Welcome to your CDP Climate Change Questionnaire 2020

C0. Introduction

C0.1

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

Established in 1817, BMO Financial Group (BMO) 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 $852 billion, and an engaged and diverse base of employees. BMO provides a broad range of personal and commercial banking, wealth management, global markets and investment banking products and services, conducting business through three operating groups: Personal and Commercial Banking, BMO Wealth Management and BMO Capital Markets. We serve eight million customers across Canada through our Canadian personal and commercial banking arm, BMO Bank of Montreal. In the United States, we serve customers through BMO Harris Bank, based in the U.S. Midwest, with more than two million personal, business and commercial banking customers. We also serve customers through our wealth management businesses – BMO Private Wealth, BMO InvestorLine, BMO Wealth Management U.S., BMO Global Asset Management and BMO Insurance. BMO Capital Markets, our Investment and Corporate Banking and Global Markets division, provides a full suite of financial products and services to North American and international clients.

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
Reporting year	November 1, 2018	October 31, 2019	No

C0.3

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

Australia
Barbados
Brazil
Canada
China
France
Germany
Gibraltar
Ireland

Luxembourg
Mexico
Netherlands
Portugal
Singapore
Sweden
Switzerland
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 chosen approach for consolidating your GHG inventory.

Operational control

C-FS0.7

(C-FS0.7) Which organizational activities does your organization undertake?

Bank lending (Bank)
Investing (Asset manager)

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) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual(s)	Please explain
Board-level	Board-level oversight of sustainability, including climate-related risks and

committee	opportunities, is embedded in the charter of the Audit and Conduct Review Committee (ACRC) of BMO's Board of Directors. The ACRC meets annually with BMO's Chief Sustainability Officer and General Counsel to review and discuss matters related to sustainability, including climate change and climate-related disclosures. For example, the ACRC reviews and approves our annual Sustainability Report and Public Accountability Statement (PAS). The ACRC reviews and guides strategy, action plans, and performance objectives and targets related to BMO's operational footprint and sustainable finance commitment in order to ensure that management is adequately addressing opportunities associated with the transition to a lower-carbon economy. The Risk Review Committee of the Board of Directors (RRC) assists the Board in fulfilling its risk management oversight responsibilities. This involves overseeing the identification and management of BMO's risks, including our risk culture, adherence by operating groups to risk management corporate policies and procedures, and compliance with risk-related regulatory requirements. Our risk management framework is reviewed on a regular basis by the RRC in order to provide guidance for the governance of our risk-taking activities.

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	Scope of board-level oversight	Please explain
Scheduled – some meetings	Reviewing and guiding strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Setting performance objectives Monitoring implementation and performance of objectives Monitoring and	Climate-related risks and opportunities to our own operations Climate-related risks and opportunities to our bank lending activities Climate-related risks and opportunities to our investment activities Climate-related	The Audit and Conduct Review Committee (ACRC) meets twice annually with BMO's Chief Sustainability Officer and General Counsel to review and discuss matters related to sustainability, including climate change and climate-related disclosures. The ACRC reviews and guides strategy, action plans, and performance objectives and targets related to BMO's operational footprint and sustainable finance commitment in order to ensure that management is adequately addressing opportunities associated with the transition to a lower-carbon economy.

	overseeing progress against goals and targets for addressing climate-related issues	risks and opportunities to our other products and services we provide to our clients The impact of our own operations on the climate The impact of our bank lending activities on the climate The impact of our investing activities on the climate	The Risk Review Committee of the Board of Directors (RRC) assists the Board in fulfilling its risk management oversight responsibilities. This involves overseeing the identification and management of BMO's risks, including our risk culture, adherence by operating groups to risk management corporate policies and procedures, and compliance with risk-related regulatory requirements. Our risk management framework is reviewed on a regular basis by the RRC in order to provide guidance for the governance of our risk-taking activities.

C1.2

(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.

Name of the position(s) and/or committee(s)	Reporting line	Responsibility	Coverage of responsibility	Frequency of reporting to the board on climate-related issues
Chief Risks Officer (CRO)	CEO reporting line	Both assessing and managing climate-related risks and opportunities	Risks and opportunities related to our bank lending activities	Half-yearly
Other C-Suite Officer, please specify General Counsel	CEO reporting line	Both assessing and managing climate-related risks and opportunities	Risks and opportunities related to our bank lending activities Risks and opportunities related to our other products and services Risks and opportunities related to our own operations	Half-yearly
Chief Sustainability	Corporate Sustainability/CSR	Both assessing and managing climate-	Risks and opportunities	Half-yearly

Officer (CSO)	reporting line	related risks and opportunities	related to our bank lending activities Risks and opportunities related to our other products and services Risks and opportunities related to our own operations	
Sustainability committee	Other, please specify Comprised of 19 senior leaders from business and Corporate Support areas	Assessing climate-related risks and opportunities	Risks and opportunities related to our bank lending activities Risks and opportunities related to our own operations	Annually
Risk committee	Other, please specify Risk Management Committee (RMC) chaired by the CRO	Managing climate-related risks and opportunities	Risks and opportunities related to our bank lending activities	As important matters arise

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 (do not include the names of individuals).

The Chief Executive Officer (CEO) has delegated responsibility for sustainability to BMO's General Counsel, who is a member of the Executive Committee and reports directly to the CEO. BMO's General Counsel also has accountability for areas such as legal and regulatory risk, reputation risk and business conduct. This organizational structure aligns responsibility for sustainability with accountability for these related areas.

BMO's General Counsel chairs the BMO Sustainability Council, which was established in 2008 and comprises 19 senior leaders from business and Corporate Support areas across the organization as at fiscal year-end 2019. The Sustainability Council supports and advises on the implementation of BMO's sustainability strategy, and meets quarterly to discuss sustainability topics, including the risks, opportunities and disclosures related to climate change.

BMO's Chief Sustainability Officer (CSO) reports to the Corporate Secretary and to the General Counsel. The CSO is responsible for the development and execution of BMO's sustainability strategy, including internal advisory and support efforts, stakeholder engagement and disclosure. This mandate includes monitoring climate-related issues, developing strategies to manage risks and opportunities associated with climate change across the organization, and producing and publishing climate-related disclosures.

BMO's Chief Risk Officer (CRO) reports directly to the CEO and is head of Enterprise Risk and Portfolio Management (ERPM) and chair of the Risk Management Committee (RMC). The CRO is responsible for providing independent review and oversight of enterprise-wide risks and leadership on risk issues, developing and maintaining a risk management framework and fostering a strong risk culture across the organization. ERPM provides risk management oversight, supporting a disciplined approach to risk-taking for independent transaction approval and portfolio management, policy formulation, risk reporting, stress testing, modelling and risk education. ERPM is responsible for conducting climate change scenario analysis to identify potential risks in BMO's lending portfolio.

C1.3

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

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

Entitled to incentive	Type of incentive	Activity inventivized	Comment
Environment/Sustainability manager	Monetary reward	Emissions reduction project	Emissions reduction projects are part of environment/sustainability managers' mandate and therefore influence decisions related to annual performance-based incentive pay.
Energy manager	Monetary reward	Energy reduction project	Energy reduction projects are part of energy managers' mandate and therefore influence decisions related to annual performance-based incentive pay.
Facilities manager	Monetary reward	Energy reduction project	Energy reduction projects are part of facilities managers' mandate and therefore influence decisions related to annual performance-based incentive pay.
Executive officer	Monetary reward	Efficiency target	BMO's executive compensation design links to both bank and operating group performance. Performance measures used to fund BMO's short, mid and long-term incentive plans are tied to key elements of

			the bank's strategic priorities: customer, productivity and growth. Productivity is measured using the efficiency ratio. Growth is measured using financial metrics including net income. Both of these metrics are influenced by business unit profitability which is enhanced through energy and greenhouse gas emissions reduction measures including limiting employee travel for business purposes (e.g., commercial air travel) and substituting alternatives like Webex, Skype and other online conferencing tools. Qualitatively, how the executive's contributions and behaviours align with our responsibility to our customers, employees, the environment and the communities in which we live and work are assessed. Our control functions may recommend adjustments or reductions in compensation to better reflect sustainability-related factors. We also indirectly consider ESG issues in compensation by factoring them into company-wide financial goals and through secondary considerations, including sustainability metrics such as employee pulse scores and material risk events.
Business unit manager	Monetary reward	Efficiency target	Performance of Business Unit Managers is 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.
Corporate executive team	Non-monetary reward	Other (please specify) Recognition	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.

All employees	Non-monetary reward	Behavior change related indicator	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.

C-FS1.4

(C-FS1.4) Does your organization offer its employees an employment-based retirement scheme that incorporates ESG principles, including climate change?

	We offer an employment-based retirement scheme that incorporates ESG principles, including climate change.	Comment
Row 1	Yes, as an investment option for some plans offered	

C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?

Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short-term	0	1	
Medium-term	1	3	
Long-term	3	20	

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

BMO defines substantive financial impacts as those that would influence our ability to deliver on our strategic priorities and/or meet financial and sustainability performance objectives. Impacts will vary depending on the nature of the risk and whether it is related to our business activities with our clients, or related to our own operations. For example, with regard to client lending transactions, a substantive impact includes any negative impact on a company's operating leverage such that they would be unable to meet their financial commitments to us.

C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.

Value chain stage(s) covered

Direct operations

Risk management process

A specific climate-related risk management process

Frequency of assessment

More than once a year

Time horizon(s) covered

Short-term
Medium-term

Description of process

To identify and assess climate-related risks at our own facilities (e.g. retail branches, etc.), BMO monitors existing and new fuel or energy taxes and carbon pricing regulations that could affect our operating costs. The potential size and scope of the risk is assessed based on analysis of our own energy use and emissions. We also track weather data for large urban centres in North America where BMO Financial Group facilities are located that could affect physical risks of our own operations. These areas of analysis are considered in operational risk, and sustainability planning and reporting.

BMO’s Sustainability team partners with the Procurement and Corporate Real Estate groups to establish environmental management processes. These groups are 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 that are related to aligning the bank’s operations with its Environmental Policy.

BMO also has quarterly risk monitoring programs in place and climate-related risks are among the risks that are monitored.

Example – Physical Risk:
BMO manages operational climate risks through our environmental management process. This includes tracking and monitoring weather data where our properties are located since annual weather fluctuations can affect our building energy use, operating costs and the useful life of our assets. We manage energy consumption through energy savings projects such as lighting, HVAC and controls upgrades. If the life-span of assets (e.g. HVAC equipment) are negatively impacted, we modify our capital forecasting.

Value chain stage(s) covered

Upstream

Risk management process

A specific climate-related risk management process

Frequency of assessment

More than once a year

Time horizon(s) covered

Short-term
Medium-term

Description of process

BMO's Supplier Code of Conduct outlines the principles BMO expects 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.

Regarding supplier selection, we utilize a rigorous RFP process to determine which risks and/or opportunities could have a substantive financial or strategic impact on our organization. All RFPs include a comprehensive set of sustainability questions that seek to understand proponent's practices related to environmental and social responsibility.

In 2020, BMO joined CDP Supply Chain to help us better understand the environmental impact of our procurement activities and to provide a platform through which we can engage with a selection of strategic suppliers on climate-related risks and opportunities.

Value chain stage(s) covered

Downstream

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

More than once a year

Time horizon(s) covered

Short-term
Medium-term
Long-term

Description of process

BMO's processes for identifying, assessing and managing climate-related risks are integrated into our enterprise-wide risk management framework. This framework, overseen by the Chief Risk Officer, assists BMO in managing its risk-taking activities and is anchored in the three-lines-of-defence approach to managing risk. Our current approach to evaluating enterprise risk exposures implicitly includes certain types of transition risk and physical risk.

To identify and assess climate-related risks arising from our customer relationships, we follow internal guidelines that outline the scope of environmental and social risk, and we establish procedures, including enhanced due diligence, to determine the extent of our exposure to any such risk. These include identifying and assessing our customers' climate change strategies and carbon mitigation plans, as well as the quality of their climate change disclosures and their readiness to respond to climate-related regulatory changes or reputation risk. We are also enhancing our environmental and social risk policy framework in order to improve our governance and management of climate-related risks and opportunities.

BMO has been a signatory to the Equator Principles since 2005 and applies its credit risk management framework to identify, assess and manage the environmental and social risk of transactions within its scope. We also apply environmental and social screening and assessment process to categorize and assess projects based on the magnitude of their potential impacts and risks, including climate change.

BMO's evolving climate change scenario analysis program will inform our process for climate-related risk identification and assessment going forward. In fiscal 2019, we conducted a climate scenario analysis pilot project focused on transition risk analysis, and we plan to expand such analysis to other sectors and risk types, including physical risk.

Example - Transition Risk:
BMO is establishing a climate change scenario analysis program, in line with the TCFD recommendations. In 2019, we applied leading scenario analysis methodologies in a pilot project to test the resilience of a selection of upstream oil and gas counterparties to the impacts of climate transition scenarios. We considered both a short-term disorderly scenario and a long-term orderly climate transition scenario. In the disorderly scenario, a carbon tax is implemented over a short timeframe. The orderly scenario was developed using the REMIND 2°C model, in which a carbon tax is implemented gradually. The short-term scenario reflects a disorderly transition to a lower-carbon economy and assessed the impact of a carbon tax of $25, $50 and $100 per tonne, implemented over three years. The long-term scenario looks ahead to 2040 and reflects a more orderly transition, in which a carbon tax is implemented gradually.

