

Victorian Parliamentary Inquiry into Climate Resilience in Victoria

National Trust of Australia (Victoria) Submission

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Terminology

Cultural Heritage: Refers to the qualities of a society that are valued and passed on to future generations. Cultural Heritage can be tangible and intangible, built and environmental, an object and a practise. Cultural Heritage is not a frozen example in time, it is dynamic and adaptive, it is valued because it carries meaning, and its qualities are shared across communities and social barriers. Throughout this submission the terms cultural heritage and heritage are used interchangeably.

Green Space: Refers to the infrastructure of public open spaces and private open spaces which are used for recreational activities, leisure, provide aesthetic appeal and reduce the urban heat island effect. Such spaces provide vegetation and trees that are crucial for community health and wellbeing and contribute to our cultural heritage.

Public Open Space: Refers to parks, gardens, playgrounds, outdoor playing/sports fields, and recreation corridors which are easily accessible to the public but excludes reserves for environmental conservation.

Private Open Space: Refers to privately managed or owned parks, gardens, sporting grounds and yards that are not generally accessible to the public, but contribute to the overall liveability of neighbourhoods, the protection of which is of net community benefit.

These definitions are based on those used in the 2023 [Centre for International Economics Report: Economic, social, and environmental impacts of alternative urban development scenarios for Victoria](#), prepared for Infrastructure Victoria.

Executive Summary

The National Trust of Australia (Victoria) understands that the climate and biodiversity crisis is the single biggest and fastest growing threat to people, the environment, and cultural heritage worldwide.

We recognise that the adverse impacts of the climate and biodiversity crisis require urgent and coordinated action.

We believe it is crucial to demonstrate and showcase how our heritage places are a part of the solution and can be used to mitigate climate change. Heritage plays an active role in not only showing our past but protecting our future.

The National Trust is an established community leader, educator, and custodian of Victoria's heritage. This unique role comes with the responsibility to be a strong voice in climate change mitigation, adaptation, and emissions reduction in heritage and related industries. Through leading by example and sharing what we learn, we aim to create more resilient communities and achieve a safe climate future for everyone.

1.0 About Us

1.1 The National Trust of Australia (Victoria)

The National Trust of Australia (Victoria) is a not-for-profit membership organisation formed in 1956. As Victoria's premier heritage organisation, the National Trust has an interest in ensuring that a wide range of natural, cultural, social and Indigenous heritage values are protected, respected and celebrated, contributing to strong, vibrant and prosperous communities.

Whilst we are an independent and non-government organisation, we work collaboratively with government, local councils, businesses, local community groups and individuals, to strengthen heritage protection, increase community involvement in heritage conservation, and provide tourism and engagement experiences for diverse audiences.

The National Trust is also Victoria's leading operator of historic properties and heritage attractions, managing over 40 sites across the state worth more than \$148 million, with 25 open to the public. Our property portfolio is diverse, including historic mansions, a remnant forest, a gaol, and a tall ship, just to name a few. We are the Committee of Management for nine properties owned by the State Government of Victoria, including Old Melbourne Gaol and Tasma Terrace. We manage more than 1,700 hectares of land, including urban and rural gardens, farms, and natural reserves.

1.2 Our Reach and Impact

We are the state's largest community-based heritage advocacy organisation actively working towards conserving and protecting our heritage for future generations to enjoy, with over 60,000 members and supporters across Victoria. In the 2022-2023 financial year, the National Trust:

- Made over 33 submissions advocating to safeguard and protect the built and natural heritage of Victoria;
- Facilitated \$1.03m worth of donations through tax-deductible heritage appeals, for conservation and restoration works at 33 community-owned or managed heritage places that would otherwise not have access to funding streams.
- Coordinated 5 events providing learning opportunities for trades, professionals and the general public in building conservation practises, including our inaugural [Traditional Trades Expo](#).
- Was supported by 11 regional Member's Branches;
- Generated community support with more than \$1.45m of donations through trusts, bequests, foundations and individual giving;
- Welcomed over 160,000 visitors to our properties
- Facilitated education programs for 60,000 students
- Hosted over 280 events at our properties
- Communicated with over 69,000 social media followers and 34,000 e-news subscribers

1.3 Our Climate Action Plan

The inaugural National Trust Climate Action Plan (CAP) was launched in 2021. The National Trust has long been aware of the developing climate and biodiversity crisis and the unique role the heritage sector can play to contribute new strategies to mitigate and adapt to the impacts of climate change. However, the formalisation of our first CAP has provided opportunities to create consistency in our approach to managing our properties and communicating with our community. The success of our CAP 2021-2023 is due to the dedication of teams across the National Trust. The CAP Working Group established to support the implementation of the action plan consists of members from every department across the organisation, including; Executives, Property Managers and Officer level staff. We are now developing our second CAP for 2024-2026 to build on this work.

