

Annual Greenhouse Gas Emissions Inventory

FY 2023



Parkside Hotel & Spa

March 1, 2022 to February 28, 2023

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Completed	31/7/2023

synergy

Executive Summary

The Parkside Hotel & Spa is a 126-suite hotel in downtown Victoria, BC. Designed and built to LEED Platinum Building Standards, over 92% of waste and materials were diverted from the landfill during its construction. Parkside achieved carbon neutrality in 2019, becoming the second carbon neutral hotel in British Columbia. Parkside invests in carbon offset projects that protect BC's forestland from logging, reduce emissions, support wildlife habitats, and protect Indigenous sites.

Since opening in 2009, Parkside has made consistent efforts to assess and minimize the environmental impact of its operations. Synergy Enterprises has worked with Parkside since 2017 to conduct annual greenhouse gas (GHG) emissions inventories for the hotel. This report measures the carbon emissions associated with Parkside's operations for the 2023 fiscal year (FY).

Total emissions in FY 2023 were 542 tCO₂e, a 9.61% increase over FY 2022 due to an increase in natural gas and water consumption, paper purchases, company travel, and staff commuting. Despite a 53.4% increase in room night occupancy levels, emissions per room night decreased by 28.5% over FY 2022.

Parkside has committed to reducing emissions by 42% by 2030, with FY 2020 as the baseline for comparison. Parkside's emissions increased by 14.1% in FY 2023 compared to FY 2020. With seven years left to achieve the 2030 reduction target, Parkside should focus on reducing its highest emission sources, such as natural gas, staff commuting, and waste.

Inventory Information

Company Name	Parkside Hotel & Spa		
Contact Information	Trina White	trina.white@parksidevictoria.com	250-940-1200
Company Description	Hotel in downtown Victoria with 126 suites, 5 meeting rooms, 1 pool and 1 gym. Parkside owns and operates 1 company vehicle.		
Reporting Period	March 1, 2022 to February 28, 2023		
Inventory Boundary	Scope 1 (Direct Emissions) Natural Gas, Gasoline, Biodiesel, Propane		
	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		
Scope 2 Approach	Location-Based Emissions Calculation		
Consolidation Approach	Operational Control: Accounting for 100% of emissions from operations over which the company has operational control.		
Primary Measurement	GHG emissions measured in 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 (2015, The GHG Protocol, www.ghgprotocol.org)</i> . Emissions factors reviewed & approved by Ostrom.		

