

### 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 full 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 two of its 2014 initiatives:

- The purchase of renewable energy credits and carbon offsets to support our carbon neutral commitment; and
- The \$500 million TD Green Bond, the first such bond issued by a commercial bank in Canada.

Our natural capital valuations account for benefits accrued only in fiscal 2014 (November 1, 2013, to October 31, 2014), although the impact of these initiatives spans 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 2014 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: value: \$118.5 million (Canadian dollars)

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. In 2014, a total of nearly one million tonnes of GHG emissions were offset through our purchase of RECs and carbon offsets. This reduction resulted in a matching cut in TD's impact on natural capital in the United States and Canada. The value of the reduction of GHG emissions associated with the carbon offsets and RECs TD purchased in fiscal 2014 – based on the lifetime impact the emissions would have had – is approximately \$118.5 million.

### TD Green Bond Projects: value: \$356,200 (Canadian dollars)

In March 2014, TD became the first Canadian 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 relating to reduction of GHG emissions and air pollution associated with the TD Green Bond in fiscal 2014 was more than \$350,000. Given that we have excluded lending for general corporate purposes and impacts on water and other resources, the overall natural capital value would be significantly higher.