



The green facts about red meat

From paddocks to processing, the Australian red meat industry cares for its environment. But, like all industries, red meat knows its practices have an environmental impact. Here's what the industry is doing to reduce environmental impact while simultaneously enhancing farm livelihoods and food quality.

Is eating red meat bad for the environment?

No – in fact, the Australian red meat industry has more than halved its net greenhouse gas (GHG) emissions since 2005. This reduction in GHG is larger than any other sector in Australia.

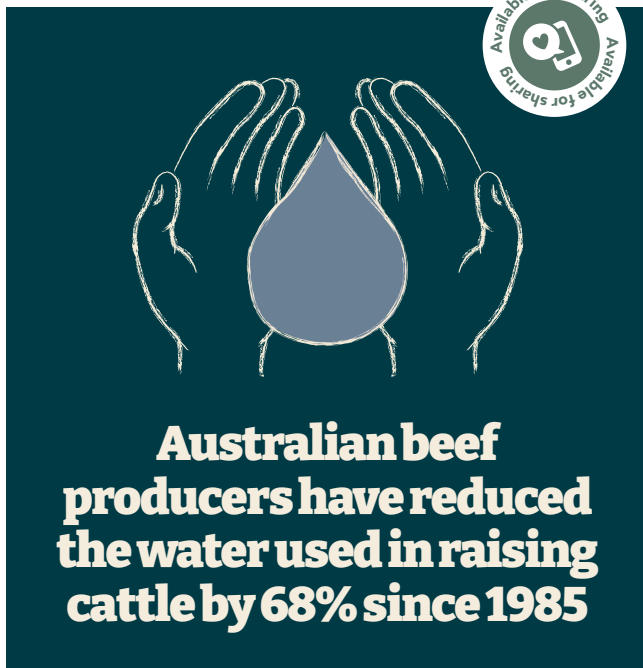
But we're not satisfied with past achievements, and Australia's red meat industry has committed to a net zero greenhouse gas target by 2030 (CN30), while boosting farm productivity and not compromising on livestock numbers.

We were one of the first industries on the planet to set such an ambitious target and we're making progress to achieve it.

In fact, the Australian sheep industry is already climate neutral.

Some of the other positive steps the Australian red meat industry has made to reduce the impact of production on the environment are:

- using 68% less water to produce a kilogram of beef now than it did 30 years ago;
- reducing land clearing/deforestation on land that produces red meat. In fact, total woody vegetation in Australia has remained stable over the past 30 years.



But wouldn't land used for livestock be better used for cropping to grow food?

Only 8% of Australia's land mass is suitable for cropping*. Most of our land mass cannot support any other food production than red meat.

Most feed that livestock eat is inedible by humans. Around 86% of plant materials fed to livestock globally are lower value by-products that do not meet human consumption standards**.

Cattle, sheep and goats then convert this grass and other plants with low nutrient value into high quality protein, fatty acids, vitamins and minerals that humans can digest.

Sources: *Global Food Security, Volume 14, 2017. **Food and Agriculture Organization of the United Nations, 2018.

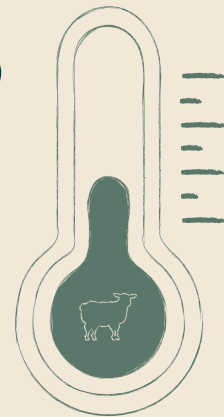


Australian lamb is climate neutral

This means eating lamb is not contributing to further global temperature rise.

DID YOU KNOW:

Lamb is one of only two food products grown in Australia that is climate neutral.



How can the Australian sheep meat industry be 'climate neutral'?

Research by the CSIRO shows Australia's sheep meat industry, despite having increased production over the past 30 years, is now 'climate neutral' making no additional contribution to global temperature increases.

The research used annual Australian greenhouse gas (GHG) emission data from 1990–2017 to measure the 'radiative forcing' footprint of the Australian sheep meat industry.

Radiative forcing relates to the balance between incoming and outgoing radiation. GHG concentrations in the atmosphere can impact the earth's energy balance and contribute to climate change.

The goal of limiting mean global temperature rise to 1.5°C, described in the Paris Agreement, depends upon urgent action to stabilise radiative forcing.

The research showed

the radiative forcing footprint of Australia's sheep meat sector has plateaued over the past 30 years and reached the point of a net zero increase in 2020, a status that could be described as 'climate neutral'.

Climate neutral is different to 'carbon neutral'. Carbon neutral means the carbon footprint of a product is zero (or it has been offset). In Australia, some livestock producers are carbon neutral, using soils to store carbon, tree planting or carbon offsets to achieve neutrality.

