



# CLIMATE CHANGE & PLANNING IN VICTORIA

*Ensuring Victoria's planning system effectively tackles climate change*

# EXECUTIVE SUMMARY

This project has arisen as a result of the disconnect between high level policy positions on climate change, both by State and local government, and the day-to-day decisions that are being made. In practice, local government decision-makers routinely report that the adoption of a zero emission target and commitments to adaptation have not yet 'trickled down' to inform decision-making within the built environment, and more particularly, to decisions made through Victoria's planning system. This project seeks to explore some of the key reasons for this, in order to inform and facilitate change.

Given the urgency with which climate change must be addressed at local and state level, and the need for transformational adaptation, there is a clear imperative to elevate climate change within the planning system to a position that is commensurate with the threat it poses.

This report also examines influences which inform planning decisions, in order to provide recommendations for change. The following key findings are highlighted:

- The influence of the *Planning & Environment Act 1987* on day-to-day decision-making is largely felt through Victoria's municipal based Planning Schemes (Planning Policy Framework and other Victorian Planning Provisions), which act as the key implementation tool. The inclusion of content in the Planning Scheme is a critical step in allowing matters to be considered by decision-makers. Its application is frequently the primary influence on outcomes, particularly at lot and subdivision scale.

- For strategic planning, the role of the State in authorising and leading plays a more pivotal role, including through 'non-statutory' documents such as the *Practitioners Guide*. The approach taken by Department of Environment, Land, Water and Planning (DELWP) staff to any proposed changes to the schemes is highly influential and DELWP also drives reform to the planning system (seen most recently by the SMART planning program) and is therefore critical to reforms to drive climate responsive planning.
- The Victorian Planning Authority (VPA) is the key authority in the delivery of Precinct Structure Plans (PSPs) and Urban Renewal Precinct Plans, both of which set the urban structure and key parameters relating to precincts. The VPA is guided by its own legislation. Increasingly, there are other actors in the precinct planning space who also need to be considered, for example the Department of Transport and the Department of Jobs, Precincts and Regions.

## FOCUS AREAS FOR CHANGE

While the broader focus of this report has been on changes that are relevant to the environment in which decision-makers operate, with a particular focus on decision-makers at local government level, a number of more specific focus areas have been identified to guide the recommendations of this report. They represent the link between the initiatives recommended and the barriers identified and encapsulate the findings of both the analysis and engagement, as follows:

- **Shifting the balance of decision-making**

'High level' legislative obligations are important in driving change at the more fine-grained level. Planning is structured to flow from legislative requirements to objectives, which are then supported by the application of zones and overlays and the articulation of strategies. In turn, these are implemented by standards and guidelines. Failing to include, as part of legislative obligations, robust and comprehensive references to climate change, and to highlight the key role decisions made within the planning system play can compromise support for climate action. How we live our lives is strongly influenced by the places we inhabit and these are the remit of planning. Ensuring that these places are focused on the twin goals of adaptation and mitigation has the potential to make a significant contribution to global objectives in responding to climate change.

- **Supporting statutory decision-making**

Statutory planners and other decision-makers need specific content in Planning Schemes to support them in delivering climate responsive outcomes. If there is no reference in the scheme, the ability to deliver particular

outcomes is compromised and inconsistent, and relies more heavily on individual decision-making and capacity. In addition, planning relies heavily on the presence of a permit trigger for there to be any relevant assessment of the appropriateness of an application. If there is not a permit trigger which relates to the issue within the Planning Scheme, there is no opportunity for a decision to be made on the matter through the planning system.

- **Making climate change considerations explicit**

In responding to climate change, planning needs to look to the longer-term impacts and requires greater consideration of the impacts on future generations. This is sometimes incompatible with other objectives of planning and with the interests and obligations of some decision-makers. Climate change considerations must be made explicit, or they will continue to be overlooked in favour of policy considerations that are more explicitly spelled out within Planning Schemes.

- **Aligning planning with best practice and science**

Planning Schemes currently speak to the need to identify at-risk areas using the best available data and climate change science. Specific policy benchmarks stated in the schemes therefore need to be consistent with the “best available data and climate change science.” These benchmarks and standards need to be kept up to date to provide clear guidance for decision-makers.

- **Supporting strategic decisions**

Climate change needs to be more strongly integrated into the documents and frameworks. As a result, in some

cases, work can be undertaken to plan for places like activity centres and land can be rezoned, without paying particular attention to the impact on either mitigation and / or adaptation goals. Improving the robustness of the integration with strategic planning sets the groundwork for long term responses.

- **Planning for climate resilient communities**

Current planning practices at precinct scale, including huge areas of greenfield development, as well as more standard subdivisions, are failing to take into consideration the scale of change needed to standard practice. This is a key barrier, as once these foundations are set through the subdivision and precinct planning stages, they are very difficult to change or to retrofit. Many of these areas will still be developing when a net zero target is envisaged to be met.

- **Integrating climate change actions**

Adopting integrated responses and avoiding ‘siloeing’ is critical to addressing climate change. A current lack of integration between planning and other areas of government addressing adaptation planning, across various portfolios and departments, has been identified as a barrier. In addition, the current practice of including references to large and complex Policy Documents to “consider as relevant”, without explicitly extracting content relevant to planning and including this within Planning Schemes, means many key parts of government policy are being poorly applied through the planning system. Explicit attention is needed to integrate policy content on climate action into the planning system.

## KEY RECOMMENDATIONS

This report contains a total of 42 Initiatives across a number of different areas. However, the overarching recommendations are as follows:

- **Recognise the fundamental role the Planning Scheme plays in guiding decision-makers, and its weight as statutory law.** Focus attention on ensuring the planning scheme is reformed in a number of key areas:
  - Making the importance of considering climate change in decision-making explicit, rather than relying on generic references to sustainability.
  - Filling gaps where there is a policy void in key areas.
  - Introducing mandatory development standards in targeted areas.

*Initiatives 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 24, 25, 27, 28, 29, 30, 31, 32 and 33.*

- **Ensure that the scheme and its application of controls is consistent with the scientific evidence base and best practice.** This includes updating relevant datasets / benchmarks to reflect current scientific understanding of hazards, delivering best practice adaptation, and recognising required urgency in emission reductions.

*Initiatives 9, 14, 27, 29, 34, 35, 37, 38, 39.*

- **Focus on changes that will assist in getting the fundamentals of future development areas right.** This includes changes to planning for precincts and for subdivisions, both in ensuring appropriate urban structure is delivered but also in a much stronger focus on net zero and climate resilient communities

*Initiatives 1, 2, 4, 5, 6, 10, 11, 12, 20, 21, 22, 25, 26, 32, 34, 35, 36.*

Despite the identification of key areas of focus, the scale of the challenge and the immediacy of action required to reflect scientific consensus means that there is actually an urgent need to pull all available levers.

The application of the precautionary principle points to a need to not make minor changes, but to review all facets of the system and to activate requirements for climate change responsive outcomes at all levels. The underlying premise of the precautionary principle, particularly considering the latest scientific guidance (IPCC 2021) on the speed at which mitigation must occur, suggests that it is better to have an over-abundance of requirements to consider

climate impacts than to continue to deliver buildings, neighbourhoods and infrastructure which do not align with a sustainable future.

It is important to also recognise that the changes recommended in this report, which relate more specifically to the authorising environment for decisions made in the built environment, only represent a small part of the picture in any advocacy campaign. While some associated initiatives are identified as complementary initiatives these are by no means comprehensive, and this document should not be seen as the whole picture in terms of advocacy priorities.

Nonetheless, planning's role as a crucial determinant of what occurs during change and renewal in the built environment cannot be overlooked. There is a very strong case to be made that, as a system only activated when a change is proposed (either to land use or to built form), this change must be aligned with responses to climate change. Initiatives outlined in this report point to what that change might look like.

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**APPENDIX ONE:** Glossary

Date	Version	Issue	For
12.10.2021	A	Draft	Client Review
14.10.2021	B	Draft	With exec summary and conclusion
19.10.21	C	Draft	Client Review
29.10.21	D	Final Draft	
12.11.21	E	FINAL	

# 1.0 INTRODUCTION

*'Ensuring Victoria's planning system effectively tackles climate change'* is a project led by the Climate Change and Planning Advocacy Group. This group was established to explore, consider, develop and advocate for solutions to address climate change. It also seeks to support Victoria's commitment to net zero greenhouse gas emissions through the authorising environment of the planning, and associated building, system. The group is a collaboration between the following organisations:

- Council Alliance for Sustainable Built Environment (CASBE)
- Central Victorian Greenhouse Alliance (CVGA)
- Eastern Alliance for Greenhouse Action (EAGA)
- Goulburn Murray Climate Alliance (GMCA)
- Northern Alliance for Greenhouse Action (NAGA)
- South East Councils Climate Change Alliance (SECCA)
- Western Alliance for Greenhouse Action (WAGA)

This report has been prepared for a wide audience. It is intended to provide background on current barriers impacting the contribution the planning system can make in mitigating emissions and adapting our built environment to climate change. Importantly, it also seeks to identify the opportunities to address these.

## 1.1 PROJECT RATIONALE AND AIMS

For any decision there are always a range of factors which affect the outcome. In the context of planning, decisions are made within a complex system of legislation, policy and other external influences. All of these influences, but in particular the legislative and regulatory context, create what can be referred to as the 'authorising environment'.

Within the authorising environment for Victoria's planning and building system, a relatively limited level of consideration is currently given to climate change (mitigation and adaptation) in decision-making related to permitting use or development and to the protection of land. While certain opportunities for consideration of climate change are available within the current planning system, feedback and review of decisions indicates they are not being utilised either widely or effectively. This is at odds with the Victorian Government's legislated target of net zero emissions by 2050, and to deliver sustainable and resilient communities. Ultimately, this disadvantages the Victorian community.

Given the urgency with which climate change must be addressed at Local and State level, and the need for transformational adaptation, there is a clear imperative to elevate climate change within the planning system to a position that is commensurate with the threat it poses. This is acknowledged in Victoria's *Climate Change Strategy*. A misalignment between the *Local Government Act 2020*, the *Climate Change Act 2017*, and the *Planning and Environment Act 1987* in relation to the level of consideration given to climate change has also been identified and is discussed further in this report. Also identified in Section 2.3 Key Issues of this report is the potential misalignment between the State

target outlined in the *Climate Change Act 2017* and the most recent scientific evidence presented in the *Sixth Assessment Report* (Intergovernmental Panel on Climate Change, 2021), which highlighted a critical need for urgent action to have any possibility of limiting global heating to 1.5 degrees.

The project seeks to:

- Investigate barriers and opportunities within the current authorising environment for the planning and building systems, to ensure all relevant decision-makers are mandated to incorporate climate change action in their decisions.
- Identify and rank options for change to the authorising environment which will be most effective to ensure that climate change is an overarching consideration in planning and building decisions, and consider the potential for these changes to be enacted.

The ambition of the Climate Change and Planning Advocacy Group is that the authorising environment will:

- *Deliver land use and development that provides for Victorian communities to be resilient, equitable and safe in a changing climate;*
- *Assist state and local government and other relevant decision makers, such as private developers and building surveyors, to adequately consider the economic, environmental and social risks to their communities from climate change when making decisions around future development;*
- *Enable local government and other relevant organisations to deliver on commitments and pledges to reduce greenhouse gas emissions in line with what the science tells us we need to do to keep the temperature rise below 1.5 degrees C.; and*

- *Enable key industry stakeholders who interact with planning and building regulation to adopt practices that build resilience to climate change and reduce greenhouse gas emissions.*

It is important to note that this document focuses primarily on the planning system. Within the built environment, the planning and building systems both play an important role, particularly in the case of single dwellings. However, the focus on planning as a first priority has been framed with the following considerations:

- Planning has a much wider role than building and impacts on a much wider range of responses to climate change.
- The key interface that the building system has with climate change relates to energy and water efficiency. Many of these standards are set nationally and while they can be set at a State level, they generally represent minimum standards and, in many cases, cascade from planning requirements.
- Where the building system fills a gap in the planning system it is identified through this report, and the relationship and potential tensions between the two systems are also highlighted.

