Building a sustainable future

CIBC's TCFD Report – September 2019

Introduction

Climate change is a pivotal issue for our planet. As one of the world's most difficult and urgent problems, a changing climate will have a measurable impact on people, communities, the economy – and our business. CIBC is dedicated to understanding and taking real action to address the risks and effects of climate change.

As a service-based company, CIBC has relatively low direct carbon emissions. However, we know there are opportunities to further improve the carbon emission performance of our operations, and we are taking concrete steps to do so. We also recognize the important role that CIBC plays in supporting and engaging our clients, suppliers and other stakeholders in transitioning to a low-carbon economy. Many of our clients operate businesses that are currently facing or will face new carbon emission standards in the foreseeable future.

To mitigate our risks, increase our resilience and position CIBC at the forefront of climate action in our industry, we continue to build comprehensive climate change strategies and risk management processes, while promoting wider awareness around the need to address the threat of climate change. These efforts support global sustainability initiatives like the UN Sustainable Development Goals, including Goal #13 on climate action.

Communicating openly and regularly about our climate-related work is important to CIBC and our stakeholders, who are keen to learn about the evolving risks we face and how we are managing them. Reflecting our commitment to transparency:

- We have reported climate-related disclosures since 2003 as an annual respondent to the CDP (formerly Carbon Disclosure Project) survey.
- In 2019, we published enhanced disclosure, including our greenhouse gas (GHG) emission reduction targets, as outlined in our annual Corporate Responsibility Report.
- We endorse and are applying the recommendations developed by the Financial Stability Board's Taskforce on Climate-Related Financial Disclosures (TCFD), which aim to improve the reporting of climate-related risks and opportunities. Our climate change practices and disclosures extend across the TCFD's four-pillar framework, as this report highlights.

Addressing climate change is a multi-year journey for CIBC. In our drive to be a leading sustainable and resilient bank, CIBC is committed to examining, quantifying and responsibly managing climate-related risks and opportunities.

"Focusing on environmental, social and financial resilience is a key part of creating value for our stakeholders. That is why addressing climate change is a priority for us. We are taking action to better grasp and quantify climate-related impacts, integrate these considerations into our plans and activities, and ensure robust disclosure about the risks and opportunities we face."

– Laura Dottori-Attanasio, Senior Executive Vice-President and Chief Risk Officer

This report, our first climate-related disclosure aligned to the TCFD recommendations, is structured around four core elements:

1. Governance
   - CIBC's governance around climate-related risks and opportunities
2. Strategy
   - How we assess the actual and potential impacts of climate-related risk and opportunities on CIBC's businesses, strategy and financial planning.
3. Risk Management
   - How we identify, evaluate and manage climate-related risks.
4. Metrics and Targets
   - The metrics and targets we use to gauge and manage relevant climate-related risks and opportunities.

1. Governance

CIBC's governance structure reflects our firm commitment to understanding and managing environmental, social and governance (ESG) issues, with oversight of climate-related risks and opportunities at both the Board and management levels.

Board oversight

At the highest governance level, two committees of the Board of Directors – the Risk Management Committee and the Corporate Governance Committee – are charged with overseeing ESG matters, including climate change.

- The **Risk Management Committee** assists the Board in fulfilling its responsibilities for defining CIBC's risk appetite and overseeing the bank's risk profile and performance against that criteria. This includes supervising key frameworks, policies and limits related to identifying, measuring, monitoring and controlling CIBC's principal business risks, such as climate-sensitive risk exposures.
- The **Corporate Governance Committee** reviews disclosures on CIBC's approach to conducting its business in an ethical, socially responsible and environmentally conscious manner. CIBC's climate change program is reviewed by the committee on a quarterly basis.

Management's role

Within CIBC's Risk Management function, the **Enterprise and Conduct Risk group** provides independent oversight of the measurement, monitoring and control of climate-related risk. This group is led by the Senior Vice-President, Enterprise & Conduct Risk (ECR), and reports directly to the Chief Risk Officer.

An enterprise-wide **Environmental Management Committee**, chaired by our Senior Vice-President of Enterprise & Conduct Risk, comprises senior leaders who meet quarterly to provide input into CIBC's environmental strategy and review the bank's ESG initiatives. The environmental risk management team within ECR is responsible for developing recommendations on environmental strategy, standards, targets and reporting.

