



**Fifth Avenue
Place
GHG Inventory
Report
2010
- FINAL -**

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1 SUMMARY

This report details the greenhouse gas (GHG) emissions inventory of Fifth Avenue Place. This GHG emissions inventory lists the sources of GHG emissions and the quantity of emissions released from each source during the reporting period.

Fifth Avenue Place is owned and managed by Brookfield Properties. Brookfield Properties is registering Fifth Avenue Place in the Canada Green Building Council's (CaGBC) LEED Canada EB: O&M Program (LEED EB) and is targeting this rating system's Energy and Atmosphere Credit 6: Emission Reduction Reporting (EAc6). Brookfield Properties will use the data from this report to disclose the building's emissions in the CSA CleanStart™ Registry and also as part of Fifth Avenue Place's LEED EB Credit EAc6 documentation package.

BLJC (Brookfield LePage Johnson Controls) is the agent to Fifth Avenue Place's and is responsible for the completion of Fifth Avenue Place's GHG inventory and reporting in accordance with CAN/CSA-ISO Standard 14064-1-06. An independent third party will be engaged to provide independent verification of this report.

This report has been written in accordance with CAN/CSA-ISO Standard 14064-106 Greenhouse Gases -Part 1: Specification with Guidance at the Organization Level for Quantification and Reporting of Greenhouse Gas Emissions and Removals. In addition, the World Resource Institute (WRI)/World Business Council for Sustainable Development (WBCSD) Standard: Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard and CAN/CSA-ISO Standard 14064-3-06 Greenhouse Gases -Part 3: Specification with Guidance for the Validation of Greenhouse Gas Assertions have been used as additional resources.

We have determined that the Fifth Avenue Place produced 29,075 tonnes of CO₂e for the reporting year spanning April 2010 to March 2011. The emissions were calculated from data and other documentation collected from Brookfield Properties. Please refer to Section 5 and Appendix A for the Fifth Avenue Place's detailed GHG inventory.

2 ORGANIZATION PROFILE

Fifth Avenue Place is a high-rise skyscraper complex in Calgary, Alberta, Canada. It was originally called Esso Plaza and Imperial Oil is still the anchor tenant of the building. The complex occupies the entire area of a city block, between 4th and 5th Avenue SouthWest and 1st and 2nd Street SouthWest, and is currently owned and operated by Brookfield Properties Corporation. The complex consists of two structures, East Tower and West Tower, both with 31 floors and a height of 133 m (436 ft). The two tower complex encompasses 1.5 million square feet of office space with 50,000 square feet of retail area. Construction started in 1979 and the complex was completed in 1981, at the height of the 1980s oil boom. Although the towers are almost identical, they are arranged in an "L" shape, with the West Tower oriented east-west, and the East Tower oriented on a north-south direction. Fifth Avenue Place was built in late modernist style and has curtain walls with alternating vision glass on all sides. The three level underground parking provides 793 parking stalls. The two towers are connected by a two level shopping galleria, which is connected by the Plus 15 skywalk network to nearby structures. A recreation area on the north side contains a large reflecting pool with three fountains. Total gross floor area is 2,080,593 square feet.

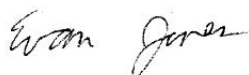
The building has an independent ventilation and heating system and a diesel generator for emergency power.

The chilled water system consists of 4 centrifugal chillers. The two Johnson Controls chillers use refrigerant HFC-134a, while the two Trane chillers use refrigerant HFC-123.

Brookfield Properties has made a commitment to "greening" this facility, including participating in the LEED Canada EB: O&M Program, which includes evaluating energy, water efficiency and waste management. To achieve LEED EB EAc6, Fifth Avenue Place's GHG emissions will be reported to the CSA CleanStart™ Registry.

2 PERSON RESPONSIBLE

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3 GHG INVENTORY DESIGN AND DEVELOPMENT

3.1 Organizational Boundaries

For any GHG inventory, an organizational boundary is used to determine how GHG emissions are accounted for. Typically, one of the following approaches is used:

1. Equity share approach: accounts for GHG emissions based on share of equity in the operation;
2. Financial control approach: accounts for GHG emissions based on the financial control over the operation; or
3. Operational control approach: accounts for GHG emissions based on the control of operations. The organization must report emissions from the sources over which it has operational control.

