



'Building a renewable energy community'

## SENATE INQUIRY INTO EXTREME WEATHER AND CLIMATE CHANGE

I make this submission on behalf of DRREA (Dandenong Ranges Renewable Energy Association Inc). DRREA has about 50 members from across the Dandenong Ranges in Victoria.

Bushfire is the extreme weather event that our submission focuses on. This is because the Dandenong Ranges is one of the most bushfire prone areas on earth. Our submission refers to just some points in the terms of reference.

The vulnerability of the Dandenongs and adjoining areas to catastrophic bushfire events like Black Saturday is set to increase with climate change. According to the IPCC, a 1 in 20 year hottest day is likely to become a 1 in 2 year event by the end of the 21<sup>st</sup> century.

**(bi)** Extreme heat is not however the only trigger for extreme bushfires. Historically all the major bushfires in South Eastern Australia in the last 100 years have occurred during El Nino / below average rainfall / drought events.

If, as predicted, South Eastern Australia has a drying climate under climate change this will also contribute to an increased incidence of extreme bushfire events. (There is scientific information available from organizations like the C.S.I.R.O. and the Bureau of Meteorology which supports this drying climate scenario. The IPCC has also drawn similar conclusions)

**(bii)** As an environmental organization we are concerned about the impacts of a drying climate and of consequent bushfires on natural ecosystems for the following reasons.

In the most recent El Nino drought, which ended in 2010, ornithologists identified a significant decline in bird numbers. Science tells us that animals have been severely impacted by episodes of climate change in the past. Those episodes however were more gradual allowing for species adaptation.

The much faster pace of anthropogenic climate change will make adaptation more difficult and make our wildlife less resilient in the face of more regular and more extreme natural disasters. For example the Black Saturday fires pushed Victoria's faunal emblem, the Leadbeaters possum much closer to extinction. It is said Australia's flora and fauna is adapted to fire. However it may not adapt to more regular and more severe fires.

**(biii)** As a Victorian one feature of the Black Saturday fires which was surprising was the number of property owners who were uninsured. Since then we have had the Queensland and Victorian floods. Premiums have gone up significantly as a result. This raises 2 questions for the future regarding all types of natural disasters. Firstly, will insurance cover be affordable and if not what will the implications be?

**(d)** The terms of reference focus on frequency of extreme weather events and the adequacy of resources of emergency services. While an increased frequency of extreme weather events will push resources to their limits, increased severity

may push resources beyond that limit. In the case of bushfires, bushfire experts say firestorms are becoming more common. Bushfires like this appear unstoppable.

#### **(h) Related matters**

For all of the above reasons DRREA's attention is focused on the things that we must do to return the world to a safe climate. We believe it is defeatist to talk only of adaptation.

The world (including Australia) cannot afford to take a 'business as usual' approach because that would involve doing nothing about the root causes of this problem and would allow climate change to worsen past critical tipping points.

DRREA believes the world (including Australia) must instead be proactive and cut its emissions by taking decisive action in the 5 areas outlined below.

1. Rapidly move away from coal based electricity generation.
2. Transition quickly to 100% renewable energy
3. Exit the coal export industry. (It is not ethical to sell a product that is injurious to the health and wellbeing of current and future generations. Also, by exporting our emissions we are just making climate change worse.)
4. Not develop the coal seam gas industry. (Gas is not clean energy. Its emissions will make climate change worse).
5. Aim for much higher emission reductions than 5%.

In conclusion, DRREA believes a safe climate should be the goal of every politician, every political party and every government. This can only be achieved by reducing atmospheric levels of CO2 down to safe levels less than 350 parts per million. This will not happen if short term economic gains are put ahead of the safety and wellbeing of present and future generations.

Like many other members of DRREA I grew up in the Dandenongs and lived through Black Saturday, Ash Wednesday and the 1967 fires. We know that those past fire events could be dwarfed by future fires if action is limited mainly to adaptation strategies. This is not 'alarmism' but merely a statement of what could happen under 'business as usual'.

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President

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Please note: The history of fires in the Dandenong Ranges would make townships like Upwey or Emerald, a logical location for a committee hearing.