



Australian Government

Department of the Environment and Heritage

**Submission to the
Agriculture and Food Policy Reference Group**

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Introduction

The Department of the Environment and Heritage is pleased to provide a submission to the Agriculture and Food Policy Reference Group (the Reference Group) that has been established to provide advice to the Minister for Agriculture, Fisheries and Forestry on long-term strategic directions for the Australian agriculture and food sector.

There is a growing understanding in government and in the Australian agriculture and food sector that, in looking to the future, climate change is a new and increasingly important factor to be considered in strategic planning. Consequently, the Department of the Environment and Heritage has chosen to focus its submission on this issue.

The submission draws upon the framework and content of the Issues paper '*Ensuring a profitable and sustainable agriculture and food sector in Australia – Issues for consideration*' provided by the Reference Group.

The Summary provides *Conclusions and Recommendations* to assist the Reference Group succinctly address its Terms of Reference. Greater detail on the development of each of the conclusions and recommendations is provided throughout the latter parts of the submission.

The Department of the Environment and Heritage offers to assist the Reference Group in any way in its deliberations subsequent to this submission. The principal contact is: Ian Carruthers, First Assistant Secretary, Australian Greenhouse Office, Department of the Environment and Heritage, GPO Box 787 CANBERRA ACT 2601, Contact Phone: 02 6274 1405, Email: ian.carruthers@deh.gov.au

SUMMARY:

THE WAY FORWARD IN A CHANGING CLIMATE

- Australian and international leading scientists have assembled scientific evidence that climate change will have an increasing impact on a range of Australian industry sectors and communities and regions over the coming decades of this century.
- The Australian agriculture and food sector is identified as an area of relatively high exposure and risk from the impacts of a changing climate.
- Adaptation to climate change is fundamental to the capacity of the Australian agriculture and food sector to maintain productivity and profitability.
- The world community, during the course of this century, needs to achieve major reductions in emissions of greenhouse gases to protect the climate. Action will be required in all major emitting countries and across all sources and sectors. Agriculture is a significant source of greenhouse gas emissions.
- Climate change is an important element in the future operating environment for the agriculture and food sector.

1. The Future Operating Environment in a Changing Climate

Conclusions

- 1.1 Climate and fluctuations in climate constitute the most important natural resource factor determining the productivity and profitability of the Australian agriculture and food sector, and the associated prosperity of Australia's rural communities.
- 1.2 Irreversible changes to the climate system in Australian agroecological regions could have profound affects upon the operating environment of the agriculture and food sector.
- 1.3 Greenhouse emissions from the agriculture and food sector constitute a significant fraction of Australia's national emissions. There will be an increasing focus worldwide on finding all practicable ways of reducing greenhouse gas emissions.

Recommendations

- 1.4 Understand how climate change will alter the existing operating environment of Australia's agricultural industries, as a key step towards preparing the agriculture and food sector for a sustainable and competitive future.
- 1.5 Understand the implications of climate change for the use and management of natural resources (water resources, vegetation, soils) so that management strategies can be developed to maintain and increase agricultural productivity.

2. Maintaining Competitiveness in a Changing Climate

Conclusions

- 2.1 Australian agriculture will need to develop its adaptive capacity to climate change to maximize its competitive edge in the future operating environment. Seeking new opportunities and diversification through innovation can be the key to enhancing resilience of the agriculture and food sector, regions, and individual agribusinesses.
- 2.2 Greenhouse gas emissions in agriculture represent a loss of valuable production inputs (e.g. animal feed, fertilizer). Efficient utilisation of input resources through superior management skills can simultaneously lead to farm productivity improvements and greenhouse emissions reductions.
- 2.3 Australia has world leading capability to calculate emissions of greenhouse gases (and storage of carbon in sinks) through the National Carbon Accounting System. Similarly, the new Greenhouse Action in Regional Australia Programme and the continuing work of research agencies such as the Research and Development Corporations and CSIRO provide a solid technical foundation on which to build innovation on farm emissions management strategies.
- 2.4 Climate change research addressing the needs of the agriculture and food sector is, in part, a cross-industry issue and should be funded through a coordinated approach across the agriculture and food sector.

