Module: Introduction

Page: Introduction

0.1

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 $525 billion and 46,000 employees as at October 31, 2012, BMO provides a broad range of retail banking, wealth management and investment banking products and services to more than 12 million customers. We serve more than seven million customers across Canada through our Canadian retail arm, BMO Bank of Montreal. We also serve customers through our wealth management businesses: BMO Nesbitt Burns, BMO InvestorLine, BMO Private Banking, BMO Global Asset Management and BMO Insurance. BMO Capital Markets, our investment and corporate banking division, provides a full suite of financial products and services to our North American and international clients. In the United States, BMO serves customers through BMO Harris Bank, an integrated financial services organization 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, Private Client Group and BMO Capital Markets.

For Cautionary Statement Regarding Forward-Looking Information, please see attachment entitled "CDP 2013 - FLI Statement.pdf".

0.2

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
Tue 01 Nov 2011 - Wed 31 Oct 2012
Mon 01 Nov 2010 - Mon 31 Oct 2011

0.3

Country list configuration

Please select the countries for which you will be supplying data. This selection will be carried forward to assist you in completing your response

Select country
Australia
Barbados
Brazil
Canada
China

Select country
France
India
Ireland
Luxembourg
Mexico
Singapore
Switzerland
United Arab Emirates
United Kingdom
United States of America

0.4

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 ($)

0.6

Modules
As part of the request for information on behalf of investors, electric utilities, companies with electric utility activities or assets, companies in the automobile or auto component manufacture sectors, companies in the oil and gas industry and companies in the information technology and telecommunications sectors should complete supplementary questions in addition to the main questionnaire.
If you are in these sectors (according to the Global Industry Classification Standard (GICS)), the corresponding sector modules will not appear below but will automatically appear in the navigation bar when you save this page. If you want to query your classification, please email respond@cdproject.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. If you wish to view the questions first, please see https://www.cdproject.net/en-US/Programmes/Pages/More-questionnaires.aspx.

Attachments

https://www.cdproject.net/sites/2013/17/1417/Investor CDP 2013/Shared Documents/Attachments/InvestorCDP2013/Introduction/CDP 2013 - FLI Statement.pdf

Module: Management [Investor]

Page: 1. Governance

1.1

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

Individual/Sub-set of the Board or other committee appointed by the Board

1.1a

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

The BMO Sustainability Council (SC) is comprised of senior leaders from across the bank and provides guidance and insight related to environmental, social and governance (ESG) matters. Members of the SC include executives representing each business area (e.g. Retail Banking, Capital Markets, and corporate areas (e.g. Real Estate, Human Resources). The Council meets every quarter.
The Chair of the SC is an EVP and General Counsel for BMO and a member of BMO's Management Committee (MC). The Chair reports to our President and CEO. 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 environmental, social and governance issues. Any issues requiring escalation are brought to the MC. 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 (90%) 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.

1.2

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

Yes

1.2a

Please complete the table

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator
Environment/Sustainability managers	Monetary reward	Annual incentive bonuses are partially dependent on the maintenance of enterprise-wide Carbon neutrality and ongoing participation/oversight for 5 year 10% absolute emissions target (focusing on utilities/energy consumption reduction initiatives). Collaborate with business areas to identify ways to achieve this goal.
Business unit managers	Monetary reward	Corporate real estate group has internalized the absolute emissions reduction target and how well this target (focusing on utilities/energy consumption reduction initiatives) is achieved is factored into their performance review and incentive payout.
Corporate executive team	Monetary reward	Reduction in expenses related to employee travel (commercial air) which also results in a reduction in GHG emissions.
Facility managers	Monetary reward	Contractual agreement with 3rd party facilities providers in Canada and the United States includes savings incentives.
Environment/Sustainability managers	Recognition (non-monetary)	Meeting targets relating to emissions reduction, paper reduction, employee engagement and promotion of low carbon solutions within BMO Financial Group's business strategy.
Corporate executive team	Recognition (non-monetary)	Meeting targets relating to emissions reduction and promotion of low carbon solutions within BMO Financial Group's Business strategy.
Facility managers	Recognition (non-monetary)	Meeting energy and emissions reduction targets.
All employees	Recognition (non-monetary)	Demonstrating increased awareness and actions relating to reducing BMO Financial Group's environmental impact.

Page: 2. Strategy

2.1

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

2.1a

Please provide further details

From a risk management perspective, we consider the indirect impact of climate change; specifically the extent to which our clients' exposure to climate change and associated regulation may affect us. Risk associated with climate change is focused on those Institutional clients that operate in emissions intensive sectors. However, our business mix is predominately retail with the majority of our revenue derived from our Personal & Commercial businesses.
At the company level, the Environmental, Social and Governance (ESG) group is responsible for identifying indirect risks related to the effects of climate change. These risks are monitored as part of the regular sustainability issues monitoring that takes place at a minimum annually, and more frequently if needed. This is done by monitoring regulatory developments and their likelihood of occurrence through the review of literature (policy, legal opinion, research); participating in industry groups &/or conferences discussing the impacts of climate change; engaging with stakeholders and benchmarking ourselves against best practice organizations. 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 an asset level, risks associated with climate change fall within the category of credit and counterparty risk. BMO's 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 as applicable; however, 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 and mitigation strategies. We assess: - Whether the borrower monitors and reports their greenhouse gas emissions, as well as 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 is 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.
The output of our client evaluation/process 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.
BMO has developed its ECO5 strategy to deal with the direct impacts of climate change. The BMO ECO5 Strategy is an organizational framework that focuses on:
- reducing environmental impacts from our operational activities
- measuring and reducing our company-wide greenhouse gas emissions
- lowering costs
- gathering environmental performance data and publicly reporting on performance; to continuously improve our environmental performance

BMO's aim is to specifically understand and address the environmental impacts of our own operational footprint. The ECO5 environmental sustainability strategy is built around five key BMO operational activities that have the potential to significantly impact the environment:
1. Energy reduction and efficiency
2. Sustainable transport
3. Sustainable materials
4. Waste management
5. Sustainable Procurement

2.2

Is climate change integrated into your business strategy?

Yes

2.2a

Please describe the process and outcomes

While BMO Financial Group (Bank of Montreal) does not operate in an emissions intensive industry, we understand our direct impact on climate change and are actively managing it. Our Guiding Principle is: "We aim to deliver top-tier shareholder return and balance our commitments to financial performance, our customers, our employees, the environment and the communities where we live and work."
Our strategic vision is "To be the bank that defines great customer experience" and our organization competes in a changing world. It's changing because people are reassessing their idea of value. They want the freedom to do their banking everywhere and they expect a higher standard of social responsibility from companies than ever before. Our message in this regard is consistently communicated both internally and externally through a variety of medium. Internally, we use regular communication from our CEO via intranet and targeted email communications, and business groups are measured based on performance targets. Externally, we disclose information about our strategic direction and on-going results by way of regular press releases, on our website, and annually in Annual Reports and Environmental, Social and Governance Report.
Climate change aspects influencing our strategy include both the rising costs of fuels for our own use and those borne by participants in our supply chain which may be passed on to us in the form of higher prices for their goods and services. We also 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 has been very active in supporting our institutional clients' development of renewable energy. In FY2012 BMO made $1.6b in lending commitments and advised on $3.6b in equity and debt financing in the renewable energy sector. On the retail side, we provide opportunities for customers to do their banking from wherever they are (online, mobile) and with minimal impact on the environment (paperless statements). In addition to our sustainable mutual fund offerings, we have a mortgage product that rewards energy efficient characteristics of the home with a lower mortgage rate for the term of the mortgage.
The most important component of our short term strategy that has been influenced by climate change relates to our focus on carbon emissions reduction activities concerning our own operations. We believe it is important to "walk the talk" and as such have been extremely focused on reducing our operational footprint as a starting point. Emissions from the buildings that we occupy represent 91% of our footprint, with the majority of the balance attributed to business travel by employees. As one of the organization's priorities is controlling operating costs, energy consumption, the associated costs and reduced emissions are all key factors, particularly as we expect that energy costs will continue to increase and fossil fuel based resource availability comes under pressure.
Operationally we continue to focus on improving our practices. From a standards perspective, we have developed, documented and are now executing and governing retail and office build-outs to meet aggressive performance specifications. The revised office standards, which now include branding, functionality and sustainability elements have been communicated across the various business groups and are used to guide floor refresh activities. In addition to work we do on building standards, our membership in industry groups supports the voices seeking clarity around the need for coordinated progress and incentives on managing climate change. This is done particularly through the United Nations' Environment Program Finance Initiative.
The most important components of our long term strategy, influenced by climate change build on our short term goals. We intend to remain extremely focused on the rising energy costs resulting from the diminishing supply of fossil fuel based resources while at the same time continuing to look for opportunities, from both our own and our customers' perspective, in the area of alternative/renewable energy sources. We will also be monitoring the changes to the regulatory environment which may provide additional opportunities to enter new markets from a trading perspective.
BMO is well positioned with a clear strategy, and a brand promise common to every business. As we reach important milestones our aspirations remain ambitious. We take Corporate Governance seriously and are proud that BMO ranks among the top companies in Canada for governance. Our internal focus on the reduction of 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.

2.3

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

Other

2.3g

Please provide details of the other engagement activities that you undertake

BMO personnel participate on the (Standard Council of Canada's) Canadian Advisory Committee to the ISO Technical Committee responsible for developing energy management standards. Last year, ISO published a new global standard for energy management, ISO 50001:2011, Energy management systems – Requirements with guidance for use. This Standard provides benefits for organizations large and small, in both public and private sectors, in manufacturing and services, in all regions of the world. ISO 50001 establishes a framework to help organizations follow a systematic approach in achieving continual improvement of energy performance, including energy efficiency, energy use and consumption. Bank of Montreal supports this effort because, as an organization, we acknowledge that this initiative leads to greater environmental standardization and provides a larger value add to the environmental sustainability and energy management sector as a whole.

2.3h

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 on the (Standard Council of Canada's) Canadian Advisory Committee to the ISO Technical Committee responsible for developing energy management standards is closely aligned with the Environmental Sustainability group's mandate and the organization's general 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 50001 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.

Page: 3. Targets and Initiatives

3.1

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

Absolute target

3.1a

Please provide details of your absolute target

ID	Scope	% of emissions in scope	% reduction from base year	Base year	Base year emissions (metric tonnes CO2e)	Target year	Comment
20121	Other: Maintain Carbon Neutrality	100%	100%	2012	220426.59	2012	Successfully maintained enterprise-wide carbon neutrality goal which was originally achieved in fiscal 2010. Note that for the purposes of this target, fiscal 2012 is quoted as the "base year" and "base year emissions" reflect total Scope 1+2+3 emissions.
20122	Scope 1+2+3	100%	10%	2011	259953.94	2016	During fiscal 2011 BMO Financial Group acquired a large U.S. Bank, a transaction that required the restatement of baseline emissions for fiscal 2011. In early 2012, after adjusting for the impacts of the acquisition and restating the baseline for FY2011 a new absolute

ID	Scope	% of emissions in scope	% reduction from base year	Base year	Base year emissions (metric tonnes CO2e)	Target year	Comment
							emissions reduction target was set. It is a 5 year - 10% reduction target versus the restated/adjusted FY2011 baseline and is inclusive of Scopes 1+2+3.

