

Annual Sustainability Report



Eagle Wing Tours

2019 & 2020

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Completed	16/3/2021

synergy

Executive Summary

Eagle Wing Tours is a carbon neutral whale watching company based in Victoria, BC. The company has one small office/reception space at Fisherman's Wharf, three company vehicles, and four boats. Eagle Wing Tours is committed to operating as a carbon neutral business and has been monitoring, reducing, and offsetting their carbon footprint since 2010, demonstrating a strong commitment to environmental stewardship and sustainable tourism.

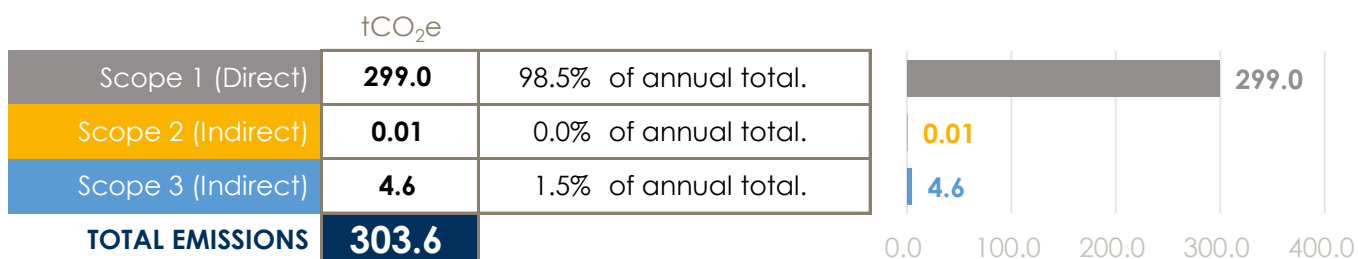
This carbon footprint report measures carbon emissions associated with Eagle Wing Tours' operations for 2019 and 2020. Total emissions in 2019 came to 981.7 tCO₂e, a 6% reduction over 2018. This is attributable to the retirement of the 'Eagle Wing' boat in 2019 and the subsequent prioritization of more fuel efficient vessels, as well as a small decrease in the number of trips. Total emissions in 2020 came to 303.6 tCO₂e, a 69% reduction over 2019. This is attributable to reduced operations due to the effects of COVID-19, less travel and staff commuting, and fewer paper purchases. Emissions per passenger in 2020 increased by only 7% over 2019. An impressive result considering reduced passenger numbers due to COVID-19 distancing requirements.

The scope of this report has been revised to include incremental work from home energy use by five full-time employees during the 2020 reporting period. These emissions are minimal and are not material to include in future reports. Emissions from service calls are de minimis (< 1% of the total inventory) and will no longer be reported.

Company Information

Company Name	Eagle Wing Tours		
Contact Information	Brett Soberg	info@eaglewingtours.com	(250) 384-8008
Company Description	One office/reception building, four boats (Serengeti, Goldwing, 4 Ever Wild & Wild 4 Whales), three company vehicles		
Reporting Period	December 1 - November 30, 2019 & December 1 - November 30, 2020		
Inventory Boundary	Scope 1 (Direct Emissions) - Gasoline, Marine Diesel (fuel for boats and company vehicles)		
	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, Shipping, 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)

