

Module: Introduction**Page: Introduction**

CC0.1**Introduction**

Please give a general description and introduction to your organization.

Established in 1817, BMO Financial Group is a highly diversified financial services provider based in North America. With total assets of \$688 billion and more than 45,000 employees, BMO provides a broad range of personal and commercial banking, wealth management and investment banking products and services to more than 12 million customers. We serve eight million customers across Canada through our Canadian personal and commercial arm, BMO Bank of Montreal. We also serve customers through our wealth management businesses: BMO Asset Management, BMO Nesbitt Burns, BMO Private Banking, BMO Insurance and BMO InvestorLine. BMO Capital Markets, our investment and corporate banking and trading products division, provides a full suite of financial products and services to North American and international clients. In the United States, BMO serves customers through BMO Harris Bank, based in the U.S. Midwest with more than two million retail, small business and commercial customers. BMO Financial Group conducts business through three operating groups: Personal and Commercial Banking, Wealth Management and BMO Capital Markets.

CC0.2**Reporting Year**

Please state the start and end date of the year for which you are reporting data.

The current reporting year is the latest/most recent 12-month period for which data is reported. Enter the dates of this year first.

We request data for more than one reporting period for some emission accounting questions. Please provide data for the three years prior to the current reporting year if you have not provided this information before, or if this is the first time you have answered a CDP information request. (This does not apply if you have been offered and selected the option of answering the shorter questionnaire). If you are going to provide additional years of data, please give the dates of those reporting periods here. Work backwards from the most recent reporting year.

Please enter dates in following format: day(DD)/month(MM)/year(YYYY) (i.e. 31/01/2001).

Enter Periods that will be disclosed

Sun 01 Nov 2015 - Mon 31 Oct 2016

CC0.3

Country list configuration

Please select the countries for which you will be supplying data. If you are responding to the Electric Utilities module, this selection will be carried forward to assist you in completing your response.

Select country

Australia
Barbados
Brazil
Canada
China
France
Germany
Gibraltar
India
Ireland
Italy
Luxembourg
Mexico
Netherlands
Portugal
Singapore
Spain
Sweden

Select country
Switzerland
United Arab Emirates
United Kingdom
United States of America

CC0.4

Currency selection

Please select the currency in which you would like to submit your response. All financial information contained in the response should be in this currency.

CAD (\$)

CC0.6

Modules

As part of the request for information on behalf of investors, companies in the electric utility sector, companies in the automobile and auto component manufacturing sector, companies in the oil and gas sector, companies in the information and communications technology sector (ICT) and companies in the food, beverage and tobacco sector (FBT) should complete supplementary questions in addition to the core questionnaire.

If you are in these sector groupings, the corresponding sector modules will not appear among the options of question CC0.6 but will automatically appear in the ORS navigation bar when you save this page. If you want to query your classification, please email respond@cdp.net.

If you have not been presented with a sector module that you consider would be appropriate for your company to answer, please select the module below in CC0.6.

Further Information

Forward-Looking Information Statement attached.

Attachments

Module: Management

Page: CC1. Governance

CC1.1

Where is the highest level of direct responsibility for climate change within your organization?

Board or individual/sub-set of the Board or other committee appointed by the Board

CC1.1a

Please identify the position of the individual or name of the committee with this responsibility

The BMO Sustainability Council (SC), comprised of senior leaders, provides guidance and insight on environmental, social and governance (ESG) matters. Members of the SC include executives representing each business (e.g. Retail Banking, Wealth Management, Capital Markets, and Corporate areas; e.g. Real Estate, Human Resources). The Council meets every quarter.

The Chair of the SC is General Counsel for BMO, a direct report of the CEO and a member of BMO's Executive Committee (EC). Our Board of Directors is responsible for enterprise-wide oversight and governance, and a number of our Board committee mandates include addressing ESG matters. For example, the Audit and Conduct Review Committee reviews & reports on ESG issues. Any issues requiring escalation are brought to the EC. Further issues may be escalated to the Board, at the discretion of the CEO and depend on materiality.

As a service provider the vast majority (87%) of our carbon footprint is driven by emissions from the buildings that we occupy. The remaining amount is a result of business travel by our employees. The direct and indirect aspects of climate change are managed internally by two different groups. The direct impacts are managed by the Environmental Sustainability (ES) group. Led by the Director of ES, this group is responsible for measuring, evaluating and providing guidance and direction to manage our operational foot print. The Director of ES reports to the Senior Vice-President responsible for Corporate Real Estate. Both of these individuals sit on the Sustainability Council. The indirect impact of climate change (the impact our business activities may have) is managed by the Environmental, Social and Governance (ESG) Group. This group is led by the Director of ESG, who sits on the SC and reports directly to the Senior Vice President, Deputy General Counsel, Corporate Affairs & Corporate Secretary.

CC1.2

Do you provide incentives for the management of climate change issues, including the attainment of targets?

Yes

CC1.2a

Please provide further details on the incentives provided for the management of climate change issues

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator	Comment
Environment/Sustainability managers	Monetary reward	Emissions reduction project Energy reduction project Other: Behaviour change related indicator	Aligned with the position mandate, decisions relative to monetary compensation in the form of incentive pay awarded, are influenced by these elements as part of the annual process.
Facility managers	Monetary reward	Energy reduction project Efficiency project	Aligned with the position mandate, decisions relative to monetary compensation in the form of incentive pay awarded, are influenced by these elements as part of the annual process.
Corporate executive team	Recognition (non-monetary)	Emissions reduction target Other: Behaviour change related indicator	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	Recognition (non-monetary)	Other: Behaviour change related indicator	Employees who participate voluntarily as "Environmental Ambassadors" are recognized via articles about sustainability initiatives/events on our corporate intranet site. Any employee may also be recognized via our internal employee recognition system (BMO beam) for their efforts in support of our corporate responsibility efforts. "BMO beam" is a real-time online social recognition newsfeed that allows employees to see and share recognition "in the moment". As part of the internal recognition program, employees can also be recognized more formally via a Quarterly Spotlight Award - a way for leaders to recognize and profile employees who are "Being BMO". Within each business group and function, Spotlight

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator	Comment
			leaders will select team members for enterprise-wide recognition on the BMO beam newsfeed. We also recognize our employees' contributions externally, in our Corporate Responsibility Report.
Corporate executive team	Monetary reward	Efficiency target	Executives at the business group level are measured on the profitability of their areas of accountability. Contributing to the decisions relative to incentive compensation are contributions to productivity challenges and more specifically, the ongoing control over expenses. Reducing employee travel for business purposes (e.g. commercial air travel) is one example of how the focus on expense reduction contributes positively to BMO's reduction in GHG emissions.

Further Information

Page: CC2. Strategy

CC2.1

Please select the option that best describes your risk management procedures with regard to climate change risks and opportunities

Integrated into multi-disciplinary company wide risk management processes

CC2.1a

Please provide further details on your risk management procedures with regard to climate change risks and opportunities

Frequency of monitoring	To whom are results reported?	Geographical areas considered	How far into the future are risks considered?	Comment
Every two years	Other committee	Australia Barbados Brazil Canada China France Germany Gibraltar India Ireland Italy Luxembourg Netherlands Portugal Mexico Singapore Spain Sweden Switzerland United Arab Emirates United Kingdom United States of America	3 to 6 years	Environmental and social risk management activities are integrated into our enterprise wide risk management framework. Environmental and social risks associated with credit transactions are managed within BMO's credit and counterparty risk management framework. BMO has also developed and implemented specific financing guidelines on environmental and social risk for specific lines of business. Enhanced due diligence is applied to transactions with clients operating in environmentally sensitive industry sectors, such as forestry or mining, and we avoid doing business with borrowers who have poor environmental and social risk management track records. BMO applies the Equator Principles and the World Bank/International Finance Corporation environmental and social screening process to assess/manage environmental and social risk in project finance transactions. These principles have been integrated into our credit risk management framework. We are a long-time signatory/participant of CDP.

CC2.1b

Please describe how your risk and opportunity identification processes are applied at both company and asset level

For risk, we consider indirect impacts of climate change to which our clients' exposure to climate change and associated regulation may affect us. At a company level, the Environmental, Social and Governance (ESG) group identifies indirect risks and related effects of climate change. These are monitored as part of regular sustainability issues monitoring that occurs at a minimum annually (more frequently if needed). The group monitors regulatory developments and the likelihood of occurrence by reviewing literature (policy, legal opinion, research); participating in industry groups/conferences discussing impacts of climate change; engaging stakeholders and benchmarking against best practice organizations.

BMO focuses on managing environmental/social risk (potential loss/damage to BMO's reputation from environmental or social concerns). We recognize the need to monitor and evaluate ourselves against rising societal expectations about environmental matters.

At an asset level, climate change related risk falls within credit and counterparty risk. Credit risk management begins with our experienced professional lending and credit risk officers who operate in a dual control structure to authorize lending transactions. When evaluating clients, we consider all risks in an integrated fashion. Specific guidelines related to climate change are applied to transactions with clients operating in emissions-intensive industry sectors. We seek to understand the borrower's climate change adaptation/mitigation strategies. We assess: Whether the borrower monitors/reports greenhouse gas emissions and the extent and

quality of such monitoring and reporting; The extent of the borrower's overall greenhouse gas emissions; Whether the borrower has a carbon mitigation plan, how it's being implemented and whether their Board of Directors was involved in its development; and the borrower's preparedness to deal with any potential regulatory requirements regarding greenhouse gas emissions.

CC2.1c

How do you prioritize the risks and opportunities identified?

At the company level, the information gathered is then distilled to determine the impact to our business and in collaboration with the potentially affected areas, a determination of materiality (against other issues and priorities) is made. With respect to climate change; if the risk is material, meaning that it would have a negative impact on a company's operating leverage such that they would be unable to meet their financial commitments to us, a mitigation plan is put in place. Regardless of level of materiality, reporting on climate change issues is provided to the bank's Sustainability Council at the regularly scheduled meetings (quarterly).

At the asset level, the output of our client evaluation/process (described above) is our credit risk profile which feeds into our overall risk reporting and quarterly disclosure directed at key stakeholders including the Board, Regulators, and the Investor Community.

CC2.1d

Please explain why you do not have a process in place for assessing and managing risks and opportunities from climate change, and whether you plan to introduce such a process in future

Main reason for not having a process	Do you plan to introduce a process?	Comment
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CC2.2

Is climate change integrated into your business strategy?

Yes

CC2.2a

Please describe the process of how climate change is integrated into your business strategy and any outcomes of this process

i) Business strategy is influenced by our commitment to customer experience - Our strategic vision is to be the bank that defines great customer experience. BMO's activities are guided by our strategic priorities of: customer loyalty, productivity, digital technology, North American platform and risk management. We express our commitment to sustainable growth through a set of sustainability principles: social change, financial resilience, community-building and environmental responsibility – reducing our environmental footprint while considering the impacts of our business activities as we work with stakeholders who share our commitment to sustainability. Extending and complementing our promise to customers, these principles reinforce the deeper sense of responsibility that informs all aspects of our business strategy. By positioning our sustainability principles alongside the strategic priorities we confirm that sustainability is incorporated into how we do business, manage risk and create value.

We actively seek out and support clients who will positively impact our future – for example, companies that develop renewable energy projects such as solar, wind, hydroelectric and biomass generation – as well as customers who adopt their own sustainability practices. Operationally, we have moved quickly and effectively to reduce our own environmental footprint. We set clear goals, and have maintained carbon neutrality across the entire enterprise since 2010. We focus our efforts on reducing the consumption of energy related to our operations, our facilities and our employees' business travel; investing in electricity from renewable sources; and purchasing high-quality voluntary carbon credits to offset the balance of our emissions to meet our goal. We have also set and successfully achieved 3 separate absolute emissions reductions targets over the past 10 years and continue to challenge ourselves in this regard.

ii) Example(s) of how business strategy has been influenced: We see the opportunity to differentiate our organization, potentially resulting in additional brand recognition/profitability by offering new products/business services relating to climate change and providing financing solutions to assist our customers in reducing their environmental impact.

- BMO was the first Canadian bank to launch a principal protected note linked to an environmental, social and governance-themed index. The BMO Environmental, Social & Governance (ESG) Index is a proprietary, quantitative and socially screened index that seeks to provide exposure to select components of the Jantzi Social Index (JSI), a stock index of Canadian companies that comply with a set of broad ESG screening criteria. A proprietary, quantitative rules based screen is used to select the BMO ESG Index components from the JSI. At maturity, investors in BMO Environmental, Social & Governance Index Linked Principal Protected Deposit Notes will receive the amount of their original deposit plus a variable amount that reflects the price return on the equities in the BMO ESG Index over the term of the note. This new product offers our clients a socially responsible investment while providing protection of their principal at maturity.

- BMO Global Asset Management's Governance and Sustainable Investment team has an extensive global program of investor engagement aimed at encouraging investee companies to adopt best practices in a range of areas including environmental standards. BMO Global Asset Management has determined that participation in the public policy process is a central part of being a responsible investor. As investors, BMO Global Asset Management can indicate to governments and regulators which policies will improve a company's alignment with ESG standards in a way that also enhances competitiveness and long-term value for investors. In the past year, BMO Global Asset Management undertook public policy engagements, including: Signing on to a letter from 130 global investors urging G20 leaders to ratify the COP21 Paris Agreement on climate change

- In 2016, we introduced the BMO Fossil Fuel Free Fund which aims to provide long-term growth of capital by investing in a globally diversified portfolio of equity securities that excludes companies primarily involved in extracting and refining fossil fuels and maintaining the infrastructure for their distribution.