In addition, CIBC has two senior management risk committees that oversee and manage transaction and non-transactional risks associated with our businesses globally: the **Reputation and Legal Risk Committee** and the **Reputation Risk Committee.**

2. Strategy

Both actual and potential impacts of climate change are influencing CIBC's businesses, strategies and financial planning.

As a responsible bank, we are taking action in many areas to tackle the unprecedented challenge of climate change. These areas include:

- Anticipating climate change risks and opportunities
- Mitigating our operational impacts
- Supporting and preparing our customers and communities
- Developing solutions to enable the transition to a low carbon economy

Consistent with the TCFD recommendations, we are assessing the potential impact of physical and transition risks from climate change on our lending portfolio using scenario analysis and stress-testing simulations. This work builds on previous analyses of physical and regulatory risks from climate change as part of our carbon risk management program.

Physical risks:
Risks related to more frequent extreme weather events and chronic changes in weather patterns.

Transition risks:
Risks related to transitioning to a low-carbon economy, including policy and legal risk, technological risk, market risk and reputational risk.

Climate scenario analysis provides insight into how the physical and transition risks and opportunities of climate change might impact CIBC's businesses over time. The United Nations Environment Programme – Finance Initiative (UNEP-FI) is guiding our approach to assessing climate change risks and identifying opportunities associated with transitioning to a low carbon future.

Forward-looking climate scenario analysis is a key recommendation of phase 1 of the United Nations Environment Programme – Finance Initiative Task Force on Climate Related Financial Disclosure (UNEP-FI TCFD). To accelerate our progress in effective climate scenario analysis, CIBC is participating in the UNEP-FI TCFD phase 2, which will build on the phase 1 results to further develop the accuracy of climate scenario analysis for both physical and transition risks. In parallel, we are continuing to use available data to study potential climate change on our business as we work towards more comprehensive solutions.

Assessing climate risks is more complex and longer-term in nature than most traditional business risks. One of the challenges with effective climate scenario analysis is limited historical data to empirically measure the strength of the climate/credit risk relationship across all sectors. Our membership in various industry associations provides opportunities to share experiences and approaches to scenario analysis across organizations and is critical to advancing both the use and capability of scenario analysis. Disclosing information on climate change scenario planning as the TCFD recommends, provides companies with new inputs into business strategy and planning, which enhances internal capability and processes.

Physical risks

We recently used scenario analysis to assess the impact of physical climate risks on our wholesale lending business. We estimated the frequency and severity loss of various weather events resulting from global temperature increases above the pre-industrial era. To overcome the data and modelling challenges presented when quantifying physical climate risks, we adopted an approach similar to quantifying operational risk for events characterized as low frequency with high severity. Data on actual losses from two severe weather events (the 2013 Calgary flood and the 2016 Fort McMurray fires) was used to assess the impact of physical climate risks on our consumer and wholesale lending business.

Probability estimates of temperature changes from +1 to +3 degrees Celsius over a 15-year time horizon and probability/severity estimates of extreme weather events such as floods, forest fires, and ice storms are shown in the chart below.

Event	Assumptions
Flood	• Used the 2013 Calgary flood losses as a proxy • A 1-in-10 year event • Severity increases 25% per half degree increase • Frequency increases 20% per half degree increase
Fire	• While the Fort McMurray losses were low, we used the flood losses as a proxy • A 1-in-5 year event • Severity increases 25% per half degree increase • Frequency increases 10% per half degree increase
Ice	• Used flood losses as a proxy as internal data not available
Other	• To account for uncertainty, an additional scenario was added with a severity of 50% of flood losses

We modelled the expected financial loss, the risk-weighted asset (RWA) and the common equity tier 1 (CET1) impacts. The results of the analysis indicated that even with the combined impact of all of the above weather events, our CET1, which measures a bank's solvency, would remain above regulatory minimums with 99.9% confidence.

For our corporate and commercial clients, we assessed primary sectors that are likely most vulnerable to climate-related risk (energy, mining, real estate, transportation). We then assumed that these vulnerable sectors will be exposed to potential finance rating downgrades over a five-year period and applied the appropriate rating classification shown below, based on the anticipated vulnerability.

Rating	Key sector factors that affect rating level
A	• No downgrade – well positioned to absorb any potential losses and would not be impacted materially by climate events
B	• One-rating level downgrade: vulnerable and likely to experience some negative pressures
C	• Two-ratings level downgrade: most vulnerable and could experience more material impacts

A key input into our corporate and commercial risk rating systems are enterprise value and profitability. These factors would be affected by climate events and thus result in downgrades to risk ratings due to higher climate-related risks. The expected losses, RWA and CET1 impacts we modelled were based on mild risk migration scenarios. In the severe scenario, we assumed each sector was downgraded by an additional risk level.

