

# Bank of Montreal - Climate Change 2018

## C0. Introduction

---

### C0.1

---

#### (C0.1) Give a general description and introduction to your organization.

Established in 1817, BMO Financial Group is a highly diversified financial services provider based in North America. We are the eighth largest bank in North America by assets, with total assets of \$710 billion and an engaged and diverse base of employees. BMO provides a broad range of personal and commercial banking, wealth management and investment banking products and services to more than 12 million customers. We serve eight million customers across Canada through our Canadian personal and commercial arm, BMO Bank of Montreal. We also serve customers through our wealth management businesses: BMO Global Asset Management, BMO Nesbitt Burns, BMO Private Banking, BMO Insurance and BMO InvestorLine. BMO Capital Markets, our investment and corporate banking and trading products division, provides a full suite of financial products and services to North American and international clients. In the United States, BMO serves customers through BMO Harris Bank, based in the U.S. Midwest with more than two million retail, small business and commercial customers. BMO Financial Group conducts business through three operating groups: Personal and Commercial Banking, Wealth Management and BMO Capital Markets.

### C0.2

---

#### (C0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date	Indicate if you are providing emissions data for past reporting years	Select the number of past reporting years you will be providing emissions data for
Row 1	November 1 2016	October 31 2017	Yes	1 year
Row 2	November 1 2015	October 31 2016	<Field Hidden>	<Field Hidden>
Row 3	<Field Hidden>	<Field Hidden>	<Field Hidden>	<Field Hidden>
Row 4	<Field Hidden>	<Field Hidden>	<Field Hidden>	<Field Hidden>

### C0.3

---

#### (C0.3) Select the countries/regions for which you will be supplying data.

Australia  
Brazil  
Canada

China  
France  
Germany  
Gibraltar  
India  
Ireland  
Italy  
Luxembourg  
Mexico  
Netherlands  
Portugal  
Singapore  
Sweden  
United Arab Emirates  
United Kingdom of Great Britain and Northern Ireland  
United States of America

#### **C0.4**

---

**(C0.4) Select the currency used for all financial information disclosed throughout your response.**

CAD

#### **C0.5**

---

**(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your consolidation approach to your Scope 1 and Scope 2 greenhouse gas inventory.**

Operational control

#### **C1. Governance**

---

#### **C1.1**

---

**(C1.1) Is there board-level oversight of climate-related issues within your organization?**

Yes

## C1.1a

### (C1.1a) Identify the position(s) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual(s)	Please explain
Board/Executive board	Oversight of sustainability strategy and ESG disclosure including climate related issues is specifically included within the mandate of the Board's Audit and Conduct Review Committee (ACRC). The ACRC meets annually with the Chief Sustainability Officer to discuss the findings of the ESG Report and to dialogue on sustainability topics. The Chair of the ACRC, Jan Babiak, is former Managing Partner at Ernst & Young LLP (EY) and founder and leader of EY's global Climate Change and Sustainability Services.
Chief Sustainability Officer (CSO)	The CEO has delegated responsibility for sustainability to BMO's General Counsel who is a member of BMO's Executive Committee and reports directly to the CEO. The General Counsel executes on the sustainability mandate through the Corporate Affairs team led by BMO's Corporate Secretary. BMO's Chief Sustainability Officer sits in Corporate Affairs and reports to the Corporate Secretary and General Counsel and is responsible for the development and execution of sustainability strategy, including internal advisory, stakeholder engagement and disclosure. This mandate includes production and publication of BMO's annual Environmental, Social and Governance (ESG) Report (ESG Report) and other public disclosures.
Other C-Suite Officer	A Sustainability Council Chaired by BMO's General Counsel has been established that is composed of executives representing each business and corporate area. The Sustainability Council meets quarterly and acts as a support and advisory body for implementation of BMO's sustainability strategy. Members of the SC include executives representing each business (e.g. Retail Banking, Wealth Management, Capital Markets, and Corporate areas; e.g. Real Estate, Human Resources).

## C1.1b

### (C1.1b) Provide further details on the board's oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Scheduled – some meetings	<ul style="list-style-type: none"> <li>Reviewing and guiding strategy</li> <li>Reviewing and guiding risk management policies</li> <li>Setting performance objectives</li> <li>Monitoring and overseeing progress against goals and targets for addressing climate-related issues</li> </ul>	The Audit Conduct and Risk Committee (ACRC) meets annually with the Chief Sustainability Officer to review and discuss the findings of the ESG Report and to dialogue on sustainability topics, including renewable energy lending and operational footprint goals and targets set out in the ESG Report. Annually, the ACRC reviews and approves the ESG Report which includes climate related data and performance.

## C1.2

**(C1.2) Below board-level, provide the highest-level management position(s) or committee(s) with responsibility for climate-related issues.**

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on climate-related issues
Chief Sustainability Officer (CSO)	Assessing climate-related risks and opportunities	Annually
Other C-Suite Officer, please specify (General Counsel)	Managing climate-related risks and opportunities	Annually
Sustainability committee	Both assessing and managing climate-related risks and opportunities	Annually

### C1.2a

**(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored.**

The CEO has delegated responsibility for sustainability to BMO's General Counsel who is a member of BMO's Executive Committee and reports directly to the CEO. The General Counsel executes on the sustainability mandate through the Corporate Affairs team led by BMO's Corporate Secretary. BMO's Chief Sustainability Officer sits in Corporate Affairs and reports to the Corporate Secretary and General Counsel and is responsible for the development and execution of sustainability strategy, including internal advisory, stakeholder engagement and disclosure. This mandate includes production and publication of BMO's annual Environmental, Social and Governance (ESG) Report (ESG Report) and other public disclosures. A Sustainability Council Chaired by BMO's General Counsel has been established that is composed of executives representing each business and corporate area. The Sustainability Council meets quarterly and acts as a support and advisory body to oversee implementation of BMO's sustainability strategy. BMO's Procurement and Corporate Real Estate groups are responsible for establishing environmental management processes. The Environmental Sustainability (ES) group of Corporate Real Estate is responsible for establishing and maintaining an operational environmental management system that is aligned with the framework set out in ISO 14001 and for setting objectives and targets related to the bank's operations and its Environmental Policy. As part of our enterprise risk management framework and credit risk management framework, we evaluate the environmental and social risks associated with credit and counterparty transactions and exposures. We have developed and implemented specific financing guidelines to address environmental and social risk for specific lines of business. To assess exposure to clients' environmental risks we apply enhanced due diligence to transactions with clients

operating in environmentally sensitive industry sectors and we avoid doing business with borrowers that have poor environmental and social risk management track records. BMO has been a signatory to the Equator Principles since 2005 and applies its credit risk management framework to identify, assess and manage environmental and social risks of transactions within its scope. We also apply environmental and social screening processes to categorize and assess projects based on the magnitude of their potential impacts and risks. These principles have been integrated into our credit risk management framework.

### **C1.3**

---

**(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?**

Yes

#### **C1.3a**

---

**(C1.3a) Provide further details on the incentives provided for the management of climate-related issues.**

**Who is entitled to benefit from these incentives?**

Environment/Sustainability manager

**Types of incentives**

Monetary reward

**Activity incentivized**

Emissions reduction project

**Comment**

Aligned with the position mandate, decisions relative to monetary compensation in the form of incentive pay awarded, are influenced by these elements as part of the annual process.

---

**Who is entitled to benefit from these incentives?**

Energy manager

**Types of incentives**

Monetary reward

**Activity incentivized**

Energy reduction project

**Comment**

Aligned with the position mandate, decisions relative to monetary compensation in the form of incentive pay awarded, are influenced by these elements as part of the annual process.

---

**Who is entitled to benefit from these incentives?**

Facilities manager

**Types of incentives**

Monetary reward

**Activity incentivized**

Energy reduction project

**Comment**

Aligned with the position mandate, decisions relative to monetary compensation in the form of incentive pay awarded, are influenced by these elements as part of the annual process.

---

**Who is entitled to benefit from these incentives?**

Executive officer

**Types of incentives**

Monetary reward

**Activity incentivized**

Efficiency target

**Comment**

Executives at the business group level are measured on the profitability of their areas of accountability. Contributing to the decisions relative to incentive compensation are contributions to productivity challenges and more specifically, the ongoing control over expenses. ESG contributions are also considered. Limiting employee travel for business purposes (e.g., commercial air travel) and substituting alternatives like Webex, Skype and other online conferencing tools is one area in which BMO's focus on reducing expenses has also contributed to achieving targeted reductions in greenhouse gas emissions.

---

**Who is entitled to benefit from these incentives?**

Business unit manager

**Types of incentives**

Monetary reward

**Activity incentivized**

Efficiency target

**Comment**

Performance of Business Unit Managers is also assessed on the profitability of their areas of accountability. Their contributions to enhancing BMO's productivity, and more specifically to reducing expenses, are also assessed. ESG contributions are also considered. Limiting employee travel for business purposes (e.g., commercial air travel) and substituting alternatives like Webex, Skype and other

online conferencing tools is one area in which BMO's focus on reducing expenses has also contributed to achieving targeted reductions in greenhouse gas emissions.

---

**Who is entitled to benefit from these incentives?**

Corporate executive team

**Types of incentives**

Recognition (non-monetary)

**Activity incentivized**

Efficiency target

**Comment**

BMO's Sustainability Council includes a number of senior executives who are recognized for their participation efforts and ability to influence change within their various operating groups.

---

**Who is entitled to benefit from these incentives?**

All employees

**Types of incentives**

Recognition (non-monetary)

**Activity incentivized**

Behavior change related indicator

**Comment**

Employees who participate voluntarily as "Environmental Ambassadors" may be recognized through internal communications about sustainability initiatives/events on our corporate intranet site. Employees may also be recognized through our internal employee recognition system for their efforts.

---

**C2. Risks and opportunities**

---

**C2.1**

---

**(C2.1) Describe what your organization considers to be short-, medium- and long-term horizons.**

	From (years)	To (years)	Comment
Short-term	1	3	See Proxy Circular pages 72-84.
Medium-term	3	10	See Proxy Circular pages 72-84.

	From (years)	To (years)	Comment
Long-term	10	30	See Proxy Circular pages 72-84.

## C2.2

**(C2.2) Select the option that best describes how your organization's processes for identifying, assessing, and managing climate-related issues are integrated into your overall risk management.**

Integrated into multi-disciplinary company-wide risk identification, assessment, and management processes

### C2.2a

**(C2.2a) Select the options that best describe your organization's frequency and time horizon for identifying and assessing climate-related risks.**

	Frequency of monitoring	How far into the future are risks considered?	Comment
Row 1	Not defined	>6 years	BMO is a supporter of the TCFD framework and is taking steps to implement the guidance contained therein. This process entails consideration of longer-term impacts of climate change on the business. Implementation of the TCFD will build on existing risk management and disclosure processes already in place at BMO. Environmental and social risk management activities are integrated into our enterprise wide risk management framework. Environmental and social risks associated with credit transactions are managed within BMO's credit and counterparty risk management framework. BMO has also developed and implemented specific financing guidelines on environmental and social risk for specific lines of business.

### C2.2b

**(C2.2b) Provide further details on your organization's process(es) for identifying and assessing climate-related risks.**

Consistent with the recommendations of the TCFD and emerging implementation best practice, climate related risks include transition risks and physical risks associated with climate change. Transition risks include substitution of goods, new regulations or other changes to the economic context of our business and the businesses of our clients. Physical risks include physical changes to the earth that could affect our business, including severe weather, flooding or other impacts of climate change. These types of changes are the subject of the TCFD recommendations which were supported by BMO in 2018. BMO is a supporter of the TCFD framework and is taking steps to implement the guidance contained therein. This process entails consideration of longer-term impacts of climate change on the business. Implementation of the TCFD will build on existing risk management and disclosure processes already in place at BMO.



The process for identifying and assessing climate-related risks is embedded into our environmental and social risk processes and integrated into our enterprise wide risk management framework. Operationally, we track new fuel/energy taxes and regulations. Increases in cost stemming from fuel/energy taxes and regulation would increase our operating costs. We track the weather data for large urban centres in North America where BMO Financial Group facilities are predominantly located.

Credit risk arising from potential carbon taxes imposed on our clients is captured within our enterprise wide risk management framework. To identify and assess climate-related risks arising from business activities and transactions with our clients, we follow internal environmental and social guidelines that describe the scope and procedures to determine the extent of environmental risk and whether enhanced due diligence is required. This includes identifying and assessing our clients' climate change strategies, carbon-mitigation plan, quality of climate change disclosure, and readiness to respond to climate-related regulatory changes.

To identify and assess reputational risk arising from climate-related issues, the Sustainability Group, under the leadership of the Chief Sustainability Officer, monitors regulatory developments, emerging best practice, stakeholder interest, benchmarking and developments from non-regulatory international bodies to determine the scope and extent of emerging climate-related risks to the organization. BMO applies the Equator Principles and the World Bank environmental and social screening process to assess/manage environmental and social risk in project finance transactions. These principles have been integrated into our credit risk management framework.

Climate change also correlates with evolving business opportunities that are being actively pursued and developed by BMO. These opportunities include growth of sustainable finance and associated business opportunities, such as green, social or sustainability bond underwriting, green lending and other sustainable finance products. In 2017 BMO Capital Markets hired a Sustainable Finance Specialist and has enhanced client engagement and identification of market opportunities around sustainable finance. From Nov 1 2016 - Oct 31 2017 BMO's green bond underwriting activity totaled \$2.06 billion USD and from Nov 1 2017 - July 31 2018 the figure was \$4.93 billion USD. In 2017, BMO Capital Markets participated in \$6.4 billion of renewable energy equity and debt financing and provided \$4.2 billion of loan commitments to renewable entities and renewable projects.