## 1.2 PROCESS AND METHODOLOGY

In order to usefully identify the barriers, opportunities and options, this report seeks to define a number of key elements by framing the following questions:

- Who are the people making decisions and how do they relate to, and use, the current authorising environment?
- What are some of the key issues impacting on decision-making?
- What are the types of barriers preventing effective climate change responses within the planning system?
- What specific issues does the planning system have the ability to influence?
- What are the barriers that arise in providing responses to those specific issues?
- What changes might assist in improving the ability for more climate responsive decision-making?
- Which of those changes will be of most benefit, overall and in the short term?

These questions were investigated through a review of relevant legislation, policy and literature, followed by a series of workshops and interviews with key stakeholders, experts and practitioners.

Work on this project can be summarised as comprising five key components, as follows:

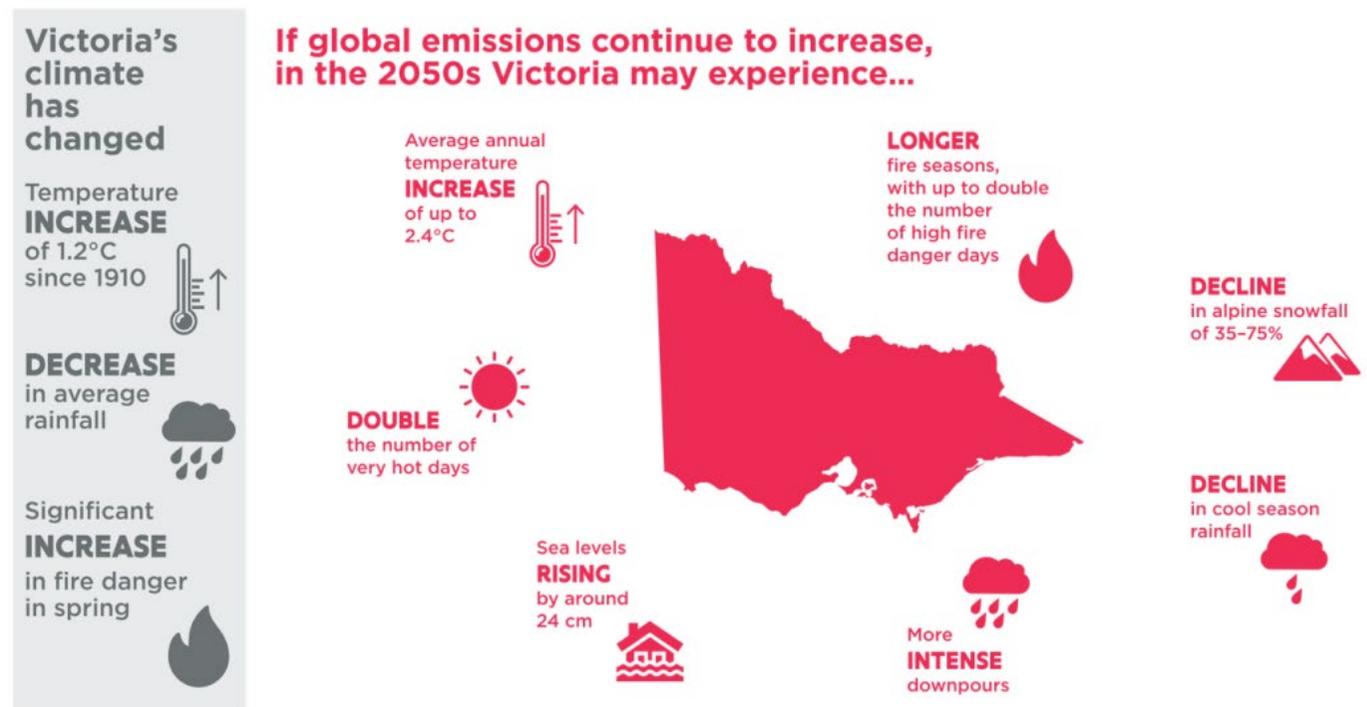
- **Decision-making framework:** An assessment was undertaken around decision-making pathways in order to establish the role that relevant legislation and other influencing factors play in the planning process. This assessment considered the varying influences at different scales of planning, in response to the significant difference in levers which are available.
- **Current Context:** A parallel assessment was also undertaken of the various intersections between matters addressed by the planning system and matters which may be considered in response to climate change mitigation and adaptation.
- **Key Barriers:** The barriers to delivery of outcomes under each of the key 'intersection' themes were identified, and then refined, to reflect the key barriers relating to the authorising environment for decision-makers.
- **Options analysis:** Potential options (Initiatives) for addressing these key barriers were identified and tested with a range of experts and stakeholders through a series of engagement exercises which included group discussions, one-on-one interviews and other mechanisms.
- **Recommendations:** The refined initiatives were then assessed against a range of criteria to inform, along with the input from experts and stakeholders, the recommendations contained within this document.

## 1.3 MITIGATION AND ADAPTATION

This report addresses both Adaptation and Mitigation.

At a basic level, Adaptation refers to the changes we need to make to live with the impacts that occur as a result of climate change. In a Victorian context these include impacts identified in Figure 1.

Mitigation refers to the steps we need to take to reduce the amount of greenhouse gas emissions which are released into the atmosphere, causing global heating. In the context of planning, these are generally carbon emissions.



Under high emissions, compared to 1986-2005. Updated from Victoria's Climate Science Report 2019

Figure 1: Climate change impacts in Victoria (source: draft DELWP Built Environment Adaptation Action Plan, 2021)

# 2.0 BACKGROUND AND CONTEXT

In assessing the ways in which Victoria’s planning system can be improved to address climate change it is important to understand the current context. This Section of the report provides an overview of some key elements of this context.

## 2.1 CURRENT PROCESSES

Victoria’s built environment is largely guided by the *Planning and Environment Act 1987 (P&E Act)* and the *Building Act 1993*. At a very high level, planning guides the spatial distribution of land uses and management of conflict and provides the framework within which development occurs. It is increasingly detailed in its scope, but the building system remains the part of the system which addresses more technical details and sets minimum standards related to human safety and amenity (see Figure 1).

The legislated objectives of planning in Victoria which are identified in the *P&E Act* (see highlight box Page 6) refer to “sustainability” but do not explicitly refer to climate change. The *P&E Act* establishes a system which primarily relies on municipal based Planning Schemes (i.e each Local Government Area has their own set of statutory rules which guide planning decisions). These rules are set in a variety of ways outlined further below. Each council’s Planning Scheme contains State, Regional and Local policy, the applicable zoning and overlay controls relevant to each municipality and a series of Statewide Particular Provisions which relate to specific aspects of use or development. Clauses 54, 55, 56 and 58 set in place key discretionary standards for the development of single dwellings, multi-residential development, subdivision and apartment development.

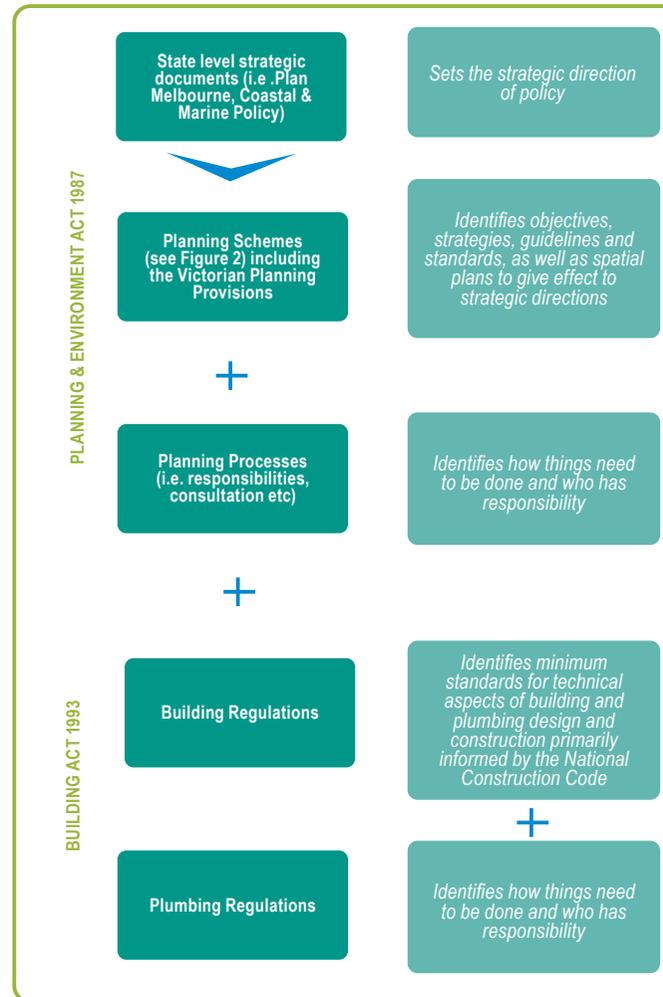


Figure 2: Key components of the planning / building system



Figure 3: Key components of Victoria’s planning schemes

It is important to understand that Victoria’s planning system is *performance* based. This requires that (generally) high level objectives must be met, but specific standards or strategies to meet those objectives are generally discretionary, meaning the decision-maker considers the particular context of each development and then decides on whether the application of a particular strategy or standard is appropriate. In practise, this means decision-makers are required to consider a range of matters, many of which may be contradictory, and then make a decision on balance.

*Plan Melbourne* (and associated implementation actions) and the various Regional Growth Plans give spatial and policy effect to the principles of planning outlined in the *P&E Act*, and in turn inform the Planning Schemes of relevant municipalities. While *Plan Melbourne* has a strong focus on climate change and overarching environmental sustainability, the older Regional Growth Plans are much more focused on growth and development, with only passing reference to climate change, and exhibit little evidence of decisions based around an understanding of this key issue.

The planning system in Victoria has recently, and is currently, subject to a wide-ranging program of reforms. This includes the SMART planning program which has informed a new Planning Policy Framework (PPF), whereby all Planning Schemes are in the process of being translated to a simplified format, with matters that are considered to duplicate or contradict State policy being stripped from schemes. Other changes included the 2017 introduction of the *Better Apartments Design Standards* (BADS), and their proposed update, which introduced various requirements related to energy efficiency, waste and recycling, noise impact objectives, and integrated water and stormwater management which represented a step change in the delivery of quality apartments.

