



Why reducing our power bills is central to reducing our climate footprint

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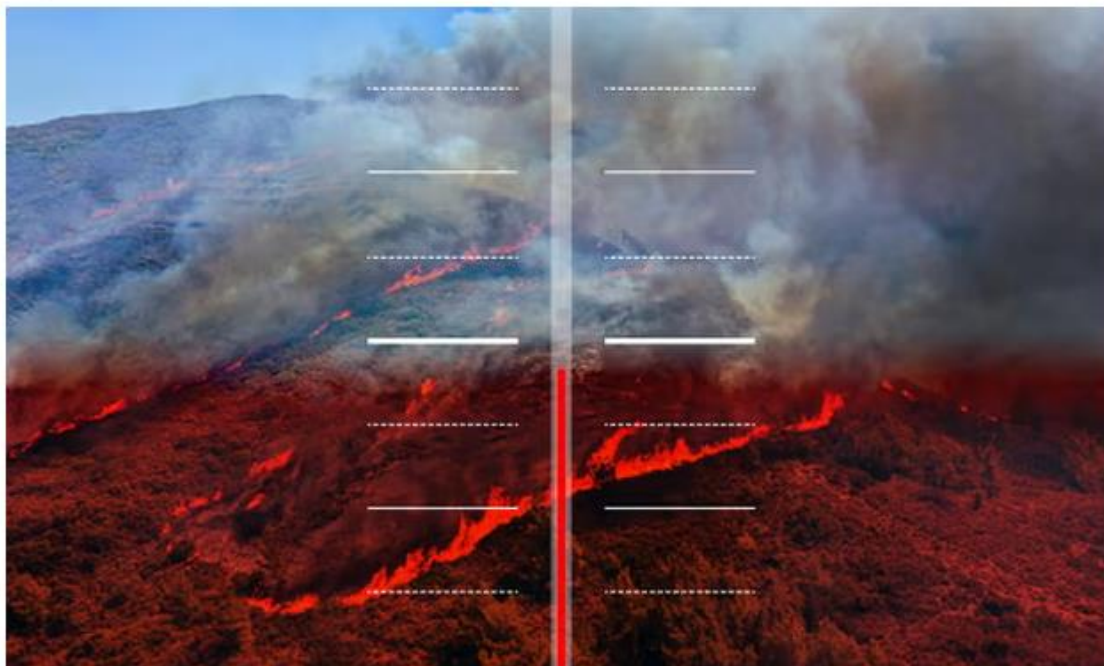


The fact of climate change is influencing our lives every day – these are just two recent stories in the media

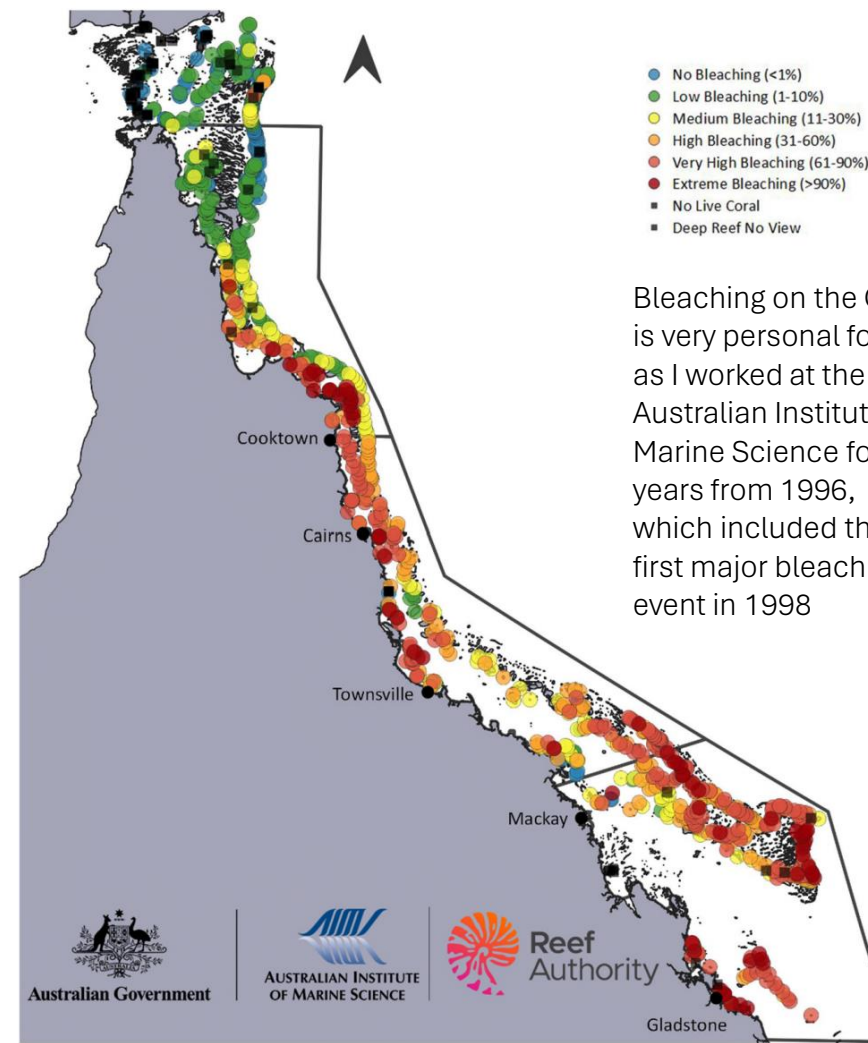
World's top climate scientists expect global heating to blast past 1.5C target

