



Trend
Getting better



Condition
Very good



Reliability
Very good

RESPONSE

Trend

Since 2000–01, there has been an upward trend of renewable electricity generation in South Australia.

South Australia is making good progress towards its 100% net renewables target by 2030. The Department for Energy and Mining uses adjusted data from the Australian Energy Market Operator (AEMO) South Australian Electricity Report to calculate renewable energy. It calculates progress towards renewable energy generation targets based on the amount of renewable energy generated in the state as a proportion of total electricity generation.

South Australia is a global leader in energy transition, having transformed its energy system from less than 1% to over 69% renewable energy since 2001 (top figure). As renewables increased, gas and diesel generation decreased by 1,100 GWh in 2021–22 (5,235 GWh in 2020–21 to 4,118 GWh in 2021–22).

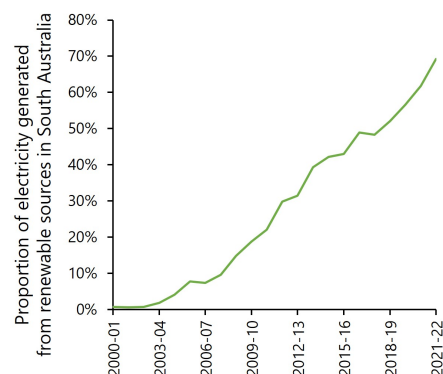
Condition

The condition of renewable energy in South Australia is considered to be very good.

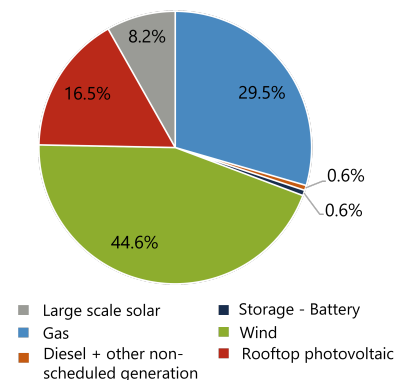
In 2021–22 renewable energy provided approximately 69.3% of the state's total electricity production.

Wind continues to be the dominant renewable energy technology in South Australia (bottom figure). During 2021–22, wind contributed 44.6% of the state's total energy output (approximately 64% of the state's total renewable energy output). Since the introduction of the solar photovoltaic feed-in tariff in 2008, solar photovoltaic output has grown exponentially, from 16 GWh in 2008–09 to 2,269 GWh in 2021–22.

South Australia has transformed its energy system from 1% to over 69% renewable energy in just over 20 years.



South Australia's electricity supply sources 2021–22



Why is renewable energy production important?

Energy generated from renewable resources does not emit greenhouse gases, making renewables the cleanest, most viable energy solution to prevent environmental degradation. Increasing the use of renewable energy will help slow the rate of climate change by removing a significant source of greenhouse gas emissions. Shifting to clean energy sources such as wind and solar also helps address air pollution and health impacts.

What are the drivers?

The global climate is changing due to an increase in atmospheric greenhouse gas concentrations, leading to long-term shifts in temperatures and weather patterns. The impacts of climate change include higher temperatures, more extreme droughts, floods, rising sea-level and more extreme weather events. Reducing greenhouse gas emissions as fast as possible will help to avoid the worst impacts of climate change and enable people to adapt.

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. South Australia is taking clear steps towards a zero-carbon future, collaboratively working with stakeholders towards the state's target of net zero carbon emissions by 2050. Through the proposed *Hydrogen and Renewable Energy Act*, the Government of South Australia will guide the development of a hydrogen economy and its integration with the expansion of renewable energy.

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



This report is a work in progress. As resource monitoring improves, so too will our ability to describe trends in condition. Licensed under [Creative Commons Attribution 4.0 International License](#). © Crown in right of the State of South Australia.



Government of South Australia