



Which of the following best describes your situation?

Farmer/producer

Are you responding on behalf of an organisation or industry body?

No

How would you like to respond?

a. Answer discussion paper questions via the online survey

What are the opportunities to reduce emissions and build carbon stores in agriculture and the land? What are the main barriers to action?

Enteric emissions from livestock does not increase atmospheric carbon levels and is very different from fossil fuel emissions as it is short lived and returns to the soil to grow grass through photosynthesis. The plant draws carbon out of the air and what it doesn't use is fed to soil organisms building carbon in the soil which builds water retention and healthy soils. This process is extremely important in producing healthy soils and needs to be protected and recognised.

How can we progress emission reduction efforts whilst also building resilience and adapting to climate change?

We need to first get the science right, and to use the correct calculation, unfortunately the GWP 100 has become the default metric for transferring emissions of different gases to a common scale; often called CO₂ equivalent emissions. There is no equivalence between CO₂ and methane and other greenhouse gases. Methane comes and goes from the atmosphere and is relatively stable replacing emissions that are disappearing so is very much a natural cycle. So we need to be concentrating on not declaring no more emissions but no more incremental

contribution to climate change. The Government needs to use the GWP* calculation for methane rather than the GWP100.

Are there initiatives or innovative programs underway that could be applied or expanded on at a national scale?

Yes agriculture has played a massive part in being part of the climate solution by recapturing CO₂ in our soils. Government could consider supporting agriculture in the many known processes and techniques to capture carbon in our soils to assist in building healthier soils for the future. This would build water-holding capacity in our soils to reduce the effect of flooding and fire. There are many Landcare Groups and organisations assisting producers in this area.

How can the Australian Government bring together existing effort and new initiatives into one coordinated plan?

As an industry agriculture has undertaken best practice for many years in terms of environment and emissions mitigation and sequestration techniques and technologies. These initiatives need to be reported on and collected in a co-ordinated manner and more scientific research is required of the many soil organisms that exist that assist in the sequestration process. It is obvious the media and city folk have limited understanding of the natural methane process and the absolute importance of this process. So the Government should consider an educational program emphasising the importance of the natural biogenic processes.

What are the most important options to be further adopted or supported, looking in the short and the longer-term?

The term 'climate neutral' or 'climate neutrality' should be adopted as a climate stabilisation target and is in fact being used internationally to refer to the point at which emissions from an activity such as beef production are having no additional impact on global temperature rise. The climate neutral approach is based on IPCC science and is well aligned with the climate stabilisation goal of the Paris Agreement. It is measured using scientifically sound metrics that account for the short-lived nature of Methane such as GWP* or Radiative Forcing Footprint. Using this metric for biogenic methane emissions would also enable some beef producers to sell more of their excess carbon sequestration as Australian Carbon Credit Units (ACCUs) and have an alternative income stream, whilst offsetting emissions from other industries.

What are the practical solutions to increase uptake?

Using a fair and equitable matrix would encourage livestock producers to adopt the practical solutions above and would have far-reaching benefits for food security and reduce the effects of drought.

How do you see the agriculture and land sectors contributing over the medium and longer-term? What are the opportunities to deliver emission reductions in parallel with wider goals?

Building soil organic matter in the soil contributes to the soils proper functioning which human societies depend. It assists in soil structure and reduces soil erosion leading to improved water quality both in groundwater and surface waters increasing food security and healthy ecosystems. Building carbon in agricultural soils would deliver emission reductions across the planet thus assisting in building a healthier planet. A 'climate neutral' program would be inclusive of water quality, carbon sequestration, regenerative practices and healthier food overall.

How can the Australian Government better support agriculture and land sectors to:

a) drive innovation

b) build capacity

c) ensure the system enables emissions reductions

The Government could consider financially supporting programs that drive innovation and build capacity at the grass-roots level.

What new initiatives could the Australian Government design that would support emissions reduction and carbon storage in agriculture and land and help ensure a productive, profitable, resilient and sustainable future for the sectors?

In the past there has appeared to be corporate organisations supporting chemical fertilizers and being less supportive of natural processes and research that may have better outcomes for longterm agricultural production. Government could consider undertaking a full review of all the science reports to date. Producers also find it difficult to have proper soil analysis of nutrients and organisms - the typical soil tests do not provide this information.

A consistent and trusted approach for assessing and reporting emissions is often raised as a barrier to reducing emissions. Is there a role for the Australian Government in addressing this concern, and how can producers and land managers be supported?

The Government could consider the various research highlighting the importance of the livestock biogenic process and build media campaigns to better educate city folk on the efforts of producers in caring for the land and their local environments and the real science associated with the natural cycle of livestock biogenic methane.

What skills, knowledge and capabilities do you think producers and land managers need to implement change? What information and data would help them make decisions about emissions reductions and sustainable land management in the short and longer-term?

Knowledge and skills to improve methods to build carbon in the soils that are under production. This would assist in reducing emissions and increase sustainable land management both in the short and longer-term.

Is your response confidential?

No

Do you agree to your response being published on our website?

Yes

Please de-identify my response

Yes

I have read and understood the privacy notice and consent to the collection, use and disclosure of my personal information as outlined in the privacy notice.

Yes

Confirm that you have read and understand this declaration.

Yes