Exclusive: Planet is headed for at least 2.5C of heating with disastrous results for humanity, poll of hundreds of scientists finds

- **'Hopeless and broken': why the world's top climate scientists are in despair**



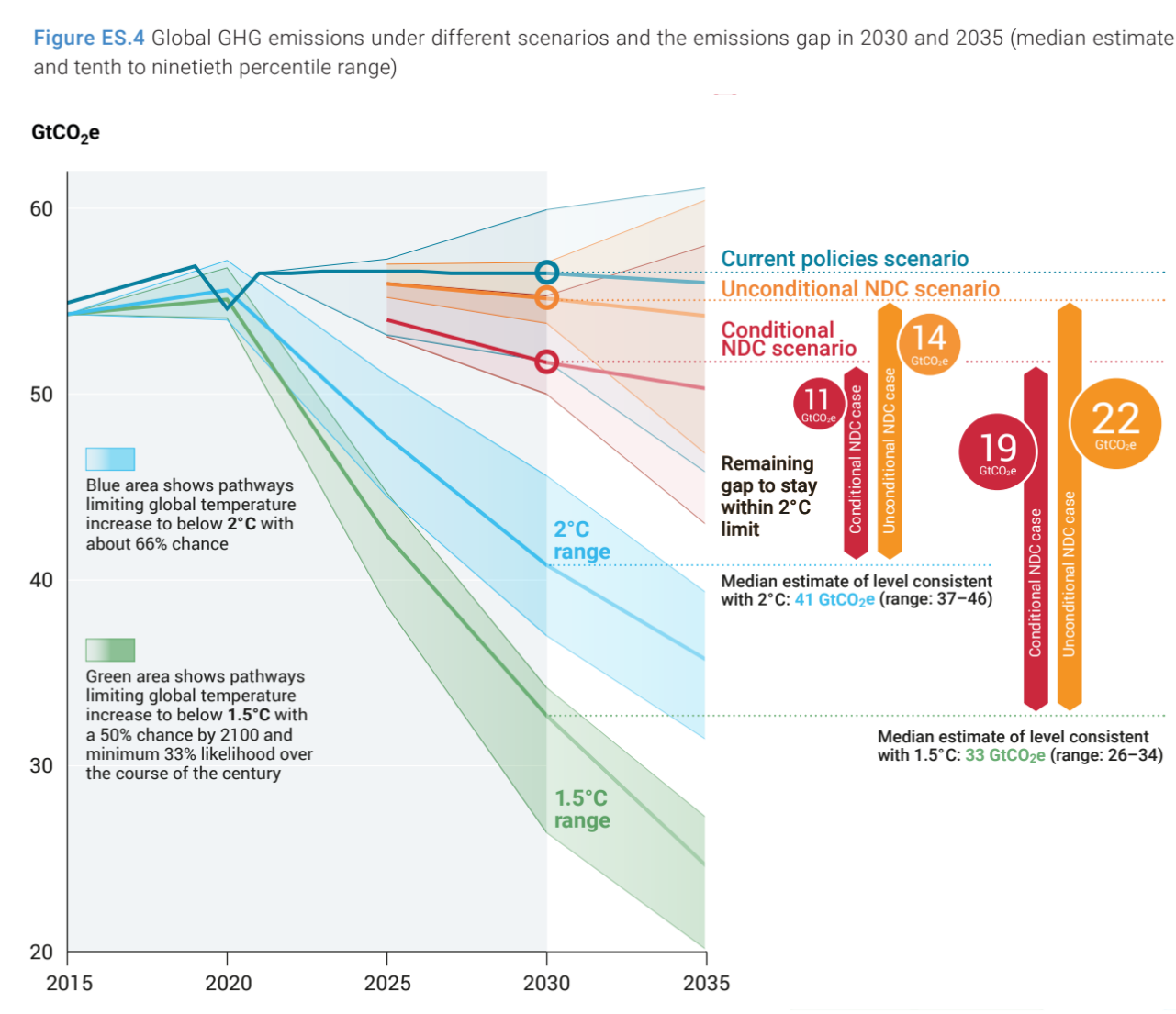
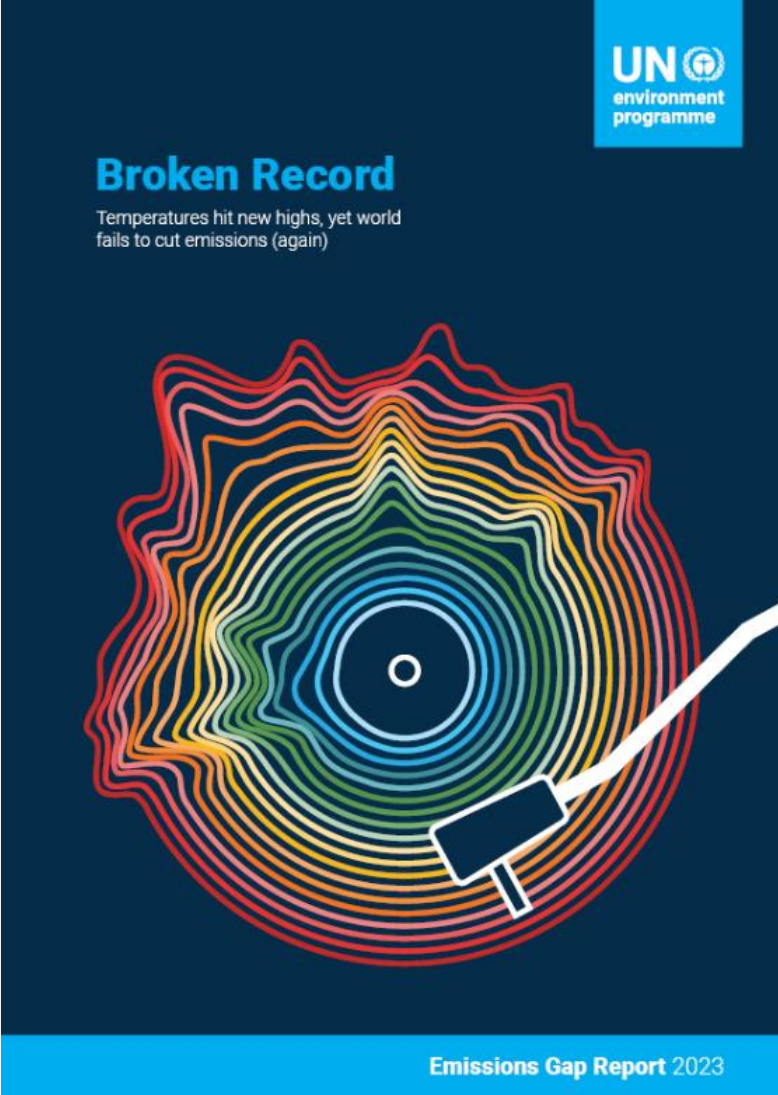
📷 The climate crisis is already causing profound damage to lives and livelihoods across the world. Illustration: Guardian Design/Halil Kahraman




Bleaching on the GBR is very personal for me as I worked at the Australian Institute of Marine Science for 9 years from 1996, which included the first major bleaching event in 1998

Map 1 - 2024 Aerial survey observations of bleaching prevalence in shallow-water coral communities throughout the Great Barrier Reef.

