

Bathurst Community Climate Action Network

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Submission re Agricultural Competitiveness White Paper

The Bathurst Community Climate Action Network was formed out of a public meeting in June 2007 by a group of citizens concerned to address climate change in the interest of the environment. It now has a membership of over 150. Although BCCAN lacks the technical expertise to comment in detailed way in relation to the future of agriculture, its members include agriculturalists and economists and we welcome the opportunity to comment on the government's role in contributing to the healthy development of this industry.

We have a deep concern for the healthy future of agriculture in our region and we wish to comment on two main related challenges facing Australian agricultural competitiveness: climate change and cost pressures in production.

Climate change.

The Australian government recognises the overwhelming evidence for anthropogenic climate change in Australia. Agriculture is one of the industries most affected as extreme weather events like floods, droughts, heatwaves and bush fires increase in frequency and intensity. It is also impacted by changing seasonal patterns and changing habitats for pests and diseases associated with climate change.

Professor Snow Barlow, from the Melbourne University School of Land and Environment, a former climate change sceptic, provides the example of the wine industry where changing temperature and rainfall patterns have caused grape vintages to move forward by something like a day a year over the last 25 years. (ABC Tuesday February 18th PM)
As a result there are some places in Australia where vintages now are somewhere between 20 and 30 days earlier than in the 1980s.

While Australian governments have typically been generous in assisting farmers cope with the costs of dramatic and extreme weather events, there is an increasing reluctance to do so as extreme weather events become more common and protracted. Governments have also understandably been much less willing to assist with the costs of less dramatic long term, complex interrelated changes associated with climate change like those in the wine industry. BCCAN believes that a robust, persistent, nationally and internationally co-ordinated attempt to reduce the extent of climate change is the highest priority for Australian agriculture. It further believes that carbon reduction strategies including increasing soil carbon, reducing the burning of fossil fuels and expanding renewable energy represent great economic opportunities for the rural sector and rural communities in general.

Cost reduction.

A related factor affecting the competitiveness of Australian agriculture has been rising costs of production, especially with imported inputs like diesel and farm chemicals. These non-

renewable inputs face rising global demand and associated predictable price increases as the become scarcer. Past policies like diesel subsidies are expensive, do not address the inevitable, long term cost increases and, due partly to the large transport component of getting these resources to rural and remote areas, contribute to the climate pressures identified above.

A progressive agricultural policy would be one which provided incentives for farmers to reduce their dependency on expensive non-renewable energy inputs enabling them to be more competitive. Bathurst can provide a good model of how an agricultural enterprise can do this. A local grazier, Michael Inwood, operates a commercial sheep property without using any off-farm energy and using minimal agricultural chemicals. He powers his farm from solar energy collected on farm and uses low till, low kill production techniques. The accompanying links are to a video of his operation and a lecture on low till, low kill farming which he gave following his 2011 Nuffield scholarship.

<http://www.youtube.com/watch?v=J0oNh20DxF4>

<http://vimeo.com/6415291>

Another example of an agricultural innovation based on renewable energy is Sundrop Farms' building of a 20 hectare greenhouse facility in Port Augusta, South Australia which will use a renewable power supply and a sustainable water source to produce over 15,000 tonnes of tomatoes a year. Solar panels will produce the de-salinated water for the tomato plants and heat and cool the greenhouses.

<https://www.cleanenergyfinancecorp.com.au/our-investments/case-studies/tomato-farm-a-solar-innovator.aspx>

<http://www.abc.net.au/catalyst/stories/3805065.htm>

BCCAN argues that the Australian government should encourage the development of progressive agricultural practices which are sustainable and generate income in local communities, reduce the industry's dependence on expensive imports and power agriculture using the renewable sources of energy readily available on-farm.

For example Australia could have a comparative advantage in an industry manufacturing solar powered agricultural vehicles. The CSIRO is already doing advanced research into more efficient battery storage. It's UltraBattery invention is a hybrid energy storage device made up of a supercapacitor integrated with a lead-acid battery cell and could have many agricultural applications.

<http://www.csiro.au/Outcomes/Energy/Storing-renewable-energy/Ultra-Battery.aspx>

Funding for companies and researchers developing renewable energy applications for agriculture could be facilitated through the Clean Energy Finance Corporation and through the Emissions Reduction Fund.

We look forward to the government assisting Australian agriculture to move to a ecological and economically sustainable future.

Tracey Carpenter (President)

Bob Hill (Secretary)

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