

Greenhouse Gas (GHG)
Reporting Methodology

Operational Emissions



March 2025¹

¹ This methodology applies to operational emissions disclosures in our most recent annual Sustainability Report and Climate Report and should be read with reference to those reports. Year-over-year comparisons may not be possible.

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1. Purpose and Background

This document provides an overview of the BMO Financial Group (BMO, Bank of Montreal, the bank) operational greenhouse gas (GHG) emissions quantification methodology for the calculation and reporting of Scope 1, Scope 2 and applicable Scope 3 categories 1-14 emissions.

Our approach is guided by the principles and guidance of the GHG Protocol Corporate Accounting and Reporting Standard and the Corporate Value Chain (Scope 3) Accounting and Reporting Standard (together the GHG Protocol). The GHG Protocol provides guidance on how to define organizational and operational boundaries, identify emission sources, collect and verify input data, apply emission factors to quantify emissions and report on results. This guidance is interpreted and applied at our discretion as described in this document.

Emissions related to BMO's investments and other financial activities (Scope 3 category 15) are calculated with reference to the Partnership for Carbon Accounting Financials' Global GHG Accounting & Reporting Standard, Part A Financed Emissions, Second Edition (PCAF Standard, Part A). For information on our approach to financed emissions, refer to our [GHG Reporting Methodology – Financed emissions](#).

2. Organizational Boundaries

The organizational boundaries define the entities or operations included in the GHG inventory.

BMO follows the GHG Protocol's operational control approach, which means we report as Scope 1 and Scope 2 100% of the GHG emissions from global operations over which we have the authority to introduce and implement policies, such as those that would influence energy consumption. This includes emissions from:

- All assets that are fully, or majority owned by BMO including offices, branches, and data centers;
- Assets that are leased or rented by BMO and where BMO has operational control over the operations; and
- Joint ventures and associates where BMO has operational control over operations.

The organizational boundaries exclude the emissions from the entities or operations that are not under BMO's operational control, such as the entities that are minority owned by BMO or the assets that are leased or rented by BMO but where BMO does not have operational control over the energy use. Emissions from these sources are reported separately under the appropriate Scope 3 categories.

3. Operational Boundaries

The operational boundaries define the emission sources or activities included in the GHG inventory.

Emission sources are divided into three scopes, based on the degree of control or influence that the bank has over them.

Scope 1:

Direct emissions from sources that are owned or controlled by BMO, such as the combustion of natural gas, diesel, gasoline in the bank's buildings or vehicles, as well as fugitive emissions (e.g., refrigerant leakages from air conditioning units).

Scope 2:

Indirect emissions from the generation of electricity, steam, heating, or cooling that are purchased and consumed by BMO, such as the electricity used in the bank's offices, branches, automated teller machines (ATMs) and data centers.

Scope 3:

Other indirect emissions that are not owned or controlled by BMO, but are related to the bank's operations, such as emissions from business travel, purchased goods and services, downstream leased assets and others.

BMO reports its Scope 2 emissions using both the “location-based” and the “market-based” methods, as per the GHG Protocol’s dual reporting recommendation. The location-based method uses grid-average emission factors that reflect the average emissions intensity of the electricity generation in a specific region or country. The market-based method uses supplier-specific or contractual emission factors that reflect the emissions associated with the electricity products or contracts that BMO purchases from its energy providers or other third parties.

BMO reports its Scope 3 emissions from categories determined to be relevant to the organization based on a Scope 3 screening assessment performed in accordance with GHG Protocol’s guidance. The Scope 3 screening assessment is described in more detail in [section 4.3 Scope 3](#).

BMO identifies and maps the emission sources or activities that fall within the organizational and operational boundaries, assigning them to the appropriate scope. BMO identifies the emission sources applicable for each of the assets within the organizational boundary as a part of an operational boundaries mapping exercise (see Table 1). The operational boundaries mapping is updated annually to reflect any changes in the bank’s operations, such as the addition or removal of entities, facilities or other emission sources.