CAN/CSA-ISO Standard 14064-1-06 Section 4.1 states that the organization may use a different consolidation methodology where specific arrangements are defined by a GHG program or legal contract.

Since LEED-EB evaluates facilities rather than organizations, to meet EAc6 requirements, the Fifth Avenue Place was used as a physical boundary, rather than using any of the organizational boundaries described above. As such, the emissions from the base building equipment and the tenant equipment (including energy and refrigerant GHG emissions) were included in the GHG inventory without taking into consideration whether Brookfield Properties or the tenants have control or ownership. In addition, since LEED EB: O&M credit EAc6 does not take transportation into consideration, emissions from building-owned or leased vehicles are excluded from the inventory.

3.2 Operational Boundaries

Operational boundaries are defined to prevent double counting of reported emissions. These boundaries can be separated into the following three emission types:

Direct GHG emissions:

Direct emissions within the organizational boundary are released from fuel combustion, refrigerant emissions, generation of electricity, steam, or heat in equipment, business travel or employee commuting in company owned or leased vehicles.

Energy Indirect GHG emissions:

Indirect GHG emissions are released by the production of electricity, steam, hot water and/or chilled water purchased by the facility.

Other Indirect GHG emissions:

Other indirect GHG emissions are released from all other activities outside of the organizational boundaries. They may include business travel, employee commuting, third party production or manufacture of materials and resources, outsourced activities, and/or combustion of fuel in boilers or furnaces and electricity, steam or chilled water use excluded from the organizational boundary.

3.2.1 Direct GHG Emissions at the Fifth Avenue Place

Direct GHG emissions released from sources at the facility level include the emissions from the combustion of fossil fuels and fugitive refrigerant emissions.

Natural gas is supplied by ENMAX. This energy is used for space heating and domestic hot water heating.

As reported by Brookfield Properties, Fifth Avenue Place has four chillers, two contain refrigerant HFC-134a and two containing refrigerant HFC-123. According to the ISO 14064-1, HFC-134a is considered a greenhouse gas and therefore is included in this report, whereas refrigerant HFC-123 is not considered a greenhouse gas and is not included. The total charge of refrigerant HFC-134a is 6,600 lbs.

Diesel is used for back-up generators on site. To estimate diesel consumption, the quantity of fuel used was determined by the amount purchased and the amount taken from tank volume readings. This data was pro-rated by month and included in the GHG inventory.

As transportation emissions are excluded in LEED EB credit EAc6, no Brookfield Properties-owned vehicles, considered direct GHG emissions, were included in the GHG inventory.

3.2.2 Energy Indirect GHG Emissions at the Fifth Avenue Place

This report includes Fifth Avenue Place indirect GHG emissions inventory from electricity. Imported chilled water, steam or hot water is not used at the facility.

Electricity at Fifth Avenue Place is purchased from ENMAX. Consumption is measured from one main meter for the whole complex.

3.2.3 Other Indirect GHG Emissions at the Fifth Avenue Place

Other indirect GHG emissions were not included as part of the GHG inventory.

3.2.4 GHG Removals and Biomass Combustion at the Fifth Avenue Place

GHG removals or combustion of biomass are not present at Fifth Avenue Place.

3.3. History of Emissions at Fifth Avenue Place

Emissions were calculated for the time period between April 2010 to March 2011 to meet LEED-EB's 12 month Performance Period requirement.

Since this is the first year that the Fifth Avenue Place is calculating its GHG emissions, this GHG inventory becomes the building's "base year" emissions. Future annual inventories should be compared to this base year to track the results of emissions reduction efforts.

4 QUANTIFICATION

Since it is neither practical, nor in many cases possible to directly measure greenhouse gas emissions, the quantification methodology chosen for each emission component used an emission factor calculation. This methodology yields a considerable level of certainty because both the activity data and emission factors are readily available from reliable sources. This methodology requires three general types of data (as per CAN/CSA-ISO Standard 14064-1-06 Section 4.3.6), the appropriate "activity data", "emission factor" and "global warming potential" were obtained for the following equation:

$$\text{GHG emissions} = [\text{activity data}] * [\text{emission factor}] * [\text{global warming potential}]$$

Activity data was collected from site utility bills, emission factors from Canada's National

Inventory Report (1990-2008) were used and GWP's from CAN/CSA-ISO Standard 14064-1-06.

