

To: Legislative Council Environment and Planning Committee, Parliament of Victoria

25 July 2024

Inquiry into Climate Resilience

We welcome this opportunity to make a submission to the Inquiry into Climate Resilience. People in Victoria are already experiencing the effects of climate change, including more frequent and intense bushfires, floods, storms and heatwaves, and understand how infrastructure and the built environment supports or stymies our collective ability to cope and bounce back.

Our submission draws directly on Victorians' experience of climate resilience. We surveyed our supporters around Victoria and 541 responded. They provided feedback on aspects of the built environment that amplify or mitigate the impacts of extreme weather, actions their community have taken to become more resilient, and whether their community fully understood the risks of climate change. They also told us how they would like to be included in the government's work to improve our resilience.

About Environment Victoria

Environment Victoria is the leading not-for-profit environmental advocacy organisation in Victoria. With 40 grassroots member groups and over 200,000 individual supporters, we've been representing Victorian communities on environmental matters for over 50 years. Through advocacy, education and empowerment, Environment Victoria seeks significant and enduring solutions that will safeguard the environment and future wellbeing of all Victorians.

Resilience encapsulates three aspects:

- 1. Mitigation of the causes of climate change
- 2. The capacity of systems to cope with climate-related events
- 3. The capacity of systems to adapt to climate change over time.

Climate resilience is thus core to all of our activites from our Safe Climate campaign to ongoing efforts to improve the management of the Murray-Darling.



What we learned from our survey

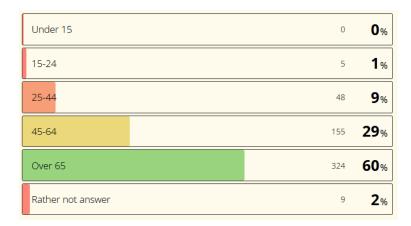
Key messages

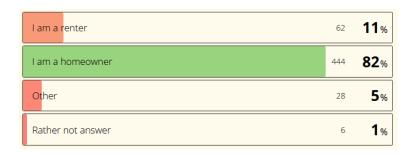
- Victorians are anxious about climate change, but also motivated to work on climate resilience.
- Our built environment and infrastructure can make us more resilient but it can also make us less resilient. We need to make changes that shift us toward resilience.
- Communities want the government to collaborate with them on climate resilience and to be accountable for the outcomes.

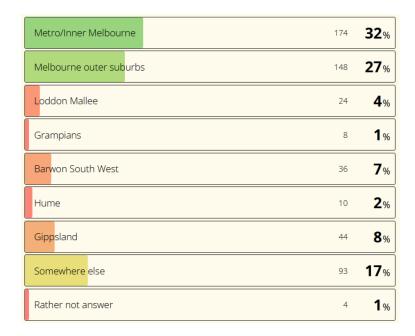
Responses

We received 541 responses to our survey from people across Victoria, with a diverse range of backgrounds and experiences. In addition, 16 people made their own video submissions.

Respondents skewed older, with 60% over 65, and 29% between 45 and 64. Over 80% were homeowners, with 12% renting. 59% were from Greater Melbourne and all regions were represented, with the best-represented being Gippsland (8%) and Barwon South West (7%).







Results

Vulnerability to climate change

38% of respondents are particularly vulnerable to the effects of climate change and the reasons were wide-ranging.

For some it was their location close to bushfire or flood zones which made them vulnerable to impacts. For others, their location meant their livelihood was especially vulnerable to drought. In some regional areas, the unreliability of phone and internet services was a worry.

Disability and physical health was frequently cited as a factor making people vulnerable, including sensory and mobility issues, asthma and heart conditions, autism and the need for life support.

"My wife suffers from asthma, so bushfire smoke presents a health risk."

Many in our community are affected by elevated heat—not just extreme heat—and struggle with poor sleep and aggravated health conditions during the warmer months. This was often associated with age, and our older respondents also reported that frailness and lack of family or community support makes them feel like they are on their own when climate-related disasters strike. Many are anxious because they don't know how they will be able to take care of their own safety.

