

Annual Sustainability Report



THE
ParkSIDE
HOTEL & SPA

Parkside Hotel & Spa

2017

| | |
|--------------|--|
| Completed By | Kayli Anderson, GHG-IQ, & Jay Cummins, GHG-IQ |
| Email | kayli@synergyenterprises.ca |
| Date | 9/5/2017 |

synergy 

Executive Summary

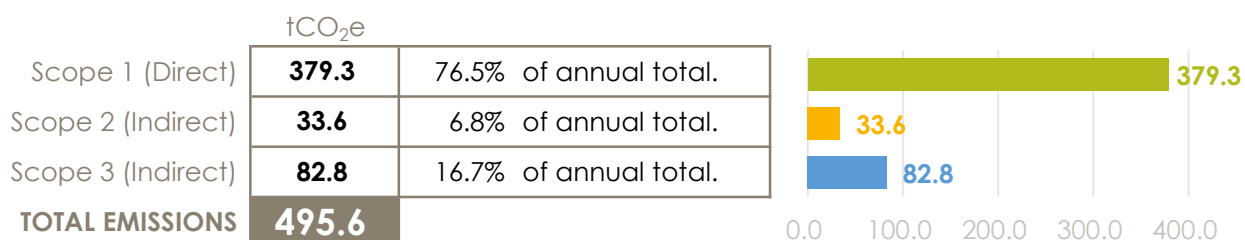
The Parkside Hotel & Spa is a 126 room hotel with five meeting rooms in downtown Victoria, BC. Parkside was designed based on the LEED Platinum building standard, to minimize energy requirements and environmental impact. Since opening in 2009, the hotel has received numerous sustainability awards such as 5 Green Keys in the Green Key Eco-Rating program.

2017 marks the first year that Parkside has measured their greenhouse gas (GHG) emissions. The inventory includes natural gas, gasoline, electricity, water, waste, paper, travel and staff commuting. Total emissions come to 495.6 tCO₂e, equivalent to 132 cars on the road for one year. Emissions per square foot are significantly lower than the average hotel. At 75.7% of the total, natural gas was the largest emissions source followed by staff commuting (7.7%) and electricity (6.8%). Parkside will be working with Synergy Enterprises to develop an action plan aimed at reducing their carbon footprint by 5% by 2018.

Company Information

| | | | |
|------------------------|---|---------------------------------|--------------|
| Company Name | Parkside Hotel & Spa | | |
| Contact Information | Trina White | trina.white@parksidevictoria.ca | 250-940-1200 |
| Company Description | 1 hotel (with 126 rooms, 5 meeting rooms, 1 pool and 1 gym) and 1 company vehicle | | |
| Reporting Period | March 1st, 2016 - February 28th, 2017 | | |
| Inventory Boundary | Scope 1 (Direct Emissions) - Natural Gas, Gasoline | | |
| | Scope 2 (Indirect Emissions from Purchased Electricity) - Purchased Electricity (BC Hydro) | | |
| | Scope 3 (Indirect Emissions from Other Sources) - Water, Waste, Stationery, Paper Products, Company Travel, Staff Commuting | | |
| Consolidation Approach | Operational Control: Accounting for 100% of emissions from operations over which the company has operational control. | | |
| Primary Measurement | Carbon Dioxide Equivalent (CO ₂ e) | | |
| Reporting Guidelines | Aligned with those defined in <i>The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard, Revised Edition (The GHG Protocol, www.ghgprotocol.org)</i> . Emissions factors reviewed & approved by Offsetters. | | |

Inventory Results



Carbon Footprint (Summary)

