



# Banking on 2°

The Hidden Risks of Climate Change for Canadian Banks

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# Banking on 2°

## The Hidden Risks of Climate Change for Canadian Banks

*“The decisions we make now will determine the future of our economy and our climate. If we choose low-carbon investment we can generate strong, high-quality growth – not just in the future, but now. But if we continue down the high-carbon route, climate change will bring severe risks to long-term prosperity.”*

**Lord Nicholas Stern, Chair of the Centre for Climate Change Economics and Policy**

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## ■ EXECUTIVE SUMMARY

Climate change is one of the defining economic, environmental and social issues of our time. There is broad global consensus that to avoid the worst and most catastrophic effects of climate change we must limit the rise in the average global surface temperature to two degrees Celsius above pre-industrial levels. In order to achieve this, we need to transition towards resilient, low carbon societies and economies.

Canada's banks have an important stake in addressing this challenge. Bank's financing activities span all sectors of the economy, making them particularly vulnerable to climate change related risks. However, to date, Canada's banks have not sufficiently integrated climate change considerations into long-term business strategies and risk management processes. To help fill this gap, we provide a framework for how Canada's banks can improve their performance in addressing climate change.

### Investor Recommendations for Addressing Climate Change

#### Establish a Climate Change Strategy

- ✓ Develop a climate change statement outlining an institutional commitment to limit the average surface temperature rise to 2°Celsius. The statement should outline how the bank addresses climate change, the steps it is taking to reduce the climate impacts of its operations and financing activities and how the bank is contributing to an energy transition.

#### Integrate Climate Change Considerations into Risk Management

- ✓ Analysis of business and portfolio sensitivity (including asset stranding) to climate change and carbon regulation scenarios.
- ✓ Carbon footprints of lending and investment portfolios measured and analyzed.

#### Establish Carbon Reduction Targets And Incentives To Achieve Them

- ✓ Performance targets to reduce operational and financed GHG emissions established that align with IPCC models to limit warming to 2°Celsius.
- ✓ Executive compensation and incentive packages include performance in reducing GHG emissions from operational and financed sources.

#### Disclose Meaningful Information To Investors

- ✓ Energy financing reports published that outline lending to the energy sector with a breakdown of financing to coalmines, oil sands, oil and gas extraction, gas- and coal-fired power generation and renewable energy.
- ✓ Carbon price or price ranges used in asset valuations and project assessments published.
- ✓ Public policy positions related to climate change and corporate lobbying activities including payments to trade associations disclosed.

## ■ INTRODUCTION

Climate change is one of the defining economic, environmental and social issues of our time. According to the Intergovernmental Panel on Climate Change (IPCC), scientific evidence for warming of the climate system is unequivocal.<sup>1</sup> In its Fourth Assessment Report, the IPCC concluded that there is more than 95 percent probability that human activities are responsible for the emissions of heat-trapping Greenhouse Gases (GHG), which raise global temperatures.<sup>2</sup>

Climate change has already had observable effects on the environment. In Canada, the impacts of a changing climate are evident in observed trends including temperature increases (on average Canada has warmed by more than 1.3°C since 1948), higher average annual precipitation rates (mean rainfall has increased by about 12%), changes in the frequency of extreme temperature and precipitation events, changes in the distribution of some animal and plant species, declining Arctic sea ice cover (decreased by 8% since 1979) and decreased snow-cover duration.<sup>3</sup> Many of the most severe and costly impacts of climate change are those related to the projected rise in the frequency and magnitude of extreme weather events and associated natural disasters. Climate scientists warn that these impacts will increase in frequency and intensity without substantial and sustained cuts in GHG emissions.<sup>4</sup>

There is broad agreement, crystallized in the agreements reached by governments in 2010 at the United Nations Climate Conference in Cancun,<sup>5</sup> that in order to avoid the worst and most catastrophic effects of climate change we must limit the rise in the average global surface temperature to two degrees Celsius above pre-industrial levels. In order to achieve this, we need to transition to a low-carbon economy. A key step in this transition will be the 21st Session of the Conference of the Parties to the United Nations Framework Convention on Climate Change (COP 21) to be held in Paris in December 2015. The purpose of the conference is to reach a universal, legally binding agreement that will enable the international community to combat climate change and boost the transition towards resilient, low-carbon societies and economies. A key theme for COP21 is how to mobilize investments of \$100 billion per year by developed countries, from both public and private sources, to enable this transition.<sup>6</sup>

