

RBC Green Bond Framework

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1. About RBC

Royal Bank of Canada (RY on TSX and NYSE) and its subsidiaries operate under the master brand name RBC. We are Canada's biggest bank and one of the largest in the world based on market capitalization. We are one of North America's leading diversified financial services companies, and provide personal and commercial banking, wealth management, insurance, investor services and capital markets products and services on a global basis. We have over 84,000 employees who serve 16 million clients in Canada, the U.S. and 34 other countries.

Our purpose is to help clients thrive and communities prosper, and our vision is to be among the world's most trusted and successful financial institutions. We strive to have a positive economic, environmental and social impact and to provide responsible leadership wherever we operate.

2. RBC and Climate Change

RBC has a long history of environmental leadership dating back to 1991 when we launched our first corporate environmental policy. Since 2007, we have identified climate change as a priority environmental issue in our corporate environmental strategy. RBC is committed to transparency and disclosure, and has reported annually on our key environmental performance metrics and targets since 2003.

RBC's Climate Change Position Statement¹ affirms that we:

- Support the principles of the Paris Agreement and the international goal to hold global warming to below 2° Celsius;
- Recognize the important role we must play in supporting a stable and inclusive transition to a low carbon economy;
- Will continue to explore ways to better enable our clients to respond to climate related risks and opportunities through our financial products, services and advice;
- Will continue to lead by example in our own operations by focusing on energy efficiency and GHG emissions reductions, and applying the principles of green building design and operation;
- Are committed to publishing annual climate-related disclosures that consider the recommendations of the Financial Stability Board's (FSB) Task Force on Climate Related Financial Disclosures (TCFD);
- Will seek to identify, assess and mitigate climate-related risks that have a material impact on our business; and
- Will publish research and develop thought leadership on climate-related issues.

3. RBC's Framework

RBC's Green Bond Framework (the "framework") has been developed in line with the ICMA Green Bond Principles (the "GBP") 2018² and is intended to provide transparency in our Green Bond issuance and reporting processes. The framework is based on the four core components of the GBP, being "Use of Proceeds", "Process for Evaluation and Selection", "Management of Proceeds" and "Reporting". The framework also describes the manner in which RBC Green Bonds support and contribute towards meeting the United Nations Sustainable Development Goals (SDGs)³. Under this framework, RBC may issue Green Bonds in various formats, according to the prevailing terms described in the documentation.

¹ http://www.rbc.com/community-sustainability/_assets-custom/pdf/RBC_ClimateChangePosition_Disclosure_Statement_2017.pdf

² <https://www.icmagroup.org/green-social-and-sustainability-bonds/green-bond-principles-gbp/>

³ <https://www.un.org/sustainabledevelopment/sustainable-development-goals/>

4. Use of Proceeds

The proceeds of RBC Green Bonds will be allocated exclusively to finance or refinance, in part or in full, eligible businesses and projects that promote the transition to a low carbon, climate resilient and sustainable economy and provide clear environmental sustainability benefits (“Eligible Assets”).

Eligible Assets may include, but are not limited to, loans to businesses and projects that meet RBC’s Green Bond eligibility criteria as described in Table 1. Where a business derives 90% or more of its revenues from activities in the eligible categories, it will be considered as eligible for financing from an RBC Green Bond. In these instances, the Use of Proceeds can be used by the business for general purposes, so long as this financing does not fund expansion into activities falling outside the eligible categories.