C2.2a

(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?

	Relevance &	Please explain

	inclusion	
Current regulation	Relevant, always included	Current regulation, including carbon pricing in the jurisdictions where BMO and our clients operate, is considered in the assessment of climate-related risk facing our own operations and those of our clients. For risks resulting from our own operations, BMO monitors existing fuel or energy taxes and carbon pricing regulations, and assesses how that could affect our operating costs based on analysis of our own energy use and emissions. For credit risk resulting from carbon pricing imposed on our clients, BMO's enterprise wide risk management framework includes identifying and assessing our clients' climate change strategies, carbon-mitigation plans, quality of climate change disclosures, and readiness to respond to climate-related regulatory changes. In 2019, BMO conducted a scenario analysis pilot project to test the resilience of a selection of upstream oil and gas counterparties to the impacts of climate transition scenarios. The transition risks included in the scenarios analysis were: policy, technology, and market. We considered both a short-term disorderly scenario and a long-term orderly climate transition scenario. In the disorderly scenario, a carbon tax is implemented over a short timeframe. The orderly scenario was developed using the REMIND 2°C model, in which a carbon tax is implemented gradually. The short-term scenario reflects a disorderly transition to a lower-carbon economy and assessed the impact of a carbon tax of $25, $50 and $100 per tonne, implemented over three years. The long-term scenario looks ahead to 2040 and reflects a more orderly transition, in which a carbon tax is implemented gradually.
Emerging regulation	Relevant, always included	Emerging regulations have the potential to impact BMO's operating cost and those of our clients. BMO's Legal and Regulatory Compliance Group maintains enterprise-wide frameworks that identify, measure, manage, monitor and report on legal and regulatory issues. Through memberships in associations (e.g. Canadian Bankers Association, United Nations Environment Programme – Finance Initiative, Carbon Pricing Leadership Coalition), BMO stays abreast of changes in policies and legislation in the jurisdictions in which we operate. BMO's enterprise-wide risk management framework includes identifying and assessing our clients' climate change strategies, carbon-mitigation plans, quality of climate change disclosures, and readiness to respond to climate-related regulatory changes. In 2019, BMO conducted a scenario analysis pilot project to test the resilience of a selection of upstream oil and gas counterparties to the impacts of climate transition scenarios. The transition risks included in the scenarios analysis were: policy, technology, and market. We considered both a short-term disorderly scenario and a long-term orderly climate transition scenario. In the disorderly scenario, a carbon

		tax is implemented over a short timeframe. The orderly scenario was developed using the REMIND 2°C model, in which a carbon tax is implemented gradually. The short-term scenario reflects a disorderly transition to a lower-carbon economy and assessed the impact of a carbon tax of $25, $50 and $100 per tonne, implemented over three years. The long-term scenario looks ahead to 2040 and reflects a more orderly transition, in which a carbon tax is implemented gradually.
Technology	Relevant, always included	Technology risk includes the risk that substitution of existing products with lower emissions options could affect credit risk associated with clients in carbon intensive sectors. Revenues may be affected by new and emerging technologies, which could disrupt the existing economic system and displace demand for certain commodities, products and services. We have implemented financing guidelines to address environmental risks for specific lines of business, and we apply enhanced due diligence to transactions with customers operating in environmentally sensitive industries. This includes efforts to develop an understanding of borrowers' climate change adaptation and mitigation strategies. In 2019, BMO conducted a scenario analysis pilot project to test the resilience of a selection of upstream oil and gas counterparties to the impacts of climate transition scenarios. The transition risks included in the scenarios analysis were: policy, technology, and market.
Legal	Relevant, always included	Legal and regulatory risk could arise from BMO's actions, or alleged lack of action, in relation to climate change, our climate change disclosures, or our customers' activities. BMO monitors legal risks associated with climate change as part of our overall risk assessment of operational, business and reputation risks.
Market	Relevant, always included	Market risk could be affected by the impact of transition and physical risks on market conditions, including equity and commodity prices, which could increase the risk of losses in our trading and underwriting portfolios. Any adverse impacts would be captured and mitigated by the existing limit monitoring processes and risk management framework. BMO GAM considers climate change to be an investment risk within its approach to ESG integration. In 2019, BMO conducted a scenario analysis pilot project to test the resilience of a selection of upstream oil and gas counterparties to the impacts of climate transition scenarios. The transition risks included in the scenarios analysis were: policy, technology, and market.
Reputation	Relevant, always included	Reputation risk could arise from BMO's perceived actions, or perceived lack of action, in relation to climate change, our climate change disclosures, or our customers' activities. BMO monitors reputation risks associated with climate change as part of our overall risk assessment

		of operational and business risks. Climate-related reputation risks are addressed within the scope of our reputation risk management framework, in which the CSO plays an advisory role. The framework is overseen by BMO's Reputation Risk Management Committee.
Acute physical	Relevant, always included	Physical risks include physical changes to the earth that could affect our business, including severe weather, flooding or other impacts of climate change. These potential risks exist for all financial institutions, including BMO, in relation to our own operations as well as through exposure to risks of our clients. We face risks arising from environmental events, such as drought, floods, wildfires, earthquakes, and hurricanes and other storms. These events could potentially disrupt our operations, impact our customers and counterparties, and result in lower earnings and higher losses. Factors contributing to heightened environmental risks include the impacts of climate change and the continued intensification of development in areas of greater environmental sensitivity. Our business continuity management preparations provide us with the capability to restore, maintain and manage critical operations and processes in the event of a business disruption.
Chronic physical	Relevant, always included	Physical risks include physical changes to the earth that could affect our business, including severe weather, flooding or other impacts of climate change. These potential risks exist for all financial institutions, including BMO, in relation to our own operations as well as through exposure to risks of our clients. We track weather data for large urban centres in North America where BMO Financial Group facilities are located that could affect physical risks of our own operations. These areas of analysis are considered in operational risk and sustainability planning and reporting.

C-FS2.2b

(C-FS2.2b) Do you assess your portfolio's exposure to climate-related risks and opportunities?

	We assess the portfolio's exposure	Please explain
Bank lending (Bank)	Yes	We have conducted a sector-specific analysis across our lending portfolio to assess our exposure to climate sensitive industries. We have determined that our lending in support of carbon-related assets in 2019 was approximately $14.7 billion and represented 3.3% of our

		total lending portfolio. We have also analyzed our power generation portfolio and determined that approximately 55% of lending is to low-carbon energy generation. BMO is establishing a climate change scenario analysis program, in line with the TCFD recommendations. In 2019, we applied leading scenario analysis methodologies in a pilot project to test the resilience of a selection of upstream oil and gas counterparties to the impacts of climate transition scenarios. We are building an internal capacity at BMO to conduct climate change scenario analysis enterprise-wide. As we refine our methodology, we are expanding approach to other types of climate-related risk and other sectors of our lending portfolio, starting with the sectors that are particularly sensitive to climate-related risks. These efforts will help us identify potential material financial risks, and will inform our business strategy in relation to climate change going forward.
Investing (Asset manager)	Yes	BMO Global Asset Management (BMO GAM) considers climate change to be one of the defining issues of our generation, and fully supports the goal of the Paris agreement to keep the increase in global average temperature to well below 2°C above pre-industrial levels, and to pursue efforts to limit the increase to 1.5°C. As a supporter of the United Nations Sustainable Development Goals (UN SDGs), we recognise that tackling climate change is also an essential foundation for achieving these, particularly SDG Goal 13 on Climate Action. We recognise that we can play an important role in supporting the transition to a lower carbon global economy, and that climate change presents both risks and opportunities that can affect our portfolios and our business. BMO GAM has built an ESG Risk Tool which provides an estimate of companies' carbon intensity versus sector peers, and flags those that are significantly over the sector average. This data is combined with proprietary information, including our engagement and voting, to produce quarterly portfolio-specific reports for fund managers in relevant asset classes. These reports include a carbon footprint analysis, which provides an overall portfolio-weighted carbon intensity.
Other products and services, please specify	Not applicable	

C-FS2.2c

(C-FS2.2c) Describe how you assess your portfolio’s exposure to climate-related risks and opportunities.

	Portfolio coverage	Assessment type	Description
Bank lending (Bank)	All of the portfolio	Qualitative and quantitative	We have conducted a qualitative sector-specific analysis across our lending portfolio to assess our exposure to climate sensitive industries. The analysis covers 100% of the lending portfolio and identifies sectors that are primarily exposed to physical risks, transitions risks, both physical and transition risks, or no climate-related risks. We also conducted three different types of quantitative assessments on a selection of BMO’s lending portfolio: 1) Analysis of BMO’s carbon-related assets We have determined that our lending in support of carbon-related assets in 2019 was approximately $14.7 billion and represented 3.3% of our total lending portfolio. 2) Analysis of BMO’s lending to power generation We have also analyzed our power generation portfolio and determined that approximately 55% of lending is to low-carbon energy generation. Power generation is a subset of utilities, excluding water utilities, independent power producers, and electricity transmission and distribution companies. The share of low-carbon energy generation is calculated on a client-by-client basis using the most recently publicly available information on energy source. 3) Scenario analysis pilot project In 2019, BMO conducted a scenario analysis pilot project to test the resilience of a selection of upstream oil and gas counterparties to the impacts of climate transition scenarios. The transition risks included in the scenarios analysis were: policy, technology, and market. We considered both a short-term disorderly scenario and a long-term orderly climate transition scenario. In the disorderly scenario, a carbon tax is implemented over a short timeframe. The orderly scenario was developed using the REMIND 2°C model, in which a carbon tax is implemented gradually. The short-term scenario reflects a disorderly transition to a lower-carbon economy and assessed the impact of a carbon tax of $25, $50 and $100 per tonne,

			implemented over three years. The long-term scenario looks ahead to 2040 and reflects a more orderly transition, in which a carbon tax is implemented gradually. Portfolio coverage is defined as the percent of lending to the sector analyzed compared to BMO's total lending portfolio. We define total lending as the total loans and acceptances, net of allowance for credit losses on impaired loans. BMO's scenario analysis pilot focused on the oil and gas sector which represents $13.4 billion in lending, or 3.0% of our total lending portfolio.
Investing (Asset manager)	Minority of the portfolio	Qualitative and quantitative	Our approach varies by asset class. Equity and fixed income make up 65% of our total AUM (as at 31 March 2020), the majority of which is in publicly listed companies. Different approaches apply to alternatives (4% AUM) and multi-asset (25% AUM). BMO GAM has built an ESG Risk Tool, which is available to fund managers invested in relevant asset classes (listed equities and credit). This tool takes MSCI ESG data as its starting point but significantly re-calibrates it to better reflect the views of RI team sector experts on which issues are most material across different sectors. Selected higher-risk companies are identified by our fund managers and analysed individually by members of the Responsible Investment team, and allocated in-house ESG scores which override the default scores. The risk tool provides an estimate of companies' carbon intensity versus sector peers, and flags those that are significantly over the sector average. This data is combined with proprietary information, including our engagement and voting, to produce quarterly portfolio-specific reports for fund managers. These reports include a carbon footprint analysis, which provides an overall portfolio-weighted carbon intensity. The reports also provide details on the contribution of sector and stock selection factors to the footprint, and indicate the companies with the highest carbon intensity versus peers. These reports can then be used by fund managers to identify potentially high-risk companies for deeper analysis. This risk tool is available to our fundamental equity, fixed income and convertibles fund managers in the EMEA region. In the North American region, climate data is also available to enable fund managers to monitor climate data including portfolio-weighted carbon intensity for their portfolios. The

			portfolio coverage is based on the assets under management (AUM) and the ESG Risk Tool is applied to approximately 26% of AUM. Fund managers within other asset classes also incorporate material climate risks and opportunities using methodologies tailored to each asset class. For instance within alternatives, our real estate team have a comprehensive approach covering emissions management (using tools such as GRESB) and physical risk, and lay this out in a public report based on TCFD guidance (https://www.bmogam.com/commercial-property-trust/wp-content/uploads/2020/05/bmo-commercial-property-trust-esg-report-2019.pdf). Some investment teams also seek opportunities to invest in companies that can contribute to solutions, either as part of the low-carbon energy transition or in addressing the physical impacts of climate change. Examples in our fundamental equity strategies have included water solutions companies, electric vehicle suppliers and renewable energy developers. In fixed income we have significant green bonds investments, both as a component part of wider strategies and as stand-alone specialist mandates.

C-FS2.2d

(C-FS2.2d) Do you assess your portfolio's exposure to water-related risks and opportunities?