4.1 Natural Gas

4.1.1 Activity Data

Activity data for natural gas is based on ENMAX monthly utility bills. Natural gas consumption is metered and reported by the utility in GJ. A conversion factor of 0.0372 GJ/m³ was used to convert the measured units to m³. This was required to match the units of the Emission Factor.

4.1.2 Emission Factor

BLJC used the National Inventory Report (1990-2008) natural gas emission factors to calculate the Fifth Avenue Place's GHG emissions. Alberta specific CO₂ emission factors from Canada's National Inventory Report 1990-2008, Part 2, Annex 8, Table A8-1 were used. National commercial CH₄ and N₂O data from Part 2, Annex 8, Table A8-2 were used.

The natural gas emission factor units are in kg of emission per m³ of natural gas.

4.2 Diesel

4.2.1 Activity Data

Activity data for diesel is based on invoices for diesel fuel from Jepson Petroleum (Alberta) and readings taken of the volume of diesel in each tank. Diesel consumption is reported in litres.

4.2.2 Emission Factor

BLJC used the National Inventory Report (1990-2008) diesel emission factors to calculate the Fifth Avenue Place's GHG emissions. National commercial CO₂, CH₄ and N₂O data from Part 2, Annex 8, Table A8-4 were used.

The diesel emission factor units are in kg of emissions per litre of diesel.

4.3 Refrigerant HFC-134a

4.3.1 Activity Data

Activity data for refrigerant HFC-134a is based on the estimated leakage from the chiller's refrigerant loop. A leakage rate of 0.5% of the total refrigerant charge is assumed based on defaults derived from LEED EB credit EAc5: Enhanced Refrigerant Management. Refrigerant charge is converted from pounds (lb) of charge to metric tonnes of charge using a conversion factor of 0.00045359237 tonnes/lb.

4.3.2 Emission Factor

BLJC used the CAN/CSA ISO-14064-1:2006 Annex C refrigerant global warming potential (GWP) factors for the Fifth Avenue Place's GHG calculations.

4.4 Electricity

4.4.1 Activity Data

Activity data for electricity is based on ENMAX monthly utility bills. Electricity consumption is metered and reported on by the utility in non adjusted kWh. As required by Energy Star and

consequently the LEED-EB Program, unadjusted kWhs were used for this GHG inventory.

4.4.2 Emission Factor

BLJC used the National Inventory Report (1990-2008) electricity emission factors. Published electricity grid emission factors do not account for Transmission and Distribution (T & D) losses. As per the Greenhouse Gas Protocol, companies that purchase electricity from a T & D grid but do not own any part of the system should not include T & D losses in a scope 2 inventory. For this reason, T & D losses have not been included in the calculations for the Fifth Avenue Place. As BLJC is reporting on one facility in Alberta, the calculations used provincial CO₂, CH₄ and N₂O emission factors from the National Inventory Report’s Part 3, Annex 13, Table A13-10.

The electricity emission factor is measured in kg of emission per kWh.

Please refer to Appendix B for summary of data collection sources and emission factor sources.

5 GHG INVENTORY COMPONENTS

5.1 Emissions

The total emissions from direct and indirect GHG emissions sources during the reporting year are 29,075 tonnes of CO₂e. Building natural gas, diesel, refrigerant leakage and electricity account for 100% of the Fifth Avenue Place’s reported emissions. The breakdown is as follows:

Table 1: Emission Summary

Source	Emissions [t CO ₂ e]	% of total
DIRECT GHG EMISSIONS		
Natural Gas	3,907.7	13.4%
Diesel	12.4	0.0%
Refrigerant	19.5	0.1%
ENERGY INDIRECT EMISSIONS		
Electricity	25,135.8	86.5%
TOTAL emissions	29,075.4	100.0%

CO₂ emissions account for 99% of the total GHG emissions, HFC-134A emissions account for 0.1% of the total GHG emissions, while CH₄ and N₂O emissions make up the difference.

