



Energy Profiles Limited

GHG Emissions Inventory Report

25 Sheppard Ave W



Prepared for H&R REIT
November 2019

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1.0 EXECUTIVE SUMMARY

25 Sheppard Ave W, located in Toronto, Ontario, is applying for LEED Canada Existing Buildings: Operations and Maintenance (LEED EB) certification with the Canada Green Building Council (CaGBC).

This report was prepared by Energy Profiles Limited (EPL) on behalf of H&R REIT. The purpose of this report is to summarize the GHG emissions generated at 25 Sheppard and the measures taken to manage those emissions.

This report fulfils the requirements for LEED Canada EB: Operations and Maintenance - Credit 6, Energy and Atmosphere: Emissions Reduction Reporting (LEED EAc6), and has been prepared in accordance with ISO 14064-1.

During the LEED Performance Period (October 1, 2018 – September 30, 2019), 25 Sheppard produced a total of 1,309.5 tCO₂e in greenhouse gas emissions: 1,197.2 tCO₂e of Direct (Scope 1) emissions and 112.3 tCO₂e of Energy Indirect (Scope 2) emissions.

The following table shows a comparison of emissions in the LEED Performance Period vs. the October 1, 2017 – September 30, 2018 Base Year:

Emissions by Scope: Base Year vs. Performance Period

Scope	Base Year (tCO ₂ e)	Performance Period (tCO ₂ e)	Increase vs. Base Year
Direct	1,082.3	1,197.2	114.9
Energy Indirect	123.4	112.3	-11.0
Total	1,205.7	1,309.5	103.8

Total emissions from the Performance Period were approximately 9% higher than the Base Year amount.

As per the LEED Canada reporting requirements, this report has been verified by an independent third-party evaluator and used by H&R REIT to enroll 25 Sheppard in the CSA GHG CleanStart Registry.

2.0 ORGANIZATIONAL PROFILE

25 Sheppard Ave W is a 22-storey office tower, located at the intersection of Yonge Street and Sheppard Avenue West in Toronto, Ontario. The property was constructed in 1994, with a total gross leasable area of 386,591 ft².

Most of the gross leasable area is occupied by office tenants. Two retail tenants and a dentist's office are located on the ground floor. The primary tenant is Nestlé Canada Inc., which fully occupies the upper four stories of the tower.

A summary of key building information is summarized below:

Building Information Summary

Description	Information
Property Name	Nestle Building
Address	25 Sheppard Avenue West Toronto, ON M2N 6S6
Property Type	Office
Number of Floors	22
Gross Leasable Area	386,591 ft ²
Lease hours	7:00 AM to 7:00 PM (Monday to Friday)
Site Contacts	Larry McGrath
Phone Number	416-225-2064 x 204

2.1 Major Energy Consuming Systems

Major energy consuming systems at 25 Sheppard are as follows, as per an ASHRAE Level II Energy Audit performed by EPL in 2019.

Lighting

Base building office lighting consists of approximately 3,000 recessed LED fixtures rated at 40W each and fitted with dimmable LED drivers. Lighting power intensity was calculated to be approximately 0.25 W/ft² in the office space, based on submeter data.

Ventilation and Air Distribution Systems

Outdoor air at 25 Sheppard is provided by a single variable speed make-up air (MUA) unit, labeled AHU1 in the BAS, rated at 75 hp and 70,000 cfm. Outdoor air is delivered to compartment units on floors 2-22 and the ground floor via an outdoor air shaft. Compartment unit (CU) fans are equipped with VFD controls and are typically rated at 22,000 cfm and have motors rated at 20 hp with 93% efficiency; two exceptions being the 21st floor, which is rated at 25 hp, and the 22nd floor which is rated at 26,000 cfm. There are two main exhaust fans located in the penthouse of 25 Sheppard, a sanitary exhaust fan (EF #4) with a motor rated at 25 hp, and a general exhaust fan (EF #5) with a motor rated at 40 hp. Both are equipped with variable speed drives.