- BMO achieved enterprise-wide carbon neutrality in August 2010. Our most substantial business decision is ensure that we remain carbon neutral. Despite pressures to allocate resources elsewhere and although we've grown our business substantially in the United States, we've maintained our carbon neutral status. In 2016, BMO joined the Carbon Pricing Leadership Coalition (CPLC), a voluntary initiative that supports successful implementation of carbon pricing around the world.

As a CPLC member, we support carbon pricing by working with other members to achieve the long-term objectives being applied across the global economy.

iii) We have a responsibility to our shareholders to manage risks, create long-term value, and the commitment to help our customers thrive. The aspects of climate change that have influenced the strategy include opportunities to invest in renewable energy projects, reducing our environmental footprint by reducing resource consumption, responding to market and shareholder demand for responsible banking, investing, products and services.

iv) Climate change has influenced our short term strategy in that we continue to focus on reducing carbon emissions in our own operations and reducing our operational footprint. Emissions from buildings we occupy represent 87% of our footprint (the balance is attributed to employee business travel). Organizational priorities include controlling operating costs, energy consumption, associated costs and reduced emissions.

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

vi) BMO is well-positioned with a clear strategy supported by our sustainability principles. We differentiate ourselves by offering new products/business services relating to climate change and providing financing solutions to assist customers reduce their environmental impact. Our internal focus to reduce operating costs relating to energy consumption has contributed to both the bottom line and to BMO's reputation as an organization that considers climate change important.

CC2.2b

Please explain why climate change is not integrated into your business strategy

CC2.2c

Does your company use an internal price on carbon?

Yes

CC2.2d

Please provide details and examples of how your company uses an internal price on carbon

i) Scope that the emissions pertain to:
Scope 1 & Scope 2

ii) rationale for employing a price
Since 2008, BMO has employed a price on carbon in order to raise internal awareness and monetize the value of carbon emissions savings.

iii) actual price used
BMO currently uses \$20 per tonne as the price.

iv) variances in prices over time and across geographies
The price was recently adjusted downward from \$25 to better reflect current market conditions and is applicable enterprise-wide to every significant energy related business case. These are typically energy projects undertaken within our Critical Facilities environments.

v) who is responsible for determining the price
The price was originally set by Director, Environmental Sustainability and was based on the price of high quality voluntary carbon offsets at the time. As noted it has recently been adjusted to align with current market conditions.

vi) examples of how carbon pricing affects investment decisions
For the large scale projects where carbon pricing is applied, it is considered as one of the many factors (cost, savings, payback, etc.) in assessing the viability of the investment decision/business case. At the current price of \$20 per tonne, it is not likely the most determinant of factors, but it has increased the focus on energy management within the organization.

CC2.3

Do you engage in activities that could either directly or indirectly influence public policy on climate change through any of the following? (tick all that apply)

Direct engagement with policy makers
Trade associations
Funding research organizations
Other

CC2.3a

On what issues have you been engaging directly with policy makers?

Focus of legislation	Corporate Position	Details of engagement	Proposed legislative solution
Climate finance	Support	Our subsidiary BMO Global Asset Management (BMO GAM) has engaged extensively with policymakers both directly and through its membership of the Institutional Investors Group on Climate Change (IIGCC). In the past year, BMO Global Asset Management undertook public policy engagements, including: Signing on to a letter from 130 global investors urging G20 leaders to ratify the COP21 Paris Agreement on climate change. In 2016 BMO GAM's key activities included: signing a global investor letter to G20 leaders encouraging the ratification of the COP21 Paris Agreement; Engaging the World Bank on approaches to measuring green finance; writing to the US Securities and Exchange Commission on company sustainability disclosure reforms. We continued to be involved in providing input via submissions to the Financial Stability Board's Task Force on Climate-Related Financial Disclosures (TCFD) and through our active membership within the Institutional Investors group on Climate Change (IIGCC), are engaging policy makers to promote robust and consistent climate related reporting standards for energy intensive sectors as well as financial sector companies. We provided joint feedback with Canadian peer banks to the Financial Stability Board's recommendations of the Task Force on Climate-related Financial Disclosures consultation document.	Ensuring that investors' concerns regarding the systemic nature of climate risk are considered as part of the legislation.

CC2.3b

Are you on the Board of any trade associations or provide funding beyond membership?

Yes

CC2.3c

Please enter the details of those trade associations that are likely to take a position on climate change legislation

Trade association	Is your position on climate change consistent with theirs?	Please explain the trade association's position	How have you, or are you attempting to, influence the position?
Institutional Investors Group on Climate Change	Consistent	Calling for clear consistent climate change policies in order to promote an orderly transition to a low carbon economy.	Representation from our subsidiary BMO Global Asset Management (EMEA) on the Board, participating actively in policy work.

CC2.3d

Do you publicly disclose a list of all the research organizations that you fund?

Yes

CC2.3e

Please provide details of the other engagement activities that you undertake

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

CC2.3f

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?

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

CC2.3g

Please explain why you do not engage with policy makers

Further Information

CC3.1

Did you have an emissions reduction or renewable energy consumption or production target that was active (ongoing or reached completion) in the reporting year?

- Absolute target
- Intensity target
- Renewable energy consumption and/or production target

CC3.1a

Please provide details of your absolute target

ID	Scope	% of emissions in scope	% reduction from base year	Base year	Base year emissions covered by target (metric tonnes CO2e)	Target year	Is this a science-based target?	Comment
Abs1	Scope 1+2 (market-based)+3 (upstream)	100%	100%	2016	175267.67	2016	No, but we anticipate setting one in the next 2 years	Successfully maintain enterprise-wide carbon neutrality goal which was originally achieved in fiscal 2010. Note that for the purposes of this target, fiscal 2016 is quoted as both the "base year" and "target year" and "base year emissions" reflect total Scope 1 + 2 (market based) + 3 emissions. Specifically for Scope 3, emissions covered include: - upstream leased assets - business travel - waste to landfill.
Abs2	Scope 1+2 (location-based)+3 (upstream)	100%	10%	2012	220426.59	2017	No, but we anticipate setting one in the next 2 years	Using the FY2012 emissions as our baseline – reduce enterprise carbon emissions resulting from energy use and business transportation, over which BMO has direct control, by 10% - to be achieved by the end of Fiscal 2017. For the purposes of tracking against this target, BMO will adjust for the impacts of weather and

ID	Scope	% of emissions in scope	% reduction from base year	Base year	Base year emissions covered by target (metric tonnes CO2e)	Target year	Is this a science-based target?	Comment
								emissions factors changes vs. the base year emissions of FY2012 to arrive at the annual measure for adjusted absolute emissions. This provides us with an indication of the progress against those factors over which we have direct control. Specifically for Scope 3, emissions covered include: - upstream leased assets - business travel - waste to landfill

CC3.1b

Please provide details of your intensity target

ID	Scope	% of emissions in scope	% reduction from base year	Metric	Base year	Normalized base year emissions covered by target	Target year	Is this a science-based target?	Comment
Int1	Scope 1+2 (location-based)+3 (upstream)	100%	10%	Metric tonnes CO2e per unit FTE employee	2012	4.76	2017	No, but we anticipate setting one in the next 2 years	BMO's intensity target is to reduce Scope 1, 2 (location based), 3 emissions per FTE by 0.5 tonne over 5 years vs. FY2012 baseline of 4.76 tonnes per full-time employee (adjusting for weather/emissions factors). Specifically for Scope 3, emissions covered include: - upstream leased assets - business travel - waste to landfill.

CC3.1c

Please also indicate what change in absolute emissions this intensity target reflects

ID	Direction of change anticipated in absolute Scope 1+2 emissions at target completion?	% change anticipated in absolute Scope 1+2 emissions	Direction of change anticipated in absolute Scope 3 emissions at target completion?	% change anticipated in absolute Scope 3 emissions	Comment
Int1	Decrease	10	Decrease	10	BMO's intensity target was derived based on the expected reduction of 10% in absolute emissions for scopes 1, 2 (location based) & 3 inclusive. This target reduction was then stated as intensity per FTE with the resultant reduction of 0.5 tonnes per FTE over the 5 year period adjusting for the impacts of weather and emissions factors. Specifically for Scope 3, emissions covered include: - upstream leased assets - business travel - waste to landfill

CC3.1d

Please provide details of your renewable energy consumption and/or production target

ID	Energy types covered by target	Base year	Base year energy for energy type covered (MWh)	% renewable energy in base year	Target year	% renewable energy in target year	Comment
RE1	Electricity consumption	2015	23786.04	17.53%	2017	22.53%	BMO's target in Canada is to purchase additional electricity from renewable sources to increase our % renewable energy purchased versus total scope 2 electricity consumption to 22.53%, an increase of 5% versus the base year of 2015. To achieve this, we will invest in additional Renewable

ID	Energy types covered by target	Base year	Base year energy for energy type covered (MWh)	% renewable energy in base year	Target year	% renewable energy in target year	Comment
							Energy Certificates, which are supported by renewable energy fed to the grid and generated by a combination of wind turbines and low impact hydroelectric sources.
RE2	Electricity consumption	2015	90652.95	100%	2016	100%	BMO's target in the United States is to maintain our existing purchase of electricity from renewable sources in order to offset 100% of total scope 2 electricity consumption. To achieve this, we invested in Renewable Energy Certificates, which are supported by renewable energy fed to the grid and generated by wind turbines.
RE3	Electricity consumption	2016	29216.07	22.66%	2017	23.00%	BMO's target in Canada is to increase our % renewable electricity purchased versus total scope 2 electricity consumption to 23.00%, a slight increase versus our new base year of 2016. To achieve this, we will continue to invest in Renewable Energy Certificates, which are supported by renewable energy fed to the grid and generated by a combination of wind turbines and low impact hydroelectric sources.
RE4	Electricity consumption	2016	91400	100%	2017	100%	BMO's target in the United States is to maintain our existing purchase of electricity from renewable sources in order to offset 100% of total scope 2 electricity consumption. To achieve this, we will continue to invest in Renewable Energy Certificates, which are supported by renewable energy fed to the grid and generated by wind turbines.

CC3.1e

For all of your targets, please provide details on the progress made in the reporting year

ID	% complete (time)	% complete (emissions or renewable energy)	Comment
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ID	% complete (time)	% complete (emissions or renewable energy)	Comment
Abs1	100%	100%	Achieved/maintained. In August 2010 BMO publically announced that it had achieved its Carbon Neutrality goal, through a combination of consumption reduction activities, the purchase of renewable electricity (Renewable Energy Certificates) and the purchase of high quality voluntary carbon offset credits. In fiscal 2016, we successfully maintained this ongoing goal.
Abs2	80%	100%	Absolute emissions, adjusted to exclude the impacts of weather and emissions factors changes, have decreased by 13.9% as at the end of FY2016 vs. our FY2012 baseline, surpassing our 5 year 10% target, one year in advance. We have therefore successfully achieved this target. BMO uses emissions for Scopes 1, 2 (location based) & 3 for this target.
Int1	80%	100%	With a reduction of 0.53 tCO ₂ e per FTE realized, versus the target of 0.50 tCO ₂ e, we have surpassed our target at the end of year 4. BMO uses emissions for Scopes 1, 2 (location based) & 3 for this target. Relative emissions, adjusted for weather and changes to emissions factors decreased versus FY2012 baseline by 12.0% while total employees decreased by approximately 2.2% over the same period. We have therefore successfully achieved this target.
RE1	50%	100%	For our Canadian facilities at the end of F2016, the total MWh of renewable electricity purchased as a percentage of the total Scope 2 electricity used was 22.67%. This exceeds our original stated target percentage of 22.53%. We have therefore achieved our 2 year target at the completion of the first year. Contributing to this success was an overall reduction in Scope 2 electricity consumption F2016 vs. F2015 (6,787 MWh) as a result of our ongoing emissions reductions activities, as well as 5,430 MWh of additional purchases of renewable electricity, in the form of RECs, in F2016.
RE2	100%	100%	For facilities located in the United States at the end of F2016, the total MWh of renewable electricity purchased as a percentage of the total Scope 2 electricity used was 100.0%. We have therefore achieved our target as scheduled. Contributing to this success was an overall reduction in Scope 2 electricity consumption F2016 vs. F2015 (9,565 MWh) as a result of our ongoing emissions reductions activities. We did not increase our purchases of renewable electricity (RECs), in the United States in F2016.
RE3	0%	0%	This is a new 1 year target set at the end of F2016. For Canadian facilities, BMO will continue to target incremental renewable energy use versus total electricity consumption.
RE4	0%	0%	This is a new annual target set at the end of F2016. For facilities located in the United States, BMO will maintain existing purchases of electricity from renewable sources in order to offset 100% of total electricity consumption.

CC3.1f

Please explain (i) why you do not have a target; and (ii) forecast how your emissions will change over the next five years

CC3.2

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?