3.1d

Please provide details on your progress against this target made in the reporting year

ID	% complete (time)	% complete (emissions)	Comment
20121	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 2012, we successfully maintained this ongoing goal.
20122	20%	100%	BMO's fiscal year 2012 emissions (Scopes 1+2+3) totalled 220,427 tCO2e thereby achieving its stated 5 year 10% reduction target in the first year. Contributing factors included emissions reduction activities, a favourable reduction in subregional electricity emissions factors and favourable weather conditions resulting in reduced energy consumption in FY2012 versus FY2011.

3.2

Does the use of your goods and/or services directly enable GHG emissions to be avoided by a third party?

Yes

3.2a

Please provide details (see guidance)

Green products - In order to promote energy efficiency and sustainable living, BMO introduced the BMO Eco Smart Mortgage. The mortgage is designed to encourage and reward Canadian homeowners looking to reduce their energy usage and save on household operating expenses. To qualify for the BMO Eco Smart Mortgage, a home must meet the requirements outlined in the BMO Eco Smart Mortgage checklist as confirmed by a third party appraiser (or energy auditor) arranged by BMO.

i. How the emissions are/were avoided;
BMO customers implement energy savings in their homes in order to qualify for the Eco Smart Mortgage. Examples include installation of Energy Star rated windows/doors, upgraded insulation, high efficiency heating/air conditioning systems etc., all aimed at reducing the consumption of energy by the homeowner.

ii. An estimate of the amount of emissions that are/were avoided over time;
Not available.

iii. The methodology, assumptions, emission factors and global warming potentials (if you have expressed your carbon saving figure in CO2e) used for your estimations;
Not applicable – estimates not available.

iv. Whether you are considering generating CERs or ERUs within the framework of CDM or JI (UNFCCC);
Not considered.
Electronic Banking - BMO Financial Group also offers electronic banking services which allow customers to consume fewer resources and reduce their carbon footprints. These services allow customers to complete banking transactions online, transfer funds electronically, view/pay bills and opt out of receiving paper statements (e.g. view statement details electronically).Our online services provide customers with electronic alternatives, thereby avoiding travel to BMO branch locations, facilitating reductions in their carbon footprint.
i. How the emissions are/were avoided;
Our online services provide customers with electronic alternatives, thereby avoiding travel to BMO branch locations, facilitating reductions in their carbon footprint.

ii. An estimate of the amount of emissions that are/were avoided over time;
While quantifying customers' carbon emissions savings relative to travel avoided is difficult, we can estimate the impacts of paperless account statements. For those customers currently opting to view their account information electronically, we estimate the annual emissions reductions to be about 5 tonnes CO2e per year, versus the baseline established as fiscal 2008.
iii. The methodology, assumptions, emission factors and global warming potentials (if you have expressed your carbon saving figure in CO2e) used for your estimations;
Calculations have been completed using the Environmental Paper Network's online Paper Calculator v3.0, using the weight and delivery frequency of those paper statements avoided. The calculator has built into it the relative emissions factors and global warming potentials.
iv. Whether you are considering generating CERs or ERUs within the framework of CDM or JI (UNFCCC);
Not considered.

3.3

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

Yes

3.3a

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	8	
To be implemented*	17	7500
Implementation commenced*	5	350
Implemented*	14	6309
Not to be implemented	2	

3.3b

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)	Annual monetary savings (unit currency - as specified in Q0.4)	Investment required (unit currency - as specified in Q0.4)	Payback period
Energy efficiency:	Signage upgrade program for facilities locations in the United	1518	111113	1915000	4-10 years

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Annual monetary savings (unit currency - as specified in Q0.4)	Investment required (unit currency - as specified in Q0.4)	Payback period
Building services	States. The purpose of this initiative was twofold; to rebrand signage for M&I Bank locations acquired in July, 2011 and to upgrade the signage infrastructure from either neon/T12 fluorescents to LED to drive savings from energy efficiency and lower ongoing maintenance costs. The costs, annual financial savings and annual emissions savings quoted are related to the energy efficiency portion of the program. For owned facilities, reductions impact Scope 2 and for leased facilities (per Financial Control reporting boundary) the impacts are recorded under Scope 3. This activity is voluntary and the implementations are expected to have a useful life of approximately 20 years.				
Energy efficiency: Processes	Expansion of Free Cooling capability at Data Centre. With the increase in electrical load at our main data centre (to support growth and additional capacity) additional free cooling infrastructure and process changes have been implemented to take advantage of cooler outside air and thereby relieve some of the electrical load for the chiller equipment. Savings result from the decreased use of electricity (and reduced emissions) to run the chillers as well as reduced maintenance costs as the cooling equipment is not subject to the same demand. The impacts are recorded as Scope 2 and this activity is voluntary. The implementation is expected to have a useful life of between 25 – 35 years.	231	118251	253505	1-3 years
Energy efficiency: Building services	Implementation of building automation systems (BAS) technologies within retail branches in Canada. Implementations for FY2012 were aligned with renovation activities planned for select branches in the network. 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	230	332000	996000	1-3 years

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Annual monetary savings (unit currency - as specified in Q0.4)	Investment required (unit currency - as specified in Q0.4)	Payback period
	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 activity is voluntary and the implementations are expected to have a useful life of approximately 15 years.				
Energy efficiency: Building services	Programmatic review and updating of heating/cooling equipment infrastructure at retail branch facilities in the United States. Costs, savings (reduced energy consumption) and emissions savings relate to the marginal costs associated with the more efficient equipment. 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 activity is voluntary and the implementations are expected to have a useful life of approximately 15 years.	75	204140	15710	11-15 years
Energy efficiency: Building services	Upgrades to Drive-Up locations in the United States for signage and pneumatic equipment with more efficient technology for cost and emissions savings. For owned facilities, reductions impact Scope 2 and for leased facilities (per Financial Control reporting boundary) the impacts are recorded under Scope 3. This activity is voluntary and the implementations are expected to have a useful life of approximately 20 years.	64	140660	8620	16-20 years
Energy efficiency: Building services	Upgrade chilled water pumps - This initiative focused on the replacement of base mount pumps that support the chillers at a major office location in Toronto, Canada. The installation of more efficient equipment results in energy savings (and reduced emissions) as well as expected lower maintenance costs over the life of the equipment. The impacts are recorded as Scope 2 and this activity is voluntary. The	59	30000	75000	1-3 years

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Annual monetary savings (unit currency - as specified in Q0.4)	Investment required (unit currency - as specified in Q0.4)	Payback period
	implementation is expected to have a useful life of between 15 – 20 years.				
Transportation: fleet	Reduced use of owned transportation assets; substituting the use of technologies such as teleconferencing and videoconferencing for actual travel. As the investment in these technologies has been made over the preceding years, we show no additional costs and reflect an estimated savings of $50,000 annually. The impacts are recorded as Scope 1 and this activity is voluntary. The technologies used as substitutes are expected to have a useful life of between 5 - 10 years.	295	50000	0	<1 year
Transportation: use	BMO continues to focus on using available technology alternatives such as videoconferencing and teleconferencing in place of ground/air travel, particularly for internal meetings, to reduce emissions resulting from business travel. The impacts are recorded as Scope 3 and this activity is voluntary. This is an ongoing initiative.	1668			<1 year
Fugitive emissions reduction	Fugitive emissions result when HFC leaks occur, releasing refrigerants to the atmosphere. We constantly review our operating routines to minimize the impacts of fugitive emissions which has resulted in a reduction in occurrence for the FY2012 period. The impacts are recorded as Scope 1 and this activity is ongoing. Fugitive emissions leaks are reported to the regulatory authorities as part of our mandatory reporting activities.	205	0	0	<1 year
Energy efficiency: Building services	Ongoing program to address energy related infrastructure within buildings, focusing on mechanical infrastructure efficiencies (e.g., HVAC upgrades, installation of variable speed drives, higher efficiency motors, etc). The emissions savings impacts are recorded for Scope 1 (natural gas) and Scope 2 (electricity) for owned buildings and Scope 3 (leased facilities) where BMO is a tenant (per Financial Control reporting boundary) and has benefited from these activities. These activities are	1964	93917	563500	4-10 years

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Annual monetary savings (unit currency - as specified in Q0.4)	Investment required (unit currency - as specified in Q0.4)	Payback period
	voluntary in nature and the expected lifespan of initiatives range from 10 – 20 years. Financial information relates only to those activities completed for owned facilities.				

3.3c

What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Dedicated budget for energy efficiency	Annually, we set aside a specified capital amount which is used to fund energy efficiency activities across the enterprise.
Dedicated budget for other emissions reduction activities	As an organization committed to carbon neutrality (achieved in 2010), we recognize that achieving this goal annually is dependent on funding other emission reduction activities such as the purchase of offsets. BMO specifically budgets for these expenditures on an annual basis.
Employee engagement	Employee engagement continues to be a key element in our overall strategy to reduce emissions across the organization. Our Environmental Ambassadors (employee volunteers) act as champions in the field to promote our sustainability efforts. Our employees participate in driving down emissions by promoting behavioural change and also feed back 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 of 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 every energy related business case.
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.
Marginal abatement cost curve	The typical marginal abatement cost curve (MACC) analysis methodology is another method we use to asses potential emissions reduction activities. We continue to move from left to right on the MACC as initiatives are completed.

Further Information

For Q 3.3(a) we have consolidated "projects" into major types. For example, planned lighting retrofits for 340 individual facilities in the US is captured under "1" project.

