# Inquiry into recent trends in and preparedness for extreme weather events

Five people submitted the following letter. They are listed below.

- 1. Name withheld
- 2. Name withheld
- 3. Michelle Richards
- 4. Joanna Pitt
- 5. Sean O'Shannessy

## Submission to Senate Environment and Communications References Committee

#### Re: Enquiry into Recent trends in and preparedness for extreme weather events

#### Dear Committee Members,

I make this submission as an ordinary Australian deeply concerned about the potentially catastrophic effects of extreme weather brought about by Climate Change

In brief I respectfully submit that your committee's enquiry must:

- 1. Take a rigourous risk management approach to assessing the costs and benefits of inaction against the costs and benefit of effective action to prevent the extremes of climate chaos that are reliably predicted to ensue if we exceed 2° of global average warming.
- 2. Make clear that action to prevent climate chaos is the primary step in any effective adaptation strategy to extreme weather events without which no other steps can do more than briefly delay the inevitable failure of any plan.
- 3. Support the strongest possible action to prevent further climatic warming and the potentially catastrophic effects on Australia's and the Earth's economy and ecology as well as human health and security brought about by extreme weather events.
- 4. Recognise and support that rapid and sweeping technological and economic shifts urgently need to be implemented across energy, transport, housing and agriculture, forestry and mining sectors in order to prevent the worst projected extreme weather events associated with climate change.
- 5. Acknowledge Australia's leadership role in having contributed more than its fair share of anthropogenic global warming through its fossil fuel extraction and general resource consumption patterns and accept that it is in our interests as well as a moral responsibility for us to play a leadership role in demonstrating effective solutions.
- Refer to and focus only on the credible established scientific consensus on climate and weather and not be distracted by pandering to fringe extremists and sectional vested interests' efforts to derail effective action for the purposes of their own ideologies and profits.

## **Risk Management**

The hazards of inaction on climate change are incredible. The worst case scenario is complete inaction (or business as usual). If we opt for that we can reasonably expect to pass a tipping point where run away positive feedback effects such as the melting of global ice caps, the acidification of the Earth's oceans and/or the die back of the Earth's forest cover (just to name a few we have already begun to see) feed huge stores of carbon into our atmosphere and create a mass extinction event the like of which has almost never been seen in the planet's history. Certainly not in the history of human evolution. That is to say homo sapiens become extinct along with the vast majority of all species now living. Obviously we cannot allow that to happen.

Even a much less dire scenario is that we take minor steps to adjust our contribution to climate change and manage to slow the warming of the planet and hold it to 4°. Under this circumstance we would still be highly likely to cause a run away greenhouse effect that would probably cause sea level rises of multiple meters and climatic chaos that will make most of our infrastructure and social systems collapse leaving us with a severely impoverished and likely collapsing civilisation.

With strong action now to rapidly eliminate greenhouse gas emissions from our society we might still be able to keep our climate from warming past the 2° that all credible scientists and government agencies around the world agree is the absolute maximum we can warm the planet without causing catastrophic climate chaos.

So the costs of inaction are somewhere on the continuum between extinction 100% economic collapse Expensive adaptation strategies (which I will leave you to calculate)

The benefit of inaction is... We get to keep the dirty, polluting, corrupt fossil fuel industry until its resource runs out and they have leeched trillions more in profit from us.

On the other hand there are the hazards of action. If we rapidly adopt a low carbon economy there might be some dislocation for some people as they change from highly polluting industries to new jobs in the renewable energy sector (or elsewhere). There are no credible catastrophic consequences proposed by the fossil fools that I know of.

The costs of action is the economic cost of investment in new infrastructure. Of course as we are already investing hundreds of billions of dollars into the energy economy now those "costs" are largely illusory as we can simply transfer the finances for high carbon energy into low carbon without any significant extra expense. The fossil fools would have us believe that investment in renewables is somehow an economic burden but investment in fossils is somehow an economic miracle. They can't have it both ways. We may need to spend something above the existing mark to make the transition as rapidly as we need to but we have been delaying making this change for over 50 years now and every day we delay will make the transition exponentially more expensive.

The benefits of action are huge. Even if climate change was not real moving away from fossil fuels would bring enormous environmental, health, security and economic benefits. The process of extracting, transporting and burning fossil fuels is notoriously dangerous to the health and safety of workers, communities and ecosystems across the globe. Oil spills, coal dust, smoke stacks, open cut mines, tar sands clear felling, fracking – we all know the story. You can join the dots.

