

Annual Sustainability Report



2015 Report

Verified By	Kayli Anderson
Email	kayli@synergyenterprises.ca
Completed	12/4/2016

synergy

Executive Summary

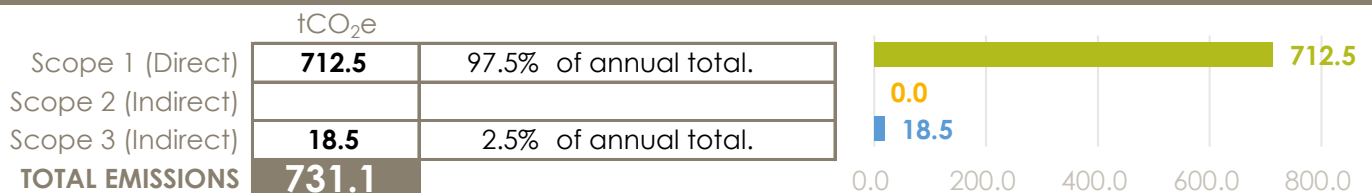
Eagle Wing Tours is a carbon neutral whale watching company based in Victoria, BC, offering adventure tours around Southern Vancouver Island. Their scope includes emissions and activities for one small office/reception space at Fisherman's Wharf and four boats. 2015 marks the sixth year that they have measured, reported and offset their carbon footprint.

Near the end of 2014, a new boat - 4 Ever Wild - was added to the company's fleet. The boat uses roughly the same amount of fuel as their 12-passenger boat, but can seat up to 50 guests, making each Eagle Wing trip much more efficient.

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, three company vehicles.		
Reporting Period	December 1st, 2014 - November 30th, 2015		
Inventory Boundary	Scope 1 (Direct Emissions) - Gasoline, Diesel/Marine Diesel (Fuel for 4 boats + company vehicles)		
	Scope 2 (Indirect Emissions from Purchased Electricity) - Purchased Electricity (BC Hydro)		
	Scope 3 (Indirect Emissions from Other Sources) - Water, Waste, Stationary, Paper Products, Company Travel, Shipping, Service Calls, Staff Commuting		
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

2015 Report



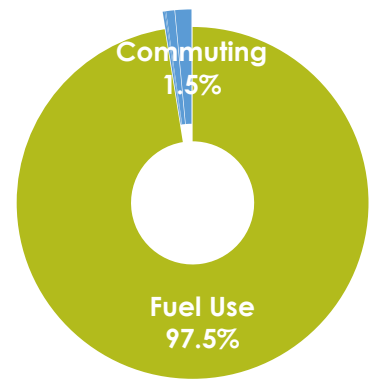
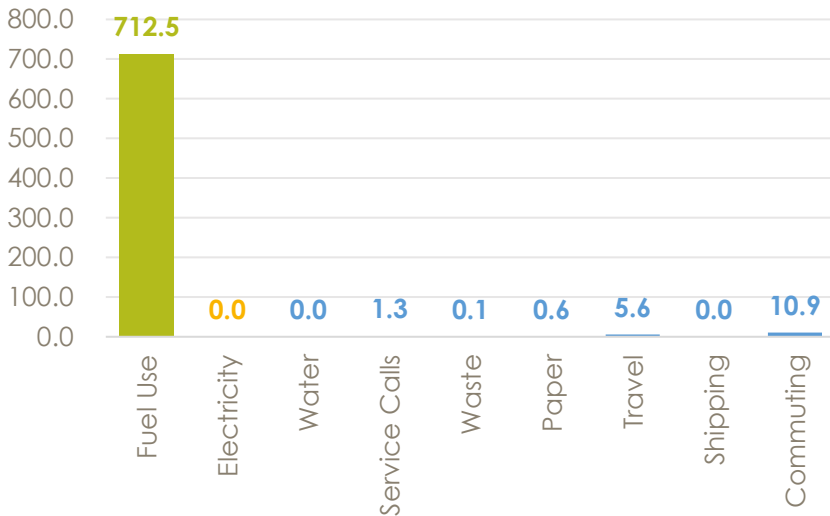
Total emissions: **731.1** tCO₂e

Offset cost: **\$14,621**

By adding a fuel-efficient catamaran boat to their fleet, Eagle Wing Tours has reduced emissions per passenger by 39% while the total carbon footprint increased by 14.4%. Congratulations on minimizing the carbon impact of the wildlife tours!