Parkside Hotel & Spa

2017 Report



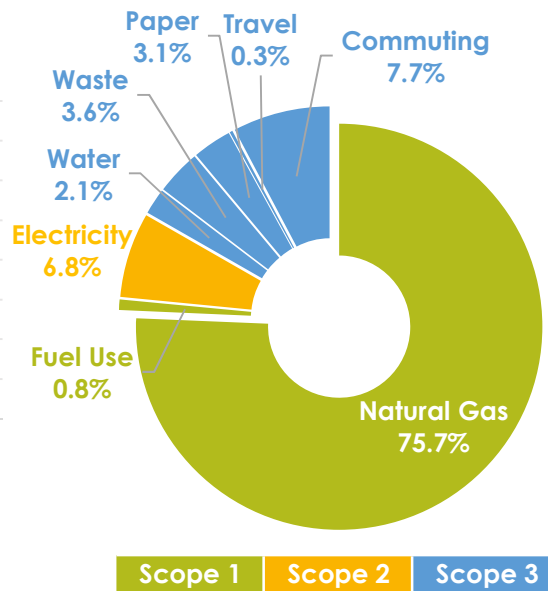
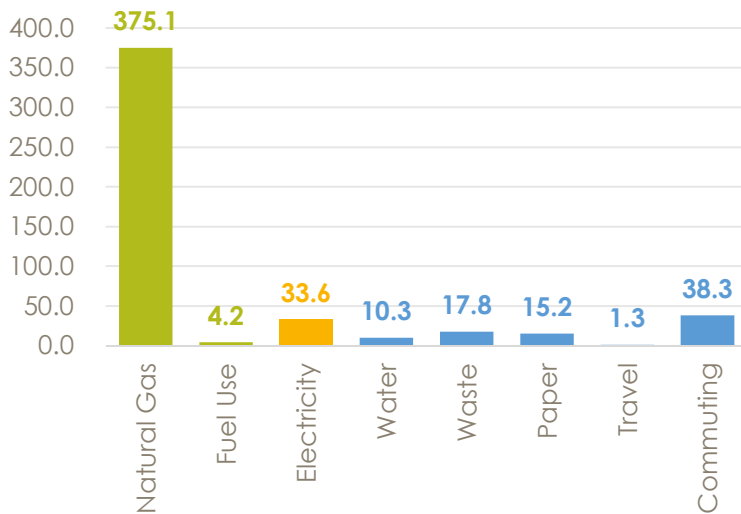
Total emissions: **495.6** tCO₂e

Offset cost: **\$9,920**

Total annual emissions for the Parkside Hotel & Spa come to 495.6 tCO₂e. Emissions per square foot are significantly lower than the average hotel. Congratulations!

Carbon Footprint (By Activity)

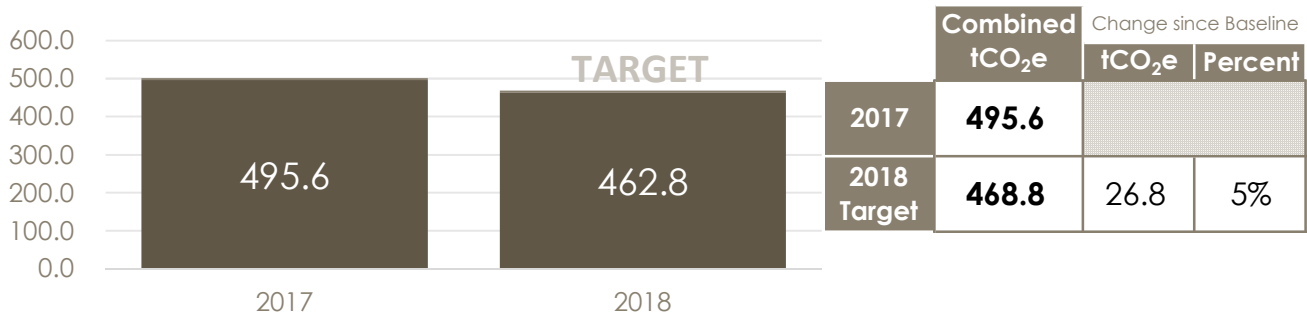
Emissions by Activity (tCO₂e)



Scope 1 | Scope 2 | Scope 3

Carbon Footprint (Historical)

Emissions (tCO₂e)