Source: Ridoutt, B. Climate neutral livestock production – A radiative forcing-based climate footprint approach, *Journal of Cleaner Production*, Vol 291, April 2021.

I'M A *red meat* AMBASSADOR

Ali Hart – marketing executive and producer

I'm a third-generation producer and Marketing Executive for Stockyard – a vertically integrated beef enterprise. We manage a Wagyu breeding herd, a 20,000 head feedlot, and distribute our branded beef to more than 20 countries.

My role is to raise our brand's presence, which includes managing consumer perceptions on how we care for our animals and the environment.

Why do you think it's important to share your story?

Generally, there's a disconnect between consumers and producers. Our industry marketing bodies can lead with national campaigns, but I believe producers also have a responsibility to help bridge that gap.

How are you sharing your story?

It's simply starting a conversation on whatever platform you have available.

Our consumers are looking for trust and transparency along the supply chain. We've had great success with videos on social media, particularly during COVID. They allow us to showcase our production to people wherever they are in the world.

What information are you sharing?

It's about ensuring consumers know that animal welfare is a top priority for us, along with the environment and traceability.

We have an incredible story to share – one where our animals are deeply cared for and where we get to make impressive inroads from research that's set to change our environmental impact.

Have you seen a positive impact from sharing this with consumers?

It's opened the door for positive conversations with people looking to know more about the industry, both domestically and internationally.

For example, I saw someone spreading misinformation on a social media platform and we ended up having a conversation and she came away feeling much better about the industry.


What have you learned along the way?

You need to listen more than you speak. I completed the Livestock Leaders program and the biggest takeaway message was to uncover what people are actually asking so you can recognise any shared values and address their concerns.

Most people who are advocating against our industry share the same values as we do – caring for our animals, the environment and people. Once you engage them from that angle, you genuinely can start a conversation.

I also encourage you to just say yes to industry advocacy. It's not as difficult as you might think, and you'll be surprised at how advocacy can snowball and have an impact.

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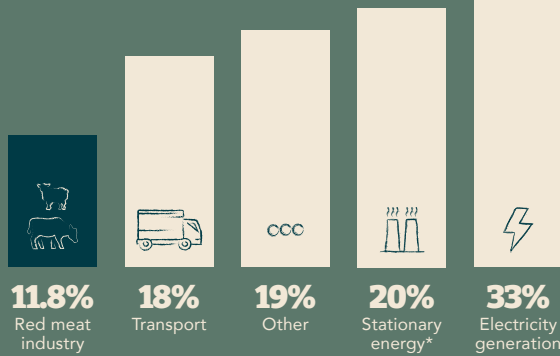
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Greenhouse gas emissions in Australia

DID YOU KNOW:

The red meat industry is the only major industry to have significantly reduced emissions



* Emissions from direct combustion of fossil fuels



Australian red meat contributes only **11.8%** of GHG emissions

How do emissions from cattle compare to other sectors?

The electricity, energy and transport sectors are significantly larger emitters of GHG than the red meat industry.

The largest emitters are electricity generation (33%), stationary energy (20%) and transport (18%), while the red meat industry makes up approximately 11.8%.

You're emitting almost twice as much carbon by driving a car than you are eating beef 3-4 times per week. The average car travels 13,500km in a normal year and emits 2,443.5kg CO₂**, whereas if you eat beef as per the *Australian Dietary Guidelines*, the emissions would be 1,131.8kg CO₂-e per year.

Sources: *National Greenhouse Gas Inventory Quarterly Update, 2020. **Carbon Dioxide Emissions Intensity for New Australian Light Vehicles, 2018.

Are there ways to reduce emissions, to continue reducing the industry's environmental impact?

There are numerous strategies producers can implement on-farm to reduce emissions and, in turn, our impact on the environment.

MLA and the broader red meat industry has dozens of projects underway to explore these strategies and how they help to reduce GHG emissions. They include:

- selective breeding
- carbon storage
- feeding cattle legumes such as leucaena
- reducing feedlot waste
- dung beetles
- renewable energy
- feed additives
- savannah burning.

Let's look at 'feed additives' as an example.

Recent MLA-funded trials show cattle that ate asparagopsis (red seaweed) produced up to 98% less methane and cattle that were fed the feed additive 3-NOP (Bovaer[®]) produced up to 90% less methane, with no negative effects on animal performance.

Source: MLA Final Report: Asparagopsis feedlot feeding trial, 2018.