Also with investment in clean renewable energy sources we can renew our economy. Creating a whole new class of jobs that is not dependent on the extraction of resources from far off and dangerously unstable places. Energy independence becomes a reality instead of a pipe dream. Our motivation for getting involved in illegal, expensive and futile resource wars can be removed and we can focus our resources on improving our own country.

So I respectfully submit to you that your committee must take a risk management approach to assessing the costs and benefits of inaction against the costs and benefit of effective action to prevent the extremes of climate chaos that are reliably predicted to ensue if we exceed 2° of global average warming.

## **Prevention is Better Than Cure**

There are those who will advocate that your committee take an excessively narrow definition of your terms of reference and only assess potential adaptation strategies without considering action to moderate the causes of extreme weather effects. As with so many things careful study of the facts shows that an ounce of prevention is worth a pound of cure. Every dollar spent now in preventing the climate from becoming more unstable and extreme will represent many dollars saved later in redressing the impact of the extremes. This is a difficult argument for people (even politicians) to address because it requires the kind of long term vision that humans are not particularly suited to (even politicians). However responsible economists and scientists have confirmed that the cheapest and most effective action is action now not action later.

Of course without effective action under the worst case scenario I outlined above there is no point at all in adaptation strategies because the global catastrophe will simply out run them eventually. So the MOST expensive thing we can do is to penny pinch now in hope that future generations will somehow fix our mess.

So that is why I humbly submit that it is your committee's duty to make clear that action to prevent climate chaos is the primary step in any effective adaptation strategy to extreme weather events without which no other steps can do more than briefly delay the inevitable failure of any plan.

## Don't Do Too Little Too Late

There are those who cling to the misguided belief that we can hedge our bets on climate change. In their view we can do something to "moderate" our climate impact slightly and hope that the rest of the world will take a lead and make up for our halfheartedness. Unfortunately this is like being half pregnant or half alive ie not much use. Decisive action is long overdue. Scientific consensus and public opinion are both strongly in favour of action on climate change. They are only going to become stronger as they see their leaders taking the necessary steps to show the way forward. The recommendations of this enquiry are almost certainly going to be watered down for the purposes of political compromise. There is no point diluting the strength of your findings in advance.

So for all the reasons I have already outlined above I respectfully submit that this enquiry must support the strongest possible action to prevent further climatic warming and the potentially catastrophic effects on Australia's and the Earth's economy and ecology as well as human health and security brought about by extreme weather events.

## **Ditch the Horse and Cart**

Only two hundred years ago we began replacing back breaking manual labour with steam powered machines. Roughly a hundred years ago Australia was still largely dependent on the horse and ox for it's transport and agricultural energy. Over the past Hundred years we have adopted and adapted our economy to the wonders of the internal combustion

engine replacing both horses and steam. Fossil fuels were a liberating civilisation advance that we needed to get to the current potential for a renewable economy.

There were those who stood in the way of progress when the transition to fossil fuels was being made just as there are nay sayers now to the prospect of the transition to clean sustainable energy. Their tales of doom were largely unjustified then and now they are even more demonstrably irrelevant to our path to future progress and prosperity now. The fossil fuel age is coming to an end. We can either choose the manner of its departure or get caught with our pants down when it collapses. Climate change is the alarm bell signalling the time to shift is now.

Renewable energy technology is now mature and cost effective. We have clear and achievable plans for how Australia and the world can make a rapid transition to 100% renewables. All that is lacking is leadership from our elected representatives. You are now in a position to redress this impediment.

Which is why I humbly submit it is imperative that this enquiry recognise and support that rapid and sweeping technological and economic shifts urgently need to be implemented across energy, transport, housing and agriculture, forestry and mining sectors in order to prevent the worst projected extreme weather events associated with climate change.

#### **Advance Australia Fair**

Australia is a great nation. We have consistently punched above our weight in many important fields in both peace and war. In science and technology, in international affairs, in the arts, in sport and economically we have always had more than our fair share of achievements on the international stage. We were one of the first countries to introduce women's suffrage. We had a leading place at the table in the League of Nations and then the United Nations, we have consistently been among the richest people on Earth.

The Australian way is not about slavishly clinging to outmoded ways of doing things. It is not about protecting privileges for sectional interests. It is about having a go and innovating our way out of trouble. It is about the fair go for all no matter what culture or belief. Have we become so timorous that we would sit idly by and allow this opportunity to leave us in its dust? Are we now a nation of yes men for the rich and powerful fossil fools?