More specifically relating to climate change, Victoria has the *Climate Change Act 2017 (CC Act)*, which sets in place current legislative requirements to plan for adaptation to climate change though five yearly sector-based adaptation action plans and to achieve net zero emissions by 2050. However, there has been no associated holistic review of the planning system and its alignment to mitigation and adaptation outcomes. Rather, there are a series of reviews and individual actions / programs underway, including:

- *The Climate Change Strategy* (Department of Environment, Land, Water and Planning (DELWP), 2021)
- *Recycling Victoria: A new economy* (DELWP, 2020)
- *Victoria’s Zero Emissions Vehicle Roadmap* (DELWP, 2021)
- *Gas Substitution Roadmap* (DELWP, 2021)
- *Victorian Renewable Energy Zones Development Plan* (DELWP, 2021)

*The objectives of planning in Victoria are—*

- (a) to provide for the fair, orderly, economic and sustainable use, and development of land;*
- (b) to provide for the protection of natural and man-made resources and the maintenance of ecological processes and genetic diversity;*
- (c) to secure a pleasant, efficient and safe working, living and recreational environment for all Victorians and visitors to Victoria;*
- (d) to conserve and enhance those buildings, areas or other places which are of scientific, aesthetic, architectural or historical interest, or otherwise of special cultural value;*
- (e) to protect public utilities and other assets and enable the orderly provision and co-ordination of public utilities and other facilities for the benefit of the community;*
- (f) to facilitate development in accordance with the objectives set out in paragraphs (a), (b), (c), (d) and (e);*
- (fa) to facilitate the provision of affordable housing in Victoria;*
- (g) to balance the present and future interests of all Victorians.*

- Integrated Water management forums (and strategic directions) (ongoing)
- Victoria’s Resilient Coasts 2100+ (place based coastal adaptation) (ongoing)
- Local Coastal Hazard Assessments (four pilots plus the unreleased Port Phillip Bay CHA) (various)
- Cooling and Greening (Melbourne) (ongoing)
- Review of the Building Code (aligned with updates to the National Construction Code) (ongoing)
- *Victoria’s ESD Roadmap* (ongoing)
- *Built Environment Adaptation Action Plan* (draft, DELWP 2021)

The State approach to climate change articulated in the *Climate Change Strategy* is comprehensive and identifies a number of relevant priorities, as follows (emphasis added):

- *Support place-based adaptation including effective and inclusive community participation and empowerment, with special emphasis on vulnerable communities.*
- *Adopt best-practice climate risk management across all portfolios, including all funded agencies and service operations.*
- **Ensure relevant legislation, standards and codes support the use of best available climate change data and adaptive planning principles as part of decision-making, particularly as it relates to infrastructure, development and land use changes.**

This document looks in more detail at how these matters are currently influencing planning policy and decision-making.

## The ESD Roadmap

In the context of this work it is important to highlight that the State Government is currently progressing an Environmentally Sustainable Design (ESD) Roadmap which has two key stages – changes to the PPF, followed by changes to existing Particular Provisions and the introduction of a new Particular Provision relating to ESD for commercial and industrial development. As acknowledged in the Roadmap, *“existing state ESD policies and standards do not apply to all land uses, and in some cases are insufficient to address existing and future planning and environmental challenges such as waste management and climate change.”* (*Environmentally sustainable development of buildings and subdivisions: A roadmap for Victoria’s planning system*, DELWP 2021)

However, the scope of the ESD Roadmap does not consider climate change responses specifically, rather, it focuses on incremental updates around a number of key areas:

- Making it easier to recycle by introducing spatial requirement for waste similar to those introduced through BADS;
- Cooling and greening new developments and our urban environment, although this work is being undertaken separately and does not look holistically at green infrastructure delivery;
- Facilitating active and sustainable transport choices, through new bicycle standards and the consideration of electric vehicle requirements;
- Reducing exposure to air and noise pollution;
- Improving building energy efficiency and supporting the transition to a low emission future (noting proposed changes are focused only on building siting and orientation and encouraging the use of renewable energy);

- Enhancing the role of planning in stormwater management and efficient water usage (although limited changes proposed); and
- Introducing Statewide ESD considerations for commercial and industrial developments.

The Roadmap also talks to the need to ensure standardisation which, based on the proposed updates, may have perverse outcomes. One of these may be the removal of existing local ESD policy developed by CASBE (and applied across a quarter of Victorian municipalities) which set higher benchmarks in many areas. In addition, updates to ESD standards currently being pursued by CASBE, in partnership with over 30 of Victoria’s municipalities, seek to elevate standards of ESD beyond those proposed through the Roadmap, which may widen the gap between the aspirations at state and local levels. In other words, standardisation has the potential to reduce planning provisions addressing climate change related matters to the lowest common denominator, rather than encouraging best practice.

## 2.2 THE DECISION-MAKING FRAMEWORK

The decision-making framework for the built environment can generally be summarised as follows:

- A piece of Legislation is enacted which identifies specific Objectives or Objects.
- A series of implementation measures are then complemented – sometimes these are specifically identified in the relevant legislation (such as the preparation of Adaptation Action Plans under Division 2 of the CC Act).
- The implementation tools have different weight depending on whether they are enacted through a statutory mechanism (for example, a Planning Scheme) or were just an endorsed strategy which then informs other measures which may or may not be implemented.
- While the *process* for implementing legislative objectives is often clearly articulated, the specific content is generally not.
- The process of developing *specific content* to give effect to legislated objectives is guided by a range of external documents, which may take the form of Ministerial Directions, Strategy Plans or other.

Key legislation in relation to the built environment includes the *P&E Act* and the *Building and Plumbing Acts 1993*. Other important legislation includes the *Climate Change Act 2017*, *Subdivision Act 1988* and the *Water Act 1989*.

While the legislative basis represents the foundation for any relevant policy or initiatives, it is often of less relevance to the day-to-day practice of planning and is usually general in nature, relying on other instruments to interpret or implement relevant objectives.

### Climate Change Act 2017

The *Climate Change Act 2017 (CC Act)* is logically the key guiding legislation to deliver responses to climate change. It does so in a number of ways. Mitigation is addressed by way of a rolling series of five yearly documents:

- The *Climate Change Strategy (2021)*, which identifies the strategies for responding to climate change, around five key pillars:
  - A clean energy economy - including “*Transformation of the electricity system with renewable energy*” and “*Building greener homes and buildings*”.
  - Innovation for the future - including “*Next-generation energy, including batteries and offshore wind power*”, “*Decarbonising gas use – including switching to electricity and developing the renewable hydrogen industry*” and “*Transitioning to more zero emissions vehicles*”.
  - Resilient farms and forests - including “*Revitalising and protecting our lands and forests*”.
  - Climate smart businesses and communities - including “*Lower emissions from waste and the creation of a circular economy*” and “*Improvements to public transport and cycling and walking paths*”.
  - A climate resilient Victoria - including “*Efforts to address current climate change impacts*”, “*Reduced barriers to adaptation*” and “*The laying of foundations for transformational adaptation*”.
- The Emission Reduction Target, which tracks emissions against a net zero target for 2050 and outlines how the State proposes to meet the relevant target set for the next five years.
- Requirements for pledges aligned with a 5 yearly Emissions Reduction Target. For some, these pledges are mandatory, while others are voluntary (see below).

The Act also requires (on the same 5 yearly cycle) a series of sector based Adaptation Action Plans (AAPs) which outline the adaptation measures proposed for specific areas. Of most relevance is the Built Environment AAP, but there are clearly intersections with other sectors such as Transport, Agriculture, Infrastructure, etc.

Some concern has been raised in relation to the Emission Reduction targets and the potential for those to not support earlier action (and therefore alignment with the latest scientific evidence). In addition, a number of Local Governments have made pledges using this framework and are concerned as to their ability to deliver on those pledges under the current planning framework.

Climate change responses and requirements of various sectors to integrate planning for climate change into their everyday operations is strengthened through their identification at Schedule One of the *CC Act*. Crucially at Part 3 ‘Climate Change considerations’ explicitly requires that “*decision-makers must have regard to climate change*”. This applies to any decision made or action taken that is authorised by— (a) the provision of an Act specified in Schedule One. For each Act referenced at Schedule One, relevant actions under each Act which require consideration of climate change are identified. The absence of the decisions made under the relevant parts of the *P&E Act* is noted.

## Planning & Environment Act (1987)

While the *P&E Act* remains a notable absence from Schedule One of the *CC Act*, the Act nonetheless identifies the purpose of setting in place a framework “for planning the use, development and protection of land in Victoria in the present and long-term interests of all Victorians”. The evidence clearly identifies that the long term interests of Victorians is served by applying mitigation and adaptation actions in any application of the Act. In combination with the stated objectives for planning in Victoria (see highlight box Page 6) there is a strong legislative basis for embedding mitigation and adaptation measures through the Planning Scheme.

Importantly in delivering climate change responses, if regulation is in the planning system as part of the relevant statutory framework (the Planning Scheme) it becomes law. That law can be mandatory or discretionary. Where a Planning Scheme identifies that a development, for example, *must* meet a particular Standard, there is (generally) no legal opportunity to consider another option for meeting a specified objective. Where it is discretionary (i.e. something is not explicitly stated as a *must*), any person making a decision under the Act must balance the various objectives in making their decision. For the purpose of this report, that would require the decision-maker to be able to consider the ‘right’ matters to deliver a decision which responds to climate change.

## Building Act (1993)

The building system to a large degree follows the planning system, and is framed around minimum standards primarily related to specific aspects of human safety and amenity. This includes key aspects of energy efficiency such as insulation and glazing standards and overall energy efficiency, including fixed equipment. Proposed updates to the way energy efficiency is measured through the *Building Act* would see energy efficiency addressed by a ‘whole of house’ budget, representing a very

different approach. The building system continues to address certain aspects of the built environment, particularly related to technical details or standards. Planning, for example does not generally consider the internal fit-out of buildings, and so detailed design considerations which relate to these aspects of a design are generally addressed through the building, rather than the planning, stage of any development. It also provides the primary mechanism for control of development that does not trigger a planning permit, such as single dwellings within most parts of the Victoria.

The *Building Act* in Victoria generally applies the *National Construction Code* (NCC) through incorporation by reference in the *Building Regulations 2018* and *Plumbing Regulations 2018*, but has the ability to be tailored at a State level. The NCC sets standards for new buildings and major renovations and includes the *Building Code of Australia* (BCA) and the *Plumbing Code of Australia* (PCA).

Relevant Objectives of the *Building Act* include:

- (b) to enhance the amenity of buildings;
- (c) to promote plumbing practices which protect the safety and health of people and the integrity of water supply and waste water systems;
- (f) to facilitate the construction of environmentally and energy efficient buildings.

The NCC currently sets a requirement for all new homes to achieve a 6 star energy rating, with an increase to 7 stars proposed through updates to the NCC. Victoria has confirmed that a 7 star rating will be pursued regardless of the where updates to the NCC land. In Victoria all new Class 1 dwellings (stand alone or semi-detached houses) are also obliged to install either a rainwater tank for toilet flushing or a solar hot water system. This is set through a Victorian variation to requirements in the NCC, with supporting provisions in the *Plumbing Regulations*.

## Local Government Act (2020)

The *Local Government Act* (*LG Act*) has recently been updated and changes to this Act underpin some of the concern held by local councils that they may not be able to discharge their new responsibilities under the *LG Act* to address climate change through the existing planning system. Under the *LG Act* the role of local government is to provide good governance in its municipal district for the benefit and wellbeing of the municipal community. Among the overarching governance principles are the following:

- (b) priority is to be given to achieving the best outcomes for the municipal community, including future generations;
- (c) the economic, social and environmental sustainability of the municipal district, **including mitigation and planning for climate change risks**, is to be promoted;
- (d) the municipal community is to be engaged in strategic planning and strategic decision making;
- (e) innovation and continuous improvement is to be pursued.

The explicit reference to mitigation and planning for climate risks, as well as references to the best outcomes for future generations, clearly establishes an expectation under this legislation that councils will act to deliver both mitigation and adaptation outcomes within their municipality.

Under the *LG Act* and *CC Act*, councils have a ‘duty of care’ to manage foreseeable risks. The Victorian Government’s review of the obligations of councils (*Local Government Climate Change Adaptation Roles and Responsibilities under Victorian Legislation*, DELWP 2020) identified that failure to act on known risks may leave councils open to claims of negligence. “*Development Approvals*” are specifically referenced as an area where there may be council liability if climate change impacts are not considered.