Recommendations

- 2.5 To ensure ongoing productivity and competitiveness in the future operating environment, the **agriculture and food sector** should take steps to:
 - further enhance knowledge of climate change impacts and vulnerabilities at various geographic scales, and
 - improve the adaptive capacity of agricultural industries.
- 2.6 **Industry** groups and R&D corporations should take practical steps to prepare for climate change impacts, which should include:
 - continued investment in research, to better understand the impacts of climate change on the industry,
 - development of management tools to adapt to climate change,
 - discovery of innovative approaches to existing or new production systems, and
 - development of pathways and support structures that enable the adoption of new or improved technologies and/or production processes.

- 2.7 **Enterprises** should enhance their productivity and competitiveness by:
- utilising available tools and improving management practices to reduce greenhouse emissions, increase productivity and achieve other multiple economic and environmental benefits, and
 - participating in the Greenhouse Challenge Plus program as a framework for practical action and cooperative partnerships.
- 2.8 **Partnerships** between governments, industry organisations, and enterprises should be further enhanced to ensure a coordinated and efficient approach in preparing for climate change. These partnerships are especially important in the:
- coordination and funding of research priorities and projects,
 - framing of plans for climate change adaptation, and
 - development of tools and practical farm practices for greenhouse emissions.

Climate Change and the Agriculture and Food Sector

1. The Future Operating Environment in a Changing Climate

The productivity, profitability and sustainability of Australian agriculture depend on climate conditions, soil quality and availability of water resources. These natural assets are interdependent.

Already, much of Australian agriculture operates under highly variable interannual climate conditions (the land of droughts and flooding rains), relatively low soil fertility, and increasing pressure on availability of water resources.

Scientists have concluded that the climate has begun to change measurably, in large part due to human activities, and it will continue to change (increasingly) in the future as a consequence of growing global greenhouse gas emissions. Australia's water supply and hydrology systems are likely to become increasingly stressed with the projected drying trends over much of the agricultural areas due to climate change. This presents significant challenges for Australian agriculture, but possibly some opportunities as well.

In 2004, the Australian Government put in place a comprehensive Climate Change Strategy, which builds upon its previous actions addressing climate change. It is designed to ensure that Australia meets its commitment to achieve its Kyoto greenhouse emissions target (108% of the 1990 level over the period 2008-12). It also lays the foundations for emissions reductions in the longer term, and for increased understanding of climate change. Total investment committed by the Australian Government amounts to \$1.8 billion.

The Australian Government Climate Change Strategy contains several elements directly relevant to the agriculture and food sectors, in particular:

- advancing knowledge of climate change science, with emphasis on understanding future climate conditions relevant to land-based activities and the associated impacts on agricultural industries,
- the first national programme on adaptation to climate change, with a particular focus upon rural and regional Australia,
- the first programme on practical steps to reduce greenhouse gas emissions from rural industries and enhance carbon sinks,
- an expanded cooperative partnership programme across the wide spectrum of Australian industries, including Greenhouse Challenge Plus for Agriculture
- continued development of Australia's world-leading abilities to quantify and analyse emissions from land systems (and uptake by carbon sinks).

These programmes delivered through the Australian Greenhouse Office of the Department of the Environment and Heritage are being conducted in close partnership with rural industries, research and development agencies, and with the Australian Government and State Departments (particularly the Department of Agriculture, Fisheries and Forestry).