Eagle Wing Tours

2019/2020 Report

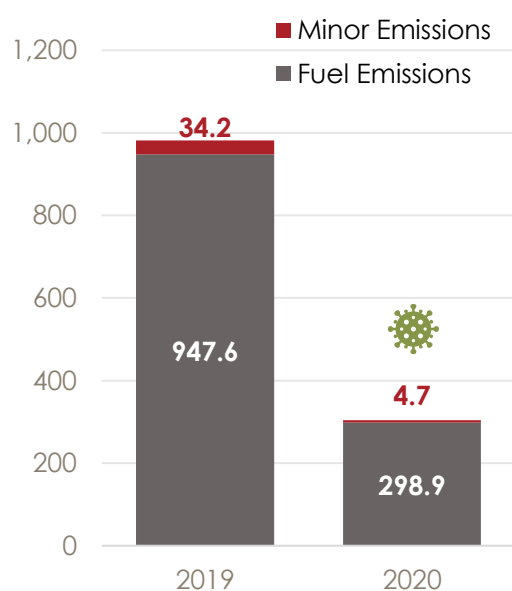


Total emissions (2019)	981.7 tCO ₂ e	Total emissions (2020)	303.6 tCO ₂ e
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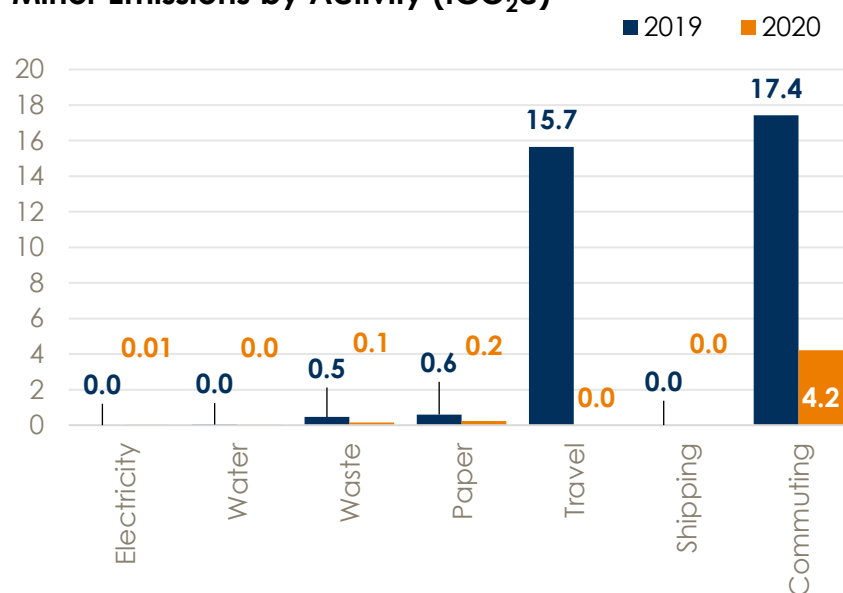
Total FY 2019 emissions decreased to 981.7 tCO₂e, a 6% reduction over 2018. Total FY 2020 emissions decreased to 303.6 tCO₂e, a 69% reduction over 2019. The 2020 changes are attributable to reduced operations due to the effects of COVID-19.

2019 and 2020 Carbon Footprint (By Activity)

2019 & 2020 Emissions (tCO₂e)

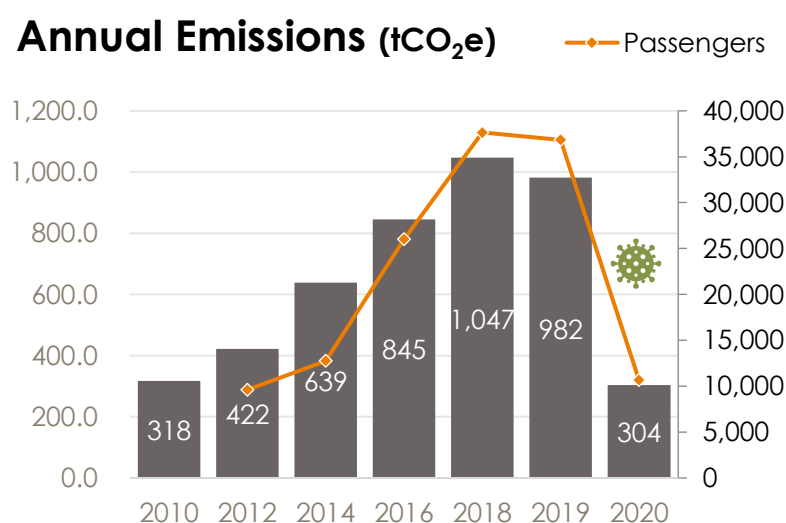


Minor Emissions by Activity (tCO₂e)



Carbon Footprint (Historical)

Annual Emissions (tCO₂e)



	tCO ₂ e Per Year	Change since Baseline	
		tCO ₂ e	Percent
2010	317.7		
2011	408.7	91.0	28.7%
2012	421.9	104.2	32.8%
2013	496.0	178.4	56.1%
2014	638.8	321.1	101.1%
2015	731.1	413.4	130.1%
2016	845.1	527.4	166.0%
2017	958.0	640.4	201.6%
2018	1,046.8	729.2	229.5%
2019	981.7	664.0	209.0%
2020	303.6	-14.1	-4.4%



957.7

Barrels of Oil



81.3

Cars per Year



28.5

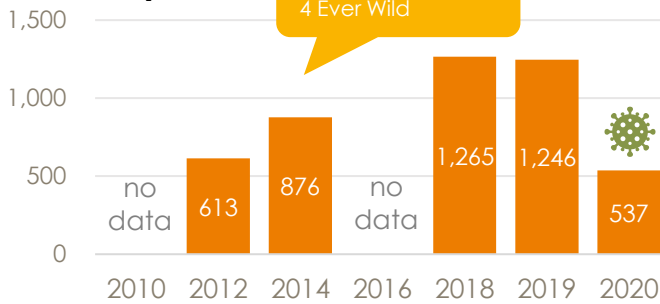
kgCO₂e/ passenger

tCO₂e
(Total)