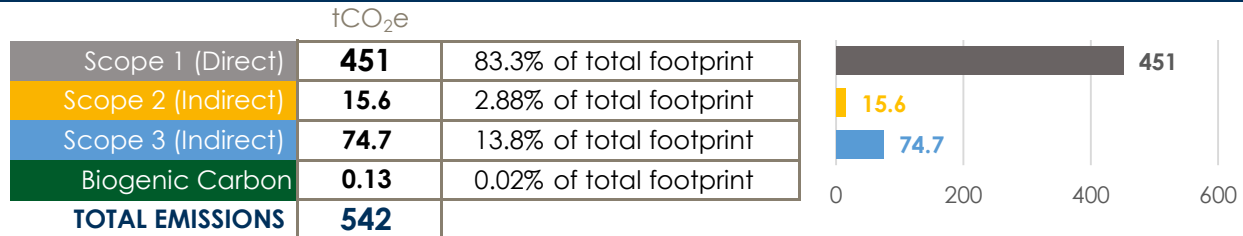
Summary of Results

Total tCO₂e **542**

Equivalent to:
 **10.1**
 kgCO₂e / Room Night

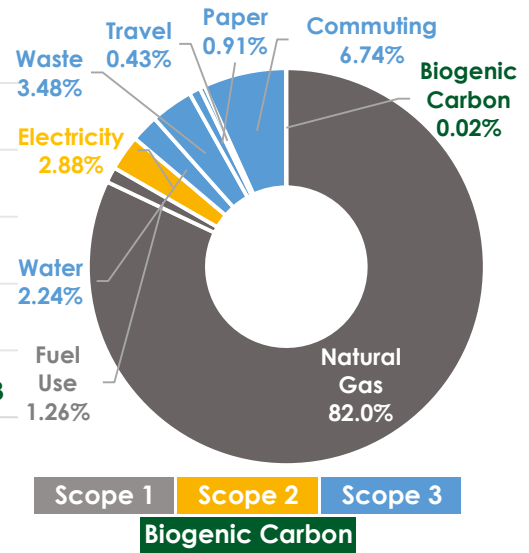
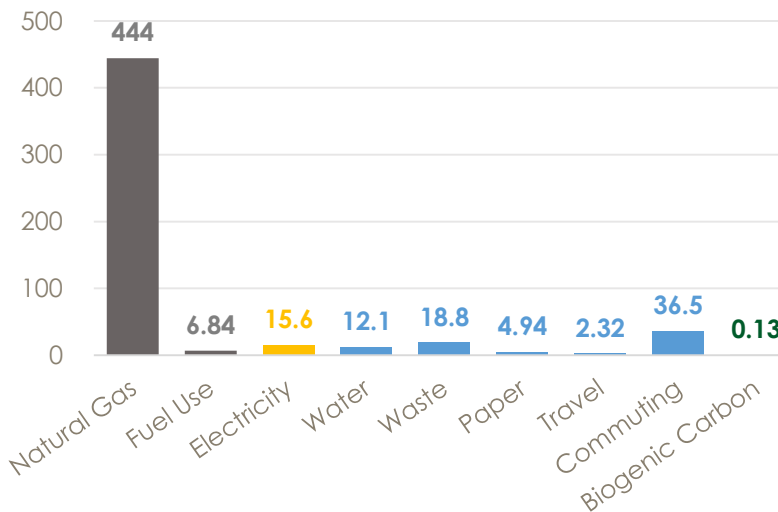
Offset Cost **\$16,251**

Carbon Footprint by Scope



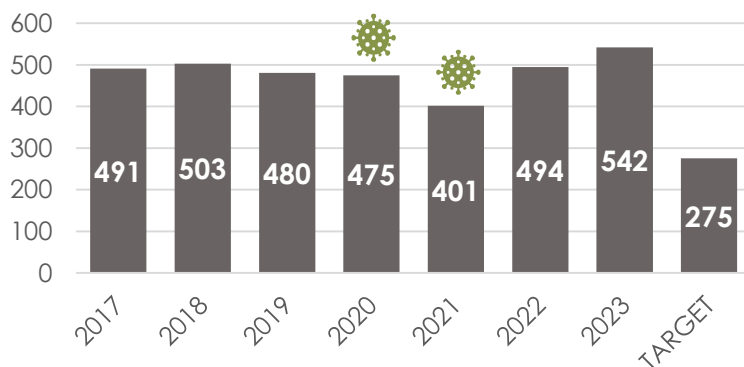
Carbon Footprint By Activity

Emissions by Activity (tCO₂e)



Carbon Footprint Year Over Year

Emissions (tCO₂e)



	tCO ₂ e/ Year	kgCO ₂ e/ Room Night	Change since Baseline	
			tCO ₂ e	Percent
2017	491.2	12.8		
2018	503.0	12.9		
2019	480.3	11.9		
2020	475.0	11.7		
2021	401.4	16.4	73.6	-15%
2022	494.3	14.2	-19.3	4%
2023	541.8	10.1	-66.8	14%
TARGET	275.5	N/A	199.5	-42%

Emission Reduction Targets

Over 2020 baseline

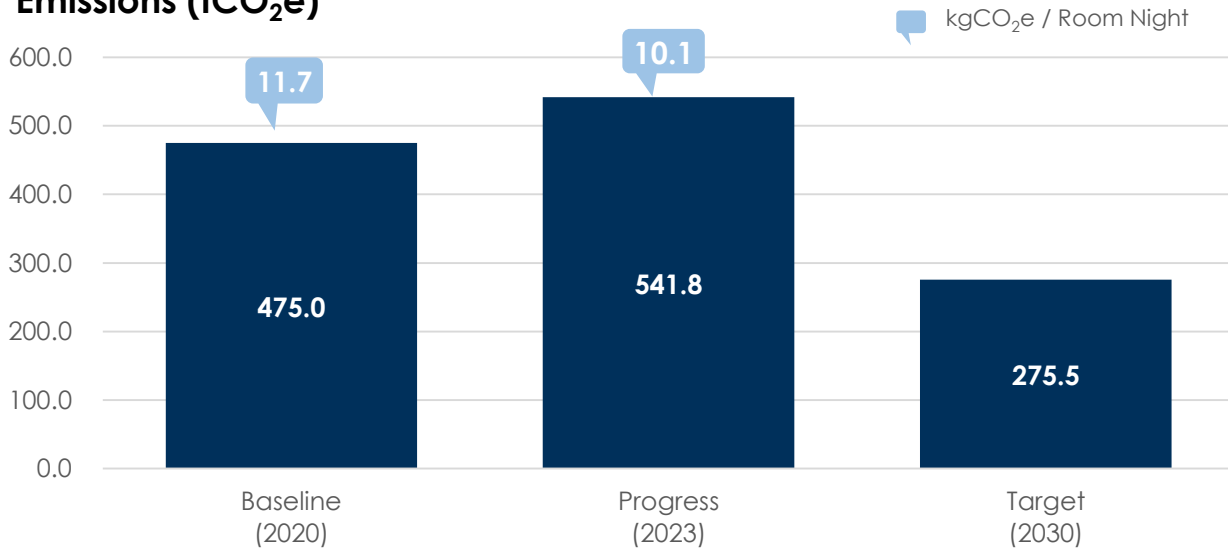
Reduction Target	-42%	% Increased	14%
	by 2030		2023

Parkside has committed to reducing emissions by 42% by 2030, with FY 2020 as the baseline for comparison.

