

SCOPE

Vigeo Eiris was commissioned to provide an independent opinion on the sustainability credentials and management of the Sustainability Bond Framework dated September 26, 2018 (the "Framework") created by the National Bank of Canada (the "Issuer") to govern future potential Sustainability Bond issuances (all the potential future bonds to be issued under the Framework are referred to as the "Bonds" hereafter) intended to finance and/or refinance five Eligible Categories, namely renewable energy, sustainable buildings, clean transportation, affordable housing and access to essential services. Our opinion is established according to our Environmental, Social and Governance ("ESG") exclusive assessment methodology and the International Capital Market Association's Green Bond Principles ("GBP") and Social Bond Principles (SBP) (referred to as the "Principles").

Our opinion is built on the review of the Framework, consisting in the assessment of the coherence between the Framework and the Issuer's sustainability commitments and in the evaluation of the Framework's alignment with the Principles.

Our sources of information are multichannel, combining data from our general rating database, information provided by the Issuer, press content providers and stakeholders, and complemented by interviews with Issuer's employees held *via* a telecommunications system. We carried out our due diligence assessment from August 20 to September 28, 2018.

We could access the appropriate documents and people we solicited. We consider that the provided information enables us to establish our opinion with a reasonable assurance on its relevance, precision and reliability.

VIGEO EIRIS' OPINION

Vigeo Eiris is of the opinion that the the National Bank of Canada's Sustainability Bond Framework is aligned with the voluntary guidelines from the Green Bond Principles and the Social Bond Principles.

We express an overall reasonable assurance³ (our highest level of assurance) on the Issuer's commitments and the Bonds' contribution to sustainability.

In addition, Eligible Businesses and Projects are likely to contribute to nine United Nations' Sustainable Development Goals, namely Goal 1: No Poverty, Goal 3: Good Health and Well-being, Goal 4: Quality Education, Goal 5: Gender Equality, Goal 7: Affordable and Clean Energy, Goal 8: Decent Work and Economic Growth, Goal 9: Industry, Innovation and Infrastructure, Goal 11: Sustainable Cities and Communities and Goal 13: Climate Action.

The National Bank of Canada has formalized the commitments and main characteristics of the Bonds within its Framework. The Issuer has committed to make both the Framework and this Second Party Opinion publicly accessible in its website⁴, in line with good market practices.

We are of the opinion that the Framework is coherent with the National Bank of Canada's main sustainability priorities and sectorial issues, and contributes to achieve its sustainability commitments.

¹ This opinion is to be considered as the "Second Party Opinion" described by the International Capital Market Association (www.icmagroup.org).

² The "Bonds" are to be considered as the potential future Sustainability Bonds issued under the National Bank of Canada' Sustainability Bond Framework dated September 26, 2018.

³ Definition of Vigeo Eiris' scales of assessment (as detailed in the Methodology section of this document):

Level of Evaluation: Advanced, Good, Limited, Weak.

Level of Assurance: Reasonable, Moderate, Weak.

⁴ www.nbc.ca

- ▶ The net proceeds of the Bonds will be used to finance and refinance, in whole or in part, five “Eligible Businesses and Projects” Categories, which are overall clearly defined.

The Eligible Categories are expected to contribute to five sustainability objectives namely climate change mitigation, air pollution prevention and control, and access to affordable housing and to basic and essential services.

The sustainability objectives are described in internal documentation and appear to be precise, measurable and relevant. The Issuer has committed to clearly communicate these objectives to investors. The National Bank of Canada will assess and, when feasible, quantify the expected social and environmental benefits of its Bonds.

We have recommended providing an estimate of the share of financing vs. refinancing of each Bond.

- ▶ The governance and the process for the evaluation and selection of Eligible Businesses and Projects appear to be documented and relevant. The process relies on explicit eligibility criteria (selection and exclusion), with regards to the sustainability objectives of the Framework.

The identification and management of environmental and social risks associated with the Eligible Businesses and Projects is overall good. We have recommended explicitly disclosing these processes in the Framework.

- ▶ The rules for the management of proceeds are clearly defined.
- ▶ The reporting process and commitments appear to be overall good, covering funds allocation and the expected social and environmental benefits of the Bonds.

