

Climate Change Management Framework

Introduction

Climate change is an issue of social, economic and environmental significance.

This Climate Change Management Framework (see diagram last page) identifies PIRSA's strategy and action in South Australia's primary industries (agriculture, fisheries, aquaculture, forestry, minerals and energy resource sectors) to support ecologically and economically sustainable development under changing climatic conditions.



Challenges and key drivers for action

Scientific research and modelling inform us of climate changes affecting average temperatures, rainfall patterns and intensity of weather events among other things, which in turn, will impact on communities and industry. There are, nevertheless, varied opinions on the possible magnitude and timing of changes at different levels of business, public and the science communities, leading to significant uncertainty.

The climate challenges for primary industries are:

- To deal with **uncertainty**;
- To recognise and **understand** the extent, timing and impacts of climate change and its implications on lives and enterprises;
- To **integrate** climate change understanding with local circumstances;
- To **develop** appropriate strategies, response options, plans and actions;
- To **adjust** to new environmental and commercial conditions; and
- To **monitor** and review industry strategy when appropriate.



Objectives

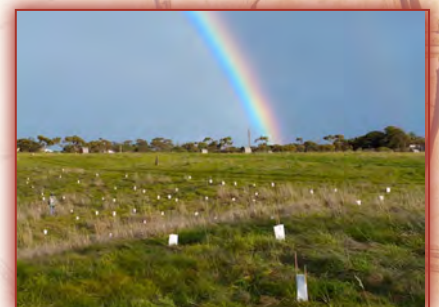
Several key drivers and the appropriate roles for government and communities, underpin a PIRSA climate change Action Plan. If implemented successfully, the following themes will enhance community capital by improving their information and skill sets for evidence based decision-making so they can face future challenges:

Science: to deal with uncertainty, identify climate change effects and implications, encourage collaborative research, and to inform decision-making policy and processes;

Adaptation: to support primary industries to plan for production - or withdrawal - under changing and variable climatic conditions;

Mitigation: to improve the impact of primary industries on climate change, to encourage the use of low emissions technologies and minimise waste;

Innovation: to realise new potential for wealth creation and a sustainable environment; and to create new best practice technologies; and



Communication: to improve understanding of the obligations, risks and opportunities as well as influencing state, national and international approaches.



Action

Strategy

Considering the role of government and the above challenges, PIRSA will:

- Support sectoral climate change **research**;
- Provide communities and business sectors with timely **access** to the science and assist in **interpreting** the information;
- Support appropriate **response strategies** and **plans** and development of **opportunities**; and
- Assist development of appropriate **policy settings**.



Role of PIRSA

While industry has a continuing business role, market forces alone may not deliver the required response. PIRSA can therefore support by providing information, a clear policy and a regulatory framework to guide effective responses.

Adverse climate impacts in regions and industries do not necessarily suggest that PIRSA should provide support. To qualify, PIRSA considers:

- The nature of the problem, industry or regional equity concerns and opportunities for an *in principle* case for providing assistance;
- How those facing climate change are placed to adapt to the change;
- Whether existing measures can address the issue in question; and if not,
- Whether intervention would result in a better outcome.

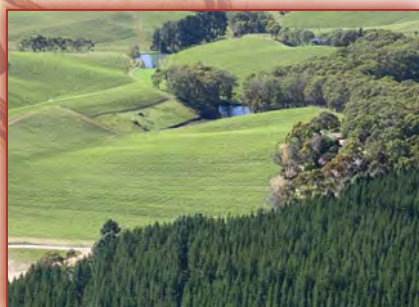
PIRSA's role in relation to climate change is to facilitate:

- Informed decision-making by government and private sectors,
- Effective responses to regional issues,
- Adjustment, adaptation, mitigation and innovation processes, and
- Appropriate, effective and efficient policy response frameworks.



Role of the private sector

Ross Garnaut (*The Garnaut Climate Change Review*, 2008) identified that climate change impacts are specific to each community, sector or enterprise, and that no level of government can provide all the local level data, detailed solutions or opportunities to safeguard communities or businesses. Garnaut concluded that communities or businesses will need to analyse available information at relevant scale and determine their own specific response accordingly.



Role of the community

The general community can play a part by providing local information for regional adaptation and mitigation initiatives that feed into government climate change programs.

Adaptive management and the action agenda

PIRSA's Action Plan aims to inform decision making; seek equitable outcomes; assist adjustment, adaptation, mitigation and innovation processes; and develop appropriate regulatory frameworks.

As our understanding of climate change and capacity to respond improves PIRSA will apply its adaptive management approach, monitor and review developments and revise strategies and actions accordingly. Each new perspective will lead to further research and progress to new implications, drivers and a revised action agenda.



Monitoring and evaluation

Learning from strategic climate change activities is an essential part of PIRSA's climate action programs. Lessons learned will influence and improve further actions.

Draft Action Plan

This Action Plan will realise the Strategy outlined in this Framework and must be read with regard to the role of PIRSA outlined above.

In developing the action plan, details such as lead role, key performance indicators, project leader and resources, will be identified for each action.

Action	
Research (increase scientific knowledge of processes, impacts and implications of climate change; encourage collaborative research effort; understand how to apply the findings)	
1.	Stocktake PIRSA's current climate change work including the exposure or vulnerability of industry sectors
2.	Research climate change processes, impacts and implications; collaborate with other research organisations; apply and demonstrate findings
Communicate Implications (inform Government, communities and industry, improve understanding of obligations, risks and opportunities; influence national and international obligations – see Communications Plan in Discussion Paper)	
3.	Establish effective public access to appropriate climate information and science
4.	Coordinate PIRSA's communications and strategies with other government climate responses
5.	Assist stakeholder communities to develop a more informed understanding of possible climate change impacts
Action Agenda	
<i>Adaptation</i> – maintain and improve primary production under changing climate; increase resilience	
6.	Assist community and industry to develop appropriate response strategies and their implementation
<i>Mitigation</i> – reduce contribution of primary industries to climate change; increase sequestration of carbon; encourage the use of low emissions technologies; raise efficiency of resource use (energy, materials etc); minimise waste	
7.	Support sequestration research, development of geothermal and bio-energy sources, reduction and/or re-use of waste
8.	Provide information and support to communities and industry to reduce emissions and increase sequestration
<i>Innovation</i> – identify new potential for new best practice technologies, wealth creation and a sustainable environment;	
9.	Support identification of new productivity and efficiency opportunities and a sustainable environment; develop of new best practice technologies for changed climatic circumstances
10.	Review - with stakeholder input, monitor and periodically review and revise this action plan and strategies implemented



PIRSA Climate Change Management Framework Model



Further information

A more detailed summary of PIRSA's position on climate change is in the complementary Working Paper:
"Climate Change and the Primary Industries and Resources Sectors in South Australia".

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