

Background

TD Economics 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 enables us to understand the true costs, benefits and return on investment of planned activities.

TD has valued the natural capital impact related to reduction of greenhouse gas (GHG) emissions and airborne pollutants of three of its 2015 initiatives:

- The purchase of renewable energy credits and carbon offsets
- The TD Green Bond
- TD's Toronto corporate office real estate portfolio

Our natural capital valuations account for benefits accrued only in fiscal 2015 (November 1, 2014, to October 31, 2015), although the impact of these initiatives will span more than one year – for example, the benefits provided by many of the projects funded by the TD Green Bond will extend over a number of years.

Several facts should be kept in mind regarding the natural capital values presented here.

- There is currently no universally agreed on or formalized system for valuing natural capital. In performing our analysis, we have employed conservative assumptions. Our methodology has been reviewed by TruCost, an industry leader in analyzing natural capital impacts.
- Due to current data limitations our 2015 natural capital valuations are based entirely on atmospheric emission impacts and exclude impacts on, for example, water resources and biodiversity.
- We use the U.S. Environmental Protection Agency's values of the social cost of carbon. While these values are based on current, state-of-the-art models, they are still open to the criticism that they do not adequately account for certain impacts such as ocean acidification or those related to biodiversity. For other air pollutants, the cost of abatement is used, rather than the social cost, as a clear consensus has not yet formed around the social costs of these pollutants.

Renewable Energy Credits and Carbon Offsets:

2015 annual natural capital value – \$34,296,810 million

As a carbon neutral bank, TD purchases both renewable energy credits (RECs) and carbon offsets to account for its energy use and carbon emissions. RECs represent energy provided by sustainable or renewable sources, such as solar power or wind. Carbon offset projects include those that reduce energy use and GHG emissions, such as building retrofits, along with initiatives that sequester carbon, such as afforestation projects.

What RECs and carbon offsets have in common is a reduction in the amount of carbon dioxide and airborne pollutants entering the atmosphere. TD's 2015 purchase of RECs and carbon offsets resulted in an offset of over 260,000 tonnes of GHG emissions.¹ This reduction resulted in a matching cut in TD's impact on natural capital throughout the U.S. and Canada. The value of the reduction of GHG emissions associated with the carbon offsets and RECs TD purchased in fiscal 2015 – based on the lifetime impact the emissions would have had – is approximately \$34,296,810 million.

TD Green Bond Project:

2015 annual natural capital value – 2,077,793

In March 2014, TD became the first Canadian commercial bank to issue a green bond, underwriting a three-year, \$500 million issuance. The proceeds of this 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. These projects have an impact on natural capital in the region where they occur. For example, energy-efficient construction and the replacement of existing infrastructure with less emission-intensive infrastructure leads to reduced energy use.

The TD Green Bond not only provides a guaranteed financial return to investors but also an environmental benefit – or return – to society. The value of the natural capital impacts associated with the TD Green Bond in fiscal 2015 was more than \$2 million. Given that we have excluded lending for general corporate purposes and impacts on water and other resources, the overall natural capital value is likely to be higher.

Toronto Corporate Office Real Estate Portfolio:

2015 annual natural capital value – \$54,500

TD Bank's corporate operations in Toronto occupy a significant amount of office space – more than 3.2 million square feet, spread across a number of buildings. TD Bank Group committed to help pilot the Natural Capital Protocol, as the only North American financial institution to have joined the Natural Capital Coalition. To assist in the piloting process, TD undertook a natural capital valuation of our core Toronto corporate real estate footprint, using the draft protocol. This allowed us to not only contribute to the development and success of this important protocol, but to also assess the impacts of the bank's corporate operations in Toronto in the context of improved building characteristics across most of our leased space – specifically LEED Gold and Platinum certifications. More than 80% of TD's Toronto office space is located within LEED Gold (14%) or LEED Platinum (69%) certified facilities.

Looking at fiscal year 2015, TD's Canadian corporate operations were responsible for producing approximately 2,500 tonnes of CO₂-equivalent emissions. That our corporate operations occur predominately in LEED-certified facilities means that direct emissions were roughly 410 tonnes lower than they would have otherwise been – a reduction of nearly 15%. The natural capital value of this reduction is approximately \$54,500.

¹ The GHG emissions quantified here represent emissions reduction specific to the offset project, or location of the REC (project).