But what about all the methane produced by cattle – isn't that contributing to global warming?

Cattle can actually be part of the climate solution.

It's true that cattle emit methane, a strong greenhouse gas (GHG), but methane is very different to CO₂, which is the most abundant greenhouse gas in the atmosphere.

Methane emissions from cattle break down in the atmosphere, whereas carbon dioxide from burning fossil fuels continues to build up over centuries.

Methane emitted by cattle is recycled within 12 years, whereas carbon dioxide emissions from energy and transport sectors burning fossil fuels remain for thousands of years.*

Source: University of California, Davis, Methane, cows and climate change, 2020.

Animation: How can livestock be a part of the climate solution?

Does red meat production cause deforestation in Australia?

No – grazing of animals to produce red meat doesn't contribute to deforestation in Australia.

The Australian red meat and livestock industry's vegetation and regrowth management is tightly regulated by federal and state government legislation.

In fact, the amount of tree cover in Australia has increased over the last 30 years. Total woody vegetation has increased from 23.9% in 1991 to 25.4% in 2019, despite significant impacts of fire and drought in that time*. While only a minor increase, this data debunks the myth that grazing animals causes deforestation.

*ABSF, Balance of Tree and Grass Cover dashboard.



Carbon neutral by 2030 (CN30) partnerships

MLA has recently launched a collective of innovative new research partnerships that will help drive the red meat industry towards its target of being carbon neutral by 2030.

Under the CN30 Pathways Partnerships, MLA will invest with leading research organisations and commercial partners aiming to achieve:

CN30

20%

improvement in livestock productivity

15M

tonnes of CO₂ stored within 10,000,000ha of Australian grazing land by 2025

50%

reduction in enteric methane emissions in 1.25 million cattle and 3.5 million sheep

For more on CN30 and its benefits visit mla.com.au/cn30



I'M A
red meat
AMBASSADOR



Barb Madden – CFO and producer

I'm the Chief Financial Officer (CFO) for our family business, Smithfield Cattle Company. We've been in the beef business since 1928 and run two feedlots at Proston and Goondiwindi, Queensland.

Why do you think it is important to share your story?

The beef industry is an amazing industry full of fabulous hardworking, authentic people who enjoy producing food for the world. That story needs sharing, along with the reasons why farming cattle is good for human health and good for the planet.

I've always been proud of what we do – my family heritage is tied to the industry – and it's now time to showcase what we do and have full transparency around our production systems and the importance of red meat in our diets and livelihoods.

It's important to find common values with our customers and share positive stories about what we do and why we do it.

It's about showcasing how cattle have helped shape the very civilisations we know, through providing nutrient-dense foods, controlling rangeland grass loads and supporting farming practices through ploughing fields. I think society might have forgotten about this and the fact cattle convert food that people cannot eat – grass – into nutritious meat we then feed our families.

With only 8% of Australian land mass suitable for cropping, using cattle to convert grass to high-quality, nutritious protein makes perfect sense.

How are you sharing your story?

I believe everyone has the ability to 'micro-influence' by influencing those people around us – our friends, family and community.

I do this by sharing stories through my own personal connections, such as through our family's longstanding connection with our local school. We hosted 35 agricultural teachers from more than 20 schools in the Wide Bay region at our feedlot – we explained the important role feedlots play in the beef supply chain and how we're producing high-quality beef.

As a result of this one tour, we reached hundreds of students across an entire region and began creating real connections for children to gain knowledge about the red meat industry.

I also use social media to share great farming images, industry facts and overall good news stories.

What have you learned along the way?

It's important we're all sharing the same message. When I first started using social media, I wondered how I, as just one person, could influence anyone. But if every red meat producer does it, and we're all sharing the same messages, positive stories and transparency around what we do, all of a sudden we will have a large movement.

What tips do you have to share the story of Australian red meat?

- Upskill your knowledge about unified red meat messaging using resources such as MLA's *Red Meat, Green Facts*.
- Be brave and start sharing the good word.
- Don't be afraid to call out misinformation when you see it in a loving and kind way – it's about finding a shared value and influencing gently through storytelling.

Connect with me:

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Know the facts. Share the facts.

Look for this symbol for impactful facts you can share to your social channels. Just scan the QR code and access resources, images and animations.



Learn more about the Australian red meat and livestock industry's commitment to be carbon neutral by 2030 at

mla.com.au/cn30

For more green facts about red meat visit

redmeatgreenfacts.com.au



For a complete list of references included in this special edition of *Feedback*, visit mla.com.au/feedback-references