Refer to Figure 1 for the monthly energy consumption and Figure 2 for a detailed GHG breakdown by Source.



Figure 1: Monthly Energy Consumption

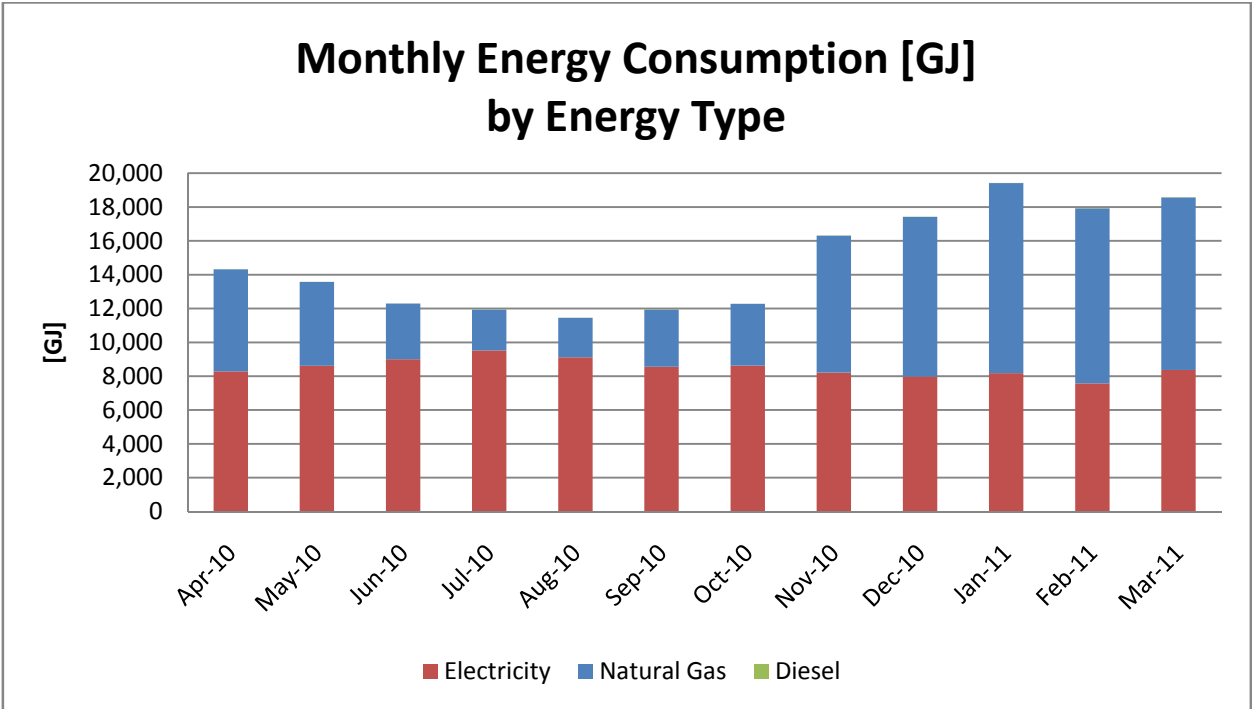
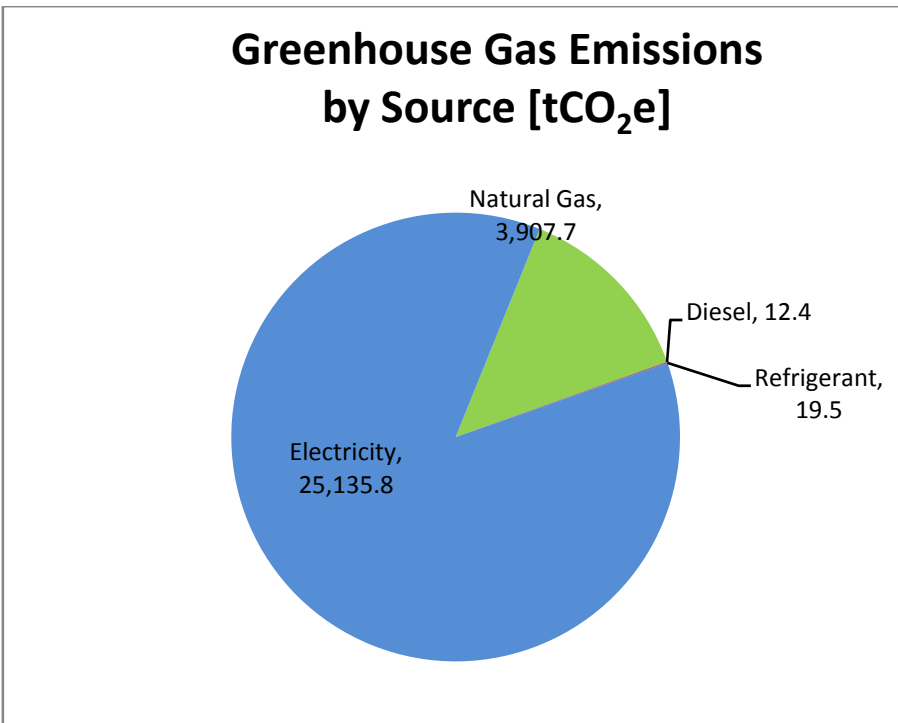
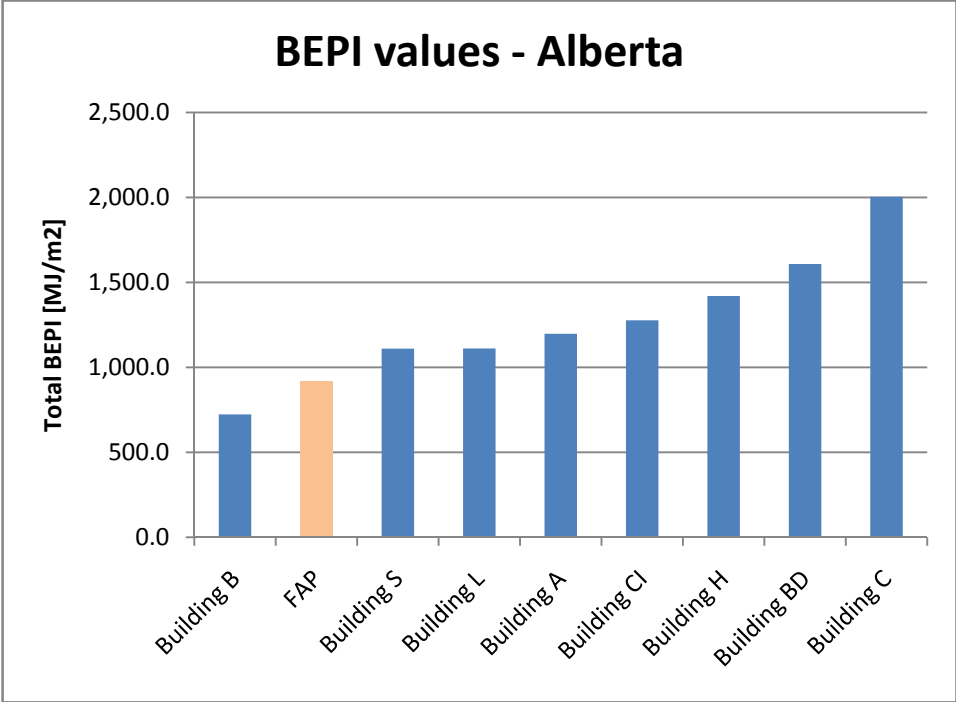