1.1 The Impacts of Climate Change on the Agriculture and Food Sector

The changing global climate will affect the operating environment of Australia's agriculture and food sector. Climate modelers in the CSIRO and in other research organizations provide scientific scenarios of the future state of the climate as greenhouse gas concentrations in the atmosphere grow. As might be expected with computer simulations of a complex climate system, which look a century or more into the future, there are some scientific conclusions that can be drawn with certainty and there are other conclusions in which there is considerable uncertainty. A snapshot of some projected changes in Australia's climate is provided below.

Australia's Future Operating Environment - Snapshot

- Global atmospheric **greenhouse gas concentrations** will continue to increase. Carbon dioxide levels in the atmosphere today are more than 30% above the pre-industrial atmospheric concentration, with most of this increase occurring in recent decades. Depending on future world development patterns, atmospheric carbon dioxide concentrations may double or more by the end of this Century.
- Average **temperatures** in Australia have risen by 0.7 degrees since 1910. Average temperatures are projected to increase by between 1.0°C and 6.0°C by 2070, but with different patterns in different regions of Australia.
- **Rainfall** patterns, amount and intensities are expected to change, though there is limited scientific understanding on the extent and timing, and changes are likely to be variable regionally.
- Frequencies and intensities of **extreme events** such as storms, floods, fires, heat waves and droughts are likely to increase, but the detail is not well understood at present.
- **Soil moisture** deficits are likely to increase as a result of decreasing rainfall, increasing temperatures, and increasing atmospheric evaporative potentials.

The agriculture sector as a whole has demonstrated resilience to climate variability in the past. However, extreme events such as droughts and floods put great pressure on economic returns in farming, and they impact significantly on the national economy.

Climate change over future decades can be expected to create additional pressure on some agricultural production systems. Not all systems will be affected to the same extent, altering relative performance of different agricultural sectors and regions.

In short, without strategic responses within the Australian agriculture and food sector, the longer term effects of climate change at regional or enterprise scales may be quite severe, impacting on the prosperity of rural communities and regional productivity.

Managed water systems could be particularly affected. Catchment scale approaches to managing water resources and risk will become increasingly important for water managers and users in the future.

A summary of the most likely climate change impacts relevant to the agriculture and food sector is provided on the following page [1].

Climate Change Impacts Relevant to the Agriculture and Food Sector

- Increased incidence and severity of droughts and other extreme events may reduce economic returns of many agricultural activities, especially the extensive cropping and animal industries.
- Greater frequency of extremely hot days may increase the incidence of heat stress in livestock.
- Reduced water for plant growth, even in 'normal' years could reduce the base levels of productivity in some agricultural regions.
- Increased temperatures could enable the southward spread of some tropical or sub-tropical pests and weeds.
- Reduced incidence of frost days, and changes to their timing, may impact on the chilling requirement for fruiting in horticulture and viticulture industries.
- Increased CO₂ concentrations in the atmosphere may influence plant growth, but in ways that are as yet undefined for Australian conditions.
- Flows in inland rivers and waterways are likely to decrease increasing the challenge of managing allocations between agricultural, urban, and environmental uses.
- Water quality in rivers and waterways may decline.
- Increased severity of droughts and storms could increase soil erosion risk.

The impacts of climate change will also vary considerably across the globe. Figure 1 (below) provides an illustration of the possible effect of climate change on cereal production as assessed in three global climate change models.

