

Second-Party Opinion

Government of Canada Green Bond Framework



Evaluation Summary

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. This assessment is based on the following:



USE OF PROCEEDS The eligible categories for the use of proceeds – Clean Transportation; Living Natural Resources & Land Use; Energy Efficiency; Terrestrial & Aquatic Biodiversity; Clean Energy; Climate Change Adaptation; Sustainable Water & Wastewater Management; Circular Economy Adapted Products, Production, Technologies and Processes; Pollution Prevention & Control – are aligned with those recognized by the Green Bond Principles. Sustainalytics considers that investments in the eligible categories will lead to positive environmental impacts and advance the UN Sustainable Development Goals, specifically SDGs 6, 7, 9, 11, 12, 13, 14 and 15.



PROJECT EVALUATION AND SELECTION The Government of Canada's Interdepartmental Green Bonds Committee will be responsible for identifying and evaluating eligible projects to be financed under the Framework. Canada has processes in place to identify and mitigate common environmental and social risks associated with the eligible projects. Sustainalytics considers this process to be in line with market practice.



MANAGEMENT OF PROCEEDS The Department of Finance will oversee the allocation and ongoing monitoring of proceeds under the Framework via a virtual register. Canada intends to achieve full allocation of bond proceeds within two fiscal years following the fiscal year of each issuance. Pending full allocation, proceeds will be managed according to the Government's cash management policy outlined in the Funds Management Governance Framework. This is in line with market practice.



REPORTING The Government of Canada intends to report on allocation and impact of proceeds annually until full allocation on its website. Allocation reporting may include a breakdown of proceeds according to project category and type of expenditure, and the amount of unallocated proceeds. In addition, Canada is committed to reporting on relevant impact metrics. Sustainalytics views the allocation and impact reporting as aligned with market practice.

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Issuer Location	Ottawa, Canada

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¹ This document updates the Second-Party Opinion originally provided by Sustainalytics in February 2022.

Introduction

Canada is the second largest country in the world by area,² spanning more than 9.98 million km². As of 2022, the country had a population of 38.1 million and reported GDP of USD 2.14 trillion.³

The Government of Canada (the “Government” or the “Issuer”) has developed the Government of Canada Green Bond Framework dated November 2023 (the “Framework”) under which it intends to issue green bonds and use the proceeds to finance and/or refinance, in whole or in part, existing and/or future government expenditures including transfer payments (such as grants and contributions), loans, subsidies, fiscal measures (such as tax credits and tax expenditures), R&D expenditures, and capital and operational expenditures for federal government purposes and/or extended to departments, agencies and select Crown corporations.⁴ Eligible projects are expected to facilitate the transition to a low-carbon economy and contribute to the climate-related, biodiversity protection and environmental goals set out by the Government.

The Framework defines eligibility criteria in nine areas:

1. Clean Transportation
2. Living Natural Resources and Land Use
3. Energy Efficiency
4. Terrestrial and Aquatic Biodiversity
5. Clean Energy
6. Climate Change Adaptation
7. Sustainable Water and Wastewater Management
8. Circular Economy Adapted Products, Production, Technologies and Processes
9. Pollution Prevention and Control

The Issuer engaged Sustainalytics to review the Government of Canada Green Bond Framework and provide a second-party opinion on the Framework’s environmental credentials and its alignment with the Green Bond Principles 2021 (GBP).⁵ The Framework will be published in a separate document.⁶

Scope of work and limitations of Sustainalytics’ Second-Party Opinion

Sustainalytics’ Second-Party Opinion reflects Sustainalytics’ independent⁷ opinion on the alignment of the reviewed Framework with the current market standards and the extent to which the eligible project categories are credible and impactful.

As part of the Second-Party Opinion, Sustainalytics assessed the following:

- The Framework’s alignment with the Green Bond Principles 2021, as administered by the International Capital Market Association (ICMA);
- The credibility and anticipated positive impacts of the use of proceeds; and
- The alignment of the Issuer’s sustainability strategy and performance and sustainability risk management in relation to the use of proceeds.

For the use of proceeds assessment, Sustainalytics relied on its internal taxonomy, version 1.14, which is informed by market practice and Sustainalytics’ expertise as an ESG research provider.

As part of this engagement, Sustainalytics held conversations with various members of the Government of Canada to understand the sustainability impact of its processes and planned use of proceeds, as well as management of proceeds and reporting aspects of the Framework. The Issuer’s representatives have confirmed (1) they understand it is the sole responsibility of the Issuer to ensure that the information provided is complete, accurate and up to date; (2) that they have provided Sustainalytics with all relevant information; and (3) that any provided material information has been duly disclosed in a timely manner. Sustainalytics also reviewed relevant public documents and non-public information.

² Britannica, “List of the world’s countries, dependencies, and territories by total area”, at: <https://www.britannica.com/topic/list-of-the-total-areas-of-the-worlds-countries-dependencies-and-territories-2130540>

³ The World Bank, “Canada”, at: <https://data.worldbank.org/country/canada>

⁴ Sustainalytics has reviewed just those financial instruments that are specified in the Framework.

⁵ The Green Bond Principles are administered by the International Capital Market Association and are available at <https://www.icmagroup.org/green-social-and-sustainability-bonds/green-bond-principles-gbp/>.

⁶ The Government of Canada Green Bond Framework is available at: <https://www.canada.ca/en/department-finance/programs/financial-sector-policy/securities/debt-program/canadas-green-bond-program.html>

⁷ When operating multiple lines of business that serve a variety of client types, objective research is a cornerstone of Sustainalytics and ensuring analyst independence is paramount to producing objective, actionable research. Sustainalytics has therefore put in place a robust conflict management framework that specifically addresses the need for analyst independence, consistency of process, structural separation of commercial and research (and engagement) teams, data protection and systems separation. Last but not the least, analyst compensation is not directly tied to specific commercial outcomes. One of Sustainalytics’ hallmarks is integrity, another is transparency.

This document contains Sustainalytics' opinion of the Framework and should be read in conjunction with that Framework.

Any update of the present Second-Party Opinion will be conducted according to the agreed engagement conditions between Sustainalytics and the Government of Canada.

Sustainalytics' Second-Party Opinion, while reflecting on the alignment of the Framework with market standards, is no guarantee of alignment nor warrants any alignment with future versions of relevant market standards. Furthermore, Sustainalytics' Second-Party Opinion addresses the anticipated impacts of eligible projects expected to be financed with bond proceeds but does not measure the actual impact. The measurement and reporting of the impact achieved through projects financed under the Framework is the responsibility of the Framework owner. Upon twenty-four (24) months following the evaluation date herein, Canada is encouraged to update the Framework, if necessary, and seek an update to the Second-Party Opinion to ensure ongoing alignment of the Framework with market standards and expectations.

In addition, the Second-Party Opinion opines on the potential allocation of proceeds but does not guarantee the realized allocation of the bond proceeds towards eligible activities.

No information provided by Sustainalytics under the present Second-Party Opinion shall be considered as being a statement, representation, warrant or argument, either in favour or against, the truthfulness, reliability or completeness of any facts or statements and related surrounding circumstances that the Issuer has made available to Sustainalytics for the purpose of this Second-Party Opinion.

Sustainalytics' Opinion

Section 1: Sustainalytics' Opinion on the Government of Canada Green Bond Framework

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 GBP. Sustainalytics highlights the following elements of the Framework:

- Use of Proceeds:
 - The eligible categories – Clean Transportation; Living Natural Resources & Land Use; Energy Efficiency; Terrestrial & Aquatic Biodiversity; Clean Energy; Climate Change Adaptation; Sustainable Water & Wastewater Management; Circular Economy Adapted Products, Production, Technologies and Processes; Pollution Prevention & Control – are aligned with those recognized by the GBP.⁸
 - The Government of Canada has defined a look-back period of 24 months for refinancing activities and 36 months for fiscal measures, such as tax credits and expenditures. Sustainalytics considers this to be in line with market practice.
 - In the Clean Transportation category, the Government may finance expenditures to support low-carbon mobility, including the following:
 - Financing the development and deployment of zero-emission vehicles and low-emission vehicles with emissions intensity below 50 gCO₂/km for passenger vehicles and 50 gCO₂/pkm for public transit vehicles; and
 - Financing projects supporting upgraded transportation infrastructure including public transit, rail, charging stations and active transportation that promote a shift to lower emission modes of transportation.
 - Example expenditures could include programmes to finance charging and refuelling stations for zero-emission vehicles as well as incentive programmes for Canadian residents and businesses to purchase or lease zero-emission vehicles. The Government confirms that only vehicles meeting the specified emissions thresholds will be supported via green bond proceeds across applicable vehicle incentive programmes.
 - Sustainalytics notes that financing zero-emission projects, as well as vehicles operating below the emission thresholds specified above, is considered aligned with market practice.
 - Under the Living Natural Resources & Land Use category, the Framework contemplates projects which support reforestation and afforestation; conservation or restoration of

⁸ Sustainalytics has reviewed just those activities and associated examples that are specified in the Framework.

natural areas; climate smart farming and agriculture; and projects to reduce the negative environmental impacts of fisheries, aquaculture and forestry.