The United Nations Environment Programme latest “gap analysis” shows the world is still a long way off track from limiting global heating to 1.5°C





“It will not be possible to get close to meeting a Net Zero target without engaging with people or by pursuing an approach that focuses only on supply-side changes”

UK Climate Change Committee

The UK climate Change Committee is a statutory body tasked with advising the UK government on its progress in reducing UK greenhouse gas emissions

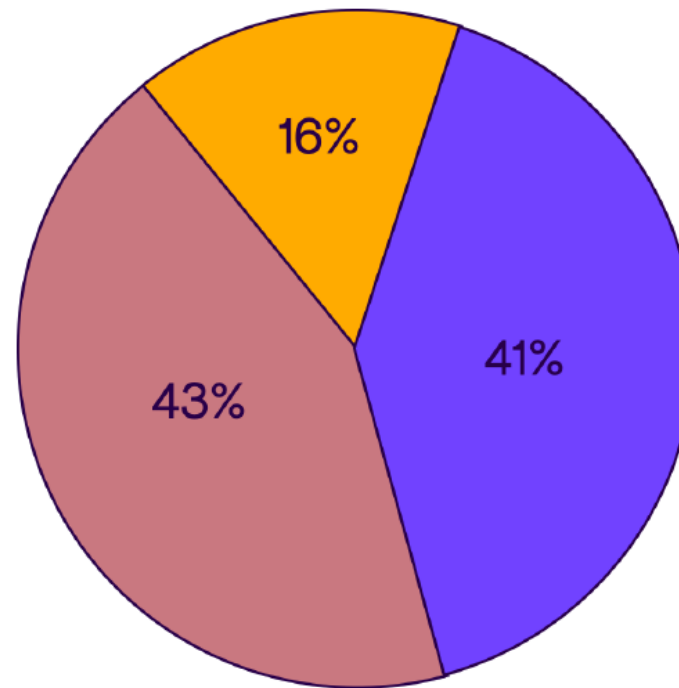
Behavioural and societal changes will drive more than 50% of change to net zero (analysis from UK Climate Change Commission)

Delivering Net Zero

Role of behavioural and societal change in meeting the Sixth Carbon Budget

As an example, for transport:

- combined technological / societal approaches include EVs, electric bikes
- behavioural approaches include walking, ride-sharing, using public transport



- Low-carbon technologies or fuels, not societal/behavioural changes
- Measures with a combination of low-carbon technologies and societal/behaviour changes
- Largely societal or behaviour changes

Source: CCC Analysis

And yet where does most of the money go?

The 2024 Australian federal budget included \$22.7 bn on the new Future Made in Australia initiative
This is a great investment – but it does focus almost entirely on supply side and not on societal factors



Budget
2024–25

A Future Made in Australia



Less than 3% of this investment will target societal factors



Budget 2024–25

Spending on societal factors

- \$112.2 m to societal changes, including “improving engagement with communities involved with the energy transition”, integration of solar rooftop and batteries into the grid, reducing emissions in agriculture and land sector
- \$428.2 m to various workforce training and attraction schemes for the new economy