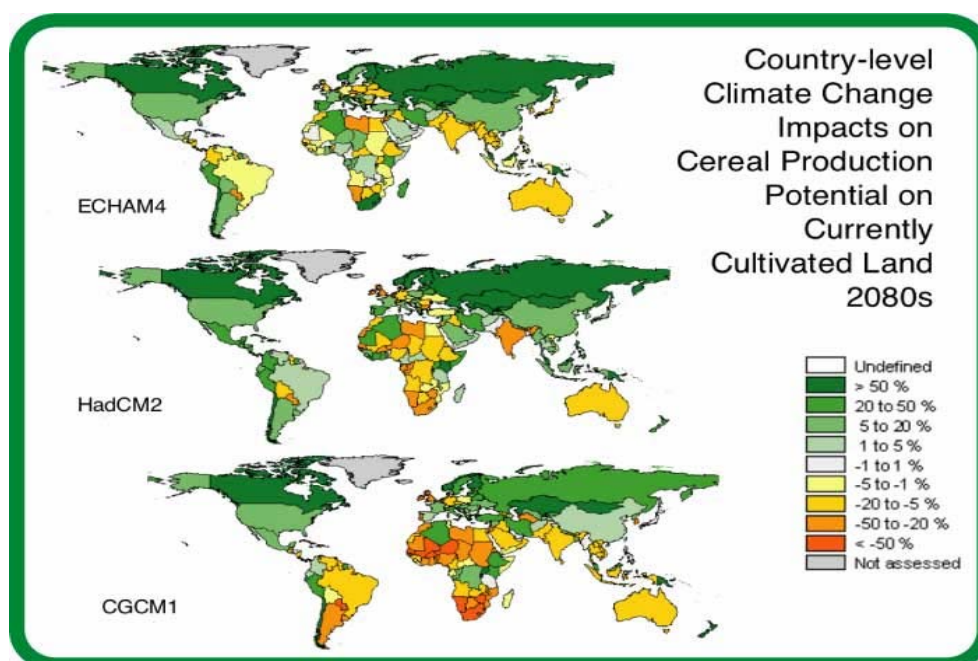


Figure 1. Country-level climate change impacts for the 2080s based on cereal production potential on currently cultivated land [2].

This type of scientific modeling is still at an early stage, but in each case, cereal production in Australia under the “do nothing scenario” is projected to come under increasing pressure. In contrast, northern hemisphere market competitors could have increased opportunity and more favoured climate conditions for agricultural production. Undoubtedly, balances of supply and demand in the international market place will change as a result. Conceivably, these changes in relative competitiveness could be significant for Australian agriculture, and it is important for Australia to have the technical capability to analyse properly such effects.

1.2 Managing Greenhouse Gas Emissions

Greenhouse gases change the radiative balance in the atmosphere producing warming in the lower atmosphere. The principal greenhouse gases are carbon dioxide, methane and nitrous oxide. Agricultural industries are a significant source of each of these greenhouse gases.

Around 17% of human-induced greenhouse gas emissions worldwide are estimated to derive from on-farm agricultural activities – and this estimate excludes land use change [3]. The proportion of emissions that derives from on-farm activities varies considerably between countries [4]. In the pool of developed countries with a higher economic reliance on the energy sector, this value is estimated to be 9% [3].

The current increases in demand for food worldwide, continuing population growth, and increases in buying power of developing countries for food products all lead to the view that the greenhouse gas emissions from agriculture worldwide will increase. It is estimated that under the current policy settings, the global emissions of greenhouse gases from on-farm activities could increase by 16% by 2020 [5][6].

Within Australia, 18% of the national greenhouse gas emissions derive from on-farm activities, and the amount of emissions has remained relatively constant since 1990 [7]. Land use change emissions associated with removal of forest cover on agricultural lands account currently for another 10% of national emissions, although there have been large reductions in land use change emissions since 1990. In addition, there are some emissions from on-farm energy usage, fuel used to transport agricultural commodities, and food manufacturing processes. Forest plantations and vegetation reestablishment on farms absorb carbon dioxide from the atmosphere (a carbon sink) which provides some offset to emissions.