- Investments related to restoration and agriculture include activities such as improving nitrogen management, and soil conservation and health improvement practices such as cover cropping that stores carbon in agricultural land. Financed projects may support the restoration of wetlands, peatlands, and grasslands through land management activities, including initiatives that are part of the Nature Smart Climate Solutions Fund. Sustainalytics notes that allocating proceeds to industrial-scale livestock production is not aligned with what Sustainalytics believes to be suitable for green finance.
 - Forestry projects will include financing afforestation and reforestation activities and may include those under the 2 Billion Trees programme, which is aimed at supporting new tree planting projects across Canada. Sustainalytics recognizes that the programme does not require certification by third-party schemes and notes that there are eligibility guidelines to maintain the ecological diversity of existing ecosystems. In addition, the Government of Canada has communicated to Sustainalytics that, for such projects, tree species will be well adapted to the local site conditions. Furthermore, all projects are required to comply with provincial, territorial and federal laws that have authority over the management of most forested land in their respective jurisdictions. In view of these measures, Sustainalytics considers the financing of these projects to be in line with market expectations.
 - Regarding aquaculture and fisheries, the Issuer has communicated that financed projects will focus on conservation as opposed to resource exploitation. This may include research and development expenditures for capacity building on techniques and aquaculture management; financing technology to minimize the environmental impact of harvesting as well as regulatory development to improve management practices. Sustainalytics recognizes that various programmes, plans and initiatives of the Government of Canada have robust methods of measuring and evaluating success.
- Under the Energy Efficiency category, the Government contemplates investments in a range of projects, components and technologies aimed at promoting energy efficiency in buildings and fuel switching.
- Example technologies may include the installation of ground or air-source electric heat pumps, building insulation, air-sealing as well as heat metering and thermostatic controls such as smart thermostats. Sustainalytics notes that heat pumps with high-GWP refrigerants may be financed under the Framework. The Issuer has communicated to Sustainalytics its expectation regarding the adoption of heat pumps with low-GWP refrigerants as regulations become more stringent and as the availability of low-GWP refrigerants increases.⁹ Sustainalytics recognizes the Government of Canada's intent to transition toward low-GWP refrigerants while noting that it considers the promotion of robust refrigerant leak control, detection and monitoring, in conjunction with the recovery, reclamation, recycling or destruction of refrigerants at end of life as best practice for the management of refrigerants.
 - As part of this category, the Government of Canada may also finance building retrofits and new buildings. Sustainalytics notes that market practice for retrofit projects is for them to achieve a minimum 30% energy efficiency improvement over the pre-improvement baseline. For new buildings, the Government of Canada has communicated to Sustainalytics that it will finance buildings that are designed to be net-zero carbon, or, in northern or remote communities, buildings built to the next highest applicable standard. Sustainalytics considers the absence of an energy efficiency improvement target for retrofit projects and the exemption offered for new buildings in northern or remote communities to be a deviation from market practice for green finance. Sustainalytics additionally acknowledges the logistical constraints of building in such communities and also recognizes the social and environmental benefits of improving the availability and condition of community buildings that will be subject to this exemption under the Green and Inclusive Community Buildings Program.

⁹ Government of Canada, "Regulatory amendments on hydrofluorocarbons: frequently asked questions", at: <https://www.canada.ca/en/environment-climate-change/services/canadian-environmental-protection-act-registry/ozone-regulations-amendments-questions.html>

- For the Terrestrial & Aquatic Biodiversity category, the Framework contemplates investments to support the protection and restoration of terrestrial and marine ecosystems.
 - Expenditures may include the Canada Nature Fund, which supports the protection of Canada's biodiversity through the creation of protected and conserved areas for species at risk. Sustainalytics recognizes the importance of such ecosystems and their biodiversity, and views such expenditures as aligned with market expectations.
- Clean Energy expenditures under the Framework may include financing and refinancing the development, deployment and distribution of clean energy projects including from solar, wind, hydropower projects, geothermal, hydrogen, marine, clean fuels, bioenergy sources and nuclear.
 - Hydropower projects contemplated under the Framework will meet specified thresholds, including:
 - Projects will have a power density higher than 5 W/m² or life cycle emissions below 100 gCO₂e/kWh if operational prior to 2020. Projects becoming operational after 2020 will have a power density higher than 10 W/m² or life cycle emissions below 50 gCO₂e/kWh.
 - In addition, the Framework specifies that all hydropower projects will be required to undertake assessments of environmental and social risks with no controversies identified.
 - For refurbishments that increase the capacity of the projects, the Government of Canada will require that these meet the above-mentioned emissions thresholds and that new assessments of social and environmental risks be carried out prior to being eligible for green bond proceeds.
 - Based on the thresholds specified as well as the environmental and social impact assessments to be undertaken, Sustainalytics considers investments in hydropower under the Framework to be aligned with market expectations.
 - Geothermal projects will be limited to those with direct emissions below 100 gCO₂/kWh, which is in line with market practice.
 - For hydrogen, the Framework specifies a threshold carbon intensity of 36.4 gCO₂e/MJ, which is approximately 60% below the carbon intensity of hydrogen produced from natural gas.¹⁰ Sustainalytics acknowledges the establishment of a threshold¹¹ while noting that this threshold leaves open the possibility of hydrogen production using fossil fuels employing carbon capture and storage, commonly referred to as "blue hydrogen". The Government of Canada has communicated to Sustainalytics that the captured carbon dioxide will be stored permanently. Sustainalytics recognizes that blue hydrogen can play a role in scaling up hydrogen production while also noting that the deep decarbonization of hydrogen production will require a shift away from reliance on fossil fuels. Sustainalytics therefore encourages the Government of Canada to help facilitate this shift and to favour projects involving the production of "green hydrogen", i.e., production that relies only on renewable energy sources.
 - As part of marine renewables, the Government may finance and refinance generation projects powered by offshore wind, tidal, and wave energy. Sustainalytics considers activities that increase renewable energy capacity as aligned with market expectation.
 - Investments in clean fuels relate to R&D and manufacturing of advanced biofuels sourced from various types of non-food biomass. The Government of Canada intends to support projects aiming to develop cellulosic ethanol, synthetic fuels, renewable diesel and sustainable aviation fuels as well as gaseous fuels such as blue or green hydrogen and green ammonia.
 - Eligible feedstocks may include forestry and agricultural residues, non-recyclable municipal solid waste and non-fossil fuel-based waste oils. The Issuer has communicated that it will not finance projects using waste from non-RSPO certified palm oil operations. Sustainalytics views positively the development of second-generation biofuels that rely on

¹⁰ Certify, "What is Certify?", at: https://www.certify.eu/wp-content/uploads/2021/10/CertifHy_folder_leaflets.pdf.

¹¹ Natural Resources Canada, "HYDROGEN STRATEGY FOR CANADA: Seizing the Opportunities for Hydrogen", (2020) at: https://www.nrcan.gc.ca/sites/www.nrcan.gc.ca/files/environment/hydrogen/NRCan_Hydrogen-Strategy-Canada-na-en-v3.pdf

- waste feedstock and do not compete with food production or consumption.
- Sustainalytics encourages the Issuer to support projects which prioritize forestry and agricultural residues over livestock residues due to the carbon, land and water footprint typically associated with livestock operations.
 - Sustainalytics notes that the Government has indicated that it does not intend to allocate proceeds towards projects that support the conversion of plastic to fuel.
- Bioenergy projects contemplated under the Framework will rely on forestry and agricultural waste sources as feedstock with an exclusion of waste tallow, on a best effort basis. Sustainalytics considers the use of waste for energy generation as aligned with market practice and views positively activities that divert waste from landfills.
 - In the area of nuclear energy, the Government of Canada has communicated to Sustainalytics that it intends to finance: i) the deployment of new facilities for nuclear heat or electricity generation; ii) the refurbishment, upgrade, operation or maintenance of existing nuclear energy generation facilities, including the expenditures associated with the procurement of nuclear fuel, the production and recycling of heavy water, and the R&D expenditures for nuclear fuel reprocessing; and iii) R&D of advanced technologies for nuclear power generation and management or storage of radioactive waste.
 - Sustainalytics recognizes the benefits of nuclear energy as a low-carbon source of electricity and its potential role in the decarbonization of electricity production. Sustainalytics also recognizes that there are substantial risks associated with nuclear energy, including, most notably, the management and long-term disposal of radioactive waste. The management of such risks requires: i) effective governance of nuclear energy generation, including a formal governing body and regulations that address, among other areas, site selection, operational safety, radioactive waste management and decommissioning, as well as effective monitoring and enforcement of such regulations; and ii) evidence of the pursuit of viable options for the secure, long-term storage of high-level radioactive waste. All nuclear energy-related expenditures financed under the Framework will be made in Canada which, in Sustainalytics' opinion, has adequate governance and regulations to address these risks. (For additional discussion of relevant risks and the management of them, see Section 2). With regard to R&D expenditures related to nuclear energy, Sustainalytics notes that the achievement of intended outcomes of certain R&D projects, such as nuclear fusion projects, remains uncertain. Sustainalytics nonetheless recognizes their potential to further the development of nuclear energy as a low-carbon source of energy and to lessen some of the risks associated with it.
 - The Government of Canada also intends to finance grid modernization projects, including investments in supporting assets dedicated to clean energy, such as transmission and distribution infrastructure, demand management solutions, micro-grids and virtual power plants.¹² Sustainalytics views positively investments that are designed to improve grid efficiency and encourages the Government of Canada to select projects that are clearly anticipated to deliver tangible benefits.
 - The Government of Canada may also finance the Enabling Small Modular Reactors Program, which entails R&D initiatives related to the development and deployment of SMRs in Canada. The Government of Canada has communicated to Sustainalytics that it would allocate proceeds only to those R&D projects under the programme that align with the criteria defined above for nuclear energy.
- For investments under the Climate Change Adaptation category, the Government of Canada may finance measures for climate resiliency and monitoring, such as through the Disaster Mitigation and Adaptation Fund.