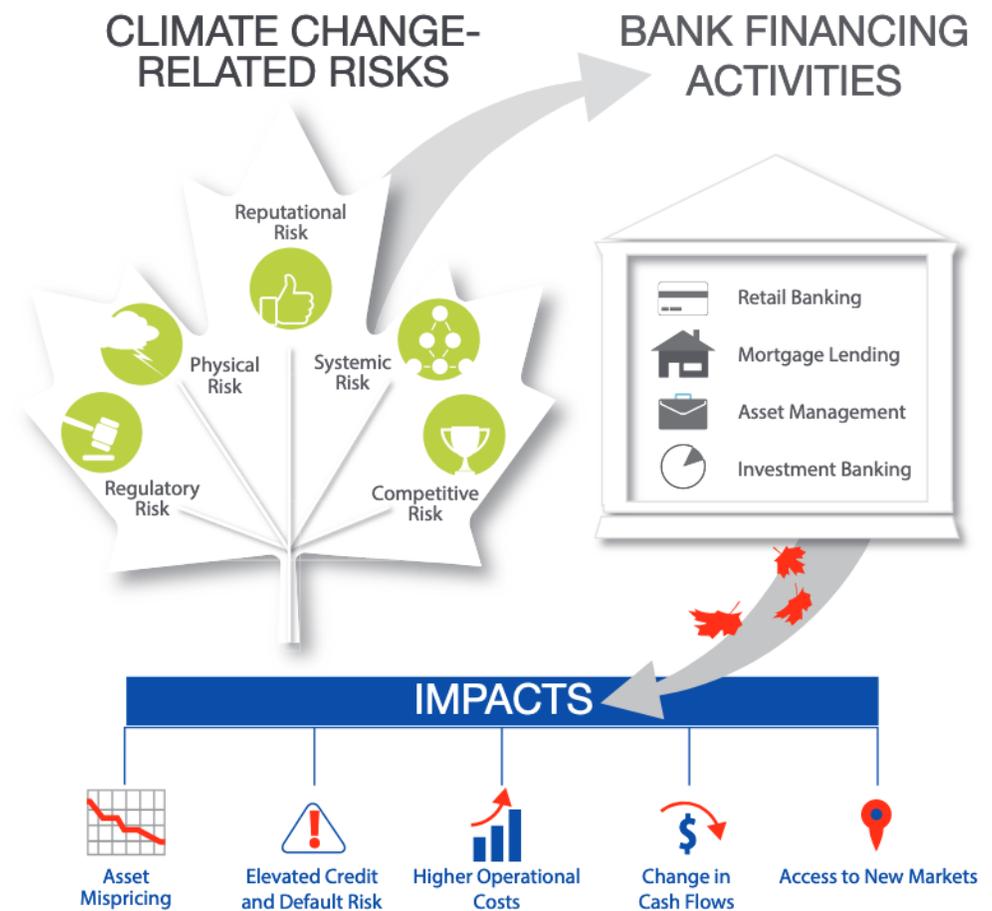
Canada's banks are involved in a range of activities that may be affected by climate change. These include retail banking, mortgage lending, business lending, project finance, asset management and investment banking. Because of the potential impacts of climate change on these financing activities, shareholders are interested in understanding how the banks are managing these risks including their overall exposure to carbon-intensive assets and how they are aligning their longer-term business strategies to a low-carbon economy. This paper outlines the impacts that climate change-related risks could have for the banking sector and provides a set of recommendations for how the banks can more effectively manage climate-change related risks and catalyze the transition to a low carbon economy. Our analysis focused on Canada's five largest banks: Bank of Montreal (BMO), Canadian Imperial Bank of Commerce (CIBC), Royal Bank of Canada (RBC), Scotiabank and Toronto-Dominion Bank (TD).



# CLIMATE CHANGE-RELATED RISKS FOR CANADA'S BANKS

The global economy faces significant and diverse economic risks from climate change.<sup>7</sup> Canada's banks are particularly vulnerable to the risks associated with climate change because of their portfolio exposure to carbon-intensive industries. Figure 1 below outlines the climate change-related risks that Canadian banks are exposed to and the potential impacts of those risks for the banks in terms of asset valuations, operational costs, reputation, new markets and cash flows.

