TD Green Bond (2017) Issuance – Use of Proceeds

In 2014, TD issued the first green bond from a Canadian commercial bank – a $500 million three-year bond that matured on April 3, 2017. In 2017, TD issued its second green bond, a US$1 billion three-year bond maturing on September 11, 2020, which was one of the largest green bond offerings by a bank in the developed markets at that time. TD Green Bonds support North American projects that contribute to the low-carbon economy through:

1. Renewable energy generation: Investments that help supply energy from renewable and low carbon sources.
2. Energy efficiency and management: Investments that help reduce energy consumption or help manage and store energy.
3. Green infrastructure and sustainable land use: Investments that support conservation, sustainable land, waste or water management, and enhance climate resiliency.

Please refer to the TD Green Bond Framework for more information on TD Green Bonds.

2017 Green Bond Issuance

In 2019, the annual environmental benefits of projects allocated to the TD Green Bond issued in 2017 include:[1]

- Over 23,500 MWh of energy saved or green energy generated, enough to power over 2,000 homes for one year
- Over 9,000 tonnes CO_2e reduced/avoided, equivalent to removing nearly 2,000 passenger vehicles driven for one year off the road
- Over $1.6 million in natural capital value generated

Three projects funded by the 2017 TD Green Bond are featured below, as well as a breakdown of benefits and use of proceeds by project category.[2]

Centre for Addiction and Mental Health

Amount Allocated: US$30.2 million

Project Lifetime: 33 years

Project Description:
The Centre for Addiction and Mental Health Phase 1C redevelopment project will see the construction of two modern buildings along Queen Street West in Toronto featuring inpatient and outpatient services.

Environmental Benefits:
This development will be LEED Gold certified with enhanced energy efficiency and a sustainable design. It will be developed in a manner that is welcoming through design of patient and public spaces and abundant access to natural light and the outdoors.

Solar Power Generation

Amount Allocated: US$3.2 million

Project Lifetime: 20 years

Project Description:
Project finance to supply and install ground mounted photo voltaic solar panels, racking, inverters and related equipment required for six Feed-In Tariff (FIT) solar power generation sites in Northern Ontario.

Environmental Benefits:
As a renewable energy source, solar energy works towards a low carbon transition. Since 2012, the Town of Kapuskasing has been developing solar power generation projects that sell in to the provincial grid. To date, these projects total a generation capacity of over 6 MW, which are approved under the Ontario Power Authority FIT 1, 2 & 3 Programs.

Energy Services Acquisition Program (ESAP) – Energy Services Modernization

Amount Allocated: US$77.4 million

Project Lifetime: 35 years

Project Description:
Modernization and expansion of an existing district energy system (DES) in Ottawa (National Capital Region) that will help the Government of Canada to meet its goal of reducing greenhouse gas emissions (GHG) in its own operations by 40% by 2030.

Environmental Benefits:
ESAP will modernize and expand the existing district energy system that heats 80 and cools 67 federal and non-federal buildings, while supporting the reduction of GHG emissions. By modernizing the DES there will be an opportunity to contribute to climate change commitments by both transitioning to a low-carbon economy and stimulating the clean technology sector. Since 2005 ESAP has reduced emissions by 30% and this modernization project will cut emissions by another 33% bringing total GHG reductions to 63% by 2025.

[1] Fiscal year 2019 values make use of an updated methodology that more fully captures the benefit of emissions reduction projects. As such, these values are not comparable with previously published values for prior years. Analysis completed by consultants, based on data derived from project owners.

[2] Information and specifications below have been provided by the project party.

TD Green Bond (2017) Issuance – Use of Proceeds (continued)

TD Green Bond 2017 Issuance – Use of Proceeds as at October 31, 2019

CATEGORY	TD GREEN BOND CRITERIA	ALLOCATED AMOUNT (millions USD)[3,4,5,6]	ANNUAL ENERGY SAVED OR GREEN ENERGY GENERATED (MWh)	ANNUAL GHG EMISSIONS REDUCED/AVOIDED (tonnes CO_2e)[7]	NATURAL CAPITAL VALUE ($CAD)
Hydroelectric	Construction and operation of hydro facilities (existing hydropower assets in temperate zones, or new hydropower facilities under 25 MW generation capacity)	$0	0	0	$0
Solar Power	Development, construction and operation of solar energy facilities	$16.4	3,850	1,434	$254,049
Wind Energy	Development, construction and operation of wind energy facilities	$19.2	15,756	5,867	$1,039,800
Building Efficiency	Green buildings – new buildings and retrofits to existing buildings to achieve LEED and other green building certifications	$779.3	3,944	1,920	$340,300
Transportation Efficiency	Retrofit or replace fleets and invest in public transportation, clean fuel technology, electric vehicles, etc.	$182.6	Not Available[8]	Not Available[8]	Not Available[8]
Sustainable Waste Management	Improvements in minimization, collection, recycling, storage and disposal, and composting	$0	0	0	$0
Total	☑	**$997.5**	**23,550**	**9,221**	**$1,634,149**

☑ Facts and figures over which Ernst & Young LLP provided reasonable level assurance

[3] All allocated deal values are refinancing.
[4] Visit the 2019 Assurance Report from EY.
[5] TD received cash proceeds of $997.5 million net of agency fees.
[6] For more information on the basis of allocating the use of proceeds, visit the TD Green Bond Framework.
[7] Fiscal year 2019 values make use of an updated methodology that more fully captures the benefit of emissions reduction projects. As such, these values are not comparable with previously published values for prior years.
[8] Impact metrics cannot be quantified at this time due to data limitations.

Natural Capital Valuation

TD Green Bond Projects

	2019
Carbon reduced or avoided (tonnes CO_2e)	9,221
Natural Capital Value	$1,634,149

TD Economics[1] has defined natural capital as "the stock of natural resources (finite or renewable) and ecosystems that provide direct or indirect benefits to the economy, our society and the world around us." Natural capital valuation allows us to understand the true costs, benefits and return on investment of planned activities.

Proceeds of the TD Green Bond were used to fund projects that provided a measurable environmental benefit, such as the construction of energy efficient buildings, solar farms, wind power developments and low impact hydroelectric facilities. The TD Green Bond not only provides a financial return to investors but also provides an environmental benefit – or return – to society. The value of the natural capital benefits associated with the TD Green Bond in fiscal 2019 was approximately $1.6 million.[2]

[1] https://www.td.com/document/PDF/economics/special/NaturalCapital.pdf

[2] Fiscal year 2019 values make use of an updated methodology that more fully captures the benefit of emissions reduction projects. As such, these values are not comparable with previously published values for prior years. Analysis completed by consultants, based on data derived from project owners.