

WHAT WOULD AN EFFECTIVE NATIONAL CLIMATE ADAPTATION STRATEGY LOOK LIKE?

ANU Climate Update 2022

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Australian
National
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Framework Convention on Climate Change

Article 2: the “*ultimate objective of this Convention*” is to “*prevent dangerous*” climate change “*within a time-frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure food production is not threatened and enable economic development to proceed in a sustainable manner.*”

Article 4.1(b), commits Parties to “*Formulate, implement, publish and regularly update national and, where appropriate, regional programmes* containing measures to mitigate climate change ... and *measures to facilitate adequate adaptation to climate change.*”

Article 4.1(f): Parties shall “*Take climate change considerations into account, to the extent feasible, in their relevant social, economic and environmental policies and actions...*”



Adaptation roles of the Federal Government?

NCRAS (2021) states that the role is to:

- provide national science and information (NCRAS focus)
- manage Commonwealth assets and programs (?)
- provide leadership on national adaptation reform (NCRAS rhetoric)
- maintain a strong, flexible economy and a well-targeted social safety net (?)

ANU: Must also facilitate financing of adaptation measures at sub-national scales through national agreements, direct grants, co-funding and other instruments.



National Climate Resilience and Adaptation Strategy

Objective 1 - Drive investment and action through collaboration

Objective 2 - Improve climate information and services

Objective 3 - Assess progress and improve over time.

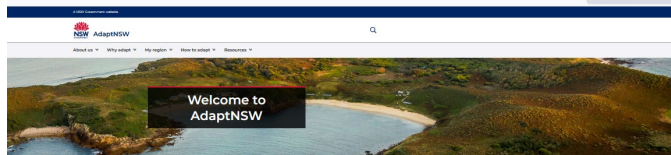
<https://www.awe.gov.au/science-research/climate-change/adaptation/strategy>

ANU:

- Climate adaptation is not inhibited by a lack of new or robust data.
- The Commonwealth has already funded information on climate change in sectors like: water availability, floodplains, coastal lands at risk, fire prone lands and natural resources management.
- Diminishing returns from further investments in these areas due to uncertainty as to the precise magnitude and rate of impacts.

ANU's recommended 11 point plan!

1 Build on existing adaptation plans



The basics of climate change
→

Causes of climate change
→

Impacts of climate change
→

Projections for your region
→

Our Mission
To help NSW households, businesses and government to understand and adapt to climate change impacts.
Read more →

How you can adapt

Homebuilding
Communities
Business
Government

Why adapt Basics of climate change Causes of climate change
My region Climate projections map My region
How to adapt Effects on households How households can adapt
Resources Case studies Teacher resources

Regional Climate Change Adaptation Strategies

Regional Climate Change Adaptation Strategies (RASs) are five-year practical strategies developed by the community to address the unique challenges and opportunities that climate change brings to Victoria's regions and guide locally relevant practical action.

Themes in the strategies include:

- preparing for and recovering from emergencies
- caring for the natural environment
- improving health and wellbeing
- strengthening the economy and workforce
- improving resilience of our built environment
- embracing renewable energy.

Check out your RAS for more information:



Gippsland Regional Climate Change Adaptation Strategy accessible version



Barwon South West Regional Climate Adaptation Strategy 2020-25 accessible version



Hume Regional Climate Adaptation Strategy accessible version

2 Betterment

Queensland Betterment Programs

****The 2020-21 Betterment Program is now open****

The Queensland Betterment Programs are jointly funded (50:50) by the Australian and Queensland Governments and enable the reconstruction of public assets to a more disaster resilient standard.

Betterment increases the resilience of our communities to natural disasters, while at the same time reducing future expenditure on asset restoration.

Betterment can also reduce incidents, injuries and fatalities during and after natural disasters, and improving asset utility during and after natural disasters.

Since the first betterment fund was established in 2013, more than 490 projects across Queensland – valued at more than \$240 million – have been approved, helping to create stronger, more resilient Queensland communities.

As at July 2021, 234 of the completed projects have been subsequently impacted by natural disasters with 85 per cent have sustained no damage or only minor or superficial damage.

Of the betterment projects that have been re-impacted, an investment of \$110 million has generated approximately more than \$250 million in savings or avoided costs, which is a great outcome for all levels of government, as well as Australian taxpayers. (Information is current as at July 2021).