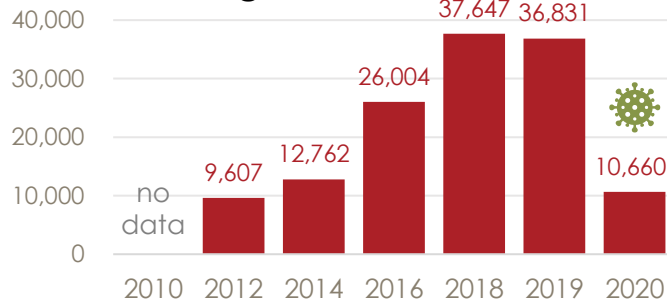
303.6

Intensity Metrics

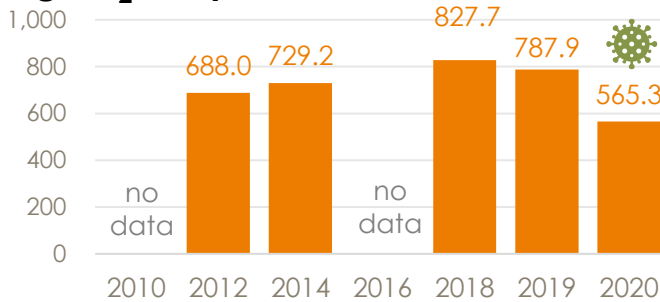
Total Trips



Total Passengers

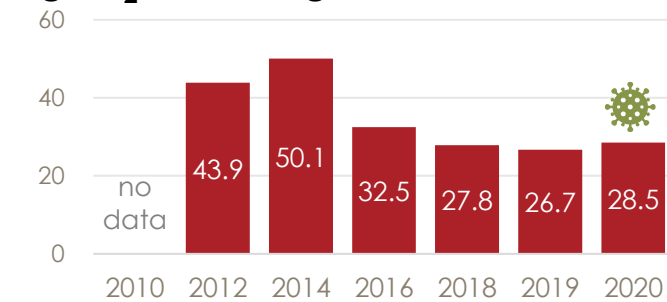


kgCO₂e/Trip*



* based on total company emissions

kgCO₂e/Passenger*

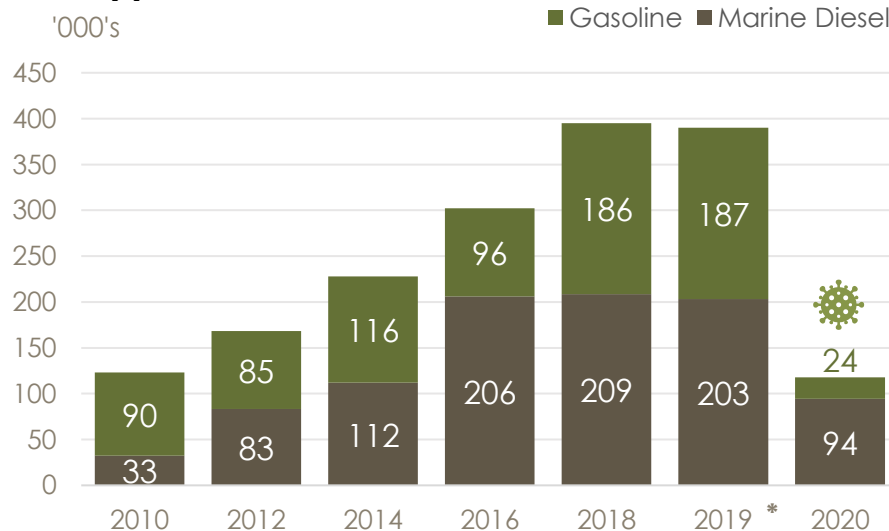


* based on total company emissions

KPI's	2019	Change since 2014		2020	Change since 2014	
		Amount	Percent		Amount	Percent
Total Passengers	36,831	24,069	189%	10,660	-2,102	-16%
Total Trips	1,246	370	42%	537	-339	-39%
kg CO ₂ e/Trip	788	59	8%	565	-164	-22%
Average Passengers/Trip	29.6	15.0	103%	19.9	5.3	36%
kg CO ₂ e/Passenger	26.7	-23	-47%	28.5	-22	-43%

Fuel

Fuel (L)



Analysis

Fuel use for boats and company vehicles has the greatest carbon impact, accounting for 298.9 tCO₂e or 98.5% of total emissions.

