



**Environment and Energy**

**AUSTRALIAN INDUSTRY GROUP  
COMMENTS ON**

**PROSPERING IN A CHANGING CLIMATE**

**DRAFT CLIMATE CHANGE ADAPTATION  
FRAMEWORK FOR SOUTH AUSTRALIA**

**APRIL 2011**



AUSTRALIAN INDUSTRY GROUP

**Australian Industry Group**

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## 1. THE AUSTRALIAN INDUSTRY GROUP

The Australian Industry Group (Ai Group) is a peak industry association which along with its affiliates represents the interests of more than 60,000 small, medium and large businesses in an expanding range of sectors including: manufacturing; engineering; construction; automotive; food; transport; information technology; telecommunications; call centres; labour hire; printing; defence; mining equipment and supplies; airlines; and other industries. The businesses which we represent employ more than 1 million employees. Ai Group is closely affiliated with more than 50 other employer groups in Australia alone and directly manages a number of those organisations.

Ai Group welcomes this opportunity to provide comment on the Draft Climate Change Adaptation Framework for South Australia (the Draft Framework).

## 2. KEY OBJECTIVES

There is increasing evidence that Australia is at risk of experiencing significant climate change as a result of global emissions of greenhouse gases from human activities. While the precise change in climate is anticipated to be different for each region, the general trend anticipated is for Australia to become hotter and drier and for the frequency and intensity of storms and bushfires to increase.

Ai Group is broadly supportive of the four overarching objectives identified in the Draft Framework.



Ai Group further supports the recognition that an effective adaptation strategy will require a coordinated regional and sectoral approach. As stated in the Draft Framework:

*“When potential regional effects are understood key sectors will need to develop adaptation responses that build resilience to climate change, with action required at the statewide, regional and individual enterprise levels. Sectoral responses will need to take into account the economic, social and environmental implications of climate change and the complex interactions between sectors.”*

### **3. GUIDING PRINCIPLES FOR ADAPTATION ACTION**

Ai Group is broadly supportive of the guiding principles for adaptation action as outlined in the Draft Framework:

- Deliver adaptation actions where there is a plausible risk of harm even in the absence of complete scientific proof
- Prioritise actions based on the careful assessment of risks, costs, efficacy and equity using the best available science to inform adaptation responses
- Give priority to those sectors that are likely to provide the greatest social, economic and environmental benefit for the state
- Develop responses at the most appropriate scale to effectively address risks and maximise opportunities
- Involve individuals, industry, business, academia and all tiers of government in developing responses using a coordinated approach
- Build on, enhance and learn from the experience of communities, sectors and regions in developing adaptation responses
- Plan for uncertainty and take action using an adaptive management approach to allow for readjustments as new information arises
- Use the best available, most appropriate and locally relevant science that is based on good data and robust processes to inform those best placed to deliver adaptation responses and manage risks
- Take into account population projections and socioeconomic trends recognising uncertainty and need for flexibility to respond to emerging trends
- Consider the interconnections between social, environmental and economic systems and the linkages between sectors in order to make appropriate tradeoffs where necessary
- Ensure responses avoid unintended consequences and do not undermine our ability to adapt over the long-term
- Take early action where there are demonstrated cost-benefits
- Ensure that adaptation responses are appropriately integrated and mainstreamed

### **4. ROLE OF THE STATE GOVERNMENT IN A COORDINATED RESPONSE**

Ai Group welcomes the recognition in the Draft Framework that:

*“Adaptation to climate change is a shared responsibility and involves a joint effort by all levels of government, business, communities and individuals”.*

Ai Group supports the stated intention that “Work undertaken as part of this Framework will ensure that adaptation actions are delivered efficiently, with less duplication and at the most appropriate level”.

Ai Group is broadly supportive of the four broad roles identified in the framework for the State Government:

- Encouraging climate change resilience and adaptive capacity including by utilising regulatory and policy instruments
- Providing or disseminating relevant local and regional science and information
- Managing public assets (including natural assets), infrastructure, service delivery and programs
- Cooperating with other governments to implement national adaptation reform

The Draft Framework further identifies that some of the specific roles for the State Government may include:

- Raising community awareness and promoting a risk management response to climate change adaptation by government and private parties
- Ensuring that regulatory and market frameworks including state planning, property and environmental legislation promote effective adaptation by private parties
- Partnering with the business sector and providing support for adaptation responses by business
- Working with other governments to identify and implement priorities to improve adaptive capacity and strengthen climate resilience in vulnerable communities
- Supporting local governments to facilitate building resilience and adaptive community and to ensure that policies and regulations are consistent with the State Government adaptation approaches
- Managing risks from climate change impacts to services provided by the government in such areas as emergency management, transport, land use planning, environment, health services and public housing
- Undertaking actions where these will not be initiated by the private or community sectors because of market failure, for example by strengthening the resilience and adaptive capacity of natural systems
- Establishing science and research priorities and conducting research in key areas of specific interest to South Australia not addressed in national research priorities and outcomes
- Providing information and decision-making tools that are relevant to local communities, including educating communities about how to adapt to a highly variable climate
- Facilitating institutional arrangements that provide for an integrated approach to adaptation among sectors
- Collaborating with other jurisdictions to develop national standards, codes and approaches and implementing them through state regulatory instruments.