Emissions Source	Baseline (2020)	Current Year (2023)	% Change
 Natural Gas	tCO ₂ e 370	tCO ₂ e 444	% Increase 20%
 Staff Commuting	tCO ₂ e 34.3	tCO ₂ e 36.5	% Increase 6%
 Waste	tCO ₂ e 15.8	tCO ₂ e 18.8	% Increase 19%

Overall Progress

Emissions (tCO₂e)



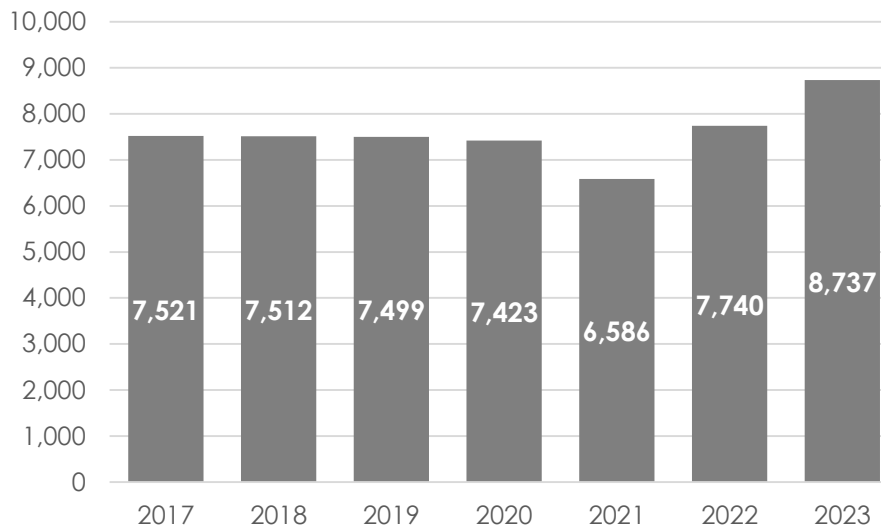
Notes on Targets

Parkside has committed to reducing emissions by 42% by 2030, with FY 2020 as the baseline for comparison. In FY 2023, total emissions increased by 14.1% over FY 2020 due to a 31.3% increase in room night capacity. Despite increasing the room night capacity by a third, emissions per room night decreased by 13.1% from 11.7 kgCO₂e in 2020 to 10.1 kgCO₂e in 2023, a record low for Parkside's emissions per room night.

With seven years left to achieve the 2030 reduction target, Parkside should focus on reducing its highest emission sources, such as natural gas, staff commuting, and waste.

Natural Gas

Natural Gas (GJ)



Analysis

Natural gas is used for heating and accounts for 82.0% of the total footprint at 444 tCO₂e. In FY 2023, Parkside used 8,737 GJ of natural gas, a 13.0% increase over FY 2022 due to the increase in room night occupancy levels. To reduce natural gas emissions, Parkside is exploring solutions such as purchasing renewable natural gas and installing solar panels.

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

tCO₂e **444**

% of Total **82%**

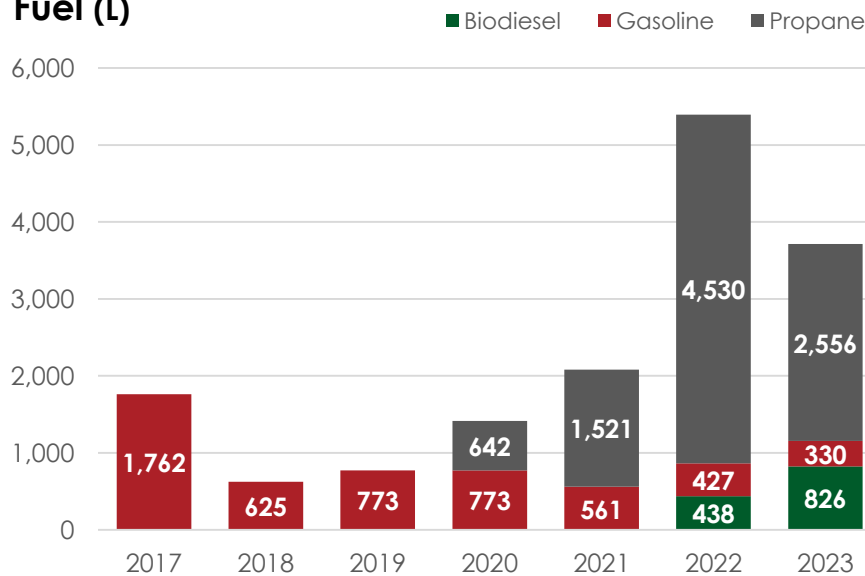
GJ/ft² **0.06**



98.8
Houses

Fuel

Fuel (L)