## C2.2c

### (C2.2c) Which of the following risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	Current regulation is considered as it applies both to the bank and clients to the extent that it pertains to any risk reviews being conducted in relation to the affected client.
Emerging	Relevant,	New regulation or the potential for new regulation will be considered as it applies both to the bank and clients to the extent that it

	Relevance & inclusion	Please explain
regulation	always included	pertains to any risk reviews being conducted in relation to the affected client.
Technology	Relevant, always included	Technology would be relevant as a potential mitigation of climate impacts and associated risks. Technology could also be considered as an investment opportunity in the context of sustainable finance.
Legal	Relevant, always included	Legal risks associated with a business would be included in an overall risk assessment of bank activity as well as the activity of our clients. Legal risks are considered in the scope of operational, reputational and other risks.
Market	Relevant, always included	Market risks including the risk of substitution of goods that could affect credit risk and also the risk of the bank's own products and services are considered in a variety of contexts. These also present opportunities and are reviewed in the context of sustainable finance, responsible lending and asset management strategies.
Reputation	Relevant, always included	Environmental and social risk is defined by BMO as the potential for loss or damage to BMO's reputation resulting from environmental or social concerns related to BMO or its customers. Environmental and social risk is often associated with credit, operational and reputation risk. This undergirds our approach to environmental and social risk management.
Acute physical	Relevant, always included	The process for identifying and assessing climate-related risks is embedded into our environmental and social risk processes and integrated into our enterprise wide risk management framework. Physical risks of the bank are considered in business continuity planning.
Chronic physical	Relevant, always included	The process for identifying and assessing climate-related risks is embedded into our environmental and social risk processes and integrated into our enterprise wide risk management framework. Physical risks of the bank are considered in business continuity planning.
Upstream	Not evaluated	
Downstream	Relevant, always included	BMO Global Asset Management has a 13 member London based Governance and Sustainable Investment team that coordinates and supports responsible investment activities.

## C2.2d

### (C2.2d) Describe your process(es) for managing climate-related risks and opportunities.

The process for managing climate-related risks is embedded into our environmental and social risk processes and integrated into our enterprise wide risk management framework. Operationally, we track new fuel/energy taxes and regulations. Increases in cost stemming from fuel/energy taxes and regulation would increase our operating costs. We track the weather data for large urban centres in North America where BMO Financial Group facilities are predominantly located. Credit risk arising from potential carbon taxes imposed on our clients is captured within our enterprise wide risk management framework. To identify and assess climate-related risks arising from business activities and transactions with our clients, we follow internal environmental and social guidelines that describe

the scope and procedures to determine the extent of environmental risk and whether enhanced due diligence is required. This includes identifying and assessing our clients' climate change strategies, carbon-mitigation plan, quality of climate change disclosure, and readiness to respond to climate-related regulatory changes.

To identify and assess reputational risk arising from climate-related issues, the Sustainability Group, under the leadership of the Chief Sustainability Officer, continuously monitors regulatory developments, stakeholder interest, best practices, benchmarking and developments from non-regulatory international bodies to determine the scope and extent of emerging climate-related risks to the organization. At a company level, the Sustainability Office identifies indirect risks and related effects of climate change. These are monitored as part of regular sustainability issues monitoring that occurs at a minimum annually (more frequently if needed). The group participates in industry groups/conferences discussing impacts of climate change; engaging stakeholders and benchmarking against best practice organizations. We recognize the need to monitor and evaluate ourselves against rising societal expectations about environmental matters. At an asset level, climate change related risk falls within credit and counterparty risk. Credit risk management begins with our experienced professional lending and credit risk officers who operate in a dual control structure to authorize lending transactions. When evaluating clients, we consider all risks in an integrated fashion. Specific guidelines related to climate change are applied to transactions with clients operating in emissions-intensive industry sectors. We seek to understand the borrower's climate change adaptation/mitigation strategies. We assess: Whether the borrower monitors/reports greenhouse gas emissions and the extent and quality of such monitoring and reporting; The extent of the borrower's overall greenhouse gas emissions; Whether the borrower has a carbon mitigation plan, how it's being implemented and whether their Board of Directors was involved in its development; and the borrower's preparedness to deal with any potential regulatory requirements regarding greenhouse gas emissions. Also at the asset level, the output of our client evaluation/process (described above) is our credit risk profile which feeds into our overall risk reporting and quarterly disclosure directed at key stakeholders including the Board, Regulators, and the Investor Community. At the company level, the information gathered is then distilled to determine the impact to our business and in collaboration with the potentially affected areas, a determination of materiality (against other issues and priorities) is made. With respect to climate change; if the risk is material, meaning that it would have a negative impact on a company's operating leverage such that they would be unable to meet their financial commitments to us, a mitigation plan is put in place. Regardless of level of materiality, reporting on climate change issues is provided to the bank's Sustainability Council at the regularly scheduled meetings (quarterly). Climate change also correlates with evolving business opportunities that are being actively pursued and developed by BMO. These opportunities include growth of sustainable finance and associated business opportunities, such as green, social or sustainability bond underwriting, green lending and other sustainable finance products. In 2017 BMO Capital Markets hired a Sustainable Finance Specialist and has enhanced client engagement and identification of market opportunities around sustainable finance. For Nov 1 2016 - Oct 31 2017 BMO's green bond underwriting activity totaled \$2.06 billion USD and for Nov 1 2017 - July 31 2018 the figure was \$4.93 billion USD. In 2017, BMO Capital Markets participated in \$6.4 billion of renewable energy equity and debt financing and provided \$4.2 billion of loan commitments to renewable entities and renewable projects.

## C2.3

---

**(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?**

Yes

### C2.3a

---

**(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.**

#### **Identifier**

Risk 1

#### **Where in the value chain does the risk driver occur?**

Direct operations

#### **Risk type**

Transition risk

#### **Primary climate-related risk driver**

Policy and legal: Mandates on and regulation of existing products and services

#### **Type of financial impact driver**

Policy and legal: Increased operating costs (e.g., higher compliance costs, increased insurance premiums)

#### **Company- specific description**

RISK DESCRIPTION: Fuel/energy taxes and regulations. Increases in fuel/energy taxes may result in additional operating costs for the use of electricity and/or natural gas as consumed in our real estate premises occupied.

#### **Time horizon**

Short-term

#### **Likelihood**

Likely

#### **Magnitude of impact**

Low

#### **Potential financial impact**

6500000

#### **Explanation of financial impact**

Estimated financial implications of the risk before taking action: This could result in increases to our overall fuel costs and impact our overall operating costs. Our fiscal year 2017 energy costs were slightly less than \$65 million CAD. In the event of increased taxes on energy due to regulation in the range of 5% to 10%, our on-going operating costs could be impacted by up to \$6.5 million CAD.

#### **Management method**

We continue to monitor the regulatory landscape for new fuel/energy taxes and regulations (e.g., via our internal risk management group and feedback from our third party facilities management service providers). As any increase in costs resulting from fuel/energy taxes and regulation would increase our operating costs, we continue to actively manage energy costs and drive down consumption. For example, in specific areas of North America where opportunities exist, we have entered into bulk fuel/electricity purchase contracts at the wholesale level to insulate the organization against price increases. In addition, we continue to concentrate on consumption reduction efforts as a way of reducing our on-going operating costs, as well as emissions.

#### **Cost of management**

0

#### **Comment**

Estimated costs of actions to manage risk: From a cost to manage perspective, there is no additional cost/effort required to keep abreast of the potential regulatory changes as this is a function of our current risk management process. We believe that by focusing on both price (costs of fuels/electricity and any associated taxes) and demand (consumption), the product of which is “expense”, we will be in a good position to deal with any future regulatory/tax changes.

---

#### **Identifier**

Risk 2

#### **Where in the value chain does the risk driver occur?**

Direct operations

#### **Risk type**

Physical risk

#### **Primary climate-related risk driver**

Please select

#### **Type of financial impact driver**

Please select

#### **Company- specific description**

RISK DESCRIPTION: Change in mean (average) temperature. Changes in mean (average) temperature (e.g., hotter summers, colder winters) have the potential to impact BMO’s operations as follows: • Increased consumption of utilities in facilities occupied, and • Shorter life-span of heating, ventilation and air conditioning (HVAC) equipment, which could be operating well beyond normal design parameters. This might result in us having to invest in upgrading or replacing the equipment before scheduled end-of-life.

**Time horizon**

Medium-term

**Likelihood**

Likely

**Magnitude of impact**

Low

**Potential financial impact**

6500000

**Explanation of financial impact**

Estimated financial implications of the risk before taking action: Heating or cooling energy consumption can change by 5% for every degree decrease or increase, respectively, in mean (average) outdoor temperature. For example, a 1 - 3 degree Celsius adverse change in mean outdoor temperature could potentially translate into \$3.25 - \$9.75 million CAD increase in energy-related operating costs.

Also, changes in mean temperature could shorten the life-span of HVAC systems.

**Management method**

We track and monitor the weather data where our properties are located, since the annual weather fluctuations can affect our building energy use. We also subscribe to emission factors updates from Environment Canada, US Environmental Protection Agency (EPA), International Energy Agency (IEA), and other sources of emission factors. If the life-span of HVAC equipment is negatively impacted, we will modify our capital forecasting.

**Cost of management**

0

**Comment**

Estimated costs of actions to manage risk: The costs associated with tracking changes to average mean temperatures are negligible as it is part of our annual carbon emissions calculations exercise, as performed by in-house resources.

---

**C2.4**

---

**(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?**

Yes

**C2.4a**

---

**(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.**

**Identifier**

Opp1

**Where in the value chain does the opportunity occur?**

Direct operations

**Opportunity type**

Resource efficiency

**Primary climate-related opportunity driver**

Move to more efficient buildings

**Type of financial impact driver**

Reduced operating costs (e.g., through efficiency gains and cost reductions)

**Company- specific description**

OPPORTUNITY DESCRIPTION: Voluntary agreements. At BMO Financial Group, we choose to lead by example in how we measure, manage and set targets to reduce our environmental impact. It is for this reason that we voluntarily implement the independent, internationally recognized standard - ISO 14001 Environmental Management Systems (EMS). Adoption of this standard for a number of our facilities provides evidence of our leadership in taking voluntary action with both employees and external stakeholders. Furthermore, voluntary standards such as LEED (Leadership in Energy and Environmental Design) and BOMA (Building Owners and Managers Association) provide us with the opportunity to make more informed choices when selecting real estate facilities for occupancy. This helps us in reducing energy consumption and the resultant GHG emissions. Our GHG emissions are verified annually by a commercially independent 3rd party and our carbon neutral commitment/achievement is also voluntary.

**Time horizon**

Medium-term

**Likelihood**

Very likely

**Magnitude of impact**

Medium-low

**Potential financial impact**

585000

**Explanation of financial impact**

Voluntary agreements/standards enhance our ability to achieve our overall emissions reduction targets. In 2017 we established a new five-year target to reduce absolute carbon emissions by 15% compared to the fiscal 2016 baseline. The target includes Scope 1, Scope 2, and Scope 3 emissions. Holding emissions factors constant, a 15% emissions reduction would result in a 15% reduction in energy operating costs over the 5 year period. Based on our fiscal year 2017 energy costs of approximately \$65 million, a 15% reduction in utilities consumption would translate into savings of approximately \$9.75 million over the same 5 year period. We estimate that our

adoption of voluntary standards will contribute 25%-35% towards our overall reduction target and this equates to a savings of \$2.4 million to \$3.4 million over the same 5 year period. Per year, we estimate the savings to be in the range of \$490,000 to \$680,000.

**Strategy to realize opportunity**

BMO has taken action to achieve third-party certification to the ISO 14001 standard for our environmental management systems at four facilities in Canada and the UK. Methods we use to leverage this opportunity include applying lessons-learned to other facilities with the goal of continually improving our environmental performance. As an example, we have applied the principles of ISO 14001 to drive energy reduction initiatives across of additional sites, hence contributing to the achievement of our enterprise-wide emissions reduction targets. BMO has also taken action to adopt elements of LEED and BOMA to improve energy efficiency in our buildings. Methods we use to leverage this opportunity include continually updating our internal design and construction standards to include performance specifications for the build out of office space in order to achieve additional energy reductions (for example, 1 watt per square foot for lighting). These measures are expected to contribute to our current and future absolute emissions reduction goals.

**Cost to realize opportunity**

75000

**Comment**

Annual costs associated with developing this opportunity: Total costs associated with our ISO 14001 EMS certifications and third party verification of our carbon emissions are minimal, totalling less than \$75K annually.

