



ANNUAL SUSTAINABILITY REPORT 2021

CARBON FOOTPRINT & OFFSETTING



Campbell River Whale Watching & Adventure Tours Says “Thank You” to Nature



Completed in cooperation with
Wilderness International

Annual Sustainability Report 2021

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Summary

Campbell River Whale Watching & Adventure Tours is a carbon neutral whale watching and grizzly bear tour company based on Vancouver Island, BC. The company has an office/reception space at The Discovery Harbour Marina on Dock E in Campbell River, one company vehicle, and six boats.

2021 marks the fourth year that Campbell River Whale Watching & Adventure Tours has measured, reported, and offset their carbon footprint.

Total emissions in 2021 came to 260 t CO₂e. This carbon footprint is only half as high as comparable years like 2018 and 2019. This results from the fact that one boat was sold and less fuel was used, but also shows the success of reduction measures such as using less energy, travelling fewer kilometers on business trips, introducing reusable bottles, as well as less paper, no more printed flyers, and less waste. Fuel usage remains the greatest contributor to the overall carbon footprint, followed by fresh-water use. In 2021, Campbell River Whale Watching & Adventure Tours has protected 2490 m² of pristine old-growth forest in British Columbia for carbon compensation, as well as 1538 m² for guests on tours. On top of that, guests voluntarily contributed an extra \$1964, totaling 5992 m² of wilderness protected. The trees in this area have sequestered 627.9 t CO₂ in their biomass, which is 2.4 times the amount that would have been necessary to offset Campbell River Whale Watching’s carbon footprint entirely. This is an admirable assumption of responsibility for habitat and biodiversity protection as well as a healthy climate in general. In total, since 2018, the company together with its guests has protected 26351 m² of forest.

Company Information

Company Name Campbell River Whale Watching & Adventure Tours

Contact Tyler Bruce: tyler@crww.ca , 250-792-0185 | Stephen Gabrysh: stephen@crww.ca , 778-874-3353

Description one office/reception building, six boats, one company vehicle

Reporting Period January 1st, 2021 – December 31st, 2021

Primary Measurement Carbon Dioxide Equivalent (CO₂e)

Reporting/Calculation Guidelines Basis: data of 2021

Offsetting Approach Protection of pristine primary forests as wildlife habitat and carbon storage in the Toba Valley, BC with Wilderness International

Total Emissions all Scopes:

Emissions per Passenger:

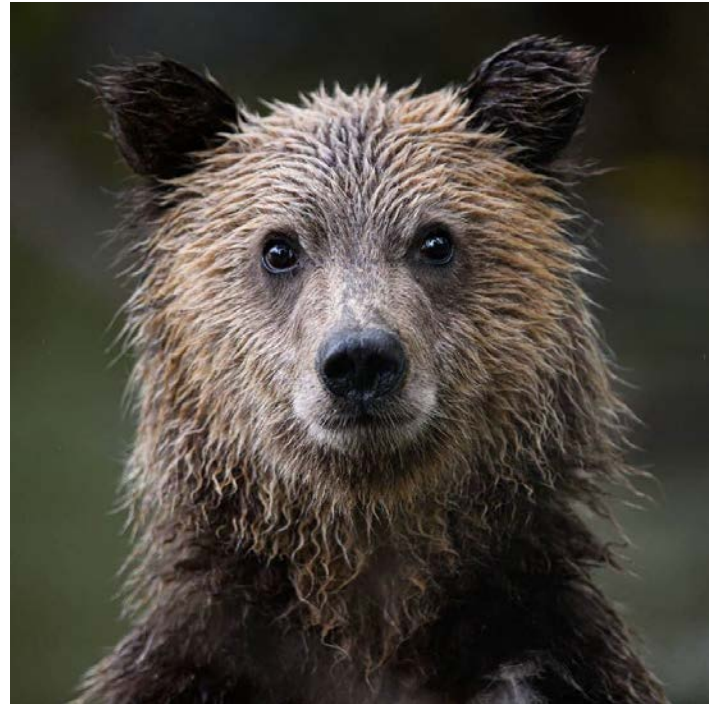
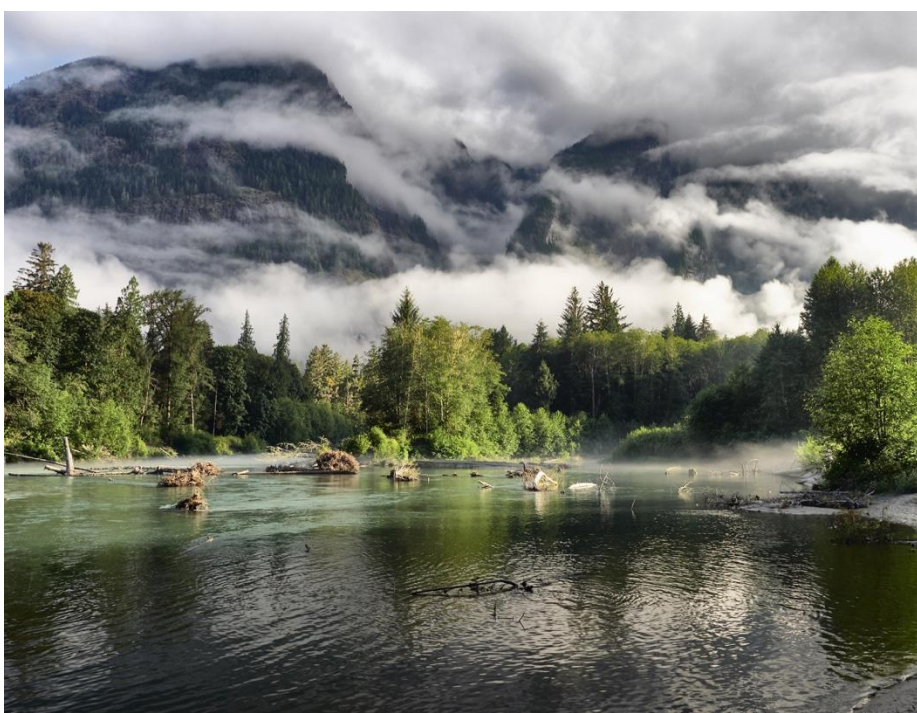
Total Offset:



56 kg CO₂e



5992 m² of ancient forest protected



About Wilderness International

Wilderness International is a non-profit organization based in Canada, Peru and Germany. Our passion is protecting unique and pristine wilderness areas all over the world. Right now, our focus is on the last old-growth forests of the West Coast of British Columbia and on the Amazon rainforest in Peru. The protected areas are located in the Toba Valley, 160 km north of Vancouver City and 100 km east of Campbell River.