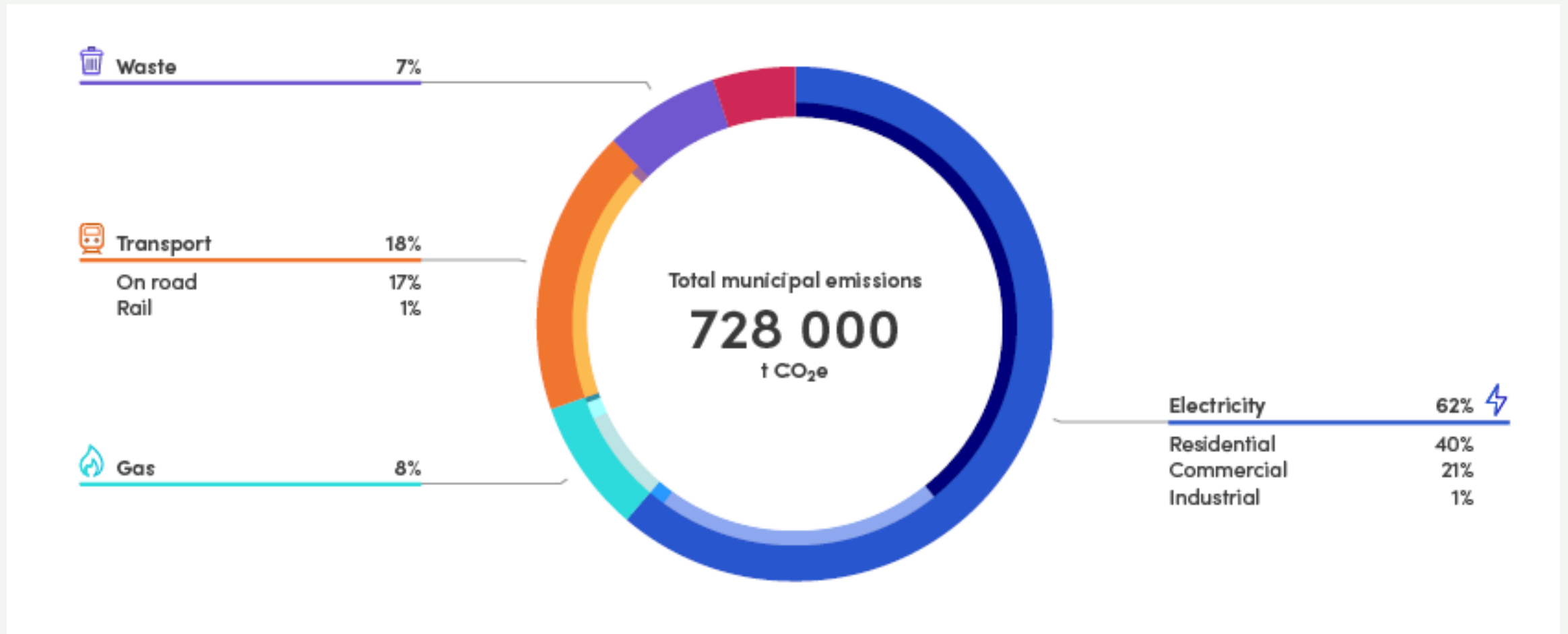
Leaving:

- \$22.16 bn for technology development, financing and attraction

A Future Made in Australia



Turning to our local environment: Ku-ring-gai's emissions sources are heavily residential (2021 data)



Ku-ring-gai reflects the national challenge with our existing housing stock



- Nationally over 12% of emissions come directly from housing
- In Ku-ring-gai about 45% of our emissions are from electricity and gas use in our homes
- NSW has about 2.2 m houses, 800,000 apartments and 405,000 town houses – total 3.4 m homes
- Around 70% of existing homes use gas.
- The average energy efficiency (NatHERS) rating is 1.8, on a scale of 1-10.
- To meet net zero by 2050, we will need to retrofit almost all NSW homes – this would mean retrofitting over 2000 homes per week, right now

We should not be amplifying the problem: We know how to build net zero houses



Josh Byrne's house in Freemantle, WA, is just one example of a normal family home that has been built to be net zero

New houses should all be built to a net zero standard



- The national housing accord will add \$1.2 m new homes by 2030 - adding 10% to the existing housing stock nationally.
- The NSW share is 377,000 new homes
- This risks adding to emissions, adding to pressure on the grid, adding to cost of living pressures
- It also risks large scale impacts on biodiversity, impacts on water quality, loss of amenity, loss of heritage
- There is a huge opportunity to increase housing development standards to those we know will be better for people and the planet



Policy opportunities to move to all new homes being net zero

- National Trajectory for Low Energy buildings – 2024 update
 - In July 2023 Energy Ministers agreed to update the Trajectory and set a new goal:
Low energy and net zero emissions building sector by 2050
- The Climate Change Authority is providing advice on a 2035 target, and is developing six sectoral decarbonisation pathways, **including one for the built environment.**
- The National Construction Code (NCC):
 - NCC 2028 will be a key element of the updated Trajectory
 - **Need to avoid constructing buildings that have to be retrofitted**
 - Primary focus will be on residential buildings
- NSW Building Sustainability SEPP (state environmental planning policy): **will be reviewed in 2025.** It already has a requirement for new commercial buildings to be net zero ready. This could be extended to residential buildings.

Building net zero homes and upgrading housing stock has many benefits

- reduces emissions
- reduces power consumption for heating and cooling
 - saves money for the homeowner
 - takes pressure off the grid
- increases comfort levels
- increases resilience
- great for health
- makes housing more affordable to actually live in