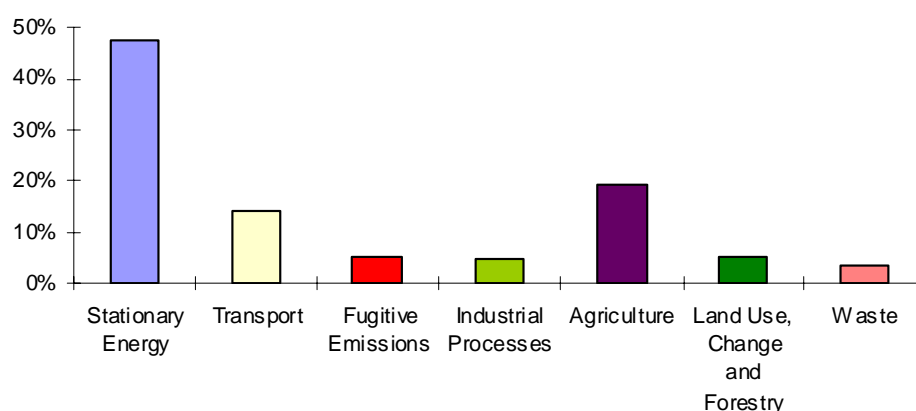


Figure 2: Australia’s greenhouse gas emissions by sectors in 2003 [6].

To date, internationally and in Australia, there have been few proven and cost-effective techniques for reducing greenhouse gas emissions from agricultural industries, exceptions being in some countries actions to limit deforestation and to restore tree cover on land, and actions to manage agricultural waste more effectively.

There is, however, an international recognition of potential opportunities for the global agriculture and food sector to reduce emissions of greenhouse gases. A growing body of applications research progressively is developing practical actions on farms and in agricultural industries that can reduce greenhouse gas emissions.

Australia, like many other countries, has adopted as a general principle that actions to address levels of greenhouse gas emissions should take a comprehensive approach. This means that in the future there will be expectations that the agriculture and food sector will progressively act to reduce its emissions as a part of this national effort. This scenario should be factored into thinking about the future operating environment for Australian primary industries over the next decade and beyond.

2. Maintaining Competitiveness in a Changing Climate

2.1 Building Resilience – Adapting to Climate Change

The 2002-03 drought gave a painful demonstration of the well-known dependence of Australian agriculture on climate. Farm output fell by close to \$3 billion, and the Australian Treasury estimated that GDP was one percent lower than it would have been without drought conditions. But even these figures give a false (and inadequate) picture as to the impact of drought in the agricultural and food sector and within communities in rural and regional Australia.

The future pressures of climate change on agriculture will vary by location and enterprise because of differential effects of the combination of climate change impacts. Recently, the Australian Government released a comprehensive Climate Change and Risk Vulnerability Assessment [8], in which the agriculture and food sector is identified as an area with high exposure to climate change and, when looked in overall terms, at high risk of adverse impacts.

Consequently, it is essential that the Australian agriculture and food sector give serious attention to avenues for adaptation to climate change. This strategy will be an important part of maintaining or improving competitiveness over the coming decades.

In essence, there are two approaches to address the impact of climate change in Australian agriculture. Both are necessary, and initial stages of each are proceeding concurrently through Australian Government Departments.

The first is to continually increase the precision and resolution of climate change modelling down to the regional and local levels. Armed with this, specific climate change exposures can be identified, and targeted actions developed to address the effects of climate change. The Australian Government's investments in the *Australian Climate Change Science Programme* make an important contribution in this area, and CSIRO and the Bureau of Meteorology are advancing world-leading capability in this emergent field of science.

The second approach is to build progressively increased resilience to climate change within the Australian agriculture and food sector, so that the industries themselves become more robust in withstanding the increasing exposures and positioned to capture any opportunities. Adaptation can be integrated with best management practice and whole farming systems. The *National Climate Change Adaptation Programme* focuses on this approach.

The Australian Government is showing leadership in these initial stages. The Department of the Environment and Heritage recommends to the Reference Group that an expanded national effort is required to address the impacts of climate change to secure the competitiveness of the agriculture and food sector over the coming decades.

The *Issues Paper* presented by the Reference Group already focuses on the need for risk management strategies and research to develop new crops and varieties suited to different climate patterns (p 3). The Department of the Environment and Heritage agrees with this, but recommends that this focus must include a concrete consideration of climate change, and managing the risks of climate change within the agriculture and food sector.