Table 1: Emission sources and Scope classification

Scope	Emission Source/Activity	Data Source
Scope 1	Natural gas consumption	Utility bills
	Heating oil consumption	Utility bills
	Propane gas consumption	Utility bills
	Diesel consumption	Fuel receipts or mileage
	Gasoline consumption	Fuel receipts or mileage
	Jet fuel consumption	Fuel consumption records
	Refrigerant leakage	Maintenance records
Scope 2	Electricity consumption	Utility bills
	Chilled water consumption	Utility bills
	Steam consumption	Utility bills
Scope 3	Purchased goods and services	Procurement data
	Capital Goods	Procurement data
	Air travel	Travel agency records and/or procurement data
	Rail travel	Rail company records and/or procurement data
	Rental car travel	Rental company records
	Employee vehicles	Expense reports
	Hotel stays	Travel agency records
	Taxi travel	Travel agency records or expense reports
	Downstream leased assets	Utility bills

4. Calculation methodology

To calculate the GHG emissions from each source, the quantity is determined in metric tonnes (t) by taking the emission factor (EF) appropriate for that specific GHG source and multiplying it by the activity data, such as the volume of fuel used.

GHG emissions per source (tGHG) =

$$EF \left\{ \frac{\text{tGHG}}{\text{activity unit}} \right\} \times \text{Activity quantity (unit of activity)}$$

Where:

GHG is the quantity of GHG emissions released from the activity in metric tonnes

EF is the emission factor for the release of GHG emissions from that activity per unit of activity

Activity quantity is the total quantity of the activity for which emissions are being quantified undertaken by the company during the reporting period, measured in the units for which emission factors are available (e.g., litres of fuel).

Where possible, emissions for each of the individual GHGs from the six Kyoto GHGs² recommended under the GHG Protocol released from an activity are quantified. The total GHGs from each activity are converted to a standardized unit, carbon dioxide equivalent (CO₂e) by applying the gases' Global Warming Potential, as shown below.

Total emissions per activity (tCO₂e) =

$$\sum_{i=1}^n \text{GHGi} \times \text{GWPI}$$

Where:

GHGi is the quantity of each GHG released from the activity in metric tonnes

GWPI is the Global Warming Potential value from the Intergovernmental Panel on Climate Change (IPCC) of each GHG gas relative to CO₂

n is the number of different gases included in the calculation.

The following sections describe the calculation methodologies for each emission source identified in BMO's operations, along with activity data used and any assumptions made.

4.1. Scope 1

4.1.1. Stationary combustion

Scope 1 emissions from stationary combustion accounts for GHG emissions from heating sources, such as natural gas and heating oil used in buildings. Data for these calculations are gathered from the BMO Corporate Real Estate team. To ensure consistency and comparability, all data are converted into a unified energy unit (Megawatt-hour, MWh) using higher heating values (HHV) and standard conversion factors sourced from the Canada Energy Regulator. In instances where measured data is unavailable for the entire reporting year, the consumption is estimated based on the building's square footage coupled with energy intensity parameters based on the location of the asset and the type of fuel, which were extrapolated from comparable assets where the energy consumption data were available. In regions where no historical energy usage data is available, we adopt energy intensity parameters from third party sources, including U.S. Energy Information Administration (EIA) Commercial Buildings Energy Consumption Survey (CBECS) and Natural Resources Canada National Energy Use Database (NEUD). In cases where only partial data is available for an asset, the missing months are estimated using available data from the same asset, applying methods such as monthly averages or data from similar months.

The emissions are calculated using emission factors specific to the fuel type and location where the fuel is combusted if such data is available. Sources of emission factors for each location and fuel type are listed in [section 4.4.2 Emission factors sources](#).