¹² Virtual power plants relate to hardware and software upgrades and/or retrofits to infrastructure for grid monitoring and automation. Natural Resources Canada, "Smart Renewables and Electrification Pathways Program (SREPs)", at: https://www.nrcan.gc.ca/sites/nrcan/files/energy/pdf/NRCan%20ENG%20Final%20-%20SREPs%20Applicant%20Guide_accessible_E_final.pdf

- The Framework cites specific climate risks, including flooding, wildfires, and drought. Climate risk mitigation projects financed under the Disaster Mitigation and Adaptation Fund are required to be accompanied by hazard risk and vulnerability assessments as well as adaptation plans or strategies. In addition, the Government of Canada has published requirements for such infrastructure projects built under certain national programmes – Climate Lens – which include vulnerability assessment and associated adaptation measures.
 - Expenditures for improved climate monitoring and assessment are viewed as aligned with market practice.
- Under the category of Sustainable Water & Wastewater Management, the Government of Canada may finance initiatives supporting the treatment and management of water or wastewater. Sustainalytics generally considers these activities to be aligned with market expectations, noting the wide variety of activities which may be undertaken under this criterion.
 - Expenditures may include infrastructure investments in treatment plants, sewer systems and stormwater management projects under, for example, the Investing in Canada Infrastructure Program.¹³
 - Sustainalytics notes that the Framework’s overarching exclusionary criteria apply to this category and activities will not include the treatment of water from fossil fuel extraction and processing. This is aligned with market practice.
- In the category of Circular Economy Adapted Products, Production, Technologies and Processes, the Framework considers expenditures related to extending the life span of products and ensuring proper end-of-life recycling and reuse.
 - As part of this category, proceeds may be directed, for example, towards various forest programmes which focus on R&D to facilitate the reuse of wood-based products as well as to support the development of biochemicals and biomaterials. Recycling of many materials and products, including forest products such as pulp and paper, is viewed as aligned with market expectations.
 - The Framework defines “value retention” as including reuse, repair, refurbishment, remanufacturing and repurposing. The adaptive reuse of materials and components may result in extended lifespans and therefore deliver environmental benefits by avoiding the need to manufacture new items. Noting the Framework’s overall exclusion on activities which support the production of fossil fuels, Sustainalytics considers these projects to be aligned with market expectation.
- In the category of Pollution Prevention & Control, the Government of Canada may finance activities related to pollution mitigation, GHG mitigation and waste management.
 - The Issuer has communicated to Sustainalytics that it will exclude financing to projects that support fossil fuel operations or fossil fuel-powered assets or technologies under this category. Sustainalytics views efforts to reduce non-GHG pollutants to be aligned with market practice.
 - Sustainalytics views financing the purchase, installation, maintenance and R&D expenditures related to carbon capture and storage (CCS) technology specifically for companies involved in hard-to-abate activities (excluding fossil fuel production) as transition expenditures. While recognizing the potential benefits of CCS, Sustainalytics notes that the Framework does not include criteria that address the end use of captured carbon, carbon capture rate and the expected performance of the activities to which CCS will be applied, creating risk of misalignment with relevant decarbonization trajectories as well as risk of lock-in of carbon-intensive assets.¹⁴ Sustainalytics further notes that assurance of the credible transition of these activities lies with the entities carrying out the activity and therefore encourages the Issuer to have clear processes in place to engage with recipients of such support to ensure that they have a credible transition strategy and pathway in place that promotes either permanent storage or long-term sequestration of captured carbon.
 - Waste management activities financed may include prevention, reduction, and recycling. Sustainalytics views the financing of waste prevention and recycling programmes to be aligned with market expectations. The Government of Canada has communicated to Sustainalytics that it may finance landfilling which will only be considered in northern and remote communities to improve waste

¹³ Government of Canada, “Investing in Canada Infrastructure Program”, at: <https://www.infrastructure.gc.ca/plan/icp-pic-INFC-eng.html>

¹⁴ Transition Pathway Initiative, “TPI tool”, at: <https://www.transitionpathwayinitiative.org/sectors>

management practices in those communities. Notwithstanding potential improvements in waste management, Sustainalytics views the allocation of green bond proceeds to conventional waste collection and engineered landfills in northern and remote communities as a deviation from market expectations.

- The Government specifies Framework-level exclusionary criteria which include the following areas: fossil fuel transportation, exploration and production; arms manufacturing; gambling; manufacture and production of tobacco and alcoholic beverages. Sustainalytics is of the opinion that these exclusions strengthen the Framework.
- Project Evaluation and Selection:
 - The Government of Canada has established an Interdepartmental Green Bonds Committee (the "IGBC" or the "Committee") which will be responsible for identifying and evaluating eligible projects ("Eligible Green Expenditures") to be financed under the Framework. The IGBC comprises representatives across various departments and is co-chaired by the Department of Finance and Environment and Climate Change Canada. The Committee intends to review the allocations made to all green bonds on an annual basis to determine any necessary changes. The Department of Finance will be responsible for making the final allocation decision.
 - The Government of Canada has processes in place to identify and mitigate common environmental and social risks potentially associated with the eligible projects. Policy, plan and programme proposals that are submitted to a ministry or cabinet are subject to strategic environmental assessment requirements as per Canada's Cabinet Directive on the Environmental Assessment of Policy, Plan and Program Proposals to identify the likely environmental effects and develop mitigation strategies to reduce or eliminate adverse effects. Such policies and programmes are also informed by gender and diversity analysis (including through Gender-based Analysis Plus) to ensure that decisions are undertaken with an understanding of how diverse groups of Canadians would be affected and that initiatives are responsive to Canada's long-term sustainable and inclusive growth. Identity factors considered could include gender, age, sexual orientation, disability, education, language, geography, culture and income, amongst others. Refer to Section 2 for more details on the environmental and social risk management processes adopted by the Government of Canada.
 - Based on the presence of a dedicated committee with cross-functional expertise and the presence of environmental and social risk management systems, Sustainalytics considers this process to be in line with market practice.
- Management of Proceeds:
 - The Department of Finance will oversee the allocation and annual tracking of net proceeds under the Framework via a virtual register.
 - Proceeds will be deposited in the Government of Canada's general purpose revenue account, the Consolidated Revenue Fund, and will accordingly be comingled with funds from other sources. The Government of Canada has communicated to Sustainalytics that the requisition and expenditure of proceeds from the Consolidated Revenue Fund are subject to the approval of the Parliament of Canada.
 - Finance Canada intends to allocate at least 50% of any green bond net proceeds to expenditures related to the fiscal year of issuance or future fiscal years, subject to expenditure availability, target issuance size and other considerations. The Government of Canada has communicated to Sustainalytics that it intends to fully allocate bond proceeds within two fiscal years following the fiscal year of each issuance. Pending full allocation, net proceeds will be managed in accordance with the Government's cash management policy outlined in the Funds Management Governance Framework.
 - Based on the established process for monitoring and disclosure around temporary use of proceeds, Sustainalytics considers this process to be in line with market practice.
- Reporting:
 - The Government of Canada intends to report on allocation and impact of proceeds annually until full allocation on its website. Allocation reporting will include the breakdown of proceeds according to project category and type of expenditure and the amount of unallocated proceeds. Furthermore, the Issuer intends to engage a third-party to provide verification on the allocation of proceeds.
 - In addition, the Issuer is committed to reporting on relevant impact metrics per category. Example metrics could include: the number of clean vehicles deployed, annual greenhouse gas (GHG) emissions avoided or reduced (in tCO₂e), annual energy savings (in MWh or

- GWh), clean energy generated (in MWh or kWh), number of conservation areas developed, and annual volume of water managed or saved.
- Based on the commitment to both impact and allocation reporting, Sustainalytics considers this process to be in line with market practice.

Alignment with Green Bond Principles 2021

Sustainalytics has determined that the Government of Canada Green Bond Framework aligns with the four core components of the GBP. For detailed information please refer to Appendix 1: Green Bond/Green Bond Programme External Review Form.

Section 2: Sustainability Strategy of the Government of Canada

Contribution of the Framework to Canada's sustainability strategy

On 9 December 2016, Canada's First Ministers adopted the Pan-Canadian Framework on Clean Growth and Climate Change¹⁵ (PCF), the country's first national climate change plan, developed with provinces and territories, and in consultation with Indigenous peoples. The PCF outlines how Canada will achieve its Paris Agreement target and is built on four main pillars: i) pricing carbon pollution; ii) complementary measures to further reduce emissions; iii) measures to adapt to the impacts of climate change and build resilience; and iv) actions to accelerate innovation, support clean technology and create jobs.¹⁶

From 2017-2019 Canada conducted a national assessment of the impacts of climate change and produced *Canada's Changing Climate Report*,¹⁷ the first of a series to be released as part of *Canada in a Changing Climate: Advancing our Knowledge for Action (2019-2021)*. Furthermore, the annual Synthesis Report¹⁸ on the Status of the Implementation of the PCF is published online annually to summarize the progress made by all levels of government. The third annual Synthesis Report highlighted continued commitment in 2019 to develop new climate change resilience initiatives.

In December 2020, Canada released *A Healthy Environment and a Healthy Economy*¹⁹ – the country's strengthened climate plan, which builds on the PCF. It includes approximately 60 strengthened and new federal policies and programmes centred on the following five pillars: i) making the places Canadians live and gather more affordable by cutting energy waste; ii) making clean, affordable transportation and power available in every community; iii) continuing to ensure that pollution isn't free and households get more money back; iv) building Canada's clean industrial advantage, including support for the development/adoption of clean technologies and the decarbonization of heavy industry; and v) embracing the power of nature to support healthier families and more resilient communities.

In June 2021, the *Canadian Net-Zero Emissions Accountability Act*²⁰ received royal assent, formalizing Canada's target to achieve net zero emissions by 2050, including establishing a process to set interim emissions reduction targets at five-year intervals. Similarly, in 2022, the Government of Canada released its *2030 Emissions Reduction Plan: Canada's Next Steps for Clean Air and a Strong Economy*, which outlines Canada's goal to achieve 40-45% emissions reduction by 2030 from a 2005 baseline.²¹ Additionally, according to the Canada Energy Regulator's long-term energy outlook for the Global and Canada Net-zero scenarios, SMRs have the potential to make up 12% of Canada's total electricity generation by 2050.²² As part of the strengthened climate plan and along with growing climate change impacts across the country, in June 2023, the Government of Canada developed Canada's first National Adaptation Strategy based on four guiding principles: i) respecting jurisdictions and upholding Indigenous Peoples' rights; ii) climate and environmental justice; iii) taking proactive measures to reduce climate impact; and iv) enhancing positive benefits to people, business and environment while identifying and avoiding negative impacts.²³ More broadly, the Government of Canada recognizes Indigenous Peoples as key partners and stewards

¹⁵ Government of Canada, "The Pan-Canadian Framework on Clean Growth and Climate Change", (2016), at: https://publications.gc.ca/collections/collection_2017/eccc/En4-294-2016-eng.pdf

¹⁶ Ibid.