Carbon Footprint (By Activity)

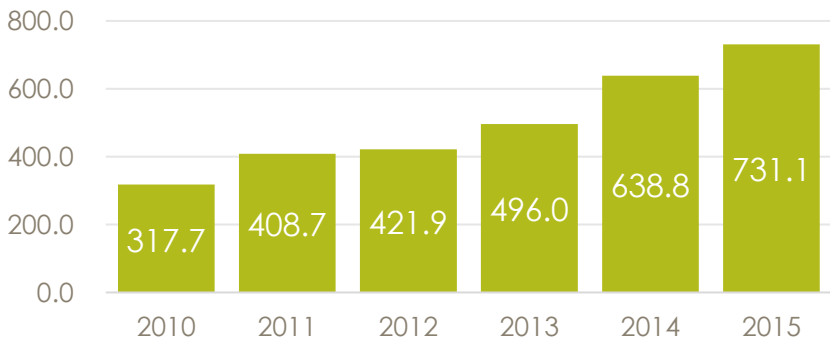
Emissions by Activity (tCO₂e)



Scope 1 Scope 2 Scope 3

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%



2,306.2

Barrels of Oil



192.3

Cars per Year



20.5

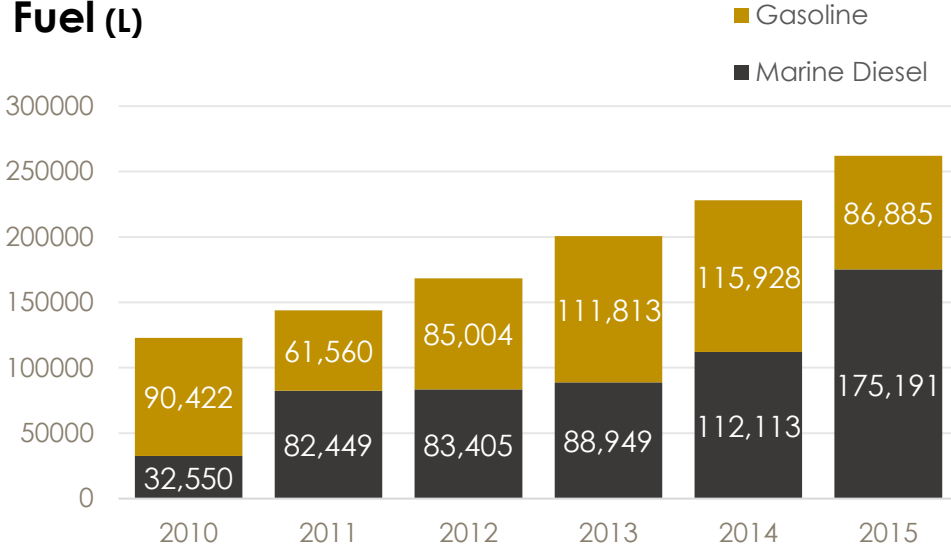
Households

tCO₂e
(Total)

731.1

FUEL

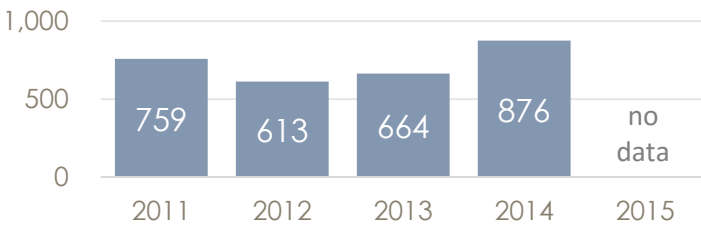
Fuel (L)