No

CC3.2a

Please 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	Description of product/Group of products	Are you reporting low carbon product/s or avoided emissions?	Taxonomy, project or methodology used to classify product/s as low carbon or to calculate avoided emissions	% revenue from low carbon product/s in the reporting year	% R&D in low carbon product/s in the reporting year	Comment

CC3.3

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

Yes

CC3.3a

Please identify the total number of projects at each stage of development, and for those in the implementation stages, the estimated CO2e savings

Stage of development	Number of projects	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	240	740
To be implemented*	227	2091
Implementation commenced*	43	396
Implemented*	436	4039
Not to be implemented	0	0

CC3.3b

For those initiatives implemented in the reporting year, please provide details in the table below

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
Energy efficiency: Building services	Continuation of implementation of building automation systems (BAS) technologies within retail branches in Canada. Implementations for FY2016 were aligned with renovation activities planned for select branches in the network.	331.9	Scope 1 Scope 2 (location-based) Scope 3	Voluntary	405000	1620000	4-10 years	11-15 years	This initiative covers installations for building automation system technologies in Canada, completed during

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
	BAS systems controls include interior lighting, exterior signage and heating/air conditioning (HVAC) infrastructure. Business rules are created to align energy usage with functional usage of the space to ensure that non-essential interior lighting is extinguished during non-business hours and HVAC systems/temperatures are "set back" during non-occupied hours. Savings relate to reduced energy consumption and savings from reduced service calls to branches as many issues can now be solved remotely, thereby avoiding the costs of vendor site visits. For owned facilities, reductions impact Scope 1 and Scope 2 and for leased facilities (per Financial Control reporting boundary) the impacts are recorded under Scope 3. This is a voluntary activity.								the fiscal period.
Energy efficiency: Building services	Lighting, HVAC and controls upgrades made at various facilities in Canada and the United States. This is part of the ongoing program focusing on energy retrofits. For owned facilities, reductions impact Scope 1 and Scope 2 and for	3152.8	Scope 1 Scope 2 (location-based) Scope 3	Voluntary	1182160	5910810	4-10 years	11-15 years	This initiative covers projects for office and retail facilities in Canada and the United States, completed during the fiscal

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
	leased facilities (per Financial Control reporting boundary) the impacts are recorded under Scope 3. This is a voluntary activity.								period.
Energy efficiency: Building services	Ongoing program within our owned critical facilities environments focusing on the upgrades such as; fans and motors (to variable frequency drive units), compressors, cooling tower filtration systems, chiller infrastructure, lighting, etc. Savings result from the decreased use of electricity (and reduced emissions) to run the equipment as well as reduced maintenance costs as the cooling equipment is not subject to the same demand. For activities undertaken this fiscal year for owned facilities, reductions impact Scope 2. This activity is voluntary.	27.1	Scope 2 (location-based)	Voluntary	100090	471190	4-10 years	16-20 years	This initiative covers major projects for special purpose facilities completed during the fiscal period.
Energy efficiency: Building fabric	Program based activities focused on energy efficiency improvements to building envelopes for facilities (e.g. window film, roof, windows/doors). For owned facilities, reductions impact Scope 1 and Scope 2 and for leased facilities (per Financial Control reporting boundary) the impacts	87.3	Scope 1 Scope 2 (location-based) Scope 3	Voluntary	56040	1681050	>25 years	21-30 years	This initiative covers projects for office and retail facilities completed during the fiscal period.

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
	are recorded under Scope 3. This is a voluntary activity.								
Low carbon energy purchase	F2016 additional purchase of renewable energy in the form of RECs for use in Canada. Incremental purchase of 5,430 MWh.	220.2	Scope 2 (market-based)	Voluntary	0	97306	>25 years		In F2016, BMO purchased an additional 5,430 MWh of renewable energy in the form of RECs for use in Canada. This purchase reduced market based Scope 2 emissions by 220 tCO2e annually.

CC3.3c

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	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

Method	Comment
activities	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) and including the benefits as part of large initiative energy related 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.

CC3.3d

If you do not have any emissions reduction initiatives, please explain why not

Further Information

Page: CC4. Communication

CC4.1

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	Status	Page/Section reference	Attach the document	Comment
In mainstream reports (including an integrated report) in accordance with the CDSB Framework	Complete	BMO Financial Group Annual Report 2016 - pages 11, 112	https://www.cdp.net/sites/2017/17/1417/Climate Change 2017/Shared Documents/Attachments/CC4.1/bmo_ar2016.pdf	
In voluntary communications	Complete	F2016 Environmental, Social & Governance and Public Accountability Report - pages 3, 6, 10-13, 40-44	https://www.cdp.net/sites/2017/17/1417/Climate Change 2017/Shared Documents/Attachments/CC4.1/BMO_ESG_PAS2016en.pdf	
In voluntary communications	Underway - previous year attached	Corporate Responsibility Report F2016 - pages 18, 54, 60	https://www.cdp.net/sites/2017/17/1417/Climate Change 2017/Shared Documents/Attachments/CC4.1/BMO_CR2016en.pdf	Report titled 2016, produced in 2016 but represents coverage for 2015.
In voluntary communications	Complete	Making Tomorrow Better – BMO on Climate Change - page 1	https://www.cdp.net/sites/2017/17/1417/Climate Change 2017/Shared Documents/Attachments/CC4.1/Making Tmrw Better BMO_ClimateChange2016en.pdf	
In voluntary communications	Complete	BMO Financial Group - Environmental Policy - pages 1, 2	https://www.cdp.net/sites/2017/17/1417/Climate Change 2017/Shared Documents/Attachments/CC4.1/BMOEnvironmentalPolicy_April2016.pdf	
In voluntary communications	Complete	Statement on Climate	https://www.cdp.net/sites/2017/17/1417/Climate Change 2017/Shared	

Publication	Status	Page/Section reference	Attach the document	Comment
ns		Change - page 1	Documents/Attachments/CC4.1/BMOClimateChangeMarch2016.pdf	
In voluntary communications	Complete	Corporate Governance Guidelines, BMO Global Asset Management - pages 19-20	https://www.cdp.net/sites/2017/17/1417/Climate Change 2017/Shared Documents/Attachments/CC4.1/Corporate Governance Guidelines - January 2016 Final.pdf	
In voluntary communications	Complete	Responsible investment: public policy, BMO Global Asset Management - page 2	https://www.cdp.net/sites/2017/17/1417/Climate Change 2017/Shared Documents/Attachments/CC4.1/Responsible Investing Public Policy Q4 2016.pdf	
In voluntary communications	Complete	2016 Responsible Investment Annual Report, BMO Global Asset Management - pages 3-11, 16-17, 19	https://www.cdp.net/sites/2017/17/1417/Climate Change 2017/Shared Documents/Attachments/CC4.1/Responsible Investment Annual Report 2016.pdf	
In voluntary communications	Complete	Responsible Ownership Policy, BMO Global Asset Management - pages 2,4	https://www.cdp.net/sites/2017/17/1417/Climate Change 2017/Shared Documents/Attachments/CC4.1/Responsible Ownership Policy December 2015.pdf	
In voluntary communications	Underway - previous year attached	Operational (ECO5) Summary Report 2015 - pages 1-2	https://www.cdp.net/sites/2017/17/1417/Climate Change 2017/Shared Documents/Attachments/CC4.1/Operational (ECO5) Summary Report - F2015 Data.docx	F2016 data to be posted on bmo.com in late June, 2017. Updated information will be available via the following URL once posted: https://www.bmo.com/home/about/banking/corporate-responsibility/environment/environmental-

Publication	Status	Page/Section reference	Attach the document	Comment
				performance#eco5summary

Further Information

Module: Risks and Opportunities

Page: CC5. Climate Change Risks

CC5.1

Have you identified any inherent climate change risks that have the potential to generate a substantive change in your business operations, revenue or expenditure? Tick all that apply

- Risks driven by changes in regulation
- Risks driven by changes in physical climate parameters
- Risks driven by changes in other climate-related developments

CC5.1a

Please describe your inherent risks that are driven by changes in regulation

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
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Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Fuel/energy taxes and regulations	Increases in fuel/energy taxes and regulations in North America, where we are primarily based. How this could affect BMO specifically: Such increases may result in additional operating costs for the use of electricity and/or natural gas as consumed in our real estate premises occupied.	Increased operational cost	1 to 3 years	Direct	Likely	Low	This could result in increases to our overall fuel costs and impact our overall operating costs. Our fiscal year 2016 energy costs were slightly less than \$70 million. In the event of increased taxes on energy due to regulation in the range of 5% to 10%, our on-going operating costs could be impacted by up to \$7 million.	We continue to track new fuel/energy taxes and regulations. As any increase in costs resulting from fuel/energy taxes and regulation would increase our operating costs, we continue to actively manage our energy costs on a regular basis. We have implemented some very specific actions to hedge against price escalations and/or initiatives to continually drive down consumption. As an example, in specific areas of North America where opportunities exist, we have entered into bulk fuel/electricity purchase contracts at the wholesale level to insulate the organization against price increases related to operating our facilities. In addition, we continue to concentrate on consumption reduction efforts, focusing on retrofits to building envelope, HVAC systems and lighting, as	From a cost to manage perspective, there is no additional cost/effort required to keep abreast of the potential regulatory changes as this is a function of our current risk management process. We believe that by focusing on both price (costs of fuels/electricity and any associated taxes) and demand (consumption), the product of which is "expense", we will be in a good position to deal with any future regulatory/tax changes.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								a way of reducing our on-going operating costs, as well as emissions. We continue to act on the energy audit reports (commissioned for approximately 33% of our retail facilities in Canada and the United States) and forecast energy consumption/cost savings of between 15% - 20% annually when all recommended actions are completed.	
Carbon taxes	Introduction of / increased regulation around emissions reductions in the form of carbon taxes for our clients operating in emissions intensive industries. How this could affect BMO specifically: Regulation in the form of carbon taxes may increase	Other: impact on credit risk profile	3 to 6 years	Indirect (Client)	More likely than not	Low	We do not typically calculate separately the impact of carbon taxes on our exposures – it is included as one of many factors affecting our assessment of the financial capacity of our clients.	The credit risk arising from potential carbon taxes imposed on our clients is captured within our enterprise wide risk management framework. Specific guidelines related to climate change are applied to transactions with clients operating in emissions-intensive industry sectors. In addition to other factors mentioned earlier, we assess: (a) whether the borrower monitors and reports its greenhouse gas emissions, as well as the extent and quality of	There is zero additional cost to manage this risk as it is within the context of our existing risk management framework.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	these clients' operational costs, which could put financial pressure on their ability to repay loans or meet other financial commitments they have with us and/or the value of our collateral.							such monitoring and reporting; (b) the extent of the borrower's overall greenhouse gas emissions; (c) whether the borrower has a carbon mitigation plan, how it is being implemented and whether its Board of Directors was involved in its development; and (d) the borrower's preparedness to deal with forthcoming regulatory requirements regarding greenhouse gas emissions.	
Product efficiency regulations and standards	Introduction of building regulations concerning energy efficiency. While not currently regulated in North America, there is clearly a move towards a variety of voluntary rating systems such as LEED,	Increased capital cost	1 to 3 years	Direct	More likely than not	Low	As we occupy approximately 20.0 million square feet of real estate, the introduction of building regulations related to energy efficiency could result in additional capital costs for our organization. We estimate	For owned assets, this risk is managed as part of our normal construction/renovation activities and we would incorporate any new standards into the process as and when they are introduced. For leaseholds, the risk is managed by our portfolio management group, responsible for negotiating new leases.	We would expect zero additional costs as any new regulation is likely to be forward looking with the current building stock to be addressed over time.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	BOMABest, Energy Star, etc. How this could affect BMO specifically: As a financial institution occupying office space, future regulation related to energy efficiency in buildings could result in additional capital costs for our organization.						these to be upwards of 3% more than our existing cost base. We view the move to making buildings more efficient as a positive step and while there may be upward pressures on capital costs to build there would also likely be downward pressures on our ongoing operating costs.		

CC5.1b

Please describe your inherent risks that are driven by changes in physical climate parameters

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
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Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Change in mean (average) temperature	Changes in mean (average) temperature (e.g., hotter summers, colder winters) have the potential to impact BMO's operations, which are primarily North American based. How this could affect BMO specifically: Hotter summers and colder winters would result in: • increased energy consumption such as electricity and natural gas in facilities occupied • shorter life-span of heating, ventilation and air conditioning (HVAC) equipment, which could be operating well beyond normal design parameters. This might result in us having to invest in upgrading or replacing the equipment before current projected end-of-life.	Increased operational cost	3 to 6 years	Direct	Very likely	Low	Heating or cooling energy consumption can change by 5% for every degree decrease or increase, respectively, in mean (average) outdoor temperature. For example, a 1 - 3 degree Celsius adverse change in mean outdoor temperature could potentially translate into \$3.5 - \$10.5 million increase in energy-related operating costs. Also, changes in mean temperature could shorten the life-span of HVAC	Over the past couple of years, we have begun to track the weather data for those large urban centres in North America where BMO Financial Group facilities are predominantly located. Actions we have implemented include collecting and analyzing weather data for about 151 and 82 weather stations in Canada and United States, respectively. We source this weather data from Environment Canada and US National Aeronautics and Space Administration (NASA). Weather data includes, but is	The costs associated with tracking changes to average mean temperatures are negligible as it is part of our annual carbon emissions calculations exercise, as performed by in-house resources.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							<p>systems. With a current end of life cycle of 15 - 20 years for HVAC systems, change in mean temperature could translate into a 1.5 – 2.0 year reduction in the useful life of these assets, resulting in an annual cost of approximately 10% for HVAC equipment.</p>	<p>not limited to, minimum, mean, and maximum daily temperatures as well as heating degree days (HDD) and cooling degree days (CDD). An example of our analysis includes the application of weather normalization techniques that are based on statistical processes such as regression analysis. This process allows us to factor out the variations in temperatures or degree days. Weather-normalized utility consumption data is used to manage, benchmark and/or forecast the energy performance and emissions</p>	