Page: 4. Communication

4.1Have you published information about your company'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	Page/Section reference	Attach the document
In mainstream financial reports (complete)	MD&A pg. 92, BMO Financial Group 195th Annual Report Fiscal Year 2012	https://www.cdproject.net/sites/2013/17/1417/Investor CDP 2013/Shared Documents/Attachments/Investor-4.1-C3-IdentifytAttachment/bmo_ar2012.pdf
In voluntary communications (complete)	GRI Index pgs 24-27, Fiscal Year 2012 Environmental, Social and Governance Report and Public Accountability Statement	https://www.cdproject.net/sites/2013/17/1417/Investor CDP 2013/Shared Documents/Attachments/Investor-4.1-C3-IdentifytAttachment/ESG_PAS2012en.pdf
In voluntary communications (complete)	Earth Hour press release (3/20/2013)	https://www.cdproject.net/sites/2013/17/1417/Investor CDP 2013/Shared Documents/Attachments/Investor-4.1-C3-IdentifytAttachment/BMO Earth Hour Press Release 2013.doc
In voluntary communications (underway) – previous year attached	pgs 29-36, Fiscal Year 2011 Corporate Responsibility Report	https://www.cdproject.net/sites/2013/17/1417/Investor CDP 2013/Shared Documents/Attachments/Investor-4.1-C3-IdentifytAttachment/BMO_CR2011en.pdf
In voluntary communications (underway) – previous year attached	Fiscal Year 2011 Operational ECO5 summary report	https://www.cdproject.net/sites/2013/17/1417/Investor CDP 2013/Shared Documents/Attachments/Investor-4.1-C3-IdentifytAttachment/BMO ECO5 2011en.pdf

Module: Risks and Opportunities [Investor]

Page: 5. Climate Change Risks

5.1

Have you identified any climate change risks (current or future) 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

5.1a

Please describe your risks driven by changes in regulation

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
51a-1	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	Increased operational cost	1-5 years	Direct	Likely	Low

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		estate premises occupied.					
51a-2	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 these clients' operational costs, which could put financial pressure on their ability to repay loans or meet other financial commitments they have with us.	Other: impact on credit risk profile	Unknown	Indirect (Client)	Unknown	Low
51a-3	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, 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.	Increased capital cost	1-5 years	Direct	More likely than not	Low

5.1b

Please describe (i) the potential financial implications of the risk before taking action; (ii) the methods you are using to manage this risk and (iii) the costs associated with these actions

51a-1 Fuel/energy taxes and regulations
(i) the potential financial implications of the risk before taking action
Increased fuel/energy taxes and regulations could potentially result in increases to our overall fuel costs and impact our overall operating costs. As a North American based financial institution whose facility occupancy is primarily office based, we would not expect the financial implications to be significant. BMO Financial Group's fiscal 2012 reported operating costs totalled approximately $10.2 billion, with less than $100 million relating to annual energy costs. 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 $10 million.
(ii) the methods you are using to manage this risk
We continue to actively monitor the regulatory landscape for 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 energy costs on a regular basis.
We have undertaken some very specific measures to hedge against price escalations and/or measures to continually drive down consumption. For facilities, in specific areas of North America where opportunities exist,

we have entered into bulk fuel/electricity purchase contracts at the wholesale level to insulate the organization against price increases. In addition, we continue to concentrate our efforts on consumption reduction efforts, focusing on retrofits to building envelope, HVAC systems and lighting, as 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.
(iii) the costs associated with these actions
From a cost to manage perspective, there is zero additional cost/effort required to keep abreast of the potential regulatory changes as this is a function of our current risk management process. There is also zero additional cost associated with our efforts to drive down consumption, as this is an ongoing focus of our Corporate Real Estate group.
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.

51a-2 Carbon taxes
(i) the potential financial implications of the risk before taking action
Although we do have some clients in jurisdictions that impose carbon taxes, we have not isolated the potential financial implications associated with this risk.
(ii) the methods you are using to manage this risk
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 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.
(iii) the costs associated with these actions
There is zero additional cost to manage this risk as it is within the context of our existing risk management framework.

51a-3 Product efficiency regulations and standards
(i) the potential financial implications of the risk before taking action
As a financial institution with approximately 20.0 million square feet of occupancy (owned and leased) mainly in North America, the introduction of building regulations related to energy efficiency could result in additional capital costs for our organization. We estimate 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.
(ii) the methods you are using to manage this risk
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.
(iii) the costs associated with these actions
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.

5.1c

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

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
51c-1	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	Increased operational cost	6-10 years	Direct	Very likely	Low

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		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.					
51c-2	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. Approximately 99% of BMO's physical real estate occupied is located in North America.	Increased operational cost	6-10 years	Direct	Likely	Low
51c-3	Change in precipitation pattern	Change in precipitation may result in interrupted supply of energy, water,	Increased operational cost	>10 years	Direct	Likely	Low

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		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.					
51c-4	Change in precipitation extremes and droughts	Change in precipitation 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.	Increased operational cost	6-10 years	Direct	Likely	Low
51c-5	Tropical cyclones (hurricanes and typhoons)	Tropical cyclones may result in interrupted supply of energy, water, telecommunications and	Increased operational cost	>10 years	Direct	Likely	Low

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		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).					
51c-6	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 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	Reduction/disruption in production capacity	1-5 years	Indirect (Supply chain)	More likely than not	Low

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		and differences in quality of materials (better or worse) and; (c) complete cessation of service or delivery in the short to medium term.					

5.1d

Please describe (i) the potential financial implications of the risk before taking action; (ii) the methods you are using to manage this risk; and (iii) the costs associated with these actions

51c-1 Change in mean (average) temperature
(i) the potential financial implications of the risk before taking action
The financial implications are two-fold:
Average temperature changes (hotter summers, colder winters) would increase our ongoing consumption of energy such as electricity and natural gas. A 10% mean temperature change could potentially translate into a $5 - $10 million increase in energy-related operating costs across the enterprise.
Furthermore, changes in mean temperatures (hotter summers, colder winters) could potentially shorten the life-span of HVAC systems and necessitate the replacement of this equipment sooner than current schedules require. With a current end of life cycle of 15 - 20 years for HVAC systems, a 10% mean temperature change could translate into a 1.5 – 2.0 year reduction in the useful life of these assets. This could have the potential to impact our annual capital budget expenditures for HVAC equipment by up to 10% annually.
(ii) the methods you are using to manage this risk
Over the past couple of years, we have begun to track the heating degree days (HDD) and cooling degree days (CDD) for those large urban centres in North America where BMO Financial Group facilities are predominantly located. We source this data via our 3rd party facilities management service providers who utilize Environment Canada and Wolfram Research in the United States to plot the trends. In the event that the life-span of HVAC equipment is negatively impacted, we will modify our capital forecasting.
(iii) the costs associated with these actions
The costs associated with tracking changes to average mean temperatures are zero as it is part of the service offered by our facilities management partners.
51c-2 – Change in Temperature Extremes
(i) the potential financial implications of the risk before taking action
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.
(ii) the methods you are using to manage this risk
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).
(iii) the costs associated with these actions
The costs associated with these actions are part of our ongoing business continuity planning and are not considered to be incremental.
51c-3 – Change in Precipitation Patterns
(i) the potential financial implications of the risk before taking action
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 of facilities occupied.
(ii) the methods you are using to manage this risk
Our Business Continuity Management (BCM) team manages this risk by monitoring the trends for precipitation patterns 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 performed (e.g. employees working from home, split operations)
(iii) the costs associated with these actions
Flood remediation 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. From a business continuity oversight perspective, there are no additional costs foreseen as this is part of our existing cost structure.

51c-4 – Change in Precipitation extremes and droughts
(i) the potential financial implications of the risk before taking action
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. 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.
(ii) the methods you are using to manage this risk
Our Business Continuity 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 performed (e.g. employees working from home, split operations).
(iii) the costs associated with these actions
Flood remediation 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.
51c-5 – Tropical cyclones (hurricanes and typhoons)
(i) the potential financial implications of the risk before taking action
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.
(ii) the methods you are using to manage this risk
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 business units develop business continuity plans appropriate to the time sensitivity of the activity being performed (e.g. employees working from home, split operations).
(iii) the costs associated with these actions
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 our existing cost structure.
51c-6 – Uncertainty of physical risks
(i) the potential financial implications of the risk before taking action
We have not modelled the financial implications of this risk.
(ii) the methods you are using to manage 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 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.
(iii) the costs associated with these actions
This is part of our ongoing supplier governance and business continuity planning and does not represent additional cost to the organization.

5.1e

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

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
51e-1	Reputation	Reputational risk associated with climate change is may impact us in two areas • Lending and investing • Own operations How this could affect BMO specifically: • Lending and investing: Our operations are predominantly in North America where	Other: customer impact, reduced market valuation	Unknown	Direct	Unlikely	Unknown

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		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 just over 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 operation.					

5.1f

Please describe (i) the potential financial implications of the risk before taking action; (ii) the methods you are using to manage this risk; (iii) the costs associated with these actions

51e-1 - Reputation
(i) the potential financial implications of the risk before taking action
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.
(ii) the methods you are using to manage this risk
Lending and investing:
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, we assess: (a) whether the borrower monitors and reports its greenhouse gas emissions, as well as the extent and quality of 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. We also monitor the regulatory landscape to ensure that should change occur, we are ready to incorporate the effects into our business.
Own operations:
We are committed to reducing the impact we have on the environment, including the impact from own operations. The largest contributing factor to that impact – 91% – is the real estate space we occupy. Business transportation by our employees and the fleet of vehicles we own account for most of the balance. If we do not take action towards reducing our emissions from own operations, then we may face reputational risk.
In order to manage this risk, we have developed a robust Environmental Management System (EMS) to mitigate the impact of our operations on the environment. Our goal is to achieve continual improvement in our overall environmental performance. Our EMS requires that we identify activities within our operations that have a potential impact on the environment, and establish objectives, targets and processes to reduce or eliminate those impacts. It also requires that we monitor performance against stated objectives and take action to continually reduce the impact of our operational footprint on the environment. We have achieved certification under the internationally recognized standard, ISO 14001 Environmental Management Systems, for our leased 19-floor office tower located at 55 Bloor Street West in Toronto and for the Bank of Montreal Institute for Learning facility located in Toronto. We continue to apply our EMS across all our operations as we strive to minimize our impact on the environment.
Furthermore, we achieved enterprise-wide carbon neutrality in August 2010. This milestone reflected our cumulative efforts in three areas: reduced energy consumption in our real estate facilities and for employees'

business-related travel; our investment in electricity from renewable sources; and our purchase of high-quality voluntary carbon credits to offset any remaining emissions.
(iii) the costs associated with these actions
Lending and investing:
These activities performed by the Environmental, Social and Governance / Risk Management groups are within existing infrastructure and work plans so there are zero additional costs to the organization. We also actively work towards promoting our brand and protecting our reputation by demonstrating environmental leadership.
Own operations:
Total costs associated with our ISO 14001 EMS certifications and third party verification of our carbon emissions are minimal, totalling 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 credits (RECs) and high quality voluntary carbon offset credits.

Page: 6. Climate Change Opportunities

6.1

Have you identified any climate change opportunities (current or future) 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

6.1a

Please describe your opportunities that are driven by changes in regulation

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact
61a-1	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 Management Systems. Adoption of this standard for a number of our facilities provides evidence of our leadership in taking voluntary action with	Other: Potential impact is two-fold: Increased employee engagement and positive reputational impact AND reduced operational costs	Current	Direct	Very likely	Low-medium

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact
		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 footprint is verified annually by an accredited 3rd party and our carbon neutral commitment/achievement is also voluntary.					
61a-2	Cap and trade schemes	New emission trading markets How this could affect BMO specifically: BMO Financial Group is a North American based organization with a presence in the global capital markets. Introduction of legislation may present opportunities for participation in new emission trading markets. To date there have been limited opportunities in North America as legislation is unclear and existing markets are very thin.	New products/business services	Unknown	Direct	Unknown	Unknown

6.1b

Please describe (i) the potential financial implications of the opportunity; (ii) the methods you are using to manage this opportunity and (iii) the costs associated with these actions

61a-1 Voluntary agreements

(i) the potential financial (positive) implications of the opportunity
ISO14001:2004:

There is a direct financial cost associated with the certification of our facilities to ISO 14001:2004 EMS, relating to the 3rd party certification (once every 3 years) and annual surveillance activities. Additionally there are internal employee costs incurred with managing this effort (creating/updating procedures, internal audits, etc.). Annual costs are estimated to be approximately $50k for both elements. The implementation of the EMS at facilities also derives value as reduction targets are established, monitored and met, contributing to our 10% absolute enterprise emissions reduction goal. There are also annual costs associated with our annual emissions verification (less than $100k) however the assurance benefits far outweigh the expense.
LEED (Leadership in Energy and Environmental Design) and BOMA (Building Owners and Managers Association):
Evolving building efficiency standards such as LEED or BOMA as well as updates to national building codes facilitate more effective procurement (lease transactions) of energy efficient office space and result in lowered costs. As building efficiency standards become more commonplace, the financial implications are as follows; (a) the lease premiums, once commanded by landlords for locating in facilities certified to these standards, are reduced as there is more supply as the number of certifications increase (lessees have more options) and (b) the on-going operating costs (lease/energy costs) over the life of the lease are lower. These buildings also tend to perform better from an occupant comfort perspective which may contribute to employee productivity, although this has not yet been measured.