¹⁷ Government of Canada, "Canada's Changing Climate Report", (2019), at: <https://changingclimate.ca/CCCR2019/>

¹⁸ Government of Canada, "Annual synthesis report on the status of implementation of the Pan-Canadian Framework on Clean Growth and Climate Change", at: <https://publications.gc.ca/site/eng/9.847802/publication.html>

¹⁹ Government of Canada, "A Healthy Environment and a Healthy Economy", (2020), at: <https://www.canada.ca/en/services/environment/weather/climatechange/climate-plan/climate-plan-overview/healthy-environment-healthy-economy.html>

²⁰ Government of Canada, "Canadian Net-Zero Emissions Accountability Act", at: <https://www.canada.ca/en/services/environment/weather/climatechange/climate-plan/net-zero-emissions-2050/canadian-net-zero-emissions-accountability-act.html>

²¹ Government of Canada, "2030 Emissions Reduction Plan – Canada's Next Steps for Clean Air and a Strong Economy", at: <https://www.canada.ca/en/environment-climate-change/news/2022/03/2030-emissions-reduction-plan--canadas-next-steps-for-clean-air-and-a-strong-economy.html>

²² Government of Canada, "Canada's Energy Future 2023", at: <https://www.cer-rec.gc.ca/en/data-analysis/canada-energy-future/2023/canada-energy-futures-2023.pdf>

²³ Government of Canada, "Canada's National Adaptation Strategy: Building Resilient Communities and a Strong Economy", at: <https://www.canada.ca/en/services/environment/weather/climatechange/climate-plan/national-adaptation-strategy.html>

of natural resources, and demonstrates commitment to a “renewed, nation-to-nation, government-to-government, and Inuit-Crown relationship based on recognition of rights, respect, co-operation and partnership”.²⁴

In addition to progress in tracking and reducing GHG emissions over time, Canada has demonstrated efforts to protect and conserve nature. The Government of Canada has made significant investments in natural climate solutions, including committing to plant 2 billion trees by 2031 and has committed to protecting 25% of Canada’s lands and oceans by 2025, working towards 30% by 2030. To build awareness and capacity of nature-based solutions, federal, provincial and territorial governments have been working together under the Canadian Council of Ministers of the Environment and in 2018, among other initiatives, published *Best Practices and Resources on Climate Resilient Natural Infrastructure*.²⁵ Furthermore, Canada’s initiatives to protect the environment from pollution and waste include the *Chemicals Management Plan*,²⁶ the *Federal Leadership Towards Zero Plastic Waste in Canada initiative*²⁷ and the adoption of the *Oceans Plastics Charter*²⁸ as part of the *G7 Charlevoix Blueprint for Healthy Oceans, Seas and Resilient Coastal Communities*. In September 2021, Canada hosted the World Circular Economy Forum²⁹ and demonstrated a commitment to continue supporting the integration of circular economy solutions. Additionally, in December 2022, Canada hosted the United Nations Biodiversity Conference of the Parties (COP 15) and adopted the Kunming-Montreal Global Biodiversity Framework, which outlines measures to address biodiversity loss, ecosystems restoration and protection of Indigenous rights.³⁰

Sustainalytics is of the opinion that the Government of Canada Green Bond Framework is aligned with the *Canadian Net-Zero Emissions Accountability Act, A Healthy Environment and a Healthy Economy*, and efforts to adapt to climate change and protect the environment. The Framework has the potential to assist the country in financing projects which advance and support the above-referenced policy objectives and contribute to mitigating and adapting to climate change. Considering the above, Sustainalytics considers the Government of Canada to be well positioned to issue green bonds.

Approach to managing environmental and social risks associated with the projects

Sustainalytics recognizes that the net proceeds from the bonds issued under the Framework will be directed towards eligible projects that are expected to have a positive environmental impact. However, Sustainalytics is aware that such eligible projects could also lead to negative environmental and social outcomes. Some key environmental and social risks associated with the eligible green investments include: i) biodiversity impact from large-scale infrastructure development, such as clean energy facilities, or with natural resource management; ii) emissions, effluents and waste generated in construction; iii) management and long-term disposal of radioactive waste from nuclear projects; iv) Indigenous peoples’ rights and potential impact from land use on local communities; v) occupational health and safety; vi) administration of grant programmes; and vii) supply chain risks.

Sustainalytics is of the opinion that the Government of Canada is able to manage or mitigate potential risks through implementation of the following:

- The Issuer has communicated to Sustainalytics that all infrastructure projects financed under the Framework are required to abide by applicable legislation and regulations, such as those outlined in the *Canadian Environmental Protection Act, 1999* and the *Species at Risk Act*. The *Canadian Environmental Protection Act, 1999* (CEPA) is the primary federal law of a legal framework that seeks to achieve sustainable development in the country through measures intended to protect and restore the environment, protect ecosystems and promote enforceable pollution prevention approaches.³¹ Efforts under CEPA are complemented by other federal laws, such as the *Species at Risk Act* (SARA), which aims to protect wildlife species from extinction and conserve their biological diversity through measures that include species assessment

²⁴ Government of Canada, “Principles respecting the Government of Canada’s relationship with Indigenous peoples”, at: <https://www.justice.gc.ca/eng/csj-sjc/principles-principes.html>

²⁵ ICF for Canadian Council of Ministers of the Environment, “Best Practices and Resources on Climate Resilient Natural Infrastructure”, (2018), at: https://ccme.ca/en/res/natural_infrastructure_report_en.pdf

²⁶ Government of Canada, “Chemicals Management Plan”, at: <https://www.canada.ca/en/health-canada/services/chemical-substances/chemicals-management-plan.html>

²⁷ Government of Canada, “Federal Leadership Towards Zero Plastic Waste in Canada initiative”, at: <https://www.canada.ca/en/environment-climate-change/services/sustainable-development/strategic-environmental-assessment/public-statements/federal-leadership-towards-zero-plastic-waste.html>

²⁸ Government of Canada, “Ocean Plastics Charter”, at: <https://www.canada.ca/en/environment-climate-change/corporate/international-affairs/partnerships-organizations/ocean-plastics-charter.html>

²⁹ Government of Canada, “World Circular Economy Forum”, at: <https://www.canada.ca/en/services/environment/conservation/sustainability/circular-economy/world-forum-2021.html>

³⁰ Government of Canada, “Canada helps lead the world to agreement on the monumental Kunming-Montréal Global Biodiversity Framework”, (2022), at: <https://www.canada.ca/en/environment-climate-change/news/2022/12/canada-helps-lead-the-world-to-agreement-on-the-monumental-kunming-montreal-global-biodiversity-framework.html>

³¹ Government of Canada “Canadian Environmental Protection Act, 1999”, at: <https://www.canada.ca/en/environment-climate-change/services/canadian-environmental-protection-act-registry/publications/canadian-environmental-protection-act-1999.html>

processes and sanctions for offences.^{32,33} SARA is also part of a three-part strategy of the Government of Canada that also includes commitments under the Accord for the Protection of Species at Risk and the Habitat Stewardship Program for Species at Risk.³⁴

- To mitigate risks related to emissions, effluents and waste generated in construction, federal and provincial laws and regulations provide a legal framework for the management of hazardous waste and recyclable materials. CEPA³⁵ regulates domestic waste management and the *Export and Import of Hazardous Waste and Hazardous Recyclable Material Regulations*³⁶ regulate the transboundary movement of hazardous waste in an environmentally sound manner.³⁷ Canada also participates in global initiatives, being a signatory to the Basel Convention, which aims to promote safe handling of transboundary movement of waste.³⁸ The Government of Canada through Public Works and Government Services Canada, has also developed the *Environmentally Responsible Construction and Renovation Handbook*, which serves as a technical guide aimed at promoting sustainable and environmentally responsible construction or renovation and reduction in waste generated.³⁹
- With regard to the management of nuclear waste, federal laws related to the management of radioactive waste include the *Nuclear Safety and Control Act (NSCA)*,⁴⁰ *Nuclear Fuel Waste Act*,⁴¹ *Nuclear Energy Act*,⁴² and the *Nuclear Liability and Compensation Act*.⁴³ The Canadian Nuclear Safety Commission (CNSC) draws its mandate from these laws and administers the management of nuclear materials, including inspection of radioactive waste facilities to ensure protection of health, safety, security and the environment. The CNSC also relies on the recommendations from the International Atomic Energy Agency for best practices for managing radioactive waste.⁴⁴ The CNSC's *REGDOC-2.3.1, Conduct of Licensed Activities: Construction and Commissioning Programs* sets out requirements and guidance for the construction and commissioning of facilities in Canada that use nuclear reactors and requires safety measures to be consistent with the Canada-IAEA safeguards agreement.⁴⁵ The *REGDOC-2.3.2, Accident Management, version 2*⁴⁶ lays out the CNSC's requirements for the development, implementation and validation of integrated accident management at reactor facilities and provides guidance on how these requirements should be met. *REGDOC-2.3.3 Periodic Safety Reviews*⁴⁷ speaks to the requirements and guidance with regard to the conduct of a periodic safety review of a nuclear power plant. Canada is also a signatory to the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management, an international, legally binding treaty that aims to ensure safe management of radioactive waste.⁴⁸
- As for the long-term disposal of nuclear waste, Canada's Nuclear Waste Management Organization⁴⁹ is responsible for implementing Canada's rolling five-year strategic implementation plan for a safe and long-term management of used nuclear fuel – *Implementing*

³² Government of Canada, "Species at Risk: Description", at: <https://www.canada.ca/en/environment-climate-change/services/species-risk-act-accord-funding/act-description.html>

³³ Government of Canada, "About the Species at Risk Act", at: <https://www.canada.ca/en/environment-climate-change/services/environmental-enforcement/acts-regulations/about-species-at-risk-act.html>

³⁴ Government of Canada, "Species at risk: the act, the accord and the funding programs", at: <https://www.canada.ca/en/environment-climate-change/services/species-risk-act-accord-funding.html>