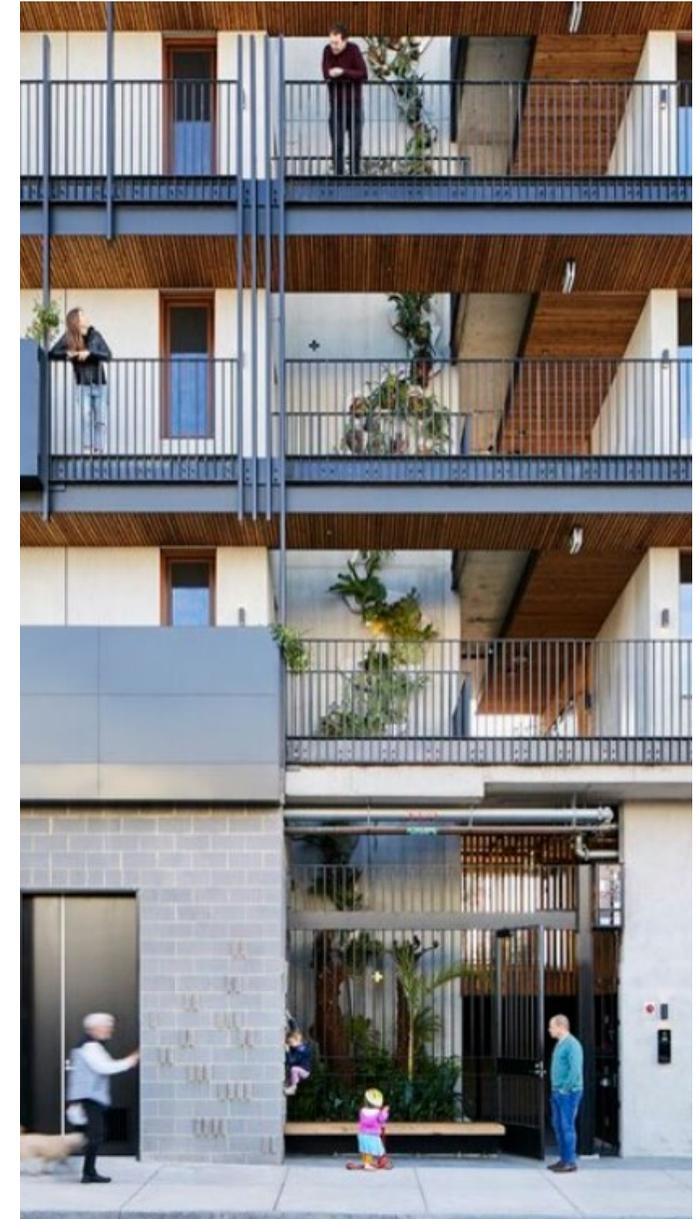
Under the *LG Act*, planning within a municipality is to be driven by a Community Vision, developed with the local community to identify aspirations for the area over a 10 year period. This Vision should inform strategic planning in the municipality across council's various functions. This emphasis on community input highlights the critical role that local communities will play in driving climate change response, in particular those related to place-based adaptation. Where a council has a Community Vision which talks to climate change responses or the environmental sustainability of the municipality, there is an additional obligation on council under the *LG Act* to plan for specific adaptation and mitigation measures that can be enacted within their municipality. These key council documents also inform Planning Schemes prepared under the *P&E Act*.

There are also a number of other legislative Acts which are relevant to planning for climate change including:

- The *Water Act 1989* which covers general water management and the functions relevant to matters such as flooding and drought. It guides the actions of the relevant Water Authorities and Floodplain Management Authorities and is referenced in Schedule One of the *CC Act*.
- The *Emergency Management Act 2013* sets the framework for emergency service coordination and responses in terms of Victoria's *Critical Infrastructure Resilience Strategy*.
- Legislation such as the *Transfer of Land Act 1958* and *Sale of Land Act 1962* set parameters relating to disclosure during these processes.
- The *Subdivision Act 1988* addresses the requirements for the certification of plans of subdivision and owners' corporations.
- The *Environment Protection Act 2017* and the *Environment*

*Effects Act 1978* set out processes and requirements to ensure the protection of the environment. The *EPA Act* was updated recently and is currently subject to legal challenges regarding the control of greenhouse gas emissions under that legislation. This follows a notable judgment in NSW.

- The *Victorian Renewable Energy Act 2006* and the *Major Transport Projects Facilitation Act 2009* set out the legal processes required to deliver specific, State significant development.
- *Victorian Planning Authority Act 2017* outlines the roles and responsibilities of the Victorian Planning Authority (VPA) in relation to greenfield and urban renewal precincts, including scope and mechanisms for this.



## 2.3 KEY ISSUES

This project has arisen as a result of the disconnect between the stated intentions and high level policy positions in relation to climate change, and the day-to-day decisions that are being made in relation to planning in Victoria. In practice, local government decision-makers routinely report that the adoption of a net zero emission target and commitments to adaptation at state level have not yet 'trickled down' to inform decision-making within the built environment, and more particularly, to decisions made through Victoria's planning system. This project seeks to explore some of the key reasons for this, in order to inform advocacy to facilitate change.

A number of key issues have been identified through the literature review and engagement with stakeholders, practitioners and decision-makers within this system. Some of these key issues are addressed within this section.

### Climate change considerations and the 'balancing' of decisions

While there is policy around general sustainability, energy efficiency and adaptation within the Planning Policy Framework, and some more specific Standards, planning in Victoria is based around a discretionary system which requires anyone utilising a Victorian Planning Scheme to make a decision to balance a range of matters. This is articulated at Clause 71.02-3 Integrated decision-making (see highlight box).

The result is that varying degrees of weight are given to matters relating to climate change, and there is little consistency or rigour in how climate change is addressed. Some aspects of climate change response (such as responses to bushfire risk) are framed as overriding considerations within the planning system (see highlight box). This has been embedded as a result of the devastating impacts of the Black Saturday bushfires.

One of the key issues raised is that the principle was applied as a 'reaction' to severe impacts, but the same principle is not being applied to decisions which influence broader climate change impacts, even when these impacts are contributing to an increase in the risks such policy seeks to manage. This is despite the severity of these impacts on current and future communities. For example, a failure to take all appropriate action to support mitigation in the built environment contributes to an increase in bushfire risk.

### Supporting transformational change

Another issue which underpins this work is a lack of clarity in the role that the planning system plays in delivering transformational, as opposed to incremental, change in response to climate change. The planning system has traditionally adopted a process of incremental changes, with a strong emphasis on ensuring that changes are underpinned by a robust evidence base. The scientific evidence all points

#### Clause 71.02-3 Integrated decision making

*Society has various needs and expectations such as land for settlement, protection of the environment, economic wellbeing, various social needs, proper management of resources and infrastructure. Planning aims to meet these needs and expectations by addressing aspects of economic, environmental and social wellbeing affected by land use and development. Planning and responsible authorities should endeavour to integrate the range of planning policies relevant to the issues to be determined and balance conflicting objectives in favour of net community benefit and sustainable development for the benefit of present and future generations. However, in bushfire affected areas, planning and responsible authorities must prioritise the protection of human life over all other policy considerations. Planning authorities should identify the potential for regional impacts in their decision making and coordinate strategic planning with their neighbours and other public bodies to achieve sustainable development and effective and efficient use of resources. (emphasis added)*

to a need for transformational change in the near future and it will be important that the foundations of this are laid within the planning system. While this need for transformational change is notably acknowledged within key government documents such as the *Climate Change Strategy*, it is not yet influencing proposed changes to the planning system and many changes which would support this are being resisted due to anticipated opposition from some stakeholders.

There has also been a strong emphasis on the cost implication of planning controls given both existing issues related to housing affordability and the heavy reliance on construction in generating the State's economic growth. The traditional emphasis on the economic considerations in planning decisions have traditionally been framed around the economic impacts on a development proponent at a lot scale rather than the broader economic cost to society of the cumulative costs of not delivering development which mitigates emissions and adapts to climate change. However, the cumulative economic benefits of a city which is more resilient to extreme heat may significantly outweigh any lot scale costs of integrating green infrastructure within a development.

## Available tools and inconsistent application of policy

A related but distinct challenge facing those using the planning system to respond to climate change is a lack of clarity and certainty in how specific aspects of policy should be applied. While this issue stems in part from the overarching authorising environment discussed above, it speaks more directly to the tools, standards and other mechanisms that are available to users of the system, and their understanding of the scope and parameters of their application.

In some areas, specific mechanisms (or permit triggers) to enable planners to assess known climate risks are lacking. A key example of this is the absence of flood overlays, despite the extent of coastal inundation being established. Inconsistent

application of policy that does exist exacerbates this further. For example, a dual occupancy can be refused due to climate change risks associated with sea level rise impacts on accessways without an overlay applying to the land itself, but a multi-residential development with basement car parking in a dune system prone to erosion may be approved.

## Organisational consideration of climate change

Delivery of climate responsive outcomes requires an understanding and embedding of this at all levels of decision-making. While CASBE and other organisations, such as the Planning Institute of Australia (PIA), have undertaken significant work in delivering training and resources to local government planners, if the prioritisation of climate change considerations is not embedded in the mindsets of management levels, and ultimately at councillor level, the required changes to practice can be undermined.

While some councils have a strong focus on climate action, and an increasing number have declared climate emergencies, this is certainly not the case across the board. And while some decision-makers feel empowered to argue their case and that this will be supported by more senior council staff, others can be hesitant to push beyond common practice to advance climate change responsive outcomes. There are a number of reasons for this, but they include concern that decisions will be overturned, affecting their career progression or the cost and expense borne by councils in pursuing outcomes that may be challenged.

Not all councils have the resources to pursue matters which may be subject to criticism, legal challenges, added expense, etc. While more recently the work undertaken by CASBE has seen increasing support for ESD where permit conditions have been challenged at the Victorian Civil and Administrative Tribunal (VCAT), a lack of confidence in support for climate

related decision-making more broadly can be a significant barrier to action. Lack of capacity and ESD experience in smaller councils can understandably also lead to an aversion to chasing compliance and enforcement in many cases.

## Alignment with scientific evidence

The release of the recent Intergovernmental Panel of Climate Change *Sixth Assessment Report* was accompanied by a 'code red' warning from the United Nations that very significant change to business as usual was needed within the next decade to avoid catastrophic climate change. However, despite broad policy statements that planning should be aligned with the best available data and science, it is clear that planning is not currently doing this. Research from key bodies such as the CSIRO and the Grattan Institute all point to the significant challenges in reducing emissions from a variety of sectors. Conversely, reducing emissions, and in particular operational emissions, from the built environment is frequently identified as one of the easiest ways of reducing emissions. In the context of the scientific evidence, there is therefore a clear case for strong policy to maximise these 'easy wins' in emission reduction. Failure to reflect this evidence within planning policy risks the system not being aligned with the delivery of ambitions to keep warming below 1.5 degrees.