We value the Issuer’s intention to engage a third-party firm to estimate quantitative impacts of all financed Businesses and Projects. We have recommended formalizing this intention in the Framework.

The National Bank of Canada’s Framework is supported by external reviews:

- Consultant reviews: a Second Party Opinion has been performed by Vigeo Eiris on the sustainability credentials of the Framework, and will be annually updated for the next 36 months. Ad-hoc reviews will be performed in case of any modification in the Framework dated September 26, 2018.
- An annual verification on the Bonds: performed by a third-party auditor, covering the allocation of funds, the compliance in all material aspects, of the actual allocation of proceeds to Eligible Businesses and Projects and their alignment with the eligibility criteria, annually and until the Bonds’ full allocation and in case of any material change.

This Opinion is valid from October 1, 2018 until October 30, 2019 and as long as the National Bank of Canada does not modify in any aspect of the Framework.

Paris, October 1, 2018



Paul Courtoisier
Sustainability Consultant
Project Manager



Adriana Cruz Félix
Sustainability Consultant

DETAILED RESULTS

Coherence of the issuance

We are of the opinion that the Framework is coherent with the National Bank of Canada's main sustainability priorities and sectorial issues, and contributes to achieve its sustainability commitments.

The banking sector has the potential of effectively channel capital to different markets and projects that contribute to the progress towards the transition to a sustainable economy. The major challenges of the sector include the development of positive impact finance products and services and minimizing the negative impact of their investments and activities on environment, people and society.

The National Bank of Canada, the sixth largest commercial bank in Canada, seems to acknowledge its roles and the Bank has formalized a Corporate Social Responsibility (CSR) strategy, structured on six pillars: clients, employees, community, environment, governance and its contribution to the economy.

In the context of its CSR strategy, the Bank has developed several social and environmental responsibility initiatives, namely:

- Development of financial services offers customized for immigrants including a hotline to support them in their integration to the country and partnerships to promote entrepreneurship.
- Support of community well-being by a donations and sponsorships program.
- Measures to calculate, disclose and reduce its greenhouse gas (GHG) emissions.
- Development of responsible sourcing policies and practices.
- Obtainment of green certification for its branches and corporate buildings.
- Membership in Hydro-Quebec's Energy Savers' Circle since 2015 to web-control heating, cooling and ventilation to optimize energy consumption in its buildings.

By creating a Framework to issue Bonds intended to finance and refinance businesses and projects related to renewable energy, sustainable buildings, clean transportation, affordable housing and access to essential services, the National Bank of Canada coherently responds to its mission as well as it aligns with the main issues of its sector in terms of environmental and social responsibility.

Use of proceeds

The net proceeds of the Bonds will be used to finance and refinance, in whole or in part, five "Eligible Businesses and Projects" Categories, which are overall clearly defined.

The Eligible Categories are expected to contribute to five sustainability objectives namely climate change mitigation, air pollution prevention and control, and access to affordable housing and to basic and essential services.

The sustainability objectives are described in internal documentation and appear to be precise, measurable and relevant. The Issuer has committed to clearly communicate these objectives to investors. The National Bank of Canada will assess and, when feasible, quantify the expected social and environmental benefits of its Bonds.

We have recommended providing an estimate of the share of financing vs. refinancing of each Bond.

The net proceeds of the Bonds will be used to finance and refinance, in whole or in part, five "Eligible Businesses and Projects" Categories that could be divided in Green Categories and Social Categories. Some categories include Eligible Projects only, while others could include both Eligible Businesses and Eligible Projects, as summarized in the following table.

	Eligible Businesses	Eligible Projects
Green Categories		
Renewable Energy	x	x
Sustainable Buildings		x
Clean Transportation		x
Social Categories		
Affordable Housing	x	x
Access to Essential Services	x	x

We consider the Eligible Categories to be overall clearly defined.

- For the Affordable Housing and Access to Essential Services Categories, we have suggested reorganizing these categories per social need, such as education, housing or healthcare to provide more clarity, and specifying target populations for each basic or essential service included (education, healthcare, etc.).