There, we have the chance to protect primary forests and wildlife habitat legally secure through purchase as property. The entry in the land registry marks Wilderness International as legal owner of the forest areas. We leave the areas as they are, as undisturbed unique ecosystems. The purchases are refinanced by donations.

Until today, we have been able to protect more than 10 million m² of temperate rainforest. Every donor receives a personalized certificate with the exact geo-coordinates of the area of forest protected. We strive to engage all kinds of different people in our projects to protect as much forest as possible.

Numerous scientific institutions support our research projects on carbon storage and biodiversity in the coastal rainforests.

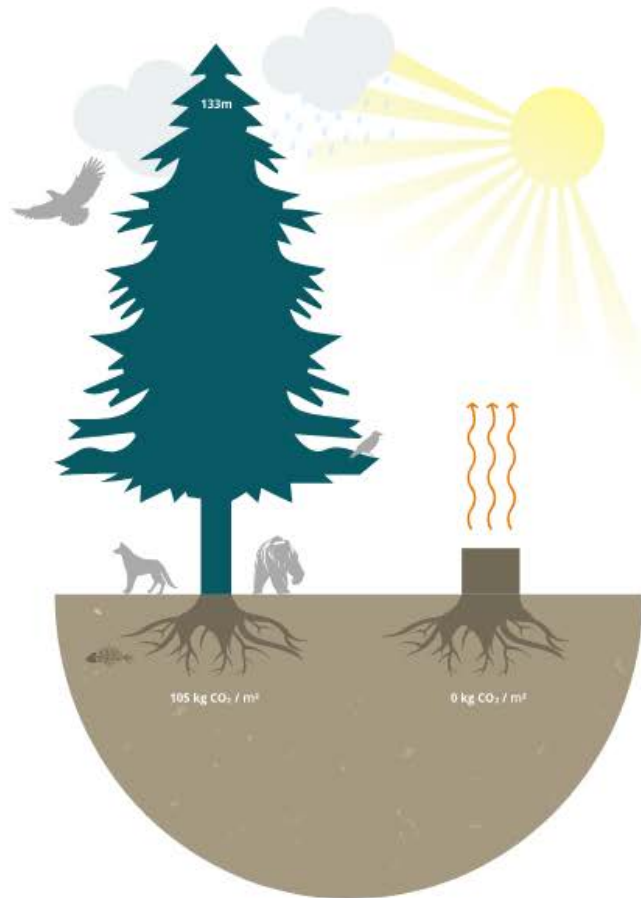
This rainforest is home to ancient tree giants, wild Grizzlies, and crystal-clear rivers full of lively salmon. And yet, only 25% of this valuable ecosystem remain. The protection of the remaining ancient forests is essential, as we profit from their benefits all over the world.

Wilderness areas are expressions of nature in its most original form. They are our inspiration, and our ancient home. Only in these ecologically most diverse areas is everything connected in a fragile natural balance. If this harmony is destroyed, the network of life is also broken.

Wilderness International's CO₂ Research & Offsetting

Led by our forestry scientist Kai Andersch and our geography scientist Hannes Holtermann in cooperation with Professor Andreas Huth, the leading German forest carbon data scientist from the Helmholtz-Centre of Environmental Research in Leipzig, we have established 24 permanent sample plots in the forest which we use for regular remeasurements of the biomass of trees. The trees in the Toba Valley sequesterate 28.55 kilograms of carbon per square meter each, equaling 104.79 kilograms of CO₂ per square meter of rainforest.

Over the centuries of its growth, a square meter in the temperate rainforest sequesters 104.79kg of CO₂ in their biomass. Even more carbon dioxide is sequestered while the trees continue to grow. Should the forest be logged, the sequestered CO₂-storage is released when processing the wood. Biodiversity is lost, and without the natural cooling functions of the vegetation it gets drier and hotter.



By protecting forest, CO₂ remains sequestered in living biomass, and biodiversity and habitats are preserved for all times. This is the perfect way to say “Thank you” to nature. This balances out unavoidable emissions.

The advantage of our unique approach lies in the combination of the protection of forest and river habitat with CO₂ offsetting projects. Wilderness International guarantees the location and preservation of every square meter of land by certificate with geo-coordinates.

Cooperation: Wilderness Protection and Carbon Neutrality

Campbell River Whale Watching & Adventure Tours needs intact nature to operate the business. Protecting nature means protecting the very base of their business and saying “Thank you” to nature for the great experiences it provides its guests while on their wilderness tours.

While offsetting carbon emissions, Campbell River Whale Watching & Adventure Tours also protects prime salmon habitat, the very base of life of the whales, grizzlies and other animals that guests come to see. They take action locally and directly connect their conservation efforts to their guests’ experience. The real conservation of rainforest in BC makes their engagement directly traceable for the guests and the public.

After their tour, every guest receives a postcard with a code on it. With this code, they are able to go online to create and receive their personalized certificate for the area of forest they helped to protect. That way, guests take a tangible souvenir home with them, a little piece of Canada, a fond memory materialized. Additionally, every guest is able to voluntarily donate more money if they chose to. Every year, Campbell River Whale Watching & Adventure Tours gets a certificate showcasing the amount of forest that was protected.

In 2021, Campbell River Whale Watching & Adventure Tours together with its guests has protected 1m² of forest for every person going on a Whale Watching or Adventure tour or Grizzly bear trip. This approximately equals the size of the fin of an Orca whale for every guest. Added to that, guests donated a \$4.00 CAD conservation fee on Toba Inlet Grizzly bear tours. Additionally, guests were incentivized to donate an extra \$1.00 CAD for forest protection.

In 2022, guests will be incentivized to donate a minimum of \$2.00 CAD or more, and to offset the emissions of their entire trip in BC.



Campbell River Whale Watching & Adventure Tours is saying “Thank you” to nature for the great experiences it provides us with during every whale watching and Grizzly bear tour!

● N50° 30' 23,153" W124° 11' 46,067"

wilderness-international.org/3/44040

3/44040

SPONSORSHIP NUMBER



WILDERNESS PROTECTION CERTIFICATE

For
Campbell River Whale Watching
Carbon Footprint Compensation 2021

This wilderness sponsorship protects **5.992 m²** of temperate rainforest.

It is a unique habitat where wild Grizzlies fish for salmon in the crystal-clear river.

