Carbon for Productivity

What carbon means for your pastoral business

Australian Government

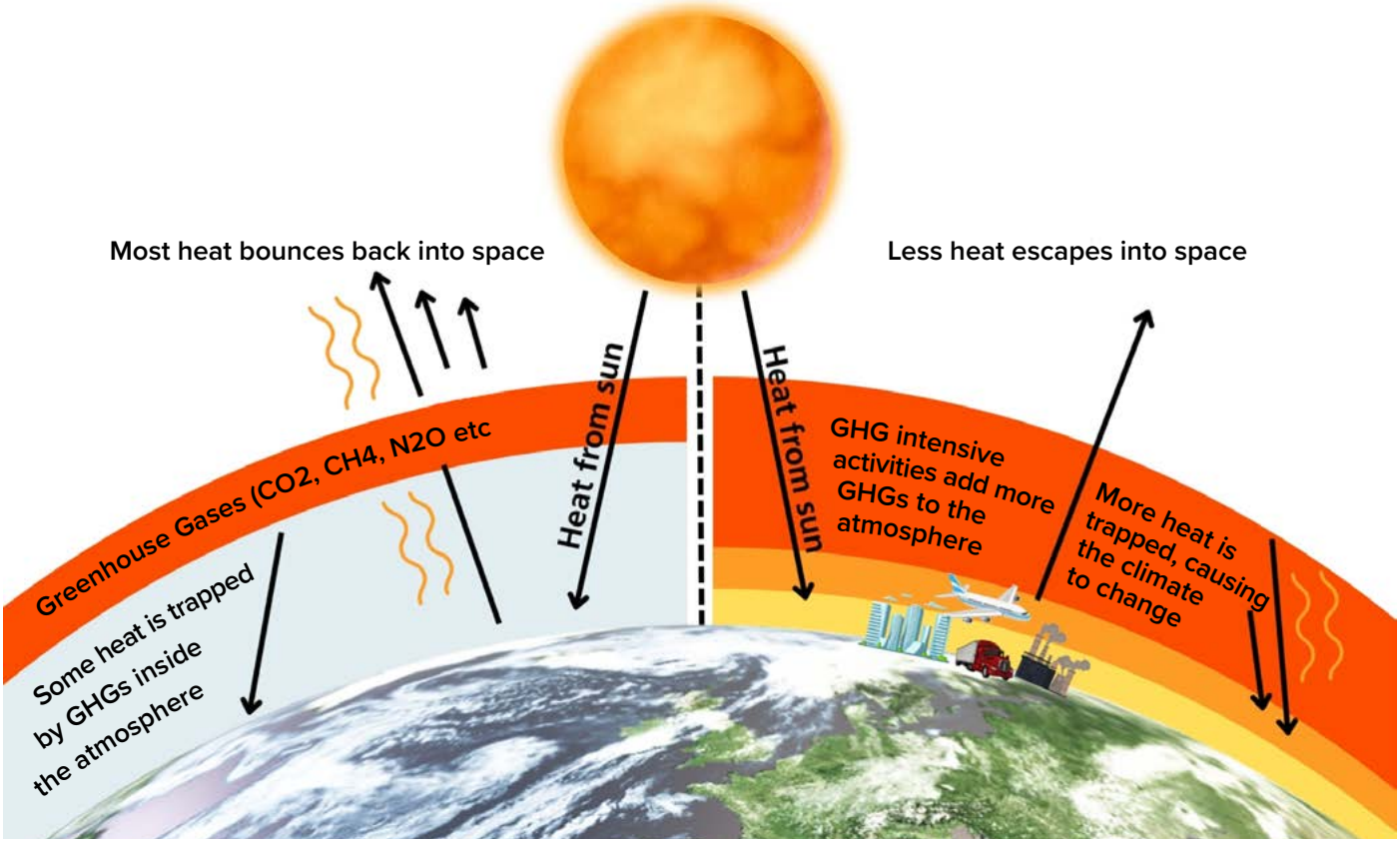
LANDSCAPE SOUTH AUSTRALIA SA ARID LANDS

The current state of play

Worldwide, every industry has a role to play and a responsibility in reducing emissions to mitigate the increasingly negative effects of climate change. South Australian pastoralists are already doing more from less, using native pasture and positively managing country. There are now great tools that pastoralists can use to document the positive impact of their management AND get ahead of the curve. This factsheet will provide the background you need to know about the carbon economy and its influence in pastoral businesses.