The target population of the Affordable Housing Category is clearly defined as lower income citizens/residents in Canada, while the target population of the Access to Essential Services Category is generally defined. We have recommended specifying target populations for each basic or essential service included (education, healthcare, etc.).

The Issuer has not disclosed the refinancing share of its Bonds issuances. We have recommended providing an estimate of the share of financing vs. refinancing of each Bond.

The Issuer has defined a look-back period of 36 months prior to the date of each Bond issuance for refinanced Businesses and Projects, in line with market good practices.

In addition, Eligible Businesses and Projects are likely to contribute to nine United Nations' Sustainable Development Goals, namely Goal 1: No Poverty, Goal 3: Good Health and Well-being, Goal 4: Quality Education, Goal 5: Gender Equality, Goal 7: Affordable and Clean Energy, Goal 8: Decent Work and Economic Growth, Goal 9: Industry, Innovation and Infrastructure, Goal 11: Sustainable Cities and Communities and Goal 13: Climate Action.

Eligible Categories	UN SDGs identified	UN SDGs targets
Renewable Energy	SDG 7 – Affordable and Clean Energy	7.2
	SDG 13 – Climate Action	N/A
Sustainable Buildings	SDG 7 – Affordable and Clean Energy	7.3
	SDG 13 – Climate Action	N/A
Clean Transportation	SDG 3 – Good Health and Well-being	3.9
	SDG 9 – Industry, innovation and infrastructure	9.4
	SDG 11 – Sustainable Cities and Communities	11.2, 11.6
	SDG 13 – Climate Action	N/A
Affordable Housing	SDG 1 – End Poverty	1.2, 1.4
	SDG 11 – Sustainable Cities and Communities	11.1
Access to Essential Services	SDG 1 – End Poverty	1.2, 1.4
	SDG 3 – Good Health and Well-being	3.8
	SDG 4 – Quality Education	4.3, 4.4, 4.5
	SDG 5 – Gender Equality	5.4
	SDG 8 – Decent Work and Economic Growth	8.6
	SDG 11 – Sustainable Cities and Communities	11.1, 11.3, 11.7

UN SDG 1. No Poverty



UN SDG 1 consists in ensuring ending poverty in all its forms everywhere. More precisely, SDG 1 targets by 2030 include:

- 1.2 Reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions
- 1.4 Ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance

By creating a Framework to issue Bonds intended to finance and refinance Affordable Housing and Access to Essential Services, the National Bank of Canada is likely to contribute to the UN SDG 1, with regards to the above-mentioned targets.

UN SDG 3. Good Health and Well-being



UN SDG 3 consists in ensuring healthy lives and promoting well-being for all at all ages. More precisely, SDG 3 targets by 2030 include:

- 3.8 Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all
- 3.9 Substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination

By creating a Framework to issue Bonds intended to finance and refinance Clean Transportation and Access to Essential Services, the National Bank of Canada is likely to contribute to the UN SDG 3, with regards to the above-mentioned targets.

UN SDG 4. Quality Education



UN SDG 4 consists in ensuring inclusive and equitable quality education and promote lifelong learning opportunities for all. More precisely, SDG 4 targets by 2030 include:

- 4.3 Ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university
- 4.4 Substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship
- 4.5 Eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations

By creating a Framework to issue Bonds intended to finance and refinance Access to Essential Services, the National Bank of Canada is likely to contribute to the UN SDG 4, with regards to the above-mentioned targets.

UN SDG 5. Gender Equality



UN SDG 5 consists in achieving gender equality and empower all women and girls. More precisely, SDG 5 targets by 2030 include:

- 5.4 Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate

By creating a Framework to issue Bonds intended to finance and refinance Access to Essential Services, the National Bank of Canada is likely to contribute to the UN SDG 5, with regards to the above-mentioned target.

UN SDG 7.
Affordable and Clean Energy

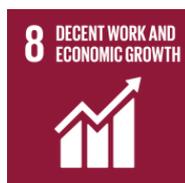


UN SDG 7 consists in ensuring access to affordable, reliable, sustainable and modern energy for all. More precisely, SDG 7 targets by 2030 include:

- 7.2 Increase substantially the share of renewable energy in the global energy mix
- 7.3 Double the global rate of improvement in energy efficiency

By creating a Framework to issue Bonds intended to finance and refinance Renewable Energy and Sustainable Buildings, the National Bank of Canada is likely to contribute to the UN SDG 7, with regards to the above-mentioned targets.