³⁵ Government of Canada, "Canadian Environmental Protection Act, 1999 (S.C. 1999, c. 33)", at: <https://laws-lois.justice.gc.ca/eng/acts/c-15.31/index.html>

³⁶ Government of Canada, "Export and Import of Hazardous Waste and Hazardous Recyclable Material Regulations (SOR/2005-149)", at: <https://laws-lois.justice.gc.ca/eng/regulations/SOR-2005-149/index.html>

³⁷ United Nations Commission on Sustainable Development, "CANADA - National Reporting to CSD-18/19. Thematic Profile: Waste Management", at: https://sustainabledevelopment.un.org/content/documents/dsd/dsd_aofw_ni/ni_pdfs/NationalReports/canada/Waste_Management.pdf

³⁸ Government of Canada, "Basel convention on the control of transboundary movements of hazardous wastes and their disposal", at: <https://www.canada.ca/en/environment-climate-change/services/managing-reducing-waste/international-commitments/basel-convention-control-transboundary-movements.html>

³⁹ Public Works and Government Services Canada, "The Environmentally Responsible Construction and Renovation Handbook", at: https://publications.gc.ca/collections/collection_2013/tpsgc-pwgsc/P4-53-2001-eng.pdf

⁴⁰ Government of Canada, "Nuclear Safety and Control Act (S.C. 1997, c.9)", at: <https://laws-lois.justice.gc.ca/eng/acts/N-28.3/index.html>

⁴¹ Government of Canada, "Nuclear Fuel Waste Act (S.C. 2002, c.23)", at: <https://laws-lois.justice.gc.ca/eng/acts/N-27.7/page-1.html>

⁴² Government of Canada, "Nuclear Energy Act (R.S.C., 1985, c. A-16)", at: <https://laws-lois.justice.gc.ca/eng/acts/a-16/>

⁴³ Government of Canada, "Nuclear Liability and Compensation Act (S.C. 2015, c. 4, s. 120)", at: <https://laws-lois.justice.gc.ca/eng/acts/n-28.1/fulltext.html>

⁴⁴ Canadian Nuclear Safety Commission, "International cooperation" at: <http://nuclearsafety.gc.ca/eng/resources/international-cooperation/index.cfm#code-of-conduct>

⁴⁵ Canadian Nuclear Safety Commission, "REGDOC-2.3.1, *Conduct of Licensed Activities: Construction and Commissioning Programs*", at: <http://www.nuclearsafety.gc.ca/eng/acts-and-regulations/regulatory-documents/published/html/regdoc2-3-1/index.cfm#sec3-3-1>

⁴⁶ Canadian Nuclear Safety Commission, "REGDOC-2.3.2, *Accident Management, Version 2*", at: <http://www.nuclearsafety.gc.ca/eng/acts-and-regulations/regulatory-documents/published/html/regdoc2-3-2v2/index.cfm>

⁴⁷ Canadian Nuclear Safety Commission, "REGDOC-2.3.3, *Periodic Safety Reviews*", at: <http://www.nuclearsafety.gc.ca/eng/acts-and-regulations/regulatory-documents/published/html/regdoc2-3-3/index.cfm>

⁴⁸ Canadian Nuclear Safety Commission, "Oversight of Canada's Framework for Radioactive Waste Management", (2018), at: <https://nuclearsafety.gc.ca/eng/resources/fact-sheets/oversight-canada-framework-radioactive-waste-management.cfm>

⁴⁹ NWMO, "Who we are", at: <https://www.nwmo.ca/en/ABOUT-US/Who-We-Are>

Adaptive Phased Management 2023-2027.⁵⁰ The plan is designed to be implemented in phases over many decades and indicates that a single preferred site for the deep geological repository will be identified by 2024, with construction expected to begin in 2033 and operation expected to commence between 2040 and 2045.⁵¹ As Canada's nuclear regulator, the CNSC is responsible for licensing geological repositories intended to provide long-term management of radioactive waste. As of August 2023, the CNSC has not yet received any applications for site preparation and construction of a deep geological repository that will provide long-term management of radioactive waste.⁵² *REGDOC-2.11.2, Decommissioning*, part of the CNSC's waste management series of regulatory documents, sets out requirements and guidance regarding the planning and preparation for as well as the execution and completion of decommissioning of Class I and Class II nuclear facilities, among other identified operations, that are required to have decommissioning plans or strategies as a result of a regulatory requirement or a condition of their license.⁵³

- Canada has formally recognized its unique relationship between the Government of Canada and Indigenous peoples, affirmed in section 35 of the *Constitution Act, 1982*. On 10 May 2016, Canada became a full supporter, without qualification,⁵⁴ of the Declaration on the Rights of Indigenous Peoples ("UNDRIP"), a legally non-binding resolution passed by the United Nations in 2007. The following year, Canada committed to implement the UNDRIP through the review of laws and policies guided by *Principles respecting the Government of Canada's Relationship with Indigenous peoples*.⁵⁵ While Canada introduced legislation in 2020, Bill C-15, the *United Nations Declaration on the Rights of Indigenous Peoples Act* received royal assent on 21 June 2021. In the decades leading to this new bill, the subject of Indigenous peoples' rights and the development of natural resources and fisheries has arisen in Parliament and the legal system.
- Canada joined the International Labour Organization (ILO) in 1919 as one of the founding member States of the Organization.⁵⁶ The country has since then ratified numerous ILO Conventions, including all eight Fundamental Conventions. According to ILO, Canada has proven to be a key partner in the pursuit of decent work for all.⁵⁷ With regard to Occupational Safety and Health ("OSH"), the Canada Labour Code, Part II and the Canada OSH Regulations made pursuant to that Code are the primary federal legislative tools protecting workers in "federal work, undertaking or business", including employees of the federal public service.⁵⁸ Provinces and territories hold an act which applies to most workplaces in each jurisdiction. Furthermore, each provincial or territorial government is responsible for the administration and enforcement of its occupational health and safety act and regulations.⁵⁹
- To ensure payments of public money, including grants programmes referenced in the Framework, are administered responsibly, the Parliament of Canada has established the Office of the Auditor General of Canada. This office has published a Framework for Identifying Risk in Grant and Contribution Programs, with the purpose of providing government staff with a tool to identify risk in relation to grants.⁶⁰ The Office of the Auditor General also maintains ongoing audit powers over the federal government, including approximately 100 departments and agencies. The office is able to conduct performance audits of various government programmes to measure the effectiveness of such programmes.⁶¹
- To mitigate potential supply chain risks, the Government of Canada has established legislations to ensure sustainable procurement and improve the environmental and social performance of suppliers in Canada. To protect labour rights in Canada, the Government of Canada has enacted

⁵⁰ NWMO, "Implementing Adaptive Phased Management 2023-27", at:

https://implementationplan.nwmo.ca/2023_27/storage/2023/03/Implementing-Adaptive-Phased-Management-2023-27-EN-2.pdf

⁵¹ Ibid.

⁵² Canadian Nuclear Safety Commission, "High-level radioactive waste", at: <http://nuclearsafety.gc.ca/eng/waste/high-level-waste/index.cfm#long-term>

⁵³ Canadian Nuclear Safety Commission, "REGDOC-2.11.2, Decommissioning", at:

<http://www.nuclearsafety.gc.ca/eng/acts-and-regulations/regulatory-documents/published/html/regdoc2-11-2/index.cfm>

⁵⁴ Government of Canada, "Canada Becomes a Full Supporter of the United Nations Declaration on the Rights of Indigenous Peoples", (2016), at:

<https://www.canada.ca/en/indigenous-northern-affairs/news/2016/05/canada-becomes-a-full-supporter-of-the-united-nations-declaration-on-the-rights-of-indigenous-peoples.html>

⁵⁵ Government of Canada, "Principles respecting the Government of Canada's relationship with Indigenous peoples", at:

<https://www.justice.gc.ca/eng/cs-j-sjc/principles-principes.html>

⁵⁶ ILO, "Canada – ILO Cooperation", at: <https://www.ilo.org/pardev/donors/canada/lang--en/index.htm>

⁵⁷ Ibid.

⁵⁸ ILO, "Canada – 2013", at: https://www.ilo.org/dyn/legosh/en/f?p=14100:1100:0::NO::P1100_ISO_CODE3,P1100_YEAR:CAN,2013

⁵⁹ Canadian Centre for Occupational Health and Safety, "Health and Safety Legislation in Canada", at:

<https://www.ccohs.ca/oshanswers/legisl/intro.html>

⁶⁰ Office of the Auditor General of Canada, "Framework for identifying risk in grant and contribution programs", at: https://www.oag-bvg.gc.ca/internet/English/meth_gde_e_10223.html

⁶¹ Office of the Auditor General of Canada, "What We Do", at: https://www.oag-bvg.gc.ca/internet/English/au_fs_e_371.html

the Canada Labour Code,⁶² the Canadian Human Rights Act,⁶³ and the Employment Equity Act.⁶⁴ These laws are aimed at prohibiting discrimination and ensuring equal employment opportunities, as well as laying down guidelines for managing industrial relations including labour-management relations; employment standards such as working hours, minimum wage, layoff procedures, and workplace health and safety. In 2018, Canada also launched the *Principles to Guide Government Action to Combat Human Trafficking in Global Supply Chains*,⁶⁵ along with governments of Australia, New Zealand, the UK and the US, which outlines the guiding principles for governments taking action against human trafficking in domestic and international supply chains. The Issuer also introduced legislation in 2022, Bill C-26 the *Critical Cyber Systems Protection Act*,⁶⁶ to protect critical cyber systems, including systems across supply chains and third-party products and services. In 2021, the Government of Canada also introduced the *Directive on the Management of Procurement*,⁶⁷ which became effective from April 2023. The directive requires that procurement activities of the Government of Canada integrate human rights, environmental, social and corporate governance, and supply chain transparency principles. Additionally, the Public Services and Procurement Canada's *Code of Conduct for Procurement*, requires all vendors and sub-contractors working with the Government of Canada to operate lawfully and conduct business activities in a socially and environmentally responsible manner.⁶⁸

Sustainalytics notes that the Government of Canada's activities in relation to the development of natural resources infrastructure, namely oil and gas pipelines, is subject to parliamentary and legislative deliberation in relation to Indigenous rights and environmental risks. Sustainalytics highlights that the exclusionary criteria set out in the Framework, which include exclusions for financing any activities that may be associated with fossil fuel production, exploration and transportation, precludes any financing of oil and gas pipelines under the Framework.