Figure 2: Greenhouse Gas Breakdown



With an energy intensity - Building Energy Performance Index (BEPI) - of 918.8 MJ/m², the Fifth Avenue Place building energy footprint is lower than the average of other office towers in Alberta that BLJC has worked with, as seen in Figure 3.

Figure 3: GHG Intensity for Comparable Alberta Buildings



5.2 Directed Actions to Reduce GHG Emissions

GHG reduction strategies for this facility have focused on energy measures. In the Fifth Avenue Place’s current baseline, implemented energy saving retrofits have resulted in energy and carbon reductions compared to the previous years.

Some of the past and planned major GHG reduction strategies are shown in Table 2.



Table 2: GHG Reduction Strategies

Measure Description	Explanation	Energy Type	Estimated Savings [Equivalent kWh]
CSM-C1 – Rescheduling	Reduce operating hours of make-up air units WSF1 and ESF1, and all compartment units	Electricity & Gas	198,611
CM-1 Occupancy sensors for lighting systems	Install occupancy sensors for lighting systems in office areas	Electricity	24,160
CM-2 28W Lamps	Replace existing 32W fluorescent lamps with 28W lamps (per floor)	Electricity	8,653
CM-3 Exterior Lighting	Install photocell for exterior lighting	Electricity	14,000
CM-4 Parkade Lighting	Install occupancy sensor control for parkade lighting at night time	Electricity	133,333
CM-6 VAV Boxes	Replace pneumatic VAV boxes with DDC VAV boxes, and control perimeter radiation valves from the new DDC VAV boxes	Electricity & Gas	
CM-7 Air Flow Stations	Install & calibrate the existing airflow stations for the CUs	Electricity & Gas	
CM-8 Upgrade BAS	Addition of control points to completely automate all Air Handling Units and associated Mech Equipment	Electricity & Gas	
			378,757

5.3 Estimation of Uncertainty

Table 3 presents our opinion of the level of uncertainty related to this GHG inventory. Our opinion of uncertainty is based on Table 3: Certainty Ranking for Common Emission Sources, found in “Measurement and Estimation Uncertainty of GHG Emissions” by the Greenhouse Gas Protocol Initiative.

Table 3 – Uncertainty Ranking

Activity Data	Uncertainty Assessment
Natural Gas Consumption	Low Uncertainty – The meter is calibrated and verified by ENMAX. Natural gas emission factors are less dependent on location and are almost always standard and accurate. Uncertainty may be derived from fluctuations in measurement equipment.
Diesel Oil Consumption	Fair Uncertainty – Diesel consumption is pro-rated based on the quantity of fuel purchased and the volume of diesel in the storage tanks. The amount of diesel contained in each of the tanks is measured independently once a year. Diesel emission factors are consistent and quite accurate.
Refrigerant Amount	High Uncertainty – Refrigerant leakage is assumed to be 0.5% of total refrigerant charge, based on LEED EAc5 guidelines.
Electricity Consumption	Fair Uncertainty – The meter is calibrated and verified by ENMAX. Submetering of electrical loads has been considered for checking the accuracy of the electricity meter but is cost-prohibitive. The emission factor is based on an annual provincial grid average, containing multiple fuel sources such as coal, natural gas, hydro and nuclear.

6 GHG INVENTORY QUALITY MANAGEMENT

6.1 GHG Information Management

In an effort to maintain a credible GHG inventory, roles and responsibilities were assigned to ensure consistency, accuracy, completeness, transparency and conformance with CAN/CSA-ISO Standard 14064-1-06.

Name	Role	Company
Kristina Schwartz	Dir, Operations & Sustainability	Brookfield Properties

Responsibilities:

- To provide BLJC with required energy data (via utility bills);
- To provide BLJC with refrigerant data information; and,
- To approve and sign the CSA CleanStart™ Registry application form.

Name	Role	Company
Evan Jones	Lead Quantifier	BLJC
Peter Rombos	Quantification Co-ordinator	BLJC
Michael Wymant	LEED Director	BLJC

Responsibilities:

- To request and analyze received activity data for acceptable accuracy, to collect appropriate emission factors and perform GHG calculations; and,
- To produce a report consistent with both the CSA CleanStart™ Registry requirements and CAN/CSA-ISO Standard 14064-1-06.

Name	Role	Company
Emil Breza	3 rd Party Verifier	Brezaworks

Responsibilities:

- To verify that BLJC Initiative's 14064-1 report meets CSA CleanStart™ Registry requirements and CAN/CSA-ISO Standard 14064-3-06; and,
- To issue a verification statement.

