



ACTION ON THE LAND: *Reducing emissions, conserving natural capital and improving farm productivity – an issues paper*

What is the issues paper for?

The Climate Change Authority has released an issues paper for consultation called *Action on the land: reducing emissions, conserving natural capital and improving farm profitability.*

In 2016, the third and final report of the Authority's Special Review into Australia's climate goals and policies recommended further work on whether low-cost emissions reduction can benefit agricultural productivity while furthering objectives such as enhanced biodiversity, soil condition and water quality. The aim of this research is to better understand the barriers to, and opportunities for, 'win-win' outcomes on the land.

The issues paper covers the following areas:

- The agriculture sector, its challenges and opportunities including improving productivity, climate change impacts and natural resource management
- Policies to reduce emissions or build carbon on the land
- Policies to deliver other environmental or natural resource management outcomes including research and development, grants, information and regulation
- Measurement and reporting needed to design or evaluate programs aimed at coordinating natural resource management and emissions reduction initiatives
- Options to involve the private sector in creating new markets for natural resource management outcomes and environmental services
- Options for integrating emissions reductions, natural resource management outcomes and farm profitability through research and development

The issues paper is available at <u>www.climatechangeauthority.gov.au</u> and submissions from stakeholders are encouraged. Following consultation, this work will result in a research report by the Authority, which is planned for release in mid-2017.

Why do we need to reduce emissions from agriculture and agricultural land?

Emissions from agriculture and on agricultural land account for approximately 20 per cent of Australia's emissions. This is more than the emissions from transport and approximately 60 per cent of the emissions associated with electricity generation.

Emissions from agriculture include methane from livestock and nitrous oxide released after applying fertilisers and manure. Changes in carbon storage on agricultural land are often due to land management practices and land-use change. Emissions from savanna burning are also considered as part of this research.

The focus of this research however is less about reducing emissions as a goal in its own right and more about the possibility of coordinating programs and policies to deliver multiple benefits on the land.

What do we mean by natural resource management?

Also known as natural capital, in this context natural resource management refers to action to preserve, protect or enhance our natural resources like soil, biodiversity (both plants and animals) and clean water. These natural assets can be affected by development and some land use practices. Conversely, some land management practices can enhance these natural systems and provide what has come to be known more recently as environmental services. Biodiverse tree planting on farms, for example, can provide a range of ecosystems services including habitats for threatened species, helping to address salinity and reducing soil erosion.

What are the Authority's key areas of interest?

There are already some examples of multiple benefits occurring in the agriculture and land sectors. Emissions from agriculture can be reduced while improving productivity. For example, improved beef cattle herd management can reduce emissions while increasing returns to farmers. Building soil carbon can offset emissions and improve the resilience and productivity of the landscape by increasing soil moisture and reducing run-off.

The Authority is keen to understand the barriers (if any) to achieving more of these kinds of multiple benefits.

- Is there scope for better integration between policies? Is there a need for closer collaboration between the different levels of government and among different government and non-government actors?
- What should the respective roles be for government, the private sector and non-government actors?
- Is there a lack of information for landholders that, if available, would allow them to make their land more profitable by pursuing these multiple benefits?
- Is there sufficient data and information available so that coordinated natural resource management and emissions reduction initiatives can be designed and then evaluated once they are in place?
- Is it possible to create new markets to support environmental or social benefits like biodiversity, Indigenous employment or diversified farming operations?
- Could research and development more explicitly consider multiple benefits and deliver technologies and practices to achieve them?

How can you be involved in this work?

The Authority will consult widely on this issues paper and encourages submissions from interested organisations and individuals. Submissions can be made to the Authority until 20 April 2017.

More information on making a submission is available on the Authority's website at <u>www.climatechangeauthority.gov.au/submissions</u>.