This oasis of biodiversity is located on Canada's West Coast. Wilderness International holds legal title to the land which ensures that it is protected permanently for all our futures.

The forest in this area sequestered **627,90 t CO₂** in its biomass.

→ DRESDEN, 08.03.2022



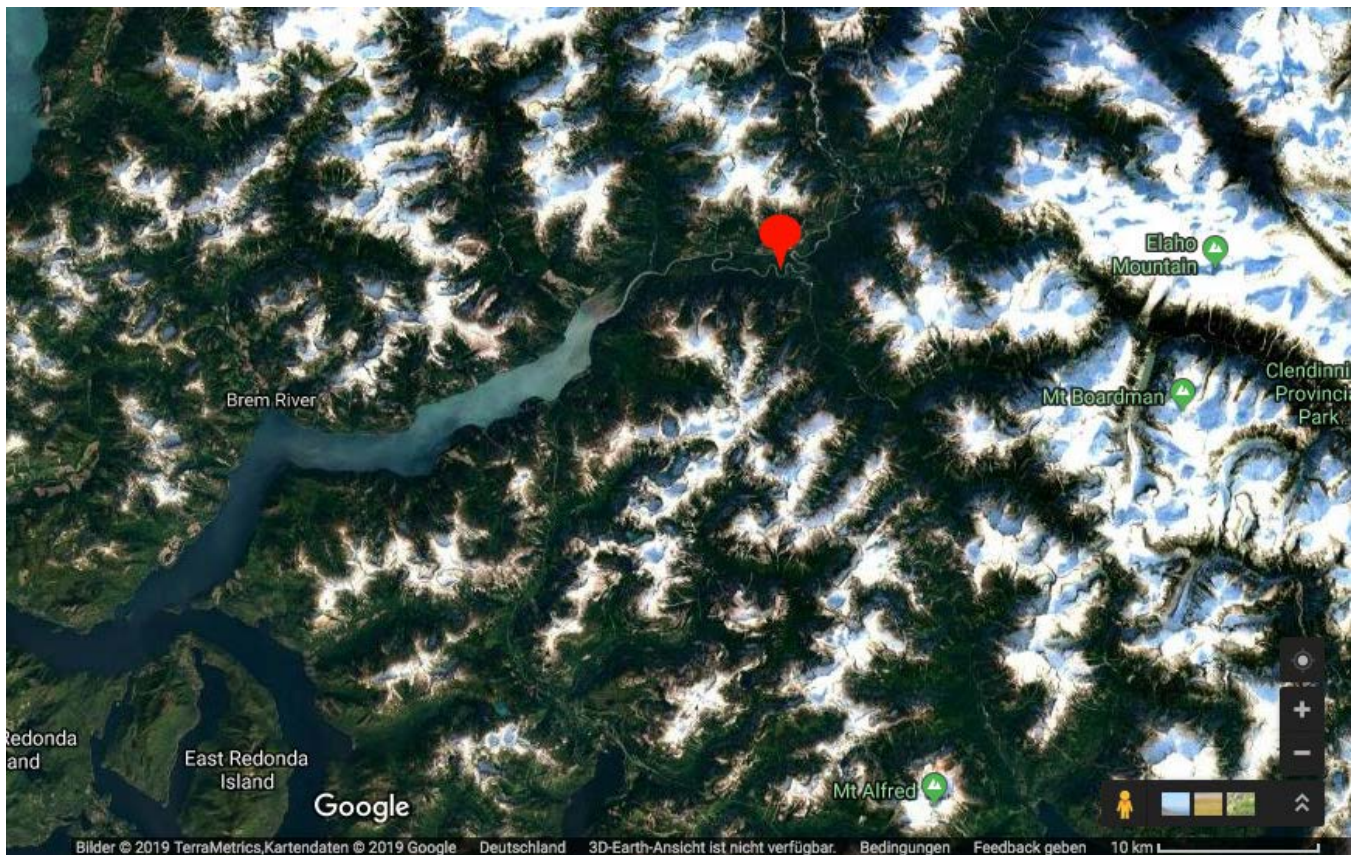
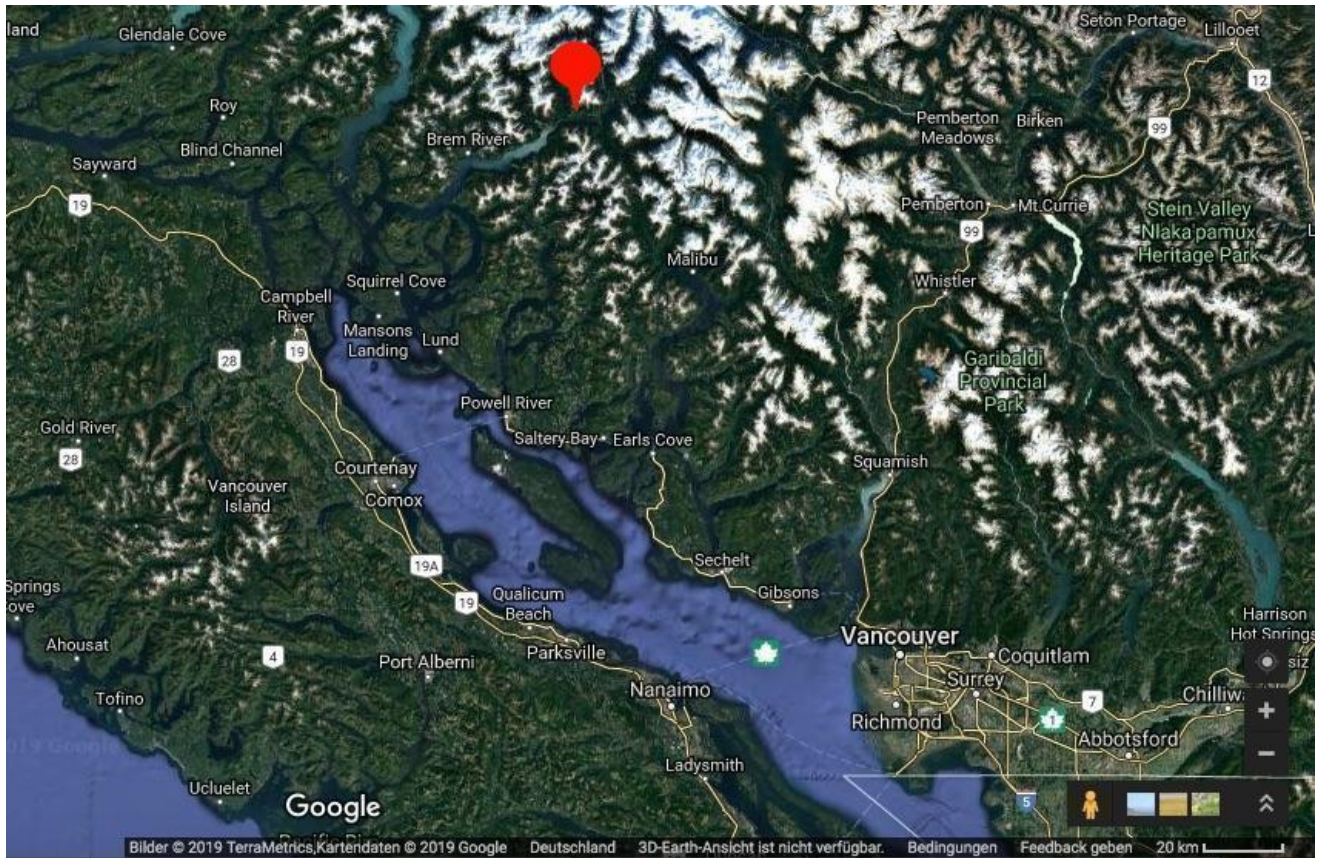
Kai Andersch
Director
Wilderness International