The above list represents important areas for potential State Government activity under a nationally consistent climate adaptation framework. In particular, Ai Group strongly supports the role identified for

the State Government in partnering with the business sector and providing support for adaptation responses by business.

## **5. EQUIPPING BUSINESSES TO ADAPT TO CLIMATE CHANGE RISKS**

Climate change poses three broad types of risks that can impact on a business' operations and profitability including:

- Resource scarcity and higher costs (eg energy, water, food)
- Accelerated deterioration of materials and equipment (due to the more severe climate)
- More extreme weather events (eg heatwaves, floods, droughts, storms)

The Draft Framework identifies as a key role for business

*“Undertaking the necessary in-house research to understand the implications that climate change is projected to have for each regional industry.”*

Ai Group research indicates that companies consider themselves poorly informed about strategies and approaches to managing climate change and greenhouse gas emission reduction. This is compounded by a lack of internal management resources.

Successful adaptation will necessitate action by industry to identify and respond to climate change threats at an early stage. Given that adaptive planning and decision-making within industry will primarily occur within the context of individual businesses or corporations, there is a need for the State Government to better engage with business in understanding adaptation risks and in the identification of innovative and best practice adaptation strategies.

- Ai Group advocates introduction of an Industry Adaptation Initiative focussing on development of pragmatic, broadly applicable approaches that will assist businesses undertake risk assessments. Such a program should incorporate:
  - Provision of information to industry on the practical implications to businesses and regions from the projected economic, social and environmental impacts of climate change
  - Practical assistance in the identification, assessment and implementation of innovative adaptation solutions including across supply chains
  - Trialling of adaptation solutions in priority sectors and regions.

A key objective is development of strategic resilience in industry through the identification and/or assessment of climate change adaptation initiatives and facilitate development of in-house expertise, including development of carbon management plans and internalisation of adaptation considerations.

### **5.1. Industry Adaptation Case Study – Murray Goulburn Co-operative**

Ai Group considers that the industry adaptation case study which we recently undertook of the Murray Goulburn Co-operative facilities in Cobram (regional Victoria), with funding from the Department of

Sustainability and Environment, provides a good model for cooperative delivery of practical support to industry to develop climate change adaptation strategies.

The project involved:

- Compilation of climate change projections to late this century for the Cobram region
- Research into possible climate change risks, risk controls and adaptation options
- A day-long risk assessment and adaptation planning workshop with senior MG managers at Cobram
- A half-day review workshop by MG general managers at the Murray Goulburn head office
- Interviews with various Murray Goulburn managers to assess the company's climate change adaptive capacity
- Making recommendations on actions that Murray Goulburn might take to adapt to climate change.

Risks were prioritised by assessing the 'consequence' of each risk in terms of: shareholder value, growth, supply chain, human resources and compliance, and then by assessing the likelihood that a risk event would occur. A risk matrix was then used to establish the level of the risk (from extreme to low).

In addition to identifying a number of climate change risks and strategic responses, the project also highlighted the following lessons:

- There is a need to review and re-assess risk priorities in light of actual experiences.
  - In January 2011, during the project, Murray Goulburn's Rochester milk processing plant in northern Victoria was inundated by floodwaters. This experience prompted the Murray Goulburn managers to re-assess the priority of stormwater entering the Cobram facilities, raising it from 'medium' to 'high'.
- Managing risks is an iterative process.
  - As new information becomes available, it is important that there are systems in place to allow for the risks and adaptation actions to be reviewed, revised, updated and communicated.
- There is a need to consider the possibility of multiple coincident risks and assess the consequences, likelihood and the priority of groups of risks.
  - On 7 February 2009, Victoria experienced its most devastating bushfires. 173 people lost their lives. Now known as Black Saturday, this day was the third hottest day on record and followed three consecutive days over 43°C. There were very strong winds, minimal precipitation in the months preceding and it occurred at a time when Victoria was into its tenth consecutive year of drought. As well as the bushfires in that period, Victoria experienced rolling power 'blackouts' and chaos on Melbourne's train network due to railway lines buckling in the extreme heat. This is an example of multiple risks occurring at the same time, resulting in cumulative impacts that are greater than the impacts of the individual risks.
- Risk assessments invariably benefit from the involvement of a wide group of stakeholders.