1,563.5

Barrels of Oil



131.7

Cars per Year



3.9

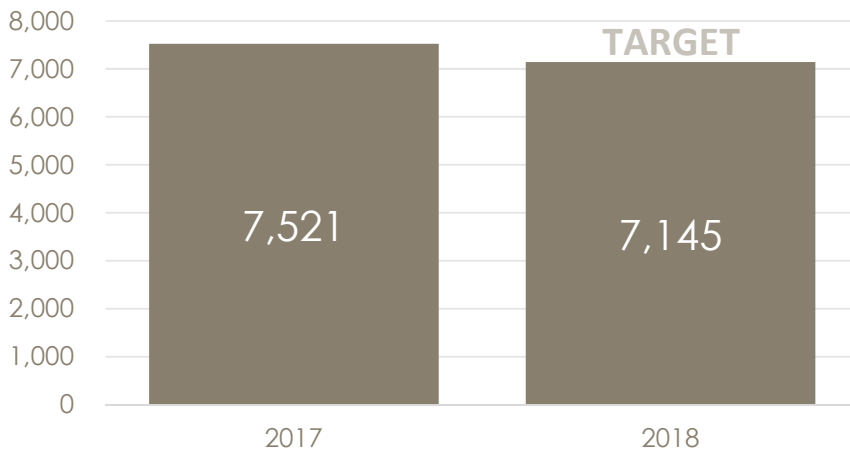
tCO₂e/ room

tCO₂e
(Total)

495.6

Natural Gas

Natural Gas (GJ)



Analysis

Natural gas is the largest source of emissions, at 75.7% of Parkside's total footprint. Natural gas is used for heating throughout the hotel and powers the boilers for pool, spa and in-room hot water. Natural gas use is highest in the winter months when the boilers are in use for space heating in guest rooms. Summer usage for hot water is steady at ~400GJ/month.

Note 1: An energy management system is in place, which contributes to a low GJ use per square foot. Closer monitoring of this system can help identify opportunities for reduction.

Note 2: Separate metering was not available for natural gas. A responsibility rate of 92.15% has been applied based on an estimate of square foot.

GJ/ft² **0.05**

tCO₂e **375.1**

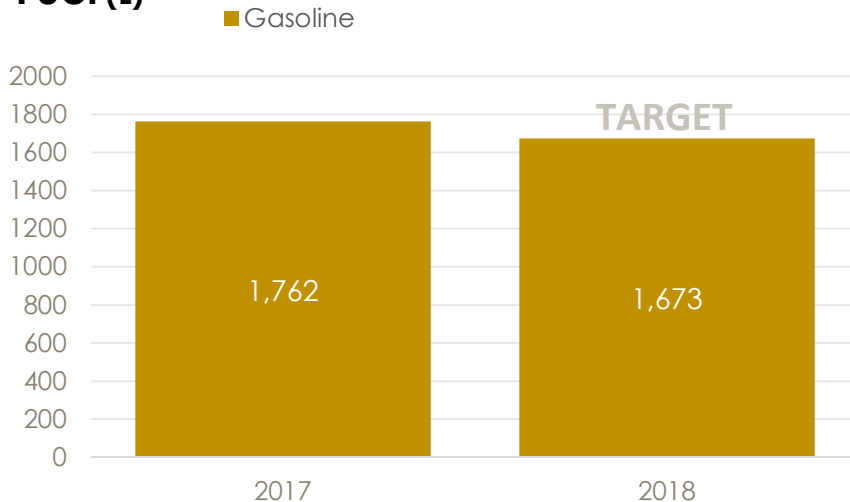
% of Total **75.7%**



81.8
Houses

Gasoline

Fuel (L)



Analysis

Gasoline is used to fuel the company van and is responsible for less than one percent of Parkside's total carbon footprint. The van is used by Parkside employees for maintenance and picking up supplies around town.

Encouraging use of cargo bikes for smaller deliveries and errands can help reduce emissions from this source.

Litres /month **146.8**

tCO₂e **4.2**

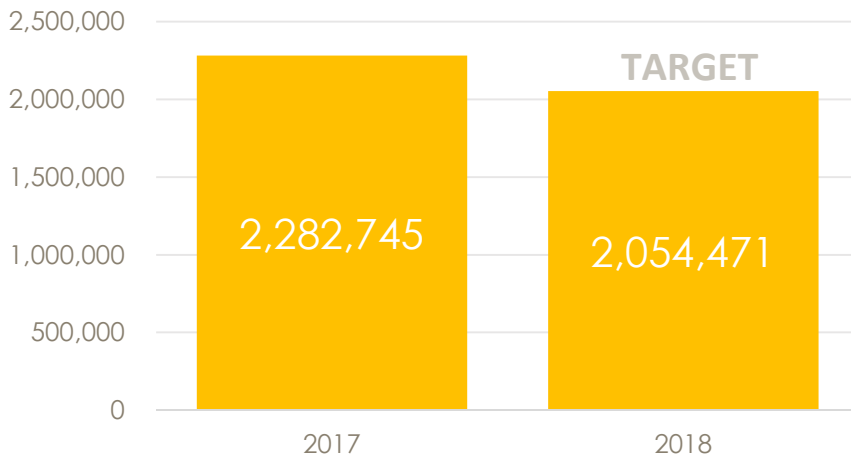
% of Total **0.8%**



1.1
Cars / Year

Electricity

Electricity (kWh)