(ii) the methods you are using to manage this opportunity
BMO's Environmental Sustainability group oversees the strategic implementation of the ISO 14001:2004 certified EMS at our facilities. This group also coordinates the calculation of enterprise carbon emissions, annual verification and carbon neutrality strategy. Annual reporting related to these elements is aligned with our fiscal period in order to align with other external reporting at the enterprise level.
BMO manages the procurement of additional building stock through a formal process which incorporates specific focus on quality standards such as LEED Gold (where appropriate). BMO also participates in a Commercial Building Energy Initiative in the greater Toronto area, which brings together landlords and tenants for the purposes of improving energy efficiency and standards form a part of this ongoing initiative. We have also updated our internal design and construction standards to include performance specifications for the build out of office space in order to achieve additional energy reductions (e.g. 1 watt per square foot for lighting). These measures are expected to contribute to our 10% absolute emissions reduction goal.

(iii) the costs associated with these actions
Total costs associated with our ISO 14001:2004 EMS certification and carbon emissions 3rd party verification are minimal, totalling less than $75k annually. We also invest approximately $3MM annually on high quality carbon offsets and 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. We see the lease premiums once paid for occupancy of LEED or BOMA certified facilities decreasing as the supply expands and benefit from reduced operating expenses from energy efficiencies at the building infrastructure level. The energy efficiencies derived contribute to our absolute emissions reduction target and help to minimize our annual operating costs (approximately 1% of total operating costs associated with energy costs).

61a-2 Cap and trade schemes

(i) the potential financial implications of the opportunity
The introduction of legislation that could drive economic incentives or lead to the creation of robust new markets can be viewed as an opportunity by BMO Financial Group. This could result in additional revenues for BMO although to date there has been limited opportunities in North America as legislation is unclear and existing markets are very thin.

(ii) the methods you are using to manage this opportunity
Our current position is to monitor the evolution of cap and trade legislation, primarily in North America, and assess the opportunities for participation in new emission trading markets when there is more certainty.

(iii) the costs associated with these actions
As a global trading organization, there would be costs associated with developing carbon trading capabilities (resources, systems, etc.) however the magnitude of these costs has not been defined at this point. The financial benefits associated have also not been defined at this point. Responsibility for managing this would lie with our Trading Products group.

6.1c

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

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
61c-1	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. As we construct and retrofit facilities across the enterprise portfolio we attempt to take advantage of 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 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.	Reduced operational costs	Current	Direct	Likely	Low

6.1d

Please describe (i) the potential financial implications of the opportunity; (ii) the methods you are using to manage this opportunity and (iii) the costs associated with these actions

61c-1 – Other physical climate drivers

(i) the potential financial implications of the opportunity
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. A key aspect of these relationships is environmental sustainability management across the facilities managed. Energy performance for these facilities has been benchmarked (consumption intensity/m2) and 5 year capital improvement plans are in place to deal with specific actions and initiatives we can undertake to leverage on-going energy related operating cost reduction opportunities. Annually we implement upgrades to building envelope (roof, windows, etc.), HVAC systems (unit replacements, heating/cooling zoning) and lighting retrofits (T12 to T8/T5 or LED). We expect the results of these activities to contribute to our annual emissions reductions targets.

(ii) the methods you are using to manage this opportunity
In our office towers and other critical facilities (operations centres) we continue to actively assess building infrastructure for opportunities to upgrade equipment, retrofit for improved efficiency and refine operating processes to reduce our costs and overall emissions impacts. “Free cooling” is a practice that we have

implemented in a number of our facilities across the network. In certain geographic areas, we have also completed bulk energy purchases, 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.
(iii) the costs associated with these actions
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 costs, these activities form part of our existing infrastructure so no significant additional costs are required.

6.1e

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

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
61e-1	Other drivers	Employee engagement. How 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.	Other: Increased employee engagement, attraction and retention	Current	Direct	Likely	Low-medium
61e-2	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	Increased stock price (market valuation)	Current	Direct	Likely	Low

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		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.					

6.1f

Please describe (i) the potential financial implications of the opportunity; (ii) the methods you are using to manage this opportunity; (iii) the costs associated with these actions

61e-1 Other drivers
(i) the potential financial implications of the opportunity
BMO's actions with respect to climate change and our carbon neutrality commitment help foster employee engagement and contribute to the retention of existing employees and attraction of new employees. 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.

(ii) the methods you are using to manage this opportunity
BMO has introduced a number of programs to raise awareness amongst employees and engage them in climate change activities, including but not limited to:
- 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
- BMO's participation in Earth Hour event annually as well as local initiatives across the corporation for Earth Day/Week
- Introduction of electronic pay advices for employees allowing them to opt out of paper statements
- Electronic delivery of shareholder materials to employees that are shareholders
- Public transit pass program in select cities which provide for reduced cost of passes for employees and encourage the avoidance of transportation emissions (approximately 4,300 employees participate monthly)
- Quarterly "Clear Blue Skies Initiative" newsletter to employees focusing on current topics and applicability to employees
- Gradual conversion of our service vehicle fleet from conventional gas power to hybrids – currently 84% of our fleet is comprised of hybrids
- 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.

(iii) the costs associated with these actions
The annual operating budget for the Environmental Sustainability group includes the costs associated with activities to raise employee awareness and the management of our carbon neutrality commitment. One full time resource supports our employee engagement activities and another 1+ FTE manages the carbon emissions activities underpinning our carbon neutral achievement. These costs represent approximately $150k annually

inclusive of salary and benefits. The costs of purchasing renewable energy and carbon offsets annually range from $2 - $3 million annually. Environmental Ambassadors are volunteers and there are zero additional costs for their efforts.

61e-2 Reputation

(i) the potential financial implications of the opportunity
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.

(ii) the methods you are using to manage this opportunity
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.

(iii) the costs associated with these actions
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.

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading [Investor]

Page: 7. Emissions Methodology

7.1

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

Base year	Scope 1 Base year emissions (metric tonnes CO2e)	Scope 2 Base year emissions (metric tonnes CO2e)
Mon 01 Nov 2010 - Mon 31 Oct 2011	24034.46	97585.79

7.2

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
The Climate Registry: General Reporting Protocol

7.2a

If you have selected "Other", please provide details below

7.3

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

Gas	Reference
CO2	IPCC Second Assessment Report (SAR - 100 year)
CH4	IPCC Second Assessment Report (SAR - 100 year)
N2O	IPCC Second Assessment Report (SAR - 100 year)
HFCs	IPCC Second Assessment Report (SAR - 100 year)

7.4

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

Fuel/Material/Energy	Emission Factor	Unit	Reference
Natural gas	50.6124	Other: kg Co2e per GJ	GHG Protocol - Facilities - 2000
Distillate fuel oil No 2	70.7712	Other: kg Co2e per GJ	GHG Protocol - Facilities - 2000 (Diesel)
Distillate fuel oil No 2	73.9062	Other: kg Co2e per GJ	GHG Protocol - Facilities - 2000 (Heating Oil)
Steam	0.1493	Other: metric tonnes CO2e per metric tonne	CANMET Energy Diversification Laboratory
Motor gasoline	2382.20	Other: kg CO2 per m3	GHG Protocol - Mobile
Jet kerosene	2552.00	Other: kg CO2 per m3	GHG Protocol - Mobile
Other: R-410A	1725.00	Other: metric tonnes CO2e per metric tonne	IPCC - 2000
Other: Purchased Electricity - Australia	233.5901	Other: kg CO2 per GJ	International Energy Agency (2012) - 2010
Other: Purchased Electricity - Barbados	54.5956	Other: kg CO2 per GJ	International Energy Agency (2012) - 2010
Other: Purchased Electricity - Brazil	24.1015	Other: kg CO2 per GJ	International Energy Agency (2012) - 2010
Other: Purchased Electricity - China	212.9071	Other: kg CO2 per GJ	International Energy Agency (2012) - 2010
Other: Purchased Electricity - France	21.9700	Other: kg CO2 per GJ	International Energy Agency (2012) - 2010
Other: Purchased Electricity - India	253.4421	Other: kg CO2 per GJ	International Energy Agency (2012) - 2010
Other: Purchased Electricity - Ireland	127.2344	Other: kg CO2 per GJ	International Energy Agency (2012) - 2010
Other: Purchased Electricity - Luxembourg	113.8455	Other: kg CO2 per GJ	International Energy Agency (2012) - 2010
Other: Purchased Electricity - Mexico	126.3428	Other: kg CO2 per GJ	International Energy Agency (2012) - 2010
Other: Purchased Electricity - Singapore	138.7363	Other: kg CO2 per GJ	International Energy Agency (2012) - 2010
Other: Purchased Electricity - Switzerland	7.5854	Other: kg CO2 per GJ	International Energy Agency (2012) - 2010
Other: Purchased Electricity - United Arab Emirates	166.0609	Other: kg CO2 per GJ	International Energy Agency (2012) - 2010
Other: Purchased Electricity - United Kingdom	127.0466	Other: kg CO2 per GJ	International Energy Agency (2012) - 2010
Other: Purchased Electricity - Alberta	204.93	Other: kg CO2e per GJ	Environment Canada (2012) - 2011
Other: Purchased Electricity - British Columbia	3.14	Other: kg CO2e per GJ	Environment Canada (2012) - 2011
Other: Purchased Electricity - Manitoba	0.92	Other: kg CO2e per GJ	Environment Canada (2012) - 2011
Other: Purchased Electricity - New Brunswick	123.25	Other: kg CO2e per GJ	Environment Canada (2012) - 2011
Other: Purchased Electricity - Newfoundland	5.67	Other: kg CO2e per GJ	Environment Canada (2012) - 2011
Other: Purchased Electricity - Northwest Territories	88.57	Other: kg CO2e per GJ	Environment Canada (2012) - 2011
Other: Purchased Electricity - Nova Scotia	199.42	Other: kg CO2e per GJ	Environment Canada (2012) - 2011