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								reductions of BMO's portfolio of facilities.	
Change in temperature extremes	Change in temperature extremes may result in interrupted supply of energy, water, telecommunications and transportation. How this could affect BMO specifically: Interruptions of this nature may result in increased costs to invoke alternate work arrangements (business continuity plans), lost productivity due to disruption to operations and workforce absenteeism. In addition, critical systems in the financial sector (e.g. payment, clearing and settlement systems, ACH) have a high degree of interdependency with critical infrastructure in the energy/ electricity,	Increased operational cost	>6 years	Direct	Likely	Low	We have not modelled the financial implications of this risk but based on current experience, we do not expect them to be material to our financial condition. Financial implications could vary greatly based on geographic locations; cost of energy, as well as the state of our physical infrastructure, including technology.	To manage the risks, all units develop business continuity plans appropriate to the time sensitivity of the activity being performed (e.g. employees working from home, split operations).	The costs associated with these actions are part of our ongoing business continuity planning and are not considered to be incremental.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	telecommunications, information technology, and transportation sectors. Prolonged disruptions of critical infrastructure sectors due to severe weather events or failure to replace aging infrastructure due to economic pressures, combined with rising demand from the increasing concentration of people in major urban centres, point could lead to higher risk. Approximately 99% of BMO's physical real estate occupied is located in North America.								
Change in precipitation pattern	Change in precipitation may result in interrupted supply of energy, water, telecommunications and transportation. How this could affect BMO specifically:	Increased operational cost	>6 years	Direct	Likely	Low	We have not modelled the financial implications of this risk but based on current experience, we do not expect them	Our Business Continuity Management (BCM) team manages this risk by monitoring the trends for precipitation patterns in the	Flood remediation costs could range from \$50k-\$100k per unit depending on the severity of the damage and

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	Interruptions of this nature may result in increased costs to invoke alternate work arrangements (business continuity plans), lost productivity due to disruption to operations and workforce absenteeism. Approximately 99% of BMO's physical real estate occupied is located in North America.						to be material to our financial condition. Financial implications could vary greatly based on geographic locations of facilities occupied.	potentially affected regions. In the event that our facilities are unable to operate, we rely on our wide distribution network as well as alternate delivery channels (online banking, telephone banking) to provide service to our customers. In order to manage the risks at the local level, all business units develop business continuity plans appropriate to the time sensitivity of the activity being performed (e.g. employees working from home, split operations)	could escalate if not addressed right away as mould or decay could be an issue in the future. From a business continuity oversight perspective, there are no additional costs foreseen as this is part of our existing cost structure.
Change in precipitation	Change in precipitation	Increased operational cost	>6 years	Direct	Likely	Low	We have not modelled the	Our Business Continuity	Flood remediation

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
extremes and droughts	<p>extremes and droughts may result in interrupted supply of energy, water, telecommunications and transportation. How this could affect BMO specifically: Interruptions of this nature may result in increased costs to invoke alternate work arrangements (business continuity plans), lost productivity due to disruption to operations and workforce absenteeism. Approximately 99% of BMO's physical real estate occupied is located in North America.</p>						<p>financial implications of this risk but based on current experience, we do not expect it to be material to our financial condition. Modelling the financial implications would seem difficult and inaccurate since changes to precipitation extremes and droughts could vary greatly across the geographies in which our facilities are located.</p>	<p>Management (BCM) team manages this risk by monitoring the trends for precipitation extremes in the potentially affected regions. In the event that our facilities are unable to operate, we rely on our wide distribution network as well as alternate delivery channels (online banking, telephone banking) to provide service to our customers. In order to manage the risks at the local level, all business units develop business continuity plans appropriate to the time sensitivity of the activity being</p>	<p>costs could range from \$50k-\$100k per unit depending on the severity of the damage and could escalate if not addressed right away as mould or decay could be an issue in the future. As a financial institution, our operations are not heavily dependent on water. From a business continuity oversight perspective, there are no additional costs foreseen as this is part of our existing cost structure.</p>

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								performed (e.g. employees working from home, split operations).	
Tropical cyclones (hurricanes and typhoons)	Tropical cyclones may result in interrupted supply of energy, water, telecommunications and transportation. How this could affect BMO specifically: Interruptions of this nature may result in increased costs to invoke alternate work arrangements (business continuity plans), lost productivity due to disruption to operations and workforce absenteeism. This risk would be most prominent for our facilities located in China, and those locations subject to hurricanes in the United States (e.g. Florida, Kansas).	Increased operational cost	>6 years	Direct	Likely	Low	We have not modelled the financial implications of this risk but based on current experience, we do not expect it to be material to our financial condition. We believe we have limited direct exposure to this risk as facilities currently located in areas subject to these conditions are minimal.	Our Business Continuity Management (BCM) team manages this risk by monitoring the trends for extreme weather events in the potentially affected regions. In the event that our facilities are unable to operate, we rely on our wide distribution network as well as alternate delivery channels (online banking, telephone banking) to provide service to our customers. In order to manage the risks at the local level, all	Flood remediation costs could range from \$50k-\$100k and/or additional costs per unit depending on the severity/type of the damage and could escalate if not addressed right away as mould or decay could be an issue in the future. From a business continuity oversight perspective, there are no additional costs foreseen as this is part of

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								business units develop business continuity plans appropriate to the time sensitivity of the activity being performed (e.g. employees working from home, split operations).	our existing cost structure.
Uncertainty of physical risks	Physical risks affecting our suppliers. How this could affect BMO specifically: Physical risks affecting our suppliers could ultimately impact not only our own operations but our provision of products or services to our customers as well, depending on the circumstances. We view the range of impacts as follows: (a) minor delay in service or delivery (e.g. if paper supplies are impacted, internal	Reduction/disruption in production capacity	3 to 6 years	Indirect (Supply chain)	More likely than not	Low	We have not modelled the financial implications of this risk.	With a relatively diverse supply base we would anticipate the ability to move to an alternate provider with relative ease and at cost competitive pricing. For more significant suppliers/partner relationships, where there is perhaps more risk associated with the failure to perform, we classify and manage these vendors as "high risk". We require	This is part of our ongoing supplier governance and business continuity planning and does not represent additional cost to the organization.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	processes and perhaps paper based deliverables to customers could be delayed); (b) supply chain issues resulting in need to switch to alternate supplier which may result in delayed delivery, process workarounds, increased costs and differences in quality of materials (better or worse) and; (c) complete cessation of service or delivery in the short to medium term.							the existence and regular testing of supplier's business contingency plans and also request confirmation of annual testing of the BCP plans as part of our annual attestation exercise. In addition, we also ensure that there are plans in place to deal with disruption of service in the event that the supplier or partner encounters issues.	

CC5.1c

Please describe your inherent risks that are driven by changes in other climate-related developments

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Reputation	<p>Reputational risk associated with climate change may impact us in two areas</p> <ul style="list-style-type: none"> Lending and investing Own operations <p>How this could affect BMO specifically:</p> <ul style="list-style-type: none"> Lending and investing: Our operations are predominantly in North America where comprehensive regulations related to climate change do not currently exist. As a financial institution, some of our clients are in carbon intensive industries. As such, we face reputational risks as NGOs and other stakeholders may scrutinize our role in lending to and investing in industry sectors of this nature. Own operations: BMO occupies 	Other: customer impact, reduced market valuation	3 to 6 years	Direct	Unlikely	Low	<p>It is difficult to accurately quantify the financial impact of reputation risk however we do value our reputation and strive to protect it in all we do.</p>	<p>Lending and investing: BMO has implemented the following actions to manage this risk: specific guidelines related to climate change are applied to transactions with clients operating in emissions intensive industry sectors. In addition to other integrated risk factors, examples of issues we assess include: (a) whether the borrower monitors/reports its greenhouse gas emissions, as well as the extent and quality of such monitoring/reporting; (b) the extent of the borrower's overall greenhouse gas emissions; (c) whether the borrower has a carbon mitigation plan, how it is being implemented and whether its Board of Directors was involved in its development; and (d) the borrower's preparedness to deal with forthcoming regulatory requirements</p>	<p>Lending and investing: These activities have no cost as they are within existing infrastructure and work plans. Own operations: Costs associated with our ISO 14001 EMS certifications and 3rd party verification of our carbon emissions total less than \$75K annually. In addition to the annual capital costs related to on-going conservation efforts, we spend just under \$3 million annually on the purchases of renewable energy certificates (RECs) and high quality voluntary carbon offset credits.</p>

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>approximately 20 million square feet of real estate and therefore has a relatively large operational carbon footprint. We may face reputational risks if we do not proactively take steps towards reducing our emissions from own operations.</p>							<p>regarding greenhouse gas emissions. Own operations: We are committed to reducing the impact of our operations on the environment. Emissions from real estate occupancy (87%) and business transportation by employees' are the main factors. Lack of attention to reducing emissions from own operations may result in reputational risk. To mitigate this risk, we have implemented a robust Environmental Management System and have set/achieved aggressive reduction targets. To support these achievements, we have introduced a number of energy reduction initiatives, such as the upgrading of building infrastructure (e.g., lighting, HVAC, building envelope and control systems). We also achieved enterprise-wide carbon neutrality in August 2010.</p>	

CC5.1d

Please explain why you do not consider your company to be exposed to inherent risks driven by changes in regulation that have the potential to generate a substantive change in your business operations, revenue or expenditure

CC5.1e

Please explain why you do not consider your company to be exposed to inherent risks driven by changes in physical climate parameters that have the potential to generate a substantive change in your business operations, revenue or expenditure

CC5.1f

Please explain why you do not consider your company to be exposed to inherent risks driven by changes in other climate-related developments that have the potential to generate a substantive change in your business operations, revenue or expenditure

Further Information

Page: CC6. Climate Change Opportunities

CC6.1

Have you identified any inherent climate change opportunities that have the potential to generate a substantive change in your business operations, revenue or expenditure? Tick all that apply

- Opportunities driven by changes in regulation
- Opportunities driven by changes in physical climate parameters
- Opportunities driven by changes in other climate-related developments

CC6.1a

Please describe your inherent opportunities that are driven by changes in regulation

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Voluntary agreements	Voluntary standards related to energy efficiency / environment. How this could affect BMO specifically: At BMO, we strive to be a leader in environmental sustainability and choose to lead by example in how we measure, manage and set reduction targets to reduce our environmental impact. It is for this reason that we voluntarily implement the independent, internationally recognized standard - ISO14001:2004 for Environmental	Other: Potential impact is two-fold: Increased employee engagement and positive reputational impact AND reduced operational costs	3 to 6 years	Direct	Very likely	Low-medium	Voluntary agreements/standards support our EMS and enhance our ability to achieve our overall emissions reduction targets (BMO is currently 4 years into a 5 year 10% absolute emissions reduction target). Holding emissions constant a 10% emissions reduction would result in a 10% reduction in energy operating costs over 5 yrs. Based on our current mix of utilities consumption/pricing	BMO has taken action to achieve third-party certification to the ISO 14001 standard for our environmental management systems at four facilities in Canada and the UK. Methods we use to leverage this opportunity include applying lessons-	Total costs associated with our ISO 14001 EMS certifications and third party verification of our carbon emissions are minimal, totalling less than \$75K annually. We also invest approximately \$1.5 MM annually on high quality carbon offsets and

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>Management Systems. Adoption of this standard for a number of our facilities provides evidence of our leadership in taking voluntary action with both employees and external stakeholders. Furthermore, voluntary standards such as LEED (Leadership in Energy and Environmental Design) and BOMA (Building Owners and Managers Association) provide us with the opportunity to make more informed choices when selecting real estate facilities for occupancy. This in turn helps us in reducing energy consumption and the resultant GHG emissions. Our GHG emissions are verified annually by a commercially independent 3rd party and our carbon neutral commitment/achievement is also voluntary.</p>						<p>, a 10% reduction in utilities consumption would translate into savings of between \$6 - \$7 MM CAD over 5 yrs. We estimate that our adoption of voluntary standards will contribute 25%-35% towards our overall reduction target and this equates to a savings of \$1.8 – \$2.5 million over the same 5 year period. LEED/BOMA certified facilities result in more cost effective/energy efficient office space and lower operating costs. Furthermore, as building efficiency standards become more commonplace and the number of buildings certified to these standards increases, the premiums we pay for leases are reduced.</p>	<p>learned to other facilities with the goal of continually improving our environmental performance. As an example, we have applied the principles of ISO 14001 to drive energy reduction initiatives across of additional sites, hence contributing to the achievement of our enterprise-wide emissions reduction targets. BMO has also taken action to adopt elements of</p>	<p>renewable energy certificates. There is zero additional annual cost associated with our procurement practices as the incorporation of standards based procurement for leased or owned facilities is now embedded in our operating practices.</p>

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								<p>LEED and BOMA to improve energy efficiency in our buildings. Methods we use to leveraging 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</p>	

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								are expected to contribute to our current and future absolute emissions reduction goals.	
Cap and trade schemes	Recent legislation enacted by the Ontario government may present opportunity for BMO to operate and partner with companies in carbon trading programs. Carbon pricing schemes are gaining traction as the preferred policy instrument for many governments. As governments regulate emissions and drop caps each year, and businesses limit emissions voluntarily, prices of allowance may increase, thereby increasing the amount of proceeds to be invested in programs to reduce GHGs where there would be opportunities for BMO to partner in these	New products/business services	3 to 6 years	Direct	Likely	Low	New regulations could drive economic incentives or create new markets. This may present opportunities to BMO's business operations. These incentives, new markets and opportunities have yet to be established. The estimated financial impact has not yet been determined.	BMO monitors the development of climate change strategies and carbon pricing mechanisms in provinces (BC, AB, ON and PQ) and states in North America to assess potential business opportunities in carbon trading.	Costs to manage have not yet been determined. Opportunities to BMO on cap and trade programs have not yet been fully developed.