Ronny Scholz
Board of Directors
Wilderness International

Stephan Hürten
Head of Council
Wilderness International

David MacDonald
Director
Wilderness International Canada

Annual Sustainability Report 2021 – Carbon Footprint & Offsetting



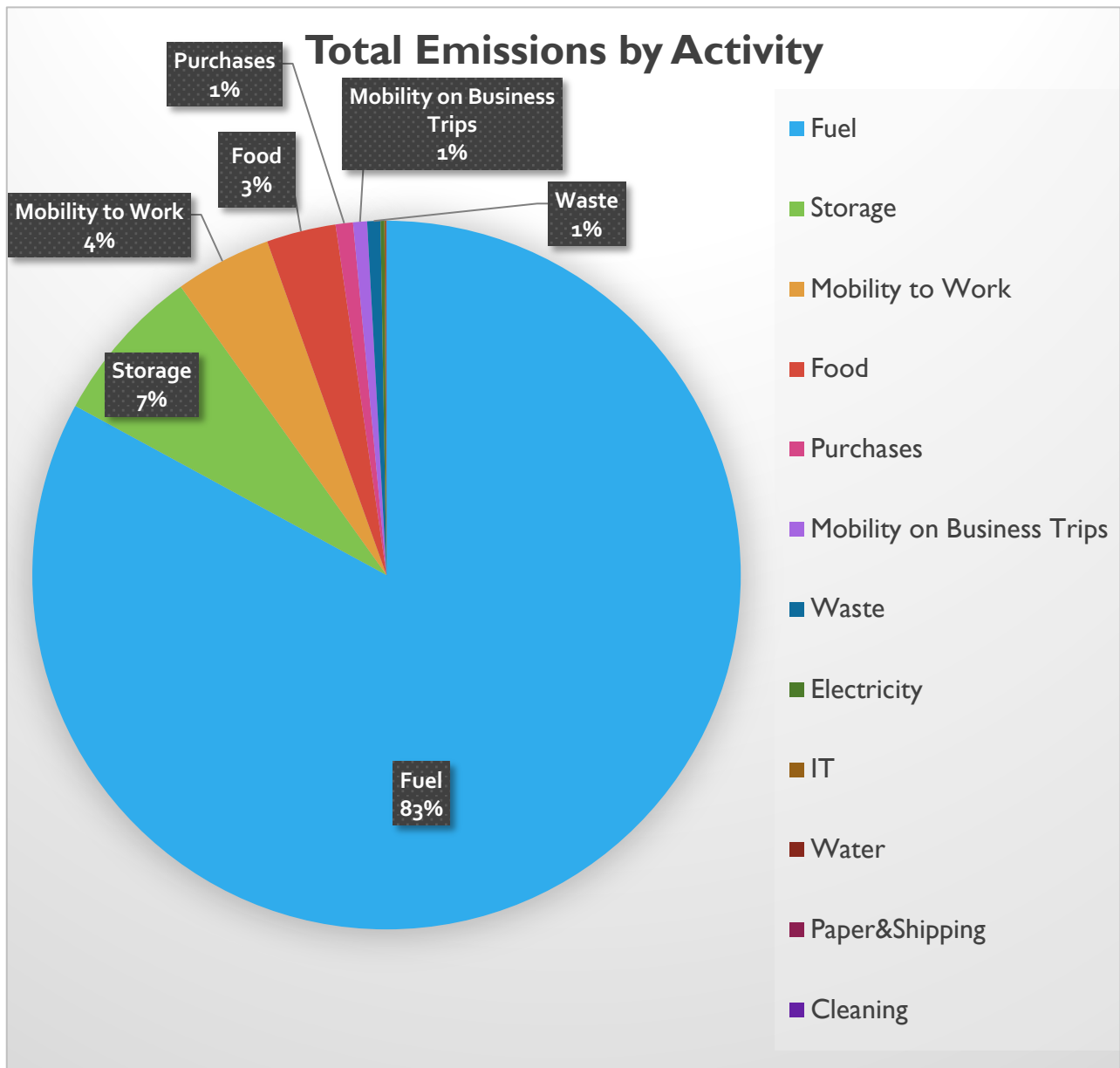


Carbon Footprint

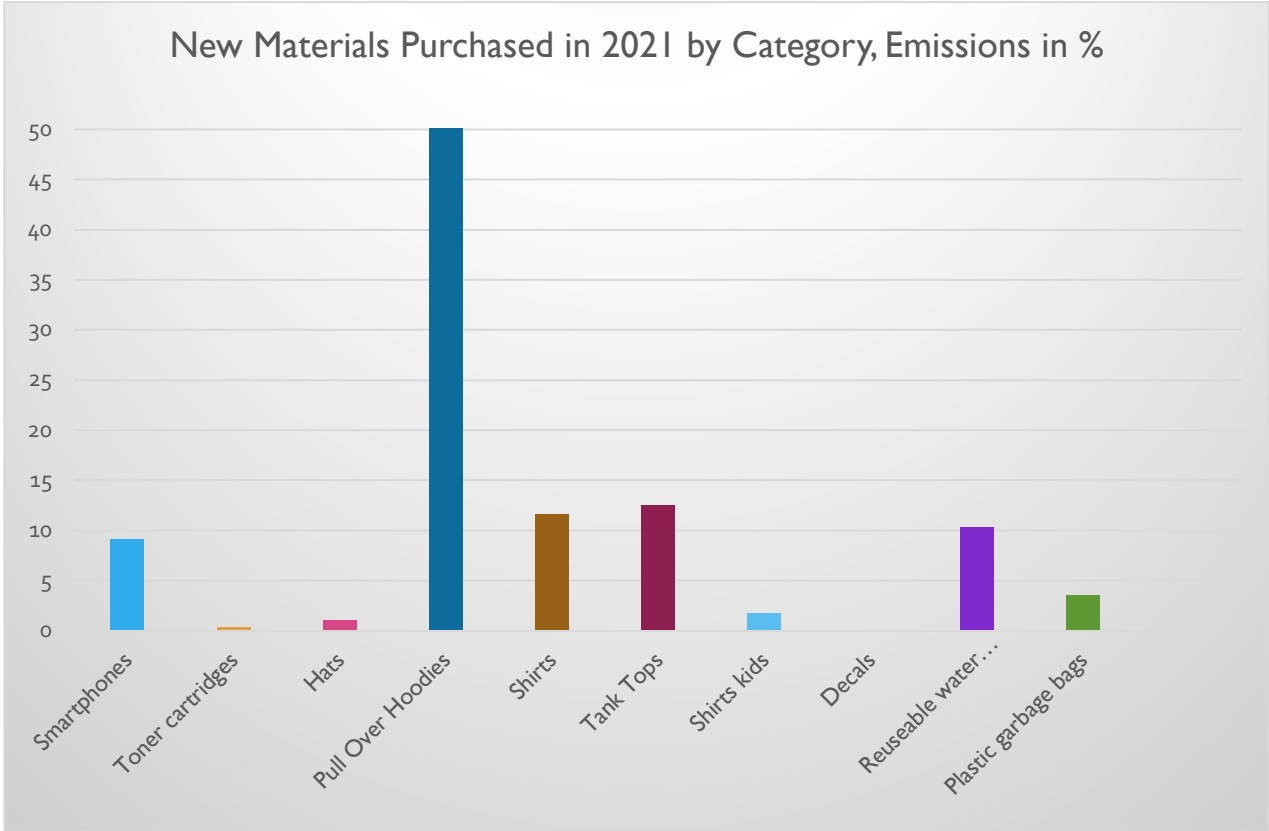
Summary

Total Emissions	Offset Donation*
260 t CO₂e	5992 CAD

* 1m² of forest in the Toba Valley offsets 0.10479t of CO₂, 1m² of forest is protected with 1 CAD. Campbell River Whale Watching donates \$1-\$4 per guest and guests add voluntarily donations. Thereby, the company's carbon footprint was overcompensated in 2021.