The analysis assumed all borrowers in each sector would be impacted by a similar downgrade, which is unlikely to occur due to different degrees of resiliency to severe weather across companies and facilities in different geographic areas. Even under this form of stress testing, our CET1 would remain above regulatory minimums, including applicable buffers.

Transition risks

We have also started to investigate the impact of transition risks, specifically regulatory risks, and the impact that increased energy efficiency requirements would have on our commercial lending portfolio. Buildings play a critical role in a country's greenhouse gas (GHG) reduction strategy since they are responsible for 12%[i] of Canada's total GHG emissions. Globally, this percentage is even higher with nearly 40%[ii] of global energy-related GHG emissions coming from buildings and building construction. As we have recently seen in cities such as New York, regulations can be used to drive energy efficiency standards to streamline the impact from the real estate sector.

As an example of our assessment of transition risks, we specifically analyzed our multi-family residential portfolio in Vancouver, examining the impact of various factors including increased capital expenditure to upgrade a multi-family apartment building to higher energy efficiency standards, the reduced operating costs following these upgrades and the changes in rents associated with recognized environmental standards such as LEED (Leadership in Energy and Environmental Design).

Energy reductions from LEED certification retrofits are expected to be between 18-39%[iii] since the energy consumption starting point varies for every building. As energy is typically 25% of a residential building's total operating expenses, energy savings from LEED certification are expected to be between 4.5-10% of the total operating expenses.

Rent premiums for LEED or green buildings can range from 5-15%[iv]. LEED is a signal to the market that the property operates in accordance with high sustainability and energy principles, which is increasingly important to climate-conscious consumers.

Capital expenditures needed to upgrade a multi-family residential property to LEED are dependent on building age, size, condition, type of heating and cooling systems, and the type and number of appliances that need to be upgraded, so the overall costs can be quite significant.

For our analysis, we evaluated both interim/bridge and commercial mortgage loans. For both types of loans, we looked at the impact of high and low capital requirements needed to make the environmental retrofits. For the high capital requirement scenario, we evaluated the impact of low, mid and high rent increases resulting from LEED certification and how this affected the overall risk rating for the mortgage. For these scenarios, we assumed that the energy savings would be on the low end of the range for a conservative result.

Our findings showed that for low capital expenditures and low rent increases/energy reductions, the risk rating remained the same or improved for both loan types. However, if the anticipated capital expenditure was very high, almost half of the loans saw risk rating downgrades of one to nine levels. If the assumed rent increase is on the high-end, even with a high capital expenditure, only 10% of the loans would see a one level downgrade.

Since there is sensitivity to capital expenditure as well as resulting rent increases, to improve the accuracy of this scenario analysis we will conduct a future analysis that has a more detailed assessment of each property and related costs and benefits of LEED retrofits.

3. Risk management

We expect the future to be increasingly carbon-constrained and therefore need to prepare our business and support our customers through the transition.

CIBC's carbon risk management program assesses and manages the impacts of climate change and associated regulations on our business operations and those of our clients. The development of resilience metrics, analytics and standards also play a major role in helping us evaluate vulnerabilities. Our carbon risk management program comprises of five key elements:

1. Managing carbon emissions from CIBC's operations
2. Determining the impacts of climate change regulation on CIBC's credit portfolio
3. Tracking and evaluating opportunities in emerging North American carbon markets
4. Developing climate risk screening tools in the assessment of overall credit risk
5. Assessing the physical and transition impacts of climate change to CIBC's operations and to our lending and investment portfolios

Environmentally responsible lending

As an integral part of our due diligence process, we conduct environmental and related social risk assessments of our business lending transactions. In addition to protecting the bank from undesired risks, this review process often helps our clients better understand and effectively manage their own risks and liabilities. Our Global Reputational and Legal Risk Policy requires that each credit transaction is examined for potential reputation and/or legal risks, including those of an environmental or a social nature. Our Reputation Risk Standards and Guidelines require identification, assessment and escalation of non-transactional reputation risk concerns, including environmental, social and governance issues.

Environmentally responsible procurement

Our suppliers provide critical goods and services to our business operations. These supplier relationships are important to operating responsibly and meeting our sustainability goals. As part of our overall supplier management process, we monitor the environmental performance of suppliers and require them to complete a questionnaire at least every two years. Through this questionnaire, we collect and review information about their environmental management systems, environmental performance and violations, product stewardship, forestry practices and third-party certifications.