Younger respondents and their parents are disempowered about the future, with little say in planning for climate change and feeling drowned out by more powerful vested interests such as the fossil fuel industry. Distress is high among our supporters which is adversely affecting wellbeing and mental health.

Poverty was often raised as a major reason for vulnerability, severely limiting peoples' capacity to make changes that could mitigate the effects of climate disasters and cope with disruption. This was often linked to housing quality and security.

"Homeless people are the most 'at risk' during any extreme weather event; even normal winter and summer extremes endanger their very lives. Safe housing for all must be a number one priority" "I feel lucky to be living in Public Housing, that is part of the climate solution, and lucky because I'm not being ripped off by greedy landlords forcing people into homelessness."

"The housing crisis makes so many vulnerable. Cap rents and more social housing."

Experience of climate change related disasters

Nearly half (46%) of respondents had directly experienced disasters - of increasing intensity.

Many have needed to evacuate from bushfires, often multiple times. Our community have been affected by recent extreme storms in metropolitan Melbourne and regional areas such as Mirboo South which have cause tree damage, road blockages and long-lasting power outages. Power outages had cascading effects such as loss of access to fuel and mobile phone service, as well as food spoilage.

Floods have affected several respondents, resulting in not only property damage but increased insurance premiums going forward.

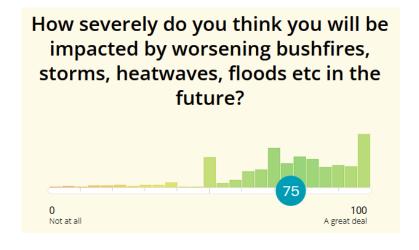
Some people find their house is intolerable during hot weather due to a lack of insulation and access to cheap cooling measures such as ceiling fans. People reported having to leave their home during the day and endure sleepless nights.

On this note, only 53% of respondents are confident that their home is safe and liveable in the face of heatwaves, power outages and bushfire smoke.

"I have no cooling, other than a couple of small fans. I manage as best I can closing blinds. Fans often just move around hot air. As a pensioner, the cost of air conditioning is prohibitive."

"Bushfire smoke is another matter - it affects my breathing."

Our community is pessimistic about the future – on a scale of 1 to 100, our respondents ranked the severity of impacts due to climate change-related disasters in future at 75 – with almost no responses under 50.



Communities are already involved in climate resilience work

59% of respondents reported that they or their communities have taken action to be more resilient to disasters. When talking about their community taking action, people are thinking not only about their neighbours, but their local council, Country Fire Authority, schools, State Emergency Service, environment and faith groups. This also includes volunteer-based groups that they themselves have started.

Their involvement encompasses all aspects of resilience: not only preparing for impending disasters, but taking action to make their homes and natural environments more able to recover from events, and reducing their own contribution to climate change. Our community values preparedness as well as mitigation measures such as better urban tree canopy, the installation of renewable energy systems and getting off gas, and actions that will improve the resilience of nature, like improving habitat and stopping beach erosion.

Therefore it's no surprise that respondents cited their communities' biggest strength as the people – their tendency to band together, collaborate and support each other. Another major strength was the firefighting infrastructure in place.

Our respondents were very clear that they expect the government to take responsibility for every aspect of climate resilience. When we asked people about the extent to which they would like to be involved in climate resilience planning, the results were very clear — our community wants to be directly involved, not only providing input but influencing or collaborating on decision-making. Ultimately however, government must be responsible and accountable.