	We assess the portfolio's exposure	Portfolio coverage	Please explain
Bank lending (Bank)	No, we don't assess this		We do not assess water-related risks.
Investing (Asset manager)	Yes	Minority of the portfolio	Water risk analysis features in our analysis of listed companies within equities and fixed income (equities and fixed income make up 65% of our assets in total). It is part of our Risk Tool. Deeper analysis only takes place on a subset of higher-risk companies so we have assessed this as applying to a minority of the portfolio. All fundamental fixed income and equity research includes an ESG assessment, making use of both third-party data and internal research. Internal resources available include a sector guide, which sets out which

			issues (including water) are material to companies in particular sectors. Water risk, where material, forms part of the ESG assessment. We also regularly engage companies on water risk management, and have a water expert on the Responsible Investment team, who has provided internal briefings to fund managers. Engagement topics have included: analysing the depth of water risk assessments and encouraging them be undertaken if not present, encouraging context-based water targets be created and implemented, seeing where opportunities might lie for water management and making sure the company is implementing these whilst managing risks effectively. We also encourage board level oversight of water issues, as we see water governance as critical. For our ESG fund range we also use a quantitative assessment, with annual reporting of portfolio water use versus the relevant benchmark. We have published research pieces on water externally, including with Fashion Revolution on water and textiles, contributing to the Ceres Investor Water Toolkit and providing a case study for the PRI.
Other products and services, please specify	Not applicable		

C-FS2.2e

(C-FS2.2e) Do you assess your portfolio's exposure to forests-related risks and opportunities?

	We assess the portfolio's exposure	Portfolio coverage	Please explain
Bank lending (Bank)	No, we don't assess this		We do not assess forests-related risks.
Investing (Asset manager)	Yes	Minority of the portfolio	We acknowledge deforestation as a key driver of climate change. Companies exposed to deforestation are vulnerable to operational, financial, regulatory and reputational risks. In 2019 we screened our emerging markets portfolio

			for heightened deforestation risk, and developed a dedicated engagement program. In 2020 we introduced new screening criteria related to deforestation risks in our responsible fund range, relating to palm oil, soy, sugar, and timber production. In 2019 we engaged on this matter extensively, covering: - Banks on their lending and underwriting practices, to encourage proper environmental and social risk management systems, including zero deforestation commitments, and policies for key commodities such as dairy and cattle, soy, palm oil and timber. - A small group of fast-moving consumer goods (FMCG) companies in Asia on sourcing standards for palm oil, soy, sugar, and paper and packaging. - Palm oil producers in Malaysia and Indonesia - Companies with natural rubber in their value chain on dedicated anti-deforestation and no exploitation policies. Alongside our individual engagement, we participate in various collaborations. This includes two led by the UN Principles for Responsible Investment: one focusing on sustainable soy production, the other on palm oil. We are also involved in collaborations led by the FAIRR Initiative, including one addressing the impacts of meat processing on forests; and another on the production of alternative proteins. Together with other investor groups, we signed a broad set of expectations statements, covering: - Deforestation in the soy supply chain. - Palm oil value chain expectations including banks (no deforestation, no planting on peat, no exploitation policies). - Amazon fires – clearer commitments from companies operating in the region.
Other products and services, please specify	Not applicable		

C-FS2.2f

(C-FS2.2f) Do you request climate-related information from your clients/investees as part of your due diligence and/or risk assessment practices?

	We request climate-related information	Please explain
Bank lending (Bank)	Yes, for some	We have implemented financing guidelines to address environmental risks for specific lines of business, and we apply enhanced due diligence to transactions with customers operating in environmentally sensitive industries. This includes efforts to develop an understanding of borrowers' climate change adaptation and mitigation strategies.
Investing (Asset manager)	Yes, for some	We request information on climate change from investee companies both through direct engagement, and as a signatory to CDP and other disclosure initiatives.
Other products and services, please specify	Not applicable	

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 & Primary climate-related risk driver

Emerging regulation

Carbon pricing mechanisms

Primary potential financial impact

Increased indirect (operating) costs

Climate risk type mapped to traditional financial services industry risk classification

Operational risk

Company-specific description

Changes in climate-related policies may result in increases in the operating and capital costs associated with the energy and equipment used to heat, cool and power our facilities. Increases in fuel/energy taxes, carbon pricing and related policy measures (e.g. clean fuel standards, carbon pricing) are likely to increase the cost of electricity and/or natural gas in the regions where BMO operates. This is likely to increase BMO's operational expenses related to real estate including retail branches, office towers, data centres, etc.

Time horizon

Short-term

Likelihood

Very likely

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

3,383,000

Potential financial impact figure – maximum (currency)

6,766,000

Explanation of financial impact figure

We have estimated the financial impact of increased fuel/energy tax and carbon pricing regulations based on our 2019 energy costs of $67.66 million CAD. Assuming such taxes result in cost increases ranging from 5% to 10%, our energy-related operating costs could be impacted by between $3.38 million and $6.77 million annually.

Cost of response to risk

3,100,000

Description of response and explanation of cost calculation

BMO's Sustainability Office also works with Risk and the Corporate Real Estate group to manage operational risks arising from climate change. This includes establishing and maintaining an operational environmental management system that is aligned with the framework set out in ISO 14001, as well as setting objectives and targets that align BMO's operations with its Environmental Policy, which includes greenhouse gas (GHG) emission reduction targets. We also monitor the regulatory landscape for new fuel or energy taxes and carbon pricing regulations on an ongoing basis through our internal risk management group, feedback from our third-party facilities management service providers and participation in industry associations. We also continue to actively manage energy consumption and costs through energy savings projects such as lighting, HVAC and controls upgrades. Where opportunities exist, we also manage costs and insulate the organization against price increases by entering into bulk fuel/electricity purchase contracts at the wholesale level.

Changing climate patterns and climate-related policies may also affect the operating and capital costs of our suppliers. Suppliers may choose to pass these costs on to their customers, which could result in higher purchasing costs for BMO. BMO is developing a Sustainable Procurement program that will consider current and future suppliers' sustainability performance and risk management, including risks related to climate change.

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. In 2019, the amount invested in energy efficiency projects at BMO was about $3.1 million.

Comment

Identifier

Risk 2

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Chronic physical

Changes in precipitation patterns and extreme variability in weather patterns

Primary potential financial impact

Increased indirect (operating) costs

Climate risk type mapped to traditional financial services industry risk classification

Operational risk

Company-specific description

Changes in climate patterns may result in increases in the operating and capital costs associated with the energy and equipment used to heat, cool and power our facilities. Changes to average seasonal temperatures and weather patterns (e.g., hotter summers and colder winters) are likely to increase the amount of energy required to cool and heat the buildings that we occupy, resulting in increased operating costs. Temperature/weather changes could also impact capital costs by shortening the life-span of heating, ventilation and air conditioning (HVAC) equipment, which could be operating 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

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

3,380,000

Potential financial impact figure – maximum (currency)

10,150,000

Explanation of financial impact figure

We have estimated the financial impact of increased energy use based on our 2019 energy costs of $67.66 million CAD. Heating or cooling energy consumption can change by 5% for every degree decrease or increase, respectively, in mean (average) outdoor temperature. A change in mean outdoor temperature of between 1-3 degrees Celsius could impact our energy-related operating costs by between $3.4 - $10.2 million annually.

Changes in mean temperature could also shorten the life-span of HVAC systems resulting in more frequent capital expenditure on equipment upgrades/replacement.

Cost of response to risk

3,100,000

Description of response and explanation of cost calculation

BMO's Sustainability Office also works with Risk and the Corporate Real Estate group to manage operational risks arising from climate change. This includes establishing and maintaining an operational environmental management system that is aligned with the framework set out in ISO 14001, as well as setting objectives and targets that align BMO's operations with its Environmental Policy, which includes greenhouse gas (GHG) emission reduction targets. We track and monitor the weather data where our properties are located, since the annual weather fluctuations can affect our building energy use. We actively manage energy consumption through energy savings projects such as lighting, HVAC and controls upgrades. If the life-span of HVAC equipment is negatively impacted, we will modify our capital forecasting.

Changing climate patterns and climate-related policies may also affect the operating and capital costs of our suppliers. Suppliers may choose to pass these costs on to their customers, which could result in higher purchasing costs for BMO. BMO is developing a Sustainable Procurement program that will consider current and future suppliers' sustainability performance and risk management, including risks related to climate change.

There is no additional cost/effort required to track changes to average mean temperatures as it is part of our annual carbon emissions calculations exercise, as performed by in-house resources. In 2019, the amount invested in energy efficiency projects at BMO was about $3.1 million.

Comment

Identifier

Risk 3

Where in the value chain does the risk driver occur?

Downstream

Risk type & Primary climate-related risk driver

Emerging regulation
Carbon pricing mechanisms

Primary potential financial impact

Increased credit risk

Climate risk type mapped to traditional financial services industry risk classification

Credit risk

Company-specific description

Climate-related risks could affect our exposure to credit and counterparty risk by impacting our customers' revenues or costs such that they may become unable to meet their financial commitments to BMO. Borrowers may face losses or increases in their operating costs as a result of acute or chronic changes in climate conditions and/or climate-related policies, such as carbon emissions pricing. Revenues may be affected by new and emerging technologies, which could disrupt the existing economic system and displace demand for certain commodities, products and services.

Time horizon

Medium-term

Likelihood

About as likely as not

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The impact has not been quantified financially.

Cost of response to risk

358,000

Description of response and explanation of cost calculation

As part of our enterprise risk management framework and credit risk management framework, we evaluate the environmental risk associated with credit and counterparty transactions and exposures. We have implemented financing guidelines to address environmental risks for specific lines of business, and we apply enhanced due diligence to transactions with customers operating in environmentally sensitive industries. This includes efforts to develop an understanding of borrowers' climate change adaptation and mitigation strategies.

We have conducted a sector-specific analysis across our lending portfolio to assess our exposure to climate sensitive industries. We have determined that our lending in support of carbon-related assets in 2019 was approximately $14.7 billion and represented 3.3% of our total lending portfolio. We have also analyzed our power generation portfolio and determined that approximately 55% of lending is to low-carbon energy generation.

BMO is establishing a climate change scenario analysis program, in line with the TCFD recommendations. In 2019, we applied leading scenario analysis methodologies in a pilot project to test the resilience of a selection of upstream oil and gas counterparties to the impacts of climate transition scenarios. BMO's lending to the oil and gas sector is approximately $13.4 billion, or 3.0% of our total lending portfolio.

We are building an internal capacity at BMO to conduct climate change scenario analysis enterprise-wide. As we refine our methodology, we plan to expand the approach to other types of climate-related risk and other sectors of our lending portfolio, starting with the sectors that are particularly sensitive to climate-related risks. These efforts will help us identify potential material financial risks, and will inform our business strategy in relation to climate change going forward. The budget for implementing and conducting the climate-related scenario analysis pilot project in 2019 was approximately $385,000.

Comment

Identifier

Risk 4

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Acute physical

Increased severity and frequency of extreme weather events such as cyclones and floods

Primary potential financial impact

Increased indirect (operating) costs

Climate risk type mapped to traditional financial services industry risk classification

Operational risk

Company-specific description

We face risks arising from environmental events, such as drought, floods, wildfires, earthquakes, and hurricanes and other storms. These events could potentially disrupt our operations, impact our customers and counterparties, and result in reduced earnings and higher losses. Factors contributing to heightened environmental risks include the impacts of climate change and continued intensification of development in areas of greater environmental sensitivity.

Time horizon

Medium-term

Likelihood

More likely than not

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The impact has not been quantified financially.

Cost of response to risk

0

Description of response and explanation of cost calculation

Our business continuity management preparations provide us with the capability to restore, maintain and manage critical operations and processes in the event of a business disruption. In addition, we support the recommendations of the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD), and we employ the TCFD framework to enhance our understanding of the evolving impact of risks associated with climate change, together with possible mitigation strategies. We are building an internal capacity at BMO to conduct climate change scenario analysis, in line with the TCFD recommendations, and we will apply these results across the enterprise. These efforts will help us to identify potential material financial risks, and will inform our business strategy in relation to climate change going forward.

There is no additional cost/effort to manage the risk of environmental events as it is included in BMO's existing business continuity management program.

Comment

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

Primary potential financial impact

Reduced indirect (operating) costs

Company-specific description

Changes in consumer preferences and emerging regulation (e.g. more efficient building codes, mandatory energy reporting) are likely to result in improved energy efficiency in the real estate sector over time. This presents BMO with an opportunity to reduce its operating costs and achieve its emission reduction targets.to reduce absolute carbon emissions by 15% compared to the fiscal 2016 baseline.

Time horizon

Medium-term

Likelihood

Very likely

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

500,000

Potential financial impact figure – maximum (currency)

700,000

Explanation of financial impact figure

We have estimated the financial impact of more efficient buildings based on our 2019 energy costs of $67.66 million, and the energy savings required to meet our emission reduction target. In 2017, we established a five-year target to reduce absolute carbon emissions by 15% compared to the fiscal 2016 baseline. Assuming a 15% emission reduction results in a 15% reduction in energy costs over the five year period, then the total estimated energy cost savings are $10.15 million over the same five-year period. It is estimated that this opportunity will contribute 25%-35% to the overall emissions reduction target, so the energy cost savings would be between $2.5 and $3.6 million over the five-year period. We estimate annual energy-related cost savings of between $0.5 and $0.7 million.

Cost to realize opportunity

75,000

Strategy to realize opportunity and explanation of cost calculation

BMO has taken the steps necessary to qualify for third-party certification under the ISO 14001 environmental management system standard at select facilities as a way to ensure energy efficiency gains are realized. The principles underlying this standard are being applied across our corporate real estate portfolio. BMO has also taken steps to implement elements of the LEED and BOMA certification standards, which is improving 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.