1.4 National Trust and Australia ICOMOS Survey 2022

In 2022 the National Trust made an extensive submission to the Parliamentary Inquiry into the Victorian Planning Framework. To inform that submission, the National Trust partnered with Australia ICOMOS on a survey seeking views on heritage protections in Victoria from heritage professionals and the community. The survey was open from 12 to 23 January 2022, and received 250 responses, indicating a high level of interest.

Of the respondents, 122 identified as National Trust members, 29 identified as heritage professionals, 29 identified as allied professionals (e.g. architects, planners and engineers), with the majority of additional respondents representing community groups and individuals with an interest in heritage.

To contribute to our submission to this Inquiry into Climate Resilience in Victoria, we have included some key examples and sentiments raised by participants to the 2022 survey that are relevant when considering the climate resilience of our state's infrastructure.

2.0 Heritage is Climate Action

Heritage, and in particular heritage conservation, is an inherently sustainable practice. It is now well established that investment in materials and the embodied energy of existing buildings generally emits less emissions than demolition and new construction, and the conservation of cultural landscapes protects trees and plants that sequester carbon and provide crucial habitats to support biodiversity.

Recently the Heritage Council Victoria released a report on the value of heritage, [Why Heritage: A synthesis of evidence for the social, economic and environmental impacts of heritage](#). The report includes analysis of the existing research and data regarding Climate Change and heritage, it notes;

Climate change is one of the most urgent policy drivers for our time. Despite evidence for the role of cultural heritage in decarbonisation, reducing waste and ecosystem resilience/ biodiversity, the role of cultural heritage is often overlooked in key policies which prevents the benefits of caring for cultural heritage from being realised. It also leads to a risk of 'maladaptation' as policies designed to deliver wider benefits fail to do so, because for example traditional knowledge has been lost or ignored. This is a significant research topic that needs a collaborative approach to identify the work currently taking place across universities in the natural and built environment sectors, and to make the connection between that and cultural heritage initiatives. It also involves moving the debate from a narrow focus on how to retrofit listed heritage items to the bigger question of how doing more to conserve, repair, mend and adapt what we have now (whether protected or not) can contribute to addressing climate breakdown.

2.1 The Greenest Building

The 2021 *State of the Environment Report* states that "Our built environment is currently the world's single largest contributor to greenhouse gas emissions. It consumes around 33% of our water and generates 40% of our waste . . . As much as 25% of Australia's carbon emissions come from buildings." In summary 'The greenest building... is the one that is already built.'¹

A ground breaking 2011 study by the US National Trust for Historic Preservation—“[The Greenest Building: Quantifying the Value of Building Reuse](#)”—concluded that, when comparing buildings of equivalent size and function, building reuse almost always offers environmental savings over demolition and new construction. The study found that it takes between 10 to 80 years for a new building that is 30% more efficient than an average-performing existing building to overcome, through efficient operations, the negative climate change impacts related to the construction process, and that collectively, building reuse and retrofits substantially reduce climate change impacts. This is further supported by [research](#) undertaken by Historic England, which found that when a typical historic building is refurbished and retrofitted, it will emit less carbon by 2050 than a new building.

Locally, [research](#) undertaken by architect Ruth Redden explores the nexus between heritage conservation and sustainability in the Australian context, highlighting broad environmental benefits of conserving historic buildings, and providing recommendations to produce guidelines and resources to support the promotion of sustainable preservation. Additionally, the ongoing maintenance and re-development of existing buildings has been proven to provide sustainable employment opportunities

¹ Carl Elefante, <https://carlelefante.com/insights/the-greenest-building-is>

and economic benefits. The 'reuse first' approach that heritage conservation naturally incorporates is an essential mindset, for policy, development and investment decision making as we combat the climate crisis.

Furthermore, the expertise of heritage professionals, particularly traditional trades people, to repair and retrofit built structures is an asset for the resilience of heritage and non-heritage buildings alike. As the risks of climate change impacts increase, tapping into the rich expanse of industry knowledge inherent within the heritage workforce can only benefit the resilience of our built environments.