Current ambitions outlined in the State's emission reduction targets and in the Trajectory for Low Energy Buildings (which informs governmental policy on building efficiency standards) are based on net zero by 2050. It is clear from the latest IPCC report that deeper cuts in greenhouse gas emissions are needed in advance of 2050 to avoid 1.5 degrees being reached. On release of the Sixth Assessment Report (IPCC 2021), United Nations secretary-general Antonio Guterres said "*We are at imminent risk of hitting 1.5 degrees in the near term. The only way to prevent exceeding this threshold is by urgently stepping up our efforts, and pursuing the most ambitious path. We must act decisively now to keep 1.5 alive.*"

## Misalignment of scope and ambition

There is also an emerging but significant potential for misalignment between State and Local ambitions. Many of Victoria's councils (31 at the time of writing) have declared a 'Climate Emergency' and recognised the need for urgent action. This can lead to a policy misalignment between local government ambitions to limit global heating to below 1.5 degrees and State or National targets which can underpin higher order policy. It creates further issues where councils seek to maximise the available levers to deliver on local climate action plans or community ambitions, given development approvals are a key opportunity for many councils to drive change within their municipality. The delivery of adaptive communities is, in many areas, intrinsically linked to net zero carbon outcomes and so is important to many councils. A misalignment between the ambition of Local and State government, is problematic on a number of levels, including:

- Increasing risk of refusal by the State to authorise amendments to the Planning Scheme put forward by local government. The overarching principle (which remains sound) of local policy not contradicting State policy becomes problematic where these are not aligned. It is therefore critical that the authorising environment, particularly in relation to the structure of Planning Schemes, be sufficiently flexible.
- Increasing risk of the introduction of State policy which constrains local government commitments to their communities. There is a real risk in this misalignment that current programs such as the State-led ESD Roadmap will bring in policy which prevents councils from delivering on commitments to their communities. For example, the City of Melbourne has a stated ambition to reach net zero emissions by 2040, 10 years ahead of State targets. To reach this target, the City needs to be able to deliver new buildings which are net zero carbon in a shorter timeframe than would be required to deliver existing State policy.

## Zero carbon vs energy efficiency

A comprehensive response to climate change requires a system which delivers net zero carbon outcomes. There is however, significant complexity in how this is achieved, and the role that the planning system has to play in delivering this.

While the role of the planning system in relation to ESD more broadly, and in relation to energy efficiency specifically has been considered and endorsed through the earlier round of ESD policy implementation, requirements for net zero carbon emissions remain untested.

The mandating of net zero carbon outcomes at a planning stage requires not only energy efficiency outcomes as currently addressed by the planning system, but also an understanding and early identification of matters usually addressed at the building stage (i.e. what R value insulation is proposed, etc.) and a mechanism for providing certainty as to the management of any additional offsets to deliver net zero. In addition, there is not a consistent understanding of whether this net zero should relate to Scope 1 (operational) or Scope 1 and 2 (operational and indirect) emissions. While changes to planning policy to reference net zero emission targets are an important step, without explicit acknowledgement of the role of new development being net zero carbon in the bigger picture of a net zero future and the right processes and mechanisms in place to address overlap with building systems and delivery of offsets, implementation will remain challenging. In flagging the need for mandatory energy efficiency standards, Infrastructure Victoria stated:

*The energy efficiency of homes and buildings can lock in future energy demand, as they are long-lasting and can be difficult to change. More than half of Australia's 2050 building stock will be constructed during the next 30 years, at prevailing energy efficiency standards. The rest may need retrofitting to help prevent escalating energy costs and demand. (Victoria's infrastructure strategy 2021-2051)*

While it could be argued that any mandatory controls should be contained within the building system (and indeed, they should be), including these as mandatory requirements within the planning system is likely to facilitate improved outcomes as planning can ensure that the widely accepted best practice hierarchy of energy efficiency (where siting and design is top of the list) is implemented.

## Siloing of built environment systems

In general, the integration of planning and building systems, and even the integration of different sectors of decision-making within the planning system itself, remain far too siloed. It is widely acknowledged that addressing climate change will require a whole-of-system approach. Within the current planning system, which seeks to avoid planning permit triggers unless a strong case can be articulated, there is an unavoidable reliance on the building system to deliver appropriate outcomes. This creates issues as identified above in the misalignment of ambitions, given the *Building Code of Australia* (BCA) is generally framed around minimum standards, and has yet to seriously address the efficiency improvements needed to support best practice responses to climate change. This means any advocacy or change within the planning system must be supported by corresponding changes to the building system.

It must also, however, be supported by appropriately integrated consideration of climate change responses through the various 'fast track' or streamlined reforms that are currently being contemplated to facilitate economic recovery post-COVID and to improve overall system functionality.

## 2.4 WHO ARE THE DECISION-MAKERS?

This section of the report seeks to understand who makes decisions within the planning system, and what influences their decision-making. Unpacking these influences is important in understanding what elements of the system are the most influential, allowing reforms to be targeted to the areas most likely to influence decisions. This stems from the stated project objective that:

*All relevant decision-makers are mandated to incorporate climate change action in their decisions.*

The following sections identify the key decision-makers, as well as others who play a role in influencing decision-making. The influences on these decision-makers (having regard to the focus of this project on the authorising environment) are then summarised in four diagrams (Figures 3 – 6). These diagrams represent the most common decision-making pathways across the planning system. It is readily acknowledged that there are infinite varieties and nuances to approval processes; the intention here is not to represent all pathways, but the most common, in order to assess areas of influence.

### 2.4.1 Key Decision-makers

#### Statutory Planners

Statutory planners make decisions on use and development applications lodged at council. These can range from single dwellings to large subdivisions, from a car parking waiver to a change of use. Most council statutory planners will make an assessment which will then be reviewed by their team leader or manager before being signed off for either referral to councillors, or for a decision to be made under delegation. The ability for statutory planners to make decisions under delegation varies widely across the State, and is often linked to matters such as the number of objections received to a given application.

Statutory planners are guided in their work by the Planning Scheme, and any other relevant local laws enacted by the council. While other internal council policies will also influence decisions, they must be linked to the Planning Scheme to have statutory weight. As well as the Planning Scheme, the *Subdivision Act 1988* also provides the framework for statutory planners approving new subdivisions, on top of the relevant policy in their Planning Scheme. In addition, statutory planners are responsible for drafting permit conditions which can require further technical reports to support policy objectives and for integrating internal referrals received from other council staff, such as ESD officers. They play a pivotal role in the approval process.

For some applications which are called in by the Minister, the assessment is undertaken by a DELWP statutory planner, rather than a council employee. The Minister has the power to 'call in' any application by making himself the Responsible Authority, and for some applications, the Minister is automatically the Responsible Authority (i.e. development of more than 25,000sqm in the City of Melbourne). The decisions are still made using the same controls, just not by the local council, who assumes the role of a referral authority.

#### Strategic planners

Strategic planners make recommendations and/or decisions on 'bigger picture' planning matters, including amendments to the Planning Scheme and the preparation of place-based plans which give spatial effect to policy. Generally, these changes are subject to councillor approval via a council meeting, community engagement and require both DELWP and Ministerial approval. Many regional and rural councils will have limited or no internal strategic planning capacity, and will contract consultancy staff to assist on a project-by-project basis. Assistance in strategic planning for rural and regional councils is periodically provided by the State through various programs (the 'rural flying squad', regional planning hubs, etc). While the Planning Scheme provides some input for strategic planners, often they are involved in changing the Planning Scheme and are therefore guided by key documents such as the *Ministerial Direction on Form and Content of Planning Schemes*, as well as the *Practitioners Guide*. To a lesser degree, strategic planners also have regard to the *Planning & Environment Act 1987 (P&E Act)* itself and the *Transport Integration Act 2010*.

#### Building Surveyors

For development approvals which do not trigger a planning permit under the relevant scheme, approval will generally be gained via a building surveyor, having regard to the *Building Act* and the *Subdivision Act*. Developments for which a planning permit is granted still need to be signed off by a building surveyor, which addresses the subsequent stage of approvals. While the majority of councils employ building surveyors, the role of these surveyors is generally to provide a Report and Consent, where a variation to specific buildings standards is sought. It is at the building stage that the 'nuts and bolts' of energy efficiency are generally currently addressed with matters like the provision of solar panels / water tanks and insulation and glazing standards identified through the *Building Act*. The *Building Act* generally follows the *National Construction Code* and imposes minimum standards, rather than identifying strategic objectives or best practice.

### Council Senior Management

In order for recommendations on planning applications and strategic planning matters to proceed, there is generally a need for sign-off by some form of senior management / council executive. In some cases, such as some classes of development approvals, this may be a planning team leader but this will regularly be someone without specific training in planning or other relevant matters. There are two distinct groups of management who influence decision-making, those who manage staff (who have responsibility for the delivery of particular internal goals or programs) and the council executive, who have broader organisational responsibilities. The culture created by these two groups can be influential.

### Councillors

Councillors have the final say on both statutory and strategic decisions made at a local government level. There can be significant issues in this decision-making. While many councillors support and respond to the specific expertise of the planners making recommendations, there are a number of issues which may arise as a result of some councillors not having a full appreciation or experience in executing their obligations under relevant legislation. In addition to this, the realities of being a democratically elected representative with the associated pressure to represent the interests of the current (as opposed to future) communities must be acknowledged. There are a wide range of issues which inform councillor decision-making and elected representatives tend to be inherently conservative, particularly in relation to matters relevant to climate change. More recently, community pressure and explicit commitments to improving climate policy (e.g. statements in their Climate Emergency Plan) have increased councillor focus on related matters in decision-making

### VCAT Tribunal members

Planning in Victoria has an established system of appeal rights, and many developments end up at the Victorian Civil and Administrative Tribunal (VCAT), challenging not only council decisions, but also the Conditions that they may place on permits. Under the Planning & Environment List, VCAT members consider appeals against decisions made under the *P&E Act*. The members have all the powers of a decision-maker under the enabling legislation (i.e. the *P&E Act* in relation to planning matters). There is also the potential for additional functions to be granted under that legislation. Tribunal members have a range of skills and the allocation of members is made by the VCAT administration having regard to the pertinent matters of each appeal. Decisions in relation to climate change have not been consistent in this forum.

### Ministers

Ultimately, the Minister for Planning has the final authority to change any part of the planning and building system. Generally the Minister's involvement is limited to having the final sign off of amendments which have been through DELWP and community review, been reviewed by a Panel and been finalised by a council. Ministers often rely heavily on the advice of DELWP officers (see below) in approving or refusing applications or amendments. It is noted that a range of other Ministers are increasingly being delegated Planning Authority or Responsible Authority status under reform pathways (e.g. under Clause 72.01 the Minister for Energy, Environment and Climate Change is identified as the responsible Authority for certain matters.)

## 2.4.2 Associated Decision-makers

### Other council staff

Engineers, ESD officers, arborists and others all form part of a cohort of council staff who both advise statutory planners but who also make decisions which inform council investment across a multitude of relevant matters – bike paths vs road upgrades, integration or not of passive watering systems etc. These staff members both feed into the overarching strategic decision-making, but in many cases also drive development approval outcomes. A good example of this are council traffic engineers. Consideration of other relevant legislation such as the *Water Act*, and the *Transport Integration Act* varies.

### Planning Panels Victoria / Ministerial Advisory Committees

These groups essentially represent the strategic planning gate-keepers. While not all amendments require referral to a panel, councils have the opportunity to refer matters on which they receive submissions to independent experts for review. Similarly, the Minister can seek advice from an independent panel of experts. The opinion of these panels is given significant weight. They operate under their own processes and legislation. Importantly, in the case of Planning Panels, the Panels' role is to consider *only* matters upon which submissions are made. This often results in a missed opportunity to consider the strategic integrity of a proposed amendment, with only isolated issues addressed. In some cases, it is clear that the Panel had significant concern about particular aspects of an amendment but felt constrained in their ability to comment.

## DELWP Planning officers

In enacting changes to Planning Schemes, current process requires that DELWP Planning Systems undertakes a review of the proposed amendment and then advises the council if the amendment is consistent with State policy and direction. Only then can council seek feedback from the community through a public exhibition process. As such, any attempt to change any existing approach to the application of policy must first be approved by DELWP before it is referred to the Planning Minister who performs the authorising role in the vast majority of cases. DELWP has the opportunity to refuse to authorise any amendment or change that is not felt to align with State policy (explicit or implied), even prior to the public exhibition of any proposed changes.