UN SDG 8.
Decent Work and Economic Growth



UN SDG 8 consists in promoting sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all. More precisely, SDG 8 targets by 2030 include:

- 8.6 substantially reduce the proportion of youth not in employment, education or training

By creating a Framework to issue Bonds intended to finance and refinance Access to Essential Services, the National Bank of Canada is likely to contribute to the UN SDG 8, with regards to the above-mentioned target.

UN SDG 9.
Industry, innovation and infrastructure



UN SDG 9 consists in building resilient infrastructure, promoting sustainable industrialization and fostering innovation. More precisely, SDG 9 targets by 2030 include:

- 9.4 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

By creating a Framework to issue Bonds intended to finance and refinance Clean Transportation, the National Bank of Canada is likely to contribute to the UN SDG 9, with regards to the above-mentioned target.

UN SDG 11.
Sustainable Cities and Communities



UN SDG 11 consists in making cities inclusive, safe, resilient and sustainable. More precisely, SDG 11 targets by 2030 include:

- 11.1 Ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums
- 11.2 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
- 11.3 Enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries
- 11.6 Reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management
- 11.7 Provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities

By creating a Framework to issue Bonds intended to finance and refinance Clean Transportation, Affordable Housing and Access to Essential Services, the National Bank of Canada is likely to contribute to the UN SDG 11, with regards to the above-mentioned targets.

UN SDG 13.
Climate action



UN SDG 13 consists in taking urgent action to combat climate change and its impacts. The financial sectors can contribute to this goal by investing in the transition to net-zero carbon energy, energy efficiency and the reduction of GHG emissions from transport operations with abatement levers such as modal shift to lower carbon modalities.

By creating a Framework to issue Bonds intended to finance and refinance Renewable Energy, Sustainable Buildings and Clean Transportation, the National Bank of Canada is likely to contribute to the UN SDG 13, with regards to the above-mentioned contribution.

Process for evaluation and selection

The governance and the process for the evaluation and selection of Eligible Businesses and Projects appear to be documented and relevant.

The process for evaluation and selection of Eligible Businesses and Projects is clearly defined and formalized through the Framework.

The evaluation and selection process is reasonably structured:

- The evaluation and selection of Eligible Businesses and Projects is based on relevant internal and external expertise with well-defined roles and responsibilities:

Business-as-usual procedure:

- The Account Managers are responsible for conducting the due diligence process of all businesses/projects to be financed by the Bank, and for preparing the necessary information to be presented to the Financial Market's Deal Committee and the Credit Committee for pre-approval.
- External parties are appointed by the Bank for the realization of risk assessments: legal and reputational risks (law firms) and environmental, social and operational risks (engineering firms).
- The Deal Committee is integrated by senior executives of the Bank and its responsibility is to ensure the compliance of businesses/projects with the Bank's policies and local/national regulations.
- The Credit Committee is responsible for reviewing and granting the final credit approval.

Bonds procedure:

- The National Bank of Canada has created a Sustainability Bond Committee comprising senior representatives, covering relevant multi-disciplinary expertise, particularly in finance, risk management, legal and public affairs. The Committee is responsible for the ultimate review and selection of Eligible Projects and Business that will be financed by the Bonds.
- The verification and traceability is ensured throughout the process:
 - The Committee will annually verify businesses and projects continued compliance with the eligibility criteria, and meeting minutes of each meeting will be created to ensure decision traceability.
 - An independent external reviewer will verify the compliance of the selected Businesses and Projects with the defined process and eligibility criteria.

The process relies on explicit eligibility criteria (selection and exclusion), with regards to the sustainability objectives of the Framework.

- The eligibility requirements are based on the Eligible Categories definitions.
- The Issuer has defined explicit exclusion criteria, relevant to the type of Eligible Businesses and Projects Categories defined in the Framework. We have recommended explicitly excluding other controversial sectors, namely animal welfare, chemicals of concern, genetic engineering, high interest rate lending, pornography, reproductive medicine and tobacco.