WHAT'S THE BIG DEAL?

Greenhouse gases, like carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O), trap heat in the atmosphere and keep our planet warm, as shown in the graphic. In the last 50+ years, human activities, mainly from the fossil fuel industry, have added excessive greenhouse gases to the atmospheric balance, causing the climate to warm and change.



GOVERNMENT AGREEMENTS AND SUPPLY CHAIN TARGETS

Many countries have worked to address climate change for the past 40 years. In 2015, 197 nations, including Australia, agreed to achieve net zero emissions by 2050. Australia also aims for 43 per cent lower emissions (vs 2005) by 2030. To track progress, emissions are reported by sector. Large companies, including supermarkets and banks, have set future net zero targets in line with reporting obligations. To report accurately, emissions data will be collected from suppliers. Properties able to supply carbon accounts will be better positioned as reporting becomes standard across the supply chain. Targets are based on emissions intensity, which measures efficiency per unit of product, not just total emissions.

Banks

Trade

Government and Industry

Companies

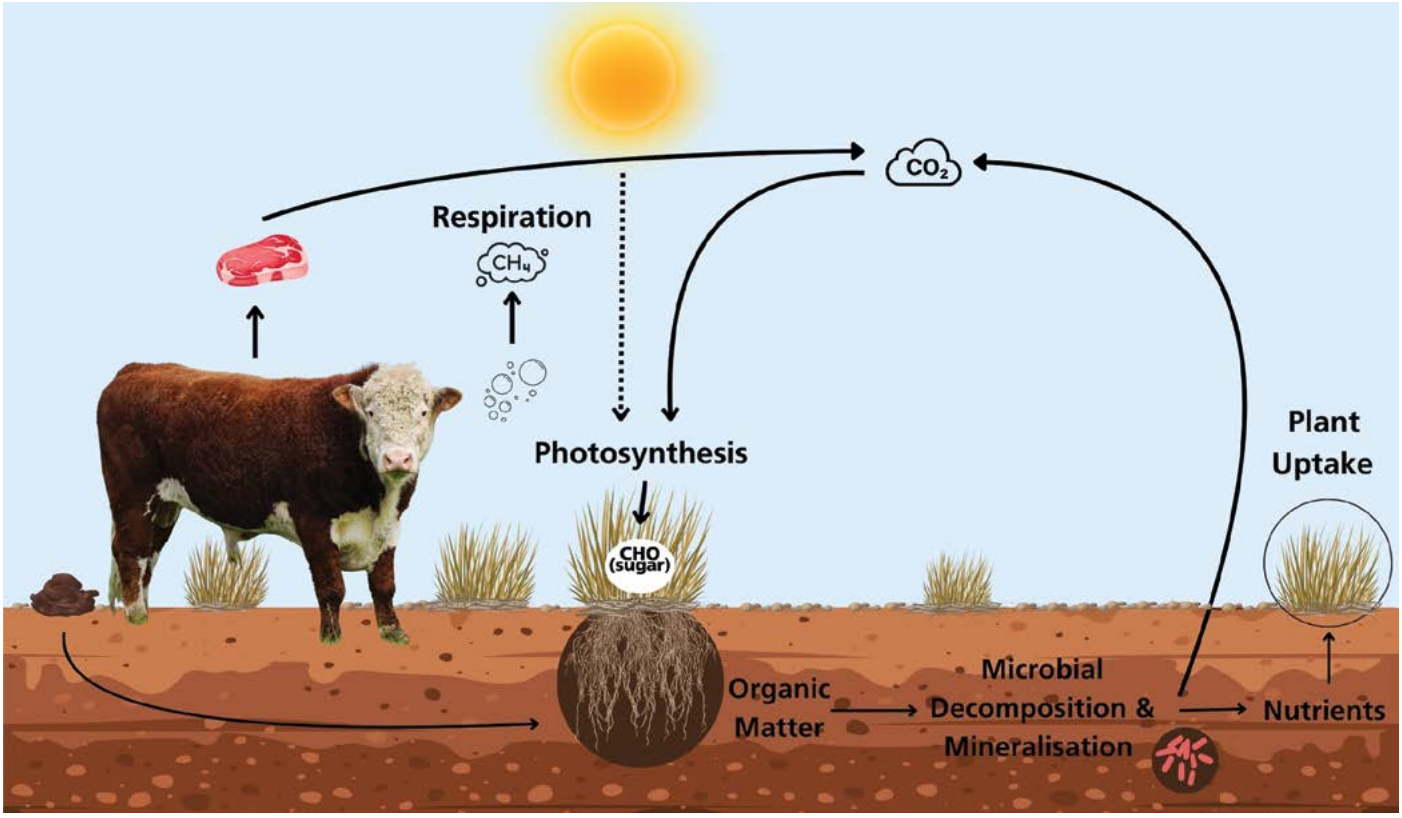
READ ABOUT AUSTRALIA'S OBLIGATIONS:

www.dcceew.gov.au/climate-change/international-climate-action#toc_1

WHAT IS CARBON FARMING

Carbon farming has become an increasingly ambiguous term for Australian producers. It stems from the needs of the emissions intensive industry to reduce their carbon emissions. This has created a perception that carbon farming is all about credits. In reality, primary production is in the business of carbon.

In a pastoral system, pasture is used to grow animals off. Plants capture carbon dioxide and turn it into pasture, which feeds livestock and builds soil organic matter. Microbes recycle this carbon, releasing nutrients that fuel new growth. The more carbon captured and cycled, the more productive and profitable the system becomes.



CARBON ACCOUNTING

Knowing your carbon account is the low-cost, low-input way to be business-ready for a low-emissions market. In a pastoral system, most emissions come from methane exhaled by livestock during digestion. Carbon accounting tracks what goes in, what's emitted, and what leaves in your product.

Completing a carbon account leaves businesses with total net emissions as well as emissions intensity, which is total emissions relative to output. Emissions intensity allows for comparison and benchmarking between businesses.

WHAT'S IN IT FOR ME?

Carbon accounting is good record keeping and can set you apart from other businesses.

Companies you supply to will need your carbon account for their reporting.

There is no cost to creating a carbon account. Even if goal posts change, it is a valuable business tool.

You're already doing it

Productive pastoral properties = lower emissions

- Good quality feed and ground cover
- Good genetics
- High lambing and weaning rates
- Healthy animals, efficient animals. No freeloaders!

AHEAD OF THE CURVE

Wool and meat buyers will rank properties based on emissions intensity. Buyers will increasingly consider how much carbon dioxide equivalent is produced for every unit of product and will choose lower-emission suppliers to reach their climate targets, with fewer carbon credits, as detailed in the graphic below. It's good news for producers: adopting simple practices like boosting weaning rates can lower emissions and make your property more attractive in the global market.

TO MEASURE YOUR EMISSIONS, YOU NEED:

- Stock numbers at the start and end of the financial years
- Stock classes
- Sales and sale weights of each stock class for each financial year
- Proportion of ewes lambing and seasonal lambing rates for each season
- Calving proportions
- Electricity usage per year in kW
- Diesel usage per year in litres
- Petrol usage per year in litres
- Feed purchased
- Wool data (net weight, clean weight, number shorn)

Learn how to use the calculator

Complete your carbon account

WANT TO LEARN MORE?

Contact the SAAL Landscape Board on 8429 9666 or saallandscapeboard@sa.gov.au

Listen to a podcast: www.agrimaster.com.au/knowledge/podcast-episodes/ep-67-the-eckard-effect-simplifying-carbon-accounting-for-farming

Watch the 'So What' of carbon webinar: www.youtube.com/watch?v=_Y6aPUP-WEc&t=515s

Australian Government

BUILDING PASTORAL SUSTAINABILITY
Adaptation · Innovation · Diversification

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