6.2 Document Retention and Record Keeping

The following activities, conducted by the property management company, maintain credible GHG inventory and reporting:

- Brookfield Properties scans each utility bill for Fifth Avenue Place's utility accounts and maintains them on a secure server. This has a dual purpose in that it tracks both energy and operating costs.
- Brookfield Properties measures diesel oil volumes on a periodic basis and stores this information on a secure server.
- This is the first year that BLJC will calculate and register Fifth Avenue Place's greenhouse gas emissions. BLJC keeps a copy of all utility bills, refrigerant data, GHG emissions and other important information used to generate the GHG inventory on a secure server

6 ORGANIZATION'S ROLE IN VERIFICATION ACTIVITIES

Emil Breza of Brezaworks was contracted to provide independent third party verification as per CAN/CSA-ISO Standard 14064-3-06. The verification was completed to a reasonable level of assurance.

BLJC prepared for the Fifth Avenue Place's verification by:

- Engaging an objective third party verifier to provide a reasonable level of assurance;
- Agreeing to verification objectives, scope, materiality and criteria with the verifier;
- Reviewing each section using the CSA Registry checklist; and,
- Using an internal review process for quality control for the inventory and the document.

Third party verification is required by LEED EB. This provides an impartial and objective review of the reported GHG emissions.

Reporting content summary for declarations to the CSA standard is presented in Appendix C.

APPENDIX A – GREENHOUSE GAS INVENTORY

Table A1 – Summary of Activity Data for Greenhouse Gas Inventory

(April 2010 to March 2011)

Activity Data - Direct Emissions		
Natural Gas		
Apr-10	6,036.79	GJ
May-10	4,947.97	GJ
Jun-10	3,290.21	GJ
Jul-10	2,412.27	GJ
Aug-10	2,325.65	GJ
Sep-10	3,377.28	GJ
Oct-10	3,652.48	GJ
Nov-10	8,091.62	GJ
Dec-10	9,429.72	GJ
Jan-11	11,233.95	GJ
Feb-11	10,341.02	GJ
Mar-11	10,195.58	GJ
Total Natural Gas	75,335	GJ
Diesel		
Apr-10	370	L
May-10	370	L
Jun-10	370	L
Jul-10	370	L
Aug-10	370	L
Sep-10	370	L
Oct-10	370	L
Nov-10	370	L
Dec-10	370	L
Jan-11	370	L
Feb-11	370	L
Mar-11	370	L
Total Diesel	4,442	L
Refrigerant		
Annual Estimated Leakage	0.0150	t
Total Refrigerant	0.0150	t

Activity Data - Energy Indirect Emissions		
Electricity - Mixed Fossil Fuels	Consumption	Units
Apr-10	2,299,841	kWh
May-10	2,393,759	kWh
Jun-10	2,499,671	kWh
Jul-10	2,644,637	kWh
Aug-10	2,533,326	kWh
Sep-10	2,377,566	kWh
Oct-10	2,394,572	kWh
Nov-10	2,281,835	kWh
Dec-10	2,216,657	kWh
Jan-11	2,271,065	kWh
Feb-11	2,105,144	kWh
Mar-11	2,325,332	kWh
Total Electricity	28,343,405	kWh

Table A2 – Summary of Greenhouse Gas Emissions (April 2010 to March 2011)

Source and Fuel	Quantity of Activity	Activity Unit	Carbon Dioxide Emissions (CO ₂) [t CO ₂ e]	Methane Emissions (CH ₄) [t CO ₂ e]	Nitrous Oxide Emissions (N ₂ O) [t CO ₂ e]	Refrigerant Emissions (HFC-134a) [t CO ₂ e]	Total Emissions [t CO ₂ e]
DIRECT GHG EMISSIONS							
Natural Gas	75,335	GJ	3,884.2	1.5735	21.9726		3,907.7
Diesel	4,442	L	11.8	0.0124	0.5508		12.4
Refrigerant	0.0150	t				19.46	19.5
ENERGY INDIRECT EMISSIONS							
Electricity	28,343,405	kWh	24,942.2	17.8563	175.7291		25,135.8
TOTAL emissions			28,838.2	19.4	198.3	19.5	29,075.4

APPENDIX B –EMISSION FACTORS and GLOBAL WARMING POTENTIALS

EMISSION FACTORS

Table B1 summarizes the emission factors used in the calculations completed for Fifth Avenue Place GHG inventory.