Analysis

At 6.8%, electricity is the third largest contributor to Parkside's total carbon footprint. Per square foot, electricity consumption is higher than similar buildings. Electricity is used for lighting, powering electronics such as phones and computers, as well as pumps and fans in the ventilation system. Opportunities exist to improve lighting efficiency by upgrading to LEDs.

Note 1: Electricity use remains consistent year round, at ~200,000 kWh/month.

Note 2: Separate metering was not available for electricity. A responsibility rate of 92.15% has been applied based on an estimate of square foot.

kWh /
ft²

16

tCO₂e **33.6**

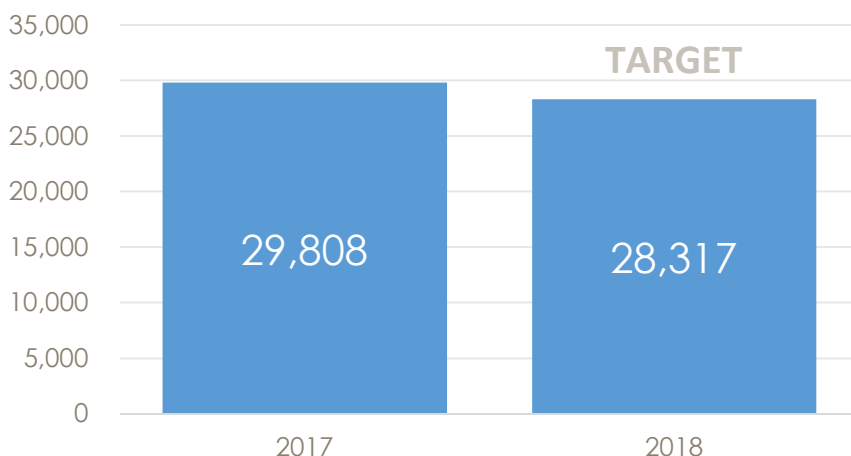
% of
Total **6.8%**



207.5
Houses

Water

Water (m³)



Analysis

Water consumption is 2.1% of Parkside's total carbon footprint. In addition to in-room use, Parkside has a pool, spa and multiple water features. Parkside's stormwater collection and greywater system reduces the amount of water needed for irrigation and water features. Reducing hot water also has the benefit of lowering natural gas use, the hotel's largest emission source.

Note: Separate metering was not available for water. A responsibility rate of 92.15% has been applied based on an estimate of square foot.

m³ /
Room

237

tCO₂e **10.3**

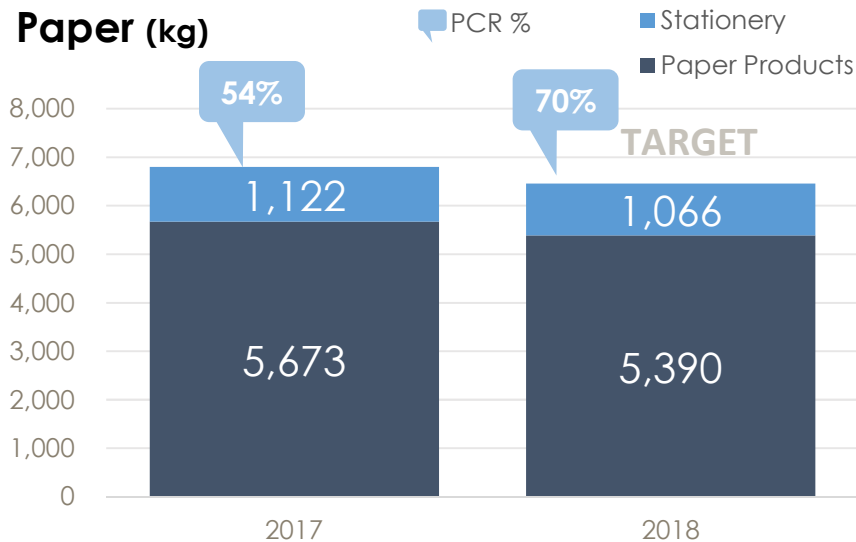
% of
Total **2.1%**



135,766
Baths (50gal)

Paper

Paper (kg)



Analysis

Paper products make up 3.1% of Parkside's total carbon footprint and include all toilet paper, paper towel, tissues, copy paper and all marketing materials. Parkside uses the equivalent of 82 trees per year to meet its paper needs; increasing treeless content will reduce this number. The top five paper products by weight are copy paper, cardstock, key card holders, note sheets and spa menus.