Analysis

Gasoline is used for the company van, while propane is used for the marshmallow roasting experience, BBQs, lawn mower, pressure washer and fireplace. Biodiesel is used for the backup generator. In FY 2023, Parkside used 3,712 L of fuel, a 31.2% decrease over FY 2022. Propane use decreased by 43.6%, gasoline use decreased by 22.6%, while biodiesel use increased by 88.5%.

tCO₂e **6.84**

% of Total **1.3%**

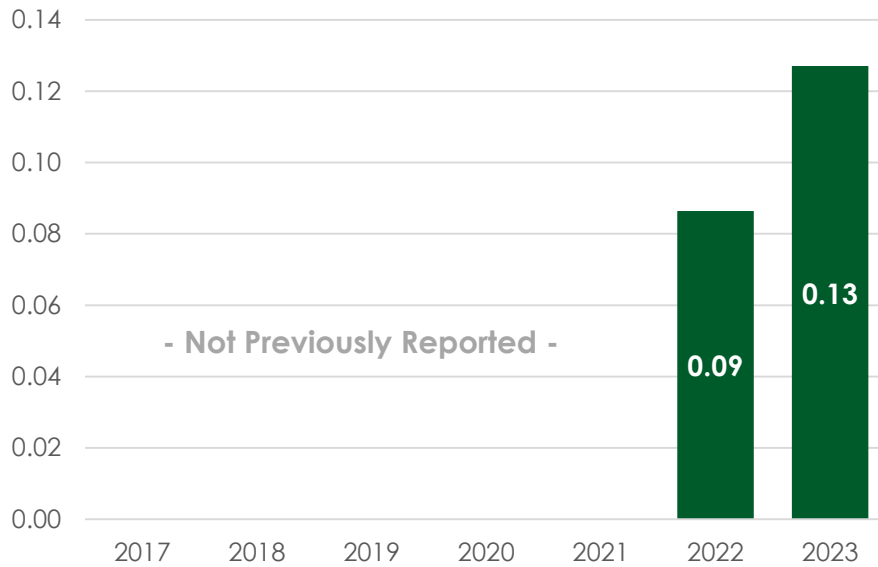
Total Litres **3,712**



1.95
Cars per Year

Biogenic CO₂

Biogenic Carbon (BiotCO₂)



Analysis

Parkside emits biogenic carbon through the use of biofuels in the backup generator. Using biofuels is a great interim solution to reduce the total carbon footprint. As carbon accounting evolves, there may be changes to the way biogenic carbon is accounted for. To stay at the forefront of sustainability, consider switching to electric options when upgrading the company van, appliances, and equipment.

Bio-tCO₂ **0.13**

% of Total **0.02%**

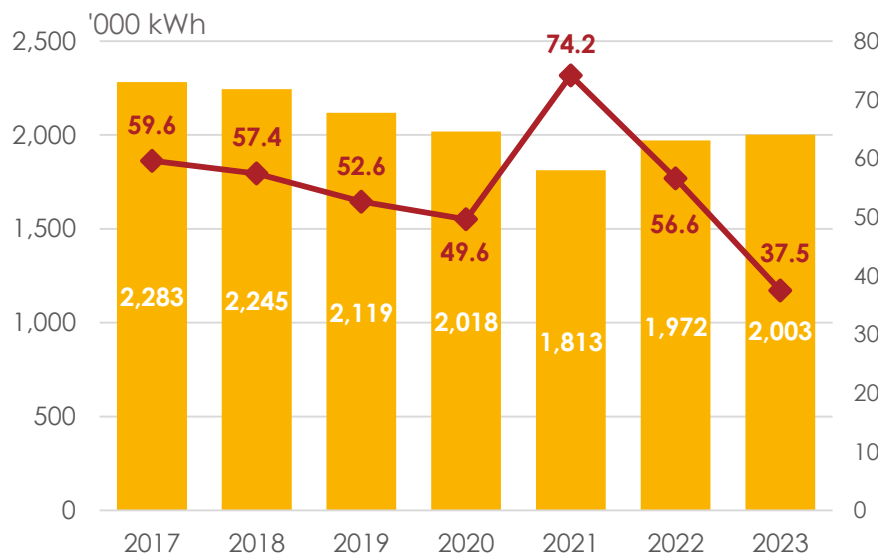
Litres/ Month **68.8**



0.04
Cars per Year

Electricity

Electricity (kWh)



Analysis

Parkside used 2,002,656 kWh of electricity for lighting and office equipment. Electricity use increased by 1.57%, while electricity use per room night decreased by 33.8% since the previous year. Emissions from electricity use totaled 15.6 tCO₂e, a decrease of 57.5% over FY 2022 due to changes in BC's grid. Focusing on energy efficiency will ensure BC's power grid remains low carbon.