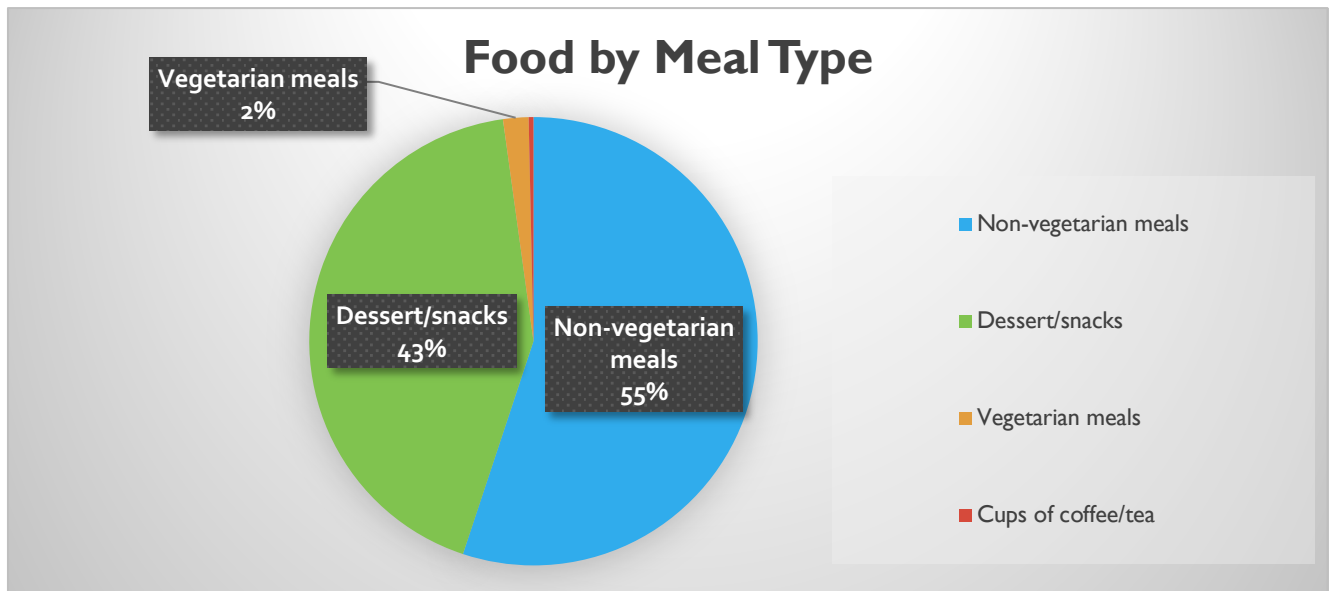
New Materials



Analysis

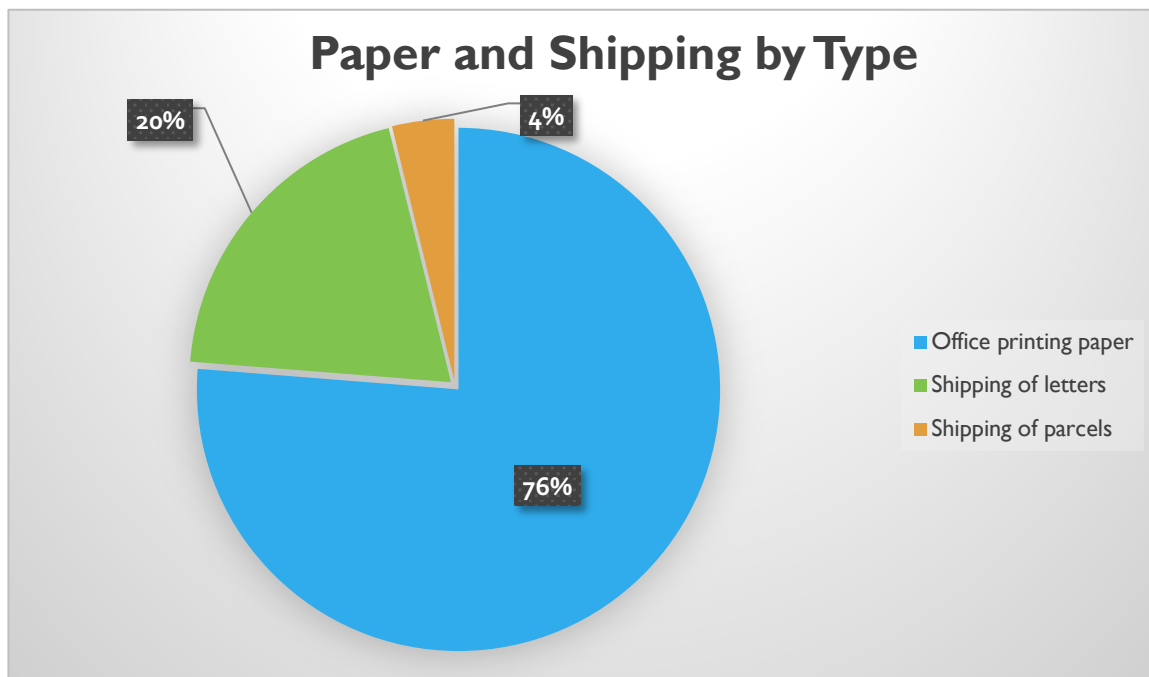
Fabric merchandise accounts for most emissions in this category, as well as the purchase of new phones. By switching fabric merchandise to an organic cotton and bamboo blend, an important change was made. While reusable water bottles have caused emissions this year, total emissions have reduced significantly due to the elimination of disposable water bottles, and will continue to be low in the following years, thanks to this purchase of a sustainable product.

Food (Guests & Staff)

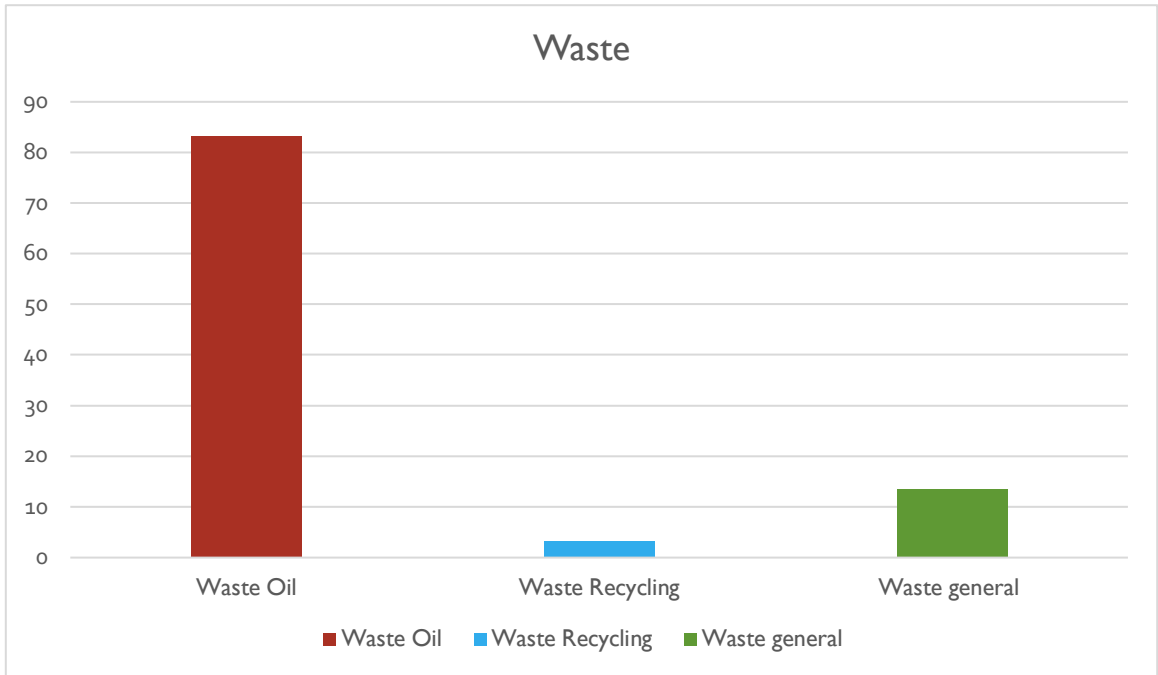


Disclaimer: For the purpose of this report, the carbon figures for all meals/food calculations were done assuming standard farming practices. Sustainable and organic farming methods were not incorporated at this time.