| How involved do you think you and your community should be in climate resilience planning? | | |
|--|-----|-----|
| [1] INFORMED: Just keep us informed on what is happening | 53 | 10% |
| [2] CONSULTED: We should be able to provide feedback on analysis, alternatives and decisions. | 57 | 11% |
| [3] INVOLVED: Community concerns and needs should be directly reflected in the options presented and feedback is provided on how the community input influenced the decision. | 114 | 22% |
| [4] ACTIVE COLLABORATION: The community is an active partner in each aspect of the decision, including the development of alternatives and the identification of the preferred solution. | 257 | 49% |
| [5] DECISION-MAKERS: The community has complete power to propose solutions and make the final decision and is accountable for the outcomes. | 44 | 8% |

Disappointingly, many people felt that the government is not effectively planning for future climate change and failing to maintain infrastructure such as hospitals and roads. Not enough is being done to ensure secure and appropriate housing for everyone. They also observe that government responses relied too heavily on volunteers who are increasingly of an older demographic – more needs to be done to engage new groups in volunteering.

Our respondents had mixed feelings about local councils. Many have climate adaptation plans in place such as the City of Melbourne, which was the first in Australia to do so. These plans focus on educating the community about the risks of climate change and establishing climate refuges around the municipality. Local councils are also on the front line of response and coordination when emergencies occur.

Our survey revealed that many doubt their council's capacity to deal with climate resilience in line with community expectations. They want the Victorian government to provide more support and resources.

"Our council had to direct enormous amounts of funds to cleanup instead of normal services."

"Mornington Peninsula Shire Council has a Climate Emergency Plan and is currently developing a coastal strategy. Lack of State Government funding and the extra slow release of the coastal hazards report has meant loss of time to implement strategies & action."

"Most disaster aid has been directed to disaster recovery, not to adaptation to prevent future climate damage impacts. We need both to happen."

When the built environment is working against the community

44% of respondents reported that the effects of climate change are being amplified. A major concern is the loss of tree canopy, green space and permeable surfaces with increasing urbanisation, which exacerbate flooding and the urban heat island effect.

"Continuing to build bigger roads and clear existing canopy for larger houses and suburban developments. Canopy not being replaced fast enough"

"New developments in the town have no gardens, black roof, large houses with multiple air conditioners, no eaves, rocks, concrete and gravel everywhere. The council has also planted no street trees. The new estates are just heat banks."

Urban planning, both historical and present, that allows building too close to the coast and in flood-prone areas is also a worry. Others are concerned about flood walls, levees and other built structures which might protect one area but increases the vulnerability of homes in the surrounds. This was a concern in both metropolitan and regional areas.

"A proposed levee bank on the Goulburn River. It'll be a costly failure which traps water and amplifies the flooding impact."

"Construction of levees and barriers, pushes water elsewhere. Flemington was an example."

People living in bushfire-prone areas are concerned about escape routes, particularly those people who already feel particularly vulnerable due to age, disability and lack of local support networks.

Housing quality was continually raised as a major issue in climate resilience. We heard from homeowners with the resources and capacity to improve their home with measures like insulation, double glazing, solar and air conditioning. On the other hand, many people lacked the ability to

make their home more climate-resilient because they did not own their own home or did not have the resources to make improvements.

"With the housing crisis, there is no where I can go to better cope with climate change, yet I can't invest in things that could help with resistance - like insulation or solar panels."

"Our house is incredibly hot during heatwaves and bitterly cold now."

Many respondents noted the importance of public space as a refuge during heatwaves, floods and other disasters, particularly for those without a comfortable home—or any home.

"One heatwave before we had air conditioning we had to escape the house as the heat was intolerable - we went to a shopping centre and were able to park in an underground car park. We stayed in the shopping centre until evening when the temperature finally dropped enough to go home."

"Homeless people need shelter against heat and flood, and need to know where safe places are. We would need to nominate and equip safe places, such as the town hall, which could be advertised via notices in public places like bus shelters, train stations, health centres. Shopping centres could be more accommodating to those escaping heat by putting back seats."

Insufficient action on climate resilience is now making insurance unaffordable. Several respondents reported that their home is no longer insured because the premiums are out of reach. This means that next time there is a disaster, they won't be buffered when their property sustains damage.