Fuel/Material/Energy	Emission Factor	Unit	Reference
Other: Purchased Electricity - Ontario	27.23	Other: kg CO2e per GJ	Environment Canada (2012) - 2011
Other: Purchased Electricity - Prince Edward Island	0.53	Other: kg CO2e per GJ	Environment Canada (2012) - 2011
Other: Purchased Electricity - Quebec	0.47	Other: kg CO2e per GJ	Environment Canada (2012) - 2011
Other: Purchased Electricity - Saskatchewan	207.18	Other: kg CO2e per GJ	Environment Canada (2012) - 2011
Other: Purchased Electricity - Yukon	18.10	Other: kg CO2e per GJ	Environment Canada (2012) - 2011
Other: Purchased Electricity - eGrid-AZNM	150.7669	Other: kg CO2e per GJ	US EPA (2012) - 2009
Other: Purchased Electricity - eGrid-CAMX	83.3103	Other: kg CO2e per GJ	US EPA (2012) - 2009
Other: Purchased Electricity - eGrid-ERCT	149.4511	Other: kg CO2e per GJ	US EPA (2012) - 2009
Other: Purchased Electricity - eGrid-FRCC	148.8823	Other: kg CO2e per GJ	US EPA (2012) - 2009
Other: Purchased Electricity - eGrid-MROE	201.6644	Other: kg CO2e per GJ	US EPA (2012) - 2009
Other: Purchased Electricity - eGrid-MROW	206.3622	Other: kg CO2e per GJ	US EPA (2012) - 2009
Other: Purchased Electricity - eGrid-NEWE	92.5194	Other: kg CO2e per GJ	US EPA (2012) - 2009
Other: Purchased Electricity - eGrid-NWPP	103.7472	Other: kg CO2e per GJ	US EPA (2012) - 2009
Other: Purchased Electricity - eGrid-NYCW	77.1154	Other: kg CO2e per GJ	US EPA (2012) - 2009
Other: Purchased Electricity - eGrid-RFCE	120.0288	Other: kg CO2e per GJ	US EPA (2012) - 2009
Other: Purchased Electricity - eGrid-RFCM	210.2605	Other: kg CO2e per GJ	US EPA (2012) - 2009
Other: Purchased Electricity - eGrid-RFCW	192.6211	Other: kg CO2e per GJ	US EPA (2012) - 2009
Other: Purchased Electricity - eGrid-RMPA	231.0056	Other: kg CO2e per GJ	US EPA (2012) - 2009
Other: Purchased Electricity - eGrid-SPNO	229.9656	Other: kg CO2e per GJ	US EPA (2012) - 2009
Other: Purchased Electricity - eGrid-SRMW	221.6490	Other: kg CO2e per GJ	US EPA (2012) - 2009
Other: Purchased Electricity - eGrid-SRSO	167.9038	Other: kg CO2e per GJ	US EPA (2012) - 2009
Other: Purchased Electricity - eGrid-SRVC	131.2556	Other: kg CO2e per GJ	US EPA (2012) - 2009

Further Information

In 2012 , BMO restated base year and base year emissions (Scopes 1 and 2) for the fiscal year 2011 period, as a result of a major acquisition completed in July, 2011. The restated base year and base year emissions have been adjusted to include the impact of the acquisition as if it were completed effective the first day (November 1, 2010) of the fiscal 2011 period.

Page: 8. Emissions Data - (1 Nov 2010 - 31 Oct 2011)

8.1

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

Financial control

8.2

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

24034.46

8.3

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

97585.79

8.4

Are there are any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions which are not included in your disclosure?

No

8.5

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 1 emissions: Uncertainty range	Scope 1 emissions: Main sources of uncertainty	Scope 1 emissions: Please expand on the uncertainty in your data	Scope 2 emissions: Uncertainty range	Scope 2 emissions: Main sources of uncertainty	Scope 2 emissions: Please expand on the uncertainty in your data
More than 2% but less than or equal to 5%	Data Gaps Metering/ Measurement Constraints Data Management	We consider the main sources of uncertainty with respect to our data as follows: Data gathering/management: 1) Completeness – we still estimate a percentage of our Scope 1 emissions due to the lack of available data (data gaps & metering/measurement constraints). Consumption data for Scope 1 facilities/transportation equipment emissions is gathered internally by BMO personnel or via facilities managers (for facilities). 2) Accuracy - there is a degree of risk that data provided by 3rd party providers	More than 2% but less than or equal to 5%	Data Gaps Metering/ Measurement Constraints Data Management	We consider the main sources of uncertainty with respect to our data as follows: Data gathering/management: 1) Completeness – we still estimate a percentage of our Scope 2 emissions due to the lack of available data (data gaps & metering/measurement constraints). Consumption data for Scope 2 facilities emissions is gathered internally by BMO personnel or via facilities managers. 2) Accuracy - there is a degree of risk that data provided by 3rd party providers (facilities managers) is not

Scope 1 emissions: Uncertainty range	Scope 1 emissions: Main sources of uncertainty	Scope 1 emissions: Please expand on the uncertainty in your data	Scope 2 emissions: Uncertainty range	Scope 2 emissions: Main sources of uncertainty	Scope 2 emissions: Please expand on the uncertainty in your data
		(facilities managers) is not completely accurate. We rely on the internal controls implemented by our facilities managers and periodically audit their processes to provide a reasonable level of assurance regarding their activities. Data handling: 1) Collection and transposition of data from original utility invoices to energy recording systems and/or consolidation spreadsheets also introduces the risk of error. For internally gathered information, we task one individual to gather and consolidate the monthly data to a spreadsheet record with verification checks performed by separate individuals on a spot check basis. We focus the spot checks on those facilities with the largest consumption in order to mitigate any significant misstatements. We request the same processes be followed for information provided by our facilities managers (e.g. where they have responsibility for utility bill handling for our owned facilities). We attempt to mitigate transposition risk when uploading to the GHG:ID Tool by using automated methods to perform the data loading activities and use check totals, comparing before and after. Data collected from across the enterprise and from 3rd party providers is populated in a data collection template. Any gaps requiring estimation are identified during this process.			completely accurate. We rely on the internal controls implemented by our facilities managers and periodically audit their processes to provide a reasonable level of assurance regarding their activities. Data handling: 1) Collection and transposition of data from original utility invoices to energy recording systems and/or consolidation spreadsheets also introduces the risk of error. For internally gathered information, we task one individual to gather and consolidate the monthly data to a spreadsheet record with verification checks performed by separate individuals on a spot check basis. We focus the spot checks on those facilities with the largest consumption in order to mitigate any significant misstatements. We request the same processes be followed for information provided by our facilities managers (e.g. where they have responsibility for utility bill handling for our owned facilities). We attempt to mitigate transposition risk when uploading to the GHG:ID Tool by using automated methods to perform the data loading activities and use check totals, comparing before and after. Data collected from across the enterprise and from 3rd party providers is populated in a data collection template. Any gaps requiring estimation are identified during this process. The populated data

Scope 1 emissions: Uncertainty range	Scope 1 emissions: Main sources of uncertainty	Scope 1 emissions: Please expand on the uncertainty in your data	Scope 2 emissions: Uncertainty range	Scope 2 emissions: Main sources of uncertainty	Scope 2 emissions: Please expand on the uncertainty in your data
		The populated data collection template is then loaded into the GHG:ID Tool where 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. For internally developed spreadsheet driven calculations, we mitigate these risks by segregating the responsibilities for creation and verification between separate individuals.			collection template is then loaded into the GHG:ID Tool where 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. For internally developed spreadsheet driven calculations, we mitigate these risks by segregating the responsibilities for creation and verification between separate individuals.

8.6

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

Third party verification or assurance complete

8.6a

Please indicate the proportion of your Scope 1 emissions that are verified/assured

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

8.6b

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

Type of verification or assurance	Relevant standard	Attach the document
Reasonable assurance	ISO14064-3	https://webadmin.cdproject.net/sites/2013/17/1417/Investor CDP 2013/Shared Documents/Attachments/Investor-8.6b-C3-RelevantStatement/BMO Emissions Verification Fiscal 2011 (Morrison Hershfield).pdf
Reasonable assurance	The Climate Registry's general verification protocol	https://webadmin.cdproject.net/sites/2013/17/1417/Investor CDP 2013/Shared Documents/Attachments/Investor-8.6b-C3-RelevantStatement/BMO Emissions Verification Fiscal 2011 (Morrison Hershfield)V2.pdf

8.7

Please indicate the verification/assurance status that applies to your Scope 2 emissions

Third party verification or assurance complete

8.7a

Please indicate the proportion of your Scope 2 emissions that are verified/assured

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

8.7b

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

Type of verification or assurance	Relevant standard	Attach the document
Reasonable assurance	ISO14064-3	https://webadmin.cdproject.net/sites/2013/17/1417/Investor CDP 2013/Shared Documents/Attachments/Investor-8.7b-C3-RelevantStatement/BMO Emissions Verification Fiscal 2011 (Morrison Hershfield).pdf
Reasonable assurance	The Climate Registry's general verification protocol	https://webadmin.cdproject.net/sites/2013/17/1417/Investor CDP 2013/Shared Documents/Attachments/Investor-8.7b-C3-RelevantStatement/BMO Emissions Verification Fiscal 2011 (Morrison Hershfield)V2.pdf

8.8

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

No

Further Information

Please note that while our actual emissions for FY2011 were verified by a 3rd party (Morrison Hershfield), they were subsequently restated for the purposes of adjusting for the large acquisition completed in July 2011. The verification statements attached support the actual emissions reported for fiscal 2011 via CDP, not the restated baseline emissions that were subsequently recalculated. The purpose of our reporting the restated/adjusted baseline emissions is for comparative purposes to this year's fiscal 2012 emissions. Reference to our reported (not adjusted) FY2011 emissions is not considered all that meaningful.

Attachments

https://webadmin.cdproject.net/sites/2013/17/1417/Investor CDP 2013/Shared Documents/Attachments/InvestorCDP2013/8.EmissionsData(1Nov2010-31Oct2011)/BMO Emissions Verification Fiscal 2011 (Morrison Hershfield).pdf

Page: 8. Emissions Data - (1 Nov 2011 - 31 Oct 2012)

8.1

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

Financial control

8.2

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

20932.55

8.3

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

86853.06

8.4

Are there are any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions which are not included in your disclosure?