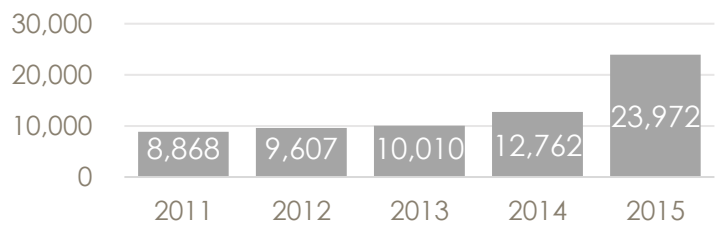
Analysis

Fuel use continues to increase as Eagle Wing expands and conducts more tours. The new catamaran, 4 Ever Wild, runs on marine diesel (with a lower emissions factor than gasoline) and carries 50 passengers—resulting in a 39% drop in emissions per passenger. Fuel use is expected to increase as business grows, with a focus on minimizing emissions per passenger.

Total Trips



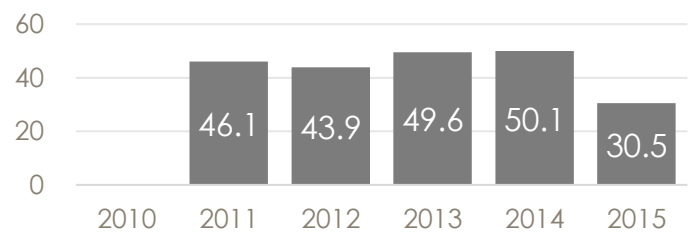
Total Passengers



kgCO₂e/Trip*



kgCO₂e/Passenger*



* based on total company emissions

Change since 2014

2015 KPI's	All boats	Amount	Percent
Total 2015 Passengers	23,972	11,210	47%
Total 2015 Trips	no data	no data	no data
kgCO ₂ e/Passenger	31	-20	-39%

Litres / trip

no data

tCO₂e **712.5**

% of Total

97.5%



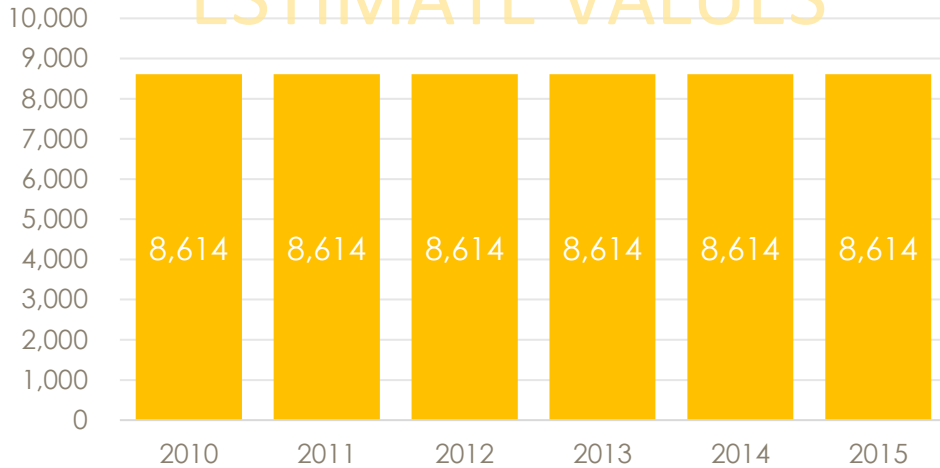
187.4

Cars / Year

Electricity

Electricity (kWh)

ESTIMATE VALUES



Analysis

Eagle Wing's electricity is estimated based on square footage, since it is not metered separately from other tenants at Fisherman's Wharf. While usage changes will not be reflected in this report, the company has made efforts to minimize use, including turning off equipment at night and reducing phantom loads.