4.1.2. Mobile combustion

Scope 1 emissions from mobile combustion account for GHG emissions from consumption of fuel used in BMO's corporate jet and vehicle fleet. Consumption data for the corporate jet is provided by the jet operating company. Data for the vehicle fleet is sourced from the fuel card provider. In cases where direct consumption data for the vehicle fleet is not available and only the total amount spent on fuel is known, this expenditure is divided by the average fuel price to estimate the fleet's fuel consumption. The average fuel price for each fuel type is calculated based on our fuel expenditure divided by our fuel consumption. For situations where no data is available, a distance-based approach is adopted, using an average distance driven per vehicle.

The emissions are calculated using country and fuel-type specific emission factors for the country where the fuel is combusted, if such data is available. Sources of emission factors for each location and fuel type are listed in [section 4.4.2 Emission factors sources](#).

4.1.3. Fugitive emissions

Scope 1 Fugitive emissions result from the unintended or accidental release of refrigerant gases from heating, ventilation, and air conditioning systems installed in buildings. The data for fugitive emissions is collected from BMO Corporate Real Estate team who track the assets that use refrigerant gases and report any leaks or maintenance activities.

GHG emissions are calculated by multiplying the weight of leaked gases by appropriate GWP value corresponding to the respective refrigerant.

The GWP values used for the calculation are taken from the Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report (AR6), which reflects the most recent scientific consensus on the radiative forcing of different gases.

4.2. Scope 2

4.2.1. Location-based approach

Scope 2 emissions account for GHG emissions from the consumption of purchased electricity, steam and chilled water. Electricity, steam and chilled water consumption data for buildings are sourced from BMO Corporate Real Estate team. To ensure consistency and comparability, all data are converted into a unified energy unit (Megawatt-hour, MWh) using standard conversions sourced from the Canada Energy Regulator. When measured data is unavailable for the entire reporting year, the consumption is estimated based on the location of the asset, the building's square footage and energy use intensity factors which are extrapolated from comparable assets where the energy consumption data were available. In cases where only partial data is available for an asset, the missing months are estimated using available data from the same asset, applying methods such as monthly averages or data from similar months.

For stand-alone ATMs, electricity consumption is calculated based on energy use information from the manufacturer and the estimated operating time of the ATM. If energy use information is not available, a comparable ATM is used as a proxy. Electricity consumption for in-branch ATMs is not calculated separately as it is included in the branch electricity consumption.

GHG emissions are calculated by applying grid average emission factors specific to the region or country and the type of energy purchased, to electricity, steam or chilled water consumption data if such data is available. Grid average emission factors reflect the average emissions intensity of the electricity, steam or chilled water generated in a specific region or country. Sources of emission factors for each location and purchased energy type are listed in [section 4.4.2 Emission factors sources](#).

4.2.2. Market-based approach

The market-based approach to calculating Scope 2 emissions considers the organization's unique energy procurement choices, such as the purchase of renewable energy certificates (RECs) or local equivalents. Unlike the location-based method, which uses grid average emission factors, the market-based method derives emission factors from contractual instruments.

Electricity consumption data for this approach is collected and estimated in the same manner as for the location-based method. BMO purchases renewable energy certificates (RECs) or local equivalents, applies them to a portion of electricity consumption and calculates market-based emissions as any remaining Scope 2 emissions to reflect the green attributes of the renewable energy procured. RECs or local equivalents are not applicable to purchased steam and chilled water.

4.3. Scope 3

4.3.1. Scope 3 screening assessment

BMO has developed an internal screening assessment tool to determine the applicability and relevance of each Scope 3 category. The assessment evaluates each Scope 3 category using a set of criteria that include:

