



CARBON ANALYSIS OF OUTBACK ENCOUNTER CLIENTS

Canopy periodically monitor and review all trips taken by clients of Outback Encounter to analyse the carbon emissions with a view to providing carbon offsets.

A sample of 72 recent client bookings were analysed for their carbon emissions (CO₂-e). The analysis below shows the relationship between the carbon intensity of various potential components of an itinerary (Figure 1) and how this is reflected in the total carbon emissions produced by all Outback Encounter clients (Figure 2), followed by the total CO₂-e associated with each client booking (Figure 3).

For the sample analysed, based upon a fixed carbon price of \$30 per tonne, using bio-sequestration as facilitated by Canopy, the average offset cost was 0.71% of the trip cost.

Figure 1 below illustrates the average carbon emissions per component of travel when included in a booking. The figures for trains appear high because the distances involved are typically much greater than for chartered flights or hire car travel and usually involve onboard accommodation and meals. Likewise, in many cases, the CO₂-e associated with meals are subsumed within the accommodation CO₂-e as calculated due to many accommodations providing an all-inclusive experience. This is also the case for some transfers and tours. Therefore some client bookings may appear not to have such meal, tour and transfer components, but this is in fact taken into account with the CO₂-e calculated for the accommodation component.

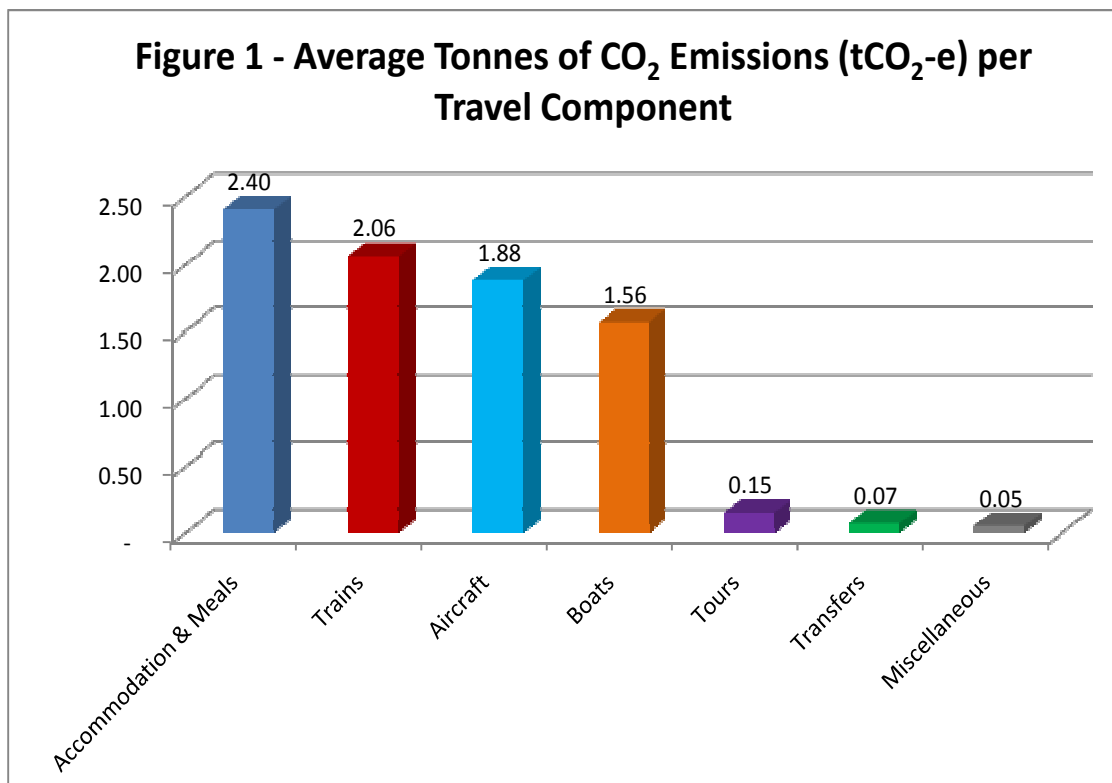
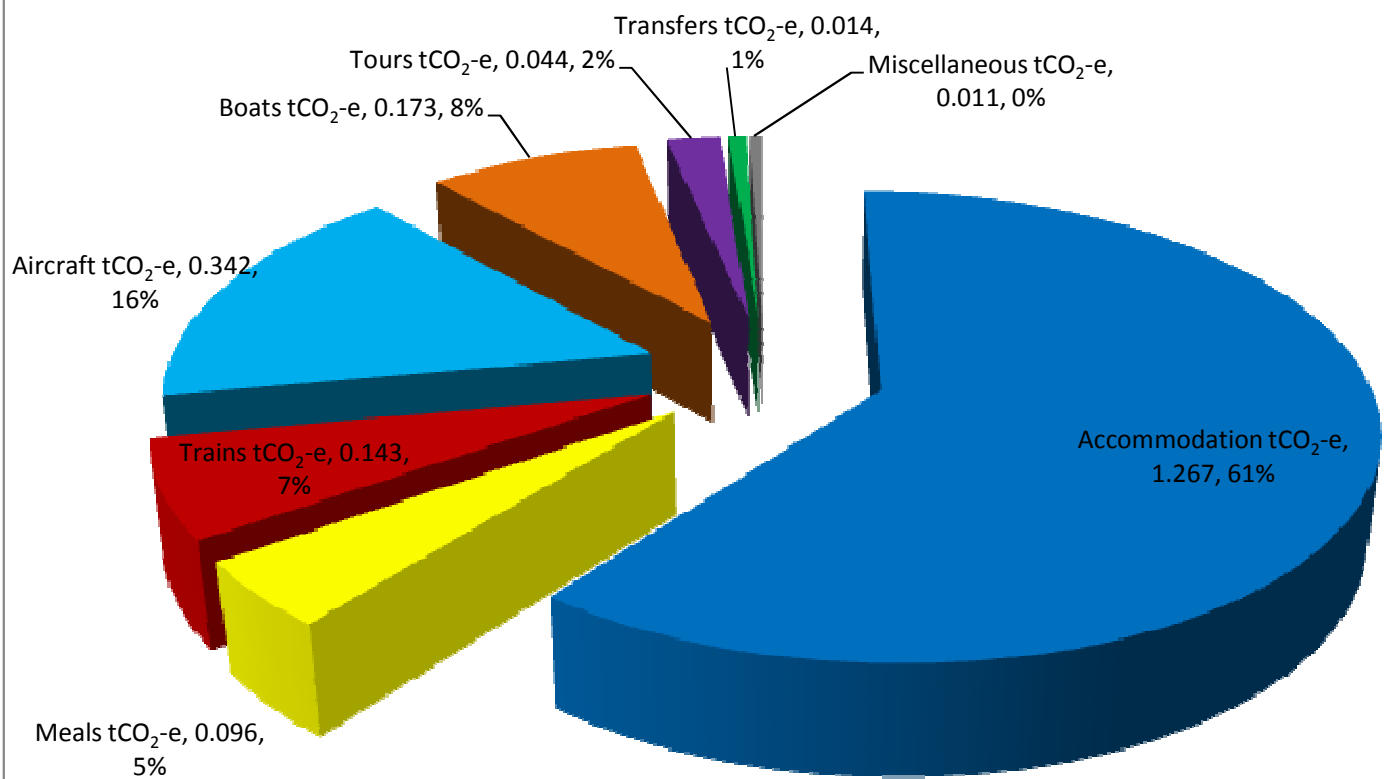