"People won't be able to afford insurance ... I can't"

"And regarding insurance, we have abandoned insurance in favour of putting our money and effort into reducing the risk. ie. we are reducing our use of fossil fuels as much as possible and cleaning up bushfire risk to the best of our ability."

"The insurance premiums have gone thru' the roof 800\$ -> 6000\$ I cannot afford the premiums on my pension So I am currently not insured"

"The flood plain (including our house) has been paved and built on, channelization and piping beneath roads has left little room to accommodate above bank flows and the potential of backup from the coast was certainly never considered. I would suggest that in time our property will be vulnerable to inundation."

"Hail storm caused \$200,000 worth of damage to house. Insurance premium have tripled last 5 years."

"My home was surrounded by flood waters in the October 2022 Maribyrnong River flood. I am now directly affected by the blanket announcement by Melbourne Water that Kensington Banks is now a flood zone. No consultation, no nuance, no consideration of existing flood mitigation measures"

"We are facing an insurance crunch because succeeding governments have failed to reduce emissions and also put in adaptation measures to reduce the risks to communities"

Preparing for climate disasters

We found out about the ways people are planning for and coping during extended power outages – or that they are not. People's resources and home ownership status influence whether they have the capacity to plan and prepare, and shared infrastructures such as telecommunications and transport also make a big difference. Often, people make do with half measures.

"We have put an additional water tank near the house. It still won't provide running water in the case of a power outage but at least it is close to the house."

"My house is well insulated, solar panels and battery backup, so energy/heating/cooling not a real issue for me."

"Loss of electricity in the area for extended periods, therefore sole reliance on personal petrol generator. Due to power outage had to drive 12km to buy petrol for generator."

"When the power is out, our NBN also goes down - the modem and telephone do not work. I need to pay for an old landline in case of emergencies."

For others, they're just not ready because they don't have the capacity or resources to improve their resilience, or they simply don't know what to do.

"During power outages we are seriously stuck, no heating in winter, no hot water in the summer, no fans. The house gets unbearable."

"I don't know how to plan for power outages"

"Telephone as there is now no to the house connection. It is completely reliant on wifi which is dependent on their being electricity supply so is very dangerous when there is a power outage which I have experienced after the February 13th of 2024 storms I was without power for 8 days. The first 3 days no phone access at all no 000 option at all."

Video submissions

In addition to the survey, sixteen of our supporters recorded individual video submissions for this Inquiry and we have lodged these separately. These videos were submitted from across the state including ten from regional areas including Ballarat, Smythes Creek, Orbost, Marlo, Gherang and Mount Beauty, and six from metro Melbourne from the inner west and north, south-east, Mornington Peninsula and Belgrave.

The videos described people's direct experiences of bushfire, extreme heat and storms as well as high levels of anxiety about our current levels of community preparedness.

They strongly underlined the call for more government resourcing including though a climate adaptation fund, more community involvement in planning, more emphasis on community education, identifying and promoting community cool, safe spaces and targeted support for people living with disabilities and other communities at greater risk from extreme weather and disasters. Several called for a commitment to First Nations-led solutions, both generally and with specific regard to fire management practices.

Many reflected on stretched emergency services, particularly those with recent firsthand experience of extreme storm and bushfire emergencies. They highlighted a need for more capacity and funding to flow into these services, especially more support for staff and volunteers, ways to bring in more volunteer help and more equipment.

Discussion

In this section, we review evidence and solutions to improve climate resilience in Victoria's built environment.