Table 2: Scope 3 Screening Assessment Criteria

Criteria	Definition of the criteria
Size	Reflects the extent to which the category contributes to the company's total estimated Scope 3 GHG emissions, based on an understanding of the operations or previously quantified data for the category.
Influence	Reflects the degree to which BMO can influence GHG emissions reductions from the category
Risk	Reflects how the category contributes to the company's risk exposure (e.g., climate change related risks including both physical and transition risks).
Stakeholders	Reflects how important the category is perceived to be by key stakeholders (e.g., regulators, customers, suppliers, investors or civil society).
Outsourcing	Reflects if the category contains outsourced activities previously performed in-house or activities outsourced by the reporting company which are typically performed in-house by other companies from the sector, or vice versa.
Sector guidance / peer practice	Reflects if the category was deemed relevant by peers or sector guidance.
Spend or revenue	Reflects whether activities related to the category incur expenses, or generate revenues, for BMO and whether the magnitude of that spending or revenue correlates with emissions.
Other	Any additional relevant considerations which may determine relevancy of the category.

Each criterion is evaluated on a 3-point scale for each category of Scope 3 emissions. Results are based on the cumulative scores from the criteria evaluations, where weights were assigned to reflect the criteria's relative importance. The conclusions of the assessment are shown in the table below:

Scope 3 Category	Assessment result	Comment
● 1. Purchased Goods & Services	Relevant	Category is calculated and disclosed, excluding purchasing activity outside of North America.
● 2. Capital Goods	Relevant	Category is calculated and disclosed together with Category 1, excluding purchasing activity outside of North America.
● 3. Fuel- and Energy- Related Activities	Relevant	Category is estimated and not yet disclosed.
● 4. Upstream Transportation and Distribution	Not applicable	Category is calculated and reported under Scope 3 category 1 Purchased Goods and Services and category 2 Capital Goods.
● 5. Waste Generated in Operations	Not relevant	Category has been deemed not relevant for reporting purposes based on estimated size.
● 6. Business Travel	Relevant	Category is calculated and disclosed, excluding purchasing activity outside of North America.
● 7. Employee Commuting	Relevant	Category is estimated and not yet disclosed.
● 8. Upstream Leased Assets	Not applicable	Category is calculated and reported under Scope 1 & 2.
● 9. Downstream Transportation and Distribution	Not applicable	BMO does not sell or distribute physical goods.
● 10. Processing of Sold Products	Not applicable	BMO does not sell physical goods.
● 11. Use of Sold Products	Not applicable	BMO does not sell physical goods.
● 12. End-of-life Treatment of Sold Products	Not applicable	BMO does not sell physical goods.
● 13. Downstream Leased Assets	Relevant	Category is calculated and disclosed.
● 14. Franchises	Not applicable	BMO does not operate franchises.
15. Investments	Reported separately	Scope 3 category 15 emissions are those resulting from our financing activity and do not qualify as operational Scope 3 GHG emissions. They are reported separately. See GHG Reporting Methodology – Financed emissions

Legend:

- **Relevant:** Category is significant and will be included in our GHG inventory
- **Not relevant:** There may be some emissions from this category resulting from BMO's activities, but they are not deemed significant for reporting
- **Not applicable:** There are no emissions from this category resulting from BMO's upstream or downstream activities.

The following sections describe the calculation methodologies for each Scope 3 category identified as relevant and currently disclosed. The activity data used in the calculations for each emission source is also identified with any assumptions made about the data.

4.3.2. Scope 3 category 1 - Purchased Goods and Services

Scope 3 category 1 emissions from purchased goods and services are calculated using a spend-based approach. Spend data is sourced from BMO's procurement team, including annual spend by supplier and the category of good or service purchased³. Spend related to activities accounted for under other GHG scopes, such as business travel or utilities or that do not fall into scope, such as donations, are excluded.

GHG emissions are calculated by multiplying the spend of purchased goods and services by the relevant emission intensity factors. When available, GHG emissions from suppliers' CDP Supply Chain disclosures are used to derive a supplier specific emission intensity factors⁴. Where supplier specific data are not available, we use sector emission intensity factors provided by Watershed and sourced from their Comprehensive Environmental Data Archive (CEDA) database⁵.