Operations in 2019 were fairly similar to 2018. In 2020, there were 57% fewer trips and 71% fewer passengers, resulting in a 68% reduction in fuel emissions. Out of the three company vans, only one van was in use in 2020.

Note: Incremental energy use by five full-time employees working from home during the 2020 reporting period resulted in 1.1 GJ (0.06 tCO₂e).

* The fifth boat, 'Eagle Wing', was retired in **MONTH** 2019.

Litres/
Day

323.2

tCO₂e

299.0

% of
Total

98.5%

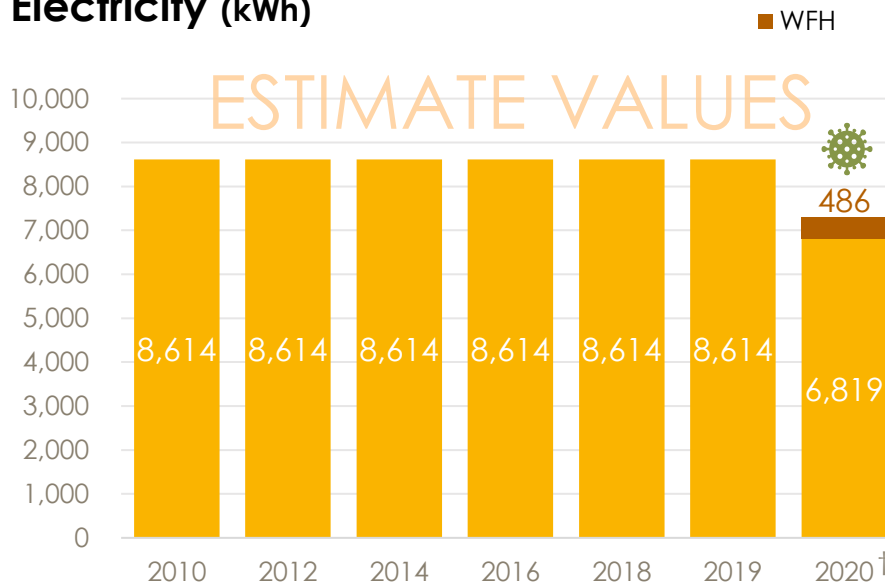


80

Cars / Year

Electricity

Electricity (kWh)



Analysis

Eagle Wing's electricity is estimated based on square footage, since it is not metered separately from other tenants at Fisherman's Wharf. Setting up an electricity meter would be helpful for more accurate data down the road.

Incremental energy use by five full-time employees working from home during the reporting period resulted in 486 kWh (0.01 tCO₂e).

* Note: Eagle Wing's electricity has no associated carbon emissions, since it is purchased through Bullfrog Power.

† Office electricity use adjusted for the number of months that the office was closed (March 18 - 1st week of June).

kWh /
ft²

14

tCO₂e

0.01[†]

% of
Total

N/A*

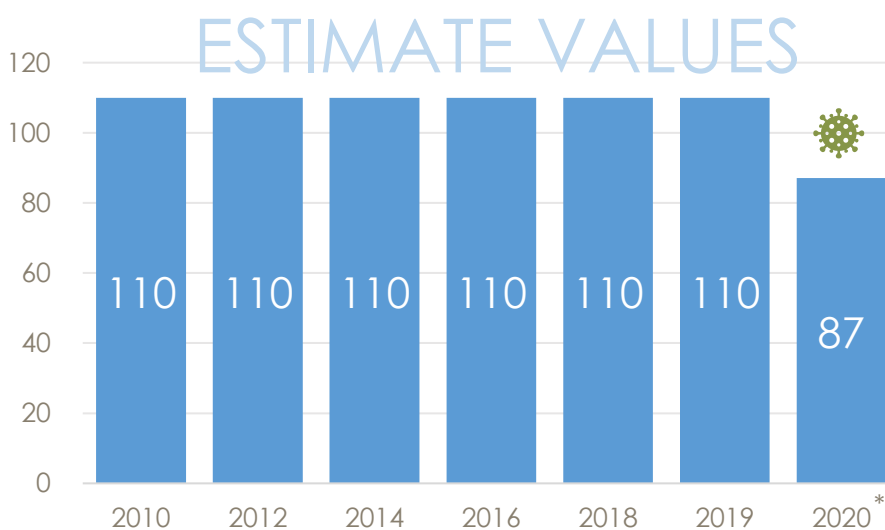


0.6

Houses

Water

Water (m³)



Analysis

Eagle Wing's water is estimated based on square footage, since it is not metered separately from other tenants at Fisherman's Wharf. As such, any conservation improvements will not be seen, but are very much encouraged.

