

SOUTH AUSTRALIA'S CARBON SEQUESTRATION STRATEGY



Government of South Australia
Department of Environment,
Water and Natural Resources





“By fostering a carbon offset industry we can create jobs and investment, particularly in our regions, while also reducing emissions and protecting our environment, enhancing our reputation as a clean, green state.”

Hon Ian Hunter MLC,
Minister for Climate Change

ACKNOWLEDGMENT OF COUNTRY

We acknowledge the traditional owners of the lands and waters of this State and recognise their enduring spiritual connection and cultural responsibility to care for country. We pay our respects to their elders, past, present and future.

CARBON SEQUESTRATION

A focus on home-grown
carbon opportunities

South Australia is innovative in its approach to reducing greenhouse gas emissions. It has led the nation in the use of renewable energy to decarbonise the economy.

South Australia will continue its ambitious pathway to reduce emissions. Home-grown carbon sequestration projects can drive down overall emissions, promote vibrant regional economies, help build resilient communities and protect the natural environment.

Momentum continues to build at the national level for growing the Australian carbon market. There is increasing demand for carbon credits, both domestically and internationally, to achieve greenhouse gas targets. South Australia is well placed to provide high quality carbon credits to this market, helping businesses, industry and Australia meet their carbon reduction goals.

WHAT IS CARBON SEQUESTRATION?

Carbon sequestration is the capture of carbon dioxide from the air and storing it in plants, soils and oceans. Sequestration occurs naturally, but additional sequestration can also occur through human actions on the land, such as revegetation or changing farming practices to increase carbon in soil. The long term storage of carbon creates carbon sinks. Carbon sinks are an important component of reducing our overall greenhouse gas emissions.

WHAT IS CARBON OFFSETTING AND CARBON CREDITS?

Certain carbon sequestration projects can create high quality, accredited carbon credits. Accreditation ensures that the projects are managed properly and the credits they generate represent actual increases in sequestration.

Carbon credits generated by accredited projects can be used to offset greenhouse gas emissions from cities, businesses or other activities. This is usually undertaken to achieve a greenhouse gas reduction target or carbon neutrality, whereby emissions are reduced as much as possible before the use of carbon credits. Carbon credits can also be bought and sold in carbon markets.

A FOCUS ON CO-BENEFITS

Aside from helping to offset greenhouse gas emissions, sequestration projects will provide environmental, social and economic benefits to South Australia. Businesses aiming to be carbon neutral are seeking carbon credits that have these additional co-benefits that align with their own values.

South Australia wants to take this opportunity to foster a carbon market in South Australia which will:

- Address climate change by reducing overall greenhouse gas emissions;
- Create new jobs and additional investment in regional communities;
- Improve farm productivity by changing land management practices; and
- Value the environmental and social co-benefits that can be achieved.

BUSINESS OFFSETTING EMISSIONS

Airlines around the world are moving to counteract the unavoidable greenhouse gas emissions from air travel. One example is **Qantas**, which, together with their customers, has offset over 3 million tonnes of emissions, using a mix of offsets from Australia and beyond. This is the equivalent of 1.1 million cars off the road.

Local organisations are also offsetting their emissions. **Uniting Communities** was the first South Australian organisation, and the first registered charity in Australia, to become certified carbon neutral under the Australian Government's Carbon Neutral Program. This includes purchasing over 8,000 tonnes of carbon offsets from sequestration projects in Australia that have additional social and environmental benefits.



A SNAPSHOT OF SOUTH AUSTRALIA'S EFFORTS SO FAR.

South Australia is growing a local carbon offsets industry that can help South Australians, particularly our land holders, participate in this market, promote investment in our regions and diversify our economy. This will help create new jobs, particularly in the regions, while protecting the environment.

- The South Australian Government has partnered with Qantas to launch Kangaroo Island as Australia's first carbon neutral destination, supporting carbon planting projects.
- A carbon offsets program is being developed by the South Australian Government that leverages carbon markets to fund native vegetation restoration in South Australia, providing long-term economic opportunities and fostering environmental stewardship.
- Co-investment of \$5.3 million between the South Australian Government and research partners for new research into carbon project opportunities across South Australia. This includes the mapping and assessment of the carbon sequestration potential of coastal wetlands and seagrass habitats, soil carbon and valuing the co-benefits of carbon projects.
- 'A Guide to Carbon Planting in South Australia Information Package' is available online as a tool to assess potential opportunities and risks for carbon planting in each region.
- A carbon planting demonstration site has been established at Adelaide High School, to help residents and visitors understand the role of carbon sequestration in the State's low carbon transition, and in achieving a Carbon Neutral Adelaide.
- Continuing biodiversity and conservation programs with ecological and carbon sequestration benefits.
- The South Australian Government's 'New Horizons' project focuses on realising productivity gains on the land and long-term soil carbon storage.





CARBON OFFSET OPPORTUNITIES IN SOUTH AUSTRALIA

There are a number of ways to store carbon across South Australia's diverse landscape that have many environmental, economic and social co-benefits. Potential carbon offset projects in SA include:

Biodiverse native forest carbon:

creating and restoring native forests can improve the resilience of existing native vegetation and also provide ecosystem services such as improving water quality, soil productivity, pollination and pest management services.

Soil carbon: modifying annual cropping and grazing practices in ways that retain more carbon in soil can improve soil health and productivity for crops and pastures.

Commercial forestry carbon:

commercial forest managers can realise diversified investment streams from carbon markets.

Coastal "blue" carbon: saltmarsh, mangrove and seagrass areas are critical ecosystems that hold high volumes of carbon. Protecting and restoring coastal ecosystems can enhance resilience to sea level rise from climate change and flood management. Healthy coastal ecosystems also provide critical habitats for fisheries which result in economic benefits.

Arid lands carbon: carbon offset projects could provide diversified investment streams and social benefits to support employment in remote Aboriginal communities. Innovative grazing practices and land management techniques can provide additional carbon sequestration outcomes.

WHAT IS NEXT?

The South Australian Government is sending a signal to the emerging local carbon offset industry that it supports this new economic opportunity. To help stimulate the supply of local carbon credits and meet the growing demand, the South Australian Government will work with, and listen to, the carbon market supply chain. This will include farmers, through to businesses in both Australia and abroad.

To facilitate the long-term DEMAND for local carbon offsets South Australia will:

- Use government purchasing levers to prioritise local offsets;
- Foster linkages with national and international demand for local offsets; and
- Link carbon offsets with other environmental drivers and markets.

To stimulate the SUPPLY of carbon offsets, South Australia will:

- Ensure the science, methodologies and business models are robust to support a carbon offset industry, valuing co-benefits;
- Facilitate innovate ways to finance carbon offset projects and ensure long term investment;
- Address any legislative or policy barriers; and
- Build the capacity of stakeholders to participate in the carbon market.



LEARNING MORE

To find out more about carbon sequestration, carbon offsetting and other work that is currently being undertaken please contact us at climatechange@sa.gov.au or visit www.climatechange.sa.gov.au.



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