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

Comment

Identifier

Opp2

Where in the value chain does the opportunity occur?

Downstream

Opportunity type

Markets

Primary climate-related opportunity driver

Access to new markets

Primary potential financial impact

Increased revenues through access to new and emerging markets

Company-specific description

We recognize an opportunity to differentiate ourselves by developing innovative new products and business services that are related to climate change and by offering financial solutions that can assist our customers during their transition to a low-carbon economy. Significant infrastructure investments will be required for this transition, including alternative power solutions, improvements to public transit infrastructure and retrofitting of existing infrastructure to make it more climate-resilient. These opportunities are being captured through our Sustainable Finance team, which is engaging with our customers and identifying market opportunities for sustainable finance products and services across BMO. These opportunities are being addressed in the innovative approaches to responsible investing taken by BMO Global Asset Management (GAM), where we are leveraging our position as trusted advisors to help align customer investments with sustainable objectives, and in Capital Markets, where we have created a dedicated advisory capability that can support our clients in their work on sustainability. These efforts are supported by the Sustainability Office, which is organizing and guiding the growth of our sustainable finance business by identifying opportunities for green lending activity and improving internal processes for tracking and monitoring such investments.

In 2019, we published a Sustainable Financing Framework, which is aligned with the 2018 Green Loan Principles issued by the Loan Market Association, as well as the 2018 Green Bond Principles, 2018 Social Bond Principles and 2018 Sustainability Bond Guidelines issued by the International Capital Markets Association. This framework sets out eligibility criteria for sustainable finance transactions, including alignment with climate-related factors and the UN's Sustainable Development Goals. Shortly after publishing the Sustainable Financing Framework, BMO issued its inaugural USD$500 million 3-year sustainability bond.

BMO's Purpose to "Boldly Grow the Good in Business and Life" includes a commitment to double the bank's mobilization for sustainable finance to $400 billion, including providing $150 billion in capital to companies pursuing sustainable outcomes.

Time horizon

Short-term

Likelihood

Virtually certain

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The opportunity has not been quantified financially.

Cost to realize opportunity

0

Strategy to realize opportunity and explanation of cost calculation

To better capture opportunities associated with sustainable finance, we established a Sustainable Finance team in 2019 that is supported by BMO's Sustainability Office. The group brings together existing capabilities in BMO Capital Markets and BMO Global Asset Management. It is responsible for mobilizing the enterprise to pursue opportunities that involve sustainability with customers across all lines of business. It includes Sustainable Finance specialists responsible for building customer engagement and identifying market opportunities for products and services as the sustainable finance market grows. We also created a Sustainable Finance Steering Committee composed of BMO Executives, which is responsible for reviewing, validating and monitoring BMO's sustainable finance strategy.

In 2019, BMO established a Sustainable Bond Program to support our Purpose and our sustainable finance commitment. This program confirms BMO's commitments to sustainability and sustainable finance, building on our ability to direct capital toward our strategic sustainability objectives and aligning those objectives with our fundraising and investor relations program. It has enabled a better understanding and assessment of impacts and opportunities related to sustainability across our organization, and has helped build relationships that will support an enterprise-wide focus on sustainability at BMO.

BMO's existing sustainable finance activities include green bond underwriting and green financing, as well as innovative approaches to responsible investing taken by BMO GAM. In FY2019, BMO participated in US$9.4 billion of sustainable bond underwriting. For example, BMO acted as joint lead manager for an International Finance Corporation (IFC) green bond issuance and proceeds for the $750 million 5-year bond were allocated to climate-related projects.

There is no additional cost required to realize this opportunity because it is part of BMO enterprise-wide strategy and therefore included in the mandates of the lines of business, as well as the Sustainability Office. The operating costs of the Sustainability Office are the equivalent of five full-time equivalents (FTE) and the operating costs of the Sustainable Finance team are the equivalent of five FTE.

Comment

Identifier

Opp3

Where in the value chain does the opportunity occur?

Downstream

Opportunity type

Products and services

Primary climate-related opportunity driver

Development and/or expansion of low emission goods and services

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

We recognize an opportunity to differentiate ourselves by developing innovative new products and business services that are related to climate change and by offering financial solutions that can assist our customers during their transition to a low-carbon economy. These opportunities are being captured through innovative approaches to responsible investing taken by BMO Global Asset Management.

BMO's Purpose to “Boldly Grow the Good in Business and Life” includes a commitment to double the bank's mobilization for sustainable finance to $400 billion by 2025, including $250 billion in client investments, which, as trusted advisors, BMO will help to align with sustainable objectives. This is complemented with products and advisory services to help clients chart a path to improved sustainability. We have also launched an impact investment fund, with $250 million in seed capital, to identify viable solutions to the sustainability challenges faced by our clients and take them to scale.

Time horizon

Short-term

Likelihood

Virtually certain

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

As at September 30, 2019, our Responsible Investing team at BMO GAM held US$5.4 billion in assets under management in ESG Specialist Strategies Funds, as well as US$161 billion in third party assets under advice through our engagement service (reo®).

Cost to realize opportunity

0

Strategy to realize opportunity and explanation of cost calculation

Climate change issues have affected the strategy of our wholly-owned asset manager, BMO Global Asset Management. BMO GAM is a signatory to the UN Principles for Responsible Investment. The identification of financially material environmental, social and governance (ESG) issues forms an integral part of its investment processes. It applies a tailored approach to ESG integration by investment strategy and asset class, to ensure that the additional analysis is relevant and meaningful to each investment process. BMO GAM also offers specific ESG Specialist Strategies Funds, for which

ESG considerations are a formal part of the investment mandate. Assets under management in these funds are US$5.4 billion as at September 30, 2019. Many of the funds offer investors the opportunity to direct capital toward climate change solutions or lower-carbon assets. These offerings include the Climate Opportunity Partners private equity fund, which is entirely invested in solutions providers; green bond investment mandates; and a group of Responsible Funds.

BMO GAM also has in place a comprehensive global program of investor engagement, within which climate change is a key topic. BMO GAM also offers this engagement expertise to third-party clients through the Responsible Engagement Overlay (reo®) service, which has assets under advice of US$161 billion as at September 30, 2019.

There is no additional cost required to realize this opportunity because it is already part of BMO Global Asset Management's mandate.

Comment

C3. Business Strategy

C3.1

(C3.1) Have climate-related risks and opportunities influenced your organization's strategy and/or financial planning?

Yes

C3.1a

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

Yes, quantitative

C3.1b

(C3.1b) Provide details of your organization's use of climate-related scenario analysis.

Climate-related scenarios and models applied	Details
REMIND	BMO is establishing a climate change scenario analysis program, in line with the TCFD recommendations. In 2019, we applied leading scenario analysis methodologies in a pilot project to test the resilience of a selection of upstream oil and gas counterparties to the impacts of climate transition scenarios. BMO's lending to the oil and gas sector is approximately $13.4 billion, or 3.0% of our total lending portfolio. We considered both a short-term disorderly scenario and a long-term orderly

	climate transition scenario. In the disorderly scenario, a carbon tax is implemented over a short timeframe. The orderly scenario was developed using the REMIND 2°C model, in which a carbon tax is implemented gradually. The short-term scenario reflects a disorderly transition to a lower-carbon economy and assessed the impact of a carbon tax of $25, $50 and $100 per tonne, implemented over three years. The long-term scenario looks ahead to 2040 and reflects a more orderly transition, in which a carbon tax is implemented gradually. Results of the analysis have been reported to the Sustainability Council. The time horizons considered in the scenario analysis were short-term (2021) and long-term (2040). The short-term time horizon was selected because it provided an analysis of the highest area of risk in the portfolio given the tenor of our loans. The long-term scenario was selected because the longer term climate impacts expected within this period could inform our current business planning.

C3.1d

(C3.1d) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	We recognize an opportunity to differentiate ourselves by developing new and innovative products and business services related to climate change, and by accessing new and emerging markets with financial solutions that can assist customers during their transition to a lower-carbon economy. Significant infrastructure investments will be required for this transition, including alternative power solutions, improvements to public transit infrastructure and retrofitting of existing infrastructure to make it more climate-resilient. Our Sustainable Finance team is engaging with our customers and identifying market opportunities for sustainable finance products and services across BMO, so that we can meet our sustainable finance commitment. These opportunities are being addressed in the innovative approaches to responsible investing taken by BMO Global Asset Management (GAM), and in Capital Markets, where we have created a dedicated advisory capability that can support our clients in their work on sustainability. These efforts are supported by the Sustainability Office, which is organizing and guiding the growth of our sustainable finance

		business by identifying opportunities for green lending activity and improving internal processes for tracking and monitoring such investments. In support of BMO's Purpose, we have committed to mobilize $400 billion for sustainable finance by 2025. Developing new products and services is one of the ways we plan to deliver on our Purpose commitment. The time horizon is short-term because it's happening currently, and long-term because we expect the activities to continue into the foreseeable future. Case Study: A strategic decision made in this area was the establishment of a Sustainable Bond Program to support our Purpose and our sustainable finance commitment. This program confirms BMO's commitments to sustainability and sustainable finance, building on our ability to direct capital toward our strategic sustainability objectives and aligning those objectives with our fundraising and investor relations program. In 2019, BMO issued its inaugural Sustainability Bond. The bond was focused on several of the 17 SDGs, for example, SDG 7 (Affordable and Clean Energy), SDG 12 (Responsible Consumption and Production), SDG 13 (Climate Action), and SDG 15 (Life on Land).
Supply chain and/or value chain	Yes	The transition to a lower carbon economy may pose policy, technology and reputational risks to BMO's downstream value chain such as clients in carbon-intensive industries. BMO is establishing a climate change scenario analysis program, in line with the TCFD recommendations to evaluate this risk. In F19, we launched a climate-related scenario analysis program and analyzed a selection of upstream oil & gas borrowers. In F20, we are expanding the scenario analysis program and plan to leverage results to inform strategic responses. Climate-related risks may have an impact on our supply chain. BMO is developing a Sustainable Procurement program that will consider current and future suppliers' sustainability performance and risk management, including risks related to climate change. New processes are being developed in F20 and will continue to be rolled out in F21. The time horizon is short-term because it's happening currently, and long-term because we expect the activities to

		continue into the foreseeable future. Case Study: A strategic decision made in this area was establishing BMO's scenario analysis program. In 2019, we applied leading scenario analysis methodologies in a pilot project to test the resilience of a selection of upstream oil and gas counterparties to the impacts of climate transition scenarios. BMO's lending to the oil and gas sector is approximately $13.4 billion, or 3.0% of our total lending portfolio. We considered both a short-term disorderly scenario and a long-term orderly climate transition scenario. In the disorderly scenario, a carbon tax is implemented over a short timeframe. The orderly scenario was developed using the REMIND 2°C model, in which a carbon tax is implemented gradually.
Investment in R&D	Yes	BMO is committed to playing a role as a convener and catalyst in mobilizing action that can effectively address the challenges posed by climate change. We are actively participating in numerous initiatives, working groups and multi-stakeholder partnerships. These collaborations support the development of climate change knowledge and expertise, including a better understanding of the risks and opportunities related to climate change and the transition to a lower-carbon economy. The time horizon is short-term because it's happening currently, and long-term because we expect the activities to continue into the foreseeable future. Case Study: A strategic decision made in this area was joining Phase 2 of UNEP-FI TCFD Pilot Project for Banks. The pilot aims to broaden and expand the group of participating banks and external partners, enhance the existing TCFD toolkit (including scenarios, data and methodology, reporting and governance), and establish UNEP-FI's leadership position as an essential platform for advice and dialogue.
Operations	Yes	Changes in consumer preferences and emerging regulations related to energy efficiency and reporting are likely to improve energy efficiency. This presents BMO with an opportunity to reduce its operating costs and achieve its emission reduction targets. BMO has taken the steps necessary to qualify for third-party certification under the ISO 14001 environmental management system standard at select facilities; the principles underlying this standard are

		being applied across our corporate real estate portfolio. BMO has also taken steps to implement elements of the LEED and BOMA certification standards, which is improving energy efficiency in our buildings. In F19, BMO made progress toward our emission reduction targets, and met our commitment to maintaining carbon neutrality. In F20 and beyond, we plan to maintain carbon neutrality, and achieve emission reduction targets. The time horizon is short-term because it's happening currently, and long-term because we expect the activities to continue into the foreseeable future. Case Study: A strategic decision made in this area was announcing a new 2020 goal to match 100% of our electricity usage with electricity produced from renewable sources across our global operations. The initiative includes investment in Renewal Energy Certificates, and will enable the generation of nearly 400,000 MWh of renewable electricity each year. This commitment enhances our operational sustainability which includes maintaining carbon neutrality in global operations since 2010 and using 100% renewable electricity in U.S. operations.

