

2.1. Comparing emissions per vehicle type

- Under the new Travel Policy and Handbook, land-based transport must be booked instead of flights for point-to-point travel between Canberra-Sydney and Sydney-Canberra.
- The CO₂ emissions of a trip will vary by vehicle, fuel type and number of people in a vehicle, as shown in Table 1.
- Emissions range from low (G - green), through mid (A - amber) to high (R - red)
- One person driving a car by themselves generates higher emissions than if they were travelling by coach or train or if there were more people in the car.
- **Key take away:** Shared vehicles are better as a low carbon travel option.

Table 1 - CO ₂ emissions by vehicle type and occupancy Canberra-Sydney return trip.			
Vehicle type	CO ₂ emissions per person (pp) from low (G - green), through mid (A - amber) to high (R - red)		
Average Flight	133kg (R)		
Rail	26kg (G)		
Bus/Coach (non-electric)	17kg (G)		
Vehicle type - Cars	CO ₂ emissions pp for one person alone	CO ₂ emissions pp for two people in the vehicle	
Petrol small car (Up to 1.4 litre engine)	80kg (A)	40kg	(G)
Petrol mid-range (1.4 to 2.0 litre engine)	110kg (A)	55kg	(G)
Petrol average large (Above 2.0 l engine)	174kg (R)	87kg	(A)
Diesel average large (Above 2.0 l engine)	120kg (R)	60kg	(A)
Petrol-Hybrid average small/medium car	60kg (A)	30kg	(G)
Petrol-Hybrid large car	90kg (A)	45kg	(G)
Plug-In Hybrid average small car	20kg (G)	10kg	(G)
Plug-In Hybrid average medium/large	40kg (G)	20kg	(G)
Electric – Charged with renewable energy	0kg (G)	0kg	(G)

Source: Trip Emissions Planner (from ANU Travel Emissions Tracker data), and Carbon footprint Calculator (<https://calculator.carbonfootprint.com/calculator.aspx>)