**C2.5**

**(C2.5) Describe where and how the identified risks and opportunities have impacted your business.**

	Impact	Description
Products and services	Impacted for some suppliers, facilities, or product lines	Climate change gives rise to evolving business opportunities that are being actively pursued and developed by BMO. These opportunities include growth of sustainable finance and associated business opportunities, such as green, social or sustainability bond underwriting, green lending and other sustainable finance products. In 2017 BMO Capital Markets hired a Sustainable Finance Specialist and has enhanced client engagement and identification of market opportunities around sustainable finance. For Nov 1 2016 - Oct 31 2017 BMO’s green bond underwriting activity totaled \$2.06 billion USD and for Nov 1 2017 - July 31 2018 the figure was \$4.93 billion USD. In 2017, BMO Capital Markets participated in \$6.4 billion of renewable energy equity and debt financing and provided \$4.2 billion of loan commitments to renewable entities and renewable projects. BMO Global Asset Management’s (GAM) portfolio-weighted carbon footprint is 43% below that of the strategy’s benchmark index, the MSCI World index. In 2017 the strategy’s footprint fell by 14%. Going forward BMO GAM would like to see companies in its strategy adopt reporting in line with the recommendations of the Taskforce on Climate-related Financial Disclosures, and will press for this through our engagement.
Supply chain and/or value chain	Impacted for some suppliers, facilities, or product lines	BMO’s Supplier Code of Conduct (Supplier Code) outlines the principles we expect our suppliers to support - our standards for integrity, fair dealing and sustainability. BMO expects its suppliers be aware of, understand, and respect the principles of the Supplier Code. We trust our suppliers to understand and manage environmental and social risks. These



	Impact	Description
		risks include the threat of adverse effects on the natural environment as well as risks to the livelihoods, health and rights of individuals and communities. We encourage suppliers to identify, adopt, and integrate environmental and social best practices into your business processes and facilities
Adaptation and mitigation activities	Impacted for some suppliers, facilities, or product lines	For risk, BMO considers indirect impacts of climate change to which our clients' exposure to climate change and associated regulation may affect us. At a company level, the Sustainability Office identifies indirect risks and related effects of climate change. These are monitored as part of regular sustainability issues monitoring that occurs at a minimum annually (more frequently if needed). The group monitors regulatory developments and the likelihood of occurrence by reviewing literature (policy, legal opinion, research); participating in industry groups/conferences discussing impacts of climate change; engaging stakeholders and benchmarking against best practice organizations. BMO focuses on managing environmental/social risk (potential loss/damage to BMO's reputation from environmental or social concerns). We recognize the need to monitor and evaluate ourselves against rising societal expectations about environmental matters. At an asset level, climate change related risk falls within credit and counterparty risk. Credit risk management begins with our experienced professional lending and credit risk officers who operate in a dual control structure to authorize lending transactions. When evaluating clients, we consider all risks in an integrated fashion. Specific guidelines related to climate change are applied to transactions with clients operating in emissions-intensive industry sectors. We seek to understand the borrower's climate change adaptation/mitigation strategies. We assess: Whether the borrower monitors/reports greenhouse gas emissions and the extent and quality of such monitoring and reporting; The extent of the borrower's overall greenhouse gas emissions; Whether the borrower has a carbon mitigation plan, how it's being implemented and whether their Board of Directors was involved in its development; and the borrower's preparedness to deal with any potential regulatory requirements regarding greenhouse gas emissions.
Investment in R&D	Impacted for some suppliers, facilities, or product lines	In 2017 BMO Capital Markets hired a Sustainable Finance Specialist and has enhanced client engagement and identification of market opportunities around sustainable finance. For Nov 1 2016 - Oct 31 2017 BMO's green bond underwriting activity totaled \$2.06 billion USD and for Nov 1 2017 - July 31 2018 the figure was \$4.93 billion USD. In 2017, BMO Capital Markets participated in \$6.4 billion of renewable energy equity and debt financing and provided \$4.2 billion of loan commitments to renewable entities and renewable projects. BMO Global Asset Management has created dedicated green bond mandates for European clients, with invested and committed capital of US\$290 million (as at October 31, 2017).
Operations	Impacted for some suppliers, facilities, or product lines	At an operations level, BMO considers direct risks on BMO operations from the related effects of climate change and indirect impacts of climate change to which our clients' exposure may affect us. These are monitored as part of regular sustainability issues monitoring that occurs at a minimum annually (more frequently if needed). BMO also focuses on managing environmental/social risk (potential loss/damage to BMO's reputation from environmental or social concerns) and recognize the need to monitor and evaluate ourselves against rising societal expectations about environmental matters. At an asset level, climate change related risk falls within credit and counterparty risk. Credit risk management begins with our experienced professional lending and credit risk officers who operate in a dual control structure to authorize lending transactions. When evaluating clients, we consider all risks in an integrated fashion. Specific guidelines related to climate change are applied to transactions with clients operating in emissions-intensive industry sectors. We seek to understand the borrower's climate change adaptation/mitigation strategies. We assess: Whether the borrower monitors/reports greenhouse gas emissions and the extent and quality of such monitoring and reporting; The extent of the borrower's overall greenhouse gas emissions; Whether the borrower has a carbon mitigation plan, how it's being implemented and whether their Board of

	Impact	Description
		Directors was involved in its development; and the borrower's preparedness to deal with any potential regulatory requirements regarding greenhouse gas emissions.
Other, please specify	Please select	

## C2.6

### (C2.6) Describe where and how the identified risks and opportunities have factored into your financial planning process.

	Relevance	Description
Revenues	Impacted for some suppliers, facilities, or product lines	Climate change corresponds with evolving business opportunities that are being actively pursued and developed by BMO. These opportunities include growth of sustainable finance and associated business opportunities, such as green, social or sustainability bond underwriting, green lending and other sustainable finance products. In 2017 BMO Capital Markets hired a Sustainable Finance Specialist and has enhanced client engagement and identification of market opportunities around sustainable finance. For Nov 1 2016 - Oct 31 2017 BMO's green bond underwriting activity totaled \$2.06 billion USD and for Nov 1 2017 - July 31 2018 the figure was \$4.93 billion USD. In 2017, BMO Capital Markets participated in \$6.4 billion of renewable energy equity and debt financing and provided \$4.2 billion of loan commitments to renewable entities and renewable projects.
Operating costs	Impacted for some suppliers, facilities, or product lines	Increases in fuel/energy taxes may result in additional operating costs for the use of electricity and/or natural gas as consumed in our real estate premises occupied. This could result in increases to our overall fuel costs and impact our overall operating costs. Our fiscal year 2017 energy costs were slightly less than \$65 million CAD. In the event of increased taxes on energy due to regulation in the range of 5% to 10%, our on-going operating costs could be impacted by up to \$6.5 million CAD. As such, we have factored this risk into our financial planning process.
Capital expenditures / capital allocation	We have not identified any risks or opportunities	
Acquisitions and divestments	We have not identified any risks or opportunities	
Access to capital	We have not identified any risks or opportunities	
Assets	We have not identified any risks or opportunities	
Liabilities	We have not identified any risks or	

	Relevance	Description
	opportunities	
Other	We have not identified any risks or opportunities	

## C3. Business Strategy

---

### C3.1

---

**(C3.1) Are climate-related issues integrated into your business strategy?**

Yes

#### C3.1a

---

**(C3.1a) Does your organization use climate-related scenario analysis to inform your business strategy?**

No, but we anticipate doing so in the next two years

#### C3.1c

---

**(C3.1c) Explain how climate-related issues are integrated into your business objectives and strategy.**

Our business strategy is influenced by our commitment to customer experience - Our strategic vision is to be the bank that defines great customer experience. BMO's activities are guided by our strategic priorities of: customer loyalty, productivity, digital technology, North American platform and risk management. We express our commitment to sustainable growth through a set of sustainability principles: social change, financial resilience, community-building and environmental responsibility – reducing our environmental footprint while considering the impacts of our business activities as we work with stakeholders who share our commitment to sustainability. Extending and complementing our promise to customers, these principles reinforce the deeper sense of responsibility that informs all aspects of our business strategy. By positioning our sustainability principles alongside the strategic priorities we confirm that sustainability is incorporated into how we do business, manage risk and create value. Climate-related issues have influenced how we integrate our environmental impact (one of our sustainability principles) with the company's business objectives and strategy. It considers how we reduce our environmental footprint while considering how business activities can impact climate. Through our Sustainability Council, chaired by our General Counsel and consists of executive leadership across business lines, we are continually examining the risks and opportunities associated with transitioning to a low-carbon economy.

With the growing global recognition of both the implications of climate change and the roles available to the financial services sector in supporting the transition to a lower-carbon economy, several analysts and investors reported that they were encouraged by the voluntary guidelines for climate-related financial disclosure recently put forward by the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD). Rather than seeing climate change as a single material issue, we understand it as a critical factor in identifying both responsible lending and responsible investing as highly material topics for us.

From an operational perspective, environmental stewardship is one of today's most pressing global challenges, with climate change in particular presenting a growing threat. Stakeholders expect us to consider the impact that BMO has on the natural environment, both directly in terms of our own operations and indirectly through our purchasing decisions. We expect the same of ourselves – and we have worked hard to maintain our carbon neutrality since 2010.

BMO Global Asset Management (GAM) reports in its 2017 Impact Report that the transition to a low-carbon economy is one of the greatest challenges – and opportunities – of our time. The BMO Responsible Strategies of BMO GAM are committed to making a contribution, and in May 2017 BMO GAM published a new, ambitious policy approach. The policy has five key elements, all of which we believe are essential components of an overall strategy:

- Divestment from companies with fossil fuel reserves
- Case by case assessment of the adequacy of climate change strategies in other key high-emissions sectors including utilities, transportation and industrials
- Investment in solutions, including companies operating in clean energy and resource efficiency, as well as the banks financing these activities
- Engagement, where the focus is on encouraging companies to develop transition planning and scenario analysis to ensure they are robust to a range of future energy scenarios
- Transparency, through publishing our methodology and carbon footprint, in line with the recommendations of the Taskforce on Climate-related Financial Disclosures

Our Responsible Global Equity Strategy has not held any investments in companies with fossil fuel reserves since February 2016. BMO Global Asset Management's (GAM) portfolio-weighted carbon footprint is 43% below that of the strategy's benchmark index, the MSCI World index. In 2017 the strategy's footprint fell by 14%. Going forward BMO GAM would like to see companies in its strategy adopt reporting in line with the recommendations of the Taskforce on Climate-related Financial Disclosures, and will press for this through our engagement. In 2017, BMO Global Asset Management announced it will exclude all companies with fossil fuel reserves from its Responsible Funds range, as part of an updated climate change policy. The policy immediately took effect in May 2017 for the Global and Emerging Market strategies within the Responsible Funds range, and will extend to the full fund range from 1 January 2020. It forms part of a new policy approach focused on how investors in the Responsible Funds can support the transition to a low-carbon global economy. Climate change has influenced our short term strategy in that we continue to focus on reducing carbon emissions in our own operations and reducing our operational footprint. Emissions from buildings we occupy represent 86% of our footprint (the balance is attributed to employee business travel). Organizational priorities include controlling operating costs, and reducing emissions.

Climate change has influenced our long term strategy in that we remain focused operationally on energy costs and reducing the use of fossil fuel based resources. We continue to look for opportunities from our own and our customers' perspectives for alternative/renewable energy sources. We also monitor changes to the regulatory environment which may provide opportunities to enter new markets in trading.

BMO is a supporter of the TCFD framework and is taking steps to implement the guidance contained therein. This process entails consideration of longer-term impacts of climate change on the business. Implementation of the TCFD will build on existing risk management and disclosure processes already in place at BMO.

### **C3.1g**

---

#### **(C3.1g) Why does your organization not use climate-related scenario analysis to inform your business strategy?**

BMO is a supporter of the TCFD framework and is taking steps to implement the guidance contained therein. This process entails consideration of longer-term impacts of climate change on the business. Implementation of the TCFD will build on existing risk management and disclosure processes already in place at BMO.

### **C4. Targets and performance**

---

#### **C4.1**

---

##### **(C4.1) Did you have an emissions target that was active in the reporting year?**

Absolute target

##### **C4.1a**

---

##### **(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.**

###### **Target reference number**

Abs 1

###### **Scope**

Scope 1+2 (location-based) +3 (upstream)

###### **% emissions in Scope**

100

###### **% reduction from base year**

15

**Base year**

2016

**Start year**

2017

**Base year emissions covered by target (metric tons CO<sub>2</sub>e)**

175268

**Target year**

2021

**Is this a science-based target?**

No, but we anticipate setting one in the next 2 years

**% achieved (emissions)**

2.96

**Target status**

Underway

**Please explain**

In FY2012, BMO set a target to reduce absolute enterprise carbon emissions by 10%—to be achieved by the end of FY2017 using FY2012 emissions as baseline. As indicated in our previous CDP report, absolute emissions, adjusted to exclude the impacts of weather and emissions factors, have decreased by 13.9% as at the end of FY2016 as compared to our FY2012 baseline, surpassing our five-year 10% target one year in advance. We have therefore successfully achieved this target and publicly reported our emissions performance (<https://www.bmo.com/home/about/banking/corporate-responsibility/environment/carbon-neutral>). Thus in 2017, BMO established a new five-year target to reduce absolute carbon emissions by 15%—to be achieved by the end of FY2021 using FY2016 baseline. BMO adjusts the base year (or baseline) emissions for changes in weather variations and emission factors. Weather is an integral component of energy and emissions calculations, especially for apples-to-apples comparison of multi-year of emissions. Weather conditions and variations from one location to another can affect how much energy is needed to operate BMO's facilities. BMO tracks the weather data (including heating and cooling degree days) of 151 and 82 representative weather stations in Canada and the United States, respectively. Per CDP guidelines, improvements in emission factors also trigger recalculation or adjustment of base year emissions. In general: Emissions Reduction = Base Year Emissions - Reporting Year Emissions +/- Adjustments As mentioned, Adjustments refer to weather variations, emissions factors, major acquisitions/deletions, and other variables that may significantly affect the emissions data. Weather adjustments are performed using either regression analysis, degree-days ratio, or other methods. Overall, we estimate that Scope 1, 2 and 3 total absolute emissions decreased by about 2.96% from fiscal 2016 to fiscal 2017 after adjusting for weather variations and emission factors, which shows good performance towards achieving the annual target.

