

## Victoria's Draft Built Environment Adaptation Action Plan. Engage Victoria consultation

### Record of Institute Responses entered on Engage Victoria 4-8-2021

**Q1. The following is the draft plan vision: 'Our cities, towns, homes, buildings and essential infrastructure are located and designed to support safe, vibrant and healthy communities in a changing climate.'** Please choose only one of the following:

Strongly agree with the vision	<input checked="" type="checkbox"/>
Agree with the vision	<input type="checkbox"/>
No opinion	<input type="checkbox"/>
Disagree with the vision	<input type="checkbox"/>
Strongly disagree with the vision	<input type="checkbox"/>
Prefer not to answer and/or not applicable	<input type="checkbox"/>

*Please provide the reason for your response regarding the vision (450 characters):*

It achieves the right balance recognising that built environment work best in the proper location. Human habitation/activity cannot feely encroach the entire area of the earth's surface. The Institute emphatically supports the premise of this statement that best outcomes for communities and individuals must be thoughtfully 'designed' using evidence-based understanding of the designs and their sub-elements that deliver this in a changing climate.

### **Q2. Do you agree with all of the following draft plan objectives?**

- Short-term objective (2022–26): Policies and standards are strengthened to provide comprehensive support for climate change adaptation across the Built Environment and associated critical infrastructure
- Medium-term objective (2027–31): All institutional organisations and major infrastructure providers have a plan that incorporates climate change adaptation into how they operate across the Built Environment.
- Long-term objective (to 2050): Climate change adaptation is integrated into all relevant investment and decision making across the Built Environment system.

Please choose only one of the following:

Strongly agree with all three objectives	<input checked="" type="checkbox"/>
Agree with all three objectives	<input type="checkbox"/>
No opinion	<input type="checkbox"/>
Disagree with all three objectives	<input type="checkbox"/>
Strongly disagree with all three objectives	<input type="checkbox"/>
Prefer not to answer and/or not applicable	<input type="checkbox"/>

*If you do not agree with one or more of the objectives, please explain why.(450 characters):*

The 2050 target should be brought forward to 2030. Twenty-nine years is too long. Many measures to achieve more climate resistant and adaptive features of our buildings also align to zero carbon buildings. Our Institute has already called on the Australian Government to establish a

national plan towards zero carbon buildings by 2030 that can be supported and led by state / local government. See: <https://www.architecture.com.au/about/carbonneutral>

### Q3. Which climate-related hazards concern you the most?

Please rate as follows:

- 3 stars for hazards of high concern
- 2 stars for hazards of medium concern
- 1 star for hazards of least concern

Heatwaves	3
Bushfire	3
Reduced rainfall	3
Coastal inundation (temporary and permanent coastal flooding)	3
Riverine flooding	3
Extreme wind and hail	3

*Do you have any comments about the increased risk from climate-related hazards in the future? (450 characters):*

Government needs to ensure buildings are optimally sited, built or retrofitted to withstand hazards according to location. This will generate downstream savings for individuals, emergency response and aftermath services and insurance underwriters who pass costs back to customers. A practical initiative example is the Qld Govt Household Resilience Program for grants up to \$11,250 to owner-occupiers of older cyclone-belt houses.

### Q4. How concerned are you (on a scale of 1-5) about the impacts of climate change on the built environment system?

Not concerned = 1 ----- to ----- Very concerned = 5.

Institute response = 5

### Q5. What are your three biggest concerns about the impacts of climate change for the built environment system in Victoria?

Please select your top three impacts into the box provided in order of priority, with the highest priority at the top:

Loss of essential services	
Degradation of infrastructure, buildings and homes	
Disruption to business, services, and lifestyle	2
Negative effects on safety, health and liveability	1
Managing the increase in emergency events	
Negative effects on vulnerable communities	
Long term viability of high-risk settlements	3
Financial and legal risks, such as access to affordable insurance	
Negative effects on places of heritage value	
Increased energy costs	

*Why are these your top three concerns? Please list any other concerns you may have? (450 characters):*

Minimising impacts requires good design to achieve built environments that enhance safety, health, liveability, business etc. W.r.t high risk-settlements, the optimal location of settlements is detailed in our submission to the Royal Commission into National Natural Disaster Arrangements (recommendations 13 & 14). See: <https://www.architecture.com.au/wp-content/uploads/20200504-Australian-Institute-of-Architects-Royal-Commission.pdf>

**Q6. The draft plan outlines nineteen potential adaptation actions for the next five years, from 2022-2026.**

**For each of the following potential actions as follows, please rank their priority as High, Medium or Low**

Update planning provisions	H
Review bushfire provisions in planning schemes and building standards	H
Investigate opportunities to update building standards relevant to flood, heatwaves, and storm exposure	H
Pursue opportunities to upgrade the resilience of existing building stock to warmer temperatures, with a focus on low income and vulnerable Victorians housing	H
Support energy infrastructure resilience through existing response mechanisms	M
Extend programs for vulnerable and/or highly exposed communities to support resilience to hazards.	H
Improve the skills and capacity of practitioners, industry and community organisations to understand and implement climate change management responses	H
Extend spatial mapping and hazard exposure modelling to support land use and infrastructure planning, design and investment	H
Support decision making by practitioners working in planning, infrastructure and building development and approval	H
Review strategic planning and settlement responses for places with elevated bushfire risk	H
Support drought resilience planning for regional cities and towns	H
Support development of place-based resilient energy generation	H
Investigate approaches for ongoing management of culturally significant and heritage places	M
Develop program options to support local climate adaptation initiatives	H
Assess options to use economic tools to facilitate climate change adaptation outcomes	M
Assess financial measures and insurance responses to support adaptation	H
Review legal mechanisms to support climate-resilient urban development	M

*Do you have any feedback on the draft actions, or on how they could be implemented? (450 characters)*

Refer to above mentioned submission to the Natural Disaster Royal Commission. Location, design and high-quality construction are key to ensuring communities' safety during catastrophic events, and can endure long-term climate change. Need to strengthen the biosphere to act as a CO2 sink as well as provide protection through local microclimate enhancing features of revegetation that protects from extreme heat and reverses desertification.

**Q7. Final AAP question. Would you like to make other comments on the draft built environment system AAP?**



1. Other systems to consider:
  - Technological systems to reduce climate change or mitigate impacts – e.g. solutions to reduce CO2 emission, engineering flood barriers, pumping systems, mechanised sunshields and new building materials.
  - Political systems – a bilateral commitment to an enduring plan.
  - Social systems – to prepare and undertake adaptive steps as such as relocation.
  
2. A range of qualified, invested, & skilled built environment matter-expert professionals need to advise on the details and implementation of the plan. For example architects undertake master planning and prepare detailed designs including construction documentation details critical to ensuring a building responds to place, person and performance requirements. They need to provide input alongside planners, builders, building surveyors and engineers.
  
3. Greater detail is required about how monitoring will occur and outcomes can be practically measured. Outcomes/ indicators should also incorporate timelines.