Heating Systems

Primary heating is provided to 25 Sheppard by a boiler plant consisting of four modulating boilers. Two boilers are Camus Dynaflame “near-condensing” boilers and have a rated input capacity of 4,000 MBH each and nameplate thermal efficiencies of 88%. The other two boilers are Raypack atmospheric boilers rated at 4,000 MBH and 85% thermal efficiency.

Cooling Systems

Primary cooling is provided to 25 Sheppard by two York centrifugal chillers in series, charged with R-123 refrigerant, designed to operate in series. The upstream chiller (Chiller 1) is rated at 588 tons and a full load efficiency of 0.60 kW/ton, and the downstream chiller (Chiller 2) is rated at 520 tons and a full load efficiency of 0.63 kW/ton. Both chillers are fitted with variable speed drives on the compressors which were installed on Chiller 1 and Chiller 2 in 2011 and 2013, respectively. Heat is rejected from the building via three Evapco cooling towers with a shared common sump. Each cooling tower has one centrifugal fan, each rated at 50 hp and 94.1% efficiency and is equipped with VFD controls.

Secondary cooling systems, including split air heat pumps, service electrical and mechanical rooms throughout the building.

Domestic Hot Water Systems

Domestic hot water (DHW) is heated by a dedicated Raytherm boiler rated at 512 MBH located in the penthouse boiler room to maintain a hot water supply temperature of 120°F.

3.0 INVENTORY DESIGN AND DEVELOPMENT

3.1 Organizational Boundaries

The organizational boundaries for this project were set using the control approach, using the operational control criteria as defined by the GHG Protocol:

Operational Control. A company has operational control over an operation if the former or one of its subsidiaries (see Table 1 for definitions of financial accounting categories) has the full authority to introduce and implement its operating policies at the operation. This criterion is consistent with the current accounting and reporting practice of many companies that report on emissions from facilities, which they operate (i.e., for which they hold the operating license). It is expected that except in very rare circumstances, if the company or one of its subsidiaries is the operator of a facility, it will have the full authority to introduce and implement its operating policies and thus has operational control.

In the case of 25 Sheppard, H&R REIT is considered to have operational control over building systems, though it is noted that building tenants may also influence how the building is operated.

3.2 Operational Boundaries

This report includes Direct (Scope 1), and Energy Indirect (Scope 2) emissions at 25 Sheppard, as follows:

Emission Sources by Scope

Direct/Indirect	Scope	Emission Source	End Use
Direct	1	Natural Gas	Space heating, domestic water heating
Direct	1	Refrigerants	Space cooling
Direct	1	Diesel	Emergency backup generation
Energy Indirect	2	Electricity	Lighting, HVAC, space cooling, plug load, etc.

No combustion of biomass or GHG removals occur at 25 Sheppard. GHG sinks are not applicable to this inventory.

4.0 QUANTIFICATION OF GHG EMISSIONS

Measuring GHG emissions directly is cost prohibitive for a project of this size. Therefore, in keeping with industry best practices, GHG emissions have been quantified using the following formula for each GHG source identified in Section 3.2:

$$\text{GHG Emissions} = \text{Activity Data (consumption)} \times \text{Emission Factor}$$

4.1 Activity Data

The following subsections describe the sources of the activity data used.

4.1.1 Electricity

Electricity is purchased for 25 Sheppard from Toronto Hydro via a single metered electricity service. Electricity consumption was obtained directly from the utility bills. Billed electricity consumption is detailed in Appendix A.

4.1.2 Natural Gas

Natural gas is purchased for 25 Sheppard from Enbridge via a single metered gas service. Natural gas consumption was obtained directly from the utility bills. Billed natural gas consumption is detailed in Appendix A.

4.1.3 Diesel Fuel

Diesel fuel is consumed by two emergency generators at 25 Sheppard. Fuel purchase amounts from 2018 were used to calculate a daily consumption rate. The following tables summarize available diesel delivery data at 25 Sheppard:

Diesel Fuel Delivery Summary

Time of Delivery	Last delivery	Number of days	Litres Delivered	Litres/day
2018-10-23	2018-02-25	240	1,783.4	7.4

The calculated daily rate was then applied to the Base Year and Performance Period to estimate annual usage, as per the following table.