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## 2.4.3 Pathways

The following flow charts identify the influences that are enacted at each stage of the decision-making process across four key planning pathways:

- Lot scale approvals
- Subdivision approvals
- Precinct planning
- Strategic planning and Planning Scheme amendments

For each of the pathways, the key players in the process are identified, along with legislation and key documents which influence these decisions. Also included are other influences such as the community or referral authorities. It must be acknowledged that planning is a system with infinite variation in how these processes play out, but these charts seek to identify the most common patterns. It is these most common patterns where the most influential change can be enacted and so they are the most important to understand.

Reviewing these flow charts allows for an understanding of the most effective levers in addressing parts of the decision-making processes. It is also noted that some of these influences fall outside the scope of this exercise, but are nonetheless important to acknowledge and are addressed in some of the 'Complementary Initiatives' outlined later in this report. These include things like community influence on councillors or the role of education in ensuring that the application designed and lodged in the system are informed by best practice.

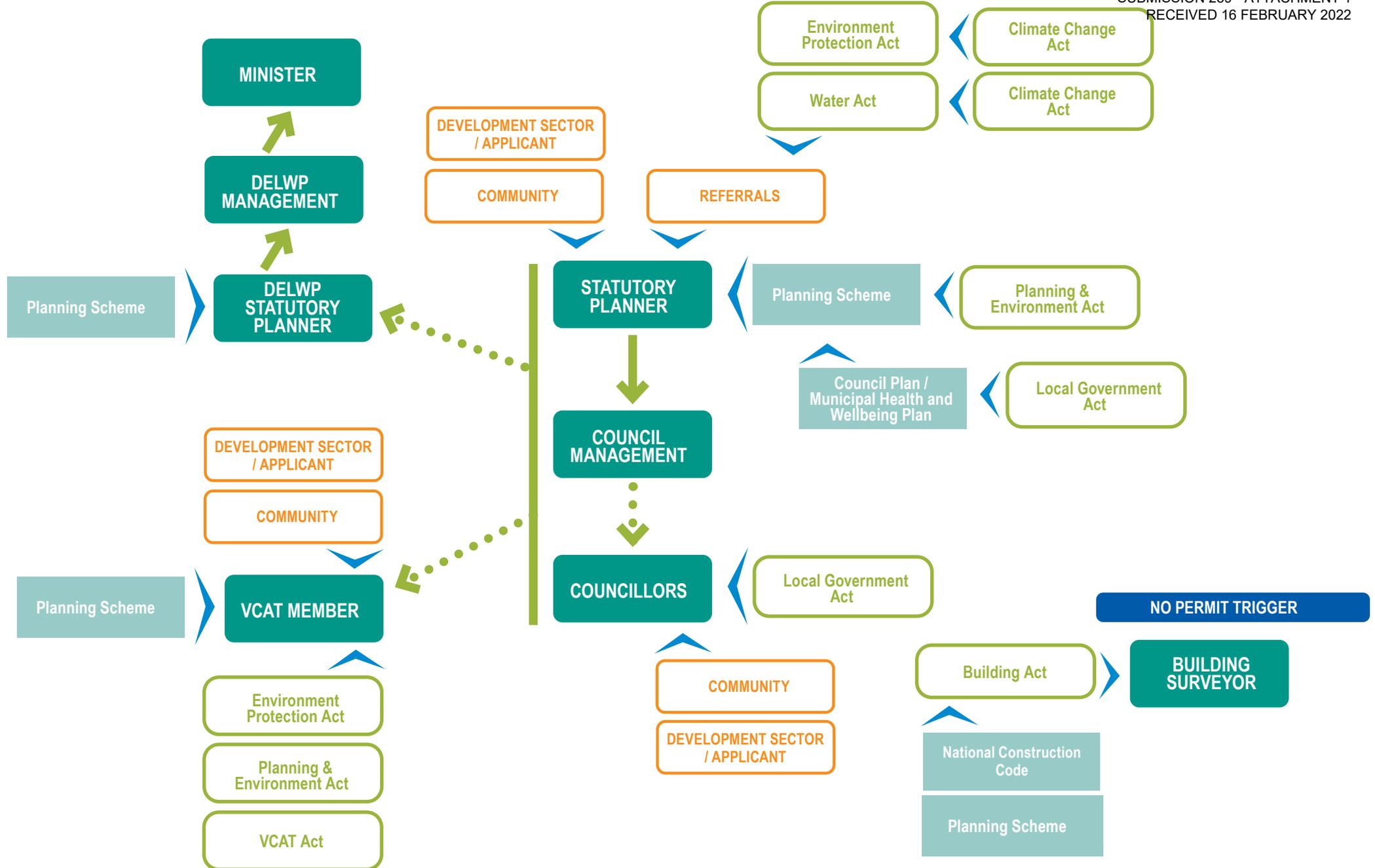


Figure 3: Influences on decision-makers - Land use and development approvals (lot scale)

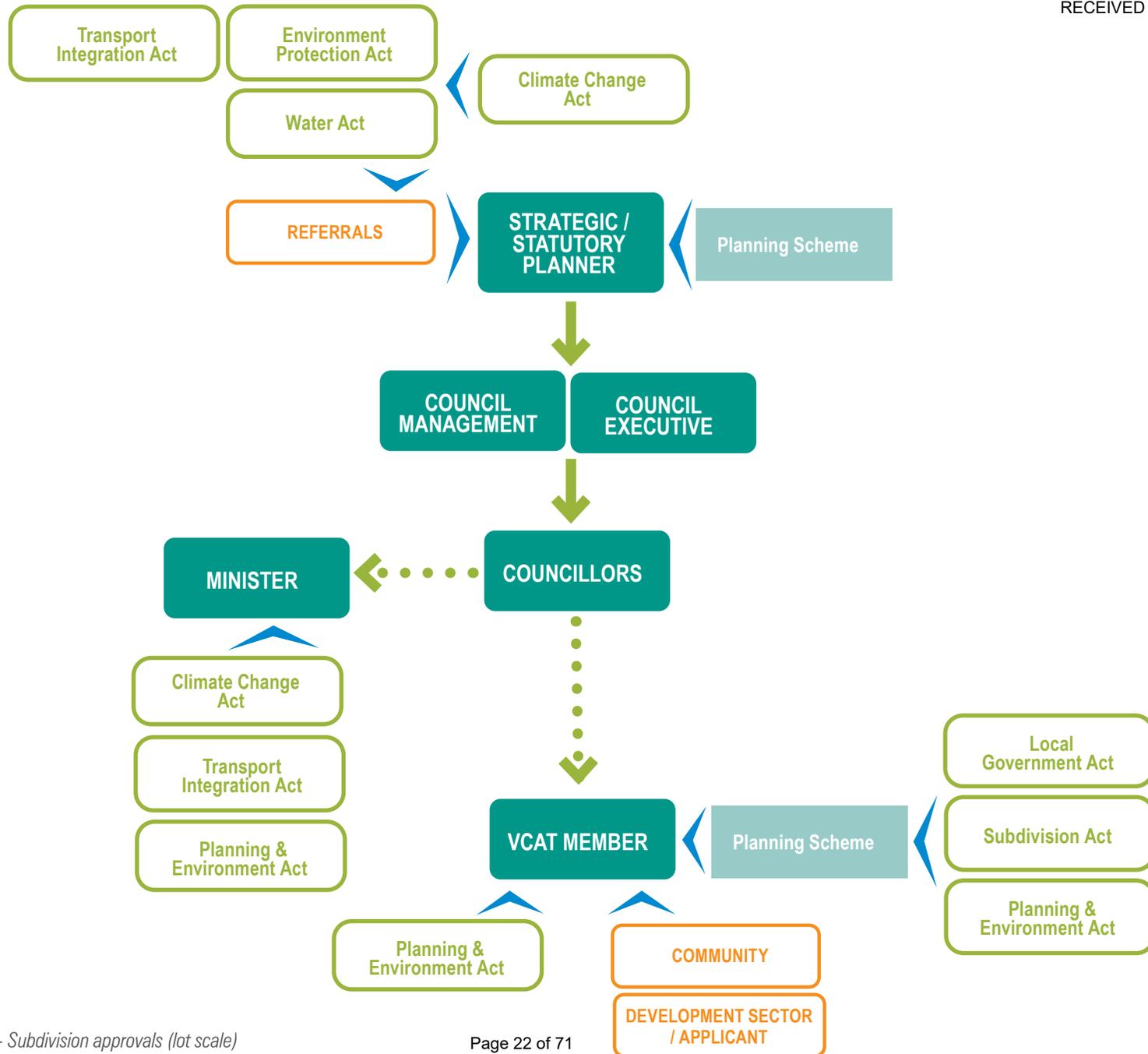


Figure 4: Influences on decision-makers - Subdivision approvals (lot scale)