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

kWh /
ft²

18

tCO₂e

N/A

% of
Total

N/A

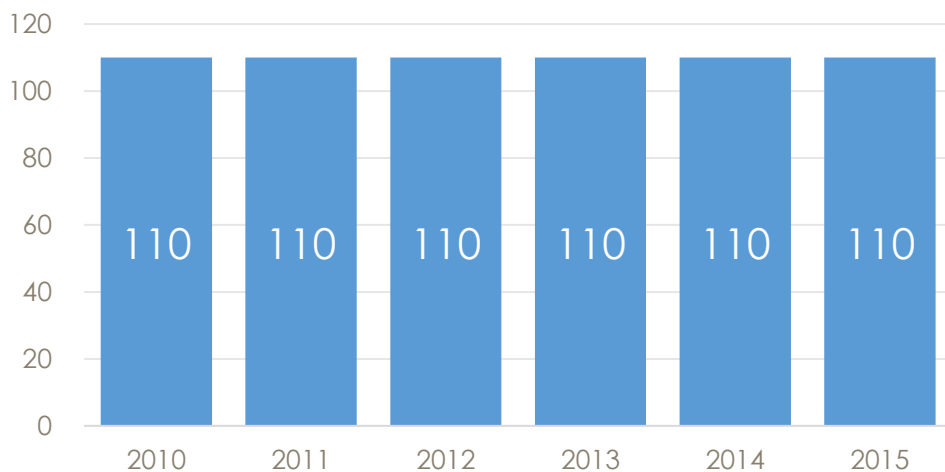


0.8
Houses

Water

Water (m³)

ESTIMATE VALUES



Analysis

Minimal water is used on site. It is measured based on square footage, and is not metered separately from surrounding businesses. As such, changes in use will not be seen.

m³ / ft²

0.2

tCO₂e

0.04

% of
Total

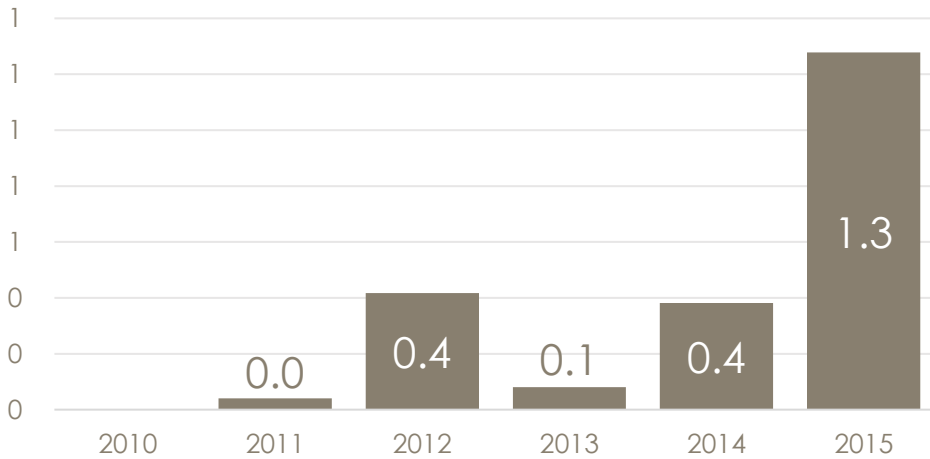
0.0%



501
Baths (50gal)

Service Calls

Emissions (tCO₂e)



Analysis

Service calls account for 0.2% of Eagle Wing's total carbon footprint. They include the many trips made by Eagle Wing staff and mechanics to the docking station in Sidney, BC, where the boats are serviced. In 2015, one mechanic was commuting from Sooke to Sidney which increased emissions slightly (0.4 to 1.3 tCO₂e).

