



SUBMISSION

On

Draft Climate Change Strategy for Tasmania

By

TASMANIAN FARMERS AND GRAZIERS ASSOCIATION

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SUMMARY

The TFGA believes that any impacts of a changing climate on agriculture are a key concern because of this sector's importance to the Tasmanian economy.

The focus of climate change strategies for Tasmania necessarily must be on adaptation to secure agricultural production into the future as well as our rural environment generally. As an industry sector Tasmanian farmers also acknowledge our responsibility to contribute our fair share to mitigation strategies by reducing our own greenhouse emissions.

The key recommendations from the TFGA relating to the Draft Climate Change Strategy for Tasmania are as follows:

1. The Tasmanian Climate Change Strategy should be supported by a whole of government "Climate Change Action Plan" to guide implementation;
2. The State Government should establish and invest in a flagship "Climate Change Research and Policy Program";
3. Climate change necessitates the need for a comprehensive and far-sighted "State Government Water Resources Strategy" to secure rural and urban water supplies and infrastructure into the future.
4. The State Climate Change Strategy must clearly link to the recently released Tasmanian Biosecurity Strategy to ensure a proactive and immediate response to any biosecurity threats.
5. The State Government should develop a specific "Alternative Energy Partnership Initiative" to facilitate co-investment in innovative energy efficient technologies.
6. The TFGA encourages the State Government to contribute to the development of a nationally consistent carbon-trading scheme and in doing so Government should actively facilitate greater input from Tasmanian agricultural industries.
7. The State Government should take a leadership role to consult specifically with the agriculture industry on climate change issues.
8. The State Government should coordinate initiatives across local government and federal arenas that encourage the Tasmanian community to adopt of clean green technologies and approaches.
9. State Government needs to encourage the use of smart energy incentives.



BACKGROUND

The Tasmanian Farmers and Graziers Association (TFGA) is the State's peak representative body for farmers. Membership totals some 5,000 enterprises covering the wool, meat, dairy, vegetables and cereals and seed production industries. Members are also involved in a range of other agricultural activities, including poppies, berries and pyrethrum, and private forest management and wood production in both native forests and plantations.

Climate change clearly poses challenges, threats and opportunities for all sectors of the Australian economy but particularly those sectors dependent on natural resources such as agriculture.

Weather and climatic forces heavily influence agriculture. Factors such as temperature, rainfall, evaporation and their patterns and variability will impact on agricultural production and our rural environments generally.

The die has been cast and climate change will continue in the short term regardless of our actions. It is a global problem requiring a global response. This is why at the farm scale, smart and timely adaptive strategies are paramount. However it is also not an excuse to do nothing about the causes of climate change such as continued growth in greenhouse gas emissions. Our actions now even locally in Tasmania, will influence the environment in which future generations will operate.

Accordingly the TFGA is advocating for active engagement on the issue at all levels and by all stakeholders to dispel any myths, measure the realities and identify solutions.

TFGA VIEWS ON CLIMATE CHANGE

The TFGA acknowledges that responding to climate change is potentially the biggest issue impacting on the viability and sustainability of farming into the future.

Therefore first and foremost climate change strategies necessarily must focus on *adaptation* to secure agricultural production into the future as well as our rural environment generally.

In this regard the TFGA believes that:

1. There is a plethora of information at global and national levels. Farmers require accurate regional and if possible local information and robust decision support tools to enable them to plan and adapt to climate change challenges.
2. Securing long-term water resources is vital to manage on-going affects of climate change on rainfall, water quality and water allocation. The development of water infrastructure and more efficient water utilization systems is required to maintain viable agricultural production.

As an industry sector Tasmanian farmers also acknowledge our responsibility to contribute our fair share to *mitigation* strategies by reducing our own greenhouse emissions. Accordingly:



3. Increased research is required to better understand the on-farm and agricultural sector emissions profile, and the potential for both emission reductions and carbon sequestration in agriculture.
4. The TFGA supports Tasmania's involvement in the development of a nationally consistent Carbon Trading Scheme. However, given the role of agriculture in this issue it is vital that farmers be actively engaged any discussion regarding carbon trading and accounting.

ISSUES FOR AGRICULTURE

The following section provides comments on the draft Climate Change Strategy specifically relating to issues for Tasmanian agriculture. Our comments are prepared as per the order of the Action Plan in the Strategy document.