Based on these policies, standards and assessments, Sustainalytics is of the opinion that the Government of Canada has implemented sufficient measures and is well positioned to manage and mitigate environmental and social risks commonly associated with the eligible categories.

Section 3: Impact of Use of Proceeds

All nine use of proceeds categories are aligned with those recognized by the GBP. Sustainalytics has focused below where the impact is specifically relevant in the local context.

Impact of investments in clean energy projects and power grids

Extreme seasonal temperatures, vast landscapes and dispersed populations all mean that Canadians and Canadian businesses use a substantial amount of energy for their electricity and heating and cooling needs. As a result, approximately 81% of the country's GHG emissions come from energy.⁶⁹ However, specifically in relation to electricity, Canada has one of the cleanest grids in the world, with 83% of the electricity generated from low- or non-GHG emitting sources, such as wind, solar, hydro and nuclear;⁷⁰ this rate is expected to reach at least 90% by 2050.⁷¹ Hydropower accounts for 60% of Canada's electricity generation, nuclear makes up 14%, while wind, solar and other non-hydro renewable energy sources have a combined share of 8%.^{72,73} Canada's vast hydroelectric resources contribute to hydro having the highest share in the country's electricity generation mix, also making Canada second in the world in terms of hydroelectric production.⁷⁴ In addition, nuclear SMR units in certain net-zero scenarios have the potential

⁶² Government of Canada, "Canada Labour Code (R.S.C., 1985, c. L-2)" at: <https://laws-lois.justice.gc.ca/eng/acts/l-2/>

⁶³ Government of Canada, "Canadian Human Rights Act (R.S.C., 1985, c. H-6)", at: <https://laws-lois.justice.gc.ca/eng/acts/h-6/>

⁶⁴ Government of Canada, "Employment Equity Act (S.C. 1995, c. 44)" at: <https://laws-lois.justice.gc.ca/eng/acts/e-5.401/page-1.html>

⁶⁵ Government of Canada, "National Strategy to Combat Human Trafficking: 2019-2024", at:

<https://www.publicsafety.gc.ca/cnt/rsrscs/pblctns/2019-ntnl-strtyg-hmnn-trffc/2019-ntnl-strtyg-hmnn-trffc-en.pdf>

⁶⁶ Government of Canada, "Bill C-26: An Act respecting cyber security, amending the Telecommunications Act and making consequential amendments to other Acts", at: https://www.justice.gc.ca/eng/csj-sjc/pl/charte-chartre/c26_1.html#:~:text=The%20CCSPA%20would%20seek%20to,third%2Dparty%20products%20and%20services

⁶⁷ Government of Canada, "Directive on the Management of Procurement", at: <https://www.tbs-sct.canada.ca/pol/doc-eng.aspx?id=32692>

⁶⁸ Government of Canada, "Code of Conduct for Procurement", at: <https://www.tpsgc-pwgsc.gc.ca/app-acq/cndt-cndct/cca-ccp-eng.html>

⁶⁹ Natural Resources Canada, "Energy Factbook 2021-2022", accessed in January 2022 at:

https://www.nrcan.gc.ca/sites/nrcan/files/energy/energy_fact/2021-2022/PDF/2021_Energy-factbook_december23_EN_accessible.pdf

⁷⁰ Government of Canada, "A Made-In-Canada Plan: Affordable Energy, Good Jobs, and a Growing Clean Economy", at:

<https://www.budget.canada.ca/2023/report-rapport/chap3-en.html>

⁷¹ IEA, "Canada 2022 Energy Policy Review", at: <https://iea.blob.core.windows.net/assets/7ec2467c-78b4-4c0c-a966-a42b8861ec5a/Canada2022.pdf>

⁷² Government of Canada, "A Made-In-Canada Plan: Affordable Energy, Good Jobs, and a Growing Clean Economy", at:

<https://www.budget.canada.ca/2023/report-rapport/chap3-en.html>

⁷³ Government of Canada Green Bond Framework.

⁷⁴ Canada Energy Regulator, "Market Snapshot: Canada – 2nd in the world for hydroelectric production", (2022), at: <https://www.cer-rec.gc.ca/en/data-analysis/energy-markets/market-snapshots/2016/market-snapshot-canada-2nd-in-world-hydroelectric-production.html>

to contribute up to 12% to Canada's total electricity generation mix by 2050.⁷⁵ However, Canada's second largest source for electricity generation (18% of all electricity generation) is combustible fuels.⁷⁶ Canada has already begun implementation of a plan to phase out coal-fired electricity generation by 2030 and announced in 2021 a commitment to achieve a net-zero emissions electricity sector by 2035.⁷⁷ Towards this goal, the Government of Canada has committed to investing more than CAD 1 billion (USD 737.8 million) in the development of renewable energy and grid modernization projects,⁷⁸ through for example the Smart Renewables and Electrification Pathways Program. Additionally, Canada's 2023 budget proposes CAD 500 million (USD 369.05 million) in support over 10 years for the Strategic Innovation Fund for the development and application of clean technologies in Canada.⁷⁹ Furthermore, Canadian provinces also have local efforts to phase out coal-powered generation: Ontario phased out coal-fired generation in 2015 and Alberta expects to do so by the end of 2023.⁸⁰

Sustainalytics is of the opinion that expenditures directed towards measures supporting the development, deployment and distribution of clean energies as well as those supporting grid modernization are expected to significantly contribute to the reduction in GHG emissions from electricity production and transportation.

Reduction of greenhouse gas emissions in Canada

Canada is the world's 10th largest emitter of greenhouse gases, with the majority of the country's emissions arising from the combustion of fossil fuels.^{81,82} Although Canada's GHG emission levels have remained relatively constant over the past decade, there has been a decline in emissions intensity over the same period, driven by fuel switching and modernization of industrial processes.⁸³ The Government of Canada forecasts a reduction in GHG emissions resulting from the introduction of regulations, the development of a carbon pricing system and other measures.⁸⁴

Following the Paris Agreement and the release of the 2016 Pan-Canadian Framework on Clean Growth and Climate Change, Canada submitted an updated Nationally Determined Contribution to the UNFCCC, and committed to reducing GHG emissions by 30% below 2005 levels by 2030.⁸⁵ This plan was enhanced in 2020, with the release of the country's strengthened climate plan, *A Healthy Environment and a Healthy Economy*, which enabled Canada to commit to a strengthened 2030 target of 40–45% below 2005 levels.⁸⁶

In addition, Canada has committed to net zero emissions by 2050 and has enshrined GHG emission reduction targets in federal law, under the *Canadian Net-Zero Emissions Accountability Act*.⁸⁷ These climate action plans codify the Government of Canada's commitment to mitigating climate impact in line with national and global targets.

Projects funded under the Canada Green Bond Framework, such as energy efficiency, clean transportation and clean energy, are considered impactful. These projects are expected to reduce GHG emissions and are, therefore, expected to support Canada in achieving its targets under the Paris Agreement.

⁷⁵ Government of Canada, "Canada's Energy Future 2023", at: <https://www.cer-rec.gc.ca/en/data-analysis/canada-energy-future/2023/canada-energy-futures-2023.pdf>

⁷⁶ Statistics Canada, "Electric Power Generation – Monthly Generation by Type of Electricity", accessed in November 2021", at: <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=2510001501>

⁷⁷ Government of Canada, "Canada and the World Move Closer to Powering Past Coal with More Climate Ambition at COP26", at: <https://www.canada.ca/en/environment-climate-change/news/2021/11/canada-and-the-world-move-closer-to-powering-past-coal-with-more-climate-ambition-at-cop26.html>

⁷⁸ Newswire, "Canada Invests Over \$960-Million in Renewable Energy and Grid Modernization Projects", (2020), at: <https://www.newswire.ca/news-releases/canada-invests-over-960-million-in-renewable-energy-and-grid-modernization-projects-880196618.html>

⁷⁹ Government of Canada, "A Made-In-Canada Plan: Affordable Energy, Good Jobs, and a Growing Clean Economy", at: <https://www.budget.canada.ca/2023/report-rapport/chap3-en.html>

⁸⁰ Government of Canada, "Canada's Energy Future 2023", at: <https://www.cer-rec.gc.ca/en/data-analysis/canada-energy-future/2023/canada-energy-futures-2023.pdf>

⁸¹ World Resources Institute, "This Interactive Chart Shows Changes in the World's Top 10 Emitters", (2023), at: <https://www.wri.org/insights/interactive-chart-shows-changes-worlds-top-10-emitters>

⁸² Government of Canada, "Greenhouse gas sources and sinks: executive summary 2022", at: <https://www.canada.ca/en/environment-climate-change/services/climate-change/greenhouse-gas-emissions/sources-sinks-executive-summary-2022.html>

⁸³ Government of Canada, "National Inventory Report 1990- 2021: Greenhouse Gas Sources and Sinks in Canada – Executive Summary", (2023), at: https://publications.gc.ca/collections/collection_2023/eccc/En81-4-1-2021-eng.pdf

⁸⁴ Government of Canada, "Government of Canada confirms ambitious new greenhouse gas emissions reduction target", at: <https://www.canada.ca/en/environment-climate-change/news/2021/07/government-of-canada-confirms-ambitious-new-greenhouse-gas-emissions-reduction-target.html>

⁸⁵ UNFCCC, "Canada's Enhanced Nationally Determined Contribution", (2021), at: <https://www.canada.ca/en/environment-climate-change/news/2021/04/canadas-enhanced-nationally-determined-contribution.html>

⁸⁶ Ibid.

