

26 February 2021

Jim Miller Chair Infrastructure Victoria Level 33/140 William St Melbourne VIC 3000

Submitted online: engage.vic.gov.au

Dear Mr Miller,

## Re: Victoria's Draft 30-Year Infrastructure Strategy

The Eastern Alliance for Greenhouse Action (EAGA) is pleased to provide this response to Infrastructure Victoria's consultation for its draft 30 year strategy (the Strategy).

EAGA is a formal Alliance of eight councils in Melbourne's East, committed to delivering mitigation and adaptation projects and advocating for initiatives that support sustainable, low carbon communities. Our members include:

- City of Boroondara
- Glen Eira City Council
- Knox City Council
- Maroondah City Council
- City of Monash
- City of Stonnington
- City of Whitehorse
- Yarra Ranges Council

EAGA urges Infrastructure Victoria to consider the following whilst finalising it strategy:

## Ensure Victoria's buildings are climate resilient

EAGA councils have recently undertaken detailed climate vulnerability assessments of a number of buildings across the region. This process has identified that public buildings are vulnerable to climate impacts in different ways including (but not limited to):

• Back-up electricity supply infrastructure is often absent.

- Capacity to provide thermal comfort and maintain safe indoor temperatures (18-26°C as per W.H.O. Health & Housing Guidelines<sup>1</sup>) could be improved. A number of contributing factors help achieve safe indoor temperatures, including building orientation, shading, insulation, draught sealing, weather proofing, door and window designs. The location of heating and cooling systems, particularly external units and air intakes impact effective operating temperatures are another significant factor.
- Structural stability often may need attention/further investigation i.e. stability in extreme weather conditions and events (e.g. wind, high rainfall, floods, lower average annual rainfall/drought, high temperatures).
- Capacity of lifts to operate reliably during extremely high temperature events could be improved. For instance, lifts could be upgraded from hydraulic to electric systems to improve reliability during heatwaves.
- Indoor air quality could be better managed with improved draught sealing, filtration on heating/cooling systems and ventilation systems, plus improved landscape design surrounding buildings.

These findings indicate that Victoria's building stock will require significant investment to adapt to a rapidly changing climate. Whilst approaches to improve the buildings stock with respect to climate mitigation are quite mature (i.e. incentive schemes, performance standards), significant policy and program support is still required to drive the required investment in adaptation measures.

Ensuring public buildings are climate resilient extends to their adaptive capacity to meet shifting needs and uses within the community (particularly after COVID), as well ability to perform well under different user scenarios – for instance, maintaining service continuity during extreme weather days under the building's 'primary ' use (i.e. library/sport pavilion) and secondary use, such as an Emergency Relief Centre.

## Blue and green infrastructure

EAGA supports the establishment of a target for canopy cover in new growth areas, however a similar target should be adopted for metropolitan Melbourne. The economic benefits of increasing the urban forest (and water ways etc) is becoming increasingly clear. DELWP have recently completed a scoping report of the *Urban Environmental-Economic Account for Melbourne* which quantifies significant economic benefits of improving the extent of blue/green infrastructure, particularly through addressing the urban heat island and thus improving productivity and reducing mortality. The report identifies the following outcomes can be achieved through reforms to the State's planning scheme:

- The (partial) value of the additional cooling effect that could be delivered by enhanced green infrastructure to be between ~\$530million and ~\$1.1billion per year (in present value terms) for the Melbourne Metropolitan Region in 2051.
- This value predominantly consists of avoided productivity losses (~\$360m to ~\$845m per year) and avoided mortality costs (~\$170million to ~\$240million per year), but also includes avoided ambulance costs and emergency department presentations which together total between ~\$1million and ~\$1.5million per year in 2051.

<sup>&</sup>lt;sup>1</sup> https://www.who.int/publications/i/item/9789241550376

If you have any questions of queries relating to this letter, please contact Scott McKenry, EAGA Executive Officer, on <u>scott.mckenry@maroondah.vic.gov.au</u> or 03 9298 4250.

Yours sincerely,

Cr Marijke Graham Executive Committee Chair Eastern Alliance for Greenhouse Action Councillor, Maroondah City Council



This submission has been approved through EAGA's formal governance structure as described in the EAGA Memorandum of Understanding 2017-21. The submission may not have been formally considered by individual member councils.