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

tCO₂e **15.6**

% of Total **2.9%**

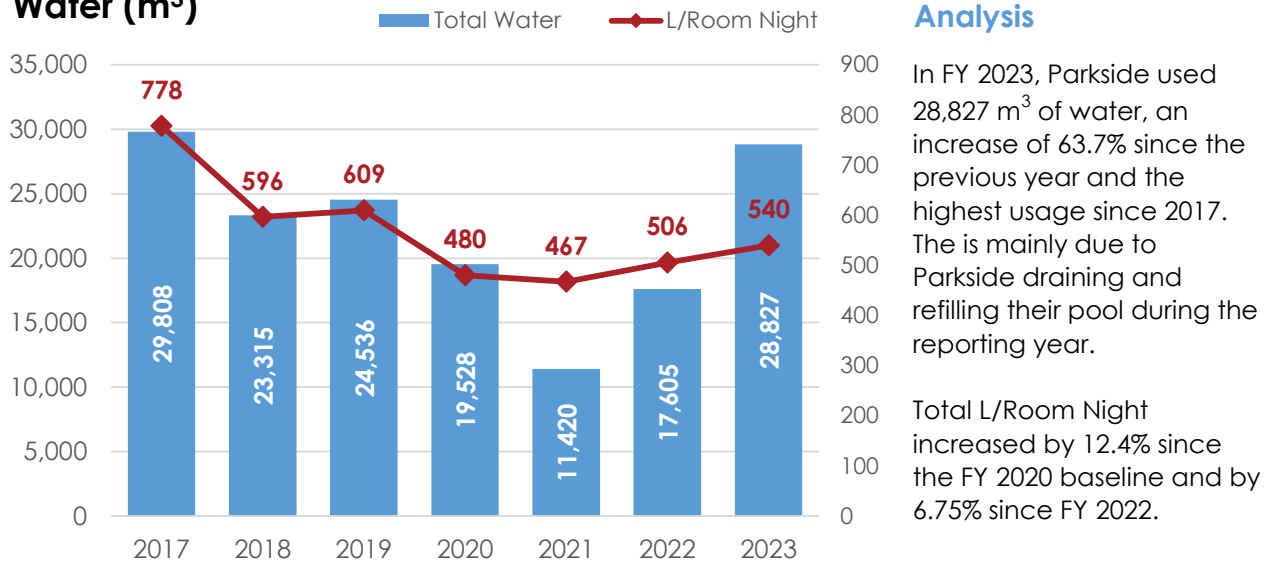
kWh/ Room Night **37.5**



180
Houses

Water

Water (m³)



Analysis

In FY 2023, Parkside used 28,827 m³ of water, an increase of 63.7% since the previous year and the highest usage since 2017. This is mainly due to Parkside draining and refilling their pool during the reporting year.

Total L/Room Night increased by 12.4% since the FY 2020 baseline and by 6.75% since FY 2022.

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

tCO₂e **12.1**

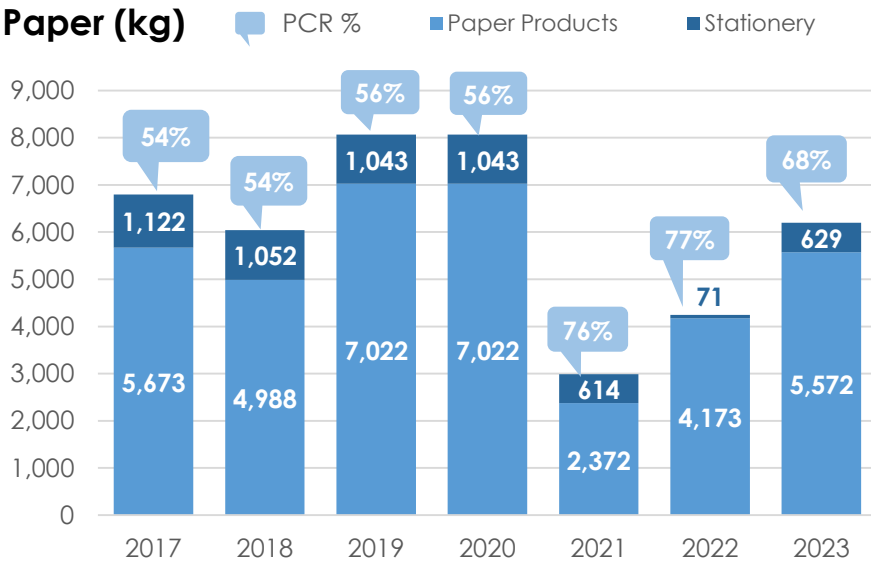
% of Total **2.2%**

L / Room Night **540**

 **131,296**
Baths (50gal)

Paper

Paper (kg)