⁸⁷ Government of Canada, "A Healthy Environment and a Healthy Economy", (2021) at: <https://www.canada.ca/en/services/environment/weather/climatechange/climate-plan/climate-plan-overview/healthy-environment-healthy-economy.html>

Clean transportation

Transportation-related emissions represented the second-largest source of emissions in Canada, at approximately 28% of all emissions, in 2021.⁸⁸ Among those transportation-related emissions, road transportation was responsible for 62% of all transportation-related emissions.⁸⁹ Several factors contribute to this large percentage of transportation-related emissions.

The country's strategy for the transportation sector is articulated in *Transportation 2030: A Strategic Plan for the Future of Transportation in Canada*.⁹⁰ Developed in 2016, it contemplates initiatives such as increased electrification, developing infrastructure to promote a shift to lower-emission modes of transportation and use of alternative clean fuels. The Framework's eligibility criteria target investments in technologies and supporting infrastructure to finance these initiatives, and the Government of Canada has launched several programmes eligible under the Framework that are expected to address transportation-related emissions. Some of them include:

- The *Incentives for Zero-Emission Vehicles Program (iZEV)*, which provides support of the purchase or lease of battery, plug-in hybrid and hydrogen fuel cell vehicles by individuals and businesses.⁹¹
- The *Zero-Emission Vehicle Infrastructure Program*, which is expected to address the lack of charging and refuelling stations in Canada, one of the key barriers to ZEV adoption, by increasing the availability of localized charging and hydrogen refuelling opportunities throughout the country.⁹²
- The CAD 2.75 billion *Zero Emission Transit Fund*, which offers support to public transit and school bus operators across Canada to plan for electrification, support the purchase of zero emissions buses, and to build supporting infrastructure, including charging and facility upgrades.⁹³

Sustainalytics is of the opinion that financing of and investments in low-carbon public and private passenger transportation, as well as low-carbon freight transportation under the Framework will help Canada to achieve carbon emissions reductions in the sector.

The importance of developing energy efficient and clean technology solutions

New and innovative technologies are recognized as being key parts of addressing environmental challenges. The Paris Agreement states that "accelerating, encouraging and enabling innovation is critical for an effective, long-term global response to climate change". It has been estimated that the clean tech sector could lead to 65 million new jobs globally by 2030.⁹⁴ Canada is well positioned to benefit from these trends, consistently ranking highly on the Global Cleantech Innovation Index.⁹⁵ In this regard, *Canada's Net Zero Future* report estimates that up to 14.5% of the net zero pathway for Canadian industry can be achieved through changes in production processes.⁹⁶ Additionally, the opportunity in supplying growing markets with cleaner energy and materials is significant for the country's net zero pathway.

Recognizing these needs and opportunities, the Government of Canada has taken steps to promote Canadian clean technology. Under *A Healthy Environment and a Healthy Economy*, the Government of Canada outlines strategies to position Canada as a world leader in zero-emissions clean technology through various programmes, such as the CAD 750 million in funding to Sustainable Development Technology Canada to support these efforts.⁹⁷ Under the oversight of Innovation, Science and Economic Development Canada, the Government has taken steps to support this mandate, including implementing a national data strategy to support the sector and centralizing funding opportunities.⁹⁸

⁸⁸ The report provides estimates for transport according to IPCC sector classification is 28% and by Canadian economic sector is 22% for transport. For more information see: Government of Canada, "National Inventory Report 1990-2021: Greenhouse Gas Sources and Sinks in Canada – Executive Summary", (2023), at: https://publications.gc.ca/collections/collection_2023/eccc/En81-4-1-2021-eng.pdf

⁸⁹ Ibid.

⁹⁰ Government of Canada, "Transportation 2030: A Strategic Plan for the Future of Transportation in Canada", at: <https://tc.canada.ca/en/initiatives/transportation-2030-strategic-plan-future-transportation-canada>

⁹¹ Government of Canada, "Zero-emission vehicles" at: <https://tc.canada.ca/en/road-transportation/innovative-technologies/zero-emission-vehicles>

⁹² Government of Canada, "Zero Emission Vehicle Infrastructure Program", at: <https://www.nrcan.gc.ca/energy-efficiency/transportation-alternative-fuels/zero-emission-vehicle-infrastructure-program/21876>

⁹³ Government of Canada, "Zero Emission Transit Fund" at: <https://www.infrastructure.gc.ca/zero-emissions-trans-zero-emissions/index-eng.html>

⁹⁴ Cambridge Econometrics, "Unlocking the Inclusive Growth Story of the 21st Century: Accelerating Climate Action in Urgent Times", at:

<http://www.camecon.com/wp-content/uploads/2018/10/2020-11-03-NCE-2018-Technical-Modelling.pdf>

⁹⁵ Canada Action, "Canada Ranks 2nd on Global Cleantech Innovation Index", (2023) at: <https://www.canadaaction.ca/cleantech-innovation-index-ranking>

⁹⁶ Canadian Institute for Climate Choices, "Canada's Net Zero Future", (2021) at: https://climatechoices.ca/wp-content/uploads/2021/02/Canadas-Net-Zero-Future_FINAL-2.pdf

⁹⁷ Government of Canada, "A Healthy Environment and a Healthy Economy", (2020), at: <https://www.canada.ca/en/services/environment/weather/climatechange/climate-plan/climate-plan-overview/healthy-environment-healthy-economy.html>

⁹⁸ Government of Canada, "Clean Growth Hub", at: <https://www.ic.gc.ca/eic/site/099.nsf/eng/home>

The Framework’s eligibility criteria allow for financing to accelerate energy efficiency solutions as well as fuel switching to reduce emissions. For instance, the Government is investing in new buildings that are considered as net-zero carbon, net-zero ready, or built to the best standards in northern and remote communities under its Green and Inclusive Community Buildings programme,⁹⁹ and the Canada Greener Homes Grant¹⁰⁰ that focuses on supporting homeowners to make energy-efficient changes to their homes. The Framework also allows for investments in Canadian manufacturing processes to improve life span and the circularity of materials, technologies and services, ultimately increasing resource efficiency.

Sustainalytics is of the opinion that expenditures financing projects to improve energy efficiency in all building types, to improve the circularity of products and business models, and to reduce air pollutants are expected to complement and advance these objectives and increase the beneficial environmental impact of Canada’s clean innovation sector.

Adaptation

Many regions, communities, and economic sectors in Canada have been recognized as vulnerable to the effects of climate change, especially changing climatic patterns, such as increased precipitation and warmer average temperatures.^{101,102} These impacts have become increasingly apparent in recent years, with 2021 alone showcasing extreme heat and wildfires, heavy rains and flooding in British Columbia, warm winter conditions across the North, inhibiting traditional activities and access to remote communities, and severe drought across the Prairies. Furthermore, the effects of climate change are often felt most heavily by Indigenous and Northern communities.¹⁰³ As the effects of climate change are anticipated to continue to increase, efforts to improve resiliency and promote climate adaptation represent key actions to protect the well-being of Canadians. In 2023, Canada launched its National Adaptation Strategy which is based on four guiding principles: i) respecting jurisdictions and upholding Indigenous peoples’ rights; ii) climate and environmental justice; iii) taking proactive measures to reduce climate impact; and iv) enhancing positive benefits to people, business and environment while identifying and avoiding negative impacts.¹⁰⁴

The activities to be financed under the Framework align with measures to enhance resiliency and climate risk management, and monitor weather conditions. Sustainalytics believes that such activities have the potential to drive positive impacts and increase climate resiliency, particularly for vulnerable communities.

Alignment with/contribution to SDGs

The Sustainable Development Goals (SDGs) were set in September 2015 by the United Nations General Assembly and form an agenda for achieving sustainable development by the year 2030. The bonds issued under the Government of Canada Green Bond Framework advance the following SDGs and targets:

Use of Proceeds Category	SDG	SDG target
Clean Transportation	11 Sustainable Cities and Communities	11.2 By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.
Living Natural Resources & Land Use	14. Life Below Water	14.2 By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans.
	15. Life on Land	15.a Mobilize and significantly increase financial resources from all sources to

⁹⁹ For more information on the program, see: <https://www.infrastructure.gc.ca/gicb-bcvi/index-eng.html>

¹⁰⁰ For more information on the program, see: <https://www.nrcan.gc.ca/energy-efficiency/homes/canada-greener-homes-grant/23441>

¹⁰¹ Government of Canada, “A Data Strategy Roadmap for the Federal Public Service”, at: https://www.canada.ca/content/dam/pco-bcp/documents/clk/Data_Strategy_Roadmap_ENG.pdf

¹⁰² Government of Canada “Vulnerability”, at: <https://www.nrcan.gc.ca/changements-climatiques/impacts-adaptation/vulnerability/10421>

¹⁰³ Furgal, C. and Seguin, J., “Climate Change, Health, and Vulnerability in Canadian Northern Aboriginal Communities”, (2006), Environmental Health Perspectives, at: <https://ehp.niehs.nih.gov/doi/full/10.1289/ehp.8433>

¹⁰⁴ Government of Canada, “Canada’s National Adaptation Strategy: Building Resilient Communities and a Strong Economy”, at: <https://www.canada.ca/en/services/environment/weather/climatechange/climate-plan/national-adaptation-strategy.html>

		conserve and sustainably use biodiversity and ecosystems.
Energy Efficiency	7. Affordable and Clean Energy 11. Sustainable Cities and Communities	7.3 By 2030, double the global rate of improvement in energy efficiency. 11.3 By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries.
Terrestrial & Aquatic Biodiversity	14. Life Below Water 15. Life on Land	14.2 By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans. 15.a Mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems.
Clean Energy	7. Affordable and Clean Energy	7.2 By 2030, increase substantially the share of renewable energy in the global energy mix.
Climate Change Adaptation	13. Climate Action	13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.
Sustainable Water & Wastewater Management	6. Clean Water and Sanitation	6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.
Circular Economy Adapted Products, Production, Technologies and Processes	12. Responsible consumption and production	12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.
Pollution Prevention & Control	9. Industry, Innovation, and Infrastructure 12. Responsible consumption and production	9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities. 12.2 By 2030, achieve the sustainable management and efficient use of natural resources.