Diesel Fuel Annual Activity Data

Period	Start Date	End Date	Litres/day	Litres Consumed
Base	2017-10-01	2018-09-30	7.4	2,712.2
Performance	2018-10-01	2019-09-30	7.4	2,712.2

The emissions from this activity are detailed in Appendix A.

4.1.4 Refrigerants

Refrigerants are found in two centrifugal chillers and multiple supplementary cooling units at 25 Sheppard. Actual refrigerant leakage rates were not available. A 2% annual leakage rate was applied to the charge capacity of all units, as per the LEED EB guidance for credit EAc5.¹

The following table summarizes the annual refrigerant activity data at 25 Sheppard:

Cooling Equipment Containing Refrigerants

Equipment Type	Make/Model	# of Units	Tons	Refrigerant	Charge Capacity (lbs)	Leakage Rate	Leakage (lbs)	Leakage (kg)
Centrifugal chiller	York YDTL-120	2	1108	R-123	2400	2%	48.0	21.8
Condenser coil	AAON	1	7	R-410A	8	2%	0.2	0.1
Rooftop unit	Johnson Controls J20ZF	1	20	R-410A	46	2%	0.9	0.4
Heat pump	Daikin RZR-P	1	2	R-410A	6	2%	0.1	0.1
Split air heat pumps	Mitsubishi MUZ-D30NA	2	4	R-410A	9	2%	0.2	0.1
Total							49.4	22.4

The Base Year and Performance Period are assumed to have had equal refrigerant leakage amounts. The emissions from this activity are detailed in Appendix A.

4.2 GHG Emission Factors and Global Warming Potentials (GWPs)

Global Warming Potentials (GWPs) from the IPCC's Fourth Assessment Report for the different types of greenhouse gases reported for 25 Sheppard are shown in the following table.

Global Warming Potentials

Emission Type	GWP (gCO ₂ e/g)	Source
CO ₂	1	IPCC Fourth Assessment Report (IPCC, 2012)
CH ₄	25	IPCC Fourth Assessment Report (IPCC, 2012)
N ₂ O	298	IPCC Fourth Assessment Report (IPCC, 2012)
R-123	77	IPCC Fourth Assessment Report (IPCC, 2012)
R-410A	2,088	IPCC Fourth Assessment Report (IPCC, 2012)

¹ Canada Green Building Council, LEED Canada for Existing Buildings: Operations and Maintenance 2009 Rating System, 2009, page 316.

The GHG emission factors used to calculate emissions from property energy use are also outlined in the following table.

Building Energy: GHG Emission Factors with Sources

GHG Source	CO2	CH4		N2O		Factor	Units	Factor Source
	gCO2	gCH4	gCO2e	gN2O	gCO2e			
Electricity	17	0.00	0.00	0.001	0.30	17	gCO2e /kWh	National Inventory Report (1990-2017) Greenhouse Gas Sources and Sinks in Canada
Natural Gas	1,888	0.037	0.93	0.035	10.43	1,899	gCO2e /m3	National Inventory Report (1990-2017) Greenhouse Gas Sources and Sinks in Canada
Diesel Fuel	2,681	0.133	3.33	0.40	119.20	2,804	gCO2e /l	National Inventory Report (1990-2017) Greenhouse Gas Sources and Sinks in Canada

Note that, as per the GHG Protocol, the electricity emission factor does not account for transmission and distribution losses.²

² World Resources Institute, The GHG Protocol Corporate Accounting and Reporting Standard, 2015, page 27.

5.0 GHG INVENTORY SUMMARY

5.1 Base Year and Reporting Period

A Base Year of October 1, 2017 – September 30, 2018 was selected for this project, in keeping with LEED certification requirements.