4.3.3. Scope 3 category 2 – Capital Goods

Scope 3 category 2 emissions from capital goods are calculated using the same approach as Scope 3 category 1 purchased goods and services. Emissions from Scope 3 categories 1 and 2 are disclosed together.

4.3.4. Scope 3 category 6 – Business Travel

GHG emissions related to business travel arise from air and ground transportation by BMO employees in vehicles not controlled by BMO, and BMO employee hotel stays. Emissions from this source are quantified and reported for North American operations only, due to low significance, based on the number of employees, and unavailability of data from other regions. Data sources and calculation methodology for each category of transport are described below. Sources of emission factors for each location and mode of transport are listed in [section 4.4.2 Emission factors sources](#).

Air travel

Emissions from business air travel are calculated using the total distance traveled in kilometres, sourced from BMO's booking agency. We apply emission factors based on the length of the flight (short, medium, or long haul) and the travel class of the flight (economy, premium economy, business or first class). We assume the total distance travelled is equal to the distance between the departure airport and the arrival airport.

Rail

Emissions from business rail travel in Canada are calculated using the distance traveled in kilometers, sourced from BMO's rail operator, and applying emission factors.

Emissions from business rail travel in the United States are calculated using a spend-based approach where spend data are sourced from BMO's procurement team. This method calculates emissions based on the amount spent on rail travel, which is then converted into passenger miles using average passenger revenue per passenger-mile data from the US Bureau of Transportation Statistics. Emission factors corresponding to passenger miles were then applied to estimate the total emissions.

³ Category 2 capital goods spend is included in the category 1 supply chain spend.

⁴ There is a data lag in availability of supplier emissions data from CDP Supply Chain. We apply supplier specific emissions factors derived from the most recently available supplier data to our current year spend.

⁵ CEDA by Watershed is a multi-regional environmentally extended input-output (EIO) database and has been recognized by the Greenhouse Gas Protocol.

Rental cars

Emissions from rental cars are calculated using fuel consumption data sourced from BMO's car rental company. Data are converted into a unified energy unit (liters, l) and emissions are calculated as described in section 4.1.2 Mobile combustion - applying emission factors that are selected based on the geographic location and the type of fuel.

Taxi

Emissions from taxi travel are calculated using a spend-based approach, where spend data are sourced from BMO's procurement team. We convert spend data into fuel consumption data using the average cost per kilometer and the average fuel consumption per kilometer sourced from national taxi statistics of the US and Canada. We assume that the fuel type used is gasoline.

Employee vehicles

Emissions from business trips where employees use their own vehicles are calculated using data on employee reimbursement claims sourced from BMO's procurement team. Employee reimbursement values (in dollars) are used to estimate distance traveled based BMO's recommended reimbursement rate (\$/km) for the specific location. We assume all vehicles are powered by gasoline.

Hotel stays

Emissions from hotel stays are calculated using the number of nights spent in hotels, by country, sourced from BMO's travel agency. Emissions are calculated using an emission factor per night per room for the given country. If the emission factor for the respective country is not available, we use a proxy country from the region.

4.3.5. Scope 3 Category 13 – Downstream Leased Assets

In accordance with the GHG Protocol and following the operational control approach, all leased or subleased assets to third parties are categorized as Scope 3 downstream leased assets. Utility data for downstream leased assets is provided by BMO Corporate Real Estate team. When separate utility meters are not available to measure energy consumption for subleased areas, the total energy consumption for the entire area is captured, and the consumption for the subleased portion is estimated based on square footage. Emissions for downstream leased assets are calculated using the same approach outlined for Scope 1 and Scope 2 emissions in section [4.1 Scope 1](#) and [4.2 Scope 2](#).

4.4. Emission Factors & Other Parameters

4.4.1. Selection and review process


Emission factors are chosen based on the emission source, geographic location, and technical specifications, and are sourced from reputable sources, including National Inventory Reports (NIR), national GHG quantification guidelines such as the Environmental Protection Agency's (EPA) GHG Emission Factors Hub, or other relevant databases. We use the most current emission factors at the time of the calculation and review and update them annually.