No

8.5

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 1 emissions: Uncertainty range	Scope 1 emissions: Main sources of uncertainty	Scope 1 emissions: Please expand on the uncertainty in your data	Scope 2 emissions: Uncertainty range	Scope 2 emissions: Main sources of uncertainty	Scope 2 emissions: Please expand on the uncertainty in your data
More than 2% but less than or equal to 5%	Data Gaps Metering/ Measurement Constraints Data Management	We consider the main sources of uncertainty with respect to our data as follows: Data gathering/management: 1) Completeness – we still estimate a percentage of our Scope 1 emissions due to the lack of available data (data gaps & metering/measurement constraints). Consumption data for Scope 1 facilities/transportation equipment emissions is gathered internally by BMO personnel or via facilities managers (for facilities). 2) Accuracy - there is a degree of risk that data provided by 3rd party providers (facilities managers) is not completely accurate. We rely on the internal controls implemented by our facilities managers and periodically audit their processes to provide a reasonable level of assurance regarding	More than 2% but less than or equal to 5%	Data Gaps Metering/ Measurement Constraints Data Management	We consider the main sources of uncertainty with respect to our data as follows: Data gathering/management: 1) Completeness – we still estimate a percentage of our Scope 2 emissions due to the lack of available data (data gaps & metering/measurement constraints). Consumption data for Scope 2 facilities emissions is gathered internally by BMO personnel or via facilities managers. 2) Accuracy - there is a degree of risk that data provided by 3rd party providers (facilities managers) is not completely accurate. We rely on the internal controls implemented by our facilities managers and periodically audit their processes to provide a reasonable level of assurance regarding their activities. Data

Scope 1 emissions: Uncertainty range	Scope 1 emissions: Main sources of uncertainty	Scope 1 emissions: Please expand on the uncertainty in your data	Scope 2 emissions: Uncertainty range	Scope 2 emissions: Main sources of uncertainty	Scope 2 emissions: Please expand on the uncertainty in your data
		their activities. Data handling: 1) Collection and transposition of data from original utility invoices to energy recording systems and/or consolidation spreadsheets also introduces the risk of error. For internally gathered information, we task one individual to gather and consolidate the monthly data to a spreadsheet record with verification checks performed by separate individuals on a spot check basis. We focus the spot checks on those facilities with the largest consumption in order to mitigate any significant misstatements. We request the same processes be followed for information provided by our facilities managers (e.g. where they have responsibility for utility bill handling for our owned facilities). We attempt to mitigate transposition risk when uploading to the GHG:ID Tool by using automated methods to perform the data loading activities and use check totals, comparing before and after. Data collected from across the enterprise and from 3rd party providers is populated in a data collection template. Any gaps requiring estimation are identified during this process. The populated data collection template is then loaded into the GHG:ID Tool where data integrity checks are completed (facility counts, record counts and consumption total checks) to ensure that the data has been			handling: 1) Collection and transposition of data from original utility invoices to energy recording systems and/or consolidation spreadsheets also introduces the risk of error. For internally gathered information, we task one individual to gather and consolidate the monthly data to a spreadsheet record with verification checks performed by separate individuals on a spot check basis. We focus the spot checks on those facilities with the largest consumption in order to mitigate any significant misstatements. We request the same processes be followed for information provided by our facilities managers (e.g. where they have responsibility for utility bill handling for our owned facilities). We attempt to mitigate transposition risk when uploading to the GHG:ID Tool by using automated methods to perform the data loading activities and use check totals, comparing before and after. Data collected from across the enterprise and from 3rd party providers is populated in a data collection template. Any gaps requiring estimation are identified during this process. The populated data collection template is then loaded into the GHG:ID Tool where data integrity checks are completed (facility counts, record counts and consumption total checks) to ensure that the data has been loaded consistently

Scope 1 emissions: Uncertainty range	Scope 1 emissions: Main sources of uncertainty	Scope 1 emissions: Please expand on the uncertainty in your data	Scope 2 emissions: Uncertainty range	Scope 2 emissions: Main sources of uncertainty	Scope 2 emissions: Please expand on the uncertainty in your data
		loaded consistently from one program to another. For internally developed spreadsheet driven calculations, we mitigate these risks by segregating the responsibilities for creation and verification between separate individuals.			from one program to another. For internally developed spreadsheet driven calculations, we mitigate these risks by segregating the responsibilities for creation and verification between separate individuals.

8.6

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

Third party verification or assurance complete

8.6a

Please indicate the proportion of your Scope 1 emissions that are verified/assured

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

8.6b

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

Type of verification or assurance	Relevant standard	Attach the document
Reasonable assurance	ISO14064-3	https://webadmin.cdproject.net/sites/2013/17/1417/Investor CDP 2013/Shared Documents/Attachments/Investor-8.6b-C3-RelevantStatement/BMO Emissions Verification Statement - FY2012 (Morrison Hershfield).pdf
Reasonable assurance	The Climate Registry's general verification protocol	https://webadmin.cdproject.net/sites/2013/17/1417/Investor CDP 2013/Shared Documents/Attachments/Investor-8.6b-C3-RelevantStatement/BMO Emissions Verification Statement - FY2012 (Morrison Hershfield)V2.pdf

8.7

Please indicate the verification/assurance status that applies to your Scope 2 emissions

Third party verification or assurance complete

8.7a

Please indicate the proportion of your Scope 2 emissions that are verified/assured

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

8.7b

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

Type of verification or assurance	Relevant standard	Attach the document
Reasonable assurance	ISO14064-3	https://webadmin.cdproject.net/sites/2013/17/1417/Investor CDP 2013/Shared Documents/Attachments/Investor-8.7b-C3-RelevantStatement/BMO Emissions Verification Statement - FY2012 (Morrison Hershfield).pdf
Reasonable assurance	The Climate Registry's general verification protocol	https://webadmin.cdproject.net/sites/2013/17/1417/Investor CDP 2013/Shared Documents/Attachments/Investor-8.7b-C3-RelevantStatement/BMO Emissions Verification Statement - FY2012 (Morrison Hershfield)V2.pdf

8.8

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

No

Further Information

Verification statement attached - BMO Emissions Verification Statement - FY2012 (Morrison Hershfield).pdf Please note that the verification covers our fiscal year November 1, 2011 through October 31, 2012.

Attachments

https://webadmin.cdproject.net/sites/2013/17/1417/Investor CDP 2013/Shared Documents/Attachments/InvestorCDP2013/8.EmissionsData(1Nov2011-31Oct2012)/BMO Emissions Verification Statement - FY2012 (Morrison Hershfield).pdf

Page: 9. Scope 1 Emissions Breakdown - (1 Nov 2010 - 31 Oct 2011)

9.1

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

Yes

9.1a

Please complete the table below

Country/Region	Scope 1 metric tonnes CO2e
Canada	12928.42
United States of America	11106.04

9.2

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

9.2a

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	13223.14
BMO Harris Bank	10811.32

9.2b

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

Facility	Scope 1 emissions (metric tonnes CO2e)	Latitude	Longitude
Retail Facilities (Branches, ABMs)	14377.69	90	-180
Office Facilities	3797.93	90	-180
Special Purpose Facilities (Operations Centres, Data Centres, Learning Centres)	3994.15	90	-180
Transportation Equipment	1864.68	90	-180

9.2c

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

GHG type	Scope 1 emissions (metric tonnes CO2e)
CH4	43.56
CO2	23749.12
N2O	22.15
HFCs	219.63

9.2d

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

Activity	Scope 1 emissions (metric tonnes CO2e)
Stationary Combustion (facilities)	21950.15
Mobile Combustion (transport)	1864.68
Fugitive emissions (HFCs - facilities)	219.63

Further Information

For Question 9.2(b) we have identified the latitude/longitude quadrant where facilities are located. Facilities where Scope 1 is applicable are all located in North America.

Page: 9. Scope 1 Emissions Breakdown - (1 Nov 2011 - 31 Oct 2012)

9.1

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

Yes

9.1a

Please complete the table below

Country/Region	Scope 1 metric tonnes CO2e
Canada	11473.61
United States of America	9458.94

9.2

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

9.2a

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	11555.06
BMO Harris Bank	9377.49

9.2b

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

Facility	Scope 1 emissions (metric tonnes CO2e)	Latitude	Longitude
Retail Facilities (Branches, ABMs)	12392.93	90	-180
Office Facilities	3972.83	90	-180
Special Purpose Facilities (Operations Centres, Data Centres, Learning Centres)	3292.01	90	-180
Transportation Equipment	1274.78	90	-180

9.2c

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

GHG type	Scope 1 emissions (metric tonnes CO2e)
CH4	39.27
N2O	19.37
CO2	20859.13
HFCs	14.78

9.2d

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

Activity	Scope 1 emissions (metric tonnes CO2e)

Activity	Scope 1 emissions (metric tonnes CO2e)
Stationary combustion (facilities)	19642.99
Mobile combustion (transport)	1274.78
Fugitive emissions (HFCs - facilities)	14.78

Further Information

For Question 9.2(b) we have identified the latitude/longitude quadrant where facilities are located. Facilities where Scope 1 is applicable are all located in North America.

Page: 10. Scope 2 Emissions Breakdown - (1 Nov 2010 - 31 Oct 2011)

10.1

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

Yes

10.1a

Please complete the table below

Country/Region	Scope 2 metric tonnes CO2e	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low carbon electricity, heat, steam or cooling (MWh)
Canada	20811.55	146833.03	23785.00
United States of America	76774.25	104075.54	91400.00

10.2

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

By business division
By facility
By activity

10.2a

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

Business division	Scope 2 emissions (metric tonnes CO2e)
BMO Bank of Montreal	20811.55
BMO Harris Bank	76774.25

10.2b

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

Facility	Scope 2 emissions (metric tonnes CO2e)
Retail Facilities (Branches, ABMs)	75522.25
Office Facilities	7212.50
Special Purpose Facilities (Operations Centres, Data Centres,	14851.05

Facility	Scope 2 emissions (metric tonnes CO2e)
Learning Centres)	

10.2c

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

Activity	Scope 2 emissions (metric tonnes CO2e)
Stationary combustion (facilities)	97585.79

Further Information

For Q10.1(a), we have recorded the relative Canada and USA amounts of "Purchased and consumed low carbon electricity, heat, steam or cooling (MWh)". These amounts represent our ongoing commitments relative to the purchase of Renewable Energy Credits (RECs) in both countries. These amounts are reported for transparency purposes only and all Scope 2 emissions recorded under the column "Purchased and consumed electricity, heat, steam or cooling (MWh)" are gross amounts (e.g. not netted for REC purchases).

Page: 10. Scope 2 Emissions Breakdown - (1 Nov 2011 - 31 Oct 2012)

10.1

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

Yes

10.1a

Please complete the table below

Country/Region	Scope 2 metric tonnes CO2e	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low carbon electricity, heat, steam or cooling (MWh)
Canada	16213.64	145865.55	23785.00
United States of America	70639.42	101008.90	91400.00

10.2

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

By business division
By facility
By activity

10.2a

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

Business division	Scope 2 emissions (metric tonnes CO2e)
BMO Bank of Montreal	16496.67
BMO Harris Bank	70356.39

10.2b

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

Facility	Scope 2 emissions (metric tonnes CO2e)
Retail Facilities (Branches, ABMs)	68198.66
Office Facilities	11093.35
Special Purpose Facilities (Operations Centres, Data Centres, Learning Centres)	7561.05

10.2c

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

Activity	Scope 2 emissions (metric tonnes CO2e)
Stationary combustion (facilities)	86853.06

Further Information

For Q10.1(a), we have recorded the relative Canada and USA amounts of "Purchased and consumed low carbon electricity, heat, steam or cooling (MWh)". These amounts represent our ongoing commitments relative to the purchase of Renewable Energy Credits (RECs) in both countries. These amounts are reported for transparency purposes only and all Scope 2 emissions recorded under the column "Purchased and consumed electricity, heat, steam or cooling (MWh)" are gross amounts (e.g. not netted for REC purchases).

