Submission to

Inquiry into the role of government in assisting Australian farmers to adapt to the impacts of climate change

From The National Association for Sustainable Agriculture Australia Ltd (NASAA)

The issue of Climate change and its impacts on Australian agriculture cannot be understated in our view. For over 23 years we have been aware of this phenomena and have shaped our farming practices to account for issues of both climate change adaptation and amelioration, which are synergistic in our view .

Indeed we believe it is not enough to simply adapt but that measures can and must be undertaken to assist in reducing greenhouse emissions and importantly sequester carbon using soil and vegetation management.

Our focus has been on the development of organic farming and has seen the organic certification NASAA of close to 7 million hectares in these two decades.

Organic farming has been documented in numerous studies, chiefly from overseas sources (Fibl-the Swiss Organic research institute, the US based Rodale research institute and many others) to characterize several key elements in the adaptation to climate change .

These include but are not limited to the following

- Reduced energy input on a comparative scale of up to 50%, achieved through the absence of synthetic chemicals and fertilizers whilst maintaining yields
- Building of soil carbon through the incorporation of organic matter, the use of cover crops and the building of Nitrogen levels in the permanent absence of synthetic Nitrogen, itself a potent greenhouse gas contributor in manufacture and application.
- The total absence of stubble burning
- The management of grazing in such ways that optimize plant growth and recovery after grazing to sequester carbon.
- The minimization of food processing and use of synthesized additives and aids in so doing
- The growth in local and regional production for smaller and decentralized markets which has recently occurred, limiting energy inputs to processing, packaging and transportation.

At an anecdotal level, extreme temperatures experienced in the Victorian summer of 2008-09 saw remarkable resilience from organic horticulture compared with reported widespread decimation of conventional crops. It is understood that increased water holding capacity of high humus levels in soils under organic management which, combined with reduced free Nitrogen in plants as a consequence of the prohibition of synthetic N in the organic system may have had a role in this phenomena.

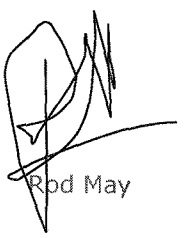
Federal Government can play an important role in assisting farmers to adapt to climate change by supporting organic agriculture at a major scale and increasing current funding which resides at less than $500,000 p.a nation wide to a figure at least 100 times greater in the first

instance. This funding should be made available to research organisations with reference to the Organic Federation of Australia, the peak National body for organic agriculture

The key research needs in our view are holistic biophysical studies that are carried out in decentralized locations and that permit farmers and researchers to better understand , soils, fertility and organic practices that further enhance crop yields and carbon sequestration.

In conclusion, we are convinced that the science indicates that organic farming is the way forward , and importantly has widespread consumer recognition The unique opportunity to see a convergence between a proven methodology for a climate resilient agriculture and a commercial opportunity lies in organic farming. Only vested interests have succeeded in delaying this convergence in the past and a third attempt to establish an appropriate CRC should be supported by Government

Signed



Rod May

Chairman

NASAA