As a highly prosperous democratic society we have a responsibility to show leadership on important international issues and none could be more important that climate change. As an English speaking strong ally of the United States we are in a position to exert exceptional influence over their position on this globally critical issue. As the worlds leading per capita emitter of greenhouse gases and one of the biggest exporters of fossil fuels we have both the moral duty and the strategic capacity to make a big difference in how the rest of the world perceives and acts on the climate crisis that is over taking us. It is time for us again to man up and face our responsibilities

Again there are those who for their own reasons choose to talk Australia down to advocate for a backward looking follower role for us. We must not let their denial of our potential role in changing the world for the better hold us back from seizing the opportunity to get ahead of the world and yet again show what a small responsive and innovative nation can do against the odds.

Which is why I respectfully urge this enquiry to acknowledge Australia's leadership role in having contributed more than its fair share of anthropogenic global warming through its fossil fuel extraction and general resource consumption patterns and accept that it is in our interests as well as a moral responsibility for us to play a leadership role in demonstrating effective solutions to the world.

#### **Zero Tolerance for Fossil Fools**

We are long past the time when the self interested and irrational bleatings of advocates for inaction on climate change should be treated seriously. We have known about the greenhouse effect for well over a hundred years now. Scientists have been raising serious concern about the potential for dangerous anthropogenic climate change for over 50 years now. They were marginalised by decision makers dazzled by the wealth and power of the fossil industry but but they were right. We now have 97.5% of all climate scientists in agreement that anthropogenic global warming is a real and present threat to our society that requires urgent action.

Anyone who now states an opinion contrary to that overwhelming consensus should have a discount of 97.5% applied to their views. They have no credibility and indeed they are either dupes or stooges of the fossil fuel industry. The fossil fools have adopted tactics and strategies to obscure the truth about their industry remarkably similar to those of the tobacco, asbestos, thalidamide, acid rain , and ozone depleting industries of the past. Fossil fool apologists have used the massive financial resources from their astronomical profits to fight a rear guard action against the truth that has substantially slowed effective action for over 50 years and we must not give any more succour to their cause.

So I respectfully submit that it his enquiry's responsibility to refer to and focus only on the credible established scientific consensus on climate and weather and not be distracted by pandering to fringe extremists and sectional vested interests' efforts to derail effective action for the purposes of their own ideologies and profits.

#### References

The Royal Society

http://royalsociety.org/policy/publications/2010/climate-change-summary-science/

Australian Academy of Science

http://www.science.org.au/policy/climatechange.html

American Academy of Science

http://dels.nas.edu/Report/Americas-Climate-Choices/12781

The Climate Commission

http://climatecommission.gov.au/resources/commission-reports/

## CSIRO

http://www.csiro.au/Outcomes/Climate/Understanding.aspx

#### AMA

https://ama.com.au/policy/climate-health#top

Climate and Health Alliance

http://caha.org.au/

The unaffordable cost of climate change delay

http://www.independent.co.uk/voices/editorials/editorial-the-unaffordable-cost-of-climate-change-delay-8449884.html

Emissions limits could cut climate damage by two-thirds: study

http://www.orlandosentinel.com/features/consumer/sns-rt-us-emissions-climatebre90c0e1-20130113,0,1584201.story

Zero Carbon Australia

http://beyondzeroemissions.org/zero-carbon-australia-2020

New high reached during great heatwave

http://m.theage.com.au/environment/weather/new-high-reached-during-great-heatwave-20130112-2cmbw.html

Extreme Weather Grows in Frequency and Intensity Around World

http://mobile.nytimes.com/2013/01/11/science/earth/extreme-weather-grows-in-frequency-and-intensity-around-world.xml

As Australia burns, attitudes are changing. But is it too late?

http://guardian.co.uk/commentisfree/2013/jan/11/australia-burns-attitudes-changing-too-late

Report: Climate change triggers extreme weather events

http://www.politico.com/story/2013/01/report-climate-change-triggers-extreme-weather-events-86067.html

Rising seas may put \$300b of property at risk: scientists

http://www.abc.net.au/news/2013-01-14/how-will-rising-seas-impact-australia/4460688

Cutting fossil-fuel emissions will stop more fires and floods

http://www.canberratimes.com.au/opinion/cutting-fossilfuel-emissions-will-stop-more-fires-and-floods-20130113-2cnu6.html

The unaffordable cost of climate change delay

http://www.independent.co.uk/voices/editorials/editorial-the-unaffordable-cost-of-climate-change-delay-8449884.html

Public risk perceptions, understandings, and responses to climate change and natural disasters in Australia, 2010 and 2011

http://www.nccarf.edu.au/publications/public-risk-perceptions-second-survey

Sunny uplands : Alternative energy will no longer be alternative

http://www.economist.com/news/21566414-alternative-energy-will-no-longer-be-alternative-sunny-uplands