C3.1e

(C3.1e) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues Indirect costs Capital expenditures Access to capital Assets Liabilities	Revenues BMO offers products and financing solutions to assist customers during the transition to a lower-carbon economy. This includes underwriting sustainable finance transactions (e.g. green bonds, social bonds and sustainability bonds), offering advisory services, and offering a range of responsible investing funds at BMO Global Asset Management. In 2019, BMO made a commitment to mobilize $400 billion for sustainable finance by 2025 in order to deliver on our Purpose to "Boldly Grow the Good in Business and Life". The growth of products in this segment and potential increase in revenues is factored into the financial planning process. The time horizon covered in the financial planning process is long-term. Indirect costs

		Climate-related physical and transition risks could increase our indirect costs. For example, changes in climate patterns and climate-related policies may result in increases in the operating and capital costs associated with the energy and equipment used to heat, cool and power our facilities. These costs are factored into the financial planning process Capital expenditures The costs related to investment in energy efficiency initiatives for our operations are factored in to the financial planning process. For example, in 2019 about $3.1MM was invested in energy efficiency projects at BMO. Physical changes to the climate and weather patterns can also affect the useful life of equipment such as HVAC. If the life-span of HVAC equipment is negatively impacted, we will modify our capital forecasting. Access to capital Our activity in the green and sustainable bond markets provide access to capital for projects that are environmentally sustainable. In 2019, BMO established a Sustainable Bond Program to support our Purpose and our sustainable finance commitment. This program confirms BMO's commitments to sustainability and sustainable finance, building on our ability to direct capital toward our strategic sustainability objectives and aligning those objectives with our fundraising and investor relations program. In October 2019, BMO issued its inaugural USD$500 million 3-year sustainability bond. The bond was focused on several of the 17 SDGs, for example, SDG 7 (Affordable and Clean Energy), SDG 12 (Responsible Consumption and Production), SDG 13 (Climate Action), and SDG 15 (Life on Land). Assets Climate-related risks can have an impact on our lending portfolio. In 2019, we conducted a sector-specific analysis to quantify carbon-related assets in our lending portfolio. We have determined that our lending in support of carbon-related assets in 2019 was approximately $14.7 billion and represented 3.3% of our total lending portfolio. Liabilities Climate-related risks could affect our exposure to credit and counterparty risk by impacting our customers' revenues or costs such that they may become unable to meet their financial commitments to BMO. Borrowers may face losses or increases in their operating costs as a result of acute or chronic changes in climate conditions and/or climate-related policies, such as carbon emissions pricing. Revenues may be affected by new and emerging technologies, which could disrupt the existing economic system and displace demand for certain commodities, products and services.

		We have implemented financing guidelines to address environmental risks for specific lines of business, and we apply enhanced due diligence to transactions with customers operating in environmentally sensitive industries. This includes efforts to develop an understanding of borrowers' climate change adaptation and mitigation strategies. BMO has been a signatory to the Equator Principles since 2005 and applies its credit risk management framework.

C3.1f

(C3.1f) Provide any additional information on how climate-related risks and opportunities have influenced your strategy and financial planning (optional).

C-FS3.2

(C-FS3.2) Are climate-related issues considered in the policy framework of your organization?

Yes, both of the above

C-FS3.2a

(C-FS3.2a) In which policies are climate-related issues integrated?

	Type of policy	Portfolio coverage of policy	Description
Bank lending (Bank)	Credit policy Other, please specify Financing Guidelines	Majority of the portfolio	Climate-related risks could affect our exposure to credit and counterparty risk by impacting our customers' revenues or costs such that they may become unable to meet their financial commitments to BMO. Borrowers may face losses or increases in their operating costs as a result of acute or chronic changes in climate conditions and/or climate-related policies, such as carbon emissions pricing. Revenues may be affected by new and emerging technologies, which could disrupt the existing economic system and displace demand for certain commodities, products and services. We have implemented financing guidelines to address environmental risks for specific lines of business, and we apply enhanced due diligence to transactions with customers operating in environmentally sensitive industries. This includes efforts to develop an

			understanding of borrowers' climate change adaptation and mitigation strategies. For example, our internal Environmental and Social Issues Financing Guideline includes direction to develop an understanding of specific climate change impacts on the borrower and its operations, including regulatory and/or legislation changes. This guidance applies to the majority of the lending portfolio based on the total amount outstanding.
Investing (Asset manager)	Engagement policy Sustainable/Responsible Investment Policy Investment policy/strategy Proxy voting policy	All of the portfolio	Climate change forms part of the following policy documents: - BMO Climate Change Approach: This sets out our full range of activities on climate change, structured according to TCFD guidance. - Responsible Investment Approach: This sets out our overall approach to RI and includes a reference to climate change, particularly in the context of engagement. - Corporate Governance Guidelines: This explains how climate change issues are systematically incorporated into proxy voting. We identify laggards and companies resistant to engagement, and will consider voting against management resolutions in these cases. - Climate Change Engagement: A Framework for the Future: This sets out our engagement approach, including our expectation that investee companies should align their businesses with the Paris agreement. - BMO Responsible Funds and the transition to a low-carbon economy: This provides our policy on climate change specifically in relation to our ethically-screened funds. (https://bmogamviewpoints.com/wp-content/uploads/2017/05/Responsible-Investing-Perspectives-Transition-to-low-carbon-global-economy-May-2017.pdf) The portfolio coverage of the policies is based on the assets under management (AUM). Some policies are only applicable for certain asset classes. For instance, our proxy voting policies apply to listed equities only, as this is where we

			exercise voting power. The policy documents are available online at: https://www.bmogam.com/gb-en/institutional/institutional-capabilities/responsible-investing/
Other products and services, please specify			

C-FS3.2b

(C-FS3.2b) Describe your exclusion policies related to industries and/or activities exposed or contributing to climate-related risks.

Type of exclusion policy	Portfolio	Application	Description
All fossil fuels	Investing (Asset manager)	Other, please specify Ethically-screened Responsible Fund Range	Our ethically-screened Responsible Fund Range excludes all companies with fossil fuel reserves, as well as electric utilities with coal-fired power unless there is a phase-out commitment. Full details can be found in the document "BMO Responsible Funds and the transition to a low-carbon economy". Exclusions also apply to other ESG strategies including our sustainable multi-asset strategies.

C-FS3.3

(C-FS3.3) Are climate-related issues factored into your external asset manager selection process?

Yes, for some assets managed externally

C-FS3.3a

(C-FS3.3a) How are climate-related issues factored into your external asset manager selection process?

	Process for factoring climate-related issues into external asset management selection	Comment
Row 1	Review asset manager's climate-related policies	We run some multi-manager strategies which use third-party fund managers. ESG considerations, including climate

	Preference for asset managers with an offering of low-carbon products Preference for asset managers with an offering of climate-resilient products Assessment of asset manager's climate-related performance (e.g. active ownership, proxy voting records, under-weighting in high impact activities) Use of external data on asset managers regarding climate-related risk management	change, form part of the due diligence, selection and monitoring processes for these managers. The process used varies to some extent between different jurisdictions, dependent on local client demand. All manager selection processes have a formal ESG component, covering all relevant ESG factors including climate change. The main tools used are manager questionnaires, and in some cases third-party ESG fund ratings. These questionnaires typically cover both the policies of the institution as a whole, as well as the specific fund being considered.

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

Year target was set

2017

Target coverage

Company-wide

Scope(s) (or Scope 3 category)

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

Base year

2016

Covered emissions in base year (metric tons CO2e)

175,268

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)

100

Target year

2021

Targeted reduction from base year (%)

15

Covered emissions in target year (metric tons CO2e) [auto-calculated]

148,977.8

Covered emissions in reporting year (metric tons CO2e)

161,314

% of target achieved [auto-calculated]

53.0768118919

Target status in reporting year

Underway

Is this a science-based target?

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

Please explain (including target coverage)

In 2017, BMO established a new five-year target to reduce company-wide carbon emissions related to energy consumption, waste and business travel by 15% by the end of fiscal 2021, based on fiscal 2016 levels. We are making good progress towards achieving our target as several energy reduction projects and operational efficiencies have been implemented in 2020. Note the emissions resulting from waste-to-landfill are based on waste data for our large North American facilities only.

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?

Target(s) to increase low-carbon energy consumption or production

Other climate-related target(s)

C4.2a

(C4.2a) Provide details of your target(s) to increase low-carbon energy consumption or production.

Target reference number

Low 1

Year target was set
2019

Target coverage
Company-wide

Target type: absolute or intensity
Absolute

Target type: energy carrier
Electricity

Target type: activity
Consumption

Target type: energy source
Renewable energy source(s) only

Metric (target numerator if reporting an intensity target)
Percentage

Target denominator (intensity targets only)

Base year
2018

Figure or percentage in base year
38.51

Target year
2020

Figure or percentage in target year
100

Figure or percentage in reporting year
97

% of target achieved [auto-calculated]
95.1211579119

Target status in reporting year
New

Is this target part of an emissions target?
No

Is this target part of an overarching initiative?
Other, please specify

Please explain (including target coverage)

In 2019, BMO set a target to match 100% of its electricity usage with electricity produced from renewable sources across our global operations by the end of 2020. We used a 2018 base year figure of 38.51% as our starting point for monitoring progress.

This contributes to our overarching initiative to maintain carbon neutrality on an annual basis.

C4.2b

(C4.2b) Provide details of any other climate-related targets, including methane reduction targets.

Target reference number
Oth 1

Year target was set
2017

Target coverage
Company-wide

Target type: absolute or intensity
Intensity

Target type: category & Metric (target numerator if reporting an intensity target)
Resource consumption or efficiency
Other, please specify
cubic meters of water consumption

Target denominator (intensity targets only)
square meter

Base year
2016

Figure or percentage in base year
0.7447

Target year
2021

Figure or percentage in target year
0.6852

Figure or percentage in reporting year
0.7122

% of target achieved [auto-calculated]

54.6218487395

Target status in reporting year

Underway

Is this target part of an emissions target?

No

Is this target part of an overarching initiative?

No, it's not part of an overarching initiative

Please explain (including target coverage)

In 2017, we set a target to reduce water use intensity (m3 water consumption / m2 real estate floor area) by 8% compared to the fiscal 2016 baseline. Coverage is company-wide.

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 initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	0	0
To be implemented*	0	0
Implementation commenced*	0	0
Implemented*	4	166.9
Not to be implemented	0	0

C4.3b

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

Initiative category & Initiative type

Energy efficiency in buildings

Lighting

Estimated annual CO2e savings (metric tonnes CO2e)
25.63

Scope(s)
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
101,320

Investment required (unit currency – as specified in C0.4)
320,875

Payback period
4-10 years

Estimated lifetime of the initiative
11-15 years

Comment
The activity type includes combined lighting efficiency initiatives at two critical facilities, in Canada only. This is part of the ongoing program and voluntary activity focusing on energy retrofits to reduce Scope 1 and Scope 2 emissions.

Initiative category & Initiative type
Energy efficiency in buildings
Lighting

Estimated annual CO2e savings (metric tonnes CO2e)
9.49

Scope(s)
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
80,250

Investment required (unit currency – as specified in C0.4)
615,000

Payback period
4-10 years

Estimated lifetime of the initiative
11-15 years

Comment

This program includes lighting efficiency initiatives (LEDs) at select retail branches in Canada only. This is part of the ongoing program and voluntary activity focusing on energy retrofits to reduce Scope 1 and Scope 2 emissions.

Initiative category & Initiative type

Energy efficiency in buildings
Heating, Ventilation and Air Conditioning (HVAC)

Estimated annual CO2e savings (metric tonnes CO2e)

46.03

Scope(s)

Scope 1
Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

23,837

Investment required (unit currency – as specified in C0.4)

1,900,000

Payback period

4-10 years

Estimated lifetime of the initiative

11-15 years

Comment

The program includes the replacement of inefficient HVAC equipment at select retail branches in Canada only. Equipment was selected based on age and likelihood of failure; therefore, the capital funds would have been required regardless, however, higher efficiency units were selected as part of the energy program. The “Investment required” that is shown above is the full cost which includes what is considered “business as usual” investment, plus the cost premium for a higher efficiency unit. The payback period looks only at the cost premium of the high efficiency unit which is approximately $240,000. This is part of the ongoing program and voluntary activity focusing on energy retrofits to reduce Scope 1 and Scope 2 emissions.

Initiative category & Initiative type

Energy efficiency in buildings
Heating, Ventilation and Air Conditioning (HVAC)

Estimated annual CO2e savings (metric tonnes CO2e)

85.75

Scope(s)

Scope 1
Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

39,469

Investment required (unit currency – as specified in C0.4)

228,808

Payback period

4-10 years

Estimated lifetime of the initiative

11-15 years

Comment

This program includes the installation of a sensors and controllers, along with energy metering and a web-based program to help control equipment not typically controlled in small retail environments. The solution was implemented at 15 locations in 2019. 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.

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

Group of products

Description of product/Group of products

ESG Specialist Strategies Funds

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

Other, please specify

Internal Methodology

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

% of total portfolio value

4

Asset classes/ product types

Investing

Other, please specify

Private Equity, Mutual funds

Comment

Our specialist ESG products include:

1) BMO Sustainable Opportunities Global Equity Fund: This is a socially responsible investment (SRI) strategy offered by BMO Investment Inc., that 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. The BMO Sustainable Opportunities Global Equity Fund provides Canadian investors with the option to have a diversified portfolio while avoiding fossil fuel producers.