Indeed, the past holds many of the answers to how we should build in the future for climate resilience and lower energy consumption. Traditional and vernacular buildings are living artefacts, providing examples of (now 'alternative') uses of materials and methods which can reduce embodied energy in building construction such as the use of calcium oxide as a binder instead of carbon producing cement. Or how to build thermal mass in a building without using cement. Their continued existence and resilience mean that they are time proven and can be tested and measured for reference in performance standards or incorporated into modern standards.

2.2 Natural Infrastructure

Heritage is not just buildings, cultural landscapes are the combined works of nature and humankind, which express a long and intimate relationship between people and our natural environments. Cultural landscapes often reflect specific techniques of sustainable land-use, considering the characteristics and limits of the natural environment they are established in. The continued existence of traditional forms of land-use supports biological diversity in many regions of the world and the protection of traditional cultural landscapes is helpful in maintaining biological diversity.

Moreover, cultural landscapes such as green space in more urban contexts contribute environmentally, socially, and economically across Victoria. It is well known that trees can mitigate the urban heat island effect and provide health benefits to the community, as well as create healthier ecosystems with a greater diversity of species in urbanised contexts. Furthermore, green space improves wellbeing and liveability in areas with increasing population density and development pressures.

Climate change will have critical impacts on our green spaces. This living infrastructure, and the biodiversity dependent on it, face higher temperatures, less water availability and more frequent extreme events such as floods and damaging winds. Ensuring these spaces can adapt to such pressures is essential. Thriving green spaces are fundamental to mitigating heat within cities but climate change places this at serious risk as heat effects intensify and a greater amount of green space will be required just to maintain existing mitigation levels. If adequate green space is not maintained and increased, levels of amenity and liveability will decline.

At the same time, the need for increased housing density to accommodate future population growth is widely acknowledged. While preferable to further urban sprawl, this will increase pressures on our existing green spaces. As a minimum, current green space benchmarks must be maintained as we face a changing climate, but to effectively mitigate climate change impacts the net amount of green space in urban areas will need to increase.

The National Trust strongly believes that access to green space is essential public infrastructure² and must be given the same priority and consideration as built infrastructure when assessing climate change impacts and necessary climate resilience measures. The value of ready access to green spaces was acutely felt during the COVID-19 Pandemic lockdowns in Victoria, and as a result demand for sufficient, quality green space is greater than ever. Provision, funding and maintenance of green spaces demands planning and resourcing equal to that of other forms of community infrastructure. Such spaces are central to the liveability of local communities and have a key role to play as we adapt to climate change.

3.0 Response to Climate Resilience in Victoria Terms of Reference

(a) the main risks facing Victoria's built environment and infrastructure from climate change and the impact these will have on the people of Victoria

The increasing concentrations of Greenhouse Gases (GHGs), caused by human activities such as the burning of fossil fuels and deforestation, are accelerating the climate and biodiversity crisis, contributing to higher temperatures and rapidly declining natural habitats.

The main risks our built environment and infrastructure faces from climate change are damage, deterioration and loss due to and the increased frequency and intensity of severe weather events such as; floods, damaging winds, droughts, and bushfires. This submission outlines the cultural heritage impacts such risks will have on the people of Victoria.

Expertise and education

Crucial skills and traditional knowledge techniques risk loss as places and therefore opportunities to practice and apply such knowledge disappear. A compounding impact of such loss is the devaluing of traditional expertise and their potential to contribute to innovative design solutions as we face the climate crisis.

Passive climatic features are present in many heritage places, such as period homes with verandahs, light-coloured pitched roofs, thick walls and proportionally large established gardens that provide shade, insulation, wildlife habitat, and carbon dioxide and water absorption capacity. If we do not support the education of our practitioners to work with existing built fabric and environmental infrastructure through traditional techniques, we ignore vital and existing solutions to the presenting problems.

Risks and impacts:

- REDUCED traditional knowledge and skills expertise such as building trades and landscape management techniques.

² The Centre for International Economics, *Economic, social, and environmental impacts of alternative urban development scenarios for Victoria (2023)*

- LOST capacity to respond to maintenance and design solutions for existing buildings and built fabric conditions.
- REDUCED innovative design solutions, such as applying passive climate features in heritage buildings to new and re-development.

Community health and wellbeing

It is becoming increasingly understood that heritage contributes to social wellbeing, cohesion, and community buy-in³. If new strategies to plan and adapt to the impacts of climate change are not initiated and actioned immediately, they will have an unprecedented and irreversible effect on our cultural heritage, our connection to place, and our way of life.

Risks and impacts:

- LOST green space and canopy cover in urban neighborhoods in response to the pressures of rapid urbanisation.
- INCREASED urban heat island effect and damaging conditions for built environment and infrastructure.
- LOST sense of place afforded by heritage places due to various climate impacts including; destruction from severe weather and removal due to increased urbanisation pressures.

