



ANTARCTIC CLIMATE
& ECOSYSTEMS CRC

Antarctic Climate & Ecosystems Cooperative Research Centre

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Media Release

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Minister launches Climate Futures for Tasmania Impacts on Agriculture research results

The most detailed research so far into the likely impacts of climate change on Tasmanian agriculture reveals a changing farming landscape throughout the 21st Century.

The research has been undertaken by the Climate Futures for Tasmania project for the State Government. Climate Futures for Tasmania is hosted by the Antarctic Climate and Ecosystems Cooperative Research Centre. The report is being launched today by the Deputy Premier and Minister for Agriculture, the Hon. Bryan Green.

The impacts on agriculture revealed in the report differ depending on location. The research also takes into account different future emission scenarios. To achieve the projections, six global climate models were downscaled to a 10-kilometre grid over Tasmania

The Climate Futures for Tasmania project leader and Intergovernmental Panel on Climate Change lead author, Professor Nathan Bindoff, said broad generalisations about the impacts of climate change on Tasmanian agriculture were not possible. "One of the things that makes this research so important and relevant is that it is designed to provide specific local detail to the people who need the information strategically in the business decisions they make," he said. "Those people have helped to guide this research from the start. While impacts will be different in different regions of Tasmanian, we can say that farm management, choice of crops and land use will probably all change in the future," Professor Bindoff said.

For example, in terms of wine production, by the latter part of the 21st Century, parts of Tasmania could experience conditions similar to the present-day conditions in Victoria's Rutherglen and South Australia's Coonawarra. Increased livestock carrying capacity will be possible in more areas because warmer temperatures mean new areas will be suitable for growing ryegrass. Different varieties of fruits may need to be developed to respond to changing chill conditions.

Among the report's key findings:

- An increase in heat available for crops will have profound effects, including changes in the choice of crop species, reduced crop duration, changes to crop yields and crop quality. Increases in heat will change the incidence and severity of pests.
- The demand for irrigation water for pastures (and probably other crops) is likely to remain unchanged on a per hectare basis.
- Simulations of wheat cropping suggests a 10-15% increase in yields, providing inputs of



fertiliser and irrigation are adequate.

- Frost incidence is projected to reduce by about half by the end of the century.

The launch of the *Climate Futures for Tasmania Impacts on Agriculture Technical Report* and the user-friendly summary is the culmination of an extensive consultation process.

“These projections are at a scale that will allow governments, businesses and farmers to better understand the challenges and opportunities of a changing climate on agriculture,” the CEO of the ACE CRC, Dr Tony Press, said.

“This is Tasmania’s most important source of climate change data at a local scale.

“Policymakers will be in a position to take advantage of opportunities and to plan for and offset changes to existing industries and farming systems.”

The *Climate Futures for Tasmania Impacts on Agriculture Technical Report* is the second of a series of products resulting from the collaborative Climate Futures for Tasmania project. The report is being released concurrently with the *Water and Catchments Technical Report*. The first of the technical reports, *General Climate Impacts*, was released in October 2010.

The Climate Futures for Tasmania project was funded primarily by the State Government, the Australian Government’s Commonwealth Environment Research Facilities Program and the Natural Disaster Mitigation Program and Hydro Tasmania.

Scientific leadership and contributions were made from a consortium of organisations including: Antarctic Climate & Ecosystems Cooperative Research Centre, Tasmanian Department of Primary Industries, Parks, Water and Environment, Tasmanian State Emergency Service, Entura, Geoscience Australia, Bureau of Meteorology, CSIRO, Tasmanian Partnership for Advanced Computing, Tasmanian Institute of Agricultural Research and the University of Tasmania.

For interview:

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Impacts on Agriculture lead author: Dr Greg Holz 0419 376 790 (March 11) or 6226-6289

The full report and summary:

http://www.dpac.tas.gov.au/divisions/climatechange/adapting/climate_futures

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