

# Proposed CCCTS Response to the Climate Crisis

Prepared by Bruce Daykin, President, Nov., 2022

The CCCTS Board of Directors agree that since the Club promotes bike tours in some locations that require air travel, it is our responsibility to ensure participants are aware of the impact of air travel on global emissions that are contributing to the accumulation of greenhouse gases in the atmosphere and are worsening the climate crisis.

We suspect most of our members may wish to do their part to mitigate the climate crisis but are likely unaware of the specific impacts of air travel. The following tables provide information that should assist participants in being aware of the emissions from flying to tours that we offer, so they can make informed decisions about their travel plans.

## 1. Greenhouse gases generated by round trip flights to some typical tour locations:

**Table 1: Emissions per Person from Vancouver BC**

Tour Destination Examples	Round Trip Distance from Vancouver, km	Aviation Emissions, Tonnes 254 g/km for short haul flights* 195 g/km for long haul flights* Includes CO2 + altitude effect & other gases
Arizona	4,800	1.2
PEI or New Brunswick	8,600	2.2
Europe	18,000	3.5
Thailand	24,000	4.7

\*1. BBC Report: Smart Guide to Climate Change, 2020-02-18; Should we give up flying for the sake of the climate.

2. European Aviation Environmental Report: 89g/km/person Co2 only x factor 2.7 for total emissions.

## 2. Comparable amounts of other household emissions to put the numbers in context

- Using family car for a year is similar to a return flight across Canada
- Heating a house with gas for a year equals a return flight to Arizona

**Table 2: Other household fuel emissions:**

Item	Details	Tonnes per person
Annual typical use of gas car	12,000 km @ .171 g/km*	2.1
Annual household gas bill for heat, cooking, hot water	50 GJ**	1.3

\*BBC Report: Smart Guide to Climate Change, 2020-02-18;

\*\*Carbon Footprint Calculator, District of Saanich, for author's house which is partially heated by electricity

### 3. Comparison to average annual carbon footprints in Canada and other countries:

- Typical Canadian footprint is 14.5 T but this includes industry and fossil fuel generated electricity in many provinces. In BC it is about 2 to 7 Tonne, depending on type of vehicle and home heating fuel and air travel. One flight to Europe of 3.5T almost triples your annual output if you are at the low end or represents a 50% increase if at the high end.
- Canada and US average is about 3 x UK and France where levels have been dropping since 1990
- One flight to Europe is 5 times the annual output of a Pakistan citizen or 12 times and African citizen

**Table 3: Compare to average annual carbon footprints\*:**

Country	National Average Carbon Footprint, tonnes, 2021 including industry, etc.	Per capita footprint without industry, electricity generated emission free, (B.C.)
Canada or U.S.	14.5	2.0, EV car, no air travel or gas heat 7.0, gas car & heat, some air travel
UK, France	5.1 (was 12 in 1990)	
Pakistan	0.9	
Cameroon, Chad, Somalia	0.1 to 0.4	

\*Source: Our world in data, Co2 emissions per capita, 2021

## Conclusions

We hope this information will be useful and suspect the data may come as a surprise to many members. Clearly flying has a significant impact on a person's carbon footprint.

The Club will try to offer more tours closer to our home bases.

Some individuals may wish to make efforts to reduce their aviation emissions by self-rationing the number and length of flights taken each year, staying longer on one trip instead of flying twice, and using ground transportation where possible.