Disasters exacerbate existing inequality

In creating the Australian Disaster Resilience Index, researchers analysed the impact of different social indicators on resilience. They found that communities were less resilient when there were more elderly people, children, women, people from culturally and linguistically diverse backgrounds, and more people who are unemployed or have lower educational attainment. They also found that areas with more renters and more people under mortgage stress are less resilient.¹

A recent report into the gendered nature of climate change and environmental justice found that women and children are disproportionately affected by climate change impacts, as are the elderly, disabled, First Nations people, and people living in regional and remote areas.² A study into the experiences of First Nations people during the Black Summer bushfires found a 'disaster within a disaster' due to the additional burden of damage to cultural and heritage values as well as recovery services being unwelcoming and culturally unsafe.³

It is important that resilience is not defined as maintaining the status quo and all of the inequality, unsustainability and injustice that goes with it. Resilience is best framed as a process of negotiation, with people and communities, that includes the social goals that are so important to real-world resilience.⁴

Housing quality and inequality make us less resilient

Organisations across the environment and social sectors have been raising the issue of housing quality for a very long time, with little improvement achieved. Back in 2010 the One Million Homes Alliance, of which Environment Victoria was a founding member, began campaigning to make half of Victoria's housing stock climate-ready. More recently, ACOSS identified climate resilience as a key urgent area of priority in its budget submission, stating that 'climate change threatens people's health and wellbeing, their quality of life, employment, livelihoods, homes and life itself. The impacts are being felt now and are accelerating.'5

Renters advocacy group Better Renting also recently published the results of a research project that tracked the humidity and temperature inside 109 renters homes over the summer period. The

¹ Melissa Parsons et al., 'The Australian Natural Disaster Resilience Index: Volume II – Chapter 2: Indicators' (Melbourne: Bushfire and Natural Hazards CRC, 2020).

² Women's Environmental Leadership Australia, 'Gender, Climate and Environmental Justice in Australia', 2024, https://wela.org.au/wp-content/uploads/2024/05/Full-report-Gender-Climate-and-Environmental-Justice-in-Australia-WELA.pdf.

³ Bhiamie Williamson, 'Aboriginal Community Governance on the Frontlines and Faultlines in the Black Summer Bushfires', application/pdf, December 2021, https://doi.org/10.25911/V482-AE70.

⁴ Leila M. Harris, Eric K. Chu, and Gina Ziervogel, 'Negotiated Resilience', *Resilience* 6, no. 3 (2 September 2018): 196–214, https://doi.org/10.1080/21693293.2017.1353196.

⁵ ACOSS, 'Budget Priorities Statement 2024-25', 2024, https://www.acoss.org.au/wp-content/uploads/2024/03/ACOSS_Budget-Priorities-Statement-2024-25_3.pdf.

results showed that many renters spend their summers living in unhealthy and sometimes dangerous conditions as temperatures rise.⁶

Yet in Victoria change remains painfully slow. It took 9 years from the first announcement in 2015 of the Victorian government's intentions to improve the 6-star standard for new homes - the 7-star and whole-of-home assessment became standard in May 2024. Before that, improvements were more frequent, with 5-star introduced in 2006 and 6-star in 2010.

To improve existing homes, the first step is to demystify the problem. An Australian energy rating label for homes being sold or leased was first announced in 2003 – and this policy is still in development. The Residential Efficiency Scorecard could be phased in for this purpose immediately with political will.

Given this long-standing policy gap, we welcome the Victorian government's proposal for new rental standards, which will make a real difference for the 30% of Victorians who currently rent their homes. The proposed new rental standards are absolutely essential measures and must be implemented in full, with commitment to improvement over time. Victorian renters have little ability to improve housing quality, and are half as likely to have insulation than homeowners.⁷

Are housing standards ready for future temperature patterns?

Up until 2022, thermal efficiency ratings for new homes under the NatHERS program were based on outdated climate data from 1969 to 2004. Since then, the data was updated, but is now based on climate data from 1990 to 2015 – meaning there was a 7-year delay from climate data collection to implementation in standards. This excludes eight of the 10 warmest years on record.⁸

Housing ratings are based on climate data that excludes weather extremes. Without also testing housing performance in extreme weather our homes are simply not designed for heatwaves.