Global Warming Potential (GWP) values from the Sixth Assessment Report (AR6) of the Intergovernmental Panel on Climate Change (IPCC) are used, which represents the latest scientific consensus⁶. The GWP values are also regularly updated to reflect the most recent assessment report.

For other quantification parameters such as unit conversions, we apply up-to-date factors that are relevant to the geography and technology. For energy, higher heating values are used to convert energy units reported in volume to a unified unit (Megawatt-hour, MWh). Similarly, energy use intensity values extrapolated from BMO's own comparable assets where the energy consumption data were available are used to estimate the energy consumption of assets that lack historical or comparable peer data for extrapolation.



4.4.2. Emission factors sources

Table 4: Emission factors sources

Country	Emission Source	Emission factor source	Factor Used
	Purchased Electricity	National Inventory Report (NIR)	Provincial emission factors
	Purchased Steam	U.S. Environmental Protection Agency (U.S. EPA)	District Steam
	Natural Gas	NIR	Provincial emission factors for Marketable Natural Gas
	Diesel – stationary combustion	NIR	Diesel - Upgraders
	Refrigerant	IPCC AR6	Global Warming Potential of refrigerant gases
	Gasoline	NIR	Light-duty Gasoline Vehicles – Tier 2
	Diesel – mobile combustion	NIR	Light-duty Diesel Vehicles – Advanced control
	Ethanol	NIR	Renewable fuels – Ethanol
	Heating Oil	NIR	Heating oil consumed by buildings
	Propane – stationary combustion	NIR	Residential propane
	Propane – mobile combustion	NIR	Propane vehicles
	Jet fuel	NIR	Aviation Gasoline
	Business travel – personal vehicles	NIR	Light-duty Gasoline Vehicles – Tier 2
	Business travel – rail	Railway Association of Canada	Intercity Passenger
	Business travel – rental cars	NIR	Light-duty Gasoline Vehicles – Tier 2
	Business travel – taxi	NIR	Gasoline

4.4.2. Emission factors sources (continued)

Table 4: Emission factors sources

Country	Emission Source	Emission factor source	Factor Used
 United States	Purchased Electricity	U.S. EPA	State-level emission factors
	Purchased Chilled Water	U.S. EPA	State-level emission factors
	Natural Gas	U.S. EPA	Natural gas
	Diesel – stationary combustion	U.S. EPA	Distillate Fuel Oil No.2
	Refrigerant	IPCC AR6	Global Warming Potential of refrigerant gases
	Gasoline	U.S. EPA	Motor gasoline
	Diesel – mobile combustion	U.S. EPA	Diesel fuel
	Ethanol	U.S. EPA	Ethanol
	Propane – fleet	National Inventory (NIR) - Canada	Propane vehicles
	Business travel – personal vehicles	U.S. EPA	Motor gasoline
	Business travel – rail	U.S. EPA	Intercity Rail – National Average
	Business travel – rental cars	U.S. EPA	Motor gasoline
	Business travel – taxi	NIR (Canada)	Gasoline
 International	Purchased Electricity	International Energy Agency (IEA), Climate Transparency Report, Association of Issuing Bodies (AIB), Department for Environment, Food & Rural Affairs (DEFRA)	Country-level emission factors
	Natural Gas	IEA	Natural gas
	Refrigerant	IPCC AR6	Global Warming Potential of refrigerant gases
General	Business travel – air	DEFRA	Obtained based on the flight length and travel class
	Business travel – international rail	DEFRA	National Rail
	Business travel – hotel stays	DEFRA	Emission factors for respective country
	Purchased goods and services	CDP, CEDA by Watershed	Supplier specific or sector emission intensity factors
	Capital goods	CDP, CEDA by Watershed	Supplier specific or sector emission intensity factors

5. Base Year & Trends Tracking

BMO reports its GHG emissions on an annual basis, using the period from August 1 to July 31 of the current year⁷.