For more information on the betterment programs and avoided costs refer to below:

Betterment eacer 2021
PDF 41KB

List of all approved Betterment projects

Betterment projects list with details
The Betterment projects list Excel spreadsheet displays the Betterment funding year, council, project name, funding amount, and project description. The Excel spreadsheet also allows for filtering functionality. 75 KB

Queensland Betterment Programs 2013+

<https://www.qra.qld.gov.au/betterment>

NSW and VIC adaptation programs:

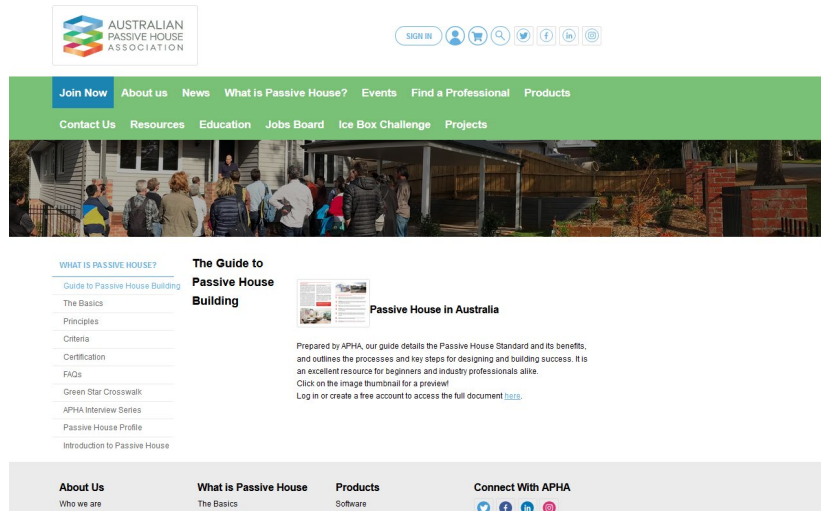
<https://www.climatechange.environment.nsw.gov.au/home>

<https://www.climatechange.vic.gov.au/supporting-local-action-on-climate-change>



An 11 point plan!

3. Better building standards



The screenshot shows the website for the Australian Passive House Association. At the top left is the logo, and to the right are social media icons and a 'SIGN IN' button. A green navigation bar contains links for 'Join Now', 'About us', 'News', 'What is Passive House?', 'Events', 'Find a Professional', and 'Products'. Below this is a secondary navigation bar with 'Contact Us', 'Resources', 'Education', 'Jobs Board', 'Ice Box Challenge', and 'Projects'. A large banner image shows a group of people gathered around a modern building. Below the banner, there is a sidebar with 'WHAT IS PASSIVE HOUSE?' and a main content area featuring 'The Guide to Passive House Building' with a thumbnail image and a brief description.

One example: Passive House Australia
<https://passivehouseaustralia.org/>

4. Coastal development standards



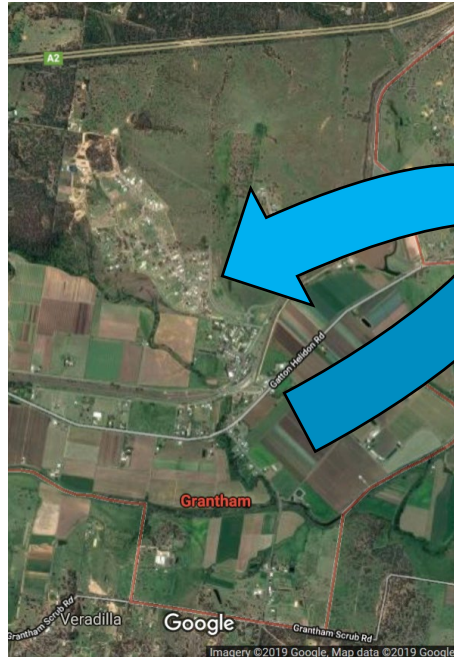
Houses undermined and teetering after a storm at Wamberal NSW in 2020 (ABC News).



An 11 point plan!

5. Buy back schemes

Relocation of
Grantham,
Queensland
after its
destruction
in a 2011
flood



Restored floodplain
bypass channel.
Photo: City of
Nijmegen,
Netherlands

6. Floodplain restoration



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7. Fire management



Control burn, Gurubung Dhaura, Yarralaumla 2019.
Photo: J Pittock

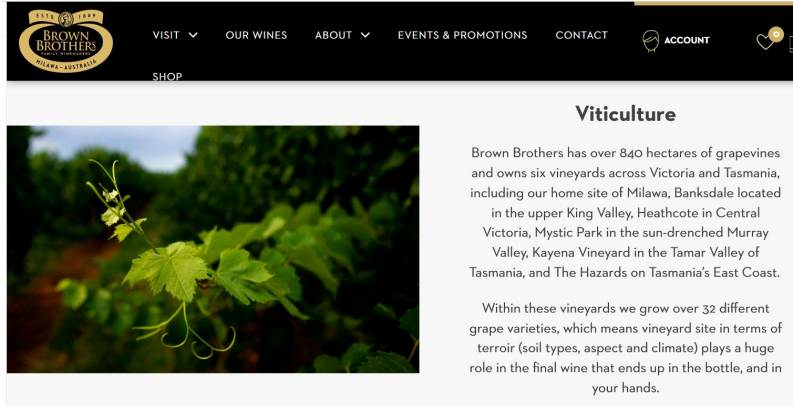
8. Natural resources management



Woodland restoration, Gurubung Dhaura, Yarralaumla 2019.
Photo: J Pittock

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9. Transformative agriculture