* Note: Office water use adjusted for the number of months that the office was closed (March 18 - 1st week of June).

m³ / ft²

0.2

tCO₂e

0.03

% of
Total

0.01%

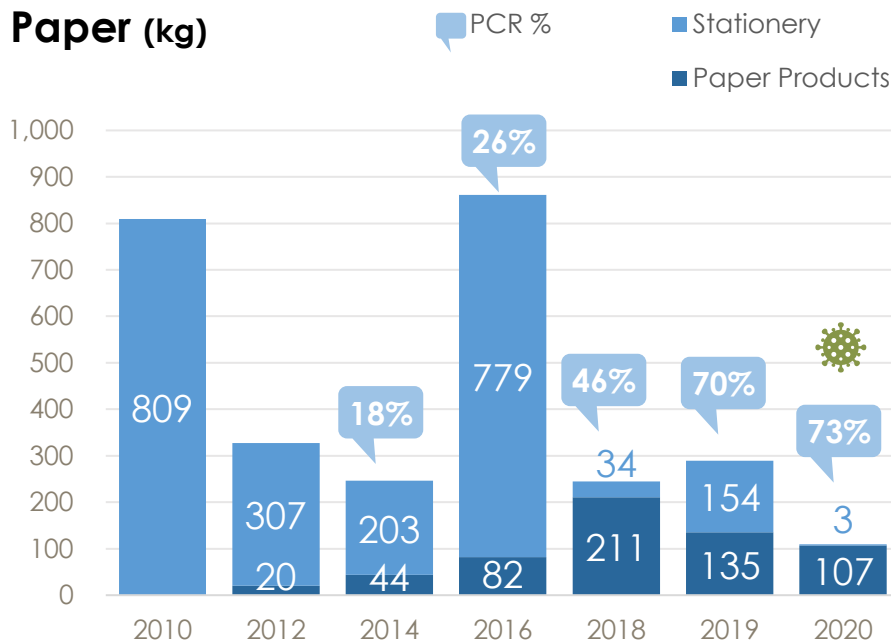


397

Baths (50gal)

Paper

Paper (kg)



Analysis

Paper ordering at Eagle Wing Tours is done on an as-needed basis. This leads to fluctuations in high and low purchasing years (e.g. no brochure or business cards purchased in 2018 and 2020 due to a surplus from previous years). Extra paper towel was purchased in 2020 due to enhanced sanitization. Eagle Wing Tours has done a great job at increasing post-consumer recycled (PCR) content to 70% in 2019 and 73% in 2020.

Note: Stationery includes office paper, waivers, brochures, business cards, envelopes, and thermal rolls. Paper products includes toilet paper, paper towels, and facial tissue, and compostable paper cups.

Treeless Content **73%**

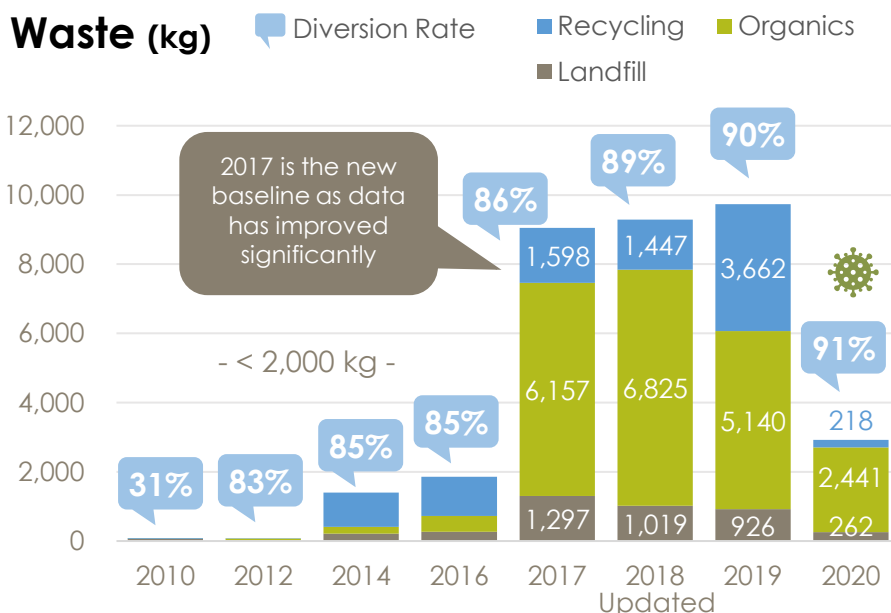
tCO₂e **0.2**

% of Total **0.1%**

0.8
Trees / Year

Waste

Waste (kg)



Analysis

Although Eagle Wing Tours has seen a steady increase in the number of trips and passengers each year, the company has done a fantastic job at diverting waste from the landfill.