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	programs.								

CC6.1b

Please describe your inherent opportunities that are driven by changes in physical climate parameters

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Other physical climate opportunities	Changes in physical climate parameters. How this could affect BMO specifically: As an organization that occupies mainly office space or smaller scale retail space, we are constantly looking for ways to take advantage of changes in physical climate parameters for our buildings.	Reduced operational costs	Up to 1 year	Direct	Likely	Low	We currently outsource facilities management activities in both Canada and the United States to third party professionals, the costs of which are not for public disclosure. Energy performance for these facilities has been benchmarked and 5 year capital improvement plans are in place to deal with specific actions and initiatives we can undertake to	As we construct and retrofit facilities across the enterprise portfolio we attempt to leverage opportunities related to changes in natural weather elements. A specific example would include retrofitting our buildings to take advantage of "free cooling". Specifically we bring lower temperature outside air into the facility to relieve the electricity	Costs associated with these energy upgrade opportunities can amount to significant dollars (e.g. \$2 - \$4 million annually), dependent on the scope and volume of projects. We typically observe energy savings in the range of 15% - 20%, again dependent on the scope of the specific initiative. As we are continually focused on reducing on-going operating

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							leverage on-going energy related operating cost reduction opportunities.	demand to cool indoor air (via base building chillers) and reduce operating costs. We also see more conventional building retrofits as ongoing opportunities to take advantage of changing conditions. In our office towers and other critical facilities (operations centres) we specifically take action to assess building infrastructure to identify opportunities to upgrade equipment, retrofit for improved efficiency, and refine operating processes to reduce our costs and overall emissions impacts. In certain geographic areas where we operate, that may	costs, these activities form part of our existing infrastructure so no significant additional costs are required.

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								experience extreme changes in physical climate parameters; we have entered into bulk energy purchase agreements, at the wholesale level, to proactively manage our costs in the face of rising fuel costs. The costs associated with these actions are part of our on-going energy management focus and are not considered to be incremental.	

CC6.1c

Please describe your inherent opportunities that are driven by changes in other climate-related developments

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Other drivers	Employee engagement. How	Other: Committed	Up to 1 year	Direct	Likely	Low-medium	BMO's actions with respect to	BMO has leveraged this	The annual operating budget

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>this could affect BMO specifically: BMO's action relative to climate change and its on-going commitment to absolute carbon footprint reductions and carbon neutrality has had a positive impact on employee engagement. Our on-going focus on energy efficiency initiatives (consumption reduction), investment in renewable energy and purchase of carbon offset credits is the underlying strategy supporting our carbon neutral achievement. We believe that our actions in this regard contribute to attracting new employees to the organization and retention of existing employees.</p>	and engaged workforce					<p>climate change help foster employee engagement. Our HR group has provided feedback that new recruits are increasingly looking at the sustainability values of organizations when investigating their employment options. While a direct correlation to retention is not quantifiable, our ability to retain employees provides benefits to the organization which may include intellectual capital retention and hiring/training cost avoidance.</p>	<p>opportunity by taking action to introduce a number of programs to raise awareness amongst employees and engage them in climate change activities. Examples include: - Corporate intranet site specifically focused on BMO's environmental sustainability activities - Environmental ambassadors program where employees volunteer to assist the environmental sustainability group to roll out tactical initiatives and provide feedback from the field - Introduction of electronic pay advices for employees allowing them to opt out of paper statements -</p>	<p>for the Environmental Sustainability group includes the costs associated with activities to raise employee awareness and the management of our carbon neutrality commitment; these costs are approximately \$200k annually inclusive of salary and benefits. The costs of purchasing renewable energy and carbon offsets annually range from \$2 - \$3 million. Environmental Ambassadors are volunteers and there are zero additional costs for their efforts.</p>

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								<p>Public transit pass program in select cities which encourage the avoidance of transportation emissions - Climate change information contained within our Annual Report, Sustainability Report, Corporate Responsibility Report and external website. Carbon Neutrality has been achieved through a primary focus on consumption reduction activities, investments in renewable energy and the purchase of high quality carbon offset credits to fill the remaining gap. The Environmental Sustainability group within BMO has oversight for this program.</p>	

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Reputation	Demonstrating leadership by example. How this could affect BMO specifically: BMO attempts to maximize shareholder return and balance our commitments to financial performance, our customers, our employees, the environment and the communities where we live and work. We believe that our efforts to lead by example in measuring, managing, setting reductions to reduce our carbon impacts as well as being transparent about our climate change policies and practices, has positive impact on our reputation with customers and broader stakeholders.	Increased stock price (market valuation)	Up to 1 year	Direct	Likely	Low	It is difficult to quantify the financial impacts of our climate change and carbon management activities from a reputational perspective as there are clearly other factors that impact our share price. If our actions resonate with stakeholders and customers, this positive reputational impact could result in new customer attraction and contribute to increased revenues.	We transparently report our progress internally to personnel and externally to customers, shareholders and other stakeholders via medium such as CDP, our Annual Report, Sustainability Performance Report, Corporate Responsibility Report, external website and regular news releases as appropriate.	There are costs associated with our climate change activities and carbon management strategy however the marginal costs of these activities are not considered significant and now form part of our annual operating budget.
Changing consumer	Providing sustainability	Other: Customer	Up to 1 year	Indirect (Client)	Likely	Low	It is difficult to quantify the	By providing information on our	Costs are negligible to

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
behavior	tips/information to customers to create awareness and influence change. How this could affect BMO specifically: BMO attempts to lead by example and provide meaningful information to our customers in this regard. As well our efforts may serve to mobilize customers in taking action to reduce their own impact on the environment, and perhaps enhance their loyalty to our organization.	attraction and loyalty					financial impacts of these actions from a customer attraction and loyalty perspective as there are a variety of other factors (e.g. cost of services, service offering, distribution channels, etc.) that could potentially contribute. If our actions resonate with customers, this could result in increased enhanced loyalty or perhaps the attraction of new customers.	website, we potentially influence the decisions made by our customers (e.g. tips to green your home and tips to reduce cost of living) which could result in enhanced customer loyalty to BMO.	gather and post awareness materials on our site as the infrastructure (website) exists and information gathering and posting is part of the current role for groups (e.g. Environmental Sustainability) within the organization.

CC6.1d

Please explain why you do not consider your company to be exposed to inherent opportunities driven by changes in regulation that have the potential to generate a substantive change in your business operations, revenue or expenditure

CC6.1e

Please explain why you do not consider your company to be exposed to inherent opportunities driven by changes in physical climate parameters that have the potential to generate a substantive change in your business operations, revenue or expenditure

CC6.1f

Please explain why you do not consider your company to be exposed to inherent opportunities driven by changes in other climate-related developments that have the potential to generate a substantive change in your business operations, revenue or expenditure

Further Information

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading

Page: CC7. Emissions Methodology

CC7.1

Please provide your base year and base year emissions (Scopes 1 and 2)

Scope	Base year	Base year emissions (metric tonnes CO2e)
Scope 1	Tue 01 Nov 2011 - Wed 31 Oct 2012	20932.55

Scope	Base year	Base year emissions (metric tonnes CO2e)
Scope 2 (location-based)	Tue 01 Nov 2011 - Wed 31 Oct 2012	86853.06
Scope 2 (market-based)	Tue 01 Nov 2011 - Wed 31 Oct 2012	86853.06

CC7.2

Please give the name of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions

Please select the published methodologies that you use

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
ISO 14064-1

CC7.2a

If you have selected "Other" in CC7.2 please provide details of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions

Not applicable - "Other" not selected in CC7.2

CC7.3

Please give the source for the global warming potentials you have used

Gas	Reference
CO2	IPCC Fourth Assessment Report (AR4 - 100 year)
CH4	IPCC Fourth Assessment Report (AR4 - 100 year)
N2O	IPCC Fourth Assessment Report (AR4 - 100 year)
HFCs	IPCC Fourth Assessment Report (AR4 - 100 year)

CC7.4

Please give the emissions factors you have applied and their origin; alternatively, please attach an Excel spreadsheet with this data at the bottom of this page

Fuel/Material/Energy	Emission Factor	Unit	Reference
Natural gas	0.05063	metric tonnes CO2e per GJ	GHG Protocol Stationary Combustion (2010) 2006
Distillate fuel oil No 1	0.07080	metric tonnes CO2e per GJ	GHG Protocol Stationary Combustion (2010) 2006
Distillate fuel oil No 2	0.07394	metric tonnes CO2e per GJ	GHG Protocol Facilities - 2000
Steam	0.14925	metric tonnes CO2e per metric tonne	CANMET Energy Diversification Laboratory - 2000
Motor gasoline	0.00229	metric tonnes CO2e per liter	GHG Protocol Mobile (2013) 2013
Jet kerosene	0.00252	metric tonnes CO2e per liter	GHG Protocol Mobile - 2013
Other: HFC-410A	1725	metric tonnes CO2e per metric tonne	IPCC - 2000

Fuel/Material/Energy	Emission Factor	Unit	Reference
Other: HFC-134a	1430	metric tonnes CO2e per metric tonne	IPCC - 2000
Propane	0.06009	metric tonnes CO2e per GJ	GHG Protocol Facilities - 2000
Electricity	798.9019	kg CO2e per MWh	Australia IEA (2014) 2012
Electricity	642.7741	kg CO2e per MWh	Barbados IEA (2014) 2012
Electricity	98.1739	kg CO2e per MWh	Brazil IEA (2014) 2012
Electricity	734.2853	kg CO2e per MWh	China IEA (2014) 2012
Electricity	69.2542	kg CO2e per MWh	France IEA (2014) 2012
Electricity	475.4081	kg CO2e per MWh	Germany IEA (2014) 2012
Electricity	748.5114	kg CO2e per MWh	Gibraltar IEA (2014) 2012
Electricity	926.098	kg CO2e per MWh	India IEA (2014) 2012
Electricity	456.5836	kg CO2e per MWh	Ireland IEA (2014) 2012
Electricity	340.3408	kg CO2e per MWh	Luxembourg IEA (2014) 2012
Electricity	453.4445	kg CO2e per MWh	Mexico IEA (2014) 2012
Electricity	440.6966	kg CO2e per MWh	Netherlands IEA (2014) 2012
Electricity	363.9591	kg CO2e per MWh	Portugal IEA (2014) 2012
Electricity	472.4789	kg CO2e per MWh	Singapore IEA (2014) 2012
Electricity	12.3579	kg CO2e per MWh	Sweden IEA (2014) 2012
Electricity	28.0363	kg CO2e per MWh	Switzerland IEA (2014) 2012
Electricity	597.2759	kg CO2e per MWh	United Arab Emirates IEA (2014) 2012
Electricity	479.4783	kg CO2e per MWh	United Kingdom IEA (2014) 2012
Electricity	796.9600	kg CO2e per MWh	Canada Alberta EC (2017) 2015
Electricity	12.8836	kg CO2e per MWh	Canada British Columbia EC (2017) 2015
Electricity	3.3373	kg CO2e per MWh	Canada Manitoba EC (2017) 2015
Electricity	281.9900	kg CO2e per MWh	Canada New Brunswick EC (2017) 2015
Electricity	32.3105	kg CO2e per MWh	Canada Newfoundland EC (2017) 2015
Electricity	385.4000	kg CO2e per MWh	Canada Northwest Territories EC (2017) 2015
Electricity	603.4800	kg CO2e per MWh	Canada Nova Scotia EC (2017) 2015
Electricity	720.0000	kg CO2e per MWh	Canada Nunavut EC (2017) 2015
Electricity	40.5480	kg CO2e per MWh	Canada Ontario EC (2017) 2015

Fuel/Material/Energy	Emission Factor	Unit	Reference
Electricity	281.9900	kg CO2e per MWh	Canada Prince Edward Island EC (2017) 2015
Electricity	1.1298	kg CO2e per MWh	Canada Quebec EC (2017) 2015
Electricity	666.9600	kg CO2e per MWh	Canada Saskatchewan EC (2017) 2015
Electricity	42.0300	kg CO2e per MWh	Canada Yukon EC (2017) 2015
Electricity	421.7665	kg CO2e per MWh	United States of America (eGrid AKGD) US EPA (2017) 2014
Electricity	309.8882	kg CO2e per MWh	United States of America (eGrid AKMS) US EPA (2017) 2014
Electricity	399.1726	kg CO2e per MWh	United States of America (eGrid AZNM) US EPA (2017) 2014
Electricity	258.8533	kg CO2e per MWh	United States of America (eGrid CAMX) US EPA (2017) 2014
Electricity	520.8348	kg CO2e per MWh	United States of America (eGrid ERCT) US EPA (2017) 2014
Electricity	490.3214	kg CO2e per MWh	United States of America (eGrid FRCC) US EPA (2017) 2014
Electricity	429.8810	kg CO2e per MWh	United States of America (eGrid HIMS) US EPA (2017) 2014
Electricity	676.1743	kg CO2e per MWh	United States of America (eGrid HIOA) US EPA (2017) 2014
Electricity	760.6543	kg CO2e per MWh	United States of America (eGrid MROE) US EPA (2017) 2014
Electricity	624.1882	kg CO2e per MWh	United States of America (eGrid MROW) US EPA (2017) 2014
Electricity	261.7585	kg CO2e per MWh	United States of America (eGrid NEWE) US EPA (2017) 2014
Electricity	414.4211	kg CO2e per MWh	United States of America (eGrid NWPP) US EPA (2017) 2014
Electricity	302.5461	kg CO2e per MWh	United States of America (eGrid NYCW) US EPA (2017) 2014
Electricity	546.4183	kg CO2e per MWh	United States of America (eGrid NYLI) US EPA (2017) 2014
Electricity	166.7918	kg CO2e per MWh	United States of America (eGrid NYUP) US EPA (2017) 2014