Table B1 – Emission Factors

Emission Source	Emission Factor	Source of Emissions Factor
Natural gas (Carbon Dioxide) (Alberta)	1.918 kg CO ₂ /m ³	Canada's National Inventory Report 1990-2008, Part 2, Annex 8, Table A8-1, written in 2010
Natural gas (Methane) (Canada)	0.000037 kg CH ₄ /m ³	Canada's National Inventory Report 1990-2008, Part 2, Annex 8, Table A8-2, written in 2010
Natural gas (Nitrous Oxide) (Canada)	0.000035 kg N ₂ O/m ³	
Diesel (Carbon Dioxide) (Canada)	2.663 kg CO ₂ /L	Canada's National Inventory Report 1990-2008, Annex 8, Table A8-4, written in 2010
Diesel (Methane) (Canada)	0.000133 kg CH ₄ /L	
Diesel (Nitrous Oxide) (Canada)	0.0004 kg N ₂ O/L	
Electricity (Carbon Dioxide) (Alberta): 2008	0.88 kg CO ₂ /kWh	Canada's National Inventory Report 1990-2008, Part 3, Annex 13, Table A13-10, written in 2010
Electricity (Methane) (Alberta): 2008	0.00003 kg CH ₄ /kWh	
Electricity (Nitrous Oxide) (Alberta): 2008	0.00002 kg N ₂ O/kWh	

GLOBAL WARMING POTENTIALS

Table B2 summarizes the global warming potential values used in the calculations completed for Fifth Avenue Place GHG inventory.

Table B2 – Global Warming Potentials

Greenhouse Gas	Global Warming Potential	Source of Emissions Factor
Carbon Dioxide GWP (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 GWP (100-yr)	21	
Nitrous Oxide GWP (100-yr)	310	
Refrigerant HFC-134a (100-yr GWP)	1300 t CO ₂ e/ tonne of refrigerant	

APPENDIX C – STANDARD REPORTING DECLARATION

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 BLJC’s assertion for Fifth Avenue Place’s inventory. Note: This GHG inventory report is the first GHG inventory report issued from BLJC for the Fifth Avenue Place

No.	CSA Reporting Requirement	Declaration
A	Description of the reporting organization.	Brookfield Properties is the owner and manager for the Fifth Avenue Place and has registered the building in the Canadian Green Building Council’s LEED-EB Program. Brookfield Properties is targeting LEED-EB Energy and Atmosphere credit 6: Emission Reduction Reporting and are reporting the greenhouse gas (“GHG”) emissions with the CSA Registry. The Fifth Avenue Place building emits GHGs through the combustion of natural gas and diesel, potential refrigerant leakage, and energy indirect electricity consumption. The total gross floor area of the building is approximately 2,080,953 square feet and the building occupancy is approximately 4,881 people.
B	Person responsible	Evan Jones, Energy and Sustainability Information Manager, BLJC
C	Reporting period covered	April 1, 2010 to March 31, 2011
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 ₂ e.	See Appendix A, Table A2.
F	A description of how CO ₂ emissions from the combustion of biomass are treated in the GHG inventory.	Not applicable to this inventory.
G	If quantified, GHG removals, quantified in tonnes of CO ₂ e.	Not applicable to this inventory.
H	Explanation for the exclusion of any GHG sources or sinks from quantifications.	This inventory includes all direct and energy indirect GHG emissions sources. GHG sinks are not applicable to this inventory.
I	Energy indirect GHG emissions associated with the generation of	See Appendix A, Table A2.

	imported electricity, heat or steam, quantified separately in tonnes of CO ₂ e.	
J	The historical base year selected and the base-year GHG inventory.	Base year: April 2010 to March 2011. 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.
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 as this methodology has a considerable level of certainty and the most cost-effective to implement.
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 BLJC from Brookfield Properties. Refrigerant data is based on total refrigerant charge received from Brookfield Properties and default leakage rates. Based on these sources, the level of uncertainty is assumed to be fair.
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 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	This GHG inventory report will undergo third party verification to a reasonable level of assurance by Brezaworks. See the third party verification report for further details.