The Department (DEH) also recommends that research is required in a number of key areas to understand the effects of climate change on the agriculture and food sector. These include effects on plant growth and function (in particular the interactive effects of elevated CO₂, temperature, water availability, and nutrition), pests, weeds, and disease, and impacts on natural resources (in particular water availability, quality, and catchment hydrology).

2.2 Managing Greenhouse Gas Emissions to Enhance Farm Resources

Agricultural industries are a significant source of carbon dioxide, methane and nitrous oxide emissions.

In the livestock sector, cattle and sheep raising (ruminant animals) account for 12% of national greenhouse emissions – the single largest greenhouse emissions source from Australian agriculture. These emissions are primarily derived from the enteric digestion of fodder, which releases methane.

Typically, under Australian conditions, greater than 10% of the total feed value ingested by sheep and cattle is lost as methane. This methane represents lost energy value in the feed that is not available for growth of the animal [9]. The creation of livestock production methods that reduce methane generation in the animal could simultaneously increase animal productivity and reduce greenhouse emissions.

Decomposition of animal manure gives rise to methane and nitrous oxide. It is possible to adopt better manure management practices in some livestock systems. For example, in intensive livestock industries manure can be used to produce methane that is captured and burned as an energy source.

Disturbance of agricultural soils often results in loss of organic carbon in the soil and emissions of carbon dioxide to the atmosphere. Soil organic carbon is a prime measure of soil fertility. Cropping and other farming techniques that reduce soil carbon loss (or increase soil carbon levels) are likely to enhance soil fertility and reduce carbon dioxide emissions.

Nitrogenous fertilizers applied to soils under some environmental conditions (depending on soil moisture level and temperature) leads to loss of a significant fraction of the nitrogen in the form of

nitrous oxide into the atmosphere. Nitrogen lost in this way reduces the amount of nitrogen available for plant growth and reduces the cost-effectiveness of fertilizer applied.

Other sources of greenhouse gas emissions from the agriculture sector include burning of savanna vegetation and rice cultivation.

Creating new forest plantations on farmlands can create a new source of farm income while acting as a carbon sink. Similarly, vegetation establishment can improve sustainability of land management and serve as a carbon sink.

Australian sugar mills have for many years used bagasse as a source of processing energy; and some food processing installations recover methane from waste treatment. Climate change policies in Australia have created an emergent opportunity for electricity generation from renewable biomass sources. Biomass from agricultural industries could become a significant sustainable source of renewable energy, so replacing to some degree carbon dioxide emissions from fossil fuel use.

At this time, the technological and economic possibilities to create ‘win-win’ solutions – a better environmental outcome and a better economic outcome for agricultural industries – are known only to a limited extent. A great deal more research and analysis is required to determine what emissions management approaches may prove viable in future.

2.3 Tools and Initiatives to Build Sustainable and Competitive Agriculture Practices

This section briefly outlines three key Australian Government activities already underway that could form the basis of expanded efforts to address the issues of climate change in maintaining and improving the competitiveness of the Australian agriculture and food sectors.

2.3.1 The National Carbon Accounting System: Analysing Emissions of Greenhouse Gases from Land-Based Systems:

At the time of the Kyoto climate change conference, there was a widely held view internationally and in Australia that estimates of emissions and sinks in the agriculture and forestry sector were crude and inaccurate. Today, this is not the case for Australia.

Beginning in the late 1990s, the Australian Government commenced investment in building a new system that would accurately and robustly quantify the levels of emissions of greenhouse gases and the removals by sinks throughout the various land based activities in Australia. This was driven by the knowledge that 40% of Australia’s emissions in 1990 (the base year for the Kyoto target) were connected with agriculture and land use activities (compared to 28% today), and that Australia would need a credible technical measurement capability to demonstrate achievement of its Kyoto target.