The identification and management of environmental and social (E&S) risks associated with the Eligible Businesses and Projects is overall good. We have recommended explicitly disclosing these processes in the Framework.

The National Bank of Canada has formalized an Environmental Risk Management Policy for Financing Activities and a Reputation Risk Management Policy. These two policies aim at identifying and reducing potential businesses and projects' E&S risks.

The Bank internal due diligence processes allow covering most of the E&S risks associated with the Eligible Projects and Businesses.

The due diligence assessment process for includes the appointment of recognized third-parties (law and engineering firms) that conduct risk assessments of all businesses/projects covering legal, reputational, human capital, operational and environmental risks. When applicable, risks related to impacts on indigenous peoples or other vulnerable communities are reviewed by the legal counsel. In addition, for Business and Projects related to the Affordable Housing and Access to Essential Services, the Bank reviews the compliance with the eligibility criteria established by the government, who will supervise these businesses/projects. Results are documented into a dedicated folder that compiles all the financial and extra-financial due diligences performed for each project/business.

The Bank has not yet adopted an overarching approach for the management and mitigation of E&S risks and we have therefore suggested creating a dedicated E&S questionnaire to ensure the exhaustive coverage of E&S risks assessments conducted by external reviewers, at least for the Bonds' portfolio.

The Issuer has committed to conduct an annual ESG controversies screening in all the Businesses and Projects financed by the Bonds to identify the events that could undermine their environmental and/or social objectives, and to take the appropriate corrective measures.

Management of proceeds

The rules for the management of proceeds are clearly defined.

The net proceeds of the Bonds will be deposited in the general fundings account of the National Bank of Canada and managed by the Corporate Treasury team. The proceeds will be appropriately earmarked and tracked using a "Sustainability Bond Register". The Issuer intends to maintain at all times a portfolio of Eligible Businesses and Projects that is at least equal to the aggregate net proceeds of the Bonds concurrently outstanding.

The National Bank of Canada has committed to fully allocate each Bond's proceeds to Eligible Businesses and Projects within 18 months of the Bond's settlement date, in line with good market practices.

Unallocated proceeds will be held in liquid short-term investments, in accordance with NBC's normal liquidity management activities, also in line with good market practices.

In case of divestment, write-offs or early amortizations, or if an Eligible Business/Project fails to comply with the eligibility criteria, the Issuer has committed to replace this business/project with another business/project respecting the eligibility criteria or kept in liquid instruments. The eventual changes in the Bonds' allocations will be disclosed to investors in the annual report.

In addition, an independent party will verify the allocation of funds for each Bond once a year until the full allocation of any outstanding Bond and thereafter upon material changes to the allocations.

Monitoring & Reporting

The reporting process and commitments appear to be overall good, covering funds allocation and the expected social and environmental benefits of the Bonds.

We value the Issuer's intention to engage a third-party firm to estimate quantitative impacts of all financed Businesses and Projects. We have recommended formalizing this intention in the Framework.

The process for monitoring, data collection, consolidation and reporting is clearly defined by the Issuer in internal documentation and made public through this Second Party Opinion. The process is based on relevant internal expertise:

- The social and environmental impact monitoring is first performed by the Front Office.
- The Corporate Treasury team will be responsible for collecting and consolidating the necessary data to update the Sustainability Bond Register (database that will feed the Bonds Reports).
- The Sustainability Bond Committee will designate a dedicated team who will be responsible for gathering the missing information and for creating the Bonds Reports.

Bonds Reports will be made publicly available in the National Bank of Canada's website. The Issuer will annually report on the Bonds, until complete allocation and later in the case of any material change, on:

- Use of proceeds: the selected reporting indicators related to the funds allocation are overall relevant to the Eligible Businesses and Projects Categories. We have recommended reporting on the share of actual share of financing vs. refinancing.
- Environmental and/or social benefits at Category level: the Issuer is committed to report on the sustainability impacts of the selected Businesses and Projects and has identified examples of potential outputs and impacts indicators.