The LEED Performance Period for this project is October 1, 2018 – September 30, 2019.

5.1.1 Base Year Recalculation Policy

H&R REIT commits to recalculating baseline activity data and emissions in subsequent GHG inventories to account for the following factors, as per ISO 14064:

- a) Changes to operational boundaries
- b) Changes to the ownership and control of GHG sources or sinks transferred into or out of organizational boundaries
- c) Changes to GHG quantification methodologies that result in significant changes to quantified GHG emissions or removals.

The base year GHG inventory will not be recalculated to account for changes in facility use or occupancy.

5.2 Building Activity Data and Emissions

This section details the activity data and emissions resulting from building operations.

5.2.1 Activity Data

The following table summarizes the activity data for the base year and performance period, as described in Section 4.1:

Activity Data: Base Year vs. Performance Period

Activity	Base Year	Performance Period	Increase vs. Base Year
Electricity (kWh)	7,133,378	6,494,969	-638,409
Natural Gas (m3)	564,249	624,732	60,483
Diesel (l)	2,712	2,712	0
R-123 (kg)	21.8	21.8	0
R-410A (kg)	0.6	0.6	0

5.2.2 GHG Emissions and Removals: Performance Period vs. Base Year

The following table details GHG emissions during the project's Performance Period vs. the Base year, by emission source:

Emissions by Source: Base Year vs. Performance Period

Emission Source	Base Year (tCO ₂ e)	Performance Period (tCO ₂ e)	Increase vs. Base Year
Electricity	123.4	112.3	-11.0
Natural Gas	1,071.7	1,186.6	114.9
Diesel	7.6	7.6	0
R-123	1.7	1.7	0
R-410A	1.3	1.3	0
Total	1,205.7	1,309.5	103.8

The following table details GHG emissions during the project's Performance Period vs. the Base year, by scope:

Total Emissions by Scope: Base Year vs. Performance Period

Scope	Base Year (tCO ₂ e)	Performance Period (tCO ₂ e)	Increase vs. Base Year
Direct	1,082.3	1,197.2	114.9
Energy Indirect	123.4	112.3	-11.0
Total	1,205.7	1,309.5	103.8

The following table details direct GHG emissions during the project's Performance Period vs. the Base Year, by GHG type:

Direct Emissions by GHG Type: Base Year vs. Performance Period

GHG Type	Base Year (tCO ₂ e)	Performance Period (tCO ₂ e)	Increase vs. Base Year
CO ₂	1,072.6	1,186.8	114.2
CH ₄	0.5	0.6	0.1
N ₂ O	6.2	6.8	0.6
Refrigerants	3.0	3.0	0.0
Total	1,082.3	1,197.2	114.9

The following table details energy indirect GHG emissions during the project's Performance Period vs. the Base Year, by GHG type:

Energy Indirect Emissions by GHG Type: Base Year vs. Performance Period

GHG Type	Base Year (tCO ₂ e)	Performance Period (tCO ₂ e)	Increase vs. Base Year
CO ₂	121.3	110.4	-10.9
CH ₄	0.0	0.0	0.0
N ₂ O	2.1	1.9	-0.2
Total	123.4	112.3	-11.0

The following table details total GHG emissions during the project's Performance Period vs. the Base year, by GHG Type:

Total Emissions by GHG Type: Base Year vs. Performance Period

GHG Type	Base Year (tCO ₂ e)	Performance Period (tCO ₂ e)	Increase vs. Base Year
CO ₂	1,193.8	1,297.2	103.3
CH ₄	0.5	0.6	0.1
N ₂ O	8.3	8.8	0.4
Refrigerants	3.0	3.0	0.0
Total	1,205.7	1,309.5	103.8

As shown in the above tables, total emissions during the performance period increased by approximately 9% compared to the base year. This increase was driven by higher natural gas consumption, mainly due to colder winter weather in 2018 vs. 2017.

5.3 Organizational Activities to Reduce GHG Emissions

H&R REIT has an ongoing initiative to improve energy performance at 25 Sheppard and thus reduce GHG emissions from building operations.