Figure 1: Potential Impacts of Climate Change on Bank's Financing Activities



## Regulatory Risks

While a global agreement to restrict GHG emissions has yet to be reached, significant developments in regional and national policies addressing climate change are already occurring. According to the 2015 Global Climate Legislation Study, by the end of 2014 there were 804 climate change laws and policies in 98 countries, which together produce approximately 93% of global greenhouse gas emissions.<sup>8</sup> The number of national laws and policies that directly relate to climate change mitigation and adaptation has risen from only 54 laws and policies in 1997 to 426 in 2009 and by the end of 2014 to over 800. The asset valuation methodologies currently used by the banking sector do not sufficiently account for the potential impacts of climate change regulations. For example, asset valuations of fossil fuel companies tend to assume that all known reserves will be exploited. A study by Carbon Trust and McKinsey showed that more than 50% of the market value assigned to oil and gas companies resides in the value of long-term cash flows to be generated from their reserves in a timeframe beyond ten years.<sup>9</sup> However, according to the International Energy Agency, no more than one-third of proven reserves of fossil fuels can be consumed prior to 2050 if the world is to achieve the 2-degree goal.<sup>10</sup> The potential for asset stranding in response to carbon reduction regulations will impact financial institutions with exposure to fossil fuel companies, with potential impacts for asset valuations, credit and default risk and ultimately cash flows.

## Physical Risks

Banks' own operations and their lending portfolios are exposed to risks associated with the physical impacts of climate change. For example, physical damage to corporate assets connected to extreme weather events may lead to an increase in defaults in commercial lending portfolios. Real estate, agribusiness and infrastructure have been assessed as being particularly vulnerable. Mortgage portfolios in geographical areas at high risk of flooding, for instance may face devaluation risks and have higher payment defaults. Banks' operational infrastructure is also vulnerable to the physical impacts of climate change. Incorporating the physical risks of climate change into bank risk management frameworks is important to account for portfolio and operational exposure and to mitigate these risks by adjusting investment decisions.

## Reputational Risks

The banking sector has become a target of environmental campaigns over their financing of carbon-intensive projects such as mountaintop removal in coal production, coal-fired power generation and oil sands extraction.<sup>11</sup> As public awareness and concern about climate change grows, it is reasonable to assume that continued fossil fuels financing and misalignment with a transition to a low carbon economy will present increasing reputational risks to banks. For example, in their 2014 Banking on Coal report, BankTrack noted that banks from Canada, Japan, France, Switzerland, Germany and Australia, provided more than 5 billion Euros in coal financing during the period 2011 to 2013.<sup>12</sup> Of particular note, all five Canadian banks acknowledged in their most recent CDP disclosures the reputational risks associated with their financing of carbon-intensive industries .

## Systemic Risks

The Canadian banking sector is exposed to systemic risks associated with the transition away from fossil fuels and towards a low-carbon economy. Rapid shifts in technologies, regulations, and carbon pricing could have substantial impacts on the demand for fossil fuels globally. As the recent oil price shocks have demonstrated, declining fossil fuel demand and/or prices can create dramatic and unexpected impacts across the entire Canadian economy. Considering these systemic risks and integrating them into risk management frameworks is critical for Canada's banks if they are to fully understand the impacts of different regulatory and physical climate scenarios on their business models.

## Competitive Risks

The shift to a low-carbon economy is generating important opportunities across economic sectors where green products and services are growing in demand. Financial institutions that are not building their capacity and investing in product innovation to respond to these opportunities may face a competitive disadvantage. Conversely, financial institutions that are analyzing the impacts of climate change on their portfolios and tilting their financing to those sectors that will benefit from a low-carbon economy may enjoy a competitive advantage in the marketplace.

# HOW CANADA'S BANKS ARE RESPONDING TO CLIMATE CHANGE

SHARE analyzed publicly available information from Canada's five largest banks including websites, corporate responsibility reports, SEDAR filings and CDP<sup>13</sup> disclosures for 2013 and 2014 to understand how each bank is responding to climate change. We looked specifically at each bank's approach to strategy, risk management, performance and climate risk disclosure. Here we provide a brief summary of the state of practice by Canada's five largest banks and provide some good practice examples from other jurisdictions.

## Strategy

For investors to manage and assess long-term risks to their portfolios they need to understand how the companies in which they invest are integrating climate change risks and opportunities into business strategy development and implementation. Emerging good practice includes prioritizing climate change at the board level, establishing an institutional commitment to accelerating the shift to a low-carbon economy and integrating climate change performance into executive mandates and compensation. Leaders are also analyzing different regulatory and physical climate scenarios in order to effectively integrate climate change considerations into risk management, business development and asset valuations.<sup>14</sup>

The primary focus of Canada's five largest banks is mitigating their own operational emissions. The drivers for addressing climate change appear to be primarily short-term and focused on opportunities to generate cost-savings, with some of the banks increasingly looking at business opportunities to take advantage of consumer demand. To date, the banks have not provided investors with sufficient information on how they are analyzing the sensitivity of their business models and long-term business strategies to different future economic, regulatory and physical climate scenarios.