---

**Target reference number**

Abs 2

**Scope**

Scope 2 (market-based)

**% emissions in Scope**

100

**% reduction from base year**

90

**Base year**

2017

**Start year**

2017

**Base year emissions covered by target (metric tons CO2e)**

103350

**Target year**

2017

**Is this a science-based target?**

No, but we anticipate setting one in the next 2 years

**% achieved (emissions)**

92.38

**Target status**

Retired

**Please explain**

We have set an indicative target to offset at least 90% of Scope 2 location-based emissions through the purchase of Renewable Energy Certificates (RECs) in North America. Thus, in fiscal 2017, we needed to purchase about 158,749 MWh of Green-e or EcoLogo certified RECs to offset about 92.38% of Scope 2 emissions for all facilities or locations in the United States and selected provinces in Canada with relatively high-emission rates. In this regard, our target renewable energy consumption would always be the same as the purchased RECs to offset at least 90% of Scope 2 emissions. Since RECs represent offsets of purchased electricity, it makes sense for RECs to offset Scope 2 emissions especially for electricity grids with high emission factors. For provinces in Canada that are relatively generating electricity from “green” electricity sources, we use carbon offsets to achieve neutrality for the remaining Scope 2 emissions. However, we do not or cannot account carbon offsets for Scope 2 market-based emissions.

---

**C4.2**

---

**(C4.2) Provide details of other key climate-related targets not already reported in question C4.1/a/b.**

**Target**

Renewable energy consumption

**KPI – Metric numerator**

Renewable energy consumption MWh

**KPI – Metric denominator (intensity targets only)**

**Base year**

2017

**Start year**

2017

**Target year**

2017

**KPI in baseline year**

158749

**KPI in target year**

158749

**% achieved in reporting year**

100

**Target Status**

Retired

**Please explain**

Please refer to Abs 2 or Scope 2 (market-based) target explanation. In fiscal 2017, we purchased about 158,749 MWh of Green-e or EcoLogo certified RECs to offset about 92.38% of Scope 2 location-based emissions.

**Part of emissions target**

Please refer to Scope 2 (market-based) target. The renewable energy consumption target is also part of a complementary initiative, i.e. EPA's Green Power Partnership Program, for BMO's facilities in the United States.

**Is this target part of an overarching initiative?**

Other, please specify (Maintain carbon neutrality status)

---

## **C4.3**

---

**(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.**



Yes

### C4.3a

**(C4.3a) Identify the total number of projects at each stage of development, and for those in the implementation stages, the estimated CO2e savings.**

	Number of projects	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	166	579
To be implemented*	308	2818
Implementation commenced*	59	530
Implemented*	334	2752
Not to be implemented		

### C4.3b

**(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.**

**Activity type**

Energy efficiency: Building services

**Description of activity**

Other, please specify (Combined lighting, HVAC and controls)

**Estimated annual CO2e savings (metric tonnes CO2e)**

2483

**Scope**

Scope 1

Scope 2 (location-based)

**Voluntary/Mandatory**

Voluntary

**Annual monetary savings (unit currency – as specified in CC0.4)**

802750

**Investment required (unit currency – as specified in CC0.4)**

4013750

**Payback period**

4 - 10 years

**Estimated lifetime of the initiative**

11-15 years

**Comment**

Combined lighting, HVAC, and controls upgrades made at various branch and office facilities in Canada and the United States. This is part of the ongoing program and voluntary activity focusing on energy retrofits to reduce Scope 1 and Scope 2 emissions.

---

**Activity type**

Energy efficiency: Building services

**Description of activity**

Other, please specify (Combined lighting, HVAC and controls)

**Estimated annual CO2e savings (metric tonnes CO2e)**

98

**Scope**

Scope 2 (location-based)

**Voluntary/Mandatory**

Voluntary

**Annual monetary savings (unit currency – as specified in CC0.4)**

54354

**Investment required (unit currency – as specified in CC0.4)**

473237

**Payback period**

4 - 10 years

**Estimated lifetime of the initiative**

21-30 years

**Comment**

Combined lighting, HVAC and controls upgrades made at critical facilities and data centers in Canada. This is part of the ongoing program and voluntary activity focusing on energy retrofits to reduce Scope 2 emissions.

---

**Activity type**

Energy efficiency: Building fabric

**Description of activity**

Other, please specify (Combined building envelope improvements)

**Estimated annual CO2e savings (metric tonnes CO2e)**

701

**Scope**

Scope 1

Scope 2 (location-based)

**Voluntary/Mandatory**

Voluntary

**Annual monetary savings (unit currency – as specified in CC0.4)**

272310

**Investment required (unit currency – as specified in CC0.4)**

6807716

**Payback period**

>25 years

**Estimated lifetime of the initiative**

21-30 years

**Comment**

Combined building envelope improvements implemented at various branch and office facilities (e.g. window, roof, and door improvements in thermal performance). This is part of the ongoing program and voluntary activity focusing on energy retrofits to reduce Scope 1 and Scope 2 emissions.

---

**C4.3c**

---

**(C4.3c) What methods do you use to drive investment in emissions reduction activities?**

Method	Comment
Dedicated budget for energy efficiency	Annually, we set aside a specified capital amount, which is used to fund energy efficiency activities across the enterprise.
Dedicated budget for other emissions reduction activities	As an organization committed to carbon neutrality (achieved in 2010), we recognize that achieving this goal annually is dependent on funding other emission reduction activities such as the purchase of renewable energy and carbon offsets. BMO specifically budgets for these expenditures on an annual basis.
Employee engagement	Employee engagement continues to be a key element in our overall strategy to reduce emissions across the organization. Our Environmental Ambassadors (employee volunteers) act as champions in the field to promote our sustainability efforts. Our employees participate in driving down emissions by promoting behavioural change and also provide ideas to the Sustainability Office for deployment consideration on a broader basis. BMO invests annually in internal communication support media (e.g. intranet, newsletters, etc.) to support employee engagement efforts.

Method	Comment
Financial optimization calculations	As an organization (financial institution) with access to capital, we have the opportunity to move beyond normal capital restrictions where there is a positive impact from a "cash flow" perspective on the annual expense line. We regularly assess initiatives using this cash flow basis or life-cycle approach which allows for extended ROI projects to be approved.
Internal price on carbon	Since 2008, BMO has been monetizing the value of carbon emissions savings (based on an internally established price of carbon) including energy cost savings and other benefits as part of wider energy-related initiatives and business cases.
Lower return on investment (ROI) specification	There are a variety of means by which we determine whether emissions reductions initiatives receive funding. While not the only reason, ROI specification is one of them. We do look at extended ROI for owned assets, particularly in the case of real estate assets where there is an expectation that we will occupy beyond the short term.

## C4.5

**(C4.5) Do you classify any of your existing goods and/or services as low-carbon products or do they enable a third party to avoid GHG emissions?**

Yes

### C4.5a

**(C4.5a) Provide details of your products and/or services that you classify as low-carbon products or that enable a third party to avoid GHG emissions.**

#### Level of aggregation

Product

#### Description of product/Group of products

BMO FOSSIL FUEL FREE FUND, a socially responsible investment (SRI) strategy offered by BMO Investment Inc, aims to provide long-term growth of capital by investing in a globally diversified portfolio of equity securities that excludes companies primarily involved in the development and infrastructure of fossil fuels. BMO Fossil Fuel Free Fund provides Canadian investors with the option to have a diversified portfolio while avoiding fossil fuel producers. Further information: [www.bmo.com/gam/ca](http://www.bmo.com/gam/ca) PRIVATE EQUITY FUND: F&C Investments (part of BMO Financial Group) announced the first close of F&C Climate Opportunity Partners LP, a new private equity fund of funds focusing on a climate change investment theme. This new fund offers investors access to investment opportunities arising from global efforts to tackle the causes and impacts of climate change. BMO Capital Markets launched a second principal-protected note linked to an ESG themed index across our BMO branch network. BMO Capital Markets participated in \$6.4 billion of renewable energy equity and debt financing and provided \$4.2 billion of loan commitments to renewable entities and renewable projects. For fiscal year 2016 BMO's green bond underwriting activity totaled \$2.06 billion USD and for fiscal year 2017 the figure was \$ 4.93 billion US (to July 2017). BMO Global Asset Management's Responsible Global Equity Strategy has not held any investments in companies with fossil fuel reserves since February 2016.

### **Are these low-carbon product(s) or do they enable avoided emissions?**

Low-carbon product

### **Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions**

Low-Carbon Investment (LCI) Registry Taxonomy

### **% revenue from low carbon product(s) in the reporting year**

#### **Comment**

F&C CLIMATE OPPORTUNITY PARTNERS LP: The Fund closed to new investment commitments in April 2013 with commitments of €30m. BMO's FOSSIL FUEL FREE FUND: As at 17 November 2017, the BMO Fossil Fuel Free Fund was at \$11 million (CAD).

---

## **C5. Emissions methodology**

---

### **C5.1**

---

#### **(C5.1) Provide your base year and base year emissions (Scopes 1 and 2).**

##### **Scope 1**

##### **Base year start**

November 1 2015

##### **Base year end**

October 31 2016

##### **Base year emissions (metric tons CO<sub>2</sub>e)**

37837

#### **Comment**

In 2017, BMO shifted from Financial to Operational control as per Greenhouse Gas (GHG) Protocol Corporate Accounting and Reporting Standard to consolidate GHG emissions at the organizational level (please refer to The GHG Protocol, which was developed by World Resources Institute (WRI) and World Business Council on Sustainable Development (WBCSD), and sets the global standard for how to measure, manage, and report greenhouse gas emissions (<https://ghgprotocol.org/corporate-standard>)). Under the new Operational control, BMO now accounts for 100 percent of the GHG emissions due to energy use of owned and leased operations over which it has Operational control in Scopes 1 and 2. Previously, BMO accounted for 100 percent of the GHG emissions due to energy use of leased operations in Scope 3. Regardless of whether the Financial or Operational control criterion is used, there is no effect on the total Scopes 1, 2 and 3 emissions as well as targets that have been publicly or historically reported by BMO. Only the breakdown of Scopes 1, 2 and 3 emissions will change. The breakdown of emissions will also be restated by BMO in its website for environmental performance and emissions summary reports. Under Financial control, the base year emissions (tCO<sub>2</sub>e)

were as follows: Scope 1 = 19,311; Scope 2 = 63,057; Scope 3 = 92,900; Total Emissions = 175,268. Under Operational control, the base year emissions (tCO<sub>2</sub>e) will be restated as follows: Scope 1 = 37,837; Scope 2 = 115,333; Scope 3 = 22,098; Total Emissions = 175,268. Please also refer to C6.1 and C6.3 for the restatement of FY2016 or the new base year emissions. The shift in Operational control will enable BMO to better implement and rollout its emission reduction and energy management programs in both owned and leased facilities especially for assets that are sold and leased back (sale-leaseback transactions). In majority of leased facilities, BMO is still responsible for running the building operation, paying for the utility bills, or collaborating with the landlords on various energy-saving projects and operational improvements.

#### **Scope 2 (location-based)**

##### **Base year start**

November 1 2015

##### **Base year end**

October 31 2016

##### **Base year emissions (metric tons CO<sub>2</sub>e)**

115333

##### **Comment**

Please see Scope 1 comments regarding the shift from Financial to Operational control and restatement of Scope 2 base year emissions.

#### **Scope 2 (market-based)**

##### **Base year start**

November 1 2016

##### **Base year end**

October 31 2017

##### **Base year emissions (metric tons CO<sub>2</sub>e)**

103350

##### **Comment**

As explained in C4.1a, Abs 2 or Scope 2 (market-based) target, BMO set an indicative target to offset at least 90% of Scope 2 location-based emissions through the purchase of Renewable Energy Certificates (RECs) in North America. Thus, the Scope 2 (market-based) base year emissions will always be the same as the Scope 2 (location-based) reporting year emissions. In FY2017, the location-based emissions (tCO<sub>2</sub>e) are as follows: Scope 1 = 38,064; Scope 2 = 103,350; Scope 3 = 21,834; Total Emissions = 163,248 (please see also C6. Emissions data).

## **C5.2**

---

**(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions.**

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

**C6. Emissions data**

---

**C6.1**

---

**(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?**

**Row 1**

**Gross global Scope 1 emissions (metric tons CO2e)**

38064

**End-year of reporting period**

<Field Hidden>

**Comment**

As explained in C5. Emissions methodology, BMO shifted from Financial to Operational control in 2017. The reported Scope 1 emissions were calculated using Operational control. BMO's Scope 1 emissions are direct GHG emissions from BMO owned facilities and sources such as combustion of fossil fuels in stationary sources (e.g., boilers, furnaces, etc.) and in vehicles. Scope 1 emissions are also the result of fugitive emissions, such as intentional or unintentional releases of refrigerants during the use of refrigeration and air conditioning equipment. While the absolute Scope 1 emissions appears to have increased from 37,837 to 38,064 tCO2e in fiscal 2017 (using fiscal 2016 as the base year), the change in emissions was largely affected by weather. The overall heating degree days were relatively higher in fiscal 2017 that naturally increased Scope 1 emissions. There was no change in Scope 1 emission factors. The Scope 1 emissions calculations are summarized below. Overall, we estimate that Scope 1 emissions decreased by about 2.14% from fiscal 2016 to fiscal 2017 after adjusting for weather variations and emission factors. • FY2016 Scope 1 Emissions: 37,837 tCO2e • Emissions Adjustment Factors: 0.00% • Total Adjusted Baseline (Emissions Factors): 37,837 tCO2e • Weather Adjustment Factors: 3.16% • Weather Sensitive Total: 33,596 tCO2e • Non-Weather Sensitive Total: 4,241 tCO2e • Total Adjusted Baseline (Weather and Emissions Factors): 38,897 tCO2e • FY2017 Target: 2.10% • Total GHG Target: 38,066 tCO2e • FY2017 Actual: 38,064 tCO2e • Actual Year-Over-Year Reduction: 2.14%

**Row 2**

**Gross global Scope 1 emissions (metric tons CO2e)**

37837

**End-year of reporting period**

2016

**Comment**

Row 2 represents the FY2016 restated emissions for Scope 1 due to the shift from Financial (19,311 tCO<sub>2</sub>e) to Operational (37,837 tCO<sub>2</sub>e) control, as previously explained in C5. Emissions methodology.