Objective 1: Government Leadership

Climate change is too important an issue to be driven by populist rhetoric or uncoordinated policy responses. A key concern for farmers is the potential for all three levels of government to enact potentially conflicting climate change strategies in isolation and presumably all with potential to impact on how farmers can farm.

The State Government has a vital role to provide sensible leadership and ensure clear, consistent and non-political responses. Firstly, the State Climate Change strategy must provide the overarching framework upon which both state government agencies as well as local government initiatives develop from.

Secondly, the Strategy must further the development of consistent national approaches to climate change policy. For agriculture, the State Government's approach should be to facilitate national consistency by linking the State Climate Change Strategy with the National Agriculture and Climate Change Action Plan. This will enable a seamless transition between any state strategies with national strategies for agriculture.

Underpinning the State Government's leadership role on climate change is the need for significant investment into the various initiatives proposed in the Draft Strategy, as well as a clearly defined action plan for how the Strategy will be implemented.

Recommendation:

1) The Tasmanian Climate Change Strategy should be supported by a whole of government "Climate Change Action Plan" to guide implementation that includes:

- ***State budget appropriation forecasts;***
- ***Key performance indicators; and***
- ***Roles and responsibilities across all levels of Government and Industry***



Objective 2: Adaptation and Strategic Planning

Climate change projections for Tasmania warn that the rural and urban communities should prepare for higher temperatures, less rainfall, fewer frosts and more extreme weather events. These changes are likely to have significant impacts on agricultural productivity, water supply, infrastructure, biodiversity and human health.

Even if it was possible, winding back the clock is only ever a long-term option. Farmers require sensible and flexible adaptive management responses based on the best available science.

Adaptation to climate change impacts will require a thorough understanding of projected impacts on Tasmanian regions, sectors of economy and society as a whole. It also requires an understanding of how effective our current approaches to managing climate variability and extremes are, and assessment of the range of management and policy tools available to help reduce future vulnerability to climate change.

Recommendation:

2a) The State Government should establish and invest in a flagship “Climate Change Research and Policy Program”.

Operating through the Tasmanian Institute of Agricultural Research (TIAR) the Program could co-ordinate collaborative research efforts to address critical knowledge gaps and also support primary industries to develop appropriate policy or management responses.

Objective 4: Plan for the Impacts

A recent study on climate change risk and vulnerability in Australia, undertaken for the Australian Greenhouse Office, identified agriculture as a priority sector because of its significance to the economy and its potential vulnerability (Allen Consulting Group 2005).

The Australian Greenhouse Office's Guide to the Science and Potential Impacts (2003) records the following consequences of climate change:

- A decrease in available water resources;
- Higher temperatures and hence evaporation;
- Increased heat stress of livestock causing reduced weight and milk yields;
- Reduction in chilling cultivars, viticulture (vineyard yield);
- Damage of crops from extreme weather, increased pests and disease outbreaks;
- A reduction of area of arable land from the 'dustbowl effect'; and
- A reduction in crop yield and quality.

Agricultural systems have shown considerable capacity to adapt to the climate — changes in land management practices, crop and cultivar choice and selection of animal species and technologies that increase water use efficiency have all been used to change the geographic and climate spread of our agricultural activities. All of these activities could and will be deployed by farmers to respond to climate change, although as the degree of climate change increases the limits of this adaptive capacity may be tested.



Farmers therefore require accurate regional and if possible local information and robust decision support tools to enable them to plan and adapt to climate change challenges.

The value of water for consumptive and environmental users will continue to increase with the inevitable pressures resulting from climate change. The development of infrastructure and more efficient water utilization systems is required to maintain viable agricultural production, and thereby secure water resources from the affects of climate change.

Recommendations:

2b) A flagship Climate Change Research and Policy Program could co-ordinate specific actions required by agriculture in:

- **Improving climate forecast modeling on the effects of climate change to assist farmers to adapt and plan for the future.**
- **Establishing a specific research theme relating to “adaptation” examining issues such as risks and opportunities for current and future land uses or enterprises, bushfire frequency and intensity, water availability, flooding, weeds and pests incursions.**
- **Facilitating an inventory of greenhouse gas emissions and sequestration for Tasmanian Agriculture, including a cross-section of all sector profiles.**

3) Climate change necessitates the need for a comprehensive and far-sighted “State Government Water Resources Strategy” to secure rural and urban water supplies and infrastructure into the future.