Paper and Shipping

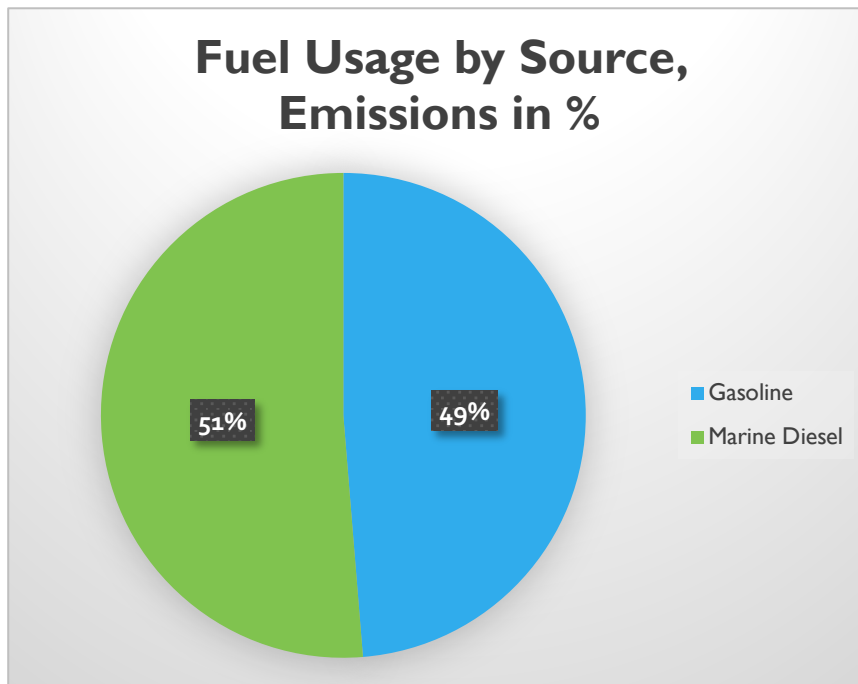


Waste, Emissions in %

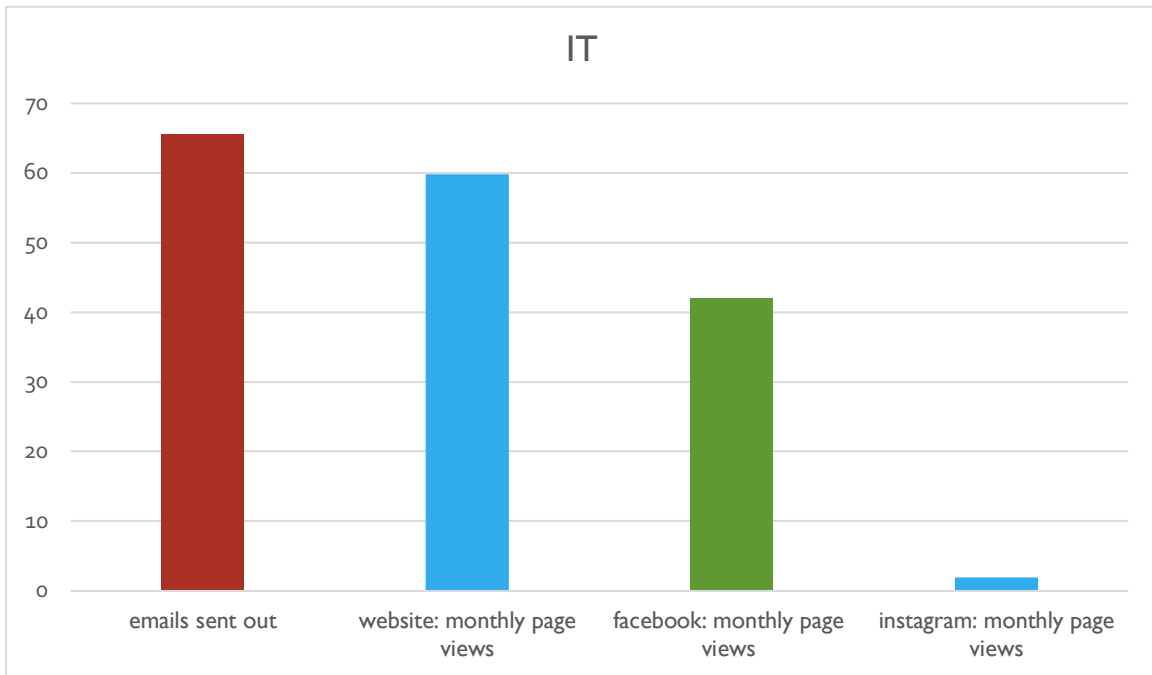


Fuel

Fuel Usage by Source, Emissions in %



IT & Communication, Emissions in %



Carbon Reduction Strategy

For the fourth year in a row, Campbell River Whale Watching & Adventure Tours continues its great efforts to offset their environmental impact while continuing to manage a profitable business. Campbell River Whale Watching & Adventure Tours is committed to operating as a carbon neutral business, offsetting more than 100% of their carbon footprint each year. The overcompensation through the protection of an area much larger as needed to balance out emissions further marks a generous assumption of responsibility for habitat and biodiversity protection, and therefore sustainability in general, especially in an economically tough year like 2021.

As Campbell River Whale Watching & Adventure Tours is moving towards the reduction of their environmental impact in all business activities, a special focus can be put on finding ways to make fuel usage more efficient and on eliminating single-use plastics.

We are going to keep working together to ambitiously increase the amount of protected forest in 2022. As part of this challenge, guests will be incentivized to donate an additional \$2.00 CAD. Moreover, the company will give guests the opportunity to offset the carbon footprint of their entire trip in Canada with Wilderness International.

New Achievements in 2021

- Switched to reusable water bottles
- Moved clothing orders to a more sustainable organic cotton / bamboo blend.
- Started a detailed waste audit process to be able to reduce specifically.