Livability of towns and cities

Poor planning and development outcomes further exacerbate the impacts of climate change through a 'demolish and replace' mentality rather than the 'reuse first' mindset. This leads to poor design outcomes as it does not support thoughtful solutions that respond to place and the inherent values of existing built and green assets. Rapid urbanisation also spreads misinformation, such as [scare tactics](#) that incorrectly pit heritage and planning protections in conflict with innovative design and development solutions for livable neighbourhoods.

Risks and impacts:

- LOSS of green space amenity as construction and development density is prioritised over maintaining existing green space and established trees.
- INCREASED fears over inadequate housing stock and infrastructure leading to a spread of misinformation and unsustainable planning outcomes.
- FURTHER exacerbation of climate and biodiversity crisis impacts due to cumulative risks of unsustainable development practises and inadequate planning mechanisms.

³ <https://historicengland.org.uk/whats-new/news/research-shows-heritage-boosts-your-wellbeing>

(b) how the Victorian Government is preparing for and mitigating the impacts of climate change on our built environment and infrastructure

The National Trust strongly supports the State Government's ambitious target to reduce the state's greenhouse gas emissions from 2005 levels by 28–33% by 2025 and 45–50% by 2030. Our advocacy on climate action promotes the potential of heritage conservation as a solution to contribute to climate change mitigation and sustainable development outcomes.

Valuing Existing Buildings

In 2021 the National Trust made a [submission](#) on the draft, Victorian Government [Built Environment Climate Change Adaptation Action Plan](#). Our recommendations sought to reframe the role of heritage in climate change conversation, harnessing the potential for heritage conservation to actively contribute to climate resilience through outcomes such as emissions reductions.

In line with the National Trust submission, the final Action Plan included two additional objectives:

- *New and Existing Buildings – Consider the value of embodied energy contained in existing and heritage buildings (p13)*
- *Heritage – Identify and support conservation and adaptive reuse of heritage buildings as an alternative to new construction (p14)*

The Built Environment Climate Change Adaptation Action Plan is one of seven action plans developed by the State Government to guide government action and help institutions, businesses and individuals to respond to our changing climate. However, while the government continues to develop strategies to achieve its emissions targets through initiatives such as these action plans, there is still little engagement with the potential for heritage conservation and adaptive reuse to contribute to climate change mitigation through 'reuse first' principles. Discussions about heritage in the context of climate change tend to focus on the risks that climate change pose to our heritage places, however there is also significant potential for heritage conservation and the adaptive reuse of heritage or historic buildings to mitigate the impacts of climate change.

The Heritage Council Victoria has also conducted a project regarding [Heritage and Climate Change](#) which provides key principles regarding the management of the effects of climate change in relation to heritage places. Furthermore, the Heritage Council Victoria assessment guide '[How Vulnerable is Your Heritage Place/Object?](#)', highlights not only the risks of Climate Change impacts to our built heritage, but the need to provide more expert support to community heritage custodians. Government support for safeguarding cultural heritage and disaster management plans to protect tangible and intangible cultural heritage in the event of climate-induced disasters is paramount to mitigating potential impacts.

Protecting Green Space

Victoria contains some of the most beautiful natural and cultural landscapes in the world, but they are increasingly at risk from inappropriate development. Specific threats include poorly designed infrastructure, intrusive buildings, subdivisions, loss of visually or ecologically significant vegetation, and plantings unsympathetic to heritage and landscape values. The National Trust has been working for more than 30 years to identify and record the important natural and cultural landscapes of the state. Ensuring that a complex range of values can be protected in broad acre landscapes is key, but challenging to achieve, particularly where multiple property owners are involved.

Significant landscapes can include both cultural and environmental features and can be protected under the *Heritage Act 2017* and under the *Planning and Environment Act 1987* through the Significant Landscape Overlay.

Significant landscape protections are also being pursued through the government's Distinctive Areas and Landscapes program, facilitated by the *Planning and Environment Amendment (Distinctive Areas and Landscapes) Act 2018*.

While many Councils utilise the Significant Landscape Overlay as a planning tool, many overlays have not been updated to reflect changing values, conditions, and best practice for protection, as well as the emerging context of climate change. Further work needs to be undertaken to assess the effectiveness of current landscape protections and the adequacy of guidance material for assessment and management.

