Climate Action Canberra lends its supports to the submissions presented by Friends of the Earth in Melbourne and other submissions, which are strongly arguing for the rapid extension of wind power in Australia. We wish to draw attention to the fact that any real or perceived negative social and economic impacts of wind farms must be weighed against the scale of the dire emergency that currently faces Australians and the worlds people, plants and animals.

The research is deeply disturbing on how quickly global warming impacts are happening, how much more is already in the pipeline, and how close to the edge of the precipice we are. NASA climate science director James Hansen, and his collaborator Makiko Sato, are saying less than one degree of warming takes us close to the limits of conditions for a safe climate. A safe climate is one in which people can continue to live in the same place, with secure food production, and in a bio-diverse environment.

Current temperatures approximately match the highest temperatures over the period of human civilization known as the Holocene. They say that at these temperatures no "cushion" is left to avoid dangerous climate change.

In the Arctic an unexpectedly large proportion of the sea-ice has been lost in recent times. This is changing the climate in Europe and North America. Ice sheets are losing mass. Hansen and Sato also say that "... even small global warming above the level of the Holocene begins to generate a disproportionate warming on the Antarctic and Greenland ice sheets."

The international policy debate on climate — in which Australia has been a poor player — has been about keeping temperature rises to no more than 2 degrees Celsius to avoid a future global disaster. Hansen and Sato conclude that "...goals of limiting human-made warming to 2 degrees and carbon dioxide to 450 parts per million (ppm) are prescriptions for disaster."

Because of the repeated global policy failures, researchers at the British Metrological Office's Tyndall Research Centre say there is now little-to-no chance of maintaining the global average surface temperature below 2 degrees. Moreover, the impacts associated with 2 degrees have been revised upwards, sufficiently that 2 degrees more appropriately represents the threshold between 'dangerous' and 'extremely dangerous' climate change.

According to the ANU's Dr Andrew Glikson, the current level of greenhouse gases and what is in the pipeline could see temperatures rise by three or four degrees. [See papers by Glikson in Appendix 1, 2 and 3]

Research from the Potsdam Institute shows that if we continue as we are along the high-growth and fossil-fuel intensive path, the catastrophe of a four-degree warming could envelope the planet by around 2060. If the action taken is limited to the commitments made by nations at Copenhagen, four degrees will be upon us by the end of the century.

At this point, the planet will likely sustain a population of less than one billion people, and the very survival of humanity as we know it, will be on a deadly tightrope. Not only that, we could be responsible for the death of millions of species that have been evolving on Earth alongside us since life began.

This is where we are presently heading, but our politicians and sections of the public seem not to be listening to what the climate scientists are telling us.

It seems that only a few of our politicians realize we really do face a global emergency in which time to respond appropriately based on what science is saying has nearly run out. The vast gap between science and politics is widening. The future of humanity is perched precariously, yet the

political leadership required to avert a global disaster is nearly entirely absent.

Rising temperatures over the next few decades will seriously challenge our capacity to withstand unrelenting severe heat, water shortages, dwindling food supplies, occasional floods, severe bushfires and massive cyclones.

The small impacts some people might experience from rural wind farms seem even smaller in light of the climate emergency and the scale of disaster possible. We must encourage each other to adapt and embrace changes such as wind farms that are part of the transition out of the current predicament.

App 1 **Andrew Glikson, Ph.D.,*Climate Papers and articles* (2007-2010)**

App 2 **Andrew Glikson, Ph.D.,*Homo Sapiens, the Anthropocene Carbon Oxidation Event and the Shift in the State of the Atmosphere*** Journal of Cosmology, 2010, Vol 8, IN PRESS. JournalofCosmology.com, June, 2010

App 3 **Andrew Glikson*, The shift in state of the atmosphere,*** Earth and Paleoclimate science. The Australian National University

App 4 **Andrew Glikson*, Last call on climate***