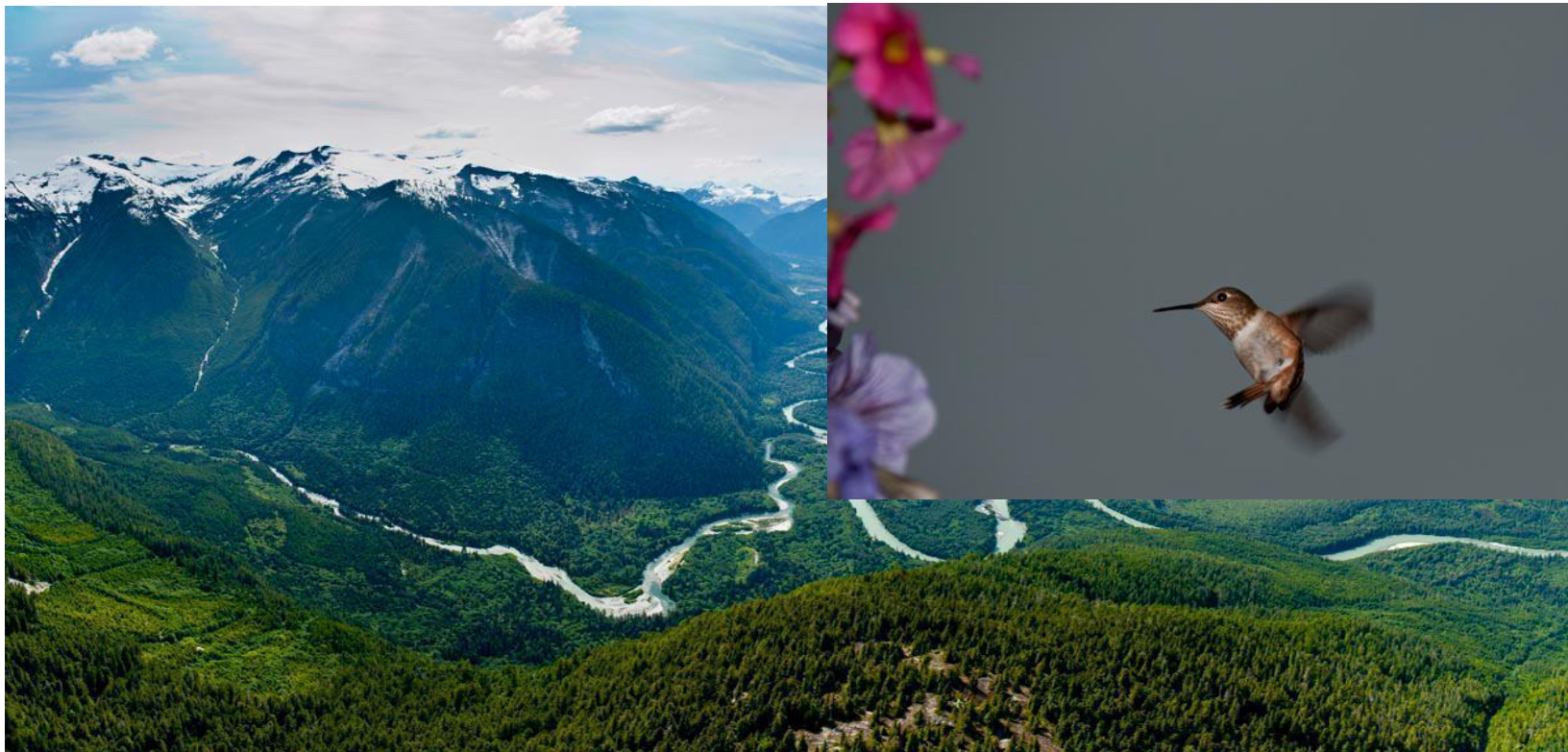
Moving Forward

- Compost coffee grounds
- Reuse ice bags for keeping water bottles cold
- Switch to unscented, biodegradable, refillable, bulk cleaning products to reduce packaging
- Switch to locally hand made cotton dishcloths
- Purchase a T3 to put more guests onto one boat rather than running multiple boats. This lowers the overall fuel burned per passenger.
- Use hybrid motors on boats.
- Save water.
- Rely more on non-emitting means of transportation or carpooling to get to work.
- Switch to compostable garbage bags.
- Eliminate single use plastic bags.
- Switch to a local coffee company to purchase coffee for guests on tours.
- Incentivize guests to voluntarily donate a minimum of \$2.00 CAD or more and to offset emissions of their entire vacation by protecting more forest.

Offsetting: Wilderness Protection

„When you listen to the silence in the rainforest, you learn to distinguish the important from the unimportant. It is important to me now that the children of our children will be able to experience this someday.”

- Astrid, Environmental Ambassador



Since 2012, Wilderness International has been buying parcels of land in the Toba Valley, in the middle of the Coastal Mountains of western Canada, 160 kilometers north of the city of Vancouver. Thus, they are protected forever! Our vision in the Toba Valley is the creation of a great protected Grizzly bear corridor. It all began with the purchase of the "Land of the Grizzlies", more than 60 hectares in size. Until today, it has been followed by the "Land of the Ghost Flowers", the "Land of the Wapitis", and the "Land of the Hummingbirds", now totaling more than 292 ha of pristine wildlife habitat and biodiversity forever protected.

Getting to Know the Conservation Area – September 2019



“It is absolutely amazing to be here on this land in the Toba River Valley that we are helping to protect. To see the bears, the eagles, to see all the wildlife around here in this amazing old-growth forest that we’re proud to be able to protect for eternity.”

Steve Gabrysh, owner

Our goal: A sand bank in the Land of the Grizzlies. On the way, we stop at a magical tree, a maple which is about 700 years old, and which is covered in moss. “That is tremendous, I didn’t think I would ever see anything this impressive,” owner Tyler Bruce says, as he cranes his neck to try to find the crown of the tree – which is impossible to see. Under the huge maple tree, we see two entrances to a wolf’s den. Then we continue to walk to the sand bank, on a path that is usually only used by animals. We make our way through the thicket of the rainforest, pass scratch marks and resting areas of bears. Once more it becomes clear to us that we are walking through the bears’ home, their living room.