(c) the barriers facing Victoria in upgrading infrastructure to become more resilient to the impacts of climate change, including barriers in rebuilding or retrofitting infrastructure, including but not limited to, issues relating to insurance and barriers faced by local government

Switching our economy away from the building industry to a 'cleverer' economy; linking planning & climate change policy more effectively (heritage/period properties are much more environmentally 'green' than what is replacing them, yet they are being allowed to be destroyed at an alarming rate, despite adding to the 'heat island effect' & climate change); more funding to heritage bodies to meaningfully protect and educate people about the value of heritage. Too often heritage is seen as an obstacle to development rather than an asset. —Annette Cooper, National Trust and Australia ICOMOS Survey

Despite the potential for reuse, retrofitting, and restoration to provide both positive heritage and environmental outcomes, there are few incentives in place to encourage this and many barriers. Indeed, a culture of knock-down/re-build is being fostered by government policies which incentivise new construction.

Maintaining Existing Built Environment

The National Trust believes there should be incentives for the adaptive re-use of heritage places and spaces, such as a funding stream for re-purposing heritage buildings and undertaking access works to make more heritage and existing buildings accessible and viable for reuse. It is evident however that substantial investment is needed from the outset to ensure this work is supported through government policy⁴ and activities.

Firstly, there is a need to recognise and value more traditional and vernacular building typologies and materials in building regulations. Making existing building stock meet contemporary measures for building performance is inherently problematic, as it places measures from one typology onto another which may not correlate.

⁴ See below response to TOR (d) *the adequacy of the current Victorian planning system as it relates to its adaptation to, preparation for, and mitigation of climate change impacts.*

By creating more standards which reflect these typologies we can preserve more building stock, listed or un-listed, reduce emissions and enable simpler re-use of these structures by removing needless barriers. A side benefit for this would be removing barriers for new builds which use traditional passive systems and materials with extended lifespans and greater repairability.

Additionally, the State Government must lead by example and demonstrate the value of retention, adaptation and upgrading of existing buildings and infrastructure through its own projects. This will provide an incentive for local government and by extension private property owners and developers to practice sustainable planning.

Disregard by State Government bodies for the retention of existing assets and infrastructure, especially buildings protected under local Heritage Overlay, is increasingly damaging to the efforts of creating a sustainable development culture. A recent and unnecessary demolition example is the destruction of Waverley House in Geelong to make way for a foyer within the new Geelong Convention Centre (GCC). Where the building could have easily been incorporated into the design and use of the GCC, Development Victoria ignored local government and community objection in a blatant display of double standards to the Victorian community. Exemptions to notice and review requirements under the *Planning and Environment Act 1987* (the Act) for big build and fast track projects, and authorities such as Vic Track and the Departments of Education, and Health must be reviewed to ensure every level of government is held accountable to sustainable development standards.

Increasing Infrastructure Resilience

The relationship between built form, landscaping, environmental attributes, trees and open space [must] be assessed and treated holistically. Protecting heritage goes hand in hand with understanding biodiversity and climate change. – Anonymous, National Trust and Australia ICOMOS Survey.

A variety of green spaces are required to meet the diverse needs of communities, from parks to playgrounds and sporting reserves. Maintaining a diversity of open spaces is critical to enhancing resilience of our green spaces as the climate changes, and our heritage gardens are a particularly important part of this mix. Heritage gardens typically occur in older established areas where population density is high and access to private open space is low. These gardens provide a vital baseline of green space in locations where it is very difficult to create or liberate new open space. Our heritage gardens also exhibit a structural complexity that provides far greater biodiversity outcomes than other green spaces of a comparable size.

Victoria's heritage gardens are managed by state and local government, and private entities such as the National Trust. Resourcing and funding models across these spaces vary widely. We believe these valuable resources should be considered as a whole, regardless of ownership, and adequate funding should be provided to allow all heritage gardens to undertake the necessary investment, research and training to build resilience into these gardens for the future. An example of innovative partnerships to provide increased public access to privately owned green space can be found at the National Trust property Rippon Lea Estate in Elsternwick.

Case Study: Rippon Lea Estate, local resident's garden access

Despite being a cultivated heritage garden, it is identified as a Top 5 biodiversity hotspot within Glen Eira, a Local Government Area with the lowest amount of public open space in

Victoria. This urban biodiversity is incredibly important in areas where proximity to natural or conservation spaces (i.e. 'bush') is rare.

An innovative partnership between the National Trust and the City of Glen Eira has been established where the Council contributes to the cost of maintaining the grounds and in return residents receive free entry to a 14 acre nationally heritage listed garden.

Further opportunities such as these where privately owned spaces can be supported to provide additional publicly accessible open space should be identified and pursued.