BMO also tracks and compares its GHG emissions over time, using a base year as the reference point. The base year serves as the benchmark for measuring the bank's progress towards any emission reduction target.

BMO has established 2023 as its base year. We recalculate base year emissions in the event of significant structural changes to our operations, such as mergers, acquisitions, or divestitures, or if there are changes in the calculation methodology or discovery of material data errors. Should any of these factors cause a discrepancy exceeding 5% for combined Scope 1 and 2 or 10% for Scope 3 from the previously reported value, a recalculation of the base year will be initiated. BMO's approach to recalculating the base year is aligned with the GHG Protocol's guidance.

6. Data Management

Data availability and quality affect the accuracy and reliability of BMO's GHG inventory. We use various data sources to collect and verify information on emission sources or activities included in the GHG inventory. The data sources vary depending on the type, availability, detail and granularity of the data. Details about data sources used for calculation of each emission source are described in [section 4. Calculation methodology](#).

6.1. Data Quality

BMO follows the GHG Protocol's principles of relevance, completeness, consistency, accuracy and transparency. We refer to the GHG Protocol's guidance on how to deal with the data gaps, uncertainties and estimations, and how to perform data quality checks, validations and verifications (see [section 6.2. Quality Assurance & Verification](#)).

We prioritize measured data gathered from sources such as invoices, meter readings, or direct measurements. In cases where measured data is unavailable, the missing information is extrapolated using historical data for the specific asset or emission source if available or data from a comparable asset, such as one in a similar location. See [section 4 Calculation Methodology](#) for more detail.

For assets or emission sources lacking historical or comparable data, estimates are made using local or industry averages from reputable sources. When no activity data is available, expenditure data coupled with spend-based emission factors may be used. See [section 4 Calculation Methodology](#) for more detail.

6.2. Quality Assurance & Verification

6.2.1. Internal controls and quality assurance processes

We strive to produce a GHG emissions inventory that is complete, accurate, reliable and transparent. We have implemented controls that are executed by the data providers and the team that prepares the GHG inventory. These measures form part of our recorded protocol, which systematically applies these controls and outlines corresponding mitigation strategies to address any potential data integrity issues.

6.2.2. Third-party verification

Annually, BMO engages an independent third-party to provide verification of the relevance, completeness, consistency, accuracy and transparency of our operational emissions, in line with ISO 14064-3:2019 standards at a limited verification level. The verification statement can be found on our [website](#).

