



PREPARING FOR DISASTERS SAVES LIVES, SAVES MONEY

The Greens' plan for adapting to climate change and more extreme weather

Natural disasters hurt people and the economy. One dollar spent on reducing the risks, can save at least two in recovery costs. A caring society will invest in preparing our communities for more intense extreme weather events like floods and bush fires.

> EXTREME WEATHER HURTS

Natural disasters resulting from extreme weather hurt.

They hurt people. More than 200 people died over the last four years in disasters such as the Black Saturday bushfires in Victoria, Cyclone Yasi in Queensland and major floods in several states. Hundreds of thousands more were affected.ⁱ

And they hurt the economy. According to the Productivity Commission, over the past six years, Australian Government funding for disaster recovery was around \$6.7 billionⁱⁱ, and this figure does not include expenditure by local and state governments or households and businesses. For example, just adding insurance losses and Queensland Government recovery expenditure for Cyclone Yasi and the 2010–11 Queensland floods increases the total to in excess of \$10 billion.

The insurance industry predicts, even before factoring in the impact of climate change, that the current cost of natural disasters will double by 2030.ⁱ The main reasons for the increasing cost of extreme weather events, according to the Insurance Council of Australia (ICA), are the growing number of properties, increasing building costs and risk of inappropriate construction – the failure to construct the built environment with due regard to the likely local extreme weather hazards.ⁱⁱⁱ

To better prepare the community, the Australian Greens will:

- **Expand the existing National Disaster Resilience Program by increasing funding to over \$350 million per year;**
- **Maintain the National Climate Change Adaptation Facility with \$10 million per year for a second 5 years funding round; and**
- **Place a levy of \$2 a tonne on thermal coal exports to raise the money to protect the community**

> EXTREME WEATHER AND CLIMATE CHANGE

The situation is being exacerbated by climate change. The Climate Commission recently reported that climate change is already increasing the intensity and frequency of many extreme weather events, adversely affecting Australians.^{iv}

Extreme events occur naturally and weather records are broken from time to time. However, climate change is influencing these events and record-breaking weather is becoming more common around the world.

The Climate Commission reports there is a high risk that extreme weather events like heatwaves, heavy rainfall, bushfires and cyclones will become even more intense and frequent in Australia over the coming decades.

Current spending on mitigation initiatives represents around only 3 per cent of spending on post-disaster recovery

> THE GOVERNMENT IS FAILING TO INVEST IN RISK MITIGATION

According to the Insurance Australia Group, the emergency management community generally accepts that one dollar spent on risk mitigation can save at least two dollars in recovery costs. But Australian Government spending on mitigation



initiatives represents around only 3 per cent of what it spends on post-disaster recovery and reconstruction.^v

The Productivity Commission recently reached a similar conclusion, noting that effective emergency management requires striking the right balance between preventing and preparing for disasters on the one hand, and responding to and recovering from them on the other. The Commission highlighted that compared to the \$6.7 billion spent on disaster recovery over the last 6 years, only \$0.18 billion has been spent on disaster mitigation.

The Australian Business Roundtable for Disaster Resilience and Safer Communities has called for an annual program of Australian Government expenditure on pre-disaster resilience of \$250 million.

According to the insurance industry we need to increase investment in disaster mitigation and resilience strategies. The \$27 million per annum allocated for mitigation works under the National Partnership Agreement on Natural Disaster Resilience (NPA) is inadequate (see Box). Additional funding is needed to allow additional protective works including barrages for unusual tides, levee banks, properly maintained fire breaks and access trails, improved flood drainage and dams.^v

The allocation of risk mitigation funding also needs to be far better targeted. The current NPA is a partnership with states and territories where jurisdictions provide direct administration of the funding and submit an annual implementation plan to the Attorney General. For the most part funding is then allocated by each jurisdiction via competitive grants programs. This means there is very little, if any, capacity for this funding to be directed toward larger scale disaster mitigation infrastructure projects of state or national significance. Further this arrangement encourages a piece-meal approach to disaster mitigation rather than one that focuses on long-term, strategic priorities.

Exacerbating the poor targeting of risk mitigation investment is the fact that Australia lacks a standardised national approach to the collection and publication of hazard data. The Productivity Commission review noted that the government has recently committed to establishing a flood risk information portal to provide a single access point to flood mapping data. The Commission recommended, however, that the initiative should “be expanded over time to encompass other natural hazards” and that “Guidelines to improve the quality and consistency of risk information should also be regularly updated and take climate change into account where feasible”.

The government has recently recognised the need for greater funding of risk mitigation activities and announced that it will invest \$100 million over two years to reduce flood risks, but the money is short term and woefully inadequate.

Most recently the Australian Business Roundtable for Disaster Resilience and Safer Communities has called for an annual program of Australian Government expenditure on pre-disaster resilience of \$250 million. The Roundtable calculated that at the national level this level of expenditure has the potential to generate budget savings of \$12.2 billion for all levels of government (including \$9.8 billion for the Australian Government) and would reduce natural disaster costs by more than 50% by 2050.

The Roundtable makes three key recommendations each of which the Greens strongly endorse:

- 1) Improve co-ordination of pre-disaster resilience by appointing a National Resilience Advisor and establishing a Business and Community Advisory Group.
- 2) Commit to long term annual consolidated funding for pre-disaster resilience.
- 3) Identify and prioritise pre-disaster investment activities that deliver a positive net impact on future budget outlays.