Visits / Day

2.7

tCO₂e

1.3

% of Total

0.2%

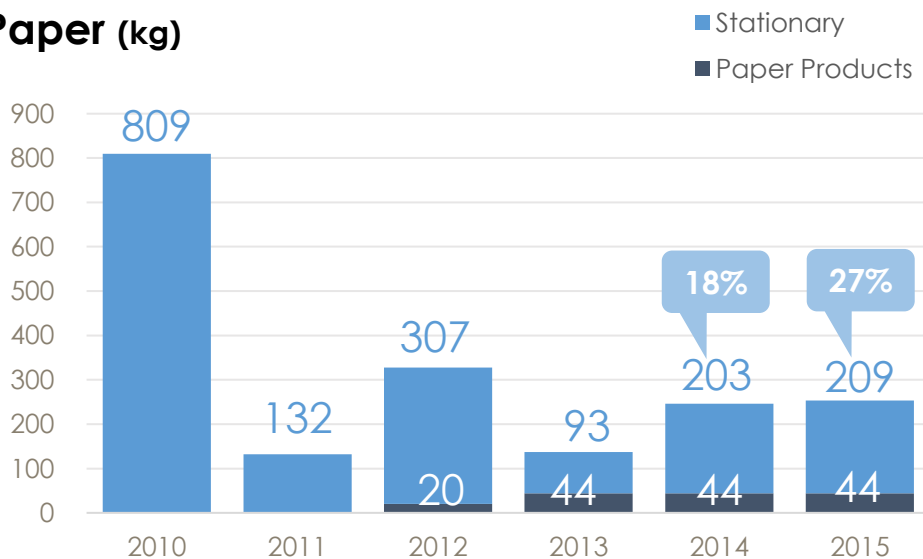


0.3

Cars / Year

Paper

Paper (kg)



Analysis

Paper includes waivers, brochures, toilet paper and coffee cups (for hot chocolate on cold or late-night trips). Paper use has remained fairly consistent while the number of passengers has increased 47%. Electronic waivers keep paper use low. Percentage of post consumer recycled content increased to 27% from 18%.

* Eagle Wing Tours uses FSC Certified paper for their brochures.

Treeless Content

27%

tCO₂e

0.6

% of Total

0.1%

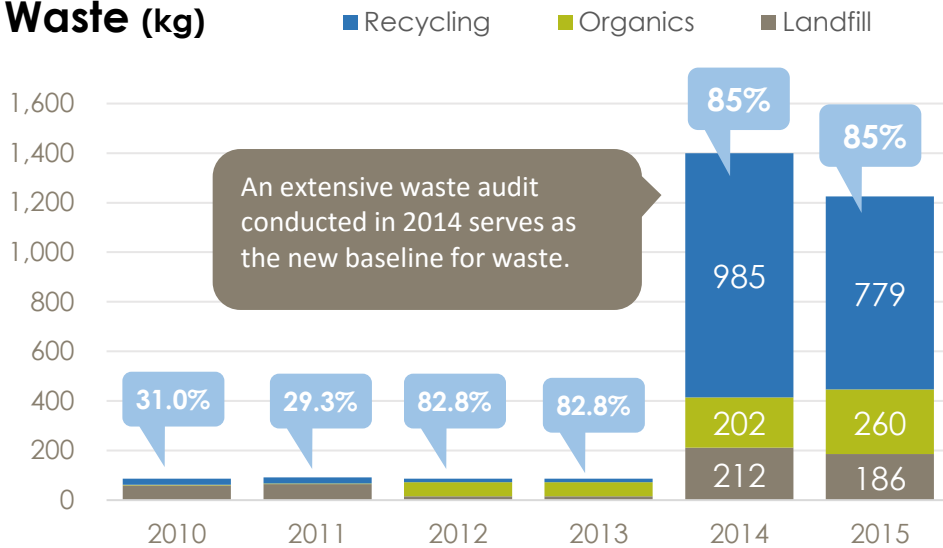


4.9

Trees / Year

Waste

Waste (kg)



Analysis

Eagle Wing Tours began collecting food scraps at Fisherman's Wharf in 2012 and has been advocating for the service to be included in the lease ever since. In 2015, a comprehensive waste management program was implemented thanks to their efforts. Waste diversion over the last two years has remained steady at 85%.