Table 1: Eligible Assets

Eligible Categories	Description	UN SDGs Alignment
1. Renewable energy	<ul style="list-style-type: none"> ▪ Proceeds may be allocated to the construction, development, operation, acquisition, maintenance and distribution of the following renewable energy generation sources: <ul style="list-style-type: none"> • Wind • Solar • Geothermal • Waste biomass • Tidal • Run of river and small scale hydroelectricity <25 MW • Refurbishment of existing hydroelectricity facilities 	<ul style="list-style-type: none"> ▪ SDG 7. Affordable and Clean Energy
2. Energy efficiency	<ul style="list-style-type: none"> ▪ Proceeds may be allocated to products and systems that reduce energy consumption or mitigate greenhouse gas (GHG) emissions, including: <ul style="list-style-type: none"> • Energy efficient heating and cooling systems • Energy efficient lighting and appliances • Centralized energy control systems • Energy storage systems 	<ul style="list-style-type: none"> ▪ SDG 7. Affordable and Clean Energy
3. Pollution prevention and control	<ul style="list-style-type: none"> ▪ Proceeds may be allocated to the construction, development, operation, acquisition and maintenance of facilities, systems or equipment used for: <ul style="list-style-type: none"> • Collection, treatment, recycling or reuse of emissions, waste, hazardous waste or contaminated soil • Facilities, systems and equipment that are used to divert waste from landfills or reduce emissions 	<ul style="list-style-type: none"> ▪ SDG 12. Responsible Consumption and Production

Eligible Categories	Description	UN SDGs Alignment
4. Environmentally sustainable management of living natural resources and land use	<ul style="list-style-type: none"> ▪ Proceeds may be allocated to sustainably managed forests and forest products certified by credible third-party forest certification systems, including: <ul style="list-style-type: none"> • Forest Stewardship Council (FSC) • Programme for the Endorsement of Forest Certification (PEFC) and Sustainable Forestry Initiative (SFI) 	<ul style="list-style-type: none"> ▪ SDG 15. Life on Land
5. Clean transportation	<ul style="list-style-type: none"> ▪ Proceeds may be allocated to the construction, development, operation, acquisition and maintenance of low carbon transportation assets, including: <ul style="list-style-type: none"> • Electric, fuel cell and non-motorized vehicles and supporting infrastructure • Infrastructure and rolling stock for mass transit 	<ul style="list-style-type: none"> ▪ SDG 9. Industry, Innovation and Infrastructure
6. Sustainable water and wastewater management	<ul style="list-style-type: none"> ▪ Proceeds may be allocated to the construction, development, operation, acquisition and maintenance of infrastructure for: <ul style="list-style-type: none"> • Collection, treatment, recycling or reuse of water, rainwater or wastewater • Flood prevention, flood defense or storm water management 	<ul style="list-style-type: none"> ▪ SDG 6. Clean Water and Sanitation
7. Green buildings	<ul style="list-style-type: none"> ▪ Proceeds may be allocated to the construction, development, operation, acquisition and maintenance of residential and commercial buildings that have: <ul style="list-style-type: none"> • Received, or expect to receive based on their design, construction and operation plans, certification according to third party verified building standards, including LEED Gold or Platinum or equivalent levels in other certification schemes such as BOMA BEST, BREEAM or ENERGY STAR; or • Achieved, based on third party assessment, greenhouse gas emission performance in the top 15% of their city, province, state or country 	<ul style="list-style-type: none"> ▪ SDG 11. Sustainable Cities and Communities

Exclusionary Criteria

RBC Green Bond proceeds will not knowingly be allocated to finance any business whose current principal industry or primary activity has been assessed by RBC as being any of the following:

- Weapons
- Tobacco
- Gambling
- Adult entertainment
- Predatory lending

5. Process for Project Evaluation and Selection

A Green Bond Working Group will oversee the implementation of RBC's Green Bond Framework. The Green Bond Working Group will be composed of representatives from specialist teams in Corporate Treasury, Capital Markets, Personal & Commercial Banking, and Corporate Citizenship. The group will draw on support from Group Risk Management as required.

RBC will maintain a single pool for Eligible Assets in a "Green Bond Asset Portfolio". RBC's Capital Markets, Personal & Commercial Banking and Environmental Affairs teams are responsible for screening potential Eligible Assets against RBC's Green Bond eligibility criteria.

The Green Bond Asset Portfolio will be reviewed by the Green Bond Working Group on a quarterly basis to ensure that all Eligible Assets continue to meet the eligibility criteria. Assets that have been terminated or no longer comply will be removed from the Green Bond Asset Portfolio.