Fuel/Material/Energy	Emission Factor	Unit	Reference
Electricity	378.5850	kg CO2e per MWh	United States of America (eGrid RFCE) US EPA (2017) 2014
Electricity	699.8950	kg CO2e per MWh	United States of America (eGrid RFCM) US EPA (2017) 2014
Electricity	631.0395	kg CO2e per MWh	United States of America (eGrid RFCW) US EPA (2017) 2014
Electricity	793.7060	kg CO2e per MWh	United States of America (eGrid RMPA) US EPA (2017) 2014
Electricity	719.7831	kg CO2e per MWh	United States of America (eGrid SPNO) US EPA (2017) 2014
Electricity	673.6325	kg CO2e per MWh	United States of America (eGrid SPSO) US EPA (2017) 2014
Electricity	465.9729	kg CO2e per MWh	United States of America (eGrid SRMV) US EPA (2017) 2014
Electricity	810.2408	kg CO2e per MWh	United States of America (eGrid SRMW) US EPA (2017) 2014
Electricity	522.0756	kg CO2e per MWh	United States of America (eGrid SRSO) US EPA (2017) 2014
Electricity	610.4277	kg CO2e per MWh	United States of America (eGrid SRTV) US EPA (2017) 2014
Electricity	391.4869	kg CO2e per MWh	United States of America (eGrid SRVC) US EPA (2017) 2014
Electricity	385.0408	kg CO2e per MWh	Italy IEA (2014) 2012
Electricity	305.3554	kg CO2e per MWh	Spain IEA (2014) 2012

Further Information

Page: CC8. Emissions Data - (1 Nov 2015 - 31 Oct 2016)

CC8.1

Please select the boundary you are using for your Scope 1 and 2 greenhouse gas inventory

Financial control

CC8.2

Please provide your gross global Scope 1 emissions figures in metric tonnes CO2e

19310.58

CC8.3

Please describe your approach to reporting Scope 2 emissions

Scope 2, location-based	Scope 2, market-based	Comment
We are reporting a Scope 2, location-based figure	We are reporting a Scope 2, market-based figure	

CC8.3a

Please provide your gross global Scope 2 emissions figures in metric tonnes CO2e

Scope 2, location-based	Scope 2, market-based (if applicable)	Comment
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Scope 2, location-based	Scope 2, market-based (if applicable)	Comment
63056.75	3504.24	

CC8.4

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

CC8.4a

Please provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure

Source	Relevance of Scope 1 emissions from this source	Relevance of location-based Scope 2 emissions from this source	Relevance of market-based Scope 2 emissions from this source (if applicable)	Explain why the source is excluded

CC8.5

Please estimate the level of uncertainty of the total gross global Scope 1 and 2 emissions figures that you have supplied and specify the sources of uncertainty in your data gathering, handling and calculations

Scope	Uncertainty range	Main sources of uncertainty	Please expand on the uncertainty in your data
Scope 1	Less than or equal to 2%	Data Gaps Metering/ Measurement Constraints Data Management	<p>We consider the main sources of uncertainty with respect to our data as follows: Data Gaps & Metering/Measurement Constraints: Completeness/Accuracy – we still estimate a small percentage of our Scope 1 emissions due to the lack of available data (data gaps & metering/measurement constraints). Consumption data for facilities is gathered from a centralized energy and utility bill tracking software that has the robust capability to generate consumption reports, verify bills, spot errors, and track issues related to BMO's energy information. Data estimates for facilities with missing utility data are performed using the actual average energy use intensity (EUI)—measured in annual energy use per floor area—of similar facilities in the same geographical location. The use of average EUIs for data estimates provides accurate calculation of energy use and mitigates potential deviation of estimates from the mean. Monthly missing data or gaps in utility consumption are filled in using utility meter readings or average consumption of adjacent months, trend lines of historical usage, weather-adjusted consumption of previous year's data, and other sound methodologies. Consumption data for Scope 1 transportation equipment emissions is gathered internally by BMO personnel or supplied by our preferred vendors, managing these elements on our behalf. Data handling: Collection and transposition of data from original utility invoices to energy recording systems and/or consolidation spreadsheets also introduces the risk of error. Segregation of duties exists for input/output audit checking both by our Facilities Management providers as well as information gathered internally. Once captured in the various source systems, we mitigate transposition risk when uploading to the GHG:ID tool's Data Collection Form, by using automated methods to perform the data loading activities and use check totals, comparing before and after. When Data Collection Forms are further uploaded to the GHG:ID database, further data integrity checks are completed (facility counts, record counts and consumption total checks) to ensure that the data has been loaded consistently from one program to another. Finally, our Scope 1 emissions are verified annually by a commercially independent 3rd party who has provided BMO with a positive assurance verification statement.</p>
Scope 2 (location-based)	Less than or equal to 2%	Data Gaps Metering/ Measurement Constraints Data Management	<p>We consider the main sources of uncertainty with respect to our data as follows: Data Gaps & Metering/Measurement Constraints: Completeness/Accuracy – we still estimate a small percentage of our Scope 2 emissions due to the lack of available data (data gaps & metering/measurement constraints). Consumption data for facilities is gathered from a centralized energy and utility bill tracking software that has the robust capability to generate consumption reports, verify bills, spot errors, and track issues related to BMO's energy information. Data estimates for facilities with missing utility data are performed using the actual average energy use intensity (EUI)—measured in annual energy use per floor area—of similar facilities in the same geographical location. The use of average EUIs for data estimates provides accurate calculation of energy use and mitigates potential deviation of estimates from the mean. Monthly missing data or gaps in utility consumption are filled in using utility meter readings or average consumption of adjacent months, trend lines of historical usage, weather-adjusted consumption of previous year's data, and other sound methodologies. Data handling: Collection and transposition of data from original utility</p>

Scope	Uncertainty range	Main sources of uncertainty	Please expand on the uncertainty in your data
			<p>invoices to energy recording systems and/or consolidation spreadsheets also introduces the risk of error. Segregation of duties exists for input/output audit checking both by our Facilities Management providers as well as information gathered internally. Once captured in the various source systems, we mitigate transposition risk when uploading to the GHG:ID tool's Data Collection Form, by using automated methods to perform the data loading activities and use check totals, comparing before and after. When Data Collection Forms are further uploaded to the GHG:ID database, further data integrity checks are completed (facility counts, record counts and consumption total checks) to ensure that the data has been loaded consistently from one program to another. Finally, our Scope 2 (location based) emissions are verified annually by a commercially independent 3rd party who has provided BMO with a positive assurance verification statement.</p>
Scope 2 (market-based)	Less than or equal to 2%	Assumptions	<p>While Scope 2 (market based) emissions are somewhat dependent on the Scope 2 (location based) calculations, we have included only those elements that are pertinent specifically to the market based calculations. While we believe that our interpretation of the guidance documentation for Market Based Scope 2 emissions is sound, there is perhaps a low level of risk associated with our understanding. We believe that we have mitigated this risk by engaging the services of a 3rd party expert to provide us with the appropriate consultative guidance to properly reflect this data. For F2016, our market based scope 2 emissions have also been verified (positive assurance) by a commercially independent 3rd party who has provided BMO with a positive assurance verification statement.</p>

CC8.6

Please indicate the verification/assurance status that applies to your reported Scope 1 emissions

Third party verification or assurance process in place

CC8.6a

Please provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements

Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/section reference	Relevant standard	Proportion of reported Scope 1 emissions verified (%)
Annual process	Complete	Reasonable assurance	https://www.cdp.net/sites/2017/17/1417/Climate Change 2017/Shared Documents/Attachments/CC8.6a/BMO Emissions Verification Statement FY2016 (Morrison Hershfield).pdf	Page 1 & 2	ISO14064-3	100

CC8.6b

Please provide further details of the regulatory regime to which you are complying that specifies the use of Continuous Emission Monitoring Systems (CEMS)

Regulation	% of emissions covered by the system	Compliance period	Evidence of submission

CC8.7

Please indicate the verification/assurance status that applies to at least one of your reported Scope 2 emissions figures

Third party verification or assurance process in place

CC8.7a

Please provide further details of the verification/assurance undertaken for your location-based and/or market-based Scope 2 emissions, and attach the relevant statements

Location-based or market-based figure?	Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/Section reference	Relevant standard	Proportion of reported Scope 2 emissions verified (%)
Location-based	Annual process	Complete	Reasonable assurance	https://www.cdp.net/sites/2017/17/1417/Climate Change 2017/Shared Documents/Attachments/CC8.7a/BMO Emissions Verification Statement FY2016 (Morrison Hershfield).pdf	Page 1 & 2	ISO14064-3	100
Market-based	Annual process	Complete	Reasonable assurance	https://www.cdp.net/sites/2017/17/1417/Climate Change 2017/Shared Documents/Attachments/CC8.7a/BMO Emissions Verification Statement FY2016 (Morrison Hershfield).pdf	Page 1 & 2	ISO14064-3	100

CC8.8

Please identify if any data points have been verified as part of the third party verification work undertaken, other than the verification of emissions figures reported in CC8.6, CC8.7 and CC14.2

Additional data points verified	Comment
No additional data verified	Absolute emissions as at year end for Scopes 1+2+3 only - no additional data points.

CC8.9

Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization?

No

CC8.9a

Please provide the emissions from biologically sequestered carbon relevant to your organization in metric tonnes CO2

Further Information

Page: CC9. Scope 1 Emissions Breakdown - (1 Nov 2015 - 31 Oct 2016)

CC9.1

Do you have Scope 1 emissions sources in more than one country?

Yes

CC9.1a

Please break down your total gross global Scope 1 emissions by country/region

Country/Region	Scope 1 metric tonnes CO2e
Canada	10368.71
United States of America	8941.87

CC9.2

Please indicate which other Scope 1 emissions breakdowns you are able to provide (tick all that apply)

- By business division
- By facility
- By GHG type
- By activity

CC9.2a

Please break down your total gross global Scope 1 emissions by business division

Business division	Scope 1 emissions (metric tonnes CO2e)
BMO Bank of Montreal	10368.71
BMO Harris Bank	8941.87

CC9.2b

Please break down your total gross global Scope 1 emissions by facility

Facility	Scope 1 emissions (metric tonnes CO2e)	Latitude	Longitude
Retail Facilities (Branches, ATMs)	10688.26	90	-180
Office Facilities	3385.74	90	-180

Facility	Scope 1 emissions (metric tonnes CO2e)	Latitude	Longitude
Special Purpose Facilities (Operations Centres, Data Centres, Learning Centres)	2901.92	90	-180
Transportation Equipment	2334.66	90	-180

CC9.2c

Please break down your total gross global Scope 1 emissions by GHG type

GHG type	Scope 1 emissions (metric tonnes CO2e)
CO2	18648.45
CH4	40.16
N2O	28.60
HFCs	593.38

CC9.2d

Please break down your total gross global Scope 1 emissions by activity

Activity	Scope 1 emissions (metric tonnes CO2e)
Stationary combustion (facilities)	16382.54

Activity	Scope 1 emissions (metric tonnes CO2e)
Mobile combustion (transport)	2334.66
Fugitive emissions (HFCs - facilities)	593.38

Further Information

Page: CC10. Scope 2 Emissions Breakdown - (1 Nov 2015 - 31 Oct 2016)

CC10.1

Do you have Scope 2 emissions sources in more than one country?

Yes

CC10.1a

Please break down your total gross global Scope 2 emissions and energy consumption by country/region

Country/Region	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low carbon electricity, heat, steam or cooling accounted in market-based approach (MWh)
Canada	8609.87	3504.24	129767.72	29216.00
United States of America	54446.88	0.00	85922.56	91400.00

CC10.2

Please indicate which other Scope 2 emissions breakdowns you are able to provide (tick all that apply)

By business division
By facility
By activity

CC10.2a

Please break down your total gross global Scope 2 emissions by business division

Business division	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)
BMO Bank of Montreal	8609.87	3504.24
BMO Harris Bank	54446.88	0

CC10.2b

Please break down your total gross global Scope 2 emissions by facility

Facility	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)
Retail Facilities (Branches, ATMs)	43050.61	135.54

Facility	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)
Office Facilities	8943.81	641.83
Special Purpose Facilities (Operations Centres, Data Centres, Learning Centres)	11062.34	2726.87

CC10.2c

Please break down your total gross global Scope 2 emissions by activity

Activity	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)
Stationary combustion (facilities)	63056.75	3504.24

Further Information

Page: **CC11. Energy**

CC11.1

What percentage of your total operational spend in the reporting year was on energy?