(d) the adequacy of the current Victorian planning system as it relates to its adaptation to, preparation for, and mitigation of climate change impacts

Built Environment Protections

It should be compulsory for Councils to firstly look at adaptive reuse of buildings when any proposal for demolition is received. More emphasis to be placed on maximizing environmental effects on existing buildings and retention of embodied energy. –Robin Grow, Art Deco & Modernism Society of Australia, National Trust and Australia ICOMOS Survey

Government policies which incentivise demolition and new construction have been accelerated as a result of the COVID-19 Pandemic. This may provide short term economic benefits; however, it is unsustainable, and is resulting in long-term environmental impacts, and adding to the destruction of heritage places valued by communities.

For example, demolition is encouraged by Federal Government legislation on foreign ownership. According to guidance provided by the Commonwealth Investment Review Board⁵, foreign persons are generally prohibited from purchasing established dwellings in Australia. The stated purpose of this policy is "to channel foreign investment into new dwellings, as opposed to established dwellings, as this creates additional jobs in the construction industry and helps support economic growth." However, in practice, it also results in the needless destruction of buildings across our towns and suburbs.

Exemptions from planning controls by State government departments such as Vic Track, the Education Department and Office of Projects have seen the lack of consideration for the retention and reuse of existing buildings with resulting demolition during major infrastructure projects undertaken by these departments.⁶

A further "loophole" which frequently results in the unnecessary release of carbon emissions through unnecessary demolition of built fabric is the ability for property owners to apply for building permits to demolish existing buildings prior to the lodgement or approval of a planning permit for a replacement building. Planning policy must be strengthened to require developers to provide justification for why demolition is the only feasible outcome rather than adaptive reuse or retrofitting of an existing building.

⁵ Foreign Investment Review Board Guidance 6: Residential Land, 2020.

⁶ See response to TOR (c) *the barriers facing Victoria in upgrading infrastructure to become more resilient to the impacts of climate change, including barriers in rebuilding or retrofitting infrastructure, including but not limited to, issues relating to insurance and barriers faced by local government.*

Furthermore, no demolition permit should be granted to a property owner without them first acquiring a planning permit for the replacement building.

Green Space Protections

2 Barkers Road, Flinders. Our understanding is that the Shire chose not to purchase this landlocked property because it deemed that it lacked significance. The land was purchased and the landholder insisted on right of access thorough some of the most diversely rich bushland on the Peninsula. An alternative existed but was not supported by DELWP. Result: net loss of significant landscape, flora and habitat on the Peninsula.—Anonymous, National Trust and Australia ICOMOS Survey

No urban tree should be removed unnecessarily as we face the climate crisis. The environmental services that urban trees provide are essential to sustainable, viable and livable cities, especially in cities that face warmer temperatures and lower rainfall.

The National Trust strongly supports the statutory protection of trees in both the public and private realms, and advocates for the protection of trees through the [National Trusts of Australia Register of Significant Trees](#), which includes over 20,000 trees in 1,200 locations in Victoria. The Register is steered by the Trust's Significant Tree Expert Advisory Committee, chaired by Dr Gregory Moore OAM.

While a number of Councils in Victoria protect significant trees under mechanisms such as local laws and registers of significant trees, there is a lack of consistency across the state in protections. There is also a lack of legislation or local provisions in the planning scheme to support these registers of significant trees or local laws.

Planning Practice Note 7, Vegetation Protection in Urban Areas, provides guidance for the assessment and protection of significant vegetation in urban areas, however it has not been updated since 1999. This practice note should be reviewed as a matter of priority, in consultation with local government, experts, and communities. A program of professional development and promotion should also be provided to local government to encourage the implementation of policies for protecting significant vegetation.

Measures should be put in place to prevent development sites from being “moonscaped” and mandate the retention of trees and vegetation cover overall. Ideally, the carbon footprint of a site should not be increased. Currently, landscaping is often seen as an ‘afterthought’ in a new development, not as an integral component, and is confined to the perimeter of the site. The practice of utilising neighbouring properties to fulfil landscaping obligations should also be prohibited (e.g. overhanging tree canopies). Planning policy should also require increases in canopy cover, and tree management policies which take the impacts of climate change into account.