Today, through its unique National Carbon Accounting System, Australia is a world-leader in carbon accounting of land systems. This provides an opportunity for a competitive edge for Australian rural industries in planning future actions on climate change response (and land management practices more broadly).

For several years now, Australia's national greenhouse accounts (known as the National Greenhouse Gas Inventory) have been assembled using this new accounting capability for land systems. The National Carbon Accounting System contains a vast array of data combined with a sophisticated computer model that includes:

- Satellite images of the continent (at 25 metre resolution), spanning back with 13 repeated and spatially consistent coverages over more than 30 years - to show over time the status of forest and woody vegetation cover,
- Data (present and past) on soil type and soil carbon content, vegetation type and biomass, and climate factors (such as rainfall and frost),
- Regional agricultural production practices and forestry management practices (present and past),
- Digital computer modeling of the carbon accounts at sub-hectare resolution, with results verified by field technical studies.

The National Carbon Accounting System is not complete. In 2006, the analytical capacity will extend to nitrous oxide emissions, thereby completing coverage of the three greenhouse gases relevant to agricultural industries. Other necessary enhancements planned to 2008 are set out in the programme development plan [10].

At the outset, the National Carbon Accounting System was designed to produce national greenhouse and carbon sink accounts at national scale. However, a combined objective was adopted so that the System would have high utility for agricultural industries and regional land managers. This is achieved by the fine scale resolution of the digital data sets and the capacity to operate the computer modeling at this fine scale.

In 2005, the Australian Government released the National Carbon Accounting Toolbox, providing freely-accessible on the desktop PC to any interested regional land manager or farming district the full data and modeling capability required to produce greenhouse accounts at any chosen location across Australia – with the outputs being consistent with the national account. Already, the Toolbox is finding growing use around Australia.

The Toolbox can answer a host of questions relevant to agricultural industries, catchment management authorities, or land managers, such as:

- What is the level of carbon dioxide emission from a crop production system at a specified location given local farm management practices?
- If trees of specified species are restored along the riparian zone of a region and in other places important for Landcare purposes, what will be the carbon sequestration benefit year-on-year into the future?

This unique National Carbon Accounting Toolbox capability provides Australia's agricultural industries with a potential competitive edge in planning and implementing greenhouse response action plans (and developments for associated purposes such as improved farm district productivity or natural resources management).

In the experience of the Australian Greenhouse Office (DEH) there is a need to substantially strengthen the capability in Australia to conduct regional socio-economic analyses – in this case to assess the cost-benefit of greenhouse response strategies at the regional level. In our opinion such economic and social analysis capability would have dual benefits for natural resource management and regional economic development planning.

A next key step with significant potential would be to link the local carbon accounting capability to a robust and comprehensive regional socio-economic modeling capability. This would enable cost-

benefit analyses of regional greenhouse response plans, and potentially could support cost-benefit analyses for regional natural resource management plans and regional economic development. Such a venture could be supported by a consortium of governments and industry bodies.

2.3.2 Research to Address Major Knowledge Gaps

As the *Issues Paper* clearly recognises, research is a major contributor to innovation, which in turn is integral to productivity growth in agriculture and underpins the competitiveness of the Australian agriculture and food sector. In this context, the Australian Government recently announced the *Greenhouse Action in Regional Australia Programme*, committing \$20.5 million over four years to build capacity in agriculture and land management to address climate change.

As part of this program, the Australian Greenhouse Office developed a *Strategic Research and Development Investment Plan* designed to promote and sponsor targeted research on managing greenhouse gas emissions and responding to climate change [11]. Knowledge gaps were defined, and research questions (priorities) formulated within a comprehensive plan (below).