Conclusion

The Government of Canada has developed the Government of Canada Green Bond Framework under which it may issue green bonds and use the proceeds to finance or refinance government expenditures, including transfer payments, loans, subsidies, fiscal measures, R&D expenditures, capital and operational expenditures related to projects that are expected to facilitate the transition to a low-carbon economy, protect climate-related biodiversity, and support the Issuer's environmental goals. Sustainalytics considers that the projects funded by the green bond proceeds are expected to create positive environmental impacts.

The Government of Canada Green Bond Framework outlines processes for tracking, allocation and management of proceeds, and makes commitments in relation to reporting on allocation and impact. Sustainalytics believes that the Framework is aligned with the Government of Canada's overall sustainability strategy and that use of proceeds will contribute to the advancement of the UN Sustainable Development Goals 6, 7, 9, 11, 12, 13, 14 and 15. Additionally, Sustainalytics considers that the Government of Canada has adequate measures to identify, manage and mitigate environmental and social risks commonly associated with the eligible projects.

Based on the above, Sustainalytics is confident that the Government of Canada is well positioned to issue green bonds and that the Government of Canada Green Bond Framework is robust, transparent and in alignment with the four core components of the Green Bond Principles 2021.

Appendix

Appendix 1: Green Bond / Green Bond Programme - External Review Form

Section 1. Basic Information

Issuer name:	Government of Canada
Green Bond ISIN or Issuer Green Bond Framework Name, if applicable:	Government of Canada Green Bond Framework
Review provider's name:	Sustainalytics
Completion date of this form:	November 2, 2023
Publication date of review publication: Original publication date <i>[please fill this out for updates]:</i>	Update to Government of Canada Green Bond Framework Second-Party Opinion, originally provided in February 2022

Section 2. Review overview

SCOPE OF REVIEW

The review:

- assessed the 4 core components of the Principles (**complete review**) and confirmed the alignment with the GBP/SBP/SBG (*delete where appropriate*).
- assessed only some of them (**partial review**) and confirmed the alignment with the GBP/SBP/SBG (*delete where appropriate*); please indicate which ones:
 - Use of Proceeds
 - Process for Project Evaluation and Selection
 - Management of Proceeds
 - Reporting
- assessed the alignment with other regulations or standards (CBI, EU GBS, ASEAN Green Bond Standard, ISO 14030, etc.); please indicate which ones:

ROLE(S) OF INDEPENDENT REVIEW PROVIDER

- Second Party Opinion
- Certification
- Verification
- Scoring/Rating
- Other (please specify):

Does the review include a sustainability quality score?

- Of the issuer
- Of the project
- Of the Framework
- Other (please specify):
- No scoring

ASSESSMENT OF THE PROJECT(S)

Does the review include:

- The environmental and/or social features of the type of project(s) intended for the Use of Proceeds?
- The environmental and/or social benefits and impact targeted by the eligible Green and/or Social Project(s) financed by the Green, Social or Sustainability Bond?
- The potentially material environmental and/or social risks associated with the project(s) (where relevant)?

ISSUER'S OVERARCHING OBJECTIVES

Does the review include:

- An assessment of the issuer's overarching sustainability objectives and strategy, and the policies and/or processes towards their delivery?
- An identification and assessment of environmental, social and governance related risks of adverse impact through the Issuer's [actions] and explanations on how they are managed and mitigated by the issuer?
- A reference to the issuer's relevant regulations, standards, or frameworks for sustainability-related disclosure and reporting?

CLIMATE TRANSITION STRATEGY

Does the review assess:

- The issuer's climate transition strategy & governance?
- The alignment of both the long-term and short/medium-term targets with the relevant regional, sector, or international climate scenario?
- The credibility of the issuer's climate transition strategy to reach its targets?
- The level/type of independent governance and oversight of the issuer's climate transition strategy (e.g. by independent members of the board, dedicated board sub-committees with relevant expertise, or via the submission of an issuer's climate transition strategy to shareholders' approval).
- If appropriate, the materiality of the planned transition trajectory in the context of the issuers overall business (including the relevant historical datapoints)?
- The alignment of the issuer's proposed strategy and targets with appropriate science-based targets and transition pathways that are deemed necessary to limit climate change to targeted levels?
- The comprehensiveness of the issuer's disclosure to help investors assess its performance holistically?

Overall comment on this section:

Section 3. Detailed review

1. USE OF PROCEEDS

Does the review assess:

- the environmental/social benefits of the project(s)?
- whether those benefits are quantifiable and meaningful?
- for social projects, whether the target population is properly identified?

Does the review assess if the issuer provides clear information on:

- the estimated proceeds allocation per project category (in case of multiple projects)?
- the estimated share of financing vs. re-financing (and the related lookback period)?

Overall comment on this section:

The eligible categories for the use of proceeds –Clean Transportation; Living Natural Resources & Land Use; Energy Efficiency; Terrestrial & Aquatic Biodiversity; Clean Energy; Climate Change Adaptation; Sustainable Water & Wastewater Management; Circular Economy Adapted Products, Production,

Technologies and Processes; Pollution Prevention & Control – are aligned with those recognized by the Green Bond Principles. Sustainalytics considers that investments in the eligible categories will lead to positive environmental impacts and advance the UN Sustainable Development Goals, specifically SDGs 6, 7, 9, 11, 12, 13, 14 and 15.

2. PROCESS FOR PROJECT EVALUATION AND SELECTION

Does the review assess:

- whether the eligibility of the project(s) is aligned with official or market-based taxonomies or recognised international standards? Please specify which ones. Sustainalytics has a proprietary taxonomy which is informed by the EU taxonomy, Climate Bonds Initiative taxonomy as well as international standards.
- whether the eligible projects are aligned with the overall sustainability strategy of the issuer and/or if the eligible projects are aligned with material ESG-related objectives in the issuer's industry?
- the process and governance to set the eligibility criteria including, if applicable, exclusion criteria?
- the processes by which the issuer identifies and manages perceived social and environmental risks associated with the relevant project(s)?
- any process in place to identify mitigants to known material risks of negative social and/or environmental impacts from the relevant project(s)?

Overall comment on this section:

The Government of Canada's Interdepartmental Green Bonds Committee will be responsible for identifying and evaluating eligible projects to be financed under the Framework. Canada has processes in place to identify and mitigate common environmental and social risks associated with the eligible projects. Sustainalytics considers this process to be in line with market practice.

3. MANAGEMENT OF PROCEEDS

Does the review assess:

- the issuer's policy for segregating or tracking the proceeds in an appropriate manner?
- the intended types of temporary investment instruments for unallocated proceeds?
- Whether an external auditor will verify the internal tracking of the proceeds and the allocation of the funds?

Overall comment on this section:

The Department of Finance will oversee the allocation and ongoing monitoring of proceeds under the Framework via a virtual register. Canada intends to achieve full allocation of bond proceeds within two fiscal years following the fiscal year of each issuance. Pending full allocation, proceeds will be managed according to the Government's cash management policy outlined in the Funds Management Governance Framework. This is in line with market practice.

4. REPORTING

Does the review assess:

- the expected type of allocation and impact reporting (bond-by-bond or on a portfolio basis)?
- the frequency and the means of disclosure?
- the disclosure of the methodology of the expected or achieved impact of the financed project(s)?

Overall comment on this section:

The Government of Canada intends to report on allocation and impact of proceeds annually until full allocation on its website. Allocation reporting may include a breakdown of proceeds according to project category and type of expenditure, and the amount of unallocated proceeds. In addition, Canada is committed to reporting on relevant impact metrics. Sustainalytics views the allocation and impact reporting as aligned with market practice.

Section 4. Additional Information

Useful links (e.g. to the external review provider's methodology or credentials, to the full review, to issuer's documentation, etc.)

Analysis of the contribution of the project(s) to the UN Sustainable Development Goals:

Additional assessment in relation to the issuer/bond framework/eligible project(s):

ABOUT ROLE(S) OF INDEPENDENT REVIEW PROVIDERS AS DEFINED BY THE GBP

- i. **Second-Party Opinion:** An institution with environmental expertise, that is independent from the issuer may issue a Second-Party Opinion. The institution should be independent from the issuer's adviser for its Green Bond framework, or appropriate procedures, such as information barriers, will have been implemented within the institution to ensure the independence of the Second-Party Opinion. It normally entails an assessment of the alignment with the Green Bond Principles. In particular, it can include an assessment of the issuer's overarching objectives, strategy, policy and/or processes relating to environmental sustainability, and an evaluation of the environmental features of the type of projects intended for the Use of Proceeds.
- ii. **Verification:** An issuer can obtain independent verification against a designated set of criteria, typically pertaining to business processes and/or environmental criteria. Verification may focus on alignment with internal or external standards or claims made by the issuer. Also, evaluation of the environmentally sustainable features of underlying assets may be termed verification and may reference external criteria. Assurance or attestation regarding an issuer's internal tracking method for use of proceeds, allocation of funds from Green Bond proceeds, statement of environmental impact or alignment of reporting with the GBP, may also be termed verification.
- iii. **Certification:** An issuer can have its Green Bond or associated Green Bond framework or Use of Proceeds certified against a recognised external green standard or label. A standard or label defines specific criteria, and alignment with such criteria is normally tested by qualified, accredited third parties, which may verify consistency with the certification criteria.
- iv. **Green Bond Scoring/Rating:** An issuer can have its Green Bond, associated Green Bond framework or a key feature such as Use of Proceeds evaluated or assessed by qualified third parties, such as specialised research providers or rating agencies, according to an established scoring/rating methodology. The output may include a focus on environmental performance data, the process relative to the GBP, or another benchmark, such as a 2-degree climate change scenario. Such scoring/rating is distinct from credit ratings, which may nonetheless reflect material environmental risks.

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In case of discrepancies between the English language and translated versions, the English language version shall prevail.

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