2) BMO SDG Engagement Global Equity Fund: For each company in the BMO SDG Engagement Global Equity Fund portfolio, we monitor and measure the impact of our dialogue around pre-defined SDG targets. We want to see improvement and continually assess the progress each company is making.

3) BMO Responsible Funds: This fund range has a range of ethical exclusions, including the exclusion of companies with fossil fuel reserves.

4) Private Equity Fund: BMO runs the Climate Opportunity Partners LP, a private equity fund of funds focusing on a climate change investment theme. This fund gave investors access to investment opportunities arising from global efforts to tackle the causes and impacts of climate change.

5) Engagement Service: BMO engages with investee companies to encourage management and disclosure on climate change, as part of a wider engagement approach encompassing the full range of ESG issues. This engagement is also available BMO's engagement service, the Responsible Engagement Overlay (reo®), allows institutional investors to delegate responsibility to BMO for engagement and/or proxy voting. Climate change is a major part of the engagement we deliver through this service to these clients, including participation in the Climate Action 100+ initiative.

The ESG products represent 4% of the total portfolio based on assets under management (AUM). Additionally, BMO Global Asset Management (GAM) has assets under advice of US$186bn through its engagement service.

Level of aggregation

Product

Description of product/Group of products

Green bonds

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

Green Bond Principles (ICMA)

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

% of total portfolio value

Asset classes/ product types

Investing
Fixed Income

Comment

In FY2019, BMO underwrote US$5.65 billion in green bonds. Examples include:
• Acted as joint lead manager for an International Finance Corporation (IFC) green bond issuance. Proceeds for the $750 million 5-year bond were allocated to climate-related projects.
• Participated in Ontario Power Generation's $500 million green bond issuance. In alignment with SDG 7 (Affordable and Clean Energy), proceeds were used to contribute to financing the acquisition of Eagle Creek Renewable Energy LLC, which operates one of the largest run-of-the-river hydroelectric fleets in the United States.
• Acted as joint lead manager and bookrunner on the Province of Ontario's $950 million green bond issuance. In alignment with SDG 11 (Sustainable Cities and Communities) and SDG 13 (Climate Action), proceeds are used to finance public transit initiatives, extreme-weather resilient infrastructure, and energy efficiency and conservation projects.

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 CO2e)

37,837

Comment

Scope 2 (location-based)

Base year start
November 1, 2015

Base year end
October 31, 2016

Base year emissions (metric tons CO2e)
115,333

Comment

Scope 2 (market-based)

Base year start
November 1, 2016

Base year end
October 31, 2017

Base year emissions (metric tons CO2e)
103,350

Comment

C5.2

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

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)
45,672

Comment

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

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

Reporting year

Scope 2, location-based

90,457

Scope 2, market-based (if applicable)

544

Comment

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 gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status

Relevant, not yet calculated

Please explain

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 asses 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, but we plan to work with our suppliers in the upcoming year to both assess the nature of and quantify Scope 3 emissions in this category. In fact, we joined the CDP Supply Chain Program in FY2020 to catalyze this process.

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

Please explain

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

Please explain

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

Please explain

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 quantify 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

530

Emissions calculation methodology

Scope 3 emissions from waste generated in operations is 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 waste generated in operations. 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 is annualized and the resulting emissions are calculated. 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

21.1

Please explain

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 nine 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 CO2e

24,655

Emissions calculation methodology

Scope 3 emissions from business travel consist 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. We identify and calculate our Scope 3 emissions in accordance with both the (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

100

Please explain

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

Please explain

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 45,513 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

Please explain

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

Please explain

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

Please explain

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

Please explain

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

Please explain

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

Please explain

Any assets that BMO owns and leases to third 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

Please explain

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.

Other (upstream)

Evaluation status

Not relevant, explanation provided

Please explain

We have determined that no additional upstream Scope 3 emissions are relevant to BMO using 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

Please explain

We have determined that no additional downstream Scope 3 emissions are relevant to BMO using 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.

C6.10

(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

0.0000053419

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

136,129

Metric denominator

unit total revenue

Metric denominator: Unit total

25,483,000,000

Scope 2 figure used

Location-based

% change from previous year

13.8

Direction of change

Decreased

Reason for change

The total revenue during the reporting year (FY2019) and previous year (FY2018) were 25,483 and 22,905 million CAD, respectively. This equates to a total revenue increase of 11.26% in FY2019 versus FY2018.

The combined gross Scope 1 and 2 location-based emissions for the reporting year (FY2019) and previous year (FY2018) were 136,129 and 141,945 tCO2e, respectively. This equates to a combined gross Scope 1 and 2 location-based emissions decrease of 4.1% in FY2019 versus FY2018.

Scope 1 and Scope 2 location-based emissions per total revenue decreased from 0.0000053419 to 0.0000061971 or by 13.8% over the same period.

Decrease in emissions was due to emissions reduction initiatives that included both capital investment upgrades and operational efficiency improvements. Emission reduction activities included efficiency upgrades to HVAC equipment and controls and lighting/signage upgrades.

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 revenue for our industry.

Intensity figure

2.99

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

136,129

Metric denominator

full time equivalent (FTE) employee

Metric denominator: Unit total

45,513

Scope 2 figure used

Location-based

% change from previous year

4.22

Direction of change

Decreased

Reason for change

The full time equivalent employees (FTE) during the reporting year (FY2019) and last year (FY2018) were 45,513 and 45,454, respectively. This equates to a total FTE increase 0.13% in FY2019 versus FY2018.

The combined gross Scope 1 and 2 location-based emissions for the reporting year (FY2019) and previous year (FY2018) were 136,129 and 141,945 tCO_2e, respectively. This equates to a combined gross Scope 1 and 2 location-based emissions decrease of 4.1% in FY2019 versus FY2018.

Scope 1 and Scope 2 location-based emissions per FTE decreased from 3.12 to 2.99 or by 4.22% over the same period.

Decrease in emissions was due to emissions reduction initiatives that included both capital investment upgrades and operational efficiency improvements. Emission reduction activities included efficiency upgrades to HVAC equipment and controls and lighting/signage upgrades.

Intensity figure

0.07885

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

136,129

Metric denominator

square meter

Metric denominator: Unit total

1,726,460

Scope 2 figure used

Location-based

% change from previous year

6.71

Direction of change

Decreased

Reason for change

The total area of real estate occupied during the reporting year (FY2019) and last year (FY2018) were 1,726,460 and 1,679,350 square meters, respectively. Thus, total floor area increased by 2.8% in FY2019 versus FY2018.

The combined gross Scope 1 and 2 location-based emissions for the reporting year (FY2019) and previous year (FY2018) were 136,129 and 141,945 tCO2e, respectively. This equates to a combined gross Scope 1 and 2 location-based emissions decrease of 4.1% in FY2019 versus FY2018.

Scope 1 and Scope 2 location-based emissions per square meters of real estate occupied decreased from 0.08452 to 0.07885 or by 6.1% over the same period.

Decrease in emissions was due to emissions reduction initiatives that included both capital investment upgrades and operational efficiency improvements. Emission reduction activities included efficiency upgrades to HVAC equipment and controls and lighting/signage upgrades.

C7. Emissions breakdowns

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	89,913	Decreased	66.05	We reduced our FY2019 Scope 2 market-based emissions by 89,913 metric tons CO2e by accounting for our purchase of 416,780 MWh of renewable energy certificates.
Other emissions reduction activities	5,816	Decreased	4.1	Decrease in emissions was due to emissions reduction initiatives that included both capital investment upgrades and operational efficiency improvements.

				Emission reduction activities included efficiency upgrades to HVAC equipment and controls and lighting/signage upgrades. Our strategy is to promote energy efficiency as the “first-fuel” complemented by operational improvement and employee awareness programs.
Divestment				
Acquisitions				
Mergers				
Change in output				
Change in methodology				
Change in boundary				
Change in physical operating conditions				
Unidentified				
Other				

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 undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
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 (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)	0	206,682	206,682
Consumption of purchased or acquired electricity		406,079	0	406,079
Consumption of purchased or acquired steam		1,331	0	1,331
Total energy consumption		407,410	206,682	614,092

C9. Additional metrics

C9.1

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

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 emissions, and attach the relevant statements.

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 GHG Verification Statement_FY2019 v3 Final.pdf

Page/ section reference

Please refer to page 1 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 2 emissions and attach the relevant statements.

Scope 2 approach

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 GHG Verification Statement_FY2019 v3 Final.pdf

Page/ section reference

Please refer to page 1 of the attached Verification Statement.

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

Scope 2 approach

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 GHG Verification Statement_FY2019 v3 Final.pdf

Page/ section reference

Please refer to page 1 of the attached Verification Statement.

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

C10.1c

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

Scope 3 category
Scope 3: Waste generated in operations

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 GHG Verification Statement_FY2019 v3 Final.pdf

Page/section reference
Please refer to page 1 of the attached Verification Statement.

Relevant standard
ISO14064-3

Proportion of reported emissions verified (%)
100

Scope 3 category
Scope 3: Business travel

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 GHG Verification Statement_FY2019 v3 Final.pdf

Page/section reference

Please refer to page 1 of the attached Verification Statement.

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

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

C11.2

(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)
10,000

Number of credits (metric tonnes CO2e): Risk adjusted volume
10,000

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
14064-2

Number of credits (metric tonnes CO2e)
74,817

Number of credits (metric tonnes CO2e): Risk adjusted volume
74,817

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

14064-2

Number of credits (metric tonnes CO2e)

6,438

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

6,438

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

BMO uses differentiated and evolutionary carbon pricing as the price of instruments such as renewable energy credits (RECs) and carbon offsets varies by region and time period. The price reported represents the upper-range price for BMO to mitigate emissions and achieve carbon neutrality. We apply a carbon price to the following business units: Corporate Real Estate.

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 directly exposed to risks from 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 our 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
Yes, our investee companies
Yes, other partners in the value chain

C12.1b

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

Type of engagement

Engagement & incentivization (changing customer behavior)

Details of engagement

Offer financial incentives for customers who reduce your downstream emissions (Scope 3) and/or exposure to carbon-related assets

% of customers by number

0.01

% of customer - related Scope 3 emissions as reported in C6.5

Portfolio coverage (total or outstanding)

Minority of the portfolio

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

BMO is committed to playing a leading role in sustainable finance by providing solutions that help our clients build a prosperous and sustainable future. One area of focus includes structuring sustainability-linked loans (SLLs). SLL's provide a reduced interest rate on a lending facility if a customer meets pre-determined sustainability targets.

In F19 we engaged with one customer, Maple Leaf Foods Inc., and the SLL deal was formally announced in December 2019 making it the first SLL in Canada. This SLL includes a pricing mechanism that reduces the interest rate payable by Maple Leaf Foods Inc. if it meets environmental reduction targets related to electricity use, water use, solid waste, and its carbon emissions.

Going forward, we plan to engage with more customers and continue structuring SLLs in the future.

Impact of engagement, including measures of success

The goal of a SLL is to incentivize a borrower to achieve certain ESG-related improvements. If a borrower meets the predetermined sustainability targets, then the engagement is considered successful. For example, for the Maple Leaf Foods Inc. SLL, the engagement would be considered successful if it meets targets related to electricity use, water use, solid waste and continuing to reduce its carbon emissions in line with its achievement of net carbon neutrality.

C-FS12.1c

(C-FS12.1c) Give details of your climate-related engagement strategy with your investee companies.

Type of engagement

Engagement & incentivization (changing investee behavior)

Details of engagement

Encourage better climate-related disclosure practices among investees

% of investees by number

3

% Scope 3 emissions as reported in C-FS14.1a/C-FS14.1b

Portfolio coverage

Minority of the portfolio

Rationale for the coverage of your engagement

Our investor engagement approach at BMO Global Asset Management (GAM) focuses on encouraging investee companies to adopt best practices in several areas including environmental standards and climate change. On climate change in particular we set out our objectives in the publication "Climate Change Engagement – A framework for the future", where we call on companies to align their businesses with the Paris agreement goals.

In 2019, a significant proportion of our engagement addressed climate change risk management and disclosure at companies in highly exposed industries. Of the engagements undertaken, 9% supported SDG13 (Climate Action) 6% SDG7 (Affordable and Clean Energy). Other related goals supported by our engagement included SDG6 – Clean Water and Sanitation (5% of total) and SDG12 – Responsible Consumption and Production (11%). We engaged with 300 companies which represents a portfolio coverage of approximately 3% based on the total number of investee companies across various funds.

Impact of engagement, including measures of success

The success of these efforts is measured by milestones – instances of change in the way these companies address ESG issues after we engage with them. In 2019, we recorded 313 milestones where companies improved ESG policies and practices following our engagement and 28% of these milestones are linked to climate change.

For example, investor and public pressure led to a significant number of companies improving their climate-related disclosures and/or committing to ambitious emissions targets: Amazon.com, Duke Energy and Volkswagen announced net zero pledges, and 87 global corporations committed to aligning their emissions reduction targets with the 1.5°C Paris climate target.

C12.1d

(C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.

BMO engages with other value chain partners such as facilities managers and downstream value chain partners outside of customers/clients. Our strategy for prioritizing engagements is based on a combination of factors, including: opportunity to generate cost savings/reduce GHG emissions, the ability to create or raise awareness, and advance BMO's reputation as a responsible citizen.