Analysis

Paper contributes 0.92% of total emissions at 4.94 tCO₂e. In FY 2023, paper use increased by 46.1% since the previous year, but is down by 23.1% since the FY 2020 baseline. Parkside saved 99 trees from being cut down by purchasing paper with post-consumer recycled content (PCR). An additional 27.2 trees could be saved by ensuring that all paper products contain 100% PCR.

* Note: Improved factors have been applied to calculate the emissions from paper. These improved factors may cause a decrease in emissions per kg of paper used.

tCO₂e **4.94**

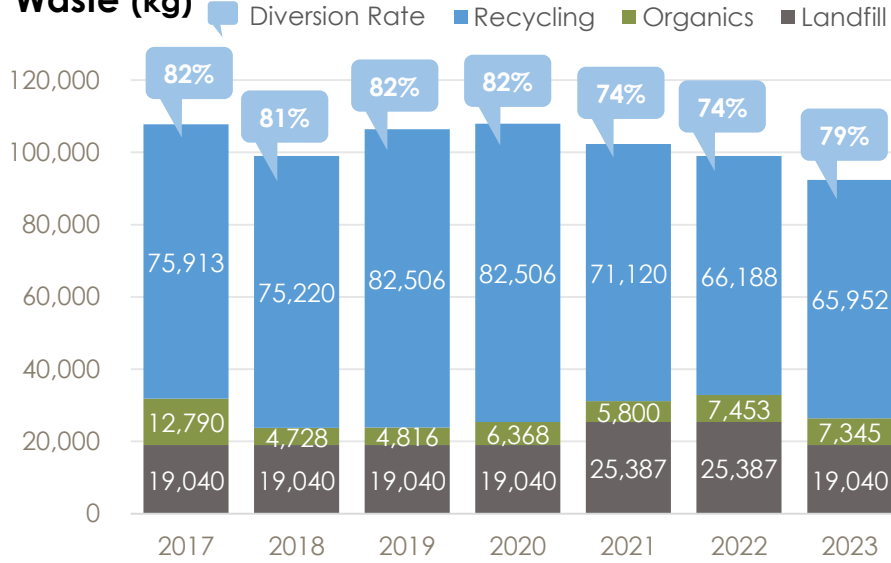
% of Total **0.9%**

Treeless Content **68%**

 **27.2**
Trees / Year

Waste

Waste (kg)



Analysis


Total waste volumes in FY 2023 totaled 92,337 kg. This equates to 18.8 tCO₂e and contributes 3.48% of the total footprint. Compared to FY 2020 pre-pandemic levels, total waste volumes are down by 14.4% and down by 6.76% over FY 2022. Due to improved waste methodology, the historical waste volumes have been restated to be comparable with FY 2023 data*.

* Note: The waste conversion factor methodology has improved in 2023, causing the estimated weight of waste to decrease. This has led to a re-statement of historical waste volumes due to a >5% change from the improved methodology and to make footprints comparable year-to-year.

tCO₂e **18.8**

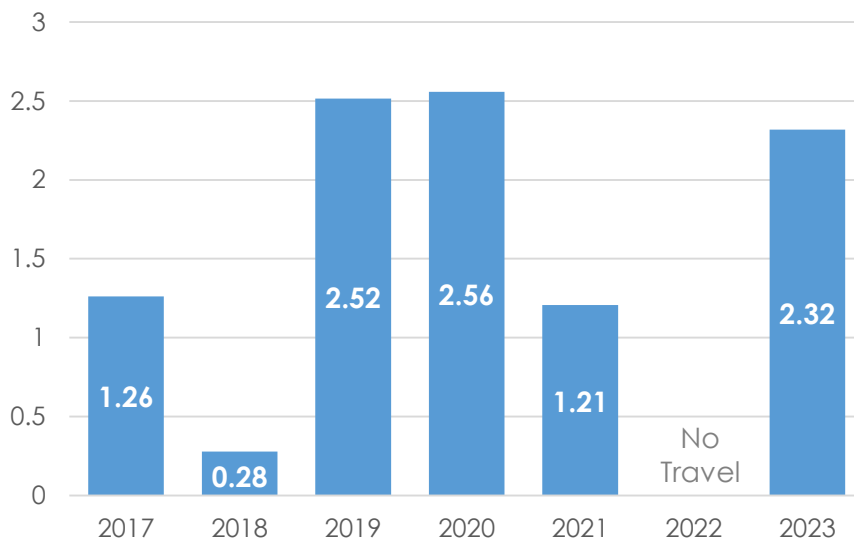
% of Total **3.5%**

kg / Room Night **1.73**

 **79.4%**
Diversion Rate

Travel

Emissions (tCO₂e)



