TD Green Bond (2017) Issuance – Use of Proceeds

In 2014, TD issued the first green bond from a Canadian commercial bank – a C$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 is one of the largest green bond offerings by a bank in the developed markets. 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

The annual environmental benefits of projects allocated to the TD Green Bond issued in 2017 include:

- Over 59,500 MWh of energy saved or green energy generated, enough to power over 5,000 homes for one year
- Over 24,000 tonnes CO_2e reduced/avoided, equivalent to removing nearly 5,000 passenger vehicles driven for one year off the road
- Over $4.2 million in natural capital value generated[1]

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]

Freedom Plaza LLC

Amount Allocated: $45MM USD	**Project Lifetime:** 5 years
Project Description: 13-story glass and stainless-steel office building adjacent to Washington, D.C.'s Freedom Plaza.	
Environmental Benefits: The building will have approximately 9,000 square-feet of rooftop green space, operable windows, personal HVAC and lighting controls and state-of-the-art operating systems; it is projected to earn LEED Gold certification.	

LAX Integrated Express Solutions LLC: LAX Automated People Mover (APM)

Amount Allocated: $53.9MM CAD	**Project Lifetime:** 30 years
Project Description: Project Finance for the Automated People Mover (APM) component of the Landside Access Modernization Program (LAMP) at Los Angeles International Airport (LAX).	
Environmental Benefits: The aims of LAMP include relieving traffic congestion in the Central Terminal Area (CTA) and on area surface streets and roads, connecting to transit, reducing private vehicles trips to LAX and reducing vehicle emissions and improving air quality. The APM is the primary element of the program and is intended to provide passengers, employees and other users a reliable, time certain means of accessing the CTA.	

[1] 2018 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.
[2] Information and specifications below have been provided by the project party.

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

New Market West LLC[3]

Amount Allocated: $6.6MM CAD	**Project Lifetime:** 3.3 years

Project Description: $15MM construction loan for a LEED Certified 135,000 square foot office tower that will create a hub for retail and community services near the 60th and Market Street El stop in West Philadelphia on a 1.5-acre vacant site. New Market West will bring high quality early childhood education, primary health care, support for previously homeless single parent families, behavioral health services, and community-serving retail to a transit-accessible location.

Environmental Benefits: The building will be LEED Certified under the v4 Core & Shell criteria. The whole building energy savings are expected to be at least 20% greater than the minimum required by code and water conservation is expected to be at least 35% greater than code minimums.

In addition to water-efficient landscaping, large areas of the site will contain "green" and "blue" roofs; roofs designed to filter and slowly release rainwater. Currently projecting 86% less water for irrigation from baseline assumption. In a manner best replicating natural site hydrology processes, the project is managing on site the runoff from the developed site for the 95th percentile rainfall event using Low Impact Development (LID) and green infrastructure. Approximately 30% of the site is being set aside or allocated as open space (25% vegetated) or space dedicated to public realm amenity space.

Extensive daylighting and views will reduce the dependence on artificial lighting, and thus reduce electrical consumption while improving the quality of life for building occupants. Furthermore, the reduction of electrical light will translate to a reduction in cooling loads during the summer months.

The project will lead to 40% less CO_2 emission by substituting Portland cement, a huge source of carbon dioxide emission when being manufactured, with non-cement materials (pozzolans) in the concrete used for the project. A construction waste management program will be implemented during construction, and a building-wide recycling program will be implemented to divert waste sent to local landfills by 75% or more. Structural and finish building materials that exhibit transparency in ingredients, that are high in recycled content and produced regionally, and that limit harmful Volatile Organic Compounds (VOCs) are being prioritized to limit environmental impact and for the well-being of building occupants. New Market West is located in a walkable neighborhood with excellent access to mass transit, and will locate all parking for the project underground. Secure, indoor bicycle storage will be provided in the garage, with showers and changing rooms included in the commercial portion of the project to support those that cycle to work, while charging stations for fuel-efficient electric vehicles will be provided within the garage.

[3] https://www.usgbc.org/projects/new-market-west

TD Green Bond 2017 Issuance – Use of Proceeds as at October 31, 2018

CATEGORY	TD GREEN BOND CRITERIA	ALLOCATED AMOUNT ($MM USD)[4,5,6,7]	ANNUAL ENERGY SAVED OR GREEN ENERGY GENERATED (MWh)	ANNUAL GHG EMISSIONS REDUCED/ AVOIDED (TONNES CO_2e)[8]	NATURAL CAPITAL VALUE ($CAD)
Hydroelectric	Construction and operation of hydro (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 facility	$2.2	882	357	$62,003
Wind energy	Development, construction and operation of wind energy facilities	$65.1	55,370	22,392	$3,894,228
Building efficiency	Green buildings – new buildings and retrofits to existing buildings to achieve LEED and other green building certification	$876.4	3,324	1,588	$276,148
Transportation efficiency	Retrofit or replace fleets and invest in public transportation, clean fuel technology, electric vehicles, etc.	$53.9	Not Available[9]	Not Available[9]	Not Available[9]
Sustainable waste management	Improvements in minimization, collection, recycling, storage and disposal, composting	$0	0	0	$0
TOTAL		☑ **$997.5**	**59,576**	**24,337**	**$4,232,379**

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

[4] All allocated deal values are refinancing.
[5] Visit the 2018 Assurance Report from E&Y LLP.
[6] TD received cash proceeds of $997.5 million net of agency fees.
[7] For more information on the basis of allocating the use of proceeds, visit the TD Green Bond Framework.
[8] 2018 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.
[9] Impact metrics cannot be quantified at this time due to data limitations.