The broad aspects of the impact assessment methodology will be publicly disclosed by the Issuer in the Sustainability Bonds Reports.

We value the Issuer's intention to engage a third-party firm to estimate quantitative impacts of all financed Businesses and Projects. We have recommended formalizing this commitment in the Framework.

We have recommended that the social and environmental data included in the report is annually verified by an external auditor.

METHODOLOGY

In Vigeo Eiris' view, Environmental, Social and Governance (ESG) factors are intertwined and complementary. As such they cannot be separated in the assessment of ESG management in any organization, activity or transaction. In this sense, Vigeo Eiris writes an opinion on the Issuer's Corporate Social Responsibility as an organization, and on the objectives, management and reporting of the projects to be (re)financed by this transaction.

Vigeo Eiris' methodology for the definition and assessment of the corporate's ESG performance is based on criteria aligned with public international standards, in compliance with the ISO 26000 guidelines, and organized in 6 domains: Environment, Human Resources, Human Rights, Community Involvement, Business Behaviour and Corporate Governance. The evaluation framework has been customized regarding material issues, based on our generic Diversified Banks North America sector ESG assessment framework and specific issues considering the issuer's activity.

Vigeo Eiris reviewed information provided by the Issuer, press content providers and stakeholders (partnership with Factiva Dow Jones: access to the content of 28,500 publications worldwide from reference financial newspapers to sector-focused magazines, local publications or Non-Government Organizations). Information gathered from these sources will be considered as long as they are public, documented and traceable. Vigeo Eiris has reviewed documents and websites of the Issuer (including but not limited The National Bank of Canada's Sustainability Bond Framework, CSR Report 2017, Environmental Risk Management Policy for Financing Activities, Reputational Risk Management Policy...) and interviewed members from several departments of the Issuer.

Our research and rating procedures are subject to internal quality control at three levels (analysts, heads of cluster sectors, and internal review by the audit department for second party opinions) complemented by a final review and validation by the Direction of Methods. A right of complaint and recourse is guaranteed to all companies under our review, including three levels: first, the team linked to the company, then the Direction of Methods, and finally Vigeo Eiris' Scientific Council. All collaborators are signatories of Vigeo Eiris' Code of Ethics.

The Bond has been evaluated by Vigeo Eiris according to the Green Bond Principles and the Social Bond Principles, and our methodology based on international standards and sector guidelines applying in terms of ESG management and assessment.

Use of proceeds

Use of proceeds guidelines are defined to ensure that the funds raised are used to finance and/or refinance Eligible Businesses and Projects, and are traceable within the issuing organisation. Each business/project endorsed shall comply with at least one of the Eligible Categories definitions to be considered as an Eligible Business or Project. Vigeo Eiris evaluates the relevance, visibility, and measurability of the associated environmental and/or social objectives. The sustainability purpose of the related Eligible Businesses and Projects has been precisely defined, with regard to the Issuer's commitments, and assessed based on the described and estimated benefits of Eligible Businesses and Projects. The contribution of Eligible Businesses and Projects to sustainable development is evaluated based on the United Nations Sustainable Development Goals.

Process for evaluation and selection

The evaluation and selection process has been assessed by Vigeo Eiris regarding its transparency, governance and efficiency. The relevance and exhaustiveness of eligibility criteria and associated supporting elements integrated in the Bonds issuance, and the coherence of the process are analysed based on material issues considered in Vigeo Eiris' methodology.

Management of proceeds

The rules for the management of proceeds and the allocation process have been evaluated by Vigeo Eiris regarding their transparency, coherence and efficiency.

Reporting

Reporting indicators, processes and methodologies are defined by the Issuer to enable annual reporting on funds allocation, environmental and/or social benefits (output and impact indicators) and on the responsible management of the Eligible Businesses and Projects (re)financed by the Bonds proceeds, collected at project level and potentially aggregated at Bond level. Vigeo Eiris has evaluated the relevance of the reporting framework according to three principles: transparency, exhaustiveness and effectiveness.

- Scale of assessment for processes and commitments: Weak, Limited, Good, Advanced.
- Scale of level of assurance on Issuer's capacity: Reasonable, Moderate, Weak.