Figure 2 below illustrates the average carbon emissions per travel component across all Outback Encounter bookings in the sample analysed. It displays the total tonnes per component divided by the total number of client bookings from the sample, providing background on the relative volumes of each component.

Figure 2 - Average Tonnes of CO₂ Emissions (tCO₂-e) per Travel Component for all Outback Encounter Clients



Aircraft & Trains

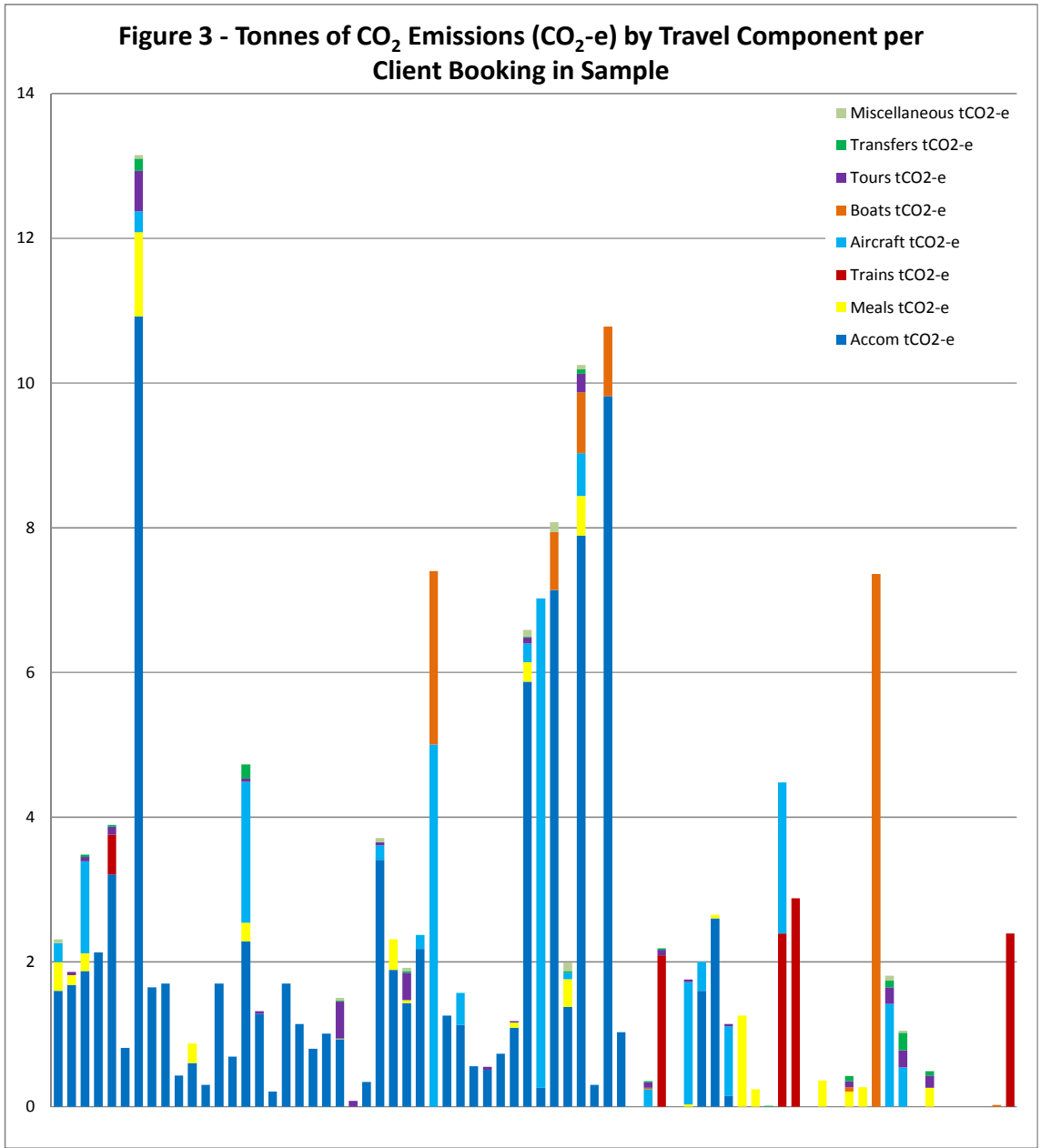
Aircraft includes private charters, helicopter and scheduled flights as booked with Outback Encounter.

The mean average CO₂ consumption for clients using either trains or planes is:

	Tonnes CO ₂ -e	Offset as % of total trip cost
With trains/aircraft	5.37	0.85%
Without trains/aircraft	2.08	0.67%

Clients using aircraft produce more than double the carbon emissions of those who do not and their carbon offset cost is usually three times as high due to more extensive trips and associated costs.

Figure 3 below summarises the carbon emissions from each trip in the sample of client bookings. Due to the varying nature of client itineraries, only selected components are included in each booking, with more extensive itineraries usually including more travel components.



Individual Sample Client Bookings

Sample Client Bookings

The table below shows the emissions sources for four client groups who travelled with Outback Encounter recently. They are distinguished between whether or not aircraft and train travel were included in the itinerary. The actual number of tonnes

Client ID	Accom. tCO ₂ e	Meals tCO ₂ e	Trains tCO ₂ e	Aircraft tCO ₂ e	Boats tCO ₂ e	Tours tCO ₂ e	Transf. tCO ₂ e	Misc tCO ₂ e	Total tCO ₂ e	Offset % of trip cost	Nights	People
Train & Air	2.64		2.39	2.09					7.12	1.293	9	2
These passengers had the following flight route: Sydney-Darwin-Vashon Head-Darwin and Adelaide-Sydney. Train travel was between Darwin-Adelaide. No additional transfers or trips were booked through OE.												
Air only	2.28	0.26		1.95		0.04	0.2	0.0005	4.73	0.798	6	2
These passengers had the following flight route: Blinman-Parafield, Adelaide-Kingscote-Adelaide. One day-tour is included.												
Train only	1.72		2.88						4.59	0.979	10	4
These passengers took the train from Adelaide-Alice Springs. No additional transfers or trips were booked through OE.												
No Air, No Train	1.67	0.21			0.06	0.08	0.07	0.0002	2.09	0.678	11	1
These passengers had the following flight route: Sydney-Melbourne-Adelaide-Kingscote-Adelaide-Alice Springs-Ayers Rock-Cairns-Sydney; three day-tours are included; three transfers are included.												

This data was derived from analysing each client's particular journey and assessing the carbon liability of each sector and action. To do this we obtained the fuel consumption of each type of transportation used by Outback Encounter's clients and factored them in depending on hours used or kilometres travelled.

Secondly, using the ClimateClever input/output database of the Australian Government, we were able to determine the emissions created by train travel and scheduled air travel. Accommodation, food, goods and services were calculated by ClimateClever in terms of expenditure rather than fuel use. For example, the carbon emissions created by a \$100 meal equate to about 0.06 tonnes CO₂e. Meals that were not included in the accommodation were separately accounted for.

We believe that this process has captured the emissions we could find and accurately calculated them. However, we shall be updating the system every two months or whenever new emissions sources or new emissions factors emerge.