### **Row 3**

#### **Gross global Scope 1 emissions (metric tons CO<sub>2</sub>e)**

<Field Hidden>

#### **End-year of reporting period**

<Field Hidden>

#### **Comment**

<Field Hidden>

### **Row 4**

#### **Gross global Scope 1 emissions (metric tons CO<sub>2</sub>e)**

<Field Hidden>

#### **End-year of reporting period**

<Field Hidden>

#### **Comment**

<Field Hidden>

## **C6.2**

---

### **(C6.2) Describe your organization's approach to reporting Scope 2 emissions.**

#### **Row 1**

#### **Scope 2, location-based**

We are reporting a Scope 2, location-based figure

#### **Scope 2, market-based**

We are reporting a Scope 2, market-based figure

#### **Comment**

BMO is reporting both location-based and market-based emissions following the GHG Protocol Scope 2 Guidance. As part of BMO's carbon neutrality mandate, BMO has been implementing energy efficiency, as the "first fuel," across its portfolio to continually reduce its Scope 2 location-based emissions. BMO has also been procuring Green-e or EcoLogo certified RECs as the contractual instrument to offset at least 90% of Scope 2 location-based emissions. Please see C6.3 for additional comments.

## **C6.3**

---

### **(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO<sub>2</sub>e?**

#### **Row 1**



**Scope 2, location-based**

103350

**Scope 2, market-based (if applicable)**

7876

**End-year of reporting period**

&lt;Field Hidden&gt;

**Comment**

As explained in C5. Emissions methodology, BMO shifted from Financial to Operational control in 2017. The reported Scope 1 emissions were calculated using Operational control. BMO's Scope 2 emissions are indirect GHG emissions resulting from electricity, heating and cooling, or steam generated onsite or purchased by BMO offsite. Absolute Scope 2 emissions show reduction by about 4.18% from 115,333 to 103,350 tCO<sub>2</sub>e in fiscal 2017 (using fiscal 2016 as the base year). Part of the reduction is due to improvement in emission factors in North America. The Scope 2 emissions calculations are summarized below. Overall, we estimate that Scope 2 emissions decreased by about 3.63% from fiscal 2016 to fiscal 2017 after adjusting for weather variations and emission factors. • Total FY2016 Scope 2 Emissions: 115,333 tCO<sub>2</sub>e • Emissions Adjustment Factors: -6.49% • Total Adjusted Baseline (Emissions Factors): 107,854 tCO<sub>2</sub>e • Weather Adjustment Factors: -0.57% • Weather Sensitive Total: 107,854 tCO<sub>2</sub>e • Non-Weather Sensitive Total: 0 tCO<sub>2</sub>e • Total Adjusted Baseline (Weather and Emissions Factors): 107,240 tCO<sub>2</sub>e • FY2017 Target: 3.70% • Total GHG Target: 103,112 tCO<sub>2</sub>e • FY2017 Actual: 103,350 tCO<sub>2</sub>e • Actual Year-Over-Year Savings: 3.63% Scope 2 market-based emissions show reduction by about 92.38% from 103,350 (location-based) to 7,876 (market-based) tCO<sub>2</sub>e in fiscal 2017. As explained in C4.1 and C4.2, BMO purchased about 158,749 MWh of Green-e or EcoLogo certified RECs to reduce overall emissions from electricity and achieve the emission reduction target.

**Row 2****Scope 2, location-based**

115333

**Scope 2, market-based (if applicable)**

3504

**End-year of reporting period**

2016

**Comment**

Row 2 represents the FY2016 restated emissions for Scope 2 due to the shift from Financial (63,057 tCO<sub>2</sub>e) to Operational (115,333 tCO<sub>2</sub>e) control, as previously explained in C5. Emissions methodology. There is no restatement for the market-based emissions.

**Row 3****Scope 2, location-based**

&lt;Field Hidden&gt;

**Scope 2, market-based (if applicable)**

<Field Hidden>

**End-year of reporting period**

<Field Hidden>

**Comment**

<Field Hidden>

**Row 4**

**Scope 2, location-based**

<Field Hidden>

**Scope 2, market-based (if applicable)**

<Field Hidden>

**End-year of reporting period**

<Field Hidden>

**Comment**

<Field Hidden>

**C6.4**

---

**(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?**

No

**C6.5**

---

**(C6.5) Account for your organization's Scope 3 emissions, disclosing and explaining any exclusions.**

**Purchased goods and services**

**Evaluation status**

Relevant, not yet calculated

**Metric tonnes CO<sub>2</sub>e**

**Emissions calculation methodology**

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

**Explanation**

For this question, we have determined those scope 3 categories that are relevant to ensure that BMO's GHG inventory appropriately reflects the emissions of the company, and serves the decision-making needs of users, both internal and external to the company. We assess relevance based on the criteria in Table 6.1 of "The Greenhouse Gas Protocol: Corporate Value Chain (Scope 3) Accounting and

Reporting Standard", developed by the World Resources Institute and the World Business Council for Sustainable Development. Criteria for determining the relevance of scope 3 emissions include: (a) size of the emissions; (b) our ability to influence emissions reductions; (c) extent to which the emissions contribute to our company's risk exposure; (d) if the emissions are deemed critical by key stakeholders; (e) extent to which outsourced activities contribute to our emissions; and (f) any specific sector guidance available. BMO Financial Group's Scope 3 emissions resulting from our purchase of goods and services are deemed relevant from a size perspective, as they have the potential to contribute significantly to the company's total scope 3 emissions. Purchased goods and services include: - technology/telecommunications equipment (personal computers, servers, copiers, printers, routers, switches, etc.), - office supplies (e.g. pens, paper, etc.), - furniture and fixtures for premises (desks, chairs, lighting, building materials, etc.), - consulting services as provided by third parties and, - marketing and advertising materials. The primary reason BMO Financial Group has not focused on the specific measurement of emissions related to its supply chain is due to the lack of available source data. Since early 2008 we have employed a Sustainable Procurement questionnaire as part our competitive bid process (supply chain focus) and have scored the results to these questions as part of overall decision process. While this process does not provide results that would allow us to quantitatively answer this question, it has proved beneficial in affecting supplier behaviour for a number of our key relationships.

#### **Capital goods**

##### **Evaluation status**

Not relevant, explanation provided

##### **Metric tonnes CO<sub>2</sub>e**

##### **Emissions calculation methodology**

##### **Percentage of emissions calculated using data obtained from suppliers or value chain partners**

##### **Explanation**

This is not relevant to BMO as our ongoing strategy is to lease facilities space and transportation equipment for use in our operations whenever possible. We have determined that none of the criteria noted in Table 6.1 of "The Greenhouse Gas Protocol: Corporate Value Chain (Scope 3) Accounting and Reporting Standard", developed by the World Resources Institute and the World Business Council for Sustainable Development, have been met in for this Scope 3 category.

#### **Fuel-and-energy-related activities (not included in Scope 1 or 2)**

##### **Evaluation status**

Not relevant, explanation provided

##### **Metric tonnes CO<sub>2</sub>e**

##### **Emissions calculation methodology**

##### **Percentage of emissions calculated using data obtained from suppliers or value chain partners**

##### **Explanation**

This scope 3 emission source represents upstream emissions of purchased electricity and the associated transmission and distribution losses. We do not consider this relevant for BMO as we have limited ability to influence.

#### **Upstream transportation and distribution**

##### **Evaluation status**

Relevant, not yet calculated

##### **Metric tonnes CO2e**

##### **Emissions calculation methodology**

##### **Percentage of emissions calculated using data obtained from suppliers or value chain partners**

##### **Explanation**

BMO Financial Group's Scope 3 emissions resulting from upstream transportation and distribution are deemed relevant from a size perspective, as they have the potential to contribute significantly to the company's total scope 3 emissions. Emissions from the transportation and distribution of products purchased by BMO, between tier 1 suppliers and our own operations (in vehicles and facilities not owned or controlled by BMO) are relevant. We have not attempted to calculate the impact of these emissions to date. Emissions from the transportation and distribution services purchased by BMO related to outbound logistics of sold products (in vehicles and facilities not owned or controlled by the reporting company) are relevant. BMO Financial Group distributes product information to customers and shareholder information to shareholders. Doing so may result in transportation emissions relating to the delivery of paper statements, Annual Reports, Corporate Responsibility Reports and other paper correspondence. The lack of readily available information is the prime reason we do not currently measure/report on emissions from this source.

##### **Waste generated in operations**

##### **Evaluation status**

Relevant, calculated

##### **Metric tonnes CO2e**

1167

##### **Emissions calculation methodology**

Scope 3 Waste generated in operations are focused on waste-to-landfill data for relatively larger corporate facilities. Per GHG Protocol Technical Guidance for Calculating Scope 3 Emissions, Average-data method is used for calculating emissions from business travel. The Average-data method involves estimating emissions based on total waste going to each disposal method (e.g., landfill) and average emission factors for each disposal method. The waste to landfill data are annualized and inputted to the ICF International GHG:ID Tool to calculate the resulting emissions. The mixed Municipal Solid Waste factor incorporates all emissions associated with transporting the waste, dumping it in a landfill, degrading and releasing methane as it decomposes in anaerobic conditions, and finally the residual biogenic carbon "credit" for the biogenic carbon that gets stored in the landfill long term.

##### **Percentage of emissions calculated using data obtained from suppliers or value chain partners**

##### **Explanation**

BMO Financial Group's Scope 3 emissions resulting from waste generated in operations are deemed relevant from a strategic perspective, as they contribute to the company's total scope 3 emissions. The percentage noted relates to the data available for the 17 large facilities (floor area of facilities where waste data is available as a percentage of enterprise facilities floor area). A significant number of our facilities are smaller in size and geographically dispersed across North America. It is not economical to gather waste information from these locations and our focus is therefore on those larger facilities which are either owned or, if leased, where we are a major tenant.

**Business travel**

**Evaluation status**

Relevant, calculated

**Metric tonnes CO<sub>2</sub>e**

20667

**Emissions calculation methodology**

Scope 3 business travel consists primarily of Air Travel (Short-Haul, Medium-Haul and Long-Haul), Employee Vehicles, Rail Travel, and Rental Cars. Per GHG Protocol Technical Guidance for Calculating Scope 3 Emissions, the Distance-based method is used for calculating emissions from business travel. The Distance-based method involves determining the distance and mode of business trips, then applying the appropriate emission factor for the mode used. For the past ten years BMO has used a customized version of ICF International's GHG:ID Tool for the calculation of greenhouse gas emissions. The ICF International GHG:ID Tool for BMO is fully compliant with both (a) The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard and (b) ISO 14064 Part 1: Greenhouse gases.

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

**Explanation**

BMO Financial Group's Scope 3 emissions resulting from business travel are deemed relevant from a size perspective, as they contribute significantly to the company's total scope 3 emissions. We obtain primary data for the types of employee business travel noted (commercial air, rental cars, personal automobile and rail). Due to the lack of readily available data for ground transportation such as taxis, limousines and public transit, these emissions are not included in our inventory.

**Employee commuting**

**Evaluation status**

Relevant, not yet calculated

**Metric tonnes CO<sub>2</sub>e**

**Emissions calculation methodology**

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

**Explanation**

BMO Financial Group's Scope 3 emissions resulting from employee commuting are deemed relevant from a size perspective, as they would contribute to the company's total Scope 3 emissions. Emissions from approximately 45,200 employees commuting between their homes and BMO Financial Group workplaces are relevant. The lack of readily available information about their commuting modes and travel distances is the prime reason we do not currently calculate/report on emissions from this source.

**Upstream leased assets**

**Evaluation status**

Not relevant, explanation provided

**Metric tonnes CO<sub>2</sub>e**

**Emissions calculation methodology**

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

**Explanation**

With the shift to Operational control starting fiscal 2017, emissions from leased assets are now accounted for in Scope 1 and Scope 2. Defensible and transparent consumption estimates are utilized for leasehold facilities where actual data is not available. Consumption estimates are calculated based on type of facility, and either a proxy for intensity per square foot where sufficient sample of similar facilities (with actual data) available, or based on published intensities for facility type by subregion (state/province) or region (country) as applicable.

**Downstream transportation and distribution**

**Evaluation status**

Not relevant, explanation provided

**Metric tonnes CO<sub>2</sub>e**

**Emissions calculation methodology**

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

**Explanation**

Not relevant as this Scope 3 activity source includes only emissions from transportation and distribution of products after the point of sale – not applicable to BMO. We have determined that none of the criteria noted in Table 6.1 of "The Greenhouse Gas Protocol: Corporate Value Chain (Scope 3) Accounting and Reporting Standard", developed by the World Resources Institute and the World Business Council for Sustainable Development, have been met in for this Scope 3 category.

