

# Greenhouse gas emissions



## Climate

South Australia's environmental trend and condition report cards 2023



Trend  
**Getting better**



Condition  
**Good**



Reliability  
**Good**

PRESSURE

### Trend

South Australia's greenhouse gas emissions decreased by 42% between 2004–05 and 2020–21.

Emissions from energy industries in South Australia have declined significantly since 2004–05 (top figure). In 2020–21, the main sources of the state's emissions were from burning fossil fuels for transport and from agriculture, including livestock (bottom figure). Other emissions sources include industrial processes, fugitive emissions from fuels, and waste to landfill.

South Australia's natural systems sequester carbon as vegetation grows. These systems release carbon when vegetation is removed through deforestation. In each year since 2008–09, the net emissions from land use and forestry have been negative, as more carbon was sequestered than released, creating a carbon sink (top figure).

The information in this assessment is based on emissions estimates in the Australian Government's National Inventory Report, submitted to the United Nations Framework Convention on Climate Change.

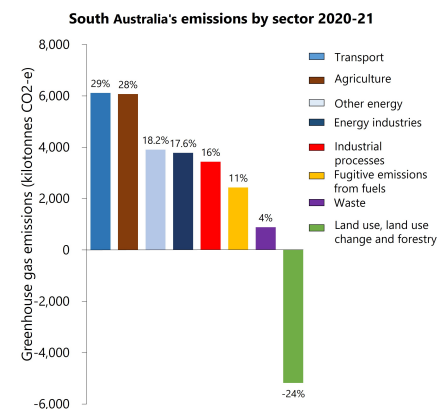
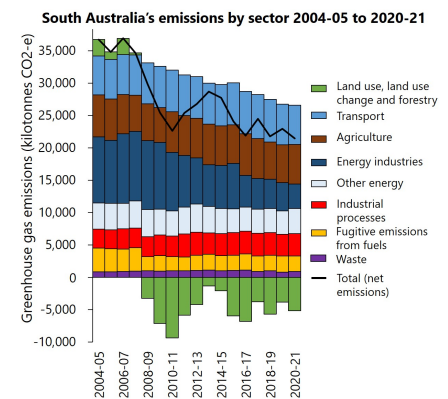
### Condition

The condition of South Australia's net greenhouse gas emissions is assessed as good.

In 2020–21, the emissions of carbon dioxide equivalent in South Australia were 11.9 tonnes per capita. This is the third lowest on a per capita basis compared to other Australian states and territories.

The Government of South Australia has a target to reduce the state's net greenhouse gas emissions by more than 50% below 2005 levels by 2030, and to achieve net zero emissions by 2050. The state is making good progress towards achieving this target.

**South Australia's greenhouse gas emissions decreased by 42% between 2004–05 and 2020–21.**



### Why is reducing greenhouse gas emissions important?

Greenhouse gas emissions from human activities are accumulating in the atmosphere and causing the Earth to warm, leading to long-term changes in regional climates and weather patterns. The impacts of climate change in South Australia include higher temperatures leading to more frequent and intense weather-related events like droughts and floods and also rising sea-levels. Reducing South Australia's emissions contributes to a global effort to reduce the risk of climate change.

### What are the drivers?

Reductions in greenhouse gas emissions since 2004–05 have mainly been driven by a shift to renewable energy generation and an increase in landscape carbon sinks. South Australia generates almost 70% of its electricity from renewable sources. Other emission sources that have been decreasing include agriculture, fugitive emissions from fuels, and other stationary energy emissions sources such as residential and commercial buildings.

### What is being done?

The Government of South Australia is supporting a transition to renewable energy and is implementing a range of actions to reduce emissions and support South Australia to adapt to climate change. South Australia is collaboratively working with stakeholders towards the state's target of net zero carbon emissions by 2050.

For further information see: [technical information](#)



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Government of South Australia