COVID-19 safety procedures ensured that guests and staff took all of their waste off the boats, resulting in minimal waste, compost and recycling.

Note: Previous years (2010 - 2016) did not take into account Eagle Wing Tours' winter season waste audits

kg / Day **8**

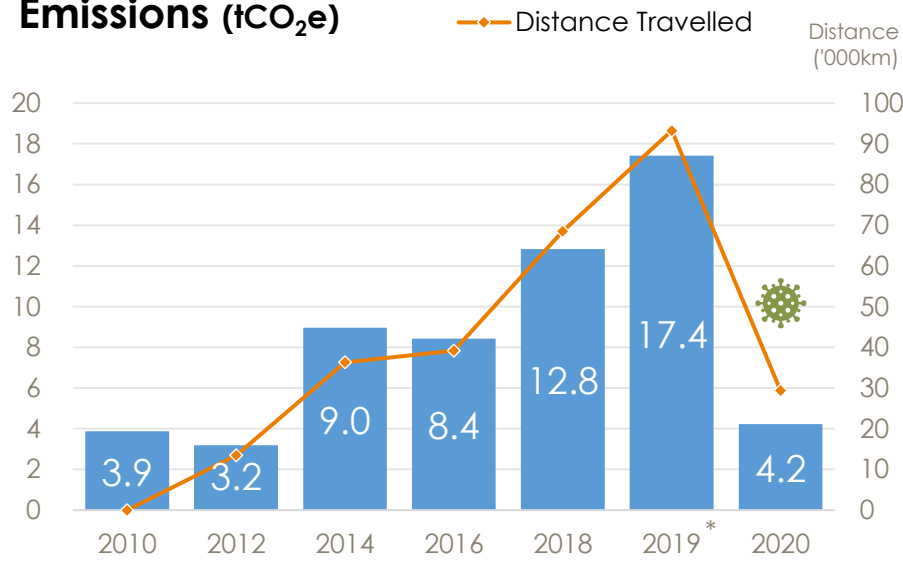
tCO₂e **0.1**

% of Total **0.05%**

91%
Diversion Rate

Commuting

Emissions (tCO₂e)



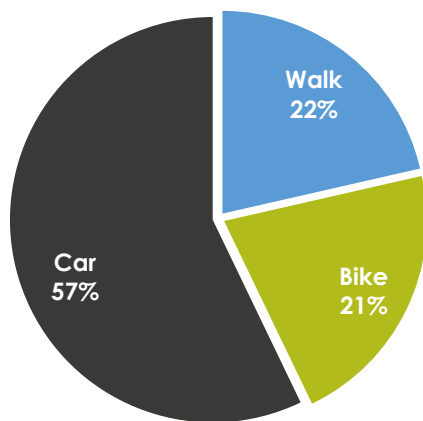
Analysis

Staff commuting is the second highest contributor to overall emissions at 4.2 tCO₂e. Emissions from staff commuting decreased by 76% over 2019 as a result of fewer employees, shorter commutes, and a slight shift toward sustainable commuting methods.

The survey had a response rate of 85%.

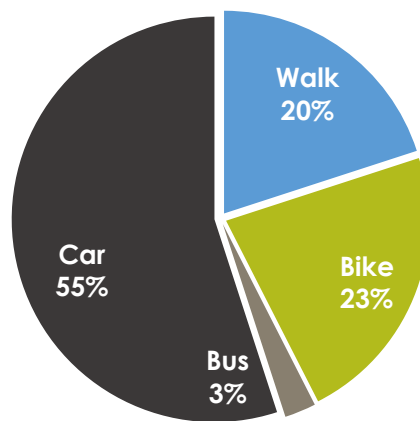
* Note: Staff commuting emissions in 2019 have been estimated based on 2018 staff commuting survey results and adjusted for changes in FTEs

Commuting Percentages by Method per Day



Baseline (2012)

Average kgCO ₂ e/km	0.238
Low-Emission Commuting %	43%



Current (2020)

Average kgCO ₂ e/km	0.144
Low-Emission Commuting %	45%

Analysis (Breakdown)

This year, 45% of commutes were made by low-emission methods, up from 42% in 2019 and 43% in 2012. Three survey respondents noted that they drive high-efficiency electric vehicles.