**Processing of sold products**

**Evaluation status**

Not relevant, explanation provided

**Metric tonnes CO<sub>2</sub>e**

**Emissions calculation methodology**

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**

### **Explanation**

As a financial institution, our products are financial services as opposed to tangible goods and therefore this Scope 3 source is not relevant. We have determined that none of the criteria noted in Table 6.1 of "The Greenhouse Gas Protocol: Corporate Value Chain (Scope 3) Accounting and Reporting Standard", developed by the World Resources Institute and the World Business Council for Sustainable Development, have been met in for this Scope 3 category.

### **Use of sold products**

#### **Evaluation status**

Not relevant, explanation provided

#### **Metric tonnes CO<sub>2</sub>e**

#### **Emissions calculation methodology**

#### **Percentage of emissions calculated using data obtained from suppliers or value chain partners**

### **Explanation**

As a financial institution, our products are financial services as opposed to tangible goods. We have determined that none of the criteria noted in Table 6.1 of "The Greenhouse Gas Protocol: Corporate Value Chain (Scope 3) Accounting and Reporting Standard", developed by the World Resources Institute and the World Business Council for Sustainable Development, have been met in for this Scope 3 category.

### **End of life treatment of sold products**

#### **Evaluation status**

Not relevant, explanation provided

#### **Metric tonnes CO<sub>2</sub>e**

#### **Emissions calculation methodology**

#### **Percentage of emissions calculated using data obtained from suppliers or value chain partners**

### **Explanation**

As a financial institution, our products are financial services as opposed to tangible goods. We have determined that none of the criteria noted in Table 6.1 of "The Greenhouse Gas Protocol: Corporate Value Chain (Scope 3) Accounting and Reporting Standard", developed by the World Resources Institute and the World Business Council for Sustainable Development, have been met in for this Scope 3 category.

### **Downstream leased assets**

#### **Evaluation status**

Not relevant, explanation provided

#### **Metric tonnes CO<sub>2</sub>e**

#### **Emissions calculation methodology**

#### **Percentage of emissions calculated using data obtained from suppliers or value chain partners**

### **Explanation**

Any assets that BMO owns and leases to 3rd parties are included in our Scope 1 and Scope 2 reported numbers. We have determined that none of the criteria noted in Table 6.1 of "The Greenhouse Gas Protocol: Corporate Value Chain (Scope 3) Accounting and Reporting Standard", developed by the World Resources Institute and the World Business Council for Sustainable Development, have been met in for this Scope 3 category.

### **Franchises**

#### **Evaluation status**

Not relevant, explanation provided

#### **Metric tonnes CO<sub>2</sub>e**

#### **Emissions calculation methodology**

#### **Percentage of emissions calculated using data obtained from suppliers or value chain partners**

#### **Explanation**

BMO Financial Group does not engage in franchise activity. We have determined that none of the criteria noted in Table 6.1 of "The Greenhouse Gas Protocol: Corporate Value Chain (Scope 3) Accounting and Reporting Standard", developed by the World Resources Institute and the World Business Council for Sustainable Development, have been met in for this Scope 3 category.

### **Investments**

#### **Evaluation status**

Relevant, not yet calculated

#### **Metric tonnes CO<sub>2</sub>e**

#### **Emissions calculation methodology**

#### **Percentage of emissions calculated using data obtained from suppliers or value chain partners**

#### **Explanation**

BMO Financial Group's Scope 3 emissions resulting from investments are deemed relevant from a size perspective, as they have the potential to contribute significantly to the company's total scope 3 emissions. We are aware of the discussions related to financed emissions and are following the work being done by the GHG Protocol and the UNEP Finance Initiative re: disclosure guidance for financial institutions but at this stage, we have not evaluated the impact on our organization. There are many factors to be considered including availability, credibility, and consistency of information as well as the direction of the regulatory landscape in North America which is where the bulk of our activities take place.

### **Other (upstream)**

#### **Evaluation status**

Not relevant, explanation provided

#### **Metric tonnes CO<sub>2</sub>e**

#### **Emissions calculation methodology**



### **Percentage of emissions calculated using data obtained from suppliers or value chain partners**

#### **Explanation**

As a financial institution, our products are financial services as opposed to tangible goods and therefore this Scope 3 source is not relevant. We have determined that none of the criteria noted in Table 6.1 of "The Greenhouse Gas Protocol: Corporate Value Chain (Scope 3) Accounting and Reporting Standard", developed by the World Resources Institute and the World Business Council for Sustainable Development, have been met in for this Scope 3 category.

#### **Other (downstream)**

#### **Evaluation status**

Not relevant, explanation provided

#### **Metric tonnes CO2e**

#### **Emissions calculation methodology**

### **Percentage of emissions calculated using data obtained from suppliers or value chain partners**

#### **Explanation**

As a financial institution, our products are financial services as opposed to tangible goods and therefore this Scope 3 source is not relevant. We have determined that none of the criteria noted in Table 6.1 of "The Greenhouse Gas Protocol: Corporate Value Chain (Scope 3) Accounting and Reporting Standard", developed by the World Resources Institute and the World Business Council for Sustainable Development, have been met in for this Scope 3 category.

### **C6.7**

---

#### **(C6.7) Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization?**

No

### **C6.10**

---

#### **(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.**

#### **Intensity figure**

6.35

#### **Metric numerator (Gross global combined Scope 1 and 2 emissions)**

141414

#### **Metric denominator**

unit total revenue

#### **Metric denominator: Unit total**

22260

**Scope 2 figure used**

Location-based

**% change from previous year**

12.19

**Direction of change**

Decreased

**Reason for change**

Per C6. Emissions data, the combined Scope 1 and 2 location-based emissions for the reporting year amounted to 141,414 tCO<sub>2</sub>e; per C5. Emissions methodology, the combined Scope 1 and 2 location-based emissions for the base year has been restated to 153,170 tCO<sub>2</sub>e using Operational control. The total revenue during the reporting year (FY2017) and base year (FY2016) were C\$22,260 and C\$21,171 million, respectively. Thus, total revenues increased by 5.14% in FY2017 versus FY2016. Scope 1 and Scope 2 location-based emissions per million dollar revenue decreased from 7.23 to 6.35 or by 12.19% over the same period. The intensity figure comparisons do not account for changes in weather and emission factors. Emissions reduction activities have contributed to the decrease in total Scope 1 and Scope 2 emissions. While this information has been provided, as requested, we do not believe that this is the most relevant indicator, due to the weak correlation between emissions and revenues.

---

**Intensity figure**

3.13

**Metric numerator (Gross global combined Scope 1 and 2 emissions)**

141414

**Metric denominator**

full time equivalent (FTE) employee

**Metric denominator: Unit total**

45200

**Scope 2 figure used**

Location-based

**% change from previous year**

7.61

**Direction of change**

Decreased

**Reason for change**

The full time equivalent employees (FTE) during the reporting year (FY2017) and base year (FY2016) were 45,200 and 45,234 employees, respectively. Thus, total FTEs decreased minimally by 0.08% in FY2017 versus FY2016. Scope 1 and Scope 2 location-

based emissions per FTE decreased from 3.39 to 3.13 or by 7.61% over the same period. The intensity figure comparisons do not account for changes in weather and emission factors. Emissions reduction activities have contributed to the decrease in total Scope 1 and Scope 2 emissions.

---

**Intensity figure**

0.083

**Metric numerator (Gross global combined Scope 1 and 2 emissions)**

141414

**Metric denominator**

square meter

**Metric denominator: Unit total**

1709439

**Scope 2 figure used**

Location-based

**% change from previous year**

5.44

**Direction of change**

Decreased

**Reason for change**

The total floor area during the reporting year (FY2017) and base year (FY2016) were 1,709,439 and 1,750,838 square meters, respectively. Thus, total floor area decreased by from 0.087 to 0.083 or by 5.44% in FY2017 versus FY2016. Scope 1 and Scope 2 location-based emissions per floor area decreased by 5.44% over the same period. The intensity figure comparisons do not account for changes in weather and emission factors. Emissions reduction activities have contributed to the decrease in total Scope 1 and Scope 2 emissions.

---

**C7. Emissions breakdowns**

---

**C7.1**

---

**(C7.1) Does your organization have greenhouse gas emissions other than carbon dioxide?**

Yes

**C7.1a**

---

**(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).**

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	37939	IPCC Fourth Assessment Report (AR4 - 100 year)
CH4	84	IPCC Fourth Assessment Report (AR4 - 100 year)
N2O	41	IPCC Fourth Assessment Report (AR4 - 100 year)

## C7.2

**(C7.2) Break down your total gross global Scope 1 emissions by country/region.**

Country/Region	Scope 1 emissions (metric tons CO2e)
Canada	14823
United States of America	22960
Other, please specify (Other International Locations)	281

## C7.3

**(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.**

By business division

By facility

By activity

### C7.3a

**(C7.3a) Break down your total gross global Scope 1 emissions by business division.**

Business division	Scope 1 emissions (metric ton CO2e)
Bank of Montreal	21546
BMO Nesbitt Burns	1695
Harris Bank	14823

### C7.3b

**(C7.3b) Break down your total gross global Scope 1 emissions by business facility.**

Facility	Scope 1 emissions (metric tons CO2e)	Latitude	Longitude
Retail Facilities (Branches, ATMs)	19679	-90	-180
Office Facilities	12228	-90	-180
Special Purpose Facilities (Operations Centres, Data Centres, Learning Centres)	3685	-90	-180
Transportation Equipment	2472	-90	-180

### C7.3c

(C7.3c) Break down your total gross global Scope 1 emissions by business activity.

Activity	Scope 1 emissions (metric tons CO2e)
Stationary combustion (facilities)	35432
Mobile combustion (transport)	2472
Fugitive emissions (HFCs - facilities)	160

### C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/region.

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low-carbon electricity, heat, steam or cooling accounted in market-based approach (MWh)
Canada	26948	4238	261191	30484
United States of America	72764	0	128265	128265
Other, please specify (Other International Locations)	3638	3638	7291	0

### C7.6

(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

By business division

By facility

By activity

### C7.6a

#### (C7.6a) Break down your total gross global Scope 2 emissions by business division.

Business division	Scope 2, location-based emissions (metric tons CO2e)	Scope 2, market-based emissions (metric tons CO2e)
Bank of Montreal	28047	7336
BMO Nesbitt Burns	2539	540
Harris Bank	72764	0

### C7.6b

#### (C7.6b) Break down your total gross global Scope 2 emissions by business facility.

Facility	Scope 2 location-based emissions (metric tons CO2e)	Scope 2, market-based emissions (metric tons CO2e)
Retail Facilities (Branches, ATMs)	62610	2789
Office Facilities	27568	4688
Special Purpose Facilities (Operations Centres, Data Centres, Learning Centres)	13172	399
Transportation Equipment	0	0

### C7.6c

#### (C7.6c) Break down your total gross global Scope 2 emissions by business activity.

Activity	Scope 2, location-based emissions (metric tons CO2e)	Scope 2, market-based emissions (metric tons CO2e)
Retail Activities (Branches, ATMs)	62610	2789

Activity	Scope 2, location-based emissions (metric tons CO2e)	Scope 2, market-based emissions (metric tons CO2e)
Office Activities	27568	4688
Special Purpose Activities (Operations Centres, Data Centres, Learning Centres)	13172	399
Transportation Activities	0	0

## C7.9

**(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?**

Decreased

### C7.9a

**(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined) and for each of them specify how your emissions compare to the previous year.**

	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption		<Field Hidden>		
Other emissions reduction activities	4550	Decreased	2.97	Emissions reduction initiatives related to real estate facilities continue to be focused primarily on programmatic efficiency upgrades to HVAC equipment and controls, lighting/signage, and building envelope (such as windows and roofs) as well as space optimization strategies. Our strategy is to promote energy efficiency as the “first-fuel” complemented by operational improvement and employee awareness programs. In FY2017, we reduced our emissions by 4,550 tCO2e, as a result of emissions reduction initiatives. Our restated total Scope 1 and Scope 2 emissions in the previous year using Operational control was 153,170 tCO2e (see also C5. Emissions methodology), resulting in a decrease of 2.97% (i.e., $-4,550/153,170 \times 100\% = -2.97\%$ ).
Divestment		<Field		

	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
		Hidden>		
Acquisitions		<Field Hidden>		
Mergers		<Field Hidden>		
Change in output	168	Decreased	0.11	Change in output reflects the impacts of owned facilities occupied for the full year in FY2016 and vacated in FY2017, as well as those owned facilities that were not in our inventory in FY2016 and occupied in FY2017. We consider this organic reduction or addition of facilities, due to the closure and opening of bank branches, which almost balanced each other in FY2017; we reduced our emissions by 168 tCO2e, as a result of changes in output. Our restated total Scope 1 and Scope 2 emissions in the previous year using Operational control was 153,170 tCO2e (see also C5. Emissions methodology), resulting in a decrease of 0.11% (i.e., $-168/153,170 * 100\% = -0.11\%$ ).
Change in methodology	7485	Decreased	4.89	Change in methodology represents the net impact resulting from changes in provincial emissions factors for electricity in Canada, Emissions & Generation Resource Integrated Database (eGRID) emissions factors for electricity in the US, and global warming potentials (GWPs). Per CDP guidelines, improvements or changes in emission factors trigger adjustment of emissions. CDP 2018 submission (FY2017 data) references (a) Environment Canada's 2018 published Provincial electricity emissions factors (as at 2016); (b) U.S. Environmental Protection Agency's 2018 published eGRID (as at 2016); and (c) United Nations Intergovernmental Panel on Climate Change (IPCC)'s Fourth Assessment Report on GWPs for 100-year time horizon. We have isolated the impacts of the change in emissions factors as a main contributing factor for the overall change in Scope 2 electricity emissions. In FY2017, we decreased our emissions by 7,485 tCO2e, as a net result of changes in methodology or improvements in emissions factors. Our restated total Scope 1 and Scope 2 emissions in the previous year using Operational control was 153,170 tCO2e (see also C5. Emissions methodology), resulting in a decrease of 4.89% (i.e., $-7,485/153,170 * 100\% = -4.89\%$ ).
Change in boundary		<Field Hidden>		
Change in physical operating conditions	447	Increased	0.29	Change in physical operating conditions refers to weather normalization. Weather adjusted energy use (and its associated emissions) is the energy that the building portfolio would have used in the current fiscal year (FY2017) under the same weather conditions as the previous year (FY2016). On average for representative BMO locations or weather stations, heating degree days increased by about 2.2% and cooling degree days decreased by about 10.6% from FY2016 to FY2017. Generally, this leads to