Treeless Content

54%

tCO₂e

15.2

% of Total

3.1%

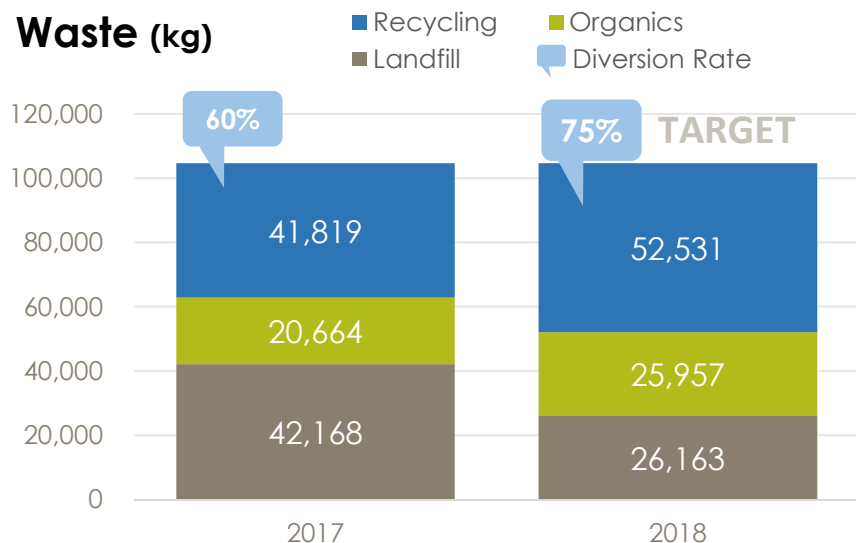


82.4

Trees / Year

Waste

Waste (kg)



Analysis

Parkside has a waste diversion rate of 60% - better than the average hotel. It is possible, however, for hotels to divert upwards of 90% of their waste. Parkside can improve waste diversion by adding streams for hard-to-recycle items, improving bin placement and signage, and educating staff, guests and businesses sharing pick-up service on better waste sorting practices.

Note: Separate invoices were not available for Parkside's waste pickups. A responsibility rate of 92.15% has been applied based on an estimate of square foot.

kg / Day

287

tCO₂e

17.8

% of Total

3.6%

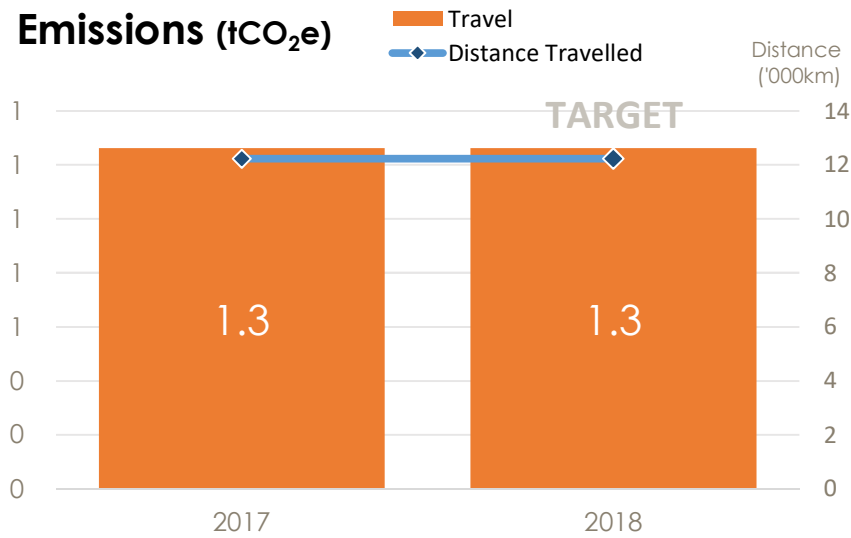


59.7%

Diversion Rate

Travel

Emissions (tCO₂e)



Analysis

Travel accounts for less than one percent of Parkside's overall carbon footprint and includes all flights, ferries and trains to destinations in North America.