Page: 11. Energy

11.1

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

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

11.2

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

Energy type	MWh
Fuel	109193.58
Electricity	246150.22
Heat	0.00
Steam	724.23
Cooling	0.00

11.3

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

Fuels	MWh
Natural gas	95471.25
Distillate fuel oil No 2	8735.53
Jet kerosene	2336.75
Motor gasoline	2650.05

11.4

Please provide details of the electricity, heat, steam or cooling amounts that were accounted at a low carbon emission factor

Basis for applying a low carbon emission factor	MWh associated with low carbon electricity, heat, steam or cooling	Comments
Tracking instruments, RECS (USA)	91400.00	In the United States, BMO has purchased renewable energy certificates for the last 3 years. The 91,400 MWh amount quoted is our annual purchase for FY2012. While we support renewable energy through the purchase of RECs, we do not account for electricity using a low carbon emissions factor as part of our stated emissions inventory, rather detail the amount for transparency purposes only.
Other	23785.00	Tracking instruments, RECS (Canada) - In Canada, BMO has purchased renewable energy certificates for the last 5 years. The 23,785 MWh amount quoted is our annual purchase for FY2012. While we support renewable energy through the purchase of RECs, we do not account for electricity using a low carbon emissions factor as part of our stated emissions inventory, rather detail the amount for transparency purposes only.

Page: 12. Emissions Performance

12.1

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

Decreased

12.1a

Please complete the table

Reason	Emissions value (percentage)	Direction of change	Comment
Emissions reduction activities	2.29	Decrease	The majority of the decrease (89%) is attributed to Scope 1 & Scope 2 emissions reduction activities relative to energy consumed within real estate facilities. Real estate related emissions reduction activities focused primarily on lighting/signage retrofits, building automation systems implementations, building envelope upgrades and HVAC equipment retrofits/upgrades. The balance of the decrease was the result of lower Scope 1 transportation assets emissions relating to our service fleet operations (e.g. more hybrid vehicles and utilization of technology to reduce travel for business purposes using owned assets).
Divestment	0	Decrease	No divestments in FY2012.
Acquisitions	0	Increase	No acquisitions impacting Scope 1 & Scope 2 emissions in FY2012.
Mergers	0	Increase	No mergers in FY2012.
Change in output	2.20	Increase	The net increase reported reflects the impacts of owned facilities open for the full year in FY2011 and closed in FY2012, as well as those owned facilities that were not in our inventory in FY2011 and opened in FY2012. It also includes the impacts of the post acquisition disposition of many owned transportation assets which were deemed no longer required.

Reason	Emissions value (percentage)	Direction of change	Comment
Change in methodology	5.26	Decrease	Net impact resulting from changes in subregional emissions factors for electricity (Canada & United States) and change in methodology for estimation of remote ATM energy consumption. Emissions factors: CDP 2012 submission (fiscal 2011 data) referenced the 2010 published subregional (Provincial) electricity emissions factors for Canada. This year's submission (fiscal 2012 data) references the 2011 published subregional (Provincial) electricity emissions factors for Canada. We have isolated the impacts of the change in emissions factors as a contributing factor for the overall change in Scope 2 emissions. CDP 2012 submission (fiscal 2011 data) referenced eGRID 2010 Version 1.1 electricity factors for the United States (based on electricity generation data from 2007). This year's submission (fiscal 2012 data) references eGRID 2012 electricity factors for the United States (based on electricity generation data from 2009). We have isolated the impacts of the change in emissions factors as a contributing factor for the overall change in Scope 2 emissions. ATMs methodology: Additional minor impact resulting from change in methodology used to estimate consumption for remote ATMs. Estimation of consumption changed from proxy based on facility type and subregional intensity measure in FY2011 to one for FY2012 based on energy consumption specifications at the machine/model level (factoring in estimated active/inactive status use).
Change in boundary	0	Increase	No changes to boundary in FY2012. The comparison of FY2012 Scope 1 & Scope 2 emissions is vs. our restated baseline amounts for FY2011 and changes in boundary have therefore been accounted for as part of the baseline restatement.
Change in physical operating conditions	0	Increase	No changes to physical operating conditions in FY2012.
Unidentified	1.62	Decrease	Emissions impacts unidentified. As a large organization it is difficult to gain visibility to all emissions reductions impacts/causes/activities. This is therefore a balancing number and remains unidentified.
Other	4.41	Decrease	There are two elements that comprise the net percentage change indicated: Adjusted emissions associated with those facilities assumed as part of our July, 2011 acquisition (M&I Bank in USA) were all calculated based on proxy consumption data. While these calculations are defensible, transparent and in accordance with GHG Protocol, they represented a sizable portion of our restated FY2011 emissions. In FY2012, we were able to obtain actual consumption data for the vast majority of these facilities, as post acquisition routines were established, and we believe that FY2012 better represents the true emissions for these facilities. We have isolated what we believe to be a representative difference and recognize it as such. Secondly, while our GHG Emissions calculation tool does not offer the ability to calculate weather specific impacts, we attribute a portion of the reduction to more favourable weather conditions in fiscal 2012 (vs. FY2011) for Scope 1 & Scope 2 emissions. We have obtained comparative information for the FY2011 vs. FY2012 years across major urban centres which, we believe, provides some insight into the direction and magnitude of weather related impacts on our emissions.

12.2

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

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change
.0000066823	metric tonnes CO2e	unit total revenue	7.4	Increase	Revenues increased 15.7% in FY2012 versus FY2011 with the major acquisition of M&I Bank in the USA contributing to this increase. Absolute emissions (tCO2e - Scope 1 & Scope 2) increased by 24.2% over the same period, again largely due to the July, 2011 M&I Bank acquisition. For this metric, we have used actual revenues reported and actual emissions reported, year over year, notwithstanding the fact that our emissions baseline has been restated to adjust for the impacts of the acquisition. Without also adjusting the revenues for FY2011 (which we have not done), any comparison to restated FY2011 emissions is of limited value. 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 Q12.3 and Q12.4 below) as more meaningful.

12.3

Please describe your gross combined Scope 1 and 2 emissions for the reporting year in metric tonnes CO2e per full time equivalent (FTE) employee

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change
2.3294	metric tonnes CO2e	FTE employee	10.03	Decrease	Number of employees decreased by 703 or 1.5% (FY2012 vs. FY2011 restated), while absolute emissions (tCO2e - Scope 1 & Scope 2) decreased by 13,835 or 11.4% over the same period. With the significant acquisition of M&I Bank in the USA (July, 2011), baseline emissions have been restated for the 2011 fiscal year and it is this reference point that is being used for comparative purposes. In addition to ongoing internal emissions reduction activities, weather and lower electricity emissions factors have contributed to the overall decrease in Scope 1 & Scope 2 emissions, and therefore this intensity metric.

12.4

Please provide an additional intensity (normalized) metric that is appropriate to your business operations

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change
.1183	metric tonnes CO2e	square meter	16.66	Decrease	Intensity measure relates to Scope 1+2+3 real estate based emissions per square meter of real estate occupied. Scope 3 real estate based emissions relate to our occupancy of leasehold premises as defined by our "Financial Control" reporting boundary. Real estate m2 increased marginally in FY2012 (32,000 m2) while total emissions declined by 15.21% (FY2012 vs. FY2011 restated). With the significant acquisition of M&I Bank in the USA (July, 2011), baseline emissions have been restated for the 2011 fiscal year and it is this reference point that is being used for comparative purposes. In addition to ongoing internal consumption reduction activities, weather and lower electricity emissions factors have contributed to the overall decrease in Scope 1, Scope 2 and Scope 3 (including leased facilities due to reporting boundary) emissions, and therefore this intensity metric.
.4309	metric tonnes CO2e	Other: FTE employee	8.81	Decrease	Intensity measure relates to tCO2e Scope 1 and Scope 3 transportation for business purposes (air/ground) emissions per FTE employee. Number of employees decreased by 703 or 1.5% (FY2012 vs. FY2011 restated). Transportation for business purposes emissions (tCO2e) decreased by 10.17% over the same period, partly due to the reduction in travel subsequent to the acquisition activities leading up to the transaction close in July, 2011. We also continue to focus on using technologies (teleconference / videoconference) to avoid business travel where possible, which has also contributed to the reduction. With the significant acquisition of M&I Bank in the USA (July, 2011), baseline emissions have been restated for the 2011 fiscal year and it is this reference point that is being used for comparative purposes.

Further Information

When answering Q12.1, 12.1(a), 12.3 and 12.4 our point of reference is the adjusted/restated baseline for fiscal 2011 which accounts for the full year's impact of a major acquisition completed in July, 2011.

Page: 13. Emissions Trading

13.1

Do you participate in any emissions trading schemes?

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

13.2

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

Yes

13.2a

Please complete the table

Credit origination or credit purchase	Project type	Project identification	Verified to which standard	Number of credits (metric tonnes of CO2e)	Number of credits (metric tonnes CO2e): Risk adjusted volume	Credits retired	Purpose, e.g. compliance
Credit Purchase	Energy efficiency: industry	Greening Canada Fund - Toronto District School Board (TDSB)	Other: ISO 14064-2	56921	56921	Yes	Voluntary Offsetting
Credit Purchase	Energy efficiency: industry	Greening Canada Fund - Commission Scolaire Marguerite-Bourgeoys (CSMB)	Other: ISO 14064-2	2789	2789	Yes	Voluntary Offsetting
Credit Purchase	Energy efficiency: industry	Greening Canada Fund - Commission Scolaire Pointe-de-I'le (CSPI)	Other: ISO 14064-2	2662	2662	Yes	Voluntary Offsetting
Credit Purchase	Energy efficiency: industry	Greening Canada Fund - Les Soeurs de l'Assomption de Sainte-Vierge (SASV)	Other: ISO 14064-2	1143	1143	Yes	Voluntary Offsetting
Credit Purchase	Energy efficiency: industry	Greening Canada Fund - University of Alberta (UOA)	Other: ISO 14064-2	12600	12600	Yes	Voluntary Offsetting
Credit Purchase	Energy efficiency: industry	Greening Canada Fund - YMCA of Greater Toronto (YMCA)	Other: ISO 14064-2	310	310	Yes	Voluntary Offsetting
Credit Purchase	Methane avoidance	Greening Canada Fund - St. Felicien (SF)	Other: ISO 14064-2	56536	56536	Yes	Voluntary Offsetting
Credit Purchase	Geothermal	Greening Canada Fund - Central de Chauffage de Chicoutimi, S.E.N.C. (CHI)	Other: ISO 14064-2	6490	6490	Yes	Voluntary Offsetting

Credit origination or credit purchase	Project type	Project identification	Verified to which standard	Number of credits (metric tonnes of CO2e)	Number of credits (metric tonnes CO2e): Risk adjusted volume	Credits retired	Purpose, e.g. compliance
Credit Purchase	Biomass energy	Greening Canada Fund - Merom Farms Ltd. (MRM)	Other: ISO 14064-2	11538	11538	Yes	Voluntary Offsetting
Credit Purchase	Landfill gas	Greening Canada Fund - North Bay (NB)	Other: ISO 14064-2	25200	25200	Yes	Voluntary Offsetting
Credit Purchase	Landfill gas	Greening Canada Fund - City of Guelph (COG)	Other: ISO 14064-2	45383	45383	Yes	Voluntary Offsetting

