



January 2013

Committee Secretary
Senate Standing Committees on Environment and Communications
PO Box 6100
Parliament House
Canberra, ACT 2600

Submission to the Inquiry into recent trends in and preparedness for extreme weather events

Dear Committee Secretary,

Climate Action Network Australia (CANA), on behalf of its 70 members from across Australia¹, welcomes the opportunity to submit to the Inquiry by the Senate Standing Committee on Environment and Communications into trends and preparedness for extreme weather events.

On points a) and b) there is extensive and growing evidence that climate change exacerbates extreme weather events, with the relationship to increased risk varying according to the type of weather. Among the most robust projections include the increase in heatwaves due to climate change and the resultant impact on increased bushfire risk - two of the areas to which Australia is particularly vulnerable. It should be noted that extreme weather will be made worse due to climate change through both direct and indirect effects - e.g. storms may become more frequent and stronger in a given area and their coastal impacts will also increase due to surges being exacerbated by sea level rise.

CANA recommends that in addition to the trends in frequency of extreme weather, the Committee should consider changes in extent, severity, timing and how these interact to affect the impact of an event. As an example - the recent heatwave in January 2013 was unprecedented in severity and extent. With climate change expected to increase both these variables, this will have greater implications for resourcing and response planning for dealing with heatwaves and the catastrophic fire conditions. Potential changes in timing of extreme weather events are also important e.g. extreme rainfall events will have a very different impact on food production, or on water and sewage infrastructure depending on the time of year and whether the natural systems and infrastructure are already under stress.

When considering point b iii), CANA suggests that the Committee considers not only evidence about the response of the insurance industry domestically, to extreme weather events, but also how the insurance industry is reacting elsewhere - especially in North America and Europe - and work by reinsurers on this issue e.g. Swiss Re².

CANA does not believe that the increasing risks from extreme weather have been properly considered by a wide range of sectors. This is unsurprising considering the lack of information at a detailed level, as was notable when researching this submission and discussing it with local

¹ <http://cana.net.au/hot-topics/cana-member-organisations>

² www.swissre.com/rethinking/climate_and_natural_disaster_risk/Insuring_floods_a_challenge_and_an_opportunity.html Accessed 18 Jan 2013

organisations. And in the instances where there is detailed information on likely impacts, the geographic extent is limited e.g. inundation mapping of sea level rise for a few major cities only³. Without this level of information, and good strategies for its communication, it is difficult for sectors, businesses or the general public to assess and prepare for increased risk.

We would recommend the Committee considers resilience of infrastructure and sectors to increased risk across very different types of weather (e.g. flooding and extreme heat) in an integrated manner as well as how individual sectors respond to individual risks. We would also note that sectors have to deal with direct and indirect impacts of extreme weather - e.g. a heatwave puts stress on the electricity network both from extreme temperatures and the increased demand as people turn on their air-conditioners. CANA believes that the Committee will discover that there are some good examples of work about extreme weather and sectoral response⁴[4], but that it remains patchy. We would also like to draw attention to the submission by Climate & Health Alliance on health impacts.

We urge that government and industry consider the risks of climate change in a far more comprehensive manner than to date in their planning work. As just one example we would like to cite the Queensland Farmers Federation's response to Queensland's Agricultural Strategy Discussion paper which states: "It is disappointing that the Agriculture Strategy.. does not consider the impacts that climate change and climate variability will have over the next 30 years on agricultural productivity."⁵[5] If agricultural strategy does not consider climate change where the likely impacts are all too apparent, it bodes badly for planning in other sectors.

There are many areas - including infrastructure decisions, land use planning, urban design, building codes and other planning regulations - where decisions made now will affect our standard of living for decades to come. Unless changes in extreme weather patterns are factored in to these decisions, our quality of life will suffer and there will be major economic impacts. It is a common finding that economic costs of climate change will be substantial without prompt mitigation and adaptation, but that early action can be highly cost effective (e.g. Garnaut 2008 and 2011⁶). There are also many reports showing the kind of steps that can be taken to reduce impact such as that by the Economics of Climate Adaptation working group's on climate resilient development⁷ [7] yet Australia is lagging on action.

CANA considers that the Committee should make clear recommendations on how Australia can increase resilience by informing about and adapting to extreme weather impacts due to climate change from greenhouse gas emission already in the system. CANA also urges the Committee to recognise that the most appropriate and cost effective response is to take further action to reduce our emissions - domestically and internationally - and so lessen the impact of climate change.

³ www.ozcoasts.gov.au/climate/sd_visual.jsp Accessed 18 Jan 2013

⁴ See research outlined at: www.nccarf.edu.au/content/case-study-impacts-and-adaptation-response-infrastructure-and-communities-heatwaves-southern

⁵ www.qff.org.au/wp-content/uploads/2012/12/QFF-Sub-DAFFQ-Ag-Strategy-issues-paper-121212.pdf Accessed 18 Jan 2013

⁶ www.garnautreview.org.au/ Accessed 18 Jan 2013

⁷ http://media.swissre.com/documents/rethinking_shaping_climate_resilient_development_en.pdf Accessed 18 Jan 2013