Analysis

FY 2023 saw a return to travel after COVID-19 restrictions lifted. Travel emissions totalled 2.23 tCO₂e, which is less than 1% of the total footprint.

The majority of travel emissions were from flights, resulting in 1.96 tCO₂e. Ferries, rental cars, taxi travel, mileage reimbursements, and accommodation make up the remaining 0.35 tCO₂e.

tCO₂e **2.32**

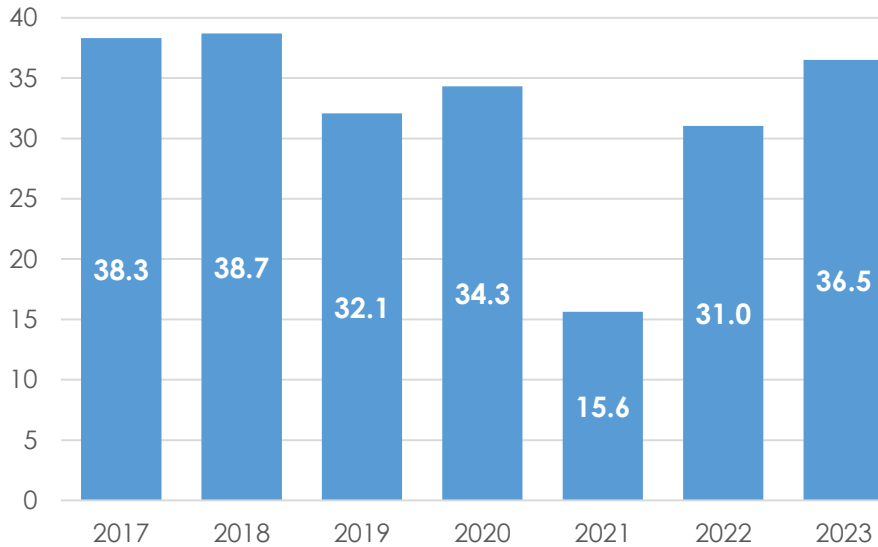
% of Total **0.4%**

kgCO₂e / FTE **22.5**

 **0.7**
Cars / Year

Commuting

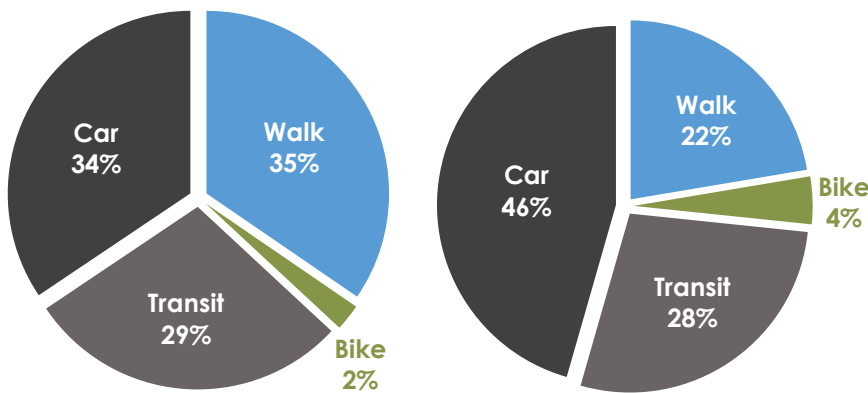
Emissions (tCO₂e)



Analysis

Staff commuting is the second highest contributor to overall emissions at 36.5 tCO₂e, which is 6.74% of the total footprint. Emissions from staff commuting have been increasing steadily with COVID-19 regulations lifting and more staff returning to in-person work. In FY 2023, commuting emissions increased by 17.6% since FY 2022 and by 6.38% since the FY 2020 baseline.

Commuting Percentages by Method per Day



Analysis (Breakdown)

The portion of employees commuting by low-emission means (biking, busing or walking) decreased from 66% in FY 2020 to 54% in FY 2023. The most significant change is the 12% decrease in staff walking to work.

Excessive distance, convenience, personal safety, and other jobs or childcare were among the most common factors leading to personal vehicle use.