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

CC11.2

Please state how much heat, steam, and cooling in MWh your organization has purchased and consumed during the reporting year

Energy type	MWh
Heat	0.00
Steam	5703.35
Cooling	0.00

CC11.3

Please state how much fuel in MWh your organization has consumed (for energy purposes) during the reporting year

96863.13

CC11.3a

Please complete the table by breaking down the total "Fuel" figure entered above by fuel type

Fuels	MWh
Natural gas	81274.43
Distillate fuel oil No 1	4544.16
Distillate fuel oil No 2	1529.55
Propane	16.79
Jet kerosene	2847.78
Motor gasoline	6650.41

CC11.4

Please provide details of the electricity, heat, steam or cooling amounts that were accounted at a low carbon emission factor in the market-based Scope 2 figure reported in CC8.3a

Basis for applying a low carbon emission factor	MWh consumed associated with low carbon electricity, heat, steam or cooling	Emissions factor (in units of metric tonnes CO2e per MWh)	Comment
Energy attribute certificates, Renewable Energy Certificates (RECs)	91400	0.00	In the United States, BMO has purchased renewable energy certificates for the last 7 years. The 91,400 MWh amount quoted is our annual purchase for FY2016, applicable to Scope 2 emissions.
Other	29216	0.00	In Canada, BMO has purchased renewable energy certificates for the last 9 years. RECs instruments comply with the Scope 2 Quality Criteria of the GHG Protocol Scope 2 guidance of 2015. The 29,216 MWh amount quoted is our annual purchase for FY2016, applicable to Scope 2 emissions.

CC11.5

Please report how much electricity you produce in MWh, and how much electricity you consume in MWh

Total electricity consumed (MWh)	Consumed electricity that is purchased (MWh)	Total electricity produced (MWh)	Total renewable electricity produced (MWh)	Consumed renewable electricity that is produced by company (MWh)	Comment
209986.93	209986.93	0.00	0.00	0.00	BMO purchases all electricity consumed, none produced internally.

Further Information

Outstanding - check guidance for question 11.2 to ensure completed correctly.

Page: CC12. Emissions Performance

CC12.1

How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to the previous year?

Decreased

CC12.1a

Please 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

Reason	Emissions value (percentage)	Direction of change	Please explain and include calculation
Emissions reduction activities	6.18	Decrease	Real estate facilities related emissions reduction initiatives focused primarily on programmatic activities including upgrades to HVAC equipment and controls, lighting/signage, building envelope (such as windows and roofs), and automation systems. In FY2016, we reduced our emissions by 5,732 tCO ₂ e, as a result of emissions reduction projects. Our total Scope 1 and Scope 2 emissions in the previous year was 92,682 tCO ₂ e, resulting in a decrease of 6.18% (i.e., $5,732/92,682 \times 100\% = 6.18\%$).
Divestment	0.00	No change	
Acquisitions	0.00	No change	
Mergers	0.00	No change	
Change in output	2.25	Decrease	The net decrease reported reflects the impacts of owned facilities occupied for the full year in FY2015 and vacated in FY2016, as well as those owned facilities that were not in our inventory in FY2015 and occupied in FY2016. We consider this organic reduction. In FY2016, we reduced our emissions by 2,082 tCO ₂ e, as a result of changes in output. Our total Scope 1 and Scope 2 emissions in the previous year was 92,682 tCO ₂ e,

Reason	Emissions value (percentage)	Direction of change	Please explain and include calculation
			resulting in a decrease of 2.25% (i.e., $2,082/92,682 \times 100\% = 2.25\%$).
Change in methodology	0.34	Increase	This slight increase represents the net impact resulting from changes in provincial emissions factors for electricity in Canada, Emissions & Generation Resource Integrated Database (eGRID) emissions factors for electricity in the US, and global warming potentials (GWPs). CDP 2017 submission (fiscal 2016 data) references (a) Environment Canada's 2017 published Provincial electricity emissions factors (as at 2015); (b) U.S. Environmental Protection Agency's 2017 published eGRID (as at 2014); and (c) United Nations Intergovernmental Panel on Climate Change (IPCC)'s Fourth Assessment Report on GWPs for 100-year time horizon. We have isolated the impacts of the change in emissions factors as a contributing factor for the overall change in electricity emissions related to owned facilities (Scope 2). Overall, the weighted average of emission factors for owned facilities showed a slight upward trend in FY2016. In other words, there are more owned facilities located in areas (such as Ontario, Illinois, and Wisconsin) where emission factors increased. In FY2016, we increased our emissions by 312 tCO ₂ e, as a net result of changes in methodology or emissions factors. Our total Scope 1 and Scope 2 emissions in the previous year was 92,682 tCO ₂ e, resulting in an increase of 0.34% (i.e., $312/92,682 \times 100\% = 0.34\%$).
Change in boundary	0.00	No change	
Change in physical operating conditions	3.03	Decrease	Weather adjusted energy use (and its associated emissions) is the energy that the building portfolio would have used in the current fiscal year (FY2016) under the same weather conditions as the previous year (FY2015). On average for representative BMO locations or weather stations, heating degree days decreased by about 24.0% and cooling degree days increased by about 24.3% from FY2015 to FY2016. Generally, this leads to expected increase in electricity consumption during summer months and decrease in heating fuel (including electric heat) during the winter months. Statistical process or analysis tool was used to factor out the variations in degree days and adjust the weather sensitive component of the energy use of facilities under Scope 1 and Scope 2. As an overall effect in FY2016, our emissions decreased by 2,812 tCO ₂ e, as a net result of changes in degree days (physical operating conditions). Our total Scope 1 and Scope 2 emissions in the previous year was 92,682 tCO ₂ e, resulting in a decrease of 3.03% (i.e., $2,812/92,682 \times 100\% = 3.03\%$).
Unidentified	0.00	No change	
Other	0.00	No change	

Is your emissions performance calculations in CC12.1 and CC12.1a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Location-based

CC12.2

Please describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tonnes CO2e per unit currency total revenue

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator: Unit total revenue	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
0.0000032028	metric tonnes CO2e	25717000000	Location-based	17.81	Decrease	Revenues increased 8.13% in FY2016 versus FY2015. Absolute location based emissions (tCO2e - Scope 1 & Scope 2) decreased by 11.13% over the same period. Emissions reduction activities have contributed to the decrease in total Scope 1 & Scope 2 emissions. For this metric, we have used gross revenues reported and actual location based emissions reported, year over year. While this information has been provided, as requested, we don't believe that this is the most relevant indicator. We consider the relativity measures of tCO2e per employee and tCO2e per m2 of premises occupied (see CC12.3 below) as more meaningful.

CC12.3

Please provide any additional intensity (normalized) metrics that are appropriate to your business operations

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator	Metric denominator: Unit total	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
1.82092	metric tonnes CO2e	full time equivalent (FTE) employee	45234	Location-based	8.93	Decrease	Number of employees decreased by 1,119 or 2.41% (FY2016 vs. FY2015), while absolute emissions (tCO2e - Scope 1 & Scope 2 (location based)) decreased by 10,314 or 11.13% over the same period. Emissions reduction activities have contributed to the decrease in total Scope 1 & Scope 2 emissions as have lower emissions factors, offset somewhat by weather impacts. Net result is an 8.93% decrease in this metric for FY2016 vs. FY2015.
0.08695	metric tonnes CO2e	square meter	1750838	Location-based	8.27	Decrease	Square meters of real estate occupied decreased by 25,033 or 1.41% (m2 - FY2016 vs. FY2015), while facilities related emissions (tCO2e - Scope 1, Scope 2 & Scope 3) decreased 16,099.24 or 9.56% over the same period. Emissions reduction activities have contributed to the decrease in total Scope 1 & Scope 2 & Scope 3 emissions. The facilities related emissions have not been normalized for weather nor emissions factors changes for the purposes of this calculation. Net result is a decrease of 8.27% in this metric for FY2016 vs. FY2015. Note that for the purposes of this metric, Scope 1, Scope 2 (location based) & Scope 3 facilities related emissions have been included.

Further Information

Page: CC13. Emissions Trading

CC13.1

Do you participate in any emissions trading schemes?

No, and we do not currently anticipate doing so in the next 2 years

CC13.1a

Please complete the following table for each of the emission trading schemes in which you participate

Scheme name	Period for which data is supplied	Allowances allocated	Allowances purchased	Verified emissions in metric tonnes CO2e	Details of ownership

CC13.1b

What is your strategy for complying with the schemes in which you participate or anticipate participating?

CC13.2

Has your organization originated any project-based carbon credits or purchased any within the reporting period?

Yes

CC13.2a

Please provide details on the project-based carbon credits originated or purchased by your organization in the reporting period

Credit origination or credit purchase	Project type	Project identification	Verified to which standard	Number of credits (metric tonnes CO2e)	Number of credits (metric tonnes CO2e): Risk adjusted volume	Credits canceled	Purpose, e.g. compliance
Credit purchase	Other: Combination of energy efficiency, landfill waste diversion, improved industrial/commercial processing practices	Will Solutions – 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 conversion and energy efficiency for buildings, redirection of waste from landfills and improved industrial and commercial processing practices.	VCS (Verified Carbon Standard)	10000	10000	Yes	Voluntary Offsetting
Credit purchase	Landfill gas	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.	Other: ISO14064-2	50000	50000	Yes	Voluntary Offsetting
Credit purchase	Methane avoidance	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	Other: ISO14064-2	10000	10000	Yes	Voluntary Offsetting

Credit origination or credit purchase	Project type	Project identification	Verified to which standard	Number of credits (metric tonnes CO2e)	Number of credits (metric tonnes CO2e): Risk adjusted volume	Credits canceled	Purpose, e.g. compliance
		carbon credits that are certified to applicable ISO standards.					
Credit purchase	Methane avoidance	Halifax Renewable Energy Corporation (HREC) – Landfill Gas to Energy HREC and its subsidiaries own and operate a renewable energy project on a landfill near Halifax, Nova Scotia. The project collects methane emissions from landfill waste and utilizes the methane to generate electricity for local consumption. The carbon credits that result from the methane destruction are certified to the ISO standards and the electricity generated is renewable energy.	Other: ISO14064-2	39925	39925	Yes	Voluntary Offsetting

Further Information

Page: CC14. Scope 3 Emissions

CC14.1

Please account for your organization's Scope 3 emissions, disclosing and explaining any exclusions

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
Purchased goods and services	Relevant, not yet calculated				<p>For this question, we have determined those scope 3 categories that are relevant to ensure that BMO's GHG inventory appropriately reflects the emissions of the company, and serves the decision-making needs of users, both internal and external to the company. We assess relevance based on the criteria in Table 6.1 of "The Greenhouse Gas Protocol: Corporate Value Chain (Scope 3) Accounting and Reporting Standard", developed by the World Resources Institute and the World Business Council for Sustainable Development. Criteria for determining the relevance of scope 3 emissions include: i) size of the emissions, ii) our ability to influence emissions reductions, iii) extent to which the emissions contribute to our company's risk exposure, iv) if the emissions are deemed critical by key stakeholders, v) extent to which outsourced activities contribute to our emissions, and vi) 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</p>

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
					and advertising materials. The primary reason BMO Financial Group has not focused on the specific measurement of emissions related to its supply chain is due to the lack of available source data. Since early 2008 we have employed a Sustainable Procurement questionnaire as part our competitive bid process (supply chain focus) and have scored the results to these questions as part of overall decision process. While this process does not provide results that would allow us to quantitatively answer this question, it has proved beneficial in affecting supplier behaviour for a number of our key relationships.
Capital goods	Not relevant, explanation provided				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)	Not relevant, explanation provided				This scope 3 emission source represents upstream emissions of purchased electricity and the associated transmission and distribution (T&D) losses. We do not consider this relevant for BMO as we have limited ability to influence.
Upstream transportation	Relevant, not yet				BMO Financial Group's Scope 3 emissions resulting from upstream transportation and distribution are

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
and distribution	calculated				deemed relevant from a size perspective, as they have the potential to contribute significantly to the company's total scope 3 emissions. Emissions from the transportation and distribution of products purchased by BMO, between tier 1 suppliers and our own operations (in vehicles and facilities not owned or controlled by BMO) are relevant. We have not attempted to calculate the impact of these emissions to date. Emissions from the transportation and distribution services purchased by BMO related to outbound logistics of sold products (in vehicles and facilities not owned or controlled by the reporting company) are relevant. BMO Financial Group distributes product information to customers and shareholder information to shareholders. Doing so may result in transportation emissions relating to the delivery of paper statements, Annual Reports, Corporate Responsibility Reports and other paper correspondence. The lack of readily available information is the prime reason we do not currently measure/report on emissions from this source.
Waste generated in operations	Relevant, calculated	1400.96	BMO Financial Group is indirectly responsible for the emissions created by the solid waste generated from our operations. In FY2016, we measured and reporting the emissions resulting from solid waste generated from 18 large facilities (owned and leased). These buildings represent 4.9 million square feet of real	26.00%	BMO Financial Group's Scope 3 emissions resulting from waste generated in operations are deemed relevant from a size perspective, as they contribute to the company's total scope 3 emissions. The percentage noted relates to the data available for the 18 large facilities (s.f. of facilities where waste data is available as a percentage of enterprise facilities s.f.). A significant number of our facilities are smaller in

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
			<p>estate, which is approximately 26% of total space occupied. Where possible, we continue to expand the scope of our review annually. To gather the raw waste data, we contracted third party providers to conduct waste audits at selected owned facilities (as required by regulation in Ontario) and also secured prorated data from landlords for our tenancy in leased facilities. The content of the waste audit reports and landlord provided data allowed us to detail the break-down of waste to landfill/recycling. The waste to landfill data was annualized and input to the ICF International GHG:ID Tool to calculate the resulting emissions. The emission factor used by the GHG:ID Tool is specifically calibrated for corporate GHG inventories, based on the EPA published WaRM tool. 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. The factor accounts for not only methane, but also CO2 as well (all converted and expressed as the CO2 equivalent factor).</p>		<p>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.</p>

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
Business travel	Relevant, calculated	20696.60	As a financial institution, one of our most significant Scope 3 emissions relates to employee business travel which includes the following: commercial air, ground travel (incl. employees' occasional use of personal vehicles for business, rental vehicles, and rail). For the past ten years BMO has used a customized version of ICF International's GHG:ID Tool for the calculation of greenhouse gas emissions. The ICF International GHG:ID Tool for BMO is fully compliant with both: "The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)" developed by the World Resources Institute and the World Business Council for Sustainable Development ("the GHG Protocol") and; "ISO 14064 Part 1: Greenhouse gases — Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals". For transportation data, we utilize the following data collection methodology: Commercial Air Travel data for business purposes is provided by our preferred travel supplier on an annual basis. The data provided consists of one-way flight segment distances and the number of instances of each segment travelled. This information is used to	100.00%	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.