An ASHRAE Level II Energy Audit was completed in September 2019. The following measures are currently under review for implementation:

1. Metering Upgrades
2. Operational Measures (e.g. compartment unit optimum start controls)
3. Tenant Engagement Measures (e.g. tenant energy consumption communication program, energy reduction seminars)
4. Systems Measures (e.g. lighting controls, motor replacement and variable speed drives, outdoor air optimization strategies)
5. Long Payback Opportunities (e.g. pneumatic thermostat retrofit, chiller isolation)

5.4 Certainty

The following table shows the level of certainty in the activity data and emission factors used in preparing this report for 25 Sheppard. Note that the combined emissions from electricity and natural gas account for 99% of total building emissions. As such, the overall level of certainty is considered to be high.

Certainty of Emissions Calculations by Emission Source

Emission Source	Certainty		
	Activity Data	Emission Factor	Explanation
Natural Gas	High	High	Consumption is measured via a revenue grade meter by Enbridge Gas. The emission factor is published by Environment and Climate Change Canada.
Refrigerants	Low	High	The refrigerant leakage rate was conservatively estimated. The emission factors are published in the IPCC Fourth Assessment Report.
Diesel	Low	High	Fuel use per day was estimated and pro-rated to the Base Year and Performance Period. The emission factor is published by Environment and Climate Change Canada.
Electricity	High	High	Consumption is measured via a revenue grade meter by Toronto Hydro. The emission factor is published by Environment and Climate Change Canada.

6.0 GHG INVENTORY QUALITY MANAGEMENT

6.1 GHG Data Management

This GHG report and inventory for 25 Sheppard is updated on an ongoing basis by EPL as part of the utility tracking service provided to H&R REIT via the following process:

- Utility bills are provided to EPL by H&R REIT on a monthly basis.
- Utility data is verified and entered into a database by EPL.
- Anomalies or inconsistencies in utility data are investigated by EPL to ensure data quality.
- Emission factors are updated annually by EPL based on the most recent National Inventory Report.

6.2 Roles and Responsibilities

The following roles and responsibilities have been assigned to ensure completeness, accuracy and continuity in GHG reporting at 25 Sheppard in accordance to ISO 14064-1.

Responsibility: Delivery of utility bills to EPL.

Owner: Mary De La Franier
Role: Senior Property Manager
Company: H&R REIT

Responsibility: Verify and enter utility data into EPL database.

Owner: Natasha Condic
Role: Data Integrity and Support
Company: Energy Profiles Limited

Responsibility: Update emission factors and prepare emissions reports.

Owner: Brian Park
Role: Energy Analyst, GHG Reporting
Company: Energy Profiles Limited

Responsibility: Verify GHG reports meet ISO 14064 CleanStart Registry requirements.

Owner: Evan Jones
Role: Independent Verifier
Company: 3P Analysis and Consulting

6.3 Document Retention and Record Keeping

Monthly utility bill and emissions data are retained on EPL's database on a secure server. Annual emission reports are archived for future reference.

7.0 VERIFICATION ACTIVITIES

Third party verification of this GHG inventory has been completed by Evan Jones of 3P Analysis and Consulting in accordance with ISO 14064-3-06 and LEED EB EAc6.

A summary of declarations in response to the CSA standard is presented in Appendix B.

APPENDIX A DETAILED GHG DATA FOR UTILITIES

The following tables detail the consumption of and emissions from electricity over the Base Year and Performance Period.