	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
				expected decrease in electricity consumption during summer months and increase in heating fuel (including electric heat) during the winter months. Statistical process or analysis tool was used to factor out the variations in degree days and adjust the weather sensitive component of the energy use of facilities under Scope 1 and Scope 2. As an overall effect in FY2017, our emissions increased by 447 tCO2e, as a net result of changes in degree days (physical operating conditions). Our restated total Scope 1 and Scope 2 emissions in the previous year using Operational control was 153,170 tCO2e (see also C5. Emissions methodology), resulting in a decrease of 0.29% (i.e., 447/153,170*100% = 0.29%).
Unidentified		<Field Hidden>		
Other		<Field Hidden>		

### C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Location-based

### C8. Energy

#### C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?

More than 0% but less than or equal to 5%

#### C8.2

(C8.2) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertakes this energy-related activity
Consumption of fuel (excluding feedstocks)	Yes

	Indicate whether your organization undertakes this energy-related activity
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	Yes
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	No

## C8.2a

### (C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)		190235	190235
Consumption of purchased or acquired electricity	<Field Hidden>		389225	389225
Consumption of purchased or acquired heat	<Field Hidden>	<Field Hidden>	<Field Hidden>	<Field Hidden>
Consumption of purchased or acquired steam	<Field Hidden>		7522	7522
Consumption of purchased or acquired cooling	<Field Hidden>	<Field Hidden>	<Field Hidden>	<Field Hidden>
Consumption of self-generated non-fuel renewable energy	<Field Hidden>	<Field Hidden>	<Field Hidden>	<Field Hidden>
Total energy consumption	<Field Hidden>		586982	586982

## C8.2b

### (C8.2b) Select the applications of your organization's consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	No
Consumption of fuel for the generation of steam	No
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	No

## C8.2c

---

**(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.**

**Fuels (excluding feedstocks)**

Natural Gas

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

180515

**MWh fuel consumed for the self-generation of electricity**

<Field Hidden>

**MWh fuel consumed for self-generation of heat**

<Field Hidden>

**MWh fuel consumed for self-generation of steam**

<Field Hidden>

**MWh fuel consumed for self-generation of cooling**

<Field Hidden>

**MWh fuel consumed for self- cogeneration or self-trigeneration**

<Field Hidden>

---

**Fuels (excluding feedstocks)**

Diesel

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

4935

**MWh fuel consumed for the self-generation of electricity**

<Field Hidden>

**MWh fuel consumed for self-generation of heat**

<Field Hidden>

**MWh fuel consumed for self-generation of steam**

<Field Hidden>

**MWh fuel consumed for self-generation of cooling**

<Field Hidden>

**MWh fuel consumed for self- cogeneration or self-trigeneration**

<Field Hidden>

---

**Fuels (excluding feedstocks)**

Fuel Oil Number 2

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

4768

**MWh fuel consumed for the self-generation of electricity**

<Field Hidden>

**MWh fuel consumed for self-generation of heat**

<Field Hidden>

**MWh fuel consumed for self-generation of steam**

<Field Hidden>

**MWh fuel consumed for self-generation of cooling**

<Field Hidden>

**MWh fuel consumed for self- cogeneration or self-trigeneration**

<Field Hidden>

---

**Fuels (excluding feedstocks)**

Propane Gas

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

17

**MWh fuel consumed for the self-generation of electricity**

<Field Hidden>

**MWh fuel consumed for self-generation of heat**

<Field Hidden>

**MWh fuel consumed for self-generation of steam**

<Field Hidden>

**MWh fuel consumed for self-generation of cooling**

<Field Hidden>

**MWh fuel consumed for self- cogeneration or self-trigeneration**

<Field Hidden>

---

## **C8.2d**

---

**(C8.2d) List the average emission factors of the fuels reported in C8.2c.**

**Acetylene**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Agricultural Waste**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Alternative Kiln Fuel (Wastes)**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Animal Fat**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Animal/Bone Meal**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Anthracite Coal**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Asphalt**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Aviation Gasoline**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Bagasse**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Bamboo**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Basic Oxygen Furnace Gas (LD Gas)**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Biodiesel**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Biodiesel Tallow**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Biodiesel Waste Cooking Oil**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>



**Comment**

<Field Hidden>

**Bioethanol**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Biogas**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Biogasoline**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Biomass Municipal Waste**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Biomethane**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Bitumen**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Bituminous Coal**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Black Liquor**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Blast Furnace Gas**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Brown Coal Briquettes (BKB)**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Burning Oil**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Butane**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Butylene**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Charcoal**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Coal**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Coal Tar**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Coke**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Coke Oven Gas**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Coking Coal**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Compressed Natural Gas (CNG)**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Condensate**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Crude Oil**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Crude Oil Extra Heavy**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Crude Oil Heavy**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Crude Oil Light**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Diesel**

**Emission factor**

0.0708

**Unit**

metric tons CO2e per GJ

**Emission factor source**

GHG Protocol Stationary Combustion (2010)

**Comment**

**Distillate Oil**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Dried Sewage Sludge**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Ethane**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Ethylene**

**Emission factor**



<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Fuel Gas**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Fuel Oil Number 1**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Fuel Oil Number 2**

**Emission factor**

0.07393

**Unit**

metric tons CO<sub>2</sub>e per GJ

**Emission factor source**

GHG Protocol Facilities (2000)

**Comment**

**Fuel Oil Number 4**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Fuel Oil Number 5**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Fuel Oil Number 6**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Gas Coke**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Gas Oil**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Gas Works Gas**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**GCI Coal**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**General Municipal Waste**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Grass**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Hardwood**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Heavy Gas Oil**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Hydrogen**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Industrial Wastes**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Isobutane**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Isobutylene**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Jet Gasoline**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Jet Kerosene**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Kerosene**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Landfill Gas**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Light Distillate**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Lignite Coal**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Liquefied Natural Gas (LNG)**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Liquefied Petroleum Gas (LPG)**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Liquid Biofuel**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Lubricants**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Marine Fuel Oil**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**



<Field Hidden>

**Comment**

<Field Hidden>

**Marine Gas Oil**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Metallurgical Coal**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Methane**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Motor Gasoline**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Naphtha**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Natural Gas**

**Emission factor**

0.05063

**Unit**

metric tons CO2e per GJ

**Emission factor source**

GHG Protocol Stationary Combustion (2010)

**Comment**

**Natural Gas Liquids (NGL)**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Natural Gasoline**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Non-Biomass Municipal Waste**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Non-Biomass Waste**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Oil Sands**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Oil Shale**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Orimulsion**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Other Petroleum Gas**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Paraffin Waxes**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Patent Fuel**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**PCI Coal**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Peat**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Pentanes Plus**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Petrochemical Feedstocks**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Petrol**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Petroleum Coke**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Petroleum Products**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Pitch**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Plastics**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Primary Solid Biomass**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Propane Gas**

**Emission factor**

0.06009

**Unit**

metric tons CO2e per GJ

**Emission factor source**

GHG Protocol Facilities (2000)

**Comment**

**Propane Liquid**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Propylene**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Refinery Feedstocks**

**Emission factor**



<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Refinery Gas**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Refinery Oil**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Residual Fuel Oil**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Road Oil**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**SBP**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Shale Oil**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Sludge Gas**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Softwood**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Solid Biomass Waste**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Special Naphtha**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Still Gas**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Straw**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Subbituminous Coal**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Sulphite Lyes**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Tar**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Tar Sands**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Thermal Coal**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Thermal Coal Commercial**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Thermal Coal Domestic**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Thermal Coal Industrial**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Tires**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Town Gas**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Unfinished Oils**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Vegetable Oil**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Waste Oils**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Waste Paper and Card**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Waste Plastics**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Waste Tires**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**White Spirit**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>



**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Wood**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Wood Chips**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Wood Logs**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Wood Pellets**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Wood Waste**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**Other**

**Emission factor**

<Field Hidden>

**Unit**

<Field Hidden>

**Emission factor source**

<Field Hidden>

**Comment**

<Field Hidden>

**C8.2f**

---

**(C8.2f) Provide details on the electricity, heat, steam and/or cooling amounts that were accounted for at a low-carbon emission factor in the market-based Scope 2 figure reported in C6.3.**

**Basis for applying a low-carbon emission factor**

Energy attribute certificates, Renewable Energy Certificates (RECs)

**Low-carbon technology type**

Wind

Hydropower

Other low-carbon technology, please specify (Digester Gas and Landfill Gas)

**MWh consumed associated with low-carbon electricity, heat, steam or cooling**

158749

**Emission factor (in units of metric tons CO<sub>2</sub>e per MWh)**

0

**Comment**

As mentioned in C4.1a Abs2 Target, we have set an indicative target to offset at least 90% of Scope 2 location-based emissions through the purchase of RECs in North America. In fiscal 2017, we purchased about 158,749 MWh of Green-e or EcoLogo certified RECs to offset about 92.38% of Scope 2 emissions. The RECs are sourced from a combination of wind, hydropower, digester gas, and landfill gas.

---

**C9. Additional metrics**

---

**C9.1**

---

**(C9.1) Provide any additional climate-related metrics relevant to your business.**

**Description**

Other, please specify (Water use)

**Metric value**

0.74

**Metric numerator**

Water use

**Metric denominator (intensity metric only)**

Floor area in square meters

**% change from previous year**

2.17

**Direction of change**

Decreased

**Please explain**

As a financial institution, we continue not to be a water-intensive industry and organization. Yet, while fresh water is relatively abundant in Canada, water rates and demand are continuously rising. The production, treatment and distribution of water are also energy intensive. For the past several years we have focused our efforts on establishing a reliable baseline for water consumption

across our facilities. We are now in a position to set a multi-year reduction target, normalized to reflect the consumption per square meter of facilities. This marks the introduction of our first water reduction target. We have set a new target to reduce water use intensity (m<sup>3</sup> water consumption / m<sup>2</sup> real estate floor area) by 8% compared to the fiscal 2016 baseline. Since 2012, we have been already monitoring the water use intensity in those facilities for which data are available (about 61.7% data coverage in FY2017). Reported water use intensities for the past several years are as follows: 2014: 0.7004 m<sup>3</sup>/m<sup>2</sup> 2015: 0.7534 m<sup>3</sup>/m<sup>2</sup> 2016: 0.7449 m<sup>3</sup>/m<sup>2</sup> 2017: 0.7287 m<sup>3</sup>/m<sup>2</sup> At the onset of our water use intensity target, we have investigated and/or developed the following action plans or opportunities for water efficiency: • Water audits (for possible municipal/federal funding) • Water reduction measures (that can be rolled out corporate-wide) • Water incentive programs • Sewer rebates • Water rates/billing optimization • Water efficiency standards • Water awareness programs, case studies and/or publications This year, we have completed water use assessments of 10 representative office facilities and branches. The water use assessments evaluated saving opportunities for (a) water using building system equipment (boilers, AC units, chillers, cooling towers, and other equipment) and (b) water fixtures in building (faucets, showers, toilets, urinals, and other fixtures).

---

## C10. Verification

---

### C10.1

---

**(C10.1) Indicate the verification/assurance status that applies to your reported emissions.**

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	Third-party verification or assurance process in place

### C10.1a

---

**(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 and/or Scope 2 emissions and attach the relevant statements.**

**Scope**

Scope 1

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Reasonable assurance

**Attach the statement**

[BMO FY2017 Emissions Verification Statement.pdf](#)

**Page/ section reference**

Please refer to pages 1 to 2 of the attached Verification Statement.

**Relevant standard**

ISO14064-3

**Proportion of reported emissions verified (%)**

100

---

**Scope**

Scope 2 location-based

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Reasonable assurance

**Attach the statement**

[BMO FY2017 Emissions Verification Statement.pdf](#)

**Page/ section reference**

Please refer to pages 1 to 2 of the attached Verification Statement.

**Relevant standard**

ISO14064-3

**Proportion of reported emissions verified (%)**

100

---

**Scope**

Scope 2 market-based

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

Reasonable assurance

**Attach the statement**

[BMO FY2017 Emissions Verification Statement.pdf](#)

**Page/ section reference**

Please refer to pages 1 to 2 of the attached Verification Statement.

**Relevant standard**

ISO14064-3

**Proportion of reported emissions verified (%)**

100

---

**C10.1b**

---

**(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.**

**Scope**

Scope 3- all relevant categories

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Attach the statement**

[BMO FY2017 Emissions Verification Statement.pdf](#)

**Page/section reference**

Please refer to pages 1 to 2 of the attached Verification Statement.