These trips are made by the sales team for trade shows and consumer shows. As travel is essential for business, it is not expected to change significantly in the coming years.

Note: A total of 18 flights, 8 ferries, and 2 trains were taken in FY 2017.

tCO₂e /
FTE

0.012

tCO₂e

1.3

% of
Total

0.3%

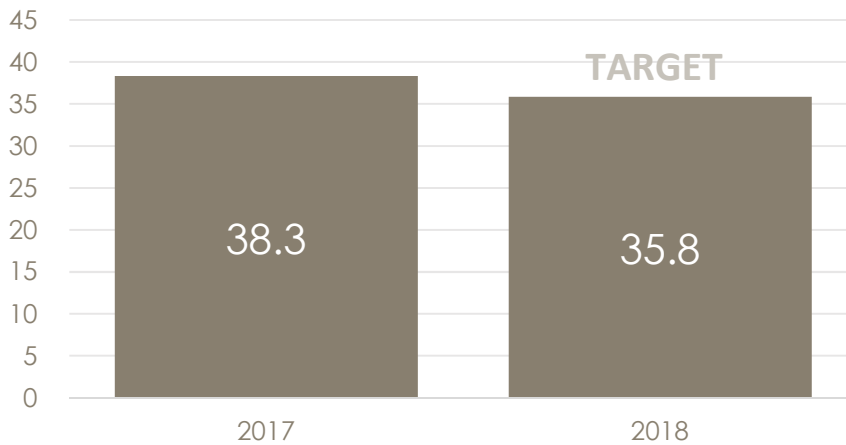


0.3

Cars / Year

Commuting

Emissions (tCO₂e)

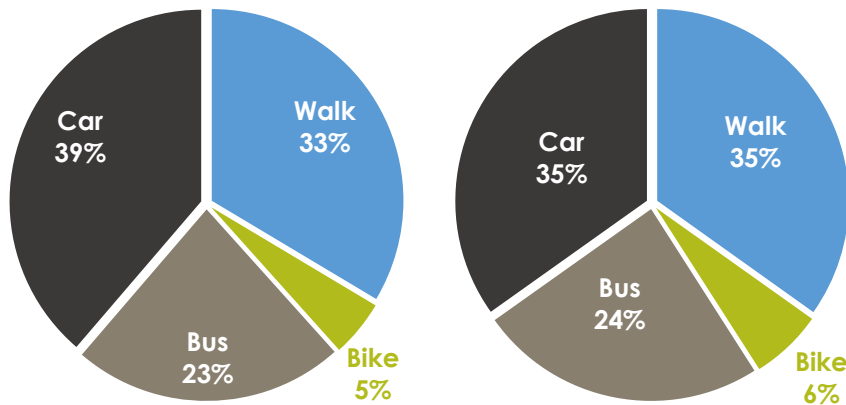


Analysis

Staff commuting is the second largest contributor to Parkside's total carbon footprint at 7.7%. Emissions from commuting come to 38.3 tCO₂e and would cost ~\$766 to offset (~\$9/FTE).

The emissions from staff commuting per employee are low compared to similar hotels, at 0.43 tCO₂e per employee.

Commuting Percentages by Method per Day



Baseline (2017)

| | |
|--------------------------------|-------------|
| Average kgCO ₂ e/km | 0.14 |
| Low-Emission Commuting % | 61% |

Target (2018)

| | |
|--------------------------------|-------------|
| Average kgCO ₂ e/km | 0.13 |
| Low-Emission Commuting % | 65% |

Analysis (Breakdown)

61% of Parkside staff commute by low-emission means including walking, biking and bussing.

The average commute is less than 7km.

Through education and incentives, Parkside can encourage more staff to commute sustainably.

Parkside currently provides secure bikes storage and shower facilities and does not subsidize parking for staff.

tCO₂e / FTE **0.435**

tCO₂e **38.3**

% of Total **7.7%**

 **10.2**
Cars / Year

Carbon Reduction Strategy

Parkside Hotel & Spa was designed and built to operate with a low impact on the environment. The hotel's first carbon footprint has demonstrated that the hotel's emissions per square foot are low compared to other similar businesses, with the largest impacts coming from heat, hot water, and electricity.