VIGEO EIRIS' ASSESSMENT SCALES

Performance evaluation	
Advanced	Advanced commitment; strong evidence of command over the issues dedicated to achieving the objective of social responsibility. Reasonable level of risk management and using innovative methods to anticipate emerging risks.
Good	Convincing commitment; significant and consistent evidence of command over the issues. Reasonable level of risk management.
Limited	Commitment to the objective of social responsibility has been initiated or partially achieved; fragmentary evidence of command over the issues. Limited to weak level of risk management.
Weak	Commitment to social responsibility is non-tangible; no evidence of command over the issues. Level of insurance of risk management is weak to very weak.

Level of assurance	
Reasonable	Able to convincingly conform to the prescribed principles and objectives of the evaluation framework
Moderate	Compatibility or partial convergence with the prescribed principles and objectives of the evaluation framework
Weak	Lack or unawareness of, or incompatibility with the prescribed principles and objectives of the evaluation framework

Vigeo Eiris is an independent international provider of environmental, social and governance (ESG) research and services for investors and public & private organisations. We undertake risk assessments and evaluate the level of integration of sustainability factors within the strategy and operations of organisations.

Vigeo Eiris offers a wide range of services:

- ▶ **For investors:** decision making support covering all sustainable and ethical investment approaches (including ratings, databases, sector analyses, portfolio analyses, structured products, indices and more).
- ▶ **For companies & organisations:** supporting the integration of ESG criteria into business functions and strategic operations (including sustainable bonds, corporate ratings, CSR evaluations and more).

Vigeo Eiris is committed to delivering client products and services with high added value: a result of research and analysis that adheres to the strictest quality standards. Our methodology is reviewed by an independent scientific council and all our production processes, from information collection to service delivery, are documented and audited. Vigeo Eiris has chosen to certify all its processes to the latest ISO 9001 standard. Vigeo Eiris is an approved verifier for CBI (Climate Bond Initiative). Vigeo Eiris' research is referenced in several international scientific publications.

With a team of more than 240 experts of 28 different nationalities, Vigeo Eiris is present in Paris, London, Boston, Brussels, Casablanca, Hong Kong, Milan, Montreal, Rabat, Santiago and Stockholm.

The Vigeo Eiris Global Network, comprising 7 exclusive research partners, is present in Australia, Brazil, Germany, Israel, Japan, Spain and Mexico.

For more information: www.vigeo-eiris.com

Disclaimer

Transparency on the relation between Vigeo Eiris and the issuer: Vigeo Eiris has not carried out any audit mission or consultancy activity for the National Bank of Canada until so far and no established relationship (financial or other) exists between Vigeo Eiris and the National Bank of Canada.

This opinion aims at providing an independent opinion on the sustainability credentials and management of the Sustainability Bond Framework, based on the information which has been made available to Vigeo Eiris. Vigeo Eiris has neither interviewed stakeholders out of the Issuer's employees, nor performed an on-site audit nor other test to check the accuracy of the information provided by the Issuer. The accuracy, comprehensiveness and trustworthiness of the information collected are a responsibility of the Issuer. Providing this opinion does not mean that Vigeo Eiris certifies the effectiveness, the excellence or the irreversibility of the Businesses or Projects to be financed by the Bonds. The Issuer is fully responsible for attesting the compliance with its commitments defined in its policies, for their implementation and their monitoring. The opinion delivered by Vigeo Eiris neither focuses on the financial performance of the Bonds, nor on the effective allocation of its proceeds. Vigeo Eiris is not liable for the induced consequences when third parties use this opinion either to make investments decisions or to make any kind of business transaction.

The opinion delivered on stakeholder-related ESG controversies is not a conclusion on the creditworthiness of the Issuer or its financial obligations. Vigeo Eiris does not express an opinion as a score when controversial activities, products and services are not prohibited by international standards or treaties.

Restriction on distribution and use of this opinion: the opinion is provided by Vigeo Eiris to the Issuer and can only be used by the Issuer. The distribution and publication is at the discretion of the Issuer, submitted to Vigeo Eiris approval.