Given the rate of change, in practicality we need to think about assessing housing in relation to future climates. CSIRO have already created data for future climate scenarios that could be readily used in our housing standards.⁹

Safe housing for all

There are over 30,000 people experiencing homelessness or living in temporary, unsafe or insecure housing in Victoria. 10 100,000 Victorians are on social housing wait lists. 11 Climate-related disasters

⁶ Better Renting, 'Cruel Summers: Renters' Diverse Experiences of Summer 23-24', 2024, https://assets.nationbuilder.com/betterrenting/pages/469/attachments/original/1710468131/Cruel_Summer s_SRR24_v1.2_embargoed_to_March_19.pdf?1710468131.

⁷ VCOSS, 'Victorian Renters Deserve Solar Equality', Victorian renters deserve solar equality | VCOSS, 16 March 2022, https://vcoss.org.au/housing-and-homelessness/2022/03/victorian-renters-deserve-solar-equality/.

⁸ Bureau of Meteorology, 'Annual Australian Climate Statement 2023' (scheme=AGLSTERMS.AglsAgent; corporateName=Australian Government - Bureau of Meteorology, 8 February 2024), Australia, http://www.bom.gov.au/climate/current/annual/aus/#tabs=Temperature.

⁹ Zhengen Ren, Zhi Tang, and Melissa James, 'Projected Weather Files for Building Energy Modelling' (CSIRO, 2022), https://ahd.csiro.au/wp-content/uploads/Projected-weather-files-User-Guide-v6.pdf.

¹⁰ Council to Homeless Persons, 'Data and Demographics', Council to Homeless Persons website, accessed 22 July 2024, https://chp.org.au/about-homelessness/data-and-demographics/.

¹¹ VCOSS, 'A Plan to End Homelessness', October 2023, https://vcoss.org.au/wp-content/uploads/2023/10/SUB20232010_VCOSS-Submission-to-the-development-of-the-NHHP.pdf.

like floods and bushfires push more people into homelessness, and events such as heatwaves hit people who are not safely housed even harder.¹²

As VCOSS have argued, Victoria and Australia need to set an explicit goal of ending homelessness and housing insecurity, including growing public and community housing to meet outstanding needs and preventing homelessness before it happens.¹³

In public spaces, there is a greater need for areas that are freely accessible, welcoming and provide respite from extreme heat. One example is the cooling hubs co-designed with end users and researchers, and co-located with health and support workers to be established in Sydney.¹⁴

Poor indoor air quality during bushfires

For many people, the 2019-20 bushfire season brought home the broader health dangers of bushfires as smoke blanketed towns and cities. Older people and those with health conditions were particularly impacted by poor air quality.

Our minimal housing ventilation standards don't include building sealing and don't consider times when outside air quality is poor. Older housing is particularly leaky and doesn't provide sufficient means of ventilation control. During bushfires, people are instructed to use air conditioning systems to recirculate and filter their indoor air. In more normal times, people are not given information on how to prepare their home: to safely seal gaps without causing other health problems, and to use air conditioners that can recirculate and filter air. People feel they need to purchase expensive air purifiers.

Urban heat

It is well known that urban and suburban Victoria have an urban heat island problem, particularly in Melbourne's west, north and outer southeast in growth suburbs and historically industrial areas. This has serious implications for climate resilience and climate justice - research by VCOSS has found that the lowest-earning households in metropolitan Melbourne are also those which experience the highest urban heat.¹⁵

In order to mitigate the problems associated with Urban heat, we support the recommendations of VCOSS including providing funding to the community sector to help people cope with extreme heat, increasing residential energy efficiency and access to air conditioning, expanding access to cool community spaces including cool 'green spaces', improving transport infrastructure, access to targeted health information, empowering workers and protecting the most vulnerable community members.¹⁶

¹⁴ Currie, River, and English, 'Australia's First Mobile Cooling Hub Is Ready for Searing Heat This Summer – and People Who Are Homeless Helped Design It'.