- Climate change risks could impact across many areas of a business. Decisions regarding climate change risks and adaptation responses at Cobram were relevant to senior managers at its Cobram facilities and throughout the supply chain.
- There is the need to 'mainstream' the management of climate change risks within the organisation. Climate change risks are just another category of risk and the management of climate change risks should be integrated with other business risk systems and activities.
  - Climate change risks are not the responsibility of one department or one keen individual. They affect the whole organisation and need to be managed on that basis. Organisations should have systems in place to avoid the risks or mitigate their impacts.
- Dealing with climatic variability enhances adaptive capacity for climate change. Adaptation actions designed to treat climate change risks will, in most cases, also provide immediate benefits by enhancing the organisation's capacity to cope with climatic variability.
  - Murray Goulburn was affected by the Victorian drought of 2002-2010 and has experienced flooding (Rochester, January 2011) and bushfires (Maffra, February 2009). The experience of Murray Goulburn employees, and operational systems put in place to cope with climatic variability during these times, have made the business more resilient to the challenges of more severe extreme weather events and resource scarcity that climate change is projected to bring.

Ai Group is producing a case study report and a checklist of climate change adaptation considerations for industry to promote the learnings from the project and potential adaptation solutions.

Consistent with the position taken in the Draft Framework that attention needs to be given to businesses and sectors that have the potential to prosper through effective adaptation, the checklist seeks to encourage businesses to consider the opportunities arising from climate change impacts.

## **5.2. Energy Efficiency and Adaptation to Climate Change**

Energy efficiency is both a key climate change adaptation and greenhouse gas mitigation response. Disturbingly, Ai Group's most recent survey of energy input costs and energy efficiency efforts identified some 73 per cent of businesses had not made energy efficiency improvements or had experienced reductions in energy efficiency over the last 5 years. A further 12 per cent reported improvements of 5 per cent or less.

Over half of all companies surveyed (57 per cent) expected their energy efficiency to be unchanged over the next 2 years. Around 27 per cent envisaged making marginal energy efficiency improvements and just 3 per cent of respondents expected to make significant energy efficiency improvements, with a similar number of respondents expecting deterioration in energy efficiency.

Analysis of the results identifies that neither the differing level of staff and investment resources available to respondents, nor the greater exposure of large companies to mandatory energy and efficiency reporting, appears to make a substantial difference to expectations. This serves to emphasise the

importance of provision of practical assistance to build understanding of energy efficiency opportunities beyond light bulb upgrades in partnership between the State Government and industry associations.

### **5.3. Innovative Supply Chain Solutions**

As identified in the Draft Framework, State Government, local government, business, non-government organisations, the research sector and communities will all need to work together to achieve the objectives of the Adaptation Framework.

Environmental improvement has historically focussed at the company or site level. However, in the case of climate change adaptation, a supply chain approach may be the most appropriate. By considering environmental impacts across supply chains this approach can ultimately enable businesses to make more informed and better decisions in product manufacturing, purchasing, distribution and product development.

Evidence suggests that individual companies often find it difficult to pursue a supply chain approach to environmental management. However, Ai Group research has identified that many businesses have limited engagement with their supply chain.

Ai Group has recently delivered an innovative supply chain project focussing on identification of carbon efficiency opportunities for 2 iconic products in the food sector. Ai Group considers that this project provides a useful delivery model for a supply chain approach to adaptation planning.

The Pilot applied life cycle assessment methodologies to determine the carbon footprint associated with production and distribution of each product. The consumer 'use phase' of each product was not studied as project resources focused on measures that could be implemented within the supply chain. The results of this study enabled the identification of 'carbon hot spots' across the supply chain and investigation of abatement opportunities. Ai Group contracted experts to assist with delivery of the project. All studies were funded by the Pilot with significant in-kind support from participating companies.

Key project steps included:

1. Carbon footprint studies (carbon life cycle assessments or LCAs);
2. Carbon abatement studies;
3. Workshops with representatives from each supply chain to identify carbon abatement opportunities;
4. Participant surveys;
5. Reporting of results to SV, participants and stakeholders; and
6. Promotion of the program and sharing of learnings.

## 6. REFINEMENT OF DRAFT FRAMEWORK

The Draft Framework is a useful first step in identifying key stakeholders and statewide priorities. Ai Group looks forwards to assisting to develop more detailed government strategies at regional, sectoral and statewide levels.

Ai Group formally requests inclusion as a key partner in development of adaptation responses, including in the areas of:

- water resources
- infrastructure and
- manufacturing and services

It is critical that sectoral responses take into account the economic, social and environmental implications of climate change, as well as the complex interactions between sectors. The manufacturing sector is already suffering the effects of accelerated water and energy cost increases in a global market where these cannot easily be recouped. The State's manufacturing sector continues to employ around 85,000 South Australians and represents a higher proportion of our State's economic activity than anywhere else in Australia, with the exception of Victoria. Premier Rann recently noted that manufacturing has been a foundation pillar of South Australia's economy for decades, and it remains a critically important source of value creation.<sup>1</sup>

## 7. Ai GROUP CONTACT DETAILS

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<sup>1</sup> Address by Premier Rann to the Australian Industry Group Economic Forum Friday, 11 March 2011.

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