Where Wild Grizzlies Roam



A healthy Grizzly population still roams the vast wilderness of this valley. Since there is more than enough to eat, a mother can birth 3-4 cubs in one year. The diverse vegetation of the river valleys is on the menu, and in the late summer and early fall the bears can feast on thousands of salmon in order to build up the winter fat so essential for survival. For their six-month winter rest, they use the root caves of ancient giant trees, which can only be formed through undisturbed, natural processes.



“Standing at the foot of a tree, whose height is not even fathomable, whose circumference is not even attainable with ten people, and whose age is hundreds of times one’s own – only those who have experienced this can really comprehend what it feels like.”

- Mareike, Environmental Ambassador



End Notes

Glossary

CO ₂ Equivalent (CO ₂ e)	Green House Gasses have different warming potentials, measured collectively as CO ₂ equivalents ("e")
Greenhouse Gas (Emissions)	Atmospheric gasses contributing to the greenhouse effect, including Carbon Dioxide (CO ₂), Methane (CH ₄), Nitrous Oxide (N ₂ O), etc.
m ³	Cubic Meter: Unit of measurement equal to 1000 Litres
PU	Polyurethane
m ²	Square meters: unit of measurement for areas, 1m ² equals an area of 1m (side 1) x 1m (side 2)
ha	Hectar: unit of measurement for areas, 1 ha equals an area of 10000 m ²

Calculation Procedure

To calculate the ecological footprint, so-called emission factors are used. They are based on consumption data such as energy consumption or kilometers driven by car, the amount of emitted carbon dioxide can be calculated. Added to that, the emission factor takes into account all other greenhouse gases that are emitted with certain activities.

Methane for example has an effect on our climate that is 28 times stronger than that of CO₂. Therefore, for every kilogram of methane emitted, 28 kg of CO₂ equivalents are factored in.

Uncertain Information

To calculate the emission of boat production, roughly 2 times the emission factor of cars was assumed.

To calculate the emission of whole-body PFDs, 5 times the emission factor of regular PFDs was assumed. Regular PFDs were calculated as weighing 650g and consisting of 470g PU soft foam and 180g Nylon.

For Servers, emissions during production are factored in.

For toilet paper, raw material extraction, production, distribution and drive to purchase of consumer as well as disposal were factored in at 10 rolls, 3-layered, fresh fiber, 1.35kg.

Sources

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And others.



Wilderness International 2022
www.wilderness-international.org
<https://www.facebook.com/wildernessinternational>