Our focus on green information technology (IT) continues to enhance our information technology infrastructure to provide environmental benefits across CIBC. We manage our computers, monitors and printers to use less energy and to produce less waste.

Sustainable finance

Our capital markets team is at the forefront of financing new and innovative projects that contribute to cleaner, alternative or renewable energy supplies, including biogas, biomass, district energy systems, hydroelectric, solar and on-shore and off-shore wind.

In 2018, CIBC underwrote approximately $1.5 billion in capital markets financings related to renewable energy, sustainable infrastructure and green bond issuances. CIBC also arranged $6.4 billion in loans, including a direct lending commitment of $1.3 billion, to renewable energy supplies and sustainable infrastructure. We also advised our clients on investments and acquisitions for over $7.0 billion in renewable energy and sustainable infrastructure initiatives in Canada, the United States and Europe. We continue to evaluate low carbon market opportunities that address environmental challenges such as climate change.

Responsible investing

Our asset management business manages a variety of equity and fixed income portfolios with specific responsible investment mandates. We also consider the ESG performance of global companies as part of our regular investment research process.

Since 2017, CIBC Asset Management has been a signatory of the United Nations-supported Principles for Responsible Investment (PRI), a global network of asset owners, investment managers and service providers who are committed to integrating ESG factors into their investment practices, analyses and decision-making processes. In adopting these principles, we are contributing to a more sustainable global financial system. We are also a registered observer of the Green Bond Principles, a set of voluntary guidelines designed to promote integrity in the green bond market where capital is raised to fund projects with environmental benefits.

4. Metrics and targets

In the global economy, sustainability has become an important yardstick for business performance. We use various metrics to drive and gauge our progress, with a focus on reducing GHG emissions and efficiently using natural resources.

Our carbon footprint

10%

Target reduction in GHG emissions by 2023

15%*

Reduction in absolute emissions (scope 1 & 2) since 2016

12%*

Reduction in energy since 2016

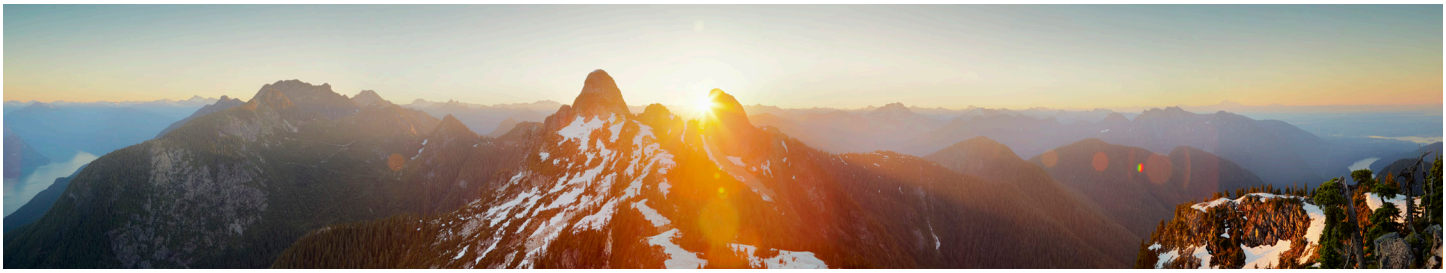
*As of fiscal-year end 2018 for Canadian locations

We continue to pursue opportunities to reduce both our direct and indirect carbon emissions throughout our network of banking centres and offices worldwide, and proactively invest in energy reduction initiatives to achieve a measurable decrease in our energy use and associated carbon emissions.

When purchasing technology, we incorporate environmental considerations through a Technical Performance Assessment. We consider many factors including the space needed to house the equipment, service life, recyclability and energy efficiency.

In 2018, as part of our company-wide program to implement more efficient lighting, HVAC systems and smart retail controls, we were able to save over three million kilowatt hours of electricity or 223 tonnes of GHG emissions, equivalent to taking 48 cars off the road.

We have set an initial goal of reducing our intensity-based GHG emissions by 10% by 2023 (2018 baseline) and we are committed to being transparent on our progress towards this goal.