The most common commuting method is through personal vehicle use due to excessive distance and a lack of transit and bike infrastructure to Fisherman's Wharf.

tCO₂e / FTE
0.211

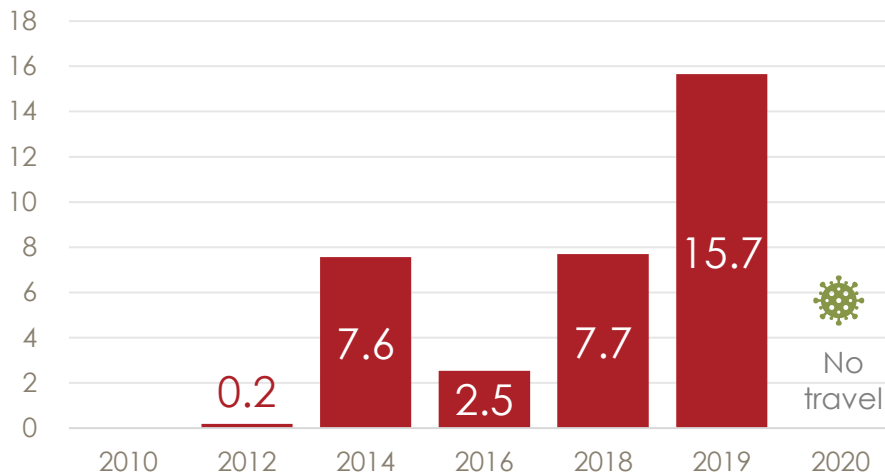
tCO₂e
4.2

% of Total
1.4%

 **1.1**
Cars / Year

Travel

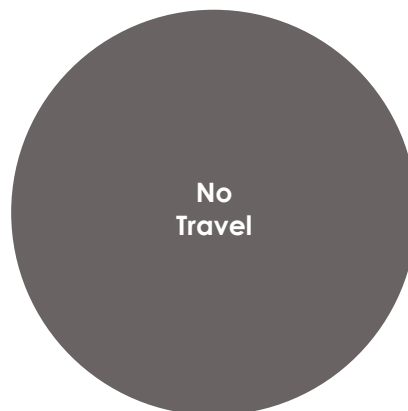
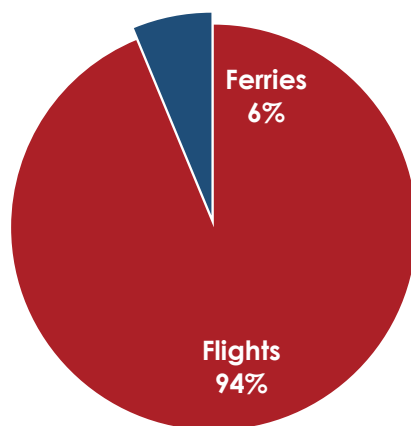
Emissions (tCO₂e)



Analysis

Travel includes all flights and ferries for business travel purposes. In 2019, travel was the third largest contributor to Eagle Wing Tours' carbon footprint at 15.7 tCO₂e. No travel took place in 2020 due to COVID-19 restrictions.

Travel Percentages by Number of Trips



Analysis (Breakdown)

Travel emissions increased substantially in 2019 due to international trips to London. The number of flights for the year increased from 26 in 2018 to 30 in 2019. Total distance travelled increased by 47%, leading to a 104% increase in travel emissions.

Previous (2019)

Average kgCO ₂ e/km	0.147
Low-Emissions Travel %	6.3%

Current (2020)

Average kgCO ₂ e/km	N/A
Low-Emissions Travel %	N/A

Distances Travelled (km)

