to support Indigenous Peoples in the design, implementation, or expansion of community-based climate monitoring projects.
		Climate Change Preparedness in North		142 new projects funded since 2019 to support to Indigenous and northern communities and organizations to help adapt to climate change impacts.
		Capital Facilities and Maintenance Program - Structural Mitigation		120 projects structural mitigation projects underway or completed in First Nation communities between 2019-23.
		First Nation Adapt		103 projects funded for First Nation communities on-reserve to assess climate change impacts on infrastructure and disaster risk reduction.

Impact Indicator	Green Project Category	Program Reporting on Indicator	Impact
Benefits to underrepresented groups	Renewable Energy	Capital Facilities and Maintenance Program – Energy	28 efficiency or clean energy related projects completed in First Nation communities between 2019-20 and 2022-23.
		Clean Energy for Rural and Remote Communities	90 per cent of the Program's funded projects are Indigenous led as of August 2023.
		Emerging Renewable Power Program	Supporting Canada's first 100 per cent Indigenous-owned geothermal project, which has created 4 local positions for Indigenous employees.
Structural and/or natural assets with an improved structural capacity to adapt to climate change, disasters, and weather	Climate Change Adaptation	Disaster Mitigation and Adaptation Fund	115 projects to improve public infrastructure's resilience and adaptation measures to natural disasters approved as of March 2023.
		Capital Facilities and Maintenance Program - Structural Mitigation	120 projects structural mitigation projects and adaptation projects underway or completed between 2019-23.
		Climate Change Preparedness in North	142 new projects funded since 2019 including projects relating to the implementation of non-structural and structural adaptation measures.
Wastewater systems meeting government requirements	Sustainable Water & Wastewater Management	Capital Facilities and Maintenance Program – Wastewater	59.8 per cent of wastewater systems produced treated water that met regulated requirements in 2021-22.
Increase in materials that are reusable, recyclable, and/or certified	Circular Economy: Adapted Products, Production, Technologies, and Processes	Green Construction through Wood Program	Demonstration of four tall wood and ten low-rise non-residential buildings, and two mass timber bridge projects completed or currently underway.
Increase of waste that is prevented, minimized, reused, or recycled	Circular Economy: Adapted Products, Production, Technologies, and Processes	Food Waste Reduction Challenge	5.2 million kg in volume of waste prevented, minimized or recycled from July 2022 and April 2023.
Communities undertaking solid waste management improvement projects	Pollution Prevention & Control	Capital Facilities and Maintenance Program - Solid Waste Management	75 per cent of First Nations communities have undertaken solid waste management improvement projects as of March 2023.

Impact Indicator	Green Project Category	Program Reporting on Indicator	Impact
New standards or codes developed as best practices within an industry	Renewable Energy	Clean Fuels Fund Program	The development of at least 24 new or revised codes of standards by the end of 2026.
	Circular Economy: Adapted Products, Production, Technologies, and Processes	Forest Innovation Program	6 codes and standards were developed in 2020-23 to determine environmental credentials of key low-carbon products.

Source: Eligible green expenditures identified by the Interdepartmental Green Bonds Committee (IGBC) that were allocated green bond proceeds.