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
			<p>calculate the relevant emissions within the ICF International GHG:ID Tool for short haul, medium haul and long haul flights. Ground Travel 1) Employee travel for business purposes using personal vehicles – all data is captured via our internal expense reimbursement system as claims are submitted. Annually we extract this data and use kilometres travelled and a proxy for vehicle type (mid-sized automobile efficiency) within the ICF International GHG:ID Tool for calculation of emissions. 2) Rail travel data for business purposes is provided directly by our rail service suppliers on an annual basis. The data provided consists of one-way rail segment distances and the number of instances of each segment travelled. This information is used to calculate the relevant emissions within the ICF International GHG:ID Tool. 3) Rental vehicles – data is provided by our two preferred suppliers on an annual basis. The data consists of vehicle type and total distance travelled. The data combined with a proxy for vehicle type (mid-sized automobile efficiency) is used within the ICF International GHG:ID Tool for calculation of the relevant emissions. Emissions are reported as tCO2e.</p>		

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
Employee commuting	Relevant, not yet calculated				BMO Financial Group's Scope 3 emissions resulting from employee commuting are deemed relevant from a size perspective, as they would contribute to the company's total scope 3 emissions. Emissions from approximately 45,200 employees commuting between their homes and BMO Financial Group workplaces are relevant. The lack of readily available information about their commuting modes and travel distances is the prime reason we do not currently calculate/report on emissions from this source.
Upstream leased assets	Relevant, calculated	70802.78	Based on our reporting boundary (Financial Control) and contractual obligations per leased facilities (per GHG Protocol Standard), emissions from leased premises have been classified as Scope 3. The emissions relating to fuel combusted and purchased electricity used in our leased facilities (Scope 1 & Scope 2 emissions of the lessor), form the most significant portion of our total Scope 3 emissions reported. For the past ten years BMO has used a customized version of ICF International's GHG:ID Tool for the calculation of greenhouse gas emissions. The ICF International GHG:ID Tool for BMO is fully compliant with both: "The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)" developed by the World Resources Institute		BMO Financial Group's Scope 3 emissions resulting from upstream leased assets are deemed relevant from both a size and influence perspective, as they contribute significantly to the company's total scope 3 emissions. In FY2016, actual consumption data was obtained for 74% of all leased facilities (based on percentage of emissions calculated). 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.

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
			<p>and the World Business Council for Sustainable Development ("the GHG Protocol") and; ISO 14064 Part 1: Greenhouse gases — Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals. At our request, consumption data is provided annually by the landlord/facilities managers for the facilities occupied by BMO Financial Group. In those instances where check/sub meters are installed, actual consumption information for fuels/electricity is used to reflect our actual consumption. In the absence of this specific level of information, we receive consumption information for the entire facility and based on the area occupied by BMO Financial Group, we determine our prorated portion for each of the fuels/electricity consumed. We also ask for confirmation from our landlords that the information provided accurately reflects the consumption figures provided and for a number of facilities, we receive the actual source utility data. We retain a detailed calculation worksheet for each of the leased properties where information has been gathered in this manner. The consumption data provided is routinely reviewed for intensity (consumption/square foot) to</p>		

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
			identify any obvious anomalies for further investigation. Finally, the consumption information is then input to the ICF International GHG:ID tool to calculate the relevant emissions.		
Downstream transportation and distribution	Not relevant, explanation provided				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	Not relevant, explanation provided				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	Not relevant, explanation provided				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

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
					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	Not relevant, explanation provided				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	Not relevant, explanation provided				Any assets that BMO owns and leases to 3rd parties are included in our Scope 1 and Scope 2 reported numbers. We have determined that none of the criteria noted in Table 6.1 of "The Greenhouse Gas Protocol: Corporate Value Chain (Scope 3) Accounting and Reporting Standard", developed by the World Resources Institute and the World Business Council for Sustainable Development, have been met in for this Scope 3 category.
Franchises	Not relevant, explanation provided				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

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
					for Sustainable Development, have been met in for this Scope 3 category.
Investments	Relevant, not yet calculated				BMO Financial Group's Scope 3 emissions resulting from investments are deemed relevant from a size perspective, as they have the potential to contribute significantly to the company's total scope 3 emissions. We are aware of the discussions related to financed emissions and are following the work being done by the GHG Protocol and the UNEP Finance Initiative re: disclosure guidance for financial institutions but at this stage, we have not evaluated the impact on our organization. There are many factors to be considered including availability, credibility, and consistency of information as well as the direction of the regulatory landscape in North America which is where the bulk of our activities take place.
Other (upstream)	Not relevant, explanation provided				As a financial institution, our products are financial services as opposed to tangible goods and therefore this Scope 3 source is not relevant. We have determined that none of the criteria noted in Table 6.1 of "The Greenhouse Gas Protocol: Corporate Value Chain (Scope 3) Accounting and Reporting Standard", developed by the World Resources Institute and the World Business Council for Sustainable Development, have been met in for this Scope 3 category.
Other (downstream)	Not relevant, explanation				As a financial institution, our products are financial services as opposed to tangible goods and therefore

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
	provided				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.

CC14.2

Please indicate the verification/assurance status that applies to your reported Scope 3 emissions

Third party verification or assurance process in place

CC14.2a

Please provide further details of the verification/assurance undertaken, and attach the relevant statements

Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/Section reference	Relevant standard	Proportion of reported Scope 3 emissions verified (%)
Annual process	Complete	Reasonable assurance	https://www.cdp.net/sites/2017/17/1417/Climate Change 2017/Shared Documents/Attachments/CC14.2a/BMO Emissions Verification Statement FY2016 (Morrison Hershfield).pdf	Pages 1 & 2	ISO14064-3	100

CC14.3

Are you able to compare your Scope 3 emissions for the reporting year with those for the previous year for any sources?

Yes

CC14.3a

Please identify the reasons for any change in your Scope 3 emissions and for each of them specify how your emissions compare to the previous year

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
Upstream leased assets	Emissions reduction activities	4.87	Decrease	The decrease is attributed to fuel and energy related reductions in our leased real estate facilities (Scope 1 & Scope 2 emissions of the lessor). Reduction activities focused primarily on energy efficiency programs including lighting/signage, HVAC, and building envelope upgrades where BMO has the opportunity to positively effect change. In FY2016, we reduced our emissions by 4,831 tCO2e, as a result of emissions reductions initiatives. Our total Scope 3

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
				emissions in the previous year was 99,199 tCO ₂ e, resulting in a decrease of 4.87% (i.e., $4,831/99,199 \times 100 = 4.87\%$).
Upstream leased assets	Change in output	1.47	Increase	The net increase reported reflects the impacts of leasehold facilities occupied for the full year in FY2015 and vacated in FY2016, as well as those leasehold facilities that were not included in our inventory in FY2015 and newly occupied in FY2016. We consider this change to be organic in nature. In FY2016, we increased our emissions by 1,458 tCO ₂ e, as a result of changes in output. Our total Scope 3 emissions in the previous year was 99,199 tCO ₂ e, resulting in an increase of 1.47% (i.e., $1,458/99,199 \times 100 = 1.47\%$).
Upstream leased assets	Change in methodology	1.20	Decrease	The decrease represents the net impact resulting from changes in provincial emissions factors for electricity in Canada, Emissions & Generation Resource Integrated Database (eGRID) emissions factors for electricity in the US, and global warming potentials (GWPs). CDP 2017 submission (fiscal 2016 data) references (a) Environment Canada's 2017 published Provincial electricity emissions factors (as at 2015); (b) U.S. Environmental Protection Agency's 2017 published eGRID (as at 2014); and (c) United Nations Intergovernmental Panel on Climate Change (IPCC)'s Fourth Assessment Report on GWPs for 100-year time horizon. We have isolated the impacts of the change in emissions factors as a contributing factor for the overall change in electricity emissions related to leased facilities (Scope 3). Overall, the weighted average of emission factors for leased facilities showed a downward trend in FY2016. In other words, there are more leased facilities located in areas where emission factors decreased. In FY2016, we decreased our emissions by 1,191 tCO ₂ e, as a net result of changes in methodology or emissions factors. Our total Scope 3 emissions in the previous year was 99,199 tCO ₂ e, resulting in a decrease of 1.20% (i.e., $1,191/99,199 \times 100 = 1.20\%$).
Upstream leased assets	Change in physical operating conditions	1.75	Decrease	Weather normalized energy use (and its associated emissions) is the energy that the building portfolio would have used in the current fiscal year (FY2016) under the same weather conditions as the previous year (FY2015). On average for representative BMO locations or weather stations, heating degree days decreased by about 24.0% and cooling degree days increased by about 24.3% from FY2015 to FY2016. Generally, this leads to expected increase in electricity consumption during summer months and decrease in heating fuel (including electric heat) during the winter months. Statistical process or analysis tool was used to factor out the variations in degree days and adjust the weather sensitive component of the energy use of facilities under Scope 3. As an overall effect in FY2016, our emissions decreased by about 1,735 tCO ₂ e, as a net result of changes in degree days (physical operating conditions). Our total Scope 3 emissions in the previous year was 99,199 tCO ₂ e, resulting in a decrease of 1.75% (i.e., $1,735/99,199 \times 100 = 1.75\%$).

CC14.4

Do you engage with any of the elements of your value chain on GHG emissions and climate change strategies? (Tick all that apply)

Yes, our suppliers

Yes, our customers

Yes, other partners in the value chain

CC14.4a

Please give details of methods of engagement, your strategy for prioritizing engagements and measures of success

BMO's engagement with suppliers/customers continues to be focused largely on practical initiatives. 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 and being a responsible corporate 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 organizations success in reducing facilities related emissions by in excess of 6% in the F2016 versus F2015.

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 organizations (e.g. schools). This activity avoids the creation of harmful greenhouse gases relating the manufacture of new equipment and defers the impact to the waste/recycling stream for a further period of time.

In F2016, approximately 235 tonnes of technology equipment was collected, refurbished and repurposed for sale by our trusted provider. The proceeds of the sales, net of refurbishment costs, are then available to BMO for donation to various charitable organizations. This same vendor has recently been successful in having a new protocol approved, which enables them to create and sell carbon offset credits as a by-product of this activity. We are currently investigating the opportunity to leverage these offset credits as part of our carbon neutrality commitment.

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)
- Reduced costs to BMO for disposal of technology equipment
- Socially responsible contribution by way of donations to organizations in need – in F2016, \$186k (CAD) was made available for donation to charities on BMO's behalf

Example 3

Renewable energy purchases (RECs) for Canadian retail branches. As part of our Carbon Neutrality commitment, BMO invests in renewable energy to reduce emissions. Over the past 9 years, we have developed a strong relationship with our preferred supplier and have worked with them to extended discount offers to BMO employees and customers for their purchase of renewable energy.

BMO's investment in renewable energy, in addition to assisting the organization in meeting its carbon neutrality goal, provides the potential to positively impact its reputation. In F2016, as part of our awareness and engagement activities with customers, BMO continued to promote the video co-created with our vendor to our Canadian customer base. The overall purpose of the video was to raise awareness with customers relative to BMO's climate change initiatives, with a specific focus on our commitment to renewable energy.

Quantitative benefits of these efforts are difficult to determine, as the correlation between increased customer loyalty/revenues is challenging. Evidence is anecdotal at best, based on qualitative feedback and support from customers received via responses to periodic surveys conducted.

Measures of success:

- Positive contribution to Carbon Neutrality target vis-a-vis the use of low carbon energy
- Positive impact on awareness of both employees and customers, relative to BMO's climate change initiatives

CC14.4b

To give a sense of scale of this engagement, please give the number of suppliers with whom you are engaging and the proportion of your total spend that they represent

Type of engagement	Number of suppliers	% of total spend (direct and indirect)	Impact of engagement
Active engagement	10	5.5%	Impacts of our active engagement with suppliers include: • Operational cost savings due to reduced utilities consumption and reduced maintenance costs (more efficient and longer lasting technologies – e.g. LED lighting) • Reduced GHG emissions as a result of reduced consumption • Positive impact on awareness of both employees and customers, relative to BMO's climate change initiatives • Potential to enhance BMO's reputation as a responsible corporate citizen

CC14.4c

Please explain why you do not engage with any elements of your value chain on GHG emissions and climate change strategies, and any plans you have to develop an engagement strategy in the future

Further Information

Module: Sign Off

Page: CC15. Sign Off

CC15.1

Please provide the following information for the person that has signed off (approved) your CDP climate change response

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

Further Information

CDP