



Australian Government

Australian Government Response

Senate Standing Committee on Rural and Regional Affairs and Transport

Inquiry report: Climate change and the Australian agricultural sector

2011

GOVERNMENT RESPONSE TO THE RURAL AND REGIONAL AFFAIRS AND TRANSPORT SENATE COMMITTEE REPORT

Climate change and the Australian agricultural sector

On 19 September 2007, the Senate referred the following matter to the Standing Committee on Rural and Regional Affairs and Transport for inquiry and report by 30 June 2008:

- (i) The scientific evidence available on the likely future climate of Australia's key agricultural production zones, and its implications for current farm enterprises and possible future industries.
- (ii) The need for a national strategy to assist Australian agricultural industries to adapt to climate change.
- (iii) The adequacy of existing drought assistance and exceptional circumstances programs to cope with long-term climatic changes.

On 14 February 2008, the Senate re-adopted the Inquiry with terms of reference unchanged and with a reporting date of 4 September 2008. On 4 September 2008, the committee tabled an interim report, and tabled a final report on 4 December 2008.

The Senate Committee report made three recommendations:

1. The government should significantly increase the research effort in relation to the potential of soil carbon as a climate mitigation measure, as a means of reducing the capital input costs to agriculture [and] as a means of increasing resilience in agricultural systems.
2. The committee recommends that the government should provide for a full carbon accounting framework in relation to agricultural and forestry sectors in a domestic emissions trading scheme.
3. DAFF should prioritise strategic planning for climate change mitigation and adaptation in agriculture and rural communities and play a greater leadership role than is currently the case.

There were no dissenting reports by Senate Committee members.

Government Response

The government has considered the recommendations of the Senate Committee report. The government's response to the recommendations is as follows.

Senate Committee report Recommendation 1

The government should significantly increase the research effort in relation to the potential of soil carbon as a climate mitigation measure, as a means of reducing the capital input costs to agriculture [and] as a means of increasing resilience in agricultural systems.

The government agrees in principle with this recommendation and has significantly increased investment in research efforts into the potential of soil carbon since the Senate Committee tabled its final report.

In July 2011 the government announced a new \$201 million program, Filling the Research Gap, as part of the Carbon Farming Futures program of the Clean Energy Future plan. It will provide competitive grants funding to support research into emerging abatement technologies, strategies and innovative management practices that improve soil carbon and reduce greenhouse gas emissions and enhance sustainable agricultural practices. Novel approaches, including new crop and grazing species, biochar and biofuels will be targeted. Filling the Research Gap will build on the significant research into soil carbon that has occurred through the Soil Carbon Research Program.

The Parliament passed legislation for the Carbon Farming Initiative (CFI) on 23 August 2011. The CFI will enable Australian farmers, forest growers and landholders to generate credits that can be sold in domestic and international carbon markets, allowing them to receive income for taking action to reduce Australia's carbon emissions, including through increasing soil carbon sequestration. The government will work to fast track methodologies for soil carbon under the CFI.

From 2009 to 2012, the government has invested \$9.6 million in the Soil Carbon Research Program (SCRCP), a component of the \$46.2 million Climate Change Research Program under Australia's Farming Future. The SCRCP is creating a nationally standardised methodology for sampling and analysing soil carbon. This research is identifying management practices with the potential to build soil carbon levels.

The SCRCP consists of nine projects across Australia, focusing on:

- understanding the role Australian soils could play in carbon sequestration;
- improving the understanding of soil carbon stocks; and
- understanding the impacts of management practices on soil carbon.

In addition to providing improved and consistent information about the potential of Australian soils to sequester carbon, the SCRCP will help to inform the sector on the potential of soil carbon to reduce input costs by, for example, improving nutrient use efficiency and water holding capacity. Productivity gains such as these could be delivered through increasing soil carbon which would contribute to a more resilient agricultural sector.

The government is also investing \$1.4 million in a research project on biochar through the Climate Change Research Program. The project is targeting gaps in the understanding of this emerging technology and addresses uncertainties about its use. The government will be funding additional research and on-farm testing of biochar through the Carbon Farming Futures program. Biochar has the potential to reduce greenhouse gas emissions and benefit agriculture by storing carbon and enhancing soil productivity.

The Climate Change Research Program complements projects already being funded through the government's Caring for our Country initiative. Caring for our Country seeks to achieve an environment that is healthy, better protected, well managed, resilient, and provides essential ecosystem services in a changing climate. Caring for our Country will invest over \$2 billion to 2013. Up to \$171 million is available for investment under the 2010–11 Caring for our Country business plan and an additional \$138 million is allocated each year as base-level funding to regional natural resource management organisations. Caring for our Country focuses on achieving strategic results across six national priority areas; including Sustainable Farm Practices. Recognising the benefits of soil carbon to soil health, the Sustainable Farm Practices priority includes assisting farmers to adopt improved management practices, such as cropping and grazing methods that increase soil carbon.