## Risk Management

To measure and manage risk, investors need information from companies on how they are considering climate change-related risks, including the potential impacts of climate change on their own operations as well as those associated with their financing activities. In the case of Canada's banks, the biggest risks from climate change are those that will impact their lending, investment and financing portfolios. TD, Scotiabank, RBC and BMO report incorporating climate change considerations into company valuations and credit risk assessments, although they provide little information to investors on how they do this, what carbon price or price ranges they use or what percentage of their portfolios face specific risks such as asset stranding.

### Good Practice Example: Strategy

#### Nedbank South Africa

In its climate change position statement, Nedbank outlines a climate change strategy that includes a commitment to redirect a portion of the bank's lending flows to accelerate decarbonisation of the economy explicitly at a rate that is commensurate with the national carbon budget, i.e. South Africa's equitable share of the global commitment to avoid a 2 degree Celsius average surface temperature rise. The bank's strategy to meet this commitment comprises of a carbon screen of its lending portfolio and increased lending to low-carbon sectors.

### Good Practice Example: Risk Management

#### European Investment Bank

In 2010, EIB started adopting a shadow carbon price for its investments in energy projects of €25/tCO<sub>2e</sub>. The price increases by €1 every year, reaching €45/tCO<sub>2e</sub> in 2030.

## Good Practice Example: Performance

### Bank of America

Bank of America committed in 2004 to reduce the emissions rate in its utility portfolio by 7% by 2008. Since that goal was reached, the bank continues measuring and reporting annually on the carbon intensity of its utility portfolio and plans to re-evaluate its reporting when a national regulation of GHG emissions is established.

## Good Practice Example: Disclosure

### Royal Bank of Scotland

To set a benchmark for financial services disclosure, since 2010 RBS has published an energy financing report depicting its total lending to the energy sector with a breakdown between the fossil fuel and renewable subsectors. RBS also discloses the carbon risks from its lending to its top 25 power and oil & gas clients by mapping the lending exposure to their carbon intensity.

In their CDP disclosures TD, RBC, BMO and Scotiabank indicated that they consider the physical impacts of extreme weather events for their own operations with some of them making specific reference to facilities in climate sensitive regions such as the Caribbean. All five banks reference short-term risks from uncertainty around new regulation as well as potential impacts of energy efficiency regulation and carbon taxes. However, all of the banks considered the risks associated with such regulation to be low based on their perception that the pace of regulating carbon to date has been slow. In their most recent CDP disclosures the banks acknowledge the reputational risks associated with their financing of carbon-intensive industries, although it is not clear how any of the banks are managing this risk. We find that Canadian banks' disclosures of their consideration of systemic risks associated with climate change and the potential impacts of transitioning to a low carbon economy on their overall business model fall short of what is needed by investors to make informed investment decisions.

## Performance

Canada's banks have focused their efforts on mitigating their operational emissions, with some of the banks looking more closely at financial product innovations to respond to growing consumer demand for green products. TD is the only bank that provides monetary incentives to its corporate executive team for meeting targets related to energy reduction, carbon reduction and promotion of carbon solutions within the bank's business strategy. All of the banks lend to the renewable energy sector and the cumulative value of that lending is approximately \$6.4 billion. However, none of the banks report similar figures for their lending to fossil fuel companies, making it impossible to determine the degree to which bank financing is contributing to an overall shift towards renewable energy sources. None of the banks have established targets to reduce the carbon footprints or carbon intensity of their lending, investment or financing portfolios.

## Disclosure

For investors to analyze how banks are managing the risks associated with climate change, they need better information. For example, reporting the value of each bank's financing to GHG intensive industries including coalmines, oil sands, oil and gas extraction and power generation alongside the value of their financing for renewable energy provides investors with valuable information about their exposure to carbon intensive assets and the degree to which they are shifting financing towards greener industries. In addition, investors need information about the assumptions banks are making about carbon prices in their asset valuations and credit risk analyses. Current disclosure by Canada's banks remains focused on metrics that are less relevant to risk, such as their operational GHG emissions as well as emissions associated with employee business travel, deliveries to bank properties, waste generation and leased assets. None of Canada's banks currently disclose the value of their financed emissions, which are emissions associated with lending, investing and project finance. If the banks are not measuring the carbon exposure of their portfolios then they are probably not effectively managing the associated risks.<sup>15</sup>

# INVESTOR RECOMMENDATIONS FOR ADDRESSING CLIMATE CHANGE

As the business consequences of climate change mount, investors are beginning to consider the investment risks across their portfolios and new opportunities associated with climate change solutions. An important dimension of this for investors is to better understand how the companies in which they invest, including Canada's banks, are managing the potential impacts of climate change on their core business activities and aligning their policies and practices with a low-carbon economy. Reducing operational emissions is not sufficient. Investors need better information from Canada's banks on how they are embedding climate change into risk management, asset valuation, investment decision-making and long-term business planning. The following table provides a framework for how Canada's banks can improve their performance in addressing climate change.