While the hotel is strong in many areas, including stormwater management and low-emission staff commuting, there are additional actions that can be taken to reduce the overall impact of the hotel's operations. Working with Synergy Enterprises, Parkside is developing an action plan to reduce their carbon footprint by 5% by 2018. Opportunities identified in the action plan include: upgrading lighting to LED, switching to 100% recycled paper, improving waste management systems and increasing streams for hard to recycle items, and installing low-flow aerators. Further review of the energy management system is also recommended to ensure it is optimized for the hotel.

Achievements

- > Building designed based on LEED Platinum building standard.
- > Achieved numerous awards in sustainability, including 5 Green Keys, 2010 Energy and Environmental Award from Hotel Association of Canada, and CHBA Outdoor Environmental Achievement Award.
- > Parkside's Energy Management System has led to a low natural gas use per square foot compared to similar buildings.
- > Parkside has a relatively high number of staff commuting by sustainable means (61%), compared to other businesses.
- > Participated in the 2017 Earth Day Power Hour, winning the Team Spirit Award for the 3rd year in a row.

Moving Forward

- > Implement the actions set out in Synergy's upcoming Action Plan to reduce energy use and the associated carbon footprint.
- > Switch out the lights and ballasts in the parkade to LED to reduce electricity use.
- > Introduce extra waste streams such as soft plastics to increase the waste diversion rate to 75%.
- > Switch all copy paper to Wheat Sheet (or 100% recycled paper) and save ~20 trees per year.
- > Encourage more staff to ride their bikes, by participating in the Greater Victoria Bike-to-Work Week.
- > Install low-flow (1.0 GPM) aerators throughout guest rooms to further reduce water use.

Information on Inventory Uncertainty

* Separate metering was not available for natural gas, electricity, water and waste. A responsibility rate of 92.15% has been applied based on an estimate of square foot.

Emissions References

1. 2016/17 B.C. Best Practices Methodology for Quantifying Greenhouse Gas Emissions
<http://www2.gov.bc.ca/gov/content/environment/climate-change/policy-legislation-programs/carbon-neutral-government/measure>
2. Environment Canada's National Inventory Report (1990-2014); Part 2 & 3.
http://unfccc.int/files/national_reports/annex_i_ghg_inventories/national_inventories_submissions/application/zip/can-2016-nir-14apr16.zip
3. Department for Environment, Food & Rural Affairs (UK) Carbon Factors
<https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2016>
4. Intergovernmental Panel on Climate Change (Global Warming Potentials)
http://www.ipcc.ch/publications_and_data/ar4/wg1/en/ch2s2-10-2.html

All emissions factors are reviewed and approved by Offsetters (www.offsetters.ca) on an annual basis.

Glossary of Terms

| Term | Description |
|--------------------|---|
| CFL | Compact Fluorescent Light |
| GHG | Greenhouse Gas (emissions): Atmospheric gasses contributing to the greenhouse effect, including Carbon Dioxide (CO ₂), Methane (CH ₄), Nitrous Oxide (N ₂ O), etc. |
| GJ | Gigajoule: Unit of natural gas equal to 26.137 m ³ or 0.947 MMBtu |
| HVAC | Heating, Ventilation & Air Conditioning |
| KPI | Key Performance Indicators (Highlights) |
| kWh | Kilowatt-Hour: Common unit for measuring electrical consumption |
| LED | Light Emitting Diode: A form of highly efficient lighting technology |
| m ³ | Cubic Meter: Unit of measurement equal to 1,000 Litres |
| PCR% | Post-Consumer Recycled Content (as a percentage) |
| pgs.-km | Passenger-Kilometer: Unit separating total emissions between passengers per km |
| Ream | Standard unit of paper measurement equal to 500 sheets (with 10 reams in one box) |
| T12/T8/T5 | Models of common fluorescent tube lighting |
| tCO ₂ e | Tonnes of Carbon Dioxide Equivalent: GHGs have different warming potentials, measured collectively as CO ₂ equivalent (hence "e") |
| t-km | Tonne-kilometer: A unit of measurement used in shipping |

| | |
|--------------|--|
| Completed By | Kayli Anderson, GHG-IQ, & Jay Cummins, GHG-IQ |
| Email | kayli@synergyenterprises.ca |
| Date | 9/5/2017 |