Senate Committee report Recommendation 2

The committee recommends that the government should provide for a full carbon accounting framework in relation to agricultural and forestry sectors in a domestic emissions trading scheme.

The government agrees in part with this recommendation.

The national inventory system provides a comprehensive framework for accounting for emissions and sequestration in the agricultural and forestry sectors. These are described in the National Inventory Reports, based on remotely sensed activity data and use of the ecosystem model, FullCAM. This system is internally reviewed every year under the auspices of the United Nations Framework Convention on Climate Change (UNFCCC).

The Carbon Farming Initiative (CFI) provides a full carbon accounting framework, with methods that are consistent with the national inventory system. Reforestation accounting under the CFI will be delivered by the reforestation modelling tool (RMT), developed by the Department of Climate Change and Energy Efficiency (DCCEE).

Australia is working with other countries to develop new international rules that will enable a broader range of land sector abatement to be counted towards emissions reduction targets. As the negotiations are still ongoing, it is too early to ascertain whether agricultural soil carbon and other forms of abatement that are not currently counted towards Australia's Kyoto targets will be recognised under a future international climate change framework.

Senate Committee report Recommendation 3

DAFF should prioritise strategic planning for climate change mitigation and adaptation in agriculture and rural communities and play a greater leadership role than is currently the case.

The government partially agrees with this recommendation.

Agriculture is one of the Australian Government's national adaptation priorities. These priorities are identified in the Australian Government's position paper on climate change adaptation.

The Department of Agriculture, Fisheries and Forestry (DAFF) is responsible for providing policy advice and administering programs aimed at the development of internationally competitive and sustainable primary industries, including agriculture. DAFF is playing a key role in implementing the \$1.7 billion land sector package within the Clean Energy Future plan along with the Department of Climate Change and Energy Efficiency (DCCEE), the Department of Sustainability, Environment, Water, Population and Communities (SEWPaC) and the Treasury.

The Clean Energy Future plan's land sector package includes the ongoing Carbon Farming Futures program. It will deliver \$429 million to help farmers and other landholders benefit from financial opportunities under the Carbon Farming Initiative (CFI). The Carbon Farming Futures program includes:

- \$201 million Filling the Research Gap for research into new ways of storing carbon and reducing pollution in the land sector, as discussed in Recommendation 1.
- \$99 million Action on the Ground which will provide grant funding to regional landholders and research, industry and farming organisations across Australia to undertake projects to implement innovative management practices to achieve sustainable outcomes, reduce emissions and boost soil carbon stores. Grants will be available to landholders to take action on the ground including testing new ways to increase soil carbon.
- \$64 million for Extension and Outreach activities to provide information and support to landholders in integrating carbon management into farm planning; new research and farm techniques; and improving productivity and farm sustainability.
- \$20 million to convert research into practical methodologies which are recognised under the CFI.
- A 15% tax offset to encourage the uptake of conservation tillage farming techniques.

The land sector package also includes a new ongoing \$946 million Biodiversity Fund which will assist farmers and landholders to undertake projects such as revegetating areas of high conservation value, managing and protecting biodiverse ecosystems and action to prevent the spread of invasive weeds. A new Land Sector Carbon and Biodiversity Advisory Board will provide advice on implementation of these measures.

The ongoing Indigenous Carbon Farming Fund will provide \$22 million as part of the land sector package. This fund will support Indigenous Australians to implement carbon farming projects. Funding will be provided for specialists to work with Indigenous communities to develop carbon

farming projects and for the development of low-cost estimation and reporting tools for abatement activities likely to have high Indigenous participation, such as savanna fire management.

The land sector package's Regional NRM Planning and Climate Change Fund will allow for the strategic planning of adaptation and mitigation actions in agricultural and rural communities. It will help regional communities plan for the impacts of climate change, and maximise the benefits from carbon farming projects. Funding of \$44 million will be provided for regional NRM organisations to plan for climate change, produce NRM plans to a highly professional, nationally consistent standard and develop scenarios on regional climate change impacts.

The Clean Energy Future plan's land sector package builds on Australia's Farming Future, a multi-pronged approach to help primary producers manage their emissions and adapt to the impacts of climate change. DAFF has administered Australia's Farming Future since 2008. Australia's Farming Future will conclude in June 2012 and has a number of elements including support for:

- research and development through the Climate Change Research Program
- training through the FarmReady program
- building community networks and capacity to manage climate change
- adjustment advice and assistance for those who choose to leave farming
- information services activities.