¹² Jane Currie, Jo River, and Timothy English, 'Australia's First Mobile Cooling Hub Is Ready for Searing Heat This Summer – and People Who Are Homeless Helped Design It', The Conversation, 7 December 2023, http://theconversation.com/australias-first-mobile-cooling-hub-is-ready-for-searing-heat-this-summer-and-people-who-are-homeless-helped-design-it-218829.

¹³ VCOSS, 'A Plan to End Homelessness'.

¹⁵ Ben Latham, 'A Comparison Of Disadvantage and Urban Heat Island Effect In Melbourne, Australia', 2023, https://vcoss.org.au/wp-content/uploads/2024/02/UrbanHeartVCOSS2023.pdf.

¹⁶ VCOSS, 'Feeling the Heat', May 2021, https://vcoss.org.au/wp-content/uploads/2021/06/Feeling-the-Heat.pdf.

Energy resilience

Energy resilience is a complex topic as it is implicated in the shift away from coal and gas, the increasing occurrence and intensity of climate-related disasters, and other sociotechnical changes such as information and communication technology and electric vehicles.

Long-lasting power outages can have wide-ranging and cascading impacts. These include the inability to keep spaces cool, reduced access to water, food, money, fuel, health services and other basic supplies, keeping in contact with essential services, and defending properties from bushfire.¹⁷ It becomes difficult to make decisions and is worrying when family and friends are out of reach.

Communities are motivated to find solutions to energy resilience using new technologies, but this is often easier said than done. For example, although grid-tied microgrids covering many properties may appear a good solution to energy resilience, recent research has found that many of the values, benefits or expectations of this technology are not readily accessible or straightforward under our current regulatory and governance regime for electricity.¹⁸

Instead, simpler solutions such as community hubs co-designed with local people can help cover some of the gaps in accessing essentials during outages. The community-led, government supported hubs announced for Victoria are a step in the right direction. ¹⁹ In the longer term, more complex ideas like microgrids should continue to be investigated, focusing on serving the community and not just people who can afford the technology.

The community also need to understand how electrification fits in with resilience. There may be reluctance to let go of fossil fuel devices such as gas appliances and internal combustion engine vehicles. It is not always simple, however – gas supply may need to be isolated in areas at risk of bushfire, and power outages at petrol stations prevent fuel being pumped as well as electronic payments. We would like the government to research the implications for resilience, both positive and negative, of the transition towards renewable electricity.

Insurance

Insurance against climate-related disasters is expensive and getting worse. Figures released by the Australian Bureau of Statistics in 2023 showed a sharp 16.4% increase to Australian's insurance premiums over the prior 12 months.²⁰

Inability to access house and contents insurance is a resilience problem as people face successive disasters. As ACOSS noted in its 2021 Climate Resilience and Adaptation submission, 'As extreme weather and natural disaster events increase in Australia, insurance premiums are escalating and

¹⁷ Pierrick Chalaye and Hedda Ransan-Cooper, 'Community Perspectives on Microgrids and Resilience in the Eurobodalla' (Battery Storage and Grid Integration Program, ANU, 2023), https://bsgip.com/wp-content/uploads/2023/05/Householder-Report.pdf.

¹⁸ Hedda Ransan-Cooper and Kathryn Lucas-Healey, 'Challenges and Opportunities for Grid-Tied Microgrid' (Battery Storage and Grid Integration Program, ANU, 2024), https://bsgip.com/wp-content/uploads/2024/05/Challenges-and-opportunities-for-grid-tied-microgrids-1.pdf.

¹⁹ Energy, 'Strengthening Energy Resilience during Extreme Weather', Energy (Energy, 29 May 2024), https://www.energy.vic.gov.au/about-energy/news/news-stories/strengthening-energy-resilience-during-extreme-weather.

