Submission to Senate Inquiry into preparedness for extreme weather events.

I have undertaken extensive studies of climate change over many years and am very concerned that Australia (and other countries) are not taking the urgent action needed to avoid catastrophic climate change and also to prepare for the impacts of climate change.

We have currently experienced only around 0.8 degrees celsius of increased global average warming, but already we are seeing impacts of rising sea level and more extreme weather events, both in Australia and globally.

The current bushfires have impacted on many people in many states and in Tasmania alone, the insurance costs of the fires in January have exceeded \$40 million. When costs of other fires around Australia are added, the resources needed to rebuild will be significant. This is on top of other recent natural disasters, such as the Brisbane floods and flooding in Victoria and NSW. The cost of reconstruction after superstorm Sandy in the US is estimated at \$60 billion. As these natural disasters continue, the strain on every countries resources will be immense.

In a city such as Canberra which has already felt the impact of disastrous fires in 2002 and 2003, the danger still exists that a significant number of houses and people could be at risk on days of high temperature and especially high winds. With all the bush areas and eucalypt street trees right throughout the city, it is not out of the question that fires could spread throughout a number of areas of the city at the same time, stretching fire fighting resources beyond capacity. This is probably the case in other cities also, especially on their outer fringes.

Brisbane airport is in danger of being inundated with just a sea level rise of around 1 metre and a storm surge. Adelaide and Melbourne and Sydney all have coastal suburban areas at risk. How will infrastructure such as the airport, coastal roads and port facilities be rebuilt if sea level keeps rising, as it is forecast to. Airports can be moved (at significant cost), but port facilities can't.

There is no immediate solution to this situation. It is important that all countries act on climate change, and very many are, and the primary responsibility of the Australian government is to move urgently to reduce greenhouse emissions and to move to renewable energy sources. Germany aims to have 50% of its electricity produced from renewable sources by 2030. Australia with its abundant solar and wind resources can do better than that if the political will is directed to achieving it. Australia should strive to take the lead, rather than lagging behind other less well-resourced countries.

The Australian government, as well as moving to address renewable energy sources for electricity, must improve its residential and commercial energy efficiency with improved building codes and also improve public transport and intercity rail transport, both for freight and passengers.

Another significant sector is agriculture. One of the priorities in agriculture is to protect our limited fertile agricultural land from coal mining and coal seam gas takeovers. It is insanity for Australia to be destroying farming land while at the same time increasing fossil fuel exports which will contribute enormously to the climate crisis. The subsidies provided to fossil fuel use and mining should be withdraw immediately. Those resources will be urgently needed to rebuild from natural disasters such as fires, cyclones, storms, droughts and floods - it is incomprehensible that we continue to subsidise these fossil fuel industries. Our farming land will be needed in its entirety as climate impacts are felt both in Australia and internationally.

The Australian Government must show leadership in addressing the above issues. There is a need to raise revenue for reconstruction and mitigation and energy substitution. If we are to get through this climate crisis without serious damage to our social structure, we will need to work together. In order to create the social environment of meeting this challenge together, equality is crucial. Taxation rates of those on higher incomes should be raised and middle class welfare, such as the baby bonus should be phased out. An increase in the GST may also be necessary.

I would urge those who have not read 'Climate Code Red' by Philip Sutton and David Spratt to do so. This book - among many others - provides clear evidence of the urgent need to address the climate crisis now.

Thank you for the opportunity to provide my views on this most critical issue for the future of humanity.

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