kg / Day

3.4

tCO₂e

0.1

% of Total

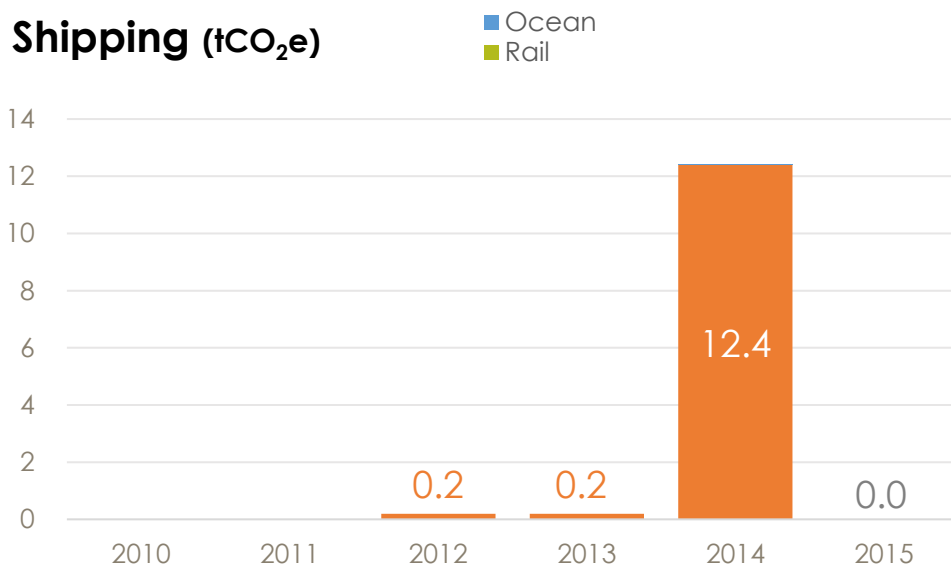
0.0%



84.8%
Diversion Rate

Shipping

Shipping (tCO₂e)



Analysis

In 2014, parts were shipped for the new boat by air. In 2015, an outboard motor and propellers were shipped locally by ground resulting in 0.002 tCO₂e.

kgCO₂e / km

0.0

tCO₂e

0.0

% of Total

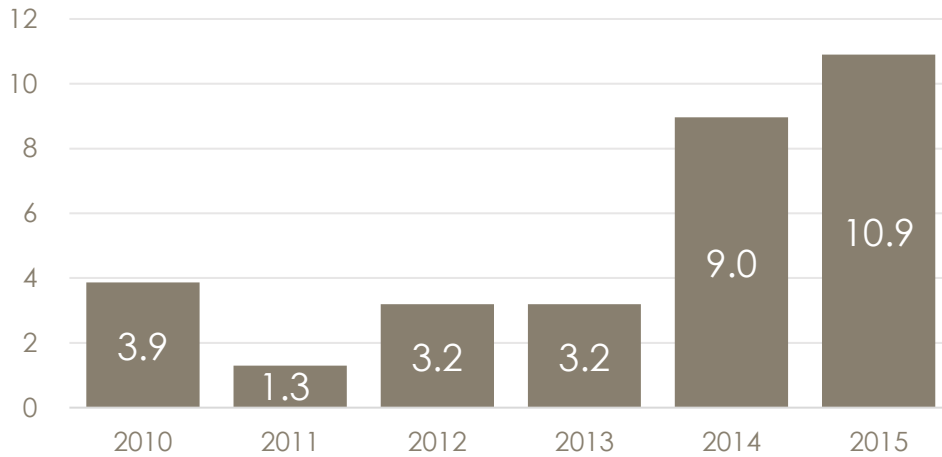
0.0%



0.0
Cars / Year

Commuting

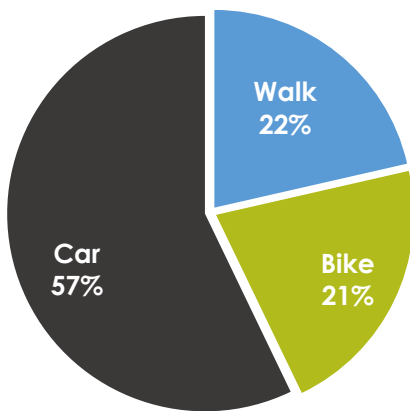
Emissions (tCO₂e)