All Eligible Assets are subject to consistency with RBC's applicable environmental and social risk management policies, including the Equator Principles.

6. Management of Proceeds

All Eligible Assets in RBC's Green Bond Asset Portfolio will be tagged as "Green Bonds Eligible" in RBC's global credit management system, which tracks RBC's credit exposure on an ongoing basis. As such, RBC's Green Bond Asset Portfolio will be dynamic with Eligible Assets maturing and new Eligible Assets being added.

RBC's Green Bond proceeds will be managed in a portfolio approach. The Green Bond Working Group will monitor the aggregate amount of assets in RBC's Green Bond Asset Portfolio on a quarterly basis to ensure it is equal to or greater than the aggregate amount of proceeds raised by RBC Green Bonds.

If for any reason the aggregate amount in RBC's Green Bond Asset Portfolio is less than the total outstanding amount of RBC Green Bonds issued, RBC will hold the unallocated amount in cash or liquid securities in accordance with RBC's normal liquidity management policy until the amount can be allocated to the Green Bond Asset Portfolio.

7. Reporting

RBC intends to make and keep readily available Green Bond reporting within a year from issuance, to be renewed annually until full allocation and in case of any material changes. RBC's Green Bond reporting will be made publicly available on rbc.com and may include, but will not be limited to:

Allocation Reporting

- Net proceeds raised from each RBC Green Bond;
- Aggregate amounts of funds allocated to each of the Eligible Categories (as listed in Table 1);
- The balance of unallocated proceeds at the reporting period end.

Impact Reporting

Where feasible, RBC will provide further information and examples of eligible businesses and projects financed or refinanced by RBC Green Bonds, including quantitative performance measures as described in Table 2. Disclosure of information related to Use of Proceeds, Impact Reporting, and businesses and projects financed or refinanced will be made subject to RBC's confidentiality obligations and the availability of information.

Table 2: Impact Measurement

Eligible Categories	Potential Quantitative Performance Measures
1. Renewable energy	Total installed capacity (MW) GHG emissions avoided (tCO ₂ e)
2. Energy efficiency	Expected energy savings per year (MWh) GHG emissions avoided (tCO ₂ e)
3. Pollution prevention and control	Emissions or pollutants reduced/avoided Waste diverted from landfill (tonnes)
4. Environmentally sustainable management of living natural resources and land use	Total surface financed (hectares)
5. Clean transportation	Annual ridership of each transit system supported New clean transportation infrastructure built (km)
6. Sustainable water and wastewater management	Total population served by the system Volume of water saved/reduced/treated (m ³)
7. Green buildings	GHG emissions avoided (tCO ₂ e) Floor space of green real estate (m ²)

8. External Review

Second Party Opinion

RBC has obtained a Second Party Opinion to confirm the alignment of our framework with the Green Bond Principles. The Second Party Opinion will be published on rbc.com.

Verification

For Green Bonds issued under RBC's Green Bond Framework, RBC may request on an annual basis a limited assurance report of the allocation of Green Bond proceeds to Eligible Assets, provided by its external auditor.

Disclaimer

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By their very nature, forward-looking statements require certain assumptions and are subject to inherent risks and uncertainties, which give rise to the possibility that predictions, forecasts, projections, expectations or conclusions will not prove to be accurate and that such assumptions may not be correct. Readers are cautioned not to place undue reliance on these statements as a number of risk factors could cause actual results to differ materially from the expectations expressed in such forward-looking statements. These factors – many of which are beyond RBC’s control and the effects of which can be difficult to predict – include: credit, market, liquidity and funding, insurance, operational, regulatory compliance, strategic, reputation, legal and regulatory environment, competitive and systemic risks and other risks discussed in RBC’s most recent Annual Report and Management’s Discussion and Analysis. Readers are cautioned that these risk factors are not exhaustive and other factors could also adversely affect RBC’s results. When relying on the forward-looking statements contained in this document to make decisions with respect to RBC, investors and others should carefully consider the foregoing factors and other uncertainties and potential events.

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