The Greens also recognise that frequently when infrastructure is repaired or rebuilt it needs to be done to a higher standard. This is an issue that has been frequently raised by local governments.

The National Disaster Resilience Program

The National Partnership Agreement on Natural Disaster Resilience commenced in 2009 and provides an inadequate \$27 million per year to states and territories to enhance the resilience of communities against the impact of natural disasters.

According to the Insurance Council of Australia, risk mitigation projects supported by the program include:

- natural disaster risk management studies;
- disaster mitigation strategies;
- investment in disaster resilient public infrastructure;
- structural works to protect against damage (eg. disaster proofing of existing buildings at risk);
- levees, retarding basins and channel improvements, permanent fire breaks, other engineered works that offer protection from natural disasters);
- disaster warning systems;
- community awareness and readiness measures;
- audits of levees and warning systems;
- development of nationally consistent data collection and analysis and nationally consistent post-disaster evaluation; and
- land and building purchase schemes in high-risk areas.



> THE NATIONAL CLIMATE CHANGE ADAPTATION RESEARCH FACILITY

The role of the National Climate Change Adaptation Research Facility (NCCARF) has been to lead the national research community in generating the information needed by decision-makers in government and in vulnerable sectors and communities to manage the risks of climate change impacts.

NCCARF started in 2008 and received \$46.9 million in Australian Government funding over the five-year period from 2008-09. Of this total, \$28.3 million has gone to funding projects under the Adaptation Research Grants Program, \$10.2 million to fund Adaptation Research Networks and \$8.4 million to fund operational activities including outreach and communications.ⁱⁱ

There have been 144 research projects involving several hundred researchers around the nation. Outputs from these studies are now feeding into decision-making in the public and private spheres. For example, the NCCARF assists local communities in interpreting the results of complex climate models, to help them make effective, science based decision about land-use planning.

The Government, in the most recent budget, ended funding in 2013. This is short-sighted and will cost more than it saves.

Numerous witnesses to the recent Senate Inquiry into recent trends in and preparedness for extreme weather events have made it clear that NCCARF has been a very effective institution that is central to climate change adaptation policy and planning and that it should be retained.

> THE SOLUTIONS

The Greens will:

- a) **Expand the existing National Disaster Resilience Program by:**
 - Substantially increasing funding from around \$50 million to over \$350 million per year.
 - Ensuring projects are appropriately prioritised and targeted by appointing a National Resilience Advisor and establishing a National Resilience Advisory Group.
 - Removing the existing limitation that the Commonwealth will contribute up to only 50% of the cost of a project, in recognition of the fact that some state and local governments will be unable to match the Commonwealth's spending power.
- b) **Maintain the National Climate Change Adaptation Facility with \$50 million over 5 years.**

> RAISING THE REVENUE – AN EXPORT LEVY ON COAL

It is appropriate that the export coal industry contributes to the cost of adapting to climate change impacts because it is responsible for several hundred million tonnes of greenhouse gas emissions globally.^{vi}

The Greens will raise the funds to protect the community from extreme weather by imposing a deductible \$2/tonne levy on thermal coal exports.^{vii} According to the Parliamentary Budget Office this would raise the amounts set out below.

| | 2013-14 | 2014-15 | 2015-16 | 2016-17 |
|---------------------------|---------|------------|------------|------------|
| Levy Revenue (\$m) | - | 234 | 347 | 387 |

Australia's black coal export industry is projected to grow at an annual rate of 2.1 per cent for 2013-18. The current price of thermal coal is around \$US90 per tonne and for the industry on average profit makes up around 26 per cent of total revenue.^{viii} A \$2/tonne levy is clearly affordable for the industry, even if none of the levy could be passed on to consumers – it would be approximately equivalent to a 2 cent fluctuation in the exchange rate, which frequently occurs daily.

All funds raised, with the exception of \$10 million per annum for the National Climate Change Adaptation Facility, will be used for expanding the National Disaster Resilience Program as described above.

ⁱ Deloitte Access Economics. *Building our Nation's Resilience to Natural Disasters: Australian Business Roundtable for Disaster Resilience and Safer Communities*. June 2013.

ⁱⁱ Productivity Commission, 2012, *Barriers to Effective Climate Change Adaptation*, Report No. 59, Final Inquiry Report, Canberra.

ⁱⁱⁱ Insurance Council of Australia submission to the Senate Standing Committees on Environment and Communications inquiry into Recent trends in and preparedness for extreme weather events.

^{iv} Climate Commission Report - *The Critical Decade: Extreme Weather*. <http://climatecommission.gov.au/report/extreme-weather/>

^v Insurance Australia Group submission to the Senate Standing Committees on Environment and Communications inquiry into Recent trends in and preparedness for extreme weather events.

^{vi} In 2013 coal exports are projected to be 187 million tonnes and this would emit approximately 446 million tonnes of carbon dioxide when burnt.

^{vii} Thermal coal is used for electricity production, as opposed to metallurgical coal which is used for steel production. Unlike thermal coal, there are no readily available substitutes for metallurgical coal.

^{viii} *Black Coal Mining in Australia*, IBISWorld Industry Report B0601, June 2013.