Example 1
BMO works extensively with facilities management (FM) providers in Canada/United States to identify business case and execute energy savings opportunities across our facilities. Through our combined efforts, we have implemented capital projects for energy savings initiatives such as interior/exterior lighting retrofits, heating/cooling infrastructure upgrades and building envelope improvements. Additionally, no/low cost operational improvements have been introduced to reduce utilities consumption, operational costs and the resultant emissions. The engagement strategy is founded on surfacing opportunities with FM service providers using utility data analysis, benchmarking/monitoring, energy assessments, capital planning, project management, and measurement & verification. Initiatives are prioritized based on a combination of cost savings and emissions reductions in this order of importance. These efforts directly contributed to our organization’s success in reducing facilities related emissions (Scope 1 and Scope 2) by approximately 4.1% in FY2019 versus FY2018.

Measures of Success:
• Reduced ongoing operational costs in the form of utilities cost reductions as well as maintenance cost reductions
• Reduced GHG emissions as a result of both capital and operational improvements – reduced utilities consumption translates into reduced emissions
• Reduced emissions contribute to reduced costs for expenditures of carbon offsets and/or renewable energy in order to maintain our commitment to Carbon Neutrality
• Positive impact on awareness of both employees and customers, relative to BMO’s climate change initiatives

Example 2
BMO partners with a preferred supplier to facilitate the environmentally responsible recycling or refurbishment/resale of technology equipment. In many cases, equipment deemed to have reached the end of its useful life from a BMO perspective, can be refurbished and reused by other organizations (e.g. schools). This activity avoids the creation of harmful greenhouse gases from the manufacture of new equipment and defers the impact to the waste/recycling stream. Compugen's CarbonBank™ program works as follows. “End of first life” IT technology is decommissioned and securely transported to a Compugen configuration centre, where all equipment is checked and hard drives are completely wiped of all data using National Institute of Standards and Technology (NIST) data-erasure standards. Technology isn’t limited to just laptop and desktop computers, but includes any IT technology, including networking/storage and even smartphones. The CarbonBank program manages to find a second life for almost all types of technology that it receives. The equipment is then tested and refurbished for resale into new markets, such as educational districts, computer retail stores, or small businesses. Carbon credits are generated through avoidance of emissions associated with the traditional e-waste recycling process and the manufacture of new IT equipment and are verified by an accredited third party.

Measures of success:
• Reduced GHG emissions from avoided new equipment manufacturing (e.g. using repurposed equipment) & landfill avoidance for technology assets taken out of service (BMO includes waste to landfill in its emissions calculations). In F2019 approximately 5,195 tonnes of greenhouse gas emissions were avoided.

• Reduced costs to BMO for disposal of technology equipment

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). Examples are set out in BMO GAM's annual Responsible Investment Review, and included signing an investor expectation statement on sustainable palm oil; supporting the recommendations of Canada's Expert Panel on Sustainable Finance; and co-signing a letter to the Brazilian government on the Amazon soy moratorium.	N/A. Support of international standards.
Climate finance	Support	In 2019, the Government of Canada's Expert Panel on Sustainable Finance released its final report on sustainable finance in Canada. BMO supports the panel's recommendations, and directly engaged with, and provided feedback to, the members of the expert panel as they developed those recommendations. In December 2019, BMO Capital Markets and BMO Global Asset Management signed a letter of public support for the Panel's recommendations.	N/A. Support of national standards.
Climate finance	Support	BMO is participating in a Canadian Standards Association Technical Committee to develop a National Standard of Canada for Green and Transition Finance.	N/A. Support of national 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

The Institutional Investors Group on Climate Change is a collaborative platform, which encourages the adoption of public policies, investment practices and corporate behaviour that address the long-term risks and opportunities associated with climate change.

How have you influenced, or are you attempting to influence their position?

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

Trade association

Investment Association

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

The Investment Association is the main trade body for UK asset managers. It has published a number of papers on sustainable investment and is developing its position on climate change.

How have you influenced, or are you attempting to influence their position?

Representation from our subsidiary BMO Global Asset Management on the IA's Sustainability Committee and co-chairing the IA's Climate Change Working Group.

C12.3e

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

BMO is an active member of the United Nations Environment Program for Financial Institutions (UNEP-FI), including on several climate scenario analysis projects. BMO is taking a leadership role on several UNEP-FI workstreams, including climate risk analysis, positive impact analysis and just transition.

BMO is on the global Steering Committee of the Equator Principles, which establishes a global framework for environmental and social risk management in finance. BMO serves as the North American representative to the EP Association and was actively involved in the recent EP 4 update which included climate change and risk management in its scope.

BMO Global Asset Management (BMO GAM) was one of the founding members of Climate Action 100+. This is a US$34 trillion global investor engagement collaboration, which is working to ensure that the world's largest corporate greenhouse gas emitters take necessary action on climate change. In 2019, BMO GAM took a lead or supporting role in engaging with 23 Climate Action 100+ companies, including major US electric utilities Vistra and Duke Energy; South Korean steel giant POSCO; and car companies Fiat Chrysler and GM.

BMO personnel participated as head of delegation, subject matter expert and international negotiator for the harmonized Standards Council of Canada / CSA Mirror Committees on ISO/TC 207 - Environmental Management and 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.

In addition, BMO personnel represented Canada at the inaugural meeting of ISO/TC 322 on Sustainable Finance. The scope of work of this international technical committee is standardization in the field of sustainable finance to integrate sustainability considerations, including environmental, social and governance practices, in the financing of economic activities.

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 quarterly Sustainability Council 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 - Environmental Management and 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 voluntary sustainability report

Status
Complete

Attach the document

BMO-2019-Sustainability-Report-PAS.pdf

Page/Section reference
Pages 27-29, 70-78

Content elements
Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets

Comment

Publication
In mainstream reports

Status
Complete

Attach the document

bmo_ar2019_Feb0620_en.pdf

Page/Section reference
Pages 70, 105-106

Content elements

Governance
Strategy
Risks & opportunities

Comment

Publication

In mainstream reports

Status

Complete

Attach the document

BMOProxy_March2020.pdf

Page/Section reference

Pages 23-24, 44-48, 55-56

Content elements

Governance
Risks & opportunities

Comment

Publication

In voluntary communications

Status

Complete

Attach the document

BMOEnvironmentalPolicy_Nov2018d.pdf

Page/Section reference

All pages

Content elements

Governance
Strategy

Comment

Publication

In voluntary communications

Status

Complete

Attach the document

climate-change-approach.pdf

Page/Section reference

All pages

Content elements

Governance
Strategy
Risks & opportunities

Comment

C-FS12.5

(C-FS12.5) Are you a signatory of any climate-related collaborative industry frameworks, initiatives and/or commitments?

	Industry collaboration	Comment
Reporting framework	Equator Principles Principles for Responsible Investment (PRI) Task Force on Climate-related Financial Disclosures (TCFD)	
Industry initiative	Principles for Responsible Investment (PRI) Climate Action 100+ Institutional Investors Group on Climate Change (IIGCC) Transition Pathway Initiative UNEP FI UNEP FI TCFD Pilot Other, please specify Investor Statement on Just Transition, Canadian Bankers Association – TCFD Working Group, Canadian Standards Association – Technical Committee on Green and Transition Finance in Canada	
Commitment		

C14. Portfolio Impact

C-FS14.1

(C-FS14.1) Do you conduct analysis to understand how your portfolio impacts the climate? (Scope 3 portfolio impact)

	We conduct analysis on our portfolio's impact on the climate	Disclosure metric	Comment
Bank lending (Bank)	Yes	Alternative carbon footprinting and/or exposure metrics (as defined by TCFD	BMO conducted analysis to quantify carbon-related assets in our lending portfolio.
Investing (Asset manager)	Yes	Alternative carbon footprinting and/or exposure metrics (as defined by TCFD	BMO GAM has built an ESG Risk Tool, which is available to fund managers invested in relevant asset classes (listed equities and credit). This provides an estimate of companies' carbon intensity versus sector peers, and flags those that are significantly over the sector average. The tool is also used to produce quarterly portfolio-specific reports for fund managers. These include a detailed carbon footprint analysis, with portfolio-weighted carbon intensity vs benchmark and absolute emissions. The reports also provide details on the contribution of sector and stock selection factors to the portfolio-weighted carbon intensity, and indicate the companies with the highest carbon intensity versus peers. These reports can then be used by fund managers to identify potentially high-risk companies for deeper analysis. We currently publish the portfolio-weighted carbon intensity vs benchmark for our Responsible funds and some other ESG strategies.
Other products and services, please specify	Not applicable		

C-FS14.1a

(C-FS14.1a) What are your organization's Scope 3 portfolio emissions? (Category 15 "Investments" total emissions)

Category 15 (Investments)

Evaluation status

Relevant, not yet calculated

Please explain

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. Publicly disclosing Scope 3 Category 15 emissions from "investments", or financed emissions, would not be practically feasible or appropriate at this time. There is no single, globally accepted methodology for measuring portfolio climate-related impacts that applies to all financial services sector companies and all financing activities. Financed emissions is one of many ways to measure such impacts. Alternative metrics include carbon-related assets, which BMO discloses in our 2019 Climate Report as approximately 3.3% of our total lending portfolio (see C-FS14.1b). This topic is the subject of internal research and we are evaluating various methodologies and mechanisms for quantification and disclosure of financed emissions including the Partnership for Carbon Accounting Financials (PCAF), the Science Based Targets Initiative Financial Institutions Expert Advisory Group and other proprietary models. There are many factors to be considered including availability, credibility, consistency and comparability of information as well as the direction of securities and other regulators.

C-FS14.1b

(C-FS14.1b) What is your organization's Scope 3 portfolio impact? (Category 15 "Investments" alternative carbon footprinting and/or exposure metrics)

Metric type

Exposure to carbon-related assets

Metric unit

Percentage portfolio value

Scope 3 portfolio metric

3.3

Portfolio coverage

More than 90% but less than or equal to 100%

Percentage calculated using data obtained from clients/investees

Calculation methodology

Carbon-related assets are measured as the value of net loans and acceptances connected to the energy and utilities sectors, excluding water utilities, independent power producers, electricity transmission and distribution companies, renewable electricity producers, and nuclear electricity producers. The amount is reported as at October 31, 2019, and is expressed as a percentage of total net loans and acceptances.

Please explain

We have determined that our lending in support of carbon-related assets in 2019 was approximately $14.7 billion and represented 3.3% of our total lending portfolio. At BMO, we have been advancing innovative approaches to managing climate-related financial risk and are taking concrete action to implement the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) across our business. We have focused on measuring and disclosing quantitative and qualitative information on climate-related risks and opportunities aligned with the recommendations of the TCFD for which good data and clear methodologies are available. We chose to determine our exposure to carbon-related assets as this is a risk metric recommended for financial institutions by the TCFD. This metric is used to determine our relative exposure to assets that are sensitive to climate-related transition risks, as a proportion of our total lending portfolio. The metric has been used to provide investors and other stakeholders with market leading information regarding BMO's climate-related risks, including portfolio impacts.

C-FS14.2

(C-FS14.2) Are you able to provide a breakdown of your organization's Scope 3 portfolio impact?

	Scope 3 breakdown	Comment
Row 1	Yes, by industry	

C-FS14.2b

(C-FS14.2b) Break down your organization's Scope 3 portfolio impact by industry.

Industry	Metric type	Metric unit	Scope 3 portfolio emissions or alternative metric	Please explain
Energy	Exposure to carbon-related assets	Percentage portfolio value	3	All energy sector assets are in-scope for the calculation, which includes oil and gas, and coal fuels. The amount is reported as at October 31, 2019, and is expressed as a percentage of total net loans and acceptances.
Utilities	Exposure to carbon-related	Percentage portfolio	0.3	The calculation includes all utilities sectors assets, except water utilities, independent power producers, electricity transmission and

	assets	value		distribution companies, renewable electricity producers, and nuclear electricity producers. The amount is reported as at October 31, 2019, and is expressed as a percentage of total net loans and acceptances.

C-FS14.3

(C-FS14.3) Are you taking actions to align your portfolio to a well below 2-degree world?

	We are taking actions to align our portfolio to a well below 2-degree world	Please explain
Bank lending (Bank)	No	At BMO, we recognize that the transition to a lower-carbon economy will be a complex endeavour that will happen over time. Evaluating the risk exposures in our lending portfolio is an important concern for BMO, especially as we consider how we can best assist the transition to a lower-carbon economy and continue to support our clients. We are building an internal capacity at BMO to conduct climate change scenario analysis enterprise-wide. The climate change scenario analysis includes multiple scenarios, including a 2 degree world. These efforts will help us identify potential material financial risks, and will inform our business strategy in relation to climate change going forward.
Investing (Asset manager)	Yes	We are engaging investee companies to ask them to align their business strategies with the Paris agreement. As more companies do so, our portfolios will become more aligned. Our engagement approach is set out in our publication "Climate Change Engagement – A framework for the future''. We are also looking into methodologies for assessing portfolio alignment. BMO GAM co-chaired a working group set up by the Institutional Investors Group on Climate Change (IIGCC) to develop investor guidance on scenario analysis; authored the final report "Navigating scenario analysis: A guide for institutional investors", published in 2018; and has spoken at a number of workshops on the topic. BMO GAM team members from our Solutions and Fiduciary teams are also now co-chairing an investor working group on Paris alignment in strategic asset allocation. During 2019, BMO GAM's Responsible Investment team, Investment Risk Oversight team, Fiduciary and Solutions teams

		and Fundamental Equity and Credit teams have been working together to consider options to embed scenario risk analysis into investment processes. We have been considering approaches both to stress-test portfolios from a top-down perspective, alongside more sector-specific and company-specific scenario methodologies for teams conducting fundamental company analysis. Work is ongoing and we hope to be able to disclose more information on outcomes in 2020.
Other products and services, please specify	Not applicable	

C-FS14.3a

(C-FS14.3a) Do you assess if your clients/investees' business strategies are aligned to a well below 2-degree world?