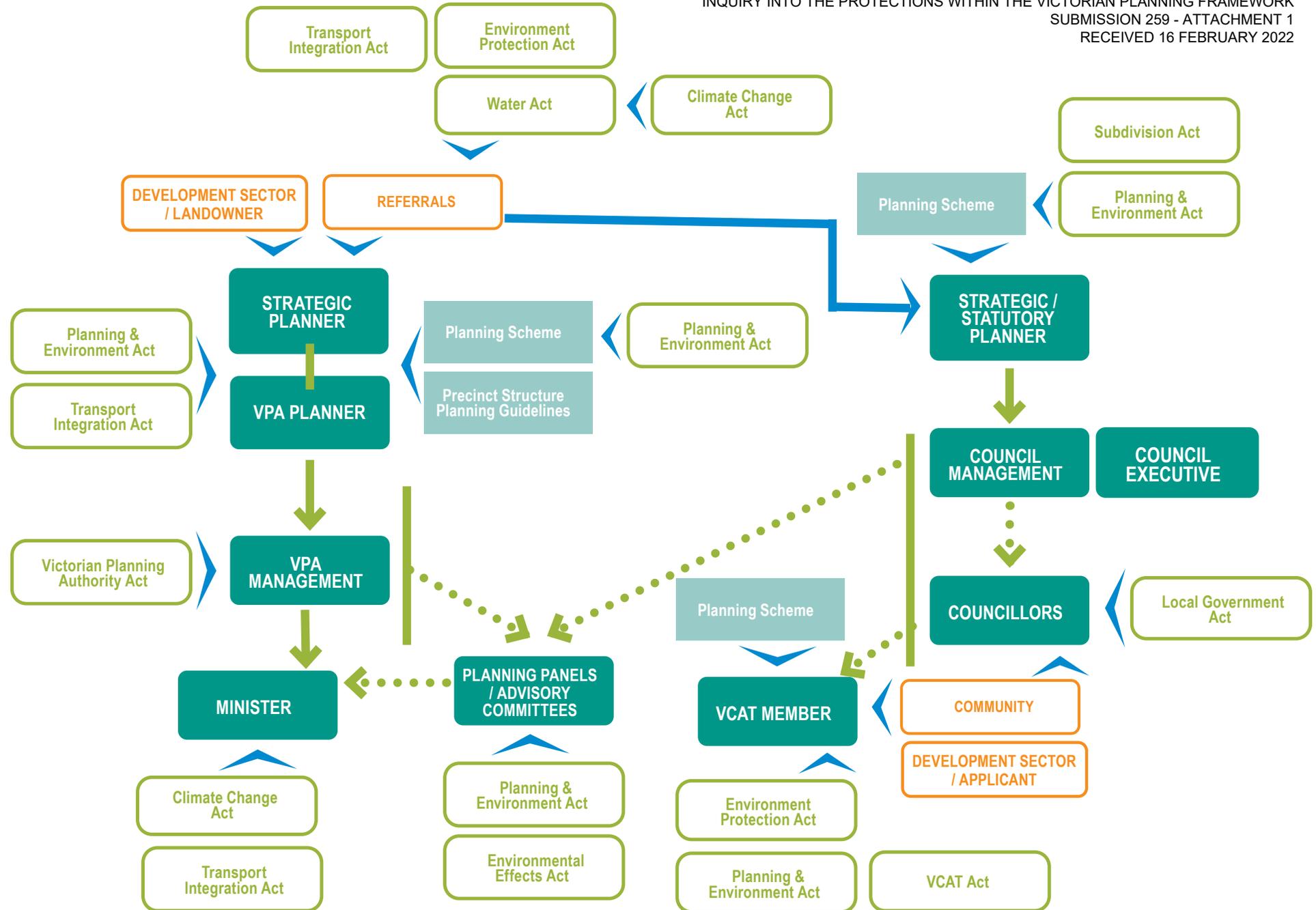


Figure 5: Influences on decision-makers - Precinct and structure planning

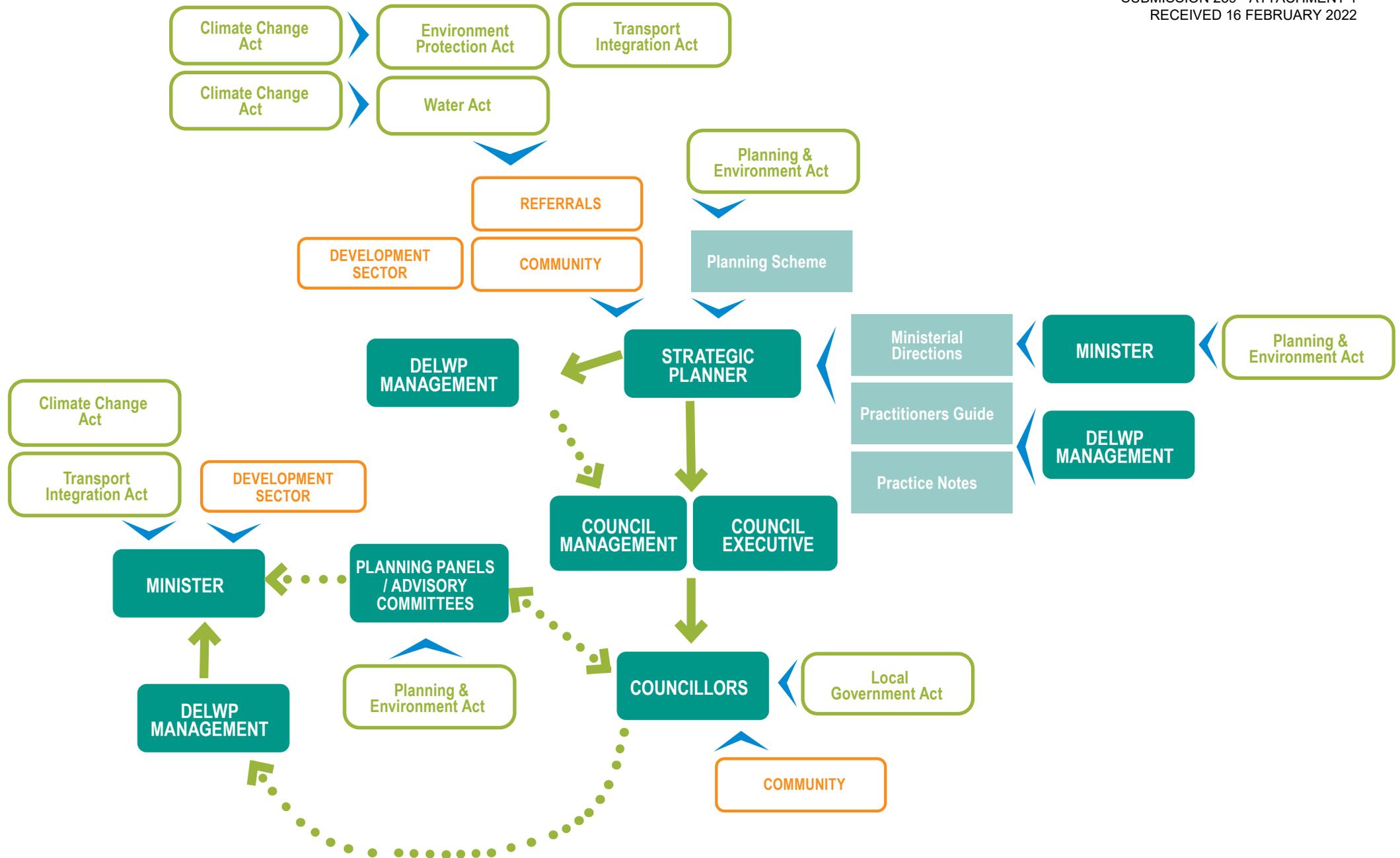


Figure 6: Influences on decision-makers - Policy and planning scheme amendments (strategic planning)

In reviewing the pathways and the influences, and considering feedback provided through industry engagement, key implications are noted as follows:

- The inclusion of content in the Planning Scheme is a critical step in allowing matters to be considered by decision-makers. It is often the key influence, particularly in lot scale and subdivision decisions.
- The influence of the *P&E Act* on decision-making is largely felt through Planning Schemes (Planning Policy Framework and other Victorian Planning Provisions), which are the key implementation tools.
- For strategic planning, the role of the State in authorising and leading plays a much more pivotal role, including through non-statutory documents such as the *Practitioners Guide* and the approach taken by DELWP staff to any proposed changes to the schemes. DELWP also drives reforms to the planning system (seen most recently by the SMART planning program) and so are critical to reforms to drive climate responsive planning.
- The Victorian Planning Authority (VPA) is the key players in the area of Precinct Structure Plans (PSPs) and Urban Renewal Precinct Plans which set the urban structure and key parameters relating to precincts, and are guided by their own legislation. Increasingly, there are other actors in the precinct planning space who also need to be considered, for example the Department of Transport and the Department of Jobs, Precincts and Regions.



## 3.0 INTERSECTIONS AND BARRIERS

While the previous section of this report looked at the influences on decision-makers, this section looks to what potential matters planners and other decision-makers could address in responding to climate change.

One of the key barriers highlighted in this report is that often, responses to climate change are not pursued as the overwhelming scale of the challenge can make it difficult for practitioners to know where to start. While this is exacerbated by a lack of clear policy and strategic direction, the scale of the challenge is an issue in itself, along with a lack of clarity as to planning's role in addressing these challenges.

This section of the report identifies the areas where planning intersects with the changes and outcomes that best practice suggests we need to address to respond to climate change, and then explores the barriers decision-makers may face in their practise.

### 3.1 INTERSECTIONS

Essentially, there is no explicit limit to what matters the planning system could consider as relevant to decisions related to land use and development (i.e. the *Planning & Environment Act* does not set a specific scope for what matters are addressed through the planning system). Legislative restrictions generally relate to the processes by which actions are undertaken rather than the specific actions themselves.

As noted above, climate change will impact almost every aspect of the built environment, and can often be overwhelming in its scope of interactions. This section of the report therefore seeks to articulate the key intersections between the broadly accepted climate change considerations and the planning system. This report is not seeking to re-prosecute these intersections, which are drawn from a wide array of background documents, including Victoria's Climate Change Strategy.

Intersections addressed are:

- Energy efficiency (passive)
- Energy efficiency (active)
- Construction Materials
- Sustainable settlement patterns / density
- Sustainable Transport
- Renewable energy generation and distribution systems
- Waste minimisation
- Coastal hazards
- Bushfire hazards

- Heat impacts
- Water security
- Flooding
- Food security
- Biodiversity protection

Within each of these overarching themes, there are a number of aspects or elements which are applied through current systems. These are outlined on the following pages. Some cut across multiple themes. For each of these it is important to understand the scale at which this aspect is most fully addressed in the current system. Broadly, they are as identified in the highlight box.

## Energy efficiency (passive)

- Thermal performance of buildings
- Ventilation
- Solar Orientation
- Daylight access
- Shading

## Renewable energy generation and distribution systems

- Protection / delivery of solar power
- Energy sources

## Energy efficiency (active)

- Efficiency of building systems (ie HWS etc)
- Efficiency of appliances / lighting
- Energy management

## Construction Materials

- Delivery of net zero carbon
- Sustainable Materials

## Sustainable settlement patterns / density

- Sea level rise impact on settlement patterns

## Sustainable Transport

- Electric Vehicle readiness
- Car parking rates / adaptable car spaces
- Ventilation of car parking spaces
- Car share opportunities

- Bicycle parking
- Motorcycle parking
- Ease and amenity of access to Public Transport
- Bike routes
- Pedestrian environments

## Waste minimisation

## Flooding

- Flood management (coastal)
- Flooding (rainfall & runoff)
- Salinity / ground water incursion

## Coastal erosion

## Bushfire hazard

## Heat Impacts

- Green infrastructure and Canopy vegetation

## Water security

- Retention and reuse of water
- Stormwater management

## Biodiversity protection

## Food security

- Agricultural production / protection of future opportunities
- Urban food production



## INTERSECTING LEGISLATION

### PLANNING / BUILT ENVIRONMENT CLIMATE CHANGE INTERSECTIONS

SCALE: REGIONAL

Generally addressed at State Government level through Regional Growth Plans and other regional plans and strategies. Regions are established and have the potential to influence 'regional' objectives and strategies in the Planning Policy Framework  
Some aspects of regional scale decision-making occurs based on environmental characteristics (i.e. coastal areas via the Marine & Coastal Policy)



INTERSECTIONS	ADAPTATION	MITIGATION	PLANNING?
Sustainable settlement patterns / density	X	X	X
Provision and scheduling of public transport / Zero emissions public transport		X	
Timing of delivery of public transport		X	
Renewable energy generation and distribution systems approval processes		X	X
Grid infrastructure facilitation		X	X
Bushfire hazard Settlement patterns / retreat	X		X
Green infrastructure (Canopy vegetation / Green cover / Parks)	X	X	X
Stormwater management (Permeability / OSDR / Stormwater quality)	X		X

- Regional Growth Plans
- Sectorial Adaptation Action Plans
- Marine & Coastal Policy / Strategy / Resilient Coasts 2100+
- Transport Plan (various documents)
- Metro Open Space Strategy
- Plan Melbourne
- Metro Land use Framework Plans
- Climate Change Strategy

Table 1: Planning intersections

## INTERSECTING LEGISLATION



### PLANNING / BUILT ENVIRONMENT CLIMATE CHANGE INTERSECTIONS

#### SCALE: MUNICIPAL

Generally addressed at Local Government level, through strategies plans and policies which inform changes to 'objectives' and 'strategies' at local level within the Planning Policy framework. They also inform application of zones and overlays. Mostly subject to Planning Panel review and Ministerial authorisation and approval

INTERSECTIONS	ADAPTATION	MITIGATION	PLANNING?
Sustainable settlement patterns / density	X		X
Net zero municipality		X	
Coastal hazards settlement patterns / retreat	X		X
Flood management (coastal)	X		X
Public open space / foreshores / beaches	X		X
Coastal biodiversity	X		X
Green infrastructure (Canopy vegetation / Green cover / Parks)	X	X	X
Stormwater management (Permeability / OSDR / Stormwater quality)	X		X
Flooding (rainfall & runoff)	X		X
Biodiversity protection	X	X	X
Agricultural production / protection of future opportunities	X		X

#### SCALE: PRECINCT OR SUBDIVISION

Larger growth areas are subject to Precinct Structure Plan which must follow the Precinct Structure Plan Guidelines prepared by the VPA. Following that and in other areas, subdivisions are guided by content in the PPF and the Subdivision Act. Generally addressed at local level through permits for subdivision.