7. Glossary

Term	Full name	Definition
CDP	Carbon Disclosure Project	CDP is a not-for-profit charity that runs the global disclosure system for investors, companies, cities, states and regions to manage their environmental impacts. (Source: CDP)
EF	Emission factor	A coefficient that quantifies the emissions or removals of a gas per unit of activity.
U.S. EPA	U.S. Environmental Protection Agency	The US federal agency responsible for protecting the environment by preparing and enforcing regulations. They also provide analysis and data including US specific emission factors.
Financed emissions		Emissions that banks and investors finance through their loans and investments. (Source: Partnership for Carbon Accounting Financials Global GHG Accounting and Reporting Standard for the Financial Industry).
GHG	Greenhouse gas	In accordance with GHG Protocol, GHGs are the six gases listed in the Kyoto Protocol: carbon dioxide (CO ₂); methane (CH ₄); nitrous oxide (N ₂ O); hydrofluorocarbons (HFCs); perfluorocarbons (PFCs); and sulphur hexafluoride (SF ₆). (Source: GHG Protocol - A Corporate Accounting and Reporting Standard)
GWP	Global Warming Potential	A factor describing the radiative forcing impact (degree of harm to the atmosphere) of one unit of a given GHG relative to one unit of CO ₂ . (Source: GHG Protocol - A Corporate Accounting and Reporting Standard)
IEA	International Energy Agency	An intergovernmental organization that provides data, analysis, and policy recommendations on energy issues, and supports clean energy transitions and global energy security.
IPCC	The Intergovernmental Panel on Climate Change	The United Nations body for assessing the science related to climate change and among others publishing Assessment Reports which are source of GWP values.
NIR	National Inventory Report	A document that reports the GHG emissions and removals of a country, following the guidelines of the United Nations Framework Convention on Climate Change (UNFCCC).
PCAF	Partnership for Carbon Accounting Financials	A global partnership of financial institutions that work together to develop and implement a harmonized approach to assess and disclose the GHG emissions associated with their loans and investments.
REC	Renewable Energy Certificate	A market-based instrument that represents the property rights to the environmental, social, and other non-power attributes of renewable electricity generation. RECs are issued when one megawatt-hour (MWh) of electricity is generated and delivered to the electricity grid from a renewable energy resource. (Source: United States Environmental Protection Agency)
Scope 1		A reporting organization's direct greenhouse gas (GHG) emissions that occur from sources that are owned or controlled by the company (e.g., emissions from combustion in owned or controlled boilers, furnaces, vehicles).
Scope 2		A reporting organization's emissions associated with the generation of electricity, heating and cooling, or steam, purchased for the company's own consumption. There are two methods for Scope 2 accounting: a location-based method reflects the average emissions intensity of grids on which energy consumption occurs (using mostly grid-average emission factor data); a market-based method reflects emissions from electricity that companies have deliberately chosen (using emission factors derived from contractual instruments such as renewable energy certificates).
Scope 3		A reporting organization's indirect emissions other than those covered in Scope 2. A company's Scope 3 emissions include emissions that occur within the organization's value chain. Scope 3 emissions result from both upstream activities (e.g., the extraction and production of purchased materials, the transportation of purchased fuels, etc.) and downstream activities (e.g., the use of sold products and services, financed emissions, etc.).
tCO₂e	Tonne of carbon dioxide equivalent	A unit of measurement for GHG emissions equal to one thousand kilograms of carbon dioxide equivalent. Carbon dioxide equivalent is used to express the impact of various GHGs in terms of the amount of CO ₂ that would have the same global warming effect over a specific time period. It is calculated by multiplying the mass of a GHG by its GWP relative to CO ₂ .



Cautionary statement regarding methodologies and data

BMO's methodologies and the nature and source of data used remain subject to evolution over time. Our emissions calculation methodologies are guided by internationally recognized standards (i.e., PCAF Standard, GHG Protocol); however, availability of comprehensive, high-quality and verifiable GHG emissions data remains a challenge for the industry. These standards inform the measurement methodologies and disclosure of our GHG emissions; guidance is interpreted and applied at our discretion as described in this document. GHG emissions calculations are based on various assumptions and are subject to inherent risks and uncertainties. Such assumptions and estimates may apply over longer time frames than many of our other disclosures. These assumptions and estimates are highly likely to change over time. As a result of the above, we expect that certain disclosures based on such methodologies and data are likely to be amended, updated or restated in the future as the quality and completeness of our data and methodologies continue to improve.

Other disclaimers

This document includes voluntary disclosures on GHG emission related methodologies and data that may not be, and are not required to be, incorporated into our mandatory disclosures, where we use a definition of materiality established under applicable securities laws for the purpose of complying with the disclosure rules and regulations promulgated by applicable securities regulators and applicable stock exchange listing standards. Nothing in this document shall constitute, or form part of, an offer to sell or a solicitation of an offer to buy or subscribe for any security or other instrument of BMO or any of its affiliates, or as an invitation, recommendation or inducement to enter into any investment activity, and no part of this document shall form the basis of, or be relied upon in connection with, any contract, commitment or investment decision. Third-party references and website references and/or links throughout this document are provided for convenience only, and the content on the referenced websites is not incorporated by reference into this document. Such third-party references and website references and/or links do not imply an affiliation, sponsorship or endorsement.