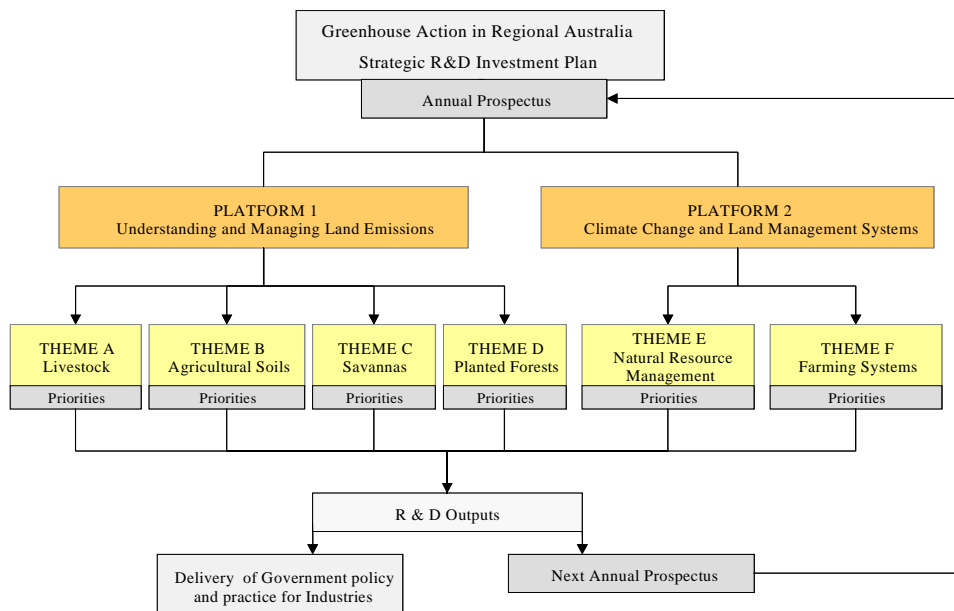


Figure 3. Strategic and operational structure of the Australian Greenhouse Office’s R&D Plan

A cornerstone of the R&D Plan is the recognition by government, industry, and research organisations alike that strong strategic and operational partnerships are needed. Research outputs can only be optimised and achievements maximised through effective and coordinated actions addressing common goals. This requires alignment of priorities and a commitment to work together, substantiated through a willingness to co-fund priority issues.

2.3.3 Industry Partnerships: Greenhouse Challenge for Agriculture

Greenhouse Challenge (Plus) for Agriculture is the Australian Government’s leading program for promoting change at the enterprise level within the agriculture sector to reduce greenhouse gas emissions [12]. The programme supports both the development of emissions inventory reporting, and the implementation of company action plans to achieve cost effective abatement. It is based

entirely on partnerships between the Government and agricultural enterprises to deliver simultaneously greenhouse gas reductions and commercial advantage to agribusiness.

There are three distinct (yet complementary) components within *Greenhouse Challenge for Agriculture*.

1. Increasing awareness – creating the want of change

Industry leaders in the cropping, grazing, viticulture and horticulture sectors are members of the *Greenhouse Challenge* program. By adopting good greenhouse practice, and demonstrating the benefits achieved, they serve as powerful examples to other enterprises. The achievements of programme members, and the multiple benefits of greenhouse actions, are also promoted in a range of publications.

2. Improved understanding – providing technical solutions

Greenhouse Challenge for Agriculture provides mechanisms for testing and validating technical solutions for change developed in part through the *Strategic R&D Investment Plan* (see above). There are also separate initiatives with industry and science research programs to develop on-farm actions. A prime focus within the program is to improve the capacity for the calculation of land-based emissions and to provide advice to industry on cost-effective abatement opportunities.

3. Extension through complementary programs – enhancing the capacity for change

Environmental Management Systems (EMS) and Adoption Pathways of Best Management Practice (BMP) are valuable tools that are being used increasingly to integrate environmental considerations into production and business processes. The incorporation of actions to reduce greenhouse gas emissions into EMS and BMP provides the best opportunity for individual enterprises or farms to improve resource and emissions management as a part of standard business practice.

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