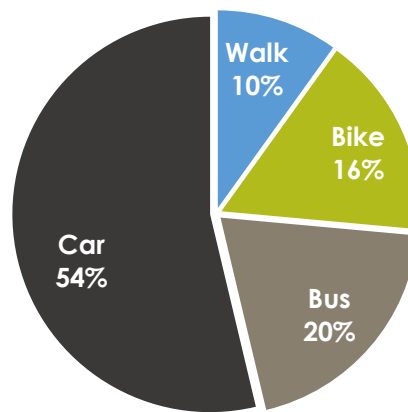
Analysis

As Eagle Wing Tours continues to grow, adding larger boats and more tours, total number of staff/shifts has increased. This has resulted in a rise in associated staff commuting emissions. Staff commuting only accounts for 1.5% of EWT's total carbon footprint but is the second largest source of emissions followed by travel at 0.8%.

Commuting Percentages by Method per Day



Baseline (2012)



Current (2015)

Analysis (Breakdown)

Total number of staff commuting by sustainable means (biking, walking or bussing) has increased from 43% to 46%!

The most common reasons staff cited as keeping them from walking, biking or bussing more often were...

- 1) Long work days on the ocean,
- 2) Excessive distance,
- 3) Personal Safety concerns.

Eagle Wing Tours can continue to encourage staff to bike, walk or bus by providing incentives.

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

Average kgCO ₂ e/km	0.197
Low-Emission Commuting %	46%

* The staff commuting survey was conducted in the winter months when staff numbers are low and extrapolated for summer staff.

tCO₂e / FTE **0.419**

tCO₂e **10.9**

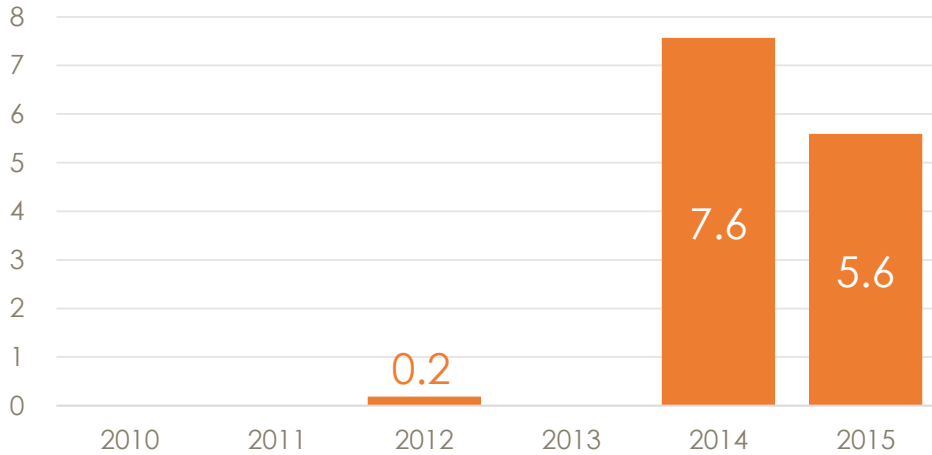
% of Total **1.5%**



2.9
Cars / Year

Travel

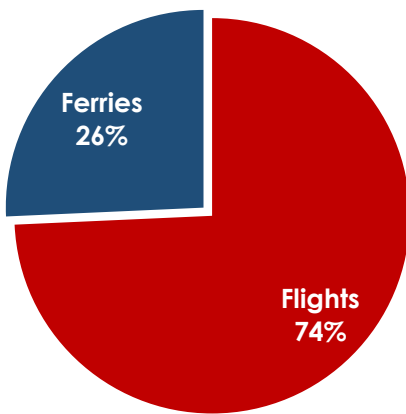
Emissions (tCO₂e)