	Flights	Ferries
2014	34,894	423
2015	80,622	0
2016	24,116	141
2017	38,315	188
2018	72,288	278
2019	106,527	92
2020	0	0

tCO₂e / FTE (2019) **0.319**

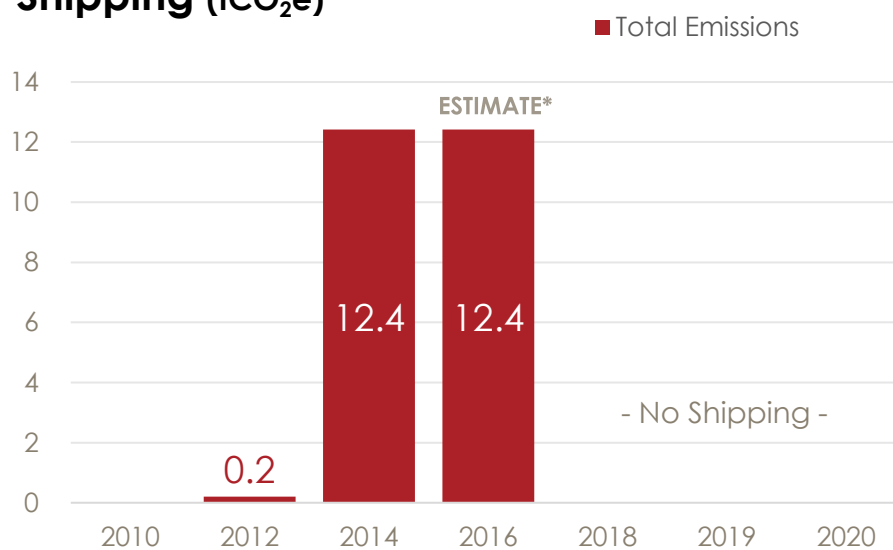
tCO₂e (2019) **15.7**

% of Total (2019) **1.6%**

 **4.2**
Cars / Year

Shipping

Shipping (tCO₂e)



Analysis

Shipping at Eagle Wings has been associated with purchasing new boats. The scope for shipping has been set to include anything over 50lbs.

No new boats were purchased in 2019 and 2020, thus having no effect on Eagle Wing's total carbon footprint.

* Note: 2016 shipping data was unavailable for the new catamaran. Estimate based on 2014 shipping data when the first catamaran was purchased and retrofitted

kgCO₂e/
km

0.0

tCO₂e

0.0

% of
Total

0.0%



0.0

Cars / Year

Carbon Reduction Strategy

Eagle Wing Tours (EWT) is committed to operating as a carbon neutral business and has been monitoring, reducing, and offsetting their carbon footprint since 2010. Eagle Wing Tours has made great efforts to mitigate their environmental impact while expanding their operations. Improvements include introducing two larger, high-efficiency catamarans, purchasing paper products with high post-consumer recycled (PCR) content, and improving waste diversion efforts.

Total emissions in 2019 came to 981.7 tCO₂e, a 6% reduction over 2018. This is attributable to the retirement of the 'Eagle Wing' boat in 2019 and the subsequent prioritization of more fuel efficient vessels, as well as a small decrease in the number of trips. Total emissions in 2020 came to 303.6 tCO₂e, a 69% reduction over 2019. This is attributable to reduced operations due to the effects of COVID-19, less travel and staff commuting, and fewer paper purchases. Emissions per passenger in 2020 increased by only 7% over 2019. An impressive result considering reduced passenger numbers due to COVID-19 distancing requirements.

Achievements

- Carbon Neutral for ten years!
- Increased waste diversion rate to 90% in 2019 and 91% in 2020
- Increased PCR content of paper to 70% in 2019 and 73% in 2020
- Electricity purchased from renewable resources with Bullfrog Power
- Two fuel efficient, clean and quiet catamarans in fleet
- Victoria's first whale & wildlife watching company to implement a \$2 wildlife fee in 2013
- \$5 wildlife fee implemented in 2019 to support local research, education and conservation initiatives in the Salish Sea
- 1% For the Planet members since 2011
- Launched the Wild for Whales Foundation in 2016

Moving Forward

- Ensure all stationery paper is at least 80% - 100% PCR
- Research opportunities to convert motors to biodiesel, hybrid and/or electric
- Continue to conduct waste audits to monitor waste production on board and at the office
- Incorporate sustainable building standards into plans for new office
- Develop a UN Sustainable Development Goals Decade of Action Plan

Information on Inventory Uncertainty

* Electricity and Water use are estimates based on billing and square footage, as Eagle Wing is not independently metered for these utilities.

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 (1990-2015); Part 2 & 3.
http://unfccc.int/files/national_reports/annex_i_ghg_inventories/national_inventories_submissions/application/zip/can-2017-nir-13apr17.zip
3. Department for Environment, Food & Rural Affairs (UK) Carbon Factors
<https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2017>
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.

Policy for Base Year Recalculation:

Base year emissions, and other previous emissions, shall be retroactively recalculated if a change in organisational 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
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
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)
psg-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)
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

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