²⁰ 'All Australians Will Foot the Bill after Climate Disasters Leave Insurance Industry on the Brink', *ABC News*, 29 April 2024, https://www.abc.net.au/news/2024-04-30/insurance-industry-urges-government-to-step-in-on-flood-zones/103752652.

too many people, particularly people on low incomes, find themselves under-insured or not insured, reducing their resilience to climate change.'21

For many people, particularly in the most impacted areas, proper insurance has already become unaffordable. A 2020 report by the Australian Competition and Consumer Commission (ACCC) into insurance affordability in northern Australia, where destructive storms and floods are most common, found the average cost of home and contents insurance in northern Australia was almost double the rest of Australia – \$2,500 compared with \$1,400. The rate of non-insurance was almost double – 20% compared with 11%. Internationally, in some regions particularly exposed to climate risks, private insurers are withdrawing from the market or risking insolvency. ²³

As a first step, we agree with ACOSS's recommendation that the government review insurance affordability in the context of worsening climate impacts. This should focus on low income householders, and should include consideration of appropriately priced insurance options including publicly-owned insurance options.

Communities want to collaborate

There is already substantial evidence that locally-led and collaborative plans for climate change and disasters leads to better solutions.²⁴ People want to be genuinely involved in planning for a better future – they want governments to be accountable, but they also want work together to focus on local hazards and risks and find local solutions. This doesn't mean "being consulted" – it means that the community is an active partner in describing the problen, developing alternatives and identifying solutions.

The consequences of not being collaborative include damaged confidence in the energy transition, exacerbated inequality of impacts (ability to prepare, ability to recover), overlooking the benefits of good community planning. This places more burden on limited public resources, misses opportunities to build back better, and excludes people including First Nations.

In order to achieve this, communities need better and more accessible information on climate projects relevant to their place; we require governments and communities to shift mindsets towards valuing local knowledge and contributions; building the capacities of people in community development and disaster recovery; and collectively moving towards proactive responses to climate change and disasters rather than reactive.²⁵

November 2020, https://www.accc.gov.au/system/files/Northern%20Australia%20Insurance%20Inquiry%20-%20Final%20Report%20-%2030%20November%202020.pdf.

ACOSS, 'Submission on National Climate Resilience and Adaptation Strategy (NCRAS) 2021 Consultation',
 2021, https://www.acoss.org.au/wp-content/uploads/2021/09/ACOSS-submission-NCRAS-13092021.pdf.
 Australian Competition and Consumer Commission, 'Northern Australia Insurance Inquiry - Final Report',
 November 2020, https://www.accc.gov.au/system/files/Northern%20Australia%20Insurance%20Inquiry%20-

²³ United Nations Environment Programme and International Science Council, *Navigating New Horizons: A Global Foresight Report on Planetary Health and Human Wellbeing* (United Nations Environment Programme, 2024), https://doi.org/10.59117/20.500.11822/45890.

Rebecca McNaught et al., 'Innovation and Deadlock in Governing Disasters and Climate Change
 Collaboratively - Lessons from the Northern Rivers Region of New South Wales, Australia', *International Journal of Disaster Risk Reduction* 105 (15 April 2024): 104366, https://doi.org/10.1016/j.ijdrr.2024.104366.
 McNaught et al.

Conclusions

It is clear that we face interacting and cascading consequences because our built environment and infrastructure is not adapted to the present, let alone the future. Climate-fuelled disasters are making people more vulnerable and therefore less resilient to the next event.

Housing is a fundamental factor in vulnerability and requires a significant correction to get us on the right path. Urban planning and community-scale amenities are also important to get right and put in place, to give people options that increase their resilience.

Finally, people and communities want to collaborate with government and be a part of creating solutions. A community climate adaptation fund could be resourced today from the Sustainability Fund, and could support community-scale planning and infrastructural changes. The cost of ill preparation is far higher.

Dr Kat Lucas-Healey
Senior Climate and Energy Advisor
Environment Victoria
k.lucashealey@environmentvictoria.org.au
0404 571 605