	We assess alignment	Please explain
Investing (Asset manager)	Yes, for some	We assess selected high-impact companies on their 2 degree alignment as part of our role as lead and supporting investors within the Climate Action 100+ initiative. We make use of tools such as the Transition Pathway Initiative and Science-based Targets Initiative. As referenced in C-FS14.3, we are currently looking at data and tools which would allow us to analyse investee companies' Paris alignment as part of a more systematic portfolio scenario analysis process.

C-FS14.3b

(C-FS14.3b) Do you encourage your clients/investees to set a science-based target?

	We encourage clients/investees to set a science-based target	Please explain
Investing (Asset manager)	Yes, for some	In our engagement programme we ask investee companies to align their business strategies with the Paris agreement, including setting long-term targets, interim milestones, and disclosing the pathway to achieve these. More details are in our document "Climate Change Engagement: A framework for the future".

C15. 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 - BMO Forward Looking Statement 2020.docx

C15.1

(C15.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Chief Sustainability Officer, Associate General Counsel	Chief Sustainability Officer (CSO)

SC. Supply chain module

SC0.0

(SC0.0) If you would like to do so, please provide a separate introduction to this module.

SC0.1

(SC0.1) What is your company's annual revenue for the stated reporting period?

	Annual Revenue
Row 1	25,483,000,000

SC0.2

(SC0.2) Do you have an ISIN for your company that you would be willing to share with CDP?

No

SC1.1

(SC1.1) Allocate your emissions to your customers listed below according to the goods or services you have sold them in this reporting period.

Requesting member

CBRE Group, Inc.

Scope of emissions

Scope 1

Allocation level

Company wide

Allocation level detail

Emissions in metric tonnes of CO2e

45,672

Uncertainty (±%)

5

Major sources of emissions

• Natural Gas
• Propane
• Diesel
• Heating oil
• Company-owned vehicles

Verified

Yes

Allocation method

Allocation not necessary due to type of primary data available

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

BMO has not allocated its GHG emissions to individual customers. As a diversified financial services provider with over 12 million customers globally it would not be feasible to do have data readily available to do so. The nature of our business as a service provider means our energy consumption is limited to offices and business travel which simultaneously serve multiple customers and cannot easily be allocated to any individual or business to which we provide financial products and services.

We identify and calculate our Scope 1 emissions in accordance with both the (a) The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard and (b) ISO 14064 Part 1: Greenhouse gases. Scope 1 coverage is company-wide.

Requesting member

CBRE Group, Inc.

Scope of emissions
Scope 2

Allocation level
Company wide

Allocation level detail

Emissions in metric tonnes of CO2e
90,457

Uncertainty (±%)
5

Major sources of emissions
- Purchased electricity
- Purchased steam

Verified
Yes

Allocation method
Allocation not necessary due to type of primary data available

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

BMO has not allocated its GHG emissions to individual customers. As a diversified financial services provider with over 12 million customers globally it would not be feasible to do have data readily available to do so. The nature of our business as a service provider means our energy consumption is limited to offices and business travel which simultaneously serve multiple customers and cannot easily be allocated to any individual or business to which we provide financial products and services.

We identify and calculate our Scope 2 emissions in accordance with both the (a) The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard and (b) ISO 14064 Part 1: Greenhouse gases. Scope 2 coverage is company-wide.

Requesting member
CBRE Group, Inc.

Scope of emissions
Scope 3

Allocation level
Company wide

Allocation level detail

Emissions in metric tonnes of CO2e

25,185

Uncertainty (±%)

5

Major sources of emissions

- Commercial business travel
- Waste from 21.1 % of facilities occupied

Verified

Yes

Allocation method

Allocation not necessary due to type of primary data available

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

BMO has not allocated its GHG emissions to individual customers. As a diversified financial services provider with over 12 million customers globally it would not be feasible to do have data readily available to do so. The nature of our business as a service provider means our energy consumption is limited to offices and business travel which simultaneously serve multiple customers and cannot easily be allocated to any individual or business to which we provide financial products and services.

We identify and calculate our Scope 3 emissions in accordance with both the (a) The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard and (b) ISO 14064 Part 1: Greenhouse gases. We quantify emissions resulting from commercial business travel and waste-to-landfill.

Scope 3 emissions from business travel consist 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.

Scope 3 emissions from waste generated in operations is focused on waste-to-landfill data for approximately 21% of our real estate occupied (relatively larger corporate facilities). Per GHG Protocol Technical Guidance for Calculating Scope 3 Emissions, average-data method is used for calculating emissions from waste generated in operations. 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 is annualized and the resulting emissions are calculated. 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.

SC1.2

(SC1.2) Where published information has been used in completing SC1.1, please provide a reference(s).

BMO’s fiscal 2018 environmental performance and emissions summary reports are available on our website. We expect the fiscal 2019 environmental performance and emissions summary reports to be updated in BMO’s website by the end of August 2020 https://corporate-responsibility.bmo.com/our-practices/environmental-stewardship/enviro-targets-performances/

SC1.3

(SC1.3) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?

Allocation challenges	Please explain what would help you overcome these challenges
Customer base is too large and diverse to accurately track emissions to the customer level	The nature of our business as a service provider means our energy consumption is limited to offices and business travel which simultaneously serve multiple customers and cannot easily be allocated to any individual or business to which we provide financial products and services.

SC1.4

(SC1.4) Do you plan to develop your capabilities to allocate emissions to your customers in the future?

No

SC1.4b

(SC1.4b) Explain why you do not plan to develop capabilities to allocate emissions to your customers.

We do not plan to develop capabilities to allocate emissions to our customers. As a diversified financial services provider with over 12 million customers globally it would not be feasible to do and have data readily available to do so. The nature of our business as a service provider means our energy consumption is limited to offices and business travel which simultaneously serve multiple customers and cannot easily be allocated to any individual or business to which we provide financial products and services.

SC2.1

(SC2.1) Please propose any mutually beneficial climate-related projects you could collaborate on with specific CDP Supply Chain members.

Requesting member

CBRE Group, Inc.

Group type of project

New product or service

Type of project

Other, please specify

New product or service that incentivizes the customer to reduce emissions

Emissions targeted

Actions that would reduce both our own and our customers' emissions

Estimated timeframe for carbon reductions to be realized

0-1 year

Estimated lifetime CO2e savings

Estimated payback

1-3 years

Details of proposal

BMO is committed to playing a leading role in sustainable finance by providing solutions that help our clients build a prosperous and sustainable future. Our Sustainable Finance group is developing innovative products and services to fund initiatives that can generate mutually beneficial climate-related outcomes. For example we underwrite sustainable finance transactions including green bonds and sustainability bonds, and we integrate ESG considerations into our investment, asset management, financing and lending activities where appropriate. In December 2019 for example, we provided a client with Canada's first sustainability linked loan which reduces the interest rate on the lending facility if it meets targets on electricity use, water use, solid waste and carbon emissions.

SC2.2

(SC2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives?

No

SC3.1

(SC3.1) Do you want to enroll in the 2020-2021 CDP Action Exchange initiative?

No

SC3.2

(SC3.2) Is your company a participating supplier in CDP's 2019-2020 Action Exchange initiative?

No

SC4.1

(SC4.1) Are you providing product level data for your organization's goods or services?

No, I am not providing data

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I am submitting to	Public or Non-Public Submission
I am submitting my response		Public

Please confirm below

I have read and accept the applicable Terms

BMO Caution Regarding Forward-Looking Statements

Bank of Montreal's public communications often include written or oral forward-looking statements. Statements of this type are included in this document, and may be included in other filings with Canadian securities regulators or the U.S. Securities and Exchange Commission, or in other communications. All such statements are made pursuant to the "safe harbor" provisions of, and are intended to be forward-looking statements under, the United States *Private Securities Litigation Reform Act of 1995* and any applicable Canadian securities legislation. Forward-looking statements in this document may include, but are not limited to, statements with respect to our objectives and priorities for fiscal 2020 and beyond, our strategies or future actions, our targets, expectations for our financial condition or share price, the regulatory environment in which we operate and the results of or outlook for our operations or for the Canadian, U.S. and international economies, our response to the COVID-19 pandemic and its expected impact on our business, operations, earnings, results and financial condition, including our capital and liquidity ratios and credit ratings, as well as its impact on our customers, competitors and trading exposure, including the potential from loss from higher credit, counterparty or mark-to-market losses, and include statements of our management. Forward-looking statements are typically identified by words such as "will", "would", "should", "believe", "expect", "anticipate", "project", "intend", "estimate", "plan", "goal", "target", "may" and "could".

By their nature, forward-looking statements require us to make assumptions and are subject to inherent risks and uncertainties, both general and specific in nature. There is significant risk that predictions, forecasts, conclusions or projections will not prove to be accurate, that our assumptions may not be correct, and that actual results may differ materially from such predictions, forecasts, conclusions or projections. The uncertainty created by the COVID-19 pandemic has heightened this risk given the increased challenge in making assumptions, predictions, forecasts, conclusions or projections. We caution readers of this document not to place undue reliance on our forward-looking statements, as a number of factors – many of which are beyond our control and the effects of which can be difficult to predict - could cause actual future results, conditions, actions or events to differ materially from the targets, expectations, estimates or intentions expressed in the forward-looking statements.

The future outcomes that relate to forward-looking statements may be influenced by many factors, including but not limited to: general economic and market conditions in the countries in which we operate; the severity, duration and spread of the COVID-19 pandemic, its impact on local, national or international economies and its heightening of certain risks that may affect our future results the possible impact on our business and operations of outbreaks of disease or illness that affect local, national or international economies; the Canadian housing market and consumer leverage; weak, volatile or illiquid capital and/or credit markets; interest rate and currency value fluctuations; changes in monetary, fiscal, or economic policy and tax legislation and interpretation; the level of competition in the geographic and business areas in which we operate; changes in laws or in supervisory expectations or requirements, including capital, interest rate and liquidity requirements and guidance, and the effect of such changes on funding costs; judicial or regulatory proceedings; the accuracy and completeness of the information we obtain with respect to our customers and counterparties; failure of third parties to comply with their obligations to us; our ability to execute our strategic plans and to complete and integrate acquisitions, including obtaining regulatory approvals; critical accounting estimates and the effect of changes to accounting standards, rules and interpretations on these estimates; operational and infrastructure risks, including with respect to reliance on third parties; changes to our credit ratings; political conditions, including changes relating to or affecting economic or trade matters; global capital markets activities; the possible effects on our business of war or terrorist activities; natural disasters and disruptions to public infrastructure, such as transportation, communications, power or water supply; technological changes; information, privacy and cyber security, including the threat of data breaches, hacking, identity theft and corporate espionage, as well as the possibility of denial of service resulting from efforts targeted at causing system failure and service disruption; and our ability to anticipate and effectively manage risks arising from all of the foregoing factors.

We caution that the foregoing list is not exhaustive of all possible factors. Other factors and risks could adversely affect our results. For more information, please refer to the discussion in the Risks That May Affect Future Results section, and the sections related to credit and counterparty, market, insurance, liquidity and funding, operational, legal and regulatory, business, strategic, environmental and social, and reputation risk, in the Enterprise-Wide Risk Management section that begins on page 68 of BMO's 2019 Annual Report, as updated by BMO's First Quarter 2020 and Second Quarter 2020 Reports to Shareholders, all of which outline certain key factors and risks that may affect our future results. Investors and others should carefully consider these factors and risks, as well as other uncertainties and potential events, and the inherent uncertainty of forward-looking statements. We do not undertake to update any forward-looking statements, whether written or oral, that may be made from time to time by the organization or on its behalf, except as required by law. The forward-looking information contained in this document is presented for the purpose of assisting our shareholders in understanding our financial position as at and for the periods ended on the dates presented, as well as our strategic priorities and objectives, and may not be appropriate for other purposes.

Material economic assumptions underlying the forward-looking statements contained in this document are set out in BMO's 2019 Annual Report under the heading "Economic Developments and Outlook" as updated by the "Economic Review and Outlook" section in BMO's First Quarter 2020 and Second Quarter 2020 Reports to Shareholders. Assumptions about the performance of the Canadian and U.S. economies, as well as overall market conditions and their combined effect on our business, are material factors we consider when determining our strategic priorities, objectives and expectations for our business. In determining our expectations for economic growth, we primarily consider historical economic data, past relationships between economic and financial variables, changes in government policies, and the risks to the domestic and global economy.