The screenshot shows the top navigation bar of the Brown Brothers website with links for VISIT, OUR WINES, ABOUT, EVENTS & PROMOTIONS, CONTACT, ACCOUNT, and SHOP. Below the navigation is a 'Viticulture' section featuring a close-up image of a green grapevine with small yellow flowers. To the right of the image is the following text:

Viticulture

Brown Brothers has over 840 hectares of grapevines and owns six vineyards across Victoria and Tasmania, including our home site of Milawa, Banksdale located in the upper King Valley, Heathcote in Central Victoria, Mystic Park in the sun-drenched Murray Valley, Kayena Vineyard in the Tamar Valley of Tasmania, and The Hazards on Tasmania's East Coast.

Within these vineyards we grow over 32 different grape varieties, which means vineyard site in terms of terroir (soil types, aspect and climate) plays a huge role in the final wine that ends up in the bottle, and in your hands.

Brown Brothers winery expansion in Tasmania

<https://www.brownbros.com.au/about/winemaking-and-viticulture/>

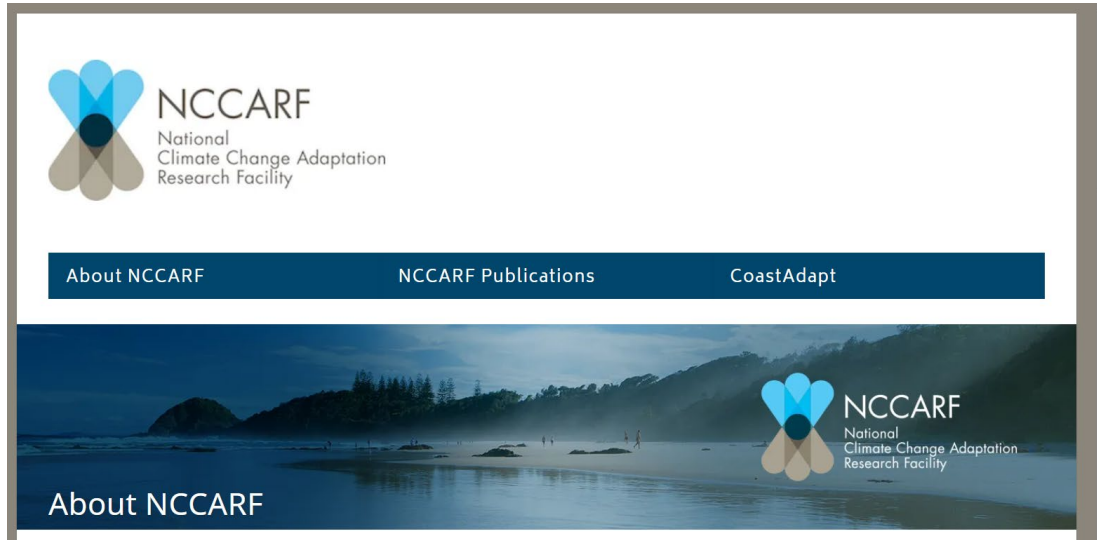
10. More resilient power supply



Solar farm, Monaro Highway, ACT. © J Pittock 2020

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11 Information coordination



National Climate Change Adaptation Research Facility (NCCARF) 2008-19.

Source:

ANU ICEDS submission to the National Climate Resilience and Adaptation Strategy Taskforce, 7th September 2021.

Conclusions

1. Australia can and should do much better than NCRAS
2. Limited returns from more modelling
3. We know what to do to reduce key climate change impacts
4. The Federal Government should actively support the adaptation programs of state and local governments, and community organisations



Bottle Bend lagoon, NSW, April 2007.
© J Pittock

CoP26 Glasgow Climate Pact and climate change adaptation

Baseline in November 2021: “88 countries are now covered by Adaptation Communications or National Adaptation Plans to increase preparedness to climate risks.”

Glasgow Climate Pact:

- Goal for developed countries to double the funding provided to developing countries for adaptation by 2025, equating to around US \$40 billion per year.
- Glasgow-Sharm el-Sheik Work Programme on the Global Goal on Adaptation over two years.
- Recognized the critical role of “restoring nature and ecosystems in delivering benefits for climate adaptation”, a strategy known as ‘ecosystem-based adaptation’ and ‘nature based solutions’.
- Pledge to end deforestation by 2030 from over 120 countries, representing around 90% of the world’s forests.
- Nationally Determined Contributions - requesting countries to increase their pledges again in 2022, including on adaptation.

