

# CLIMATE CHANGE

## Policy statement

### The issues

Climate change continues to grow as a global issue of highest importance and it is an area of rapid policy development at international, national and state scales.

Most in the scientific community now agree that a build up of greenhouse gases in the Earth's atmosphere is driving global warming and significant shifts in climatic conditions.

Climate change is a multi-faceted issue with significant economic, market, production, social, and environmental implications.

Changes occurring in Australia's climate include increases in maximum and minimum temperatures; elevated carbon dioxide levels; reduced overall rainfall though increased intensity of rainfall events; and an increase in the frequency of severe, damaging storms.

Climate changes could affect horticultural industries in Queensland in both positive and negative ways. Horticulture, however, is believed to be at greater risk from climate changes than most other sectors of the economy. Impacts are likely to vary across regions and commodities and may include increased crop water needs, reduced water availability, greater crop damage due to frosts and heat stress, increased pest and disease activity and therefore increased pest management and biosecurity challenges, increased damage from extreme weather events and changing production regions or cropping cycles. Secondary impacts may include threats to producers' capacity to meet supply contracts or market windows, further difficulties in attracting and retaining labour resources, and reduced security of water entitlements.

International, national and state level policy settings will also have significant implications for the horticulture industry and, if not carefully designed, could cause greater impacts on industry than the bio-physical and economic consequences of climate change.

Impacts of government climate change policies could include further increases to the costs of production as the introduction of an emissions trading scheme drives up the price of key inputs, a decline in the relative competitiveness of Australian produce compared to overseas product, limited capacity to engage in the emerging carbon economy if international standards for carbon accounting constrain growers ability to measure carbon sequestered in soils or vegetation on-farm. Opportunities may also emerge from government policies and programs through funding, assistance and incentives programs.

Growers have already been affected by recent significant price increases to core components of their cost structure, in particular wages, fuel and fertilisers and climate changes and policies related to climate change are expected to put further pressure on the

costs of production in horticulture. Horticultural businesses have extremely limited capacity to pass on increased production costs through the value chain due to the concentration of market power in the food retailing sector.

To respond to the challenge of climate change, the horticulture industry will need to act on a number of fronts, including emissions reductions, contributing to carbon sequestration, adapting to climate changes, and influencing and responding to new policy settings.

Currently, a significant barrier to the development of industry and government responses to climate change is a lack of information, research, modelling and analysis specifically focused on the implications of climate change for agriculture in general and horticulture in particular. Even less information is available at regional scales. Analysis of economic, industry, and environmental issues stemming from climate change specific to the horticulture industry is urgently needed.

While the impact of climate change on horticultural industries could be severe, there is a reasonable level of confidence amongst industry members of their capacity to adapt, providing they have access to accurate information, have a capacity to recoup increased costs of production and that regulatory frameworks provide for a reasonable degree of management flexibility. There are also a number of successful, established industry support programs that can be refined to assist growers to tackle the challenges of climate change.

## **Our position**

The horticulture industry will respond proactively to the challenge of climate change and take responsibility to act, within the limits imposed by the cost-price squeeze experienced by most businesses.

Growcom believes that industry self management should be encouraged by governments and that industry organisations should be given responsibility and resources to work directly with their members on tackling climate change issues, as industry groups are best placed to design programs that work with the business, market and regulatory needs of producers.

Climate change poses challenges but may also offer opportunities for horticultural businesses. The horticulture industry aims to be positioned to act on both the challenges and opportunities.

Significant effort and investment is urgently required to improve the knowledge base for climate change and intensive agriculture to underpin the development of industry and government policies and response strategies. Critical information gaps that need to be addressed include:

- Climate science, modelling and projections for key horticultural production regions along with risk and vulnerability assessments.
- Economic, value chain, agronomic, and environmental analyses of the impacts of climate changes in horticultural production regions
- Economic impact assessments of various government policy options, including the proposed arrangements for carbon emission trading.
- Measurement of horticulture's contribution to greenhouse gas emissions, options for emissions reductions, and how reductions can be measured and accounted for.

- Likely impacts of climate change on water supplies and the security of water entitlements and allocations and the options available to improve water harvesting regulations and operating rules for water storages to secure supplies.

The horticulture industry will need assistance from government to adapt to climate changes, contribute to emissions reductions and to mitigate any unavoidable impacts of government policies.

## **Our commitment**

Growcom will provide leadership to assist the horticulture industry play its role and contribute to solutions regarding energy efficiencies, emissions reductions, carbon sequestration, investigation of alternative energy supplies, proactive adaptation to climate changes and investment in strategic research and development.

Growcom will develop and coordinate implementation of a horticulture industry climate change response strategy. It will also develop and support industry members to use a climate risk management module within its Farm Management Systems program.

Growcom will aim to maintain a detailed review of relevant research and communicate information to growers in a format that supports business decision making. We will seek to facilitate industry discussion and debate on climate change and offer opportunities for growers to be fully informed of issues. Industry will review new information as it becomes available to identify and respond to emerging issues. Industry will be proactive in identifying critical information gaps and seeking to have these addressed.

The horticulture industry will seek to engage in a positive, proactive way with government policy development, offering potential solutions and seeking policies with minimal or mitigated impacts on industry.

The industry will seek solutions that deliver on a number of policy or management imperatives, for example seeking to identify farm management practices that offer carbon emission reduction as well as water quality improvement and increased water use efficiency.

## **Our expectations**

All industries, including horticulture, should respond proactively to the challenge of climate change and take responsibility to act on matters within their capacity.

In developing its policies and responses to climate change, Growcom expects government at all levels to:

- Properly consult with the horticulture industry, in its own right, on all relevant climate change policy developments.
- Work with the horticulture industry to ensure policies and programs are properly targeted and avoid or mitigate industry impacts.
- Properly consider the significant variations across pastoral, broad-acre cropping, intensive livestock and intensive cropping industries regarding carbon emissions, carbon offset and trading opportunities, and potential climate change impacts, mitigation and adaptation strategies. These must be understood and accounted for in

- Take a holistic, triple-bottom-line sustainability approach in developing responses to climate change. This will require significant effort to achieve policy alignment across a broad range of issues, including natural resource management, water reforms, drought and exceptional circumstances assistance, biosecurity and quarantine, and industry, regional, market and export development.
- Assist industry through funding and appropriately designed programs that facilitate adaptation and mitigation actions.

## **Our agenda items**

Issues to be considered within the broader climate change policy heading include:

- Establishment of a national emissions trading scheme for greenhouse gas emissions
- Seeking development of more detailed and specific information about how climate changes will affect the horticulture industry and horticultural production regions, including secondary analyses, e.g. of value chain issues; economic issues.
- Communicating climate change issues and potential impacts with growers to facilitate effective business management decision-making.
- Seeking development of customised management tools that can be used by growers to better predict and manage seasonal climate variability, assess the risks and opportunities posed by climate change, and plan how to adapt to projected climate changes.
- Ensuring growers have access to information on management practices and responses that help minimise the carbon impact of farming operations or help adapt to climatic changes.
- Climate change and its direct and indirect impacts on food security.
- Informing growers about the emerging “carbon economy” and building the capacity of growers to assess the opportunities or impacts.
- Influencing national, state and regional policies aimed at addressing climate change and carbon emission management.
- Influencing water planning and management arrangements to ensure they effectively incorporate climate change considerations and protect the security of water entitlements.
- Encouraging detailed analyses (especially of agronomic issues) at commodity and regional scales and industry investment in solutions.
- Addressing changes to pest management issues arising from climate change.
- Information sharing within and between industry, government, consumers and the general public is vital to underpin sound management decisions.