Such a strategy would set the framework beyond the current State Water Development Plan and:

- **determine Government priorities for sustainable water development;**
- **promote efficient Government water administration; and**
- **leverage industry participation and co-investment across all levels of Government.**

Objective 5: Population and Community Health and Safety

It is important that the State Government has strategies for the anticipated increase of pests and diseases associated with the affects of climate change.

As stated by The Australian Greenhouse Office, 2003, ‘Climate change an Australian guide to the Science and Potential Impacts’; Cropping, horticulture, livestock and forestry industries in Australia are vulnerable to changes in the incidence of existing pests, parasites and pathogens and incidence of new varieties.

Recommendation:

4) The State Climate Change Strategy must clearly link to the recently released Tasmanian Biosecurity Strategy to ensure a proactive and immediate response to any biosecurity threats.



Key concerns for agriculture requiring significant Government investment include:

- **Enhanced prevention and early intervention programs to protect Tasmania's biosecurity status;**
- **Improved knowledge of the extent and impact of pests and diseases from the affects of climate change; and**
- **Establishing decision making and cost sharing arrangements to better monitor pest and disease risks to Tasmania.**

Objective 6: Renewable Energy and Innovation

The whole question of energy is a complex one for agriculture. Fundamentally modern Tasmanian agriculture is based on increasing mechanization, increased irrigation development and road and sea transport logistics. Diesel and electricity inputs to support modern farming systems contribute to ever-increasing costs of production. Whilst Tasmania arguably leads Australia in hydroelectric and wind power, the broadscale use of so called "clean" fuels in any practical commercial sense is some way off.

It would therefore be of significant concern to farmers if Government moved in any way to regulate for renewable energy sources without there being practical and feasible alternatives in place. Rather, State Government can play an important role in encouraging local innovation and also to develop market signals that encourage development and uptake of alternative fuels.

For example other mainland State Governments such as Queensland, South Australia and NSW are investing in programs to develop ethanol and biofuel industries as well as incorporating biofuels into public transport systems and Government vehicle fleets.

It is also now widely recognized that if properly implemented, a national greenhouse emission trading scheme would create real incentives for all sectors, but especially farmers, to find economically efficient ways to reduce greenhouse emissions.

Recommendation:

5) The State Government should develop a specific "Alternative Energy Partnership Initiative" to facilitate co-investment in innovative energy efficient technologies.

Objective 8: Promotion of Carbon Sinks and Sustainable Land Management

The promotion of carbon sinks in rural landscapes is a complex issue for farmers.

Across Australia farmers are seeking greater Government recognition of how the practices they are adopting assist with the reduction of greenhouse emissions. For example:

- The Australia's National Greenhouse Gas Accounts 2004 report shows that Australian farmers, by reducing land clearing rates since 1990, are offsetting huge increases in greenhouse gas emissions from the energy sector.



- Even though farmers are carrying almost the entire load of meeting Australia's emissions target, they have not been financially rewarded for their greenhouse reduction efforts. This is the direct consequence of two key policy decisions by the Federal Government: the rejection of the Kyoto Protocol and the decision not to institute a domestic emissions trading market in greenhouse gas emissions (The Climate Institute, 2006).
- Indications show that sustainable land management practices like minimum or no-till cropping, maintenance of permanent groundcovers and better application of fertilisers have contributed to agriculture in achieving a 40% decrease in greenhouse gas emissions since 1990.
- Tasmanian farmers are now by regulation required to conserve threatened forest and non-forest vegetation communities. In addition, Tasmanian farmers are adopting more sustainable farming programs led by a variety of government and industry-funded Landcare, natural resource management and Private Property Conservation Programs.

At the same time the TFGA would be concerned if Tasmanian farmland was to become the carbon sink for Australia through, for example, a greenhouse market driving excessive plantation development. However, we do support the integration of forestry into productive agricultural landscapes as part of enhancing the potential farm enterprise mix.

Tools such as Property Management Systems (PMS) provide a practical framework to achieve multiple benefits in terms of productivity, economic returns, environmental management and sustainability on farm. Going forward, the TFGA sees real potential for PMS to assist farmers to evaluate their own emissions profile, develop on-farm responses and facilitate carbon-trading opportunities.

While the Prime Minister's Task Group on Emissions Trading has published its first issues paper, Joint Government Issues Paper 2007, that suggests the use of a market-oriented trading scheme involving tradeable permits allowing holders to emit specified amounts of greenhouse gases is a more viable option than imposing a carbon tax on Australia's industry.