Electricity Consumption and Emissions**Base Year**

Start Date	End Date	Consumption (kWh)	Emissions (tCO ₂ e)			
			CO ₂	CH ₄	N ₂ O	Total
2017-10-01	2017-10-31	561,051	9.5	0.0	0.2	9.7
2017-11-01	2017-11-30	591,950	10.1	0.0	0.2	10.2
2017-12-01	2017-12-31	620,229	10.5	0.0	0.2	10.7
2018-01-01	2018-01-31	644,568	11.0	0.0	0.2	11.1
2018-02-01	2018-02-28	558,692	9.5	0.0	0.2	9.7
2018-03-01	2018-03-31	607,988	10.3	0.0	0.2	10.5
2018-04-01	2018-04-30	590,734	10.0	0.0	0.2	10.2
2018-05-01	2018-05-31	595,734	10.1	0.0	0.2	10.3
2018-06-01	2018-06-30	562,072	9.6	0.0	0.2	9.7
2018-07-01	2018-07-31	645,874	11.0	0.0	0.2	11.2
2018-08-01	2018-08-31	613,145	10.4	0.0	0.2	10.6
2018-09-01	2018-09-30	541,342	9.2	0.0	0.2	9.4
Total		7,133,378	121.3	0.0	2.1	123.4

Performance Period

Start Date	End Date	Consumption (kWh)	Emissions (tCO ₂ e)			
			CO ₂	CH ₄	N ₂ O	Total
2018-10-01	2018-10-31	523,090	8.9	0.0	0.2	9.0
2018-11-01	2018-11-30	553,897	9.4	0.0	0.2	9.6
2018-12-01	2018-12-31	542,622	9.2	0.0	0.2	9.4
2019-01-01	2019-01-31	567,584	9.6	0.0	0.2	9.8
2019-02-01	2019-02-28	509,318	8.7	0.0	0.2	8.8
2019-03-01	2019-03-31	564,188	9.6	0.0	0.2	9.8
2019-04-01	2019-04-30	529,262	9.0	0.0	0.2	9.2
2019-05-01	2019-05-31	519,130	8.8	0.0	0.2	9.0
2019-06-01	2019-06-30	507,945	8.6	0.0	0.2	8.8
2019-07-01	2019-07-31	633,320	10.8	0.0	0.2	11.0
2019-08-01	2019-08-31	560,952	9.5	0.0	0.2	9.7
2019-09-01	2019-09-30	483,661	8.2	0.0	0.1	8.4
Total		6,494,969	110.4	0.0	1.9	112.3

The following tables detail the consumption of and emissions from natural gas over the Base Year and Performance Period.

Natural Gas Consumption and Emissions

Base Year

Start Date	End Date	Consumption (m3)	Emissions (tCO2e)			
			CO2	CH4	N2O	Total
2017-09-22	2017-10-22	6,117	11.5	0.0	0.1	11.6
2017-10-23	2017-11-20	58,580	110.6	0.1	0.6	111.3
2017-11-21	2017-12-19	89,842	169.6	0.1	0.9	170.6
2017-12-20	2018-01-21	119,747	226.1	0.1	1.2	227.4
2018-01-22	2018-02-20	92,931	175.5	0.1	1.0	176.5
2018-02-21	2018-03-20	76,723	144.9	0.1	0.8	145.7
2018-03-21	2018-04-19	93,353	176.3	0.1	1.0	177.3
2018-04-20	2018-05-21	22,845	43.1	0.0	0.2	43.4
2018-05-22	2018-06-20	1,109	2.1	0.0	0.0	2.1
2018-06-21	2018-07-19	1,160	2.2	0.0	0.0	2.2
2018-07-20	2018-08-21	923	1.7	0.0	0.0	1.8
2018-08-22	2018-09-20	919	1.7	0.0	0.0	1.7
Total		564,249	1,065.3	0.5	5.9	1,071.7

