

160 Bloor Street East, Toronto, ON  
Greenhouse Gas Inventory Report

June 24, 2010















































...Appendix B – Activity data and Emission Factors  
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**EMISSION FACTORS**

Table B2 summarizes the emission factors and sources used in the calculations completed for the Colliers 160 Bloor St. E. GHG inventory.

**Table B2 – Emission Factors**

Emission Source	Emission Factor	Source of Emissions Factor
Natural gas (Carbon Dioxide) (Ontario)	1.879 g/m <sup>3</sup>	Canada’s National Inventory Report, 2010, Part 2, Annex 8, Table A8-1
Natural gas (Methane) (Ontario)	0.037 g/m <sup>3</sup>	Canada’s National Inventory Report, 2010, Part 2, Annex 8, Table A8-2
Natural gas (Nitrous Oxide) (Ontario)	0.035 g/m <sup>3</sup>	Canada’s National Inventory Report, 2010, Part 2, Annex 8, Table A8-2
Refrigerant HFC-134a (100-yr GWP)	1300	CAN/CSA ISO 14064-1 Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals. Annex C. March 2006, International Standards Organization.
Electricity (Carbon Dioxide) (Ontario): 2007	216 g CO <sub>2</sub> /kWh <sup>16</sup>	Canada’s National Inventory Report, 2010, Part 3, Annex 13, Table A13-7 (most recent year: 2007)
Electricity (Methane) (Ontario): 2007	0.0108 g CH <sub>4</sub> /kWh <sup>4</sup>	Canada’s National Inventory Report, 2010, Part 3, Annex 13, Table A13-7 (most recent year: 2007)
Electricity (Nitrous Oxide) (Ontario): 2007	0.00432 g N <sub>2</sub> O /kWh <sup>4</sup>	Canada’s National Inventory Report, 2010, Part 3, Annex 13, Table A13-7 (most recent year: 2007)
Carbon Dioxide Conversion (100-yr)	1	CAN/CSA ISO 14064-1 Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals. Annex C. March 2006, International Standards Organization.
Methane Conversion (100-yr)	21	
Nitrous Oxide Conversion (100-yr)	310	

<sup>16</sup> The emission factor for electricity production in Ontario is 200 g CO<sub>2e</sub>/kWh. This value was increased by 8% to account for transmission and distribution losses (Reference: “The Report of the National Advisory Panel on Sustainable Energy Science and Technology – Version 1”, by NRCan, 2006).

## APPENDIX C – STANDARD REPORTING DECLARATION

### 1 REPORTING INFORMATION

The following table provides a summary of the reporting information required by CAN/CSA-ISO Standard 14064-1-06 provided in the “declaration” column is Colliers’ assertion for 160 Bloor St. E’s inventory.

Note: This GHG inventory report is the first GHG inventory report issued from Colliers for 160 Bloor St. E.

**Table C1 – Reporting Information**

No.	CSA Reporting Requirement	Declaration
A	Description of the reporting organization.	Colliers is the property management company for 160 Bloor St. E. Colliers is registered in the Canadian Green Building Council’s LEED-EB Program and is targeting LEED-EB Energy and Atmosphere credit 6: Emission Reduction Reporting. As part of Colliers initiative to green this 15 floor facility, they are reporting the 160 Bloor St. E. greenhouse gas (“GHG”) emissions with the CSA Registry. 160 Bloor St. E. emits GHG’s through their use of natural gas, potential refrigerant leakage, and electricity. The total gross floor area of the building is approximately 388,530 sq. ft. (excluding the parking) and the building occupancy is approximately 1,575 people.
B	Person responsible	Francisca Quinn, Project Director and Agent to Pauline Fowles, Senior Property Manager at 160 Bloor St. E.
C	Reporting period covered	May 1 <sup>st</sup> , 2009 and April 30 <sup>th</sup> , 2010
D	Documentation of organizational boundary.	“Physical facility approach” defined by the LEED-EB Canada Energy and Atmosphere credit 6 Emissions Reduction Reporting Program; this is a different consolidation methodology than typically defined, but is still within CSA/ISO14064-1 guidelines.
E	Direct GHG emissions, quantified separately for each GHG, in tonnes of CO <sub>2</sub> e.	See Appendix A.
F	A description of how CO <sub>2</sub> emissions from the combustion of biomass are treated in the GHG inventory.	Not applicable to this inventory.

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No.	CSA Reporting Requirement	Declaration
G	If quantified, GHG removals, quantified in tonnes of CO <sub>2</sub> e.	Not applicable to this inventory.
H	Explanation for the exclusion of any GHG sources or sinks from quantifications.	This inventory includes all energy indirect GHG emissions. GHG sinks are not applicable to this inventory.
I	Energy indirect GHG emissions associated with the generation of imported electricity, heat or steam, quantified separately in tonnes of CO <sub>2</sub> e.	See Appendix A.
J	The historical base year selected and the base-year GHG inventory.	Base year: May 1 <sup>st</sup> , 2009 to April 30 <sup>th</sup> , 2010 This base year for the CSA CleanStart Registry was chosen due to the performance period requirements of the Canadian Green Building Council LEED-program. It is a starting point for potential future GHG inventories. See Appendix A for the CSA CleanStart Registry's base year GHG emission summary.
K	Explanation of any change to the base year or other historical GHG data, and any recalculation of the base year or other historical GHG inventory.	Not applicable to this inventory.
L	Reference to, or description of, quantification methodologies including reasons for their selection.	Calculations are based on GHG activity data multiplied by GHG emission factors.
M	Explanation of any change to quantification methodologies previously used.	Not applicable to this inventory.
N	Reference to, or documentation of, GHG emission or removal factors used.	See Appendix B for details.
O	Description of the impact of uncertainties on the accuracy of the GHG emissions and removals data.	Uncertainties in calculations include error margins in emissions factors and measured activity data. Emission factors were determined by the most local and credible source available at the time of reporting. Activity data is based on utility bills received by Halsall from Colliers. Refrigerant data is based on total refrigerant charge received from Colliers and default leakage rates. Based on these sources, the level of uncertainty is assumed to be fair.



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No.	CSA Reporting Requirement	Declaration
P	A statement that the GHG report has been prepared in accordance with ISO Standard 14064-1.	This report has been prepared in accordance with the following standard: CAN/CSA-ISO Standard 14064-1-06 - Part 1: Specification with Guidance at the Organization Level for Quantification and Reporting of Greenhouse Gas Emissions and Removals.
Q	A statement describing whether the GHG inventory, report or assertion has been verified, including the type of verification and level of assurance achieved	Evan Jones at 3P Analysis and Consulting will provide third party verification for this GHG inventory report and will provide a reasonable level of assurance. See the third party verification report for further details.