As staff commuting is the second-largest contributor to emissions, Parkside should continue to work with staff to incentivize low-emission commuting methods.

Baseline (2020)

Average kgCO ₂ e/km	0.130
Low-Emission Commuting %	66%

Current (2023)

Average kgCO ₂ e/km	0.172
Low-Emission Commuting %	54%

tCO₂e **36.5**

% of Total **6.7%**

tCO₂e / FTE **0.35**

 **10.4**
Cars / Year

Carbon Reduction Strategy

The Parkside Hotel & Spa has successfully measured and reported its carbon emissions since 2017. Total emissions in FY 2023 were 542 tCO₂e, a 9.61% increase over FY 2022. This is attributable to increased natural gas and water consumption, paper purchases, company travel, and staff commuting, along with a 53.4% increase in room night occupancy levels.

Parkside has continued to develop efficiencies over time, resulting in a 13.1% decrease in kgCO₂e per room night since 2020. Moving forward, Parkside should focus on actions that will reduce its highest emission sources, such as natural gas (444 tCO₂e), staff commuting (36.5 tCO₂e) and waste (18.8 tCO₂e). Parkside is exploring solutions to reduce natural gas emissions, including purchasing renewable natural gas and installing solar panels.

Achievements

- Achieved the lowest emissions per room night to date at 10.1 kgCO₂e / Room Night
- Achieved the lowest electricity use per room night to date at 37.5 kWh / Room Night
- Lowered propane use by 43.6% compared to FY 2022
- Saved 99 trees from being cut down by purchasing paper high PCR content
- Increased waste diversion rate to 79%

Moving Forward

- Purchase renewable natural gas and install solar panels
- Consider switching to electric options when upgrading the company van, appliances, and equipment
- Empower staff to use low or no carbon transportation options when commuting
- Continue improving waste diversion practices to achieve a 90% diversion rate

Data Collection & Methodologies

Emission Source	Data Type	Data Quality
Natural Gas	Invoices	Very Good
Fuel Use	Invoices & Account Summary	Very Good
Electricity	Account Summary	Good
Water	Invoices	Very Good
Waste	Invoices & Estimate	Fair
Paper	Invoices & Account Summary	Good
Travel	Travel Tracking Worksheet	Good
Commuting	Staff Survey	Good

This table details the type of data received from Parkside to generate this report. Data quality is assessed on five categories: technology, time, geography, reliability and completeness. The purpose of this table is to provide further information on the values in this report and what sources were used to calculate them.

Information on Inventory Uncertainty

* Separate metering is 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. 2021 B.C. Best Practices Methodology for Quantifying Greenhouse Gas Emissions
<https://www2.gov.bc.ca/assets/gov/environment/climate-change/cng/methodology/2021-best-practices-methodology.pdf>

2. Environment Canada's National Inventory Report (1990-2019); Part 2 & 3.

<https://www.canada.ca/en/environment-climate-change/services/climate-change/greenhouse-gas-emissions/inventory.html>

3. Department for Environment, Food & Rural Affairs (UK) Carbon Factors 2021

<https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors->

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 Ostrom Climate Solutions (<https://ostromclimate.com/>) on an annual basis.

Policy for Base Year Recalculation:

Base year emissions, and other previous emissions, shall be retroactively recalculated if a change in organizational structure or data quality is expected to exceed a significance threshold of 10% of base year emissions. These changes may arise from structural changes such as mergers, acquisitions, divestments, outsourcing or insourcing, changes in calculation methodology and improvements in accuracy, or discovery of significant errors.

Glossary of Terms

Term	Description
Carbon Neutral	Companies are carbon neutral when they remove GHG emissions equivalent to all their scope 1, 2 and material (>5%) scope 3 emissions, usually by purchasing carbon offsets.
Biogenic	Carbon emissions generated from sources naturally occurring in the carbon cycle (i.e. organic matter), rather than the result of fossil fuel combustion.
Emissions Factor	The volume of emissions created by an emissions producing activity (i.e. fuel combustion), calculated based on the amount of the activity (volume, distance, etc.).
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
kWh	Kilowatt-Hour: Common unit for measuring electrical consumption
m ³	Cubic Meter: Unit of measurement equal to 1,000 Litres
Net-Zero	Companies with a zero-emission carbon footprint, usually achieved by minimizing outputs and negating the remaining emissions through carbon removal activities.
PCR%	Post-Consumer Recycled Content (as a percentage)
psg-km	Passenger-Kilometer: Unit separating total emissions between passengers per km
tCO ₂ e	Tonnes of Carbon Dioxide Equivalent: a combined term capturing the emissions from various GHGs.
t-km	Tonne-kilometer: A unit of measurement used in shipping

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