**Relevant standard**

ISO14064-3

---

**C10.2**

---

**(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?**

No, we do not verify any other climate-related information reported in our CDP disclosure

## **C11. Carbon pricing**

---

### **C11.1**

---

**(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?**

No, and we do not anticipate being regulated in the next three years

### **C11.2**

---

**(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?**

Yes

#### **C11.2a**

---

**(C11.2a) Provide details of the project-based carbon credits originated or purchased by your organization in the reporting period.**

##### **Credit origination or credit purchase**

Credit purchase

##### **Project type**

Other, please specify (Combination)

##### **Project identification**

Will Solutions – Quebec Based Community and Private Sector Credits Will Solutions provide Quebec based community and private sector credits. Will Solutions’ Sustainable Community Solution encourages, quantifies, and clusters together the GHG reduction efforts of both small and medium-sized public and private entities in order to create high quality carbon credits validated to the Verified Carbon Standard (VCS), a highly respected international standard. The carbon credits generated come from diverse source activities such as energy efficiency for buildings, redirection of waste from landfills, and improvement of industrial and commercial processing practices.

##### **Verified to which standard**

VCS (Verified Carbon Standard)

##### **Number of credits (metric tonnes CO2e)**

10000

##### **Number of credits (metric tonnes CO2e): Risk adjusted volume**

10000

##### **Credits cancelled**

Yes

**Purpose, e.g. compliance**

Voluntary Offsetting

---

**Credit origination or credit purchase**

Credit purchase

**Project type**

Landfill gas

**Project identification**

City of Guelph – Landfill Gas Project The City of Guelph generates carbon credits due to the collection and destruction of methane emissions at its Eastview Landfill. Renewable electricity is generated on the landfill site by using the methane as fuel. The carbon credits that result from the methane destruction are certified to applicable ISO standards and the electricity generated is renewable energy.

**Verified to which standard**

Other, please specify (ISO 14064-2)

**Number of credits (metric tonnes CO2e)**

50000

**Number of credits (metric tonnes CO2e): Risk adjusted volume**

50000

**Credits cancelled**

Yes

**Purpose, e.g. compliance**

Voluntary Offsetting

---

**Credit origination or credit purchase**

Credit purchase

**Project type**

Methane avoidance

**Project identification**

City of Guelph – Organics Waste Processing Facility The City of Guelph actively collects and processes organic waste at its Waste Innovation Centre located in Guelph, Ontario. The organic waste is processed into usable compost – thereby diverting waste from landfill and avoiding methane emissions. The resulting methane avoidance generates high quality carbon credits that are certified to applicable ISO standards.



**Verified to which standard**

Other, please specify (ISO 14064-2)

**Number of credits (metric tonnes CO2e)**

15000

**Number of credits (metric tonnes CO2e): Risk adjusted volume**

15000

**Credits cancelled**

Yes

**Purpose, e.g. compliance**

Voluntary Offsetting

---

**Credit origination or credit purchase**

Credit purchase

**Project type**

Methane avoidance

**Project identification**

Halifax Renewable Energy Corporation (HREC) – Landfill Gas to Energy HREC and its subsidiaries own and operate a renewable energy project on a landfill near Halifax, Nova Scotia. The project collects methane emissions from landfill waste and utilizes the methane to generate electricity for local consumption. The carbon credits that result from the methane destruction are certified to the ISO standards and the electricity generated is renewable energy.

**Verified to which standard**

Other, please specify (ISO 14064-2)

**Number of credits (metric tonnes CO2e)**

35075

**Number of credits (metric tonnes CO2e): Risk adjusted volume**

35075

**Credits cancelled**

Yes

**Purpose, e.g. compliance**

Voluntary Offsetting

---

**C11.3**

---

### **(C11.3) Does your organization use an internal price on carbon?**

Yes

#### **C11.3a**

---

#### **(C11.3a) Provide details of how your organization uses an internal price on carbon.**

##### **Objective for implementing an internal carbon price**

Change internal behavior

Drive energy efficiency

Identify and seize low-carbon opportunities

##### **GHG Scope**

Scope 1

Scope 2

Scope 3

##### **Application**

Selected business units.

##### **Actual price(s) used (Currency /metric ton)**

30

##### **Variance of price(s) used**

##### **Type of internal carbon price**

Shadow price

Implicit price

Offsets

##### **Impact & implication**

BMO uses a number of instruments, such as renewable energy credits (RECs) and carbon offsets, to reduce its carbon footprint. As the price of these instruments varies, BMO's internal carbon price represents the upper-range price to mitigate emissions and achieve carbon neutrality. The internal carbon price is set through a combination of shadow price, implicit price, and offsets. BMO is not yet exposed risks due to regulations such as cap-and-trade schemes that affect the cost of carbon emissions. Currently, the internal price of carbon helps BMO uncover opportunities and guide decisions on more cost-effective means to reduce carbon footprint. For example, BMO has partnered with an electric utility in one of the U.S. states to bundle brown and green power through on-bill financing without significant premium. This initiative has lowered the quantity and cost for RECs requirements. The cost savings can be further reinvested in low-carbon technologies and emission reduction initiatives.

---

## **C12. Engagement**

---

## C12.1

---

### **(C12.1) Do you engage with your value chain on climate-related issues?**

Yes, our customers

## C12.1b

---

### **(C12.1b) Give details of your climate-related engagement strategy with your customers.**

#### **Type of engagement**

Collaboration & innovation

#### **Details of engagement**

Other – please provide information in column 5

#### **Size of engagement**

50

#### **% Scope 3 emissions as reported in C6.5**

#### **Please explain the rationale for selecting this group of customers and scope of engagement**

Climate change corresponds with evolving business opportunities that are being actively pursued and developed by BMO. These opportunities include growth of sustainable finance and associated business opportunities, such as green, social or sustainability bond underwriting, green lending and other sustainable finance products. In 2017 BMO Capital Markets hired a Sustainable Finance Specialist and has enhanced client engagement and identification of market opportunities around sustainable finance.

#### **Impact of engagement, including measures of success**

BMO Capital Markets participated in \$6.4 billion of renewable energy equity and debt financing and provided \$4.2 billion of loan commitments to renewable entities and renewable projects. For fiscal year 2016 BMO's green bond underwriting activity totaled \$2.06 billion USD and for fiscal year 2017 the figure was \$4.93 billion US (to July 2017). Opportunities identified through client engagement activity.

---

## C12.3

---

### **(C12.3) Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues through any of the following?**

Direct engagement with policy makers

Trade associations

Other

## C12.3a

### (C12.3a) On what issues have you been engaging directly with policy makers?

Focus of legislation	Corporate position	Details of engagement	Proposed legislative solution
Mandatory carbon reporting	Support	Our subsidiary BMO Global Asset Management (BMO GAM) has engaged extensively with policymakers both directly and through its membership of the Institutional Investors Group on Climate Change (IIGCC). In the past year, BMO Global Asset Management undertook public policy engagements, including: Signing on to a letter from 130 global investors urging G20 leaders to ratify the COP21 Paris Agreement on climate change. In 2016 BMO GAM's key activities included: signing a global investor letter to G20 leaders encouraging the ratification of the COP21 Paris Agreement; Engaging the World Bank on approaches to measuring green finance; writing to the US Securities and Exchange Commission on company sustainability disclosure reforms.	N/A. Support of international standards.
Climate finance	Support	We have engaged on the Financial Stability Board's Task Force on Climate-Related Financial Disclosures (TCFD) through our active membership within the Institutional Investors group on Climate Change (IIGCC), the Canadian Bankers' Association and UNEP-FI through which we are engaging policy makers to promote robust and consistent climate related reporting standards for energy intensive sectors as well as financial sector companies. We provided joint feedback with Canadian peer banks to the Financial Stability Board's recommendations of the Task Force on Climate-related Financial Disclosures consultation document. Building on 2017 engagement activities, in 2018 BMO participated on two separate government roundtables on the topic of climate related financial disclosure that was attended by BMO's General Counsel with active participation. One was organized by the Federal Government and included Finance Minister Bill Morneau and the Minister of Environment Catherine McKenna. Mark Carney was a guest speaker. The second event was organized by the Government of Ontario and hosted by then-Premier Kathleen Wynne. Michael Bloomberg was a guest speaker at that event.	N/A. Support of international standards.

## C12.3b

### (C12.3b) Are you on the board of any trade associations or do you provide funding beyond membership?

Yes

## C12.3c

### (C12.3c) Enter the details of those trade associations that are likely to take a position on climate change legislation.

#### Trade association

Institutional Investors Group on Climate Change

#### Is your position on climate change consistent with theirs?

Consistent

#### Please explain the trade association's position

Calling for clear consistent climate change policies in order to promote an orderly transition to a low carbon economy.

**How have you, or are you attempting to, influence the position?**

Representation from our subsidiary BMO Global Asset Management (EMEA) on the Board, participating actively in policy work.

---

### **C12.3e**

---

**(C12.3e) Provide details of the other engagement activities that you undertake.**

BMO personnel participated as a subject matter expert and international negotiator for the harmonized Standards Council of Canada / CSA Mirror Committee on ISO/TC 207/SC 1 - Environmental Management Systems (EMS). BMO supported participation in both international and national meetings related to the development and maintenance of EMS standards, such as the internationally recognized ISO 14001, that meet stakeholder needs, are market-based and support sustainability. As such, BMO provided a service to both Canada and the extended international community and supported actions to provide organizations of any size with a common framework, built on international consensus, upon which they could build robust, credible and reliable environmental management systems aimed at improving environmental performance.

### **C12.3f**

---

**(C12.3f) What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?**

Only authorized BMO representatives knowledgeable of climate strategy are involved in climate related engagement with stakeholders or policy makers. BMO's Sustainability Council, composed of a cross section of leadership are kept apprised of climate strategy matters through the Council's meetings, including any engagement opportunities.

BMO's participation as an international negotiator for the harmonized Standards Council of Canada / CSA Mirror Committee on ISO/TC 207/SC 1 - Environmental Management Systems - is closely aligned with the Environmental Sustainability group's mandate and the organization's continued focus on energy and cost reduction. As an organization that has publicly announced and achieved both Carbon Neutrality and absolute emissions reduction targets, the ISO 14001 framework is very much aligned with our internal focus on energy practices specifically and climate change implications in general. The establishment of and tracking against specific targets and adoption of ISO 14001 for environmental management system implementation are examples of processes for direct activities that align with policy, relative to the initiative identified.

### **C12.4**

---

**(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).**

**Publication**

In mainstream reports in accordance with the CDSB Framework

**Status**

Complete

**Attach the document**

[bmo\\_ar2017.pdf](#)

**Content elements**

Risks & opportunities

---

**Publication**

In mainstream reports in accordance with the CDSB Framework

**Status**

Complete

**Attach the document**

[BMO Proxy - March 2018.pdf](#)

**Content elements**

Governance

Risks & opportunities

---

**Publication**

In voluntary sustainability report

**Status**

Complete

**Attach the document**

[BMO ESG PAS2017en.pdf](#)

**Content elements**

Governance

Strategy

Risks & opportunities

Emissions figures

Emission targets

---

**Publication**

In voluntary communications

**Status**

Complete

**Attach the document**

[BMO FY2017 ECO5 Summary Operational Control August 14 2018.pdf](#)

**Content elements**

Emissions figures

---

**Publication**

In voluntary communications

**Status**

Complete

**Attach the document**

[BMO\\_ClimateChange2016en.pdf](#)

**Content elements**

Strategy

Risks & opportunities

---

**Publication**

In voluntary communications

**Status**

Complete

**Attach the document**

[BMOEnvironmentalPolicy\\_April2016.pdf](#)

**Content elements**

Governance

Strategy

---

**Publication**

In voluntary communications

**Status**

Complete

**Attach the document**

[2018 BMO Global Asset Management ESG Profile and Impact Report.pdf](#)

**Content elements**

Governance

Strategy

Risks & opportunities

Other metrics

Other, please specify (Engagement with companies around climate)

---

**Publication**

In voluntary communications

**Status**

Complete

**Attach the document**

[BMO GAM 2017 Responsible Investment Review.pdf](#)

**Content elements**

Other, please specify (Public policy interactions e.g. FSB TCFD)

---

**Publication**

In voluntary communications

**Status**

Complete

**Attach the document**

[BMO Global Asset Management Corporate Governance Guidelines Jan 2018.pdf](#)

**Content elements**

Governance

Strategy

Risks & opportunities

---

**Publication**

In voluntary communications

**Status**



Complete

**Attach the document**

[BMO-ESG-Viewpoint-Taskforce-on-Climate-related-Financial-Disclosures Aug 2017.pdf](#)

**Content elements**

Governance

Strategy

Risks & opportunities

---

**Publication**

In voluntary communications

**Status**

Complete

**Attach the document**

[BMO Global Asset Management Responsible investment public policy.pdf](#)

**Content elements**

Other, please specify (Response to consultation by FSB TCFD)

---

**C14. Signoff**

---

**C-FI**

---

**(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response.**

**Please note that this field is optional and is not scored.**

Forward-looking Information Statement attached.

[CDP FLI Bank of Montreal 2018 submission.pdf](#)

**C14.1**

---

**(C14.1) Provide details for the person that has signed off (approved) your CDP climate change response.**

	Job title	Corresponding job category
Row 1	Simon Fish General Counsel and Chair, BMO Sustainability Council	Other C-Suite Officer

**Submit your response**

---

**In which language are you submitting your response?**

English

**Please confirm below**

I have read and accept the applicable Terms