(e) what more could be done to better prepare Victoria’s built environment and infrastructure, and therefore the community, for future climate disaster events

Invest in repair and maintenance

Providing incentives for retrofitting heritage places, upskilling the work force to undertake appropriate restoration, educating the public about adapting heritage places to current needs. — Dr Soon-Tzu Speechley, Lecturer in Urban and Cultural Heritage, University of Melbourne, National Trust and Australia ICOMOS Survey

Regular and ongoing maintenance is critical to the sustainability of all buildings regardless of heritage significance, and this should be encouraged. In addition, repair of heritage places using traditional methods not only uses more sustainable materials with less emissions, but it also ensures existing heritage buildings are more resilient and flexible to climate change impacts. Regular maintenance and a conservation approach to repairs and works also reduces the resources required to address greater building deterioration issues in the future and/or inappropriate repairs that need to be reversed, such as maladaptation.

To ensure the ongoing retention and protection of our heritage places, as well as enabling necessary adaptations and retrofitting, it is a priority action that built environment design and development industry is strengthened to assist with these processes. Tradespeople with the necessary conservation skills to undertake appropriate repairs and works to heritage buildings, and practitioners with skills to provide innovative designs that consider and respond to existing buildings are required.

The current lack of state and local funding to support the conservation exacerbates the impacts of unmaintained buildings. The discontinuation of state funding to support conservation of local⁷ and state heritage, such as the [Living Heritage Grants](#) program has removed practical support for custodians and government bodies to adequately protect our heritage and continue to use our existing buildings and infrastructure.

Case Study: Victoria's Heritage Restoration Fund

An effective example of a program supporting local heritage restoration is the Victorian Heritage Restoration Fund (VHRF), established in 2013 as a Committee of Management providing a program of restoration grants to local government Councils for heritage places in private or public ownership. The VHRF was formerly known as the Melbourne Heritage Restoration Fund, which has been successfully operating in Melbourne for over 30 years and was developed in 1988. The VHRF is administered by the National Trust of Australia (Victoria) and is one of the few grant-giving bodies providing funding to private property owners focused on increasing social amenity through streetscape improvement and providing support to heritage custodians through access to experienced heritage conservation and trades professionals.

Over the last three years the VHRF has partnered with six Councils—Melbourne City Council, Yarra City Council, Ballarat City Council, Casey City Council, Greater Bendigo City Council and Merri-bek City Council - to deliver their grants programs for restoration projects to places included in the Heritage Overlay. Over \$720,00 in grants funding has been awarded to over 60 projects, contributing to more than \$2.5 million worth of conservation works to heritage properties across Victoria.

The centralised management of the fund provides efficiencies and savings for Councils, as well as access to the National Trust's expert heritage conservation staff who administer the fund. The VHRF Committee transparently and independently assesses applications and oversees the distribution of grants and works undertaken.

There would be significant benefits in expanding this program to other councils across the state.

⁷ *State of Heritage Review: Local Heritage*, Heritage Council of Victoria, 2020, p8.

Apply a Monetary Value on Green Space Assets

A monetary value needs to be placed on significant trees & landscapes. Most people without a full understanding of the difficulty of replacing trees & landscapes do not understand monetary values. Developers should be made to preserve old red gums etc in new developments. Developers & individuals should be made to appreciate the climatic impact of large significant trees too. – Diane E Gardiner AM, National Trust and Australia ICOMOS Survey

Urban green spaces require knowledge, skills and policy in and around management of existing parks and gardens, which is key in retaining and sustaining the role these places play in combatting and adapting to climate change. Additionally, policies must be put in place to not just adequately protect and support our remaining biodiversity but increase it.

In the urban context, one of the greatest threats to significant trees and vegetation is major infrastructure projects. In 2021, *The Age*⁸ reported on the cumulative impact of the removal of trees across the city as a result of current infrastructure projects.

Despite proposed tree replacement and offset, the significant loss of trees at this scale, especially trees of 30-50 years, is unacceptable. The expected minimum time for replacement of amenity and heritage value to the community from advanced tree replacement works of this scale would be 20 years, in addition to the significant loss of carbon sequestered by mature trees removed.

The National Trust is also aware of the removal of mature trees to facilitate temporary construction and access. As a general principle, the National Trust opposes the removal of viable mature trees for temporary construction and access. All possible options should be explored to avoid the need for tree removal to be undertaken to facilitate temporary construction and access, noting that it would be many years before replacement plantings will provide the amenity and environmental benefits of mature trees.

State agencies rarely, if ever, put an economic value on the trees that they are about to remove. There are key factors regarding the value of trees to be considered in an urban environment, including amenity and shade provided by these trees, many of which are medium to long term viability trees, already providing such benefits. The National Trust expert Significant Tree Committee advises us that the average amenity provided by urban trees would have an average monetary value of \$2000-\$5000 each, depending on age, size and condition with some worth much more. For a major project, this could equate to the removal of tree assets valued at tens of millions of dollars. This must be considered during early planning for projects. All planning and environmental effects assessment processes for infrastructure projects must also require an assessment of the cumulative impact of tree removals for all approved projects, so that the impact of individual projects is not considered in isolation.