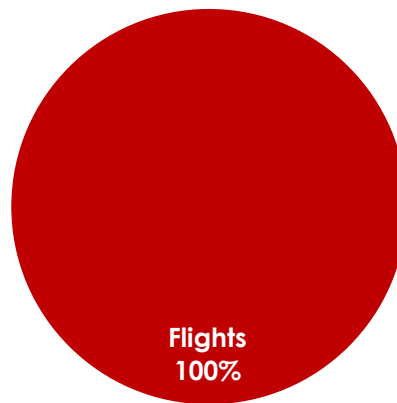
Analysis

As part of general operations, Eagle Wing Tours does not conduct much business travel. However, several trips were made in 2014 and 2015 to research, view and purchase the new boats.

Travel Percentages by Number of Trips



2014



2015

Average kgCO ₂ e/km	0.214
Low-Emissions Travel %	1.2%

Average kgCO ₂ e/km	0.069
Low-Emissions Travel %	0.0%

Analysis (Breakdown)

No ferry trips were made in 2015 and fewer flights were taken than in 2014. Travel accounts for 0.8% of Eagle Wing's total carbon footprint at 5.6 tCO₂e. Continuing to limit travel will keep emissions low.

tCO₂e / FTE **0.215**

tCO₂e **5.6**

% of Total **0.8%**

 **1.5**
Cars / Year

Carbon Reduction Strategy

Over the last five years, Eagle Wing Tours has made significant efforts to reduce their environmental impact while successfully growing their business. By targeting fuel efficiency in their boats, they have been able to cut the emissions per passenger by 39% since 2014 and expect to see further reductions in 2016.

Eagle Wing has begun sharing information about their carbon footprint with passengers. They educate their guests about the impact of each trip, and how it affects the wildlife and ecosystems they are viewing. By focusing on reducing emissions and impact, they have become award-winning leaders in the eco-tourism industry on Vancouver Island.

In 2016, Eagle Wing Tours will be launching the Wild For Whales Foundation to continue their efforts in advocating for and protecting the marine wildlife in the Salish Sea.

Achievements

CLIMATE ACTION

- Carbon Neutral for six years
- Switched to Bullfrog Power
- Reduce emissions per passenger by 39%

CONSERVATION

- Introduced \$2 wildlife fee (Industry first!)
- 1% For the Planet members
- Founding members of ViSTA
- Coordinated World Oceans Day

AWARDS

- 2014 Sustainable Tourism Business Award TIAC
- 2014 CRD EcoStar, Environmental Leadership
- 2013 Tourism VI Sustainable Business Award
- Green Tourism Canada - GOLD 2013

Moving Forward

- Launch the Wild For Whales Foundation
- Replace Goldwing motors with larger, more efficient motors
- Researching opportunities to convert motors to biodiesel, hybrid and/or electric

Information on Inventory Uncertainty

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

Emissions References

- 2014 B.C. Best Practices Methodology for Quantifying Greenhouse Gas Emissions
[http://www2.gov.bc.ca/assets/gov/environment/climate-change/policy-legislation-and-responses/carbon-neutral-government/measure-page/2014 bc best practices methodology for quantifying greenhouse gas emissions.pdf](http://www2.gov.bc.ca/assets/gov/environment/climate-change/policy-legislation-and-responses/carbon-neutral-government/measure-page/2014_bc_best_practices_methodology_for_quantifying_greenhouse_gas_emissions.pdf)
- Environment Canada's National Inventory Report (1990-2012)
 Part 2 http://publications.gc.ca/collections/collection_2014/ec/En81-4-2012-2-eng.pdf
 Part 3 http://publications.gc.ca/collections/collection_2014/ec/En81-4-2012-3-eng.pdf
- Department for Environment, Food & Rural Affairs (UK) Carbon Factors
<http://www.ukconversionfactorscarbonsmart.co.uk/>
- 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 gas effect, including Carbon Dioxide (CO ₂), Methane (CH ₄), Nitrous Oxide (N ₂ O), etc.
GJ	Gigajoule: Unit of natural gas equal to 38.26 L or 26.137 m ³
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)
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)
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

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