With the above issues in mind, the TFGA supports Tasmania's involvement in the development of a nationally consistent carbon cap and trade scheme. However, that support is predicated on the assumption that farmers must be actively engaged in any discussion regarding carbon trading and accounting.

Recommendation:

6) The TFGA encourages the State Government to contribute to the development of a nationally consistent carbon-trading scheme and in doing so, Government should actively facilitate greater input from Tasmanian agricultural industries.



Objective 10: Informing and Involving

Of critical importance when Government is developing climate change strategies is active consultation with the community as a whole and specifically with the agriculture sector.

Greenhouse gas emissions come from almost all sectors of the economy. A range of measures implemented by the State Government will ensure that all sectors can effectively. Measures in the areas of research and development, awareness raising, community empowerment, capacity building, voluntary programs, market mechanisms and well targeted regulation need to be pursued.

Recommendation:

7) The State Government should take a leadership role to consult specifically with the agriculture industry on climate change issues, including

- ***Implementing an awareness raising campaign to communicate the challenges and ways to reduce emissions and adapt to inevitable change; and***
- ***Hold a series of industry specific best practice roundtables to showcase innovation approaches to emission reduction and adaptation.***
- ***Utilize the proposed TIAR Climate Change Research and Policy Program, as a way to collect and analysis farming community needs.***

ISSUES FOR THE TASMANIAN COMMUNITY

Further to the aforementioned issues pertaining specifically to agriculture, the TFGA believes that farmers are just one-part of the total community response that is required to address challenges of a changing climate. We therefore offer the following comments that apply beyond just agriculture to the Tasmanian community as a whole.

Objective 3: Land Use, Infrastructure and Transport Planning

Environmental planning, policies or land use regulations should be developed with full consideration to all the economic, social and environmental benefits and costs. Greenhouse gas emissions come from almost all sectors of the economy.

The State government needs to implement a range of measures that will ensure that all sectors can contribute and to ensure that no opportunities for low cost emission reductions are missed.

Recommendation:

8) The State Government should coordinate initiatives across local government and federal arenas that encourage the Tasmanian community to adopt of clean green technologies and approaches, including:

- ***Providing the community with the tools and strategies to help limit climate change.***



- ***Encouraging the community to make eco-friendly choices covering energy, water, buildings, waste and gardens.***
- ***Research into utilizing and encouraging fuel efficient and low greenhouse gas emission technologies.***

Objective 7: Encourage the Efficient Use of Energy

There is a requirement to encourage all industry to take up new and cleaner energy technology by reconfiguring the incentives and disincentives in our tax system to encourage investment in cleaner and renewable energy technologies.

Examples of the government reducing impacts to the community are by providing:

- Financial incentives on clean energy; solar powered hot water systems. Give people the option of moving towards an energy smart home.
- Discount on vehicle registration for fuel efficient vehicles – vehicles could have a star rating system.

Recommendation:

10) State Government needs to encourage the use of smart energy incentives that provide:

- ***An entry level for all to participate;***
- ***Providing financial incentives for energy efficient technology;***
- ***Education to the rural and urban community on clean energy; and***
- ***Information to local councils on providing more services targeting clean energy for example to move towards 'star ratings' for buildings.***

CONCLUSION

The TFGA believes that first and foremost climate change strategies for Tasmania necessarily must focus on *adaptation* to secure agricultural production into the future as well as our rural environment generally. However that said, as an industry sector Tasmanian farmers also acknowledge our responsibility to contribute our fair share to *mitigation* strategies by reducing our own greenhouse emissions.

Accordingly, the TFGA believes that a whole of State Government action plan backed up by some realistic Government initiatives is required to address the key climate change issues for agriculture of:

- Local information and decision support tools;
- Securing water resources;
- Research into emissions; and
- Facilitating nationally consistent carbon trading.



REFERENCES

Allen Consulting Group, 2006, Climate Change: Risk and Vulnerability – Promoting an Efficient Adaptation Response in Australia.

Australian Greenhouse Office, 2003, An Australian Guide to the Science and Potential Impacts.

Australian Green House Office, 2004, Australia’s National Greenhouse Gas Accounts report.

The Climate Institute, October 2006, Missing Billions: How the Australian Government’s climate policy is penalising farmers.

Joint Government - Business Task Group on Emissions Trading, 2007, Issues Paper.