## Investor Recommendations for Addressing Climate Change

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- ✓ Develop a climate change statement outlining an institutional commitment to limit the average surface temperature rise to 2°Celsius. The statement should outline how the bank addresses climate change, the steps it is taking to reduce the climate impacts of its operations and financing activities and how the bank is contributing to an energy transition.

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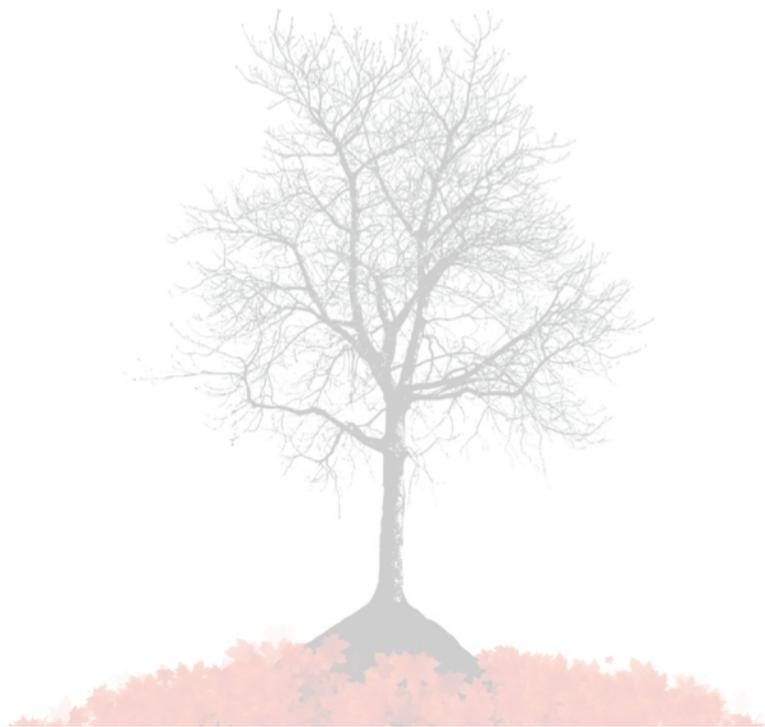
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## ■ CONCLUSION

Investors are invited to use this document as part of their stewardship activities to gauge bank performance in addressing climate change and to engage with the banks in their portfolios on climate-change issues. Active engagement by investors encourages Canada's banks to recognize the potential business impacts of climate change and demonstrate that they are managing and adapting to climate change-related risks and opportunities accordingly.



## Endnotes

- <sup>1</sup> IPCC (2013). Climate Change 2013: The Physical Science Basis – Summary for Policymakers.
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- <sup>4</sup> IPCC (2013). Climate Change 2013: The Physical Science Basis. Summary for Policymakers.
- <sup>5</sup> Known as the Cancun Agreements. More information at: <http://cancun.unfccc.int/cancun-agreements/main-objectives-of-the-agreements/#c33>.
- <sup>6</sup> See [www.cop21.gouv.fr/en/cop21-cmp11/cop21-main-issues](http://www.cop21.gouv.fr/en/cop21-cmp11/cop21-main-issues).
- <sup>7</sup> For example, The Stern Review on the Economics of Climate Change found that if we do not act, the overall costs of climate change could be equivalent to losing between 5 and 20% of global GDP per year and that the costs of action – reducing GHGs to avoid the worst impacts of climate change – could be limited to around 1% of global GDP each year. See [www.wwf.se/source.php/1169157/Stern%20Report\\_Exec%20Summary.pdf](http://www.wwf.se/source.php/1169157/Stern%20Report_Exec%20Summary.pdf).
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- <sup>13</sup> The CDP sends annual information requests to the world's largest companies on behalf of 822 institutional investors with US\$95 trillion in assets. Disclosed information is made available by the CDP for integration in business, investment and policy decision-making. BMO, CIBC, Scotiabank and TD all responded to the 2014 CDP Information Request. RBC responded to the 2013 CDP information request and has stated it will answer the CDP on a biennial as opposed to annual basis.
- <sup>14</sup> Norges Bank Investment Management (2014) Climate Change Strategy: Expectations for Companies. Available from: [www.nbim.no/en/responsibility/responsible-investments/climate-change](http://www.nbim.no/en/responsibility/responsible-investments/climate-change).
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