The South Australian transport sector - consisting of road, rail, aviation and shipping - was the highest contributor of net greenhouse gases (GHG) emissions in the 2020 financial year, accounting for 25% of total GHG net emissions\(^1\).

Australia is a large country with a relatively small population and our cities are some of the least densely populated in the world. This results in greater travel distances and emissions per person.

**Sustainable solutions**

**Active transport**

Active modes of transport (such as cycling and walking) increase daily physical activity levels and lower GHG emissions by avoiding car use. Additionally, those transport modes have low financial costs, reduce traffic congestion and air pollution, and improve health and wellbeing. Despite those benefits, typically only half of Australia’s children and young people use active modes of transport at least once per week\(^3\).

**Public transport**

Travel on all forms of public transport results in fewer GHG emissions per person per kilometre than the average Australian car. In Adelaide, many buses are now hybrid, reducing emissions by up to 92%, and Adelaide Metro is also replacing many of its diesel trains with electric trains\(^3\).

**Electric vehicles**

Electric Vehicle (EV) uptake has increased in Australia in recent years, with nearly triple the number sold in 2021 compared to 2020\(^4\). While EVs have a larger carbon footprint to manufacture than internal combustion engine vehicles, EVs result in over 40% less CO2 over their lifetime\(^5\). EVs can cost more to buy, however they are significantly cheaper to run, with fuel savings of up to 70% and maintenance savings of around 40%\(^6\).

South Australia is a world leader in renewable energy allowing electric vehicles to be largely powered from renewable sources.

**Did you know?**

A return flight from Australia to Europe for one person will emit over 3000 kg of GHGs\(^7\) - equivalent to an average Australian household’s total GHG emissions for 3 months.

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**Figure 1:** Emission sources and contribution to total greenhouse gas emissions in South Australia for the 2020 financial year\(^1\)
What can we do?

- Walk, cycle or use public transport as an alternative to driving whenever possible.
- Survey your school community to identify its current travel patterns to and from school, and encourage more walking, cycling, carpooling and/or public transport.
- If purchasing a new car, investigate electric vehicles or select a low GHG emitting vehicle: greenvehicleguide.gov.au
- Choose local holidays to reduce car and air transport emissions.
- If travelling by air, investigate options to offset your emissions.

Tips to reduce fuel consumption when driving internal combustion engine vehicles:

1. Keep your vehicle as light as possible by only packing the essentials.
2. Avoid traffic jams and peak hour traffic.
3. Maintain moderate and consistent speeds.
4. Pump your tyres to the correct pressure.
5. Service your car regularly.
6. Wind down the window before switching on the air conditioner.

Other important concepts:

Urban form - the physical characteristics of cities such as shape, size and density. They influence people’s ability or choice to walk, cycle, or take public transport. Australia’s high emissions for transport per person are strongly linked to the large distances required to travel to work, school or shops in capital cities.

Walkable neighbourhoods – areas that are good for walking, with well-lit and safe footpaths, close to shops and schools, and access to regular public transport.

Did you know?
South Australia aims to reduce GHG emissions by 50% below 2005 levels by 2030 and reach net zero emissions by 2050.1.