Performance Period

Start Date	End Date	Consumption (m3)	Emissions (tCO2e)			
			CO2	CH4	N2O	Total
2018-09-21	2018-10-21	31,338	59.2	0.0	0.3	59.5
2018-10-22	2018-11-20	72,291	136.5	0.1	0.8	137.3
2018-11-21	2018-12-19	98,889	186.7	0.1	1.0	187.8
2018-12-20	2019-01-21	111,487	210.5	0.1	1.2	211.8
2019-01-22	2019-02-20	108,066	204.0	0.1	1.1	205.3
2019-02-21	2019-03-20	91,128	172.0	0.1	1.0	173.1
2019-03-21	2019-04-21	71,277	134.6	0.1	0.7	135.4
2019-04-22	2019-05-21	35,850	67.7	0.0	0.4	68.1
2019-05-22	2019-06-19	2,757	5.2	0.0	0.0	5.2
2019-06-20	2019-07-21	391	0.7	0.0	0.0	0.7
2019-07-22	2019-08-21	380	0.7	0.0	0.0	0.7
2019-08-22	2019-09-22	878	1.7	0.0	0.0	1.7
Total		624,732	1,179.5	0.6	6.5	1,186.6

Additionally, the following two tables outline the activity data and emissions related to refrigerants and diesel fuel consumption for the Base Year and Performance Period.

Refrigerant Emissions

Period	Dates	Refrigerant	GWP (gCO ₂ e/g)	Leakage (kg)	Emissions (tCO ₂ e)
Base	2017-10-01 to 2018-09-30	R-123	77.0	21.8	1.7
		R-410A	2088.0	0.6	1.3
		Base Period Total			
Performance	2018-10-01 to 2019-09-30	R-123	77.0	21.8	1.7
		R-410A	2088.0	0.6	1.3
		Performance Period Total			

Diesel Consumption and Emissions

Period	Start Date	End Date	Consumption (l)	Emissions (tCO ₂ e)			
				CO ₂	CH ₄	N ₂ O	Total
Base	2017-10-01	2018-09-30	2,712.2	7.3	0.01	0.32	7.6
Performance	2018-10-01	2019-09-30	2,712.2	7.3	0.01	0.32	7.6

APPENDIX B STANDARD REPORTING DECLARATION

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 EPL's assertion of the GHG inventory for 25 Sheppard.

Reporting Information

No.	CSA Reporting Requirement	Declaration
A	Description of the reporting organization.	H&R REIT ("The Company") owns and manages 25 Sheppard. The Company has registered the building in the Canada Green Building Council's LEED-EB Program. To meet the requirements of LEED-EB Energy and Atmosphere credit 6: Emission Reduction Reporting, The Company is submitting this GHG Inventory report to the CSA's CleanStart Registry.
B	Person responsible.	Mary De La Franier, Senior Property Manager, H&R REIT
C	Reporting period covered.	October 1, 2018 – September 30, 2019
D	Documentation of organizational boundary.	Operational Control Approach
E	Direct GHG emissions, quantified separately for each GHG, in tonnes of CO ₂ e.	See section 5.2.2
F	A description of how CO ₂ emissions from the combustion of biomass are treated in the GHG inventory.	Not applicable.
G	If quantified, GHG removals, quantified in tonnes of CO ₂ e.	Not applicable.
H	Explanation for the exclusion of any GHG sources or sinks from quantifications.	This inventory includes all direct and energy indirect GHG emissions sources, as well as some other indirect sources. 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 ₂ e.	See section 5.2.2
J	The historical base year selected and the base-year GHG inventory.	October 1, 2017 – September 30, 2018; see section 5.2.2

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.
L	Reference to, or description of, quantification methodologies including reasons for their selection.	Calculations were derived by multiplying GHG activity data and GHG emission factors.
M	Explanation of any change to quantification methodologies previously used.	Not applicable.
N	Reference to, or documentation of, GHG emission or removal factors used.	See section 4.2
O	Description of the impact of uncertainties on the accuracy of the GHG emissions and removals data.	Calculation uncertainties include error margins in the emission factors and measured activity data. Emission factors are from the most local and credible source available at the time of reporting. Activity data is based on utility bills and invoices received by EPL with the following exception: refrigerant data relies on an assumed leakage rate to calculate associated emissions.
P	A statement that the GHG report has been prepared in accordance with ISO Standard 14064-1.	This report has been prepared in accordance to the following standard: CAN/CSA-ISO 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 provided third party verification for this GHG Inventory report and confirmed that it constitutes a reasonable level of assurance. See third party verification report for details.