Page: 14. Scope 3 Emissions

14.1

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

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Methodology	Percentage of emissions calculated using primary data	Explanation
Purchased goods and services	Relevant, not yet calculated				BMO Financial Group's Scope 3 emissions resulting from our purchase of goods and services include: - technology/telecommunications equipment (personal computers, servers, copiers, printers, routers, switches, etc.), - office supplies (e.g. pens, paper, etc.), - furniture and fixtures for premises (desks, chairs, lighting, building materials, etc.), - consulting services as provided by third parties and, - marketing and advertising materials. The primary reason BMO Financial Group has not focused on the specific measurement of emissions related to its supply chain is due to the lack of available source data. Since early 2008 we have employed a Sustainable Procurement questionnaire as part our competitive bid process (supply chain focus) and have scored the results to these questions as part of overall decision process. While this process does not provide results that

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Methodology	Percentage of emissions calculated using primary data	Explanation
					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 source of Scope 3 emissions would be relevant to the upstream (i.e., cradle-to-gate) emissions from the production of capital goods purchased or acquired by the reporting company in the reporting year. In BMO's case this would apply specifically to new owned facilities built or transportation equipment purchased. BMO's ongoing strategy is to lease facilities space whenever possible and there was no significant turnover of transportation assets during the reporting period.
Fuel-and-energy-related activities (not included in Scope 1 or 2)	Relevant, not yet calculated				Upstream emissions of purchased fuels, upstream emissions of purchased electricity and the transmission and distribution (T&D) losses are relevant to BMO as an end user of fuels and electricity. We have not attempted to calculate Scope 3 emissions relative to this source to date.
Upstream transportation and distribution	Relevant, not yet calculated				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,

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Methodology	Percentage of emissions calculated using primary data	Explanation
					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	1084.35	BMO Financial Group is indirectly responsible for the emissions created by the solid waste generated from our operations. In FY2012, we measured and reporting the emissions resulting from solid waste generated from 10 of our owned office buildings. These buildings represent 4.0 million square feet of real estate. 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	100%	The percentage noted relates to the data available for the 10 major facilities noted. A significant number of our facilities are smaller in size and geographically dispersed across North America. It is not economical to gather waste information from these locations and our focus is therefore on those larger facilities which are either owned or, if leased, where we are a major tenant.

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Methodology	Percentage of emissions calculated using primary data	Explanation
			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).		
Business travel	Relevant, calculated	18663.57	As a financial institution, our most significant Scope 3 emissions relating to employee business travel include the following: commercial air, ground travel (incl. employees' occasional use of personal vehicles for business, rental vehicles, and rail). For the past six 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)"	100%	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	Methodology	Percentage of emissions calculated using primary data	Explanation
			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 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-		

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Methodology	Percentage of emissions calculated using primary data	Explanation
			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.		
Employee commuting	Relevant, not yet calculated				Emissions from approximately 46,000 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	93977.41	Based on our reporting boundary (Financial Control) and contractual	67.79%	Actual consumption data obtained for 67.79% (based on percentage of emissions calculated). Consumption

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Methodology	Percentage of emissions calculated using primary data	Explanation
			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 a significant portion of our total Scope 3 emissions reported. For the past six 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. At our request, consumption data is provided annually by the landlord/facilities managers for the facilities occupied by		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	Methodology	Percentage of emissions calculated using primary data	Explanation
			BMO Financial Group. In those instances where check 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 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.		
Investments	Not evaluated				We are aware of the discussions related to financed emissions and are following the

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Methodology	Percentage of emissions calculated using primary data	Explanation
					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.
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.
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.
Use 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.
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 and therefore this Scope 3 source is not relevant.
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.
Franchises	Not relevant, explanation provided				BMO Financial Group does not engage in franchise activity and therefore this Scope 3 source is not relevant.
Other (upstream)					
Other (downstream)					

14.2

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

Third party verification or assurance complete

14.2a

Please indicate the proportion of your Scope 3 emissions that are verified/assured

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

14.2b

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

Type of verification or assurance	Relevant standard	Attach the document
Reasonable assurance	ISO14064-3	https://www.cdproject.net/sites/2013/17/1417/Investor CDP 2013/Shared Documents/Attachments/Investor-14.2b-C3-RelevantStatementAttached/BMO Emissions Verification Statement - FY2012 (Morrison Hershfield).pdf
Reasonable assurance	The Climate Registry's general verification protocol	https://www.cdproject.net/sites/2013/17/1417/Investor CDP 2013/Shared Documents/Attachments/Investor-14.2b-C3-RelevantStatementAttached/BMO Emissions Verification Statement - FY2012 (Morrison Hershfield).pdf

14.3

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

14.3a

Please complete the table

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
Business travel	Emissions reduction activities	1.21	Decrease	Ongoing focus on utilizing technologies such as video conferencing and teleconferencing to avoid physical travel via ground/air for business purposes.
Upstream leased assets	Emissions reduction activities	1.36	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 lighting/signage retrofits and building systems upgrades where BMO has the opportunity to positively effect change.
Upstream leased assets	Change in output	.37	Increase	The net increase reported reflects the impacts of leasehold facilities occupied for the full year in FY2011 and vacated in FY2012, as well as those leasehold facilities that were not in our inventory in FY2011 and occupied in FY2012.
Upstream leased assets	Acquisitions	.05	Increase	In June, 2012 BMO completed the acquisition of CTC Consulting, LLC in the United States which increased our real estate footprint marginally. Facilities acquired are leased premises and are included in our Scope 3 emissions due to our reporting boundary of Financial Control.
Upstream	Other: Change	4.69	Decrease	Changes in subregional emissions factors for

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
leased assets	in emissions factors			electricity (Canada & United States): For leasehold facilities - CDP 2012 submission (fiscal 2011 data) referenced the 2010 published subregional (Provincial) electricity emissions factors for Canada. This year's submission (fiscal 2012 data) references the 2011 published subregional (Provincial) electricity emissions factors for Canada. We have isolated the impacts of the change in emissions factors as a contributing factor for the overall change in Scope 3 emissions (included in Scope 3 for leasehold facilities). For leasehold facilities - CDP 2012 submission (fiscal 2011 data) referenced eGRID 2010 Version 1.1 electricity factors for the United States (based on electricity generation data from 2007). This year's submission (fiscal 2012 data) references eGRID 2012 electricity factors for the United States (based on electricity generation data from 2009). We have isolated the impacts of the change in emissions factors for regional emissions factors as a contributing factor for the overall change in Scope 3 emissions (included in Scope 3 for leasehold facilities). Changes in regional emissions factors for electricity (countries outside North America): For leasehold facilities - There were changes in the emissions factors for regional (Country level) emissions factors as well however the isolated impact is less significant due to the minimal real estate footprint of leasehold facilities outside of North America. We have isolated the impacts of the change in emissions factors for regional emissions factors as a contributing factor for the overall change in Scope 3 emissions (included in Scope 3 for leasehold facilities).
Upstream leased assets	Other: Proxy data - FY2011 / actual data - FY2012	5.05	Decrease	In July, 2011 BMO completed a large acquisition (M&I Bank in the United States) which increased our real estate footprint significantly. Along with 3.5 million square feet of owned facilities, approximately 1.5 million square feet of "leased" facilities were acquired which has resulted in the restatement of our baseline emissions for FY2011. Emissions calculated for the acquired facilities (leased facilities pertinent to Scope 3 due to our Financial Control reporting boundary) were based on transparent and defensible methods (e.g. subregional floor space intensities as set out by Office of Energy Efficiency in the USA) for the restated FY2011 baseline. In FY2012 we were able to obtain and utilize actual consumption data for most facilities and believe that the resultant emissions are more representative. To arrive at the attributed percentage difference, we have filtered out the impacts of emissions factors changes (noted separately in this section) as well as weather impacts to the best of our ability. We believe the resulting percentage change fairly represents the difference (decrease) between the use of proxy data for FY2011 and actual data for FY2012.
Upstream leased assets	Other: Weather related impacts	2.75	Decrease	While our GHG Emissions calculation tool does not offer the ability to calculate weather specific impacts, we attribute a portion of the reduction to

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
				more favourable weather conditions in fiscal 2012 (vs. FY2011) for leased facilities related Scope 3 emissions. We have obtained comparative information for the FY2011 vs. FY2012 years across major urban centres which, we believe, provides some insight into the direction and magnitude of weather related impacts on our emissions.
Upstream leased assets	Change in methodology	.11	Increase	Methodology used to estimate consumption for remote (leased) ATMs changed from proxy based on facility type and subregional intensity measure in FY2011 to one for FY2012 based on energy consumption specifications at the machine/model level (factoring in estimated active/inactive status use).
Upstream leased assets	Unidentified	4.04	Decrease	Emissions impacts unidentified. As a large organization it is difficult to gain visibility to all emissions reductions impacts/causes/activities. This is therefore a balancing number and remains unidentified.

14.4

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

14.4a

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

BMO's engagement with suppliers to date, relative to climate change, has been focused largely on practical initiatives.

For example, with our preferred vendor for office supplies, we have investigated and implemented a number of initiatives to introduce efficiencies and reduce costs and emissions. "Right-sizing" the delivery schedules is one such example. Deliveries of office supplies to our office facilities have now been scheduled for two specific days per week, as opposed to the previous requirement of delivery within 24 hours. This allows the supplier to better manage their transportation emissions as they are visiting our facilities less frequently, and it limits activity for us within the various office locations (previously delivery trucks could potentially be on site every day).

Another example is the introduction of a reusable delivery tote for office supplies received within our facilities. The reusable tote is made of heavy cardboard material and is tracked for delivery and return by the vendor using a bar code system. It replaces the previously used shipping materials which consisted of regular cardboard boxes, used once and then disposed of to either recycling or landfill. In FY2012, this service was expanded beyond our initial pilot (Toronto area locations) to additional locations across Canada and has been well received. The reduction in waste within our facilities results in reduced Scope 3 emissions for BMO and a reduction in the consumption of materials (old disposable cardboard boxes) for our supplier.

With specific technology suppliers, where we arrange to receive large volumes of product (laptop/desktop hardware) at a central location, the amount of packaging has been reduced from boxes containing individual items to shrink-wrapped “rack and roll” delivery methods containing many items (absent the individual packaging). For software, we have moved away from receiving packages containing individual software (paper materials/CDs) to the use of enterprise licensing and a true up with vendors periodically. For BMO, this reduces Scope 3 emissions for waste, for the suppliers it reduces both materials and transportation emissions as the delivery loads are reduced in weight (hardware) or eliminated altogether for software.

14.4b

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

Number of suppliers	% of total spend	Comment
52	1%	BMO's focus has been on larger suppliers for selected opportunities to date.

14.4c

If you have data on your suppliers' GHG emissions and climate change strategies, please explain how you make use of that data

How you make use of the data	Please give details
Other	To date, we have not asked for GHG emissions data from suppliers. We leverage initiatives such as the ones described in internal and external communications to promote our collaborative efforts with suppliers in the area of sustainability.

Module: Sign Off

Page: Sign Off

Please enter the name of the individual that has signed off (approved) the response and their job title

Jim Johnston
Director, Environmental Sustainability & Compliance
BMO Financial Group