Paper reduction

5%

Target reduction in paper use per employee

5.3 million

Paperless client accounts in 2018

98%

Of paper is forest stewardship council (FSC) certified

One of CIBC's largest direct environmental impacts and sources of waste is paper. We have a five-year goal to reduce our internal paper use by 5% per employee. Paper purchases are responsibly sourced from FSC-certified providers, and we continue to find ways to reduce and eliminate paper use where possible. We ensure that all internal paper materials across our banking centres and offices are securely collected, shredded and recycled. For our clients, we offer paperless banking statements and transaction records.

Electronic waste and recycling

100% Target

Target electronic waste diverted from landfill

100% Actual

Electronic waste diverted from landfill in 2018

Our goal is to divert 100% of electronic waste from landfills. In 2018, we once again met that goal. A portion of our used electronics are donated to a renewed computer technology program, helping to meet the need for computers in schools, public libraries and community organizations. For 25 years, CIBC has been the largest corporate supporter of the program. In 2018, we donated 4,202 computer components, which diverted approximately 31,000 kilograms of electronic waste from landfills.

CIBC Square

In 2020, CIBC will be relocating to a new global headquarters called CIBC Square. Located in Toronto's downtown core, our new complex is being built based on sustainable building principles, targeting LEED (Leadership in Energy and Environmental Design) Platinum certification. Located across from the city's main transit hub, Union Station, the new location will allow employees to maximize the use of public transit. The two towers are connected by a one-acre greenspace, providing a clean air environment in the middle of the city. There will also be 300 bicycle storage spaces and on-site shower facilities to make it easier for our employees to bike to work.

The new work environment at CIBC Square will use smart technologies such as tablet devices, smart hubs and white boards in all meeting rooms to allow for meeting notes to be captured digitally. We have been piloting this new work model to test the user experience and have found that paper printing has decreased by 85% compared with a traditional office environment.

Environmental and sustainable finance

At CIBC, we recognize the positive role that financial institutions can play by investing in a more sustainable future. As part of our commitment to support environmental sustainability initiatives, CIBC has committed to a $150 billion environmental and sustainable finance goal over 10 years (2018-2027). The goal is part of our commitment to develop and use innovative market-based solutions to address critical environmental challenges and climate change.

$150 billion

Environmental and sustainable finance initiatives by 2027

In North America, the resource sector is a very important contributor to the economy but also a source of carbon emissions. We expect the resource sector will be an important contributor to addressing environmental challenges including climate change globally. Addressing these challenges will require a balanced approach, one where CIBC will continue to support traditional energy sources and associated infrastructure but also efforts by the resource and other sectors to reduce emissions through innovative technologies and other transitionary activities.

What's ahead

We embrace our responsibility as a North American bank to reduce our environmental footprint and set goals that will have a positive impact on our clients and communities.

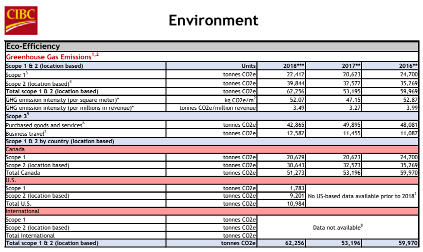
Tackling climate change is a cross-sector, global priority. Success will be defined by collaboration. That's why we will continue to engage with clients, employees, stakeholders and business partners – to share insights and formulate common approaches to climate challenges. Going forward, our near-term efforts are focused on the following areas where we can drive meaningful change:

1. Support our clients as they transition to the low-carbon economy by offering innovative financial products and services
2. Enhance our strategy around seizing low carbon market opportunities, such as renewable energy projects, that facilitate and support transitioning to a low-carbon economy
3. Maintain a strong focus on reducing our GHG emissions and improving the energy efficiency of our operations
4. Continue to develop metrics and targets to help us manage our climate-related risks and opportunities
5. Involve all employees in our sustainability journey by encouraging grassroots initiatives and idea sharing to maximize our impact
6. Broaden our climate scenario analysis capabilities and enhance our disclosures, in line with the TCFD recommendations and stakeholder expectations

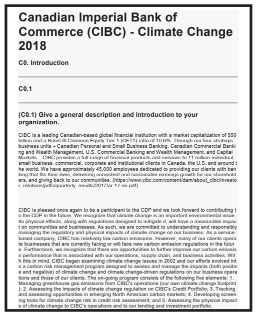
As we look to further enhance CIBC's ESG performance and accelerate our ambition to make a positive difference, our corporate reporting and business activities related to climate change will continue to evolve.

Other Publications

CIBC's approach to managing climate-related risks and opportunities is also discussed in these publications:



ESG Data Tables



2018 CDP Response

2018 Corporate Responsibility Report

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