Increase Public Open Space

Many areas identified for housing growth have low existing open space provision, as these suburbs originally provided high amounts of private open space. For example, at an SA3 level, the inner-city areas of Melbourne City (14.9%), Port Phillip (11.2%) and Yarra (10.8%) have significantly higher percentages of public open space than Kingston (4.6%), Monash (4.8%) and Glen Eira (4.2%). Even Boroondara, colloquially known as the 'leafy east' has only 5.1% public open space. Private open space

⁸ Clay Lucas, "[Anger grows as thousands of trees axed in transport building blitz](#)", *The Age*, 3 January 2021.

will significantly reduce in these areas due to in-fill development. While the demand for public open space to accommodate increased population density will increase. Trees on private property, which are an essential component of our urban forest, will be particularly affected as these are the first casualty of development and subdivision. It is vital we plan for a net increase in green space now, considering the inevitable reduction in private open space, as well as forecast future housing density. Without this planning, communities will suffer higher impacts from climate change than is necessary.

(f) whether further inquiries or investigation may be needed into other aspects of climate change adaptation and climate disaster preparedness in Victoria, noting that climate change will have far-reaching impacts on all aspects of Victorian life, including but not limited to biodiversity, human health, primary production, industry, emergency services and more, and that while these areas may overlap with the matters covered in this inquiry, they may also warrant further investigation in their own inquiries

First Peoples Traditional Knowledge and Expertise

The National Trust supports a First Nations led approach to the protection of Aboriginal tangible and intangible cultural heritage when developing climate resilience in Victoria. We acknowledge and support the rights of First Peoples to maintain control, protect and develop their own cultural heritage in preparing for climate change, and we would encourage the Victorian Government to do the same.

Furthermore, the National Trust recognises that all environments, buildings and infrastructure in Victoria is located on the Country of First Peoples, and that Traditional Owner land care techniques have developed cultural landscapes throughout the state for millennia.

We urge the Government to explore programs and policies that will provide meaningful opportunities for Traditional Owners and First Peoples to have access to land and decision-making powers for management. The practise and teaching of traditional knowledge techniques that provide solutions and expertise to the presenting impacts of the climate and biodiversity crisis must be supported to mitigate disaster events such as bushfires

4.0 Recommendations

Innovative Heritage Solutions

- **SUPPORT** the value of cultural heritage in our society and its contributions to climate action through meaningful policies and protections for buildings and green space infrastructure.
- **RECOGNISE** that heritage homes and gardens are effective weapons in the battle against climate change and afford them greater legislative planning protection.
- **INTEGRATE** heritage into policies planning for climate change resilience and mitigation.

Built Environment

- EDUCATE the current and next generation of designers and practitioners to work with existing buildings.
- IDENTIFY and SUPPORT conservation and adaptive reuse of existing buildings, including heritage buildings, specifically as an alternative to new construction.
- DEVELOP and IMPLEMENT policies and programs to incentivise the adaptive re-use, retrofitting, and restoration of heritage buildings and other existing building stock.
- FUND a sustainable stream of revenue to support the ongoing maintenance and restoration of existing buildings.
- LEAD by example through State government infrastructure projects and PROVIDE exemplary case study examples of adaptive re-use.

Green Space Infrastructure

- REVIEW and ENFORCE minimum targets for open space within Local Government Areas based on future population density forecasts.
- REVIEW the effectiveness of current tree and vegetation protections to identify gaps and ADDRESS those gaps.
- SUPPORT private land holders with incentives to conserve and protect privately owned green space.
- EXPLORE partnerships and incentives with private land holders to increase public open space infrastructure.

Policy and Planning Changes

- REMOVE exemptions from planning controls for State government departments for infrastructure projects involving existing buildings.
- ADVOCATE to the Commonwealth for the reform of foreign ownership laws to lift the prohibition on the purchase of established dwellings by foreign persons.
- REQUIRE property developers to meaningfully explore options for adaptive reuse before applying for a permit for the demolition of existing buildings and REQUIRE a planning permit prior to the issue of a building permit for the demolition of existing buildings.
- SIGNIFICANT increase in financial and other penalties for the illegal removal of significant trees and vegetation.
- REVIEW Planning Practice Note 7, Vegetation Protection in Urban Areas and EDUCATE Councils about its implementation.