INTERSECTIONS	ADAPTATION	MITIGATION	PLANNING?
Energy sources (ie gas)		X	X
Net zero carbon requirements		X	Potential
EV readiness (commercial / industrial / residential / on street / charging of E-bikes etc)		X	Potential
Bicycle parking (rates / on street / facilities)		X	X
Access and ease of public transport usage, urban design to support		X	X
Bike routes		X	X
Pedestrian environments / Streets for People / cool corridors	X	X	X
Micro-grids, embedded networks etc		X	Potential
Precinct scale waste management (Access and spatial req to support)		X	X
Blue infrastructure / third pipes	X		X
Urban farming	X		

- Regional Growth Plans
- Adaptation Action Plans
- Marine & Coastal Policy / Strategy / Resilient Coasts
- Green Wedge Management Plans
- Integrated Water Management Plans (proposed)
- Precinct Structure Plan Guidelines
- Metro Urban Forest
- ZEV Roadmap
- Gas Transition Plan

## INTERSECTING LEGISLATION

### PLANNING / BUILT ENVIRONMENT CLIMATE CHANGE INTERSECTIONS

SCALE: LOT

Generally addressed at Local Government level through the assessment of development applications considering the PPF. Some applications addressed through VicSmart which often excludes local policy, others through Particular Provisions. Some decisions made by Ministerial call-ins or by VCAT.

INTERSECTIONS	ADAPTATION	MITIGATION	PLANNING?
Thermal performance (insulation / glazing standards / thermal bridges and lagging / airtightness)	X	X	
Ventilation	X	X	X
Orientation (Lots / Dwellings / Rooms)	X	X	X
Daylight access		X	X
Shading (Eaves / Trees / external structures)		X	
Protection / delivery of solar (Provision / Optimisation / Usage)		X	X
Efficiency of systems (ie HWS etc)		X	
Efficiency of appliances / lighting / space for efficient systems		X	
Energy management (Smart meters / batteries / space for batteries)		X	
Construction Material production emissions		X	
Construction Material Transportation emissions		X	
Car parking rates / adaptable car spaces / ventilation of car parking spaces		X	X
Car share		X	
EV readiness (commercial / industrial / residential / on street / charging of E-bikes etc)		X	
Bicycle parking (rates / on street / facilities)		X	X
Motorcycle parking		X	
Net zero carbon requirements		X	
Building adaptation and material reuse (design for disassembly / recyclable materials / recycled materials)		X	
Recycling and reuse facilitation / landfill diversion		X	
Appropriate provision of facilities / space for waste management		X	X
Construction waste management		X	X
Robust, low maintenance materials		X	
Building design for coastal inundation	X		
SLR implications for access	X		X
Salinity / ground water incursion (Building foundations / Contamination impacts)	X		
Coastal erosion Development / design	X		X
Building design for fire / veg removal	X		X
Green infrastructure (Canopy vegetation / Green cover / Parks / irrigation)	X	X	X
*Protection of existing canopy vegetation	X		X
Landscape species selection / Materials to reduce heat	X		X
Water retention and reuse (Fire protection systems / Tanks: garden / Greywater / Blackwater)	X		
Stormwater management (Permeability / OSDR / Stormwater quality)	X		X
Efficiency of appliances (WELS)	X		

Planning Schemes

Building Regulations

Plumbing Regulations

Climate Change Strategy

ZEV Roadmap

Parking Overlays

BADS

Floodplain Management Authority Guidelines

BUILDING ACT

VCAT ACT

WATER ACT

PLANNING & ENVIRONMENT ACT

## 3.2 BARRIERS

The identification of barriers is a key objective of this project. It is important to understand the barriers that:

- Prevent, or create confusion about, consideration of an aspect of built environment response to climate change.
- Prevent the necessary scale or scope of response to meet the objective of limiting heating to 1.5 degrees.
- Lead to inconsistency in the outcomes delivered under relevant policy.

This section of the report identifies the various barriers which have been identified through literature reviews and stakeholder engagement. The key intersections identified at Section 3.1 are broken down further to relevant elements addressed by planning and for each, the touch point in relation to scale and the primary control is identified. Potential barriers identified through this process are then documented.

In order to ensure that the identification of barriers was comprehensive, all potential barriers were identified under each of the 'Intersections'. This documentation includes matters which may be of varying degrees of relevance to the outputs of this report. However, the process of identifying a wide range of barriers allowed the team to then ensure that the scope of barriers appropriately addressed the relevant issues.

While there were a number of 'intersection specific' barriers identified, there are a number of 'bigger picture' barriers which emerged through the process. These are discussed in the Recommendations section as 'Focus areas for recommendations.'



CURRENT BARRIERS (MITIGATION) BY INTERSECTION			
ENERGY EFFICIENCY (PASSIVE)	SCALE	ADDRESSED BY	BARRIERS
<b>Thermal performance</b>			
Insulation	LOT	BUILDING STANDARDS (Building Act)	<p><u>General:</u></p> <ul style="list-style-type: none"> <li>• Perceptions that building regulations will deliver appropriately high levels of energy efficiency</li> <li>• Monitoring of insulation outcomes 'on the ground' has been questioned (<i>note recent study?</i>)</li> <li>• Lack of clarity about what is appropriate to specify at what stage of the development process, i.e. what requirements should be specified at planning stage and how to avoid duplication of requirements under Building Act</li> <li>• Existing ESD policies do not prescribe specific performance standards. New changes through the PPF may impact ability to obtain information required to assess against objectives (i.e no statutory Application Requirements).</li> <li>• Objectives in current policy in relation to energy efficiency are being interpreted in a range of ways across different Councils leading to inconsistent requirements for applicants</li> <li>• Planning does not generally play a role in enforcement of building standards so objectives to see whole of lifecycle efficiency through construction stage can be compromised</li> <li>• Higher standards of energy efficiency identified through the planning scheme only apply when a permit is triggered</li> <li>• Current policy only requires the demonstration of 'potential' for energy efficiency</li> </ul> <p><u>Specific:</u></p> <ul style="list-style-type: none"> <li>• Insulation standards lower than may be required to deliver appropriate levels of energy efficiency to assist in forthcoming energy transition</li> <li>• Performance of existing dwellings is very poor and there is a significant need for retrofitting, just the 'new' build not whole house energy efficiency considered in case of renovations</li> <li>• Lagging and pipe penetrations often not implemented according to Code (R0.6)</li> <li>• Insulation often not implemented according to Code (ie some internal walls)</li> <li>• Thermal bridges presumed addressed but not explicitly required to be by standards</li> <li>• No consistent process or measurement requirements to establish airtightness</li> <li>• Potential associated issues as a result of 'airtight' buildings re ventilation / air quality</li> <li>• Ventilation requirements only applied through planning to residential buildings, and are discretionary. Only specific standard are for apartments with only 40% required to have cross ventilation</li> <li>• Relationship to site coverage and lot size / density not being recognised in delivery of new subdivision meaning lots are too small / orientated poorly so difficult to put a 'standard' home on the lot in an efficient manner</li> <li>• Standard 'budget' models of housing are not always adaptable to different lot configurations and not all lots can be optimised for solar access</li> <li>• Balancing of planning outcomes can compromise orientation (ie amenity considerations relating to noise or overlooking / access to open space may override orientation of living areas to the north)</li> <li>• Shading not generally incorporated into planning process. Trees not considered by building and therefore hard to integrate.</li> <li>• Lot sizes and configurations can compromise eaves.</li> </ul>
Glazing standards	LOT	BUILDING STANDARDS (Building Act)	
Thermal bridges / lagging etc	LOT	BUILDING STANDARDS (Building Act) / PLUMBING STANDARDS (Plumbing Act)	
Airtightness	LOT	NOT	
<b>Ventilation</b>	LOT	PLANNING STANDARDS - Planning Scheme (Planning & Environment Act) BUILDING STANDARDS (Building Act)	
<b>Orientation</b>			
Lots	LOT/PRECINCT OR SUBDIVISION	PLANNING STANDARDS - Planning Scheme (Planning & Environment Act) / PSPs - PSP Guidelines (Victorian Planning Authority Act)	
Dwellings	LOT/PRECINCT OR SUBDIVISION	PLANNING STANDARDS - Planning Scheme (Planning & Environment Act)	
Rooms	LOT	PLANNING STANDARDS BUILDING STANDARDS - Part 5 siting (res)	
<b>Daylight access</b>	LOT	PLANNING STANDARDS BUILDING STANDARDS	
<b>Shading</b>			
Eaves	LOT	NOT (req to be shown)	
Trees / external structures	LOT	NOT (req to be shown)	

Table 2: Potential barriers to climate change response

BARRIERS (MITIGATION)			
ENERGY EFFICIENCY (ACTIVE)	SCALE	ADDRESSED BY	BARRIERS
<b>Protection/ delivery of solar</b>			
Delivery/ provision requirements	LOT	BUILDING STANDARDS (Building Act)	
Optimisation (shading, roof pitch/ orientation)	LOT	BUILDING STANDARDS (Building Act) / Planning Schemes (Planning & Environment Act)	<ul style="list-style-type: none"> <li>Provisions to consider the impact of new development on adjoining rooftop solar, and direction on solar energy facilities in heritage areas inserted into planning schemes via Amendment VC149. Unlikely for there to be immediate appetite for further reform by DELWP.</li> <li>Roof pitch tends to be guided by neighbourhood character/ built form character considerations within the planning scheme, and this is given precedence over capacity to allow for optimal siting of photovoltaics.</li> <li>Some safety concerns and uncertainty around regulation of household batteries.</li> <li>Unclear whether the planning system has a role in regulating batteries/ space for batteries.</li> </ul>
Usage	LOT	BUILDING STANDARDS (Building Act) / PLUMBING STANDARDS (Plumbing Act)	
<b>Energy sources (ie gas)</b>	PRECINCT OR SUBDIVISION	PLANNING STANDARDS - Planning Scheme (Planning & Environment Act) / BUILDING STANDARDS (Building Act)	
<b>Efficiency of systems (ie HWS etc)</b>	LOT	BUILDING STANDARDS (Building Act) / PLUMBING STANDARDS (Plumbing Act)	<ul style="list-style-type: none"> <li>Enforcement/ monitoring of appliances/lighting over the course of the life of a building would be beyond the role of planning system.</li> </ul>
<b>Efficiency of appliances/ lighting</b>		BUILDING STANDARDS (Building Act)	<ul style="list-style-type: none"> <li>Unclear whether regulating the efficiency of appliances/lighting is a role for the planning system.</li> </ul>
Space for outdoor drying	LOT	PLANNING STANDARDS - Planning Scheme (Planning & Environment Act) / PSPs - PSP Guidelines (Victorian Planning Authority Act)	<ul style="list-style-type: none"> <li>Lack of certainty in the planning process means that there is a reluctance to commit to the full documentation of detailed design aspects (ie HWS etc) at planning stage.</li> <li>Gas industry opposition to phasing out gas. The Gas industry remains a determining referral authority in the subdivision provisions within planning schemes - a contradictory level of influence in the context of the Victorian Government launching consultation recently on Gas substitution.</li> </ul>
<b>Energy Management</b>			
smart meters	LOT	NOT	<ul style="list-style-type: none"> <li>In relation to offsets, there is a need to work through the legal mechanisms / precedents to require carbon offsets, and the certification / monitoring of such offsets.</li> <li>Concern that a reliance on offsets enables/ sets up a pathway of deferring stronger requirements in relation to on-site emissions reductions</li> </ul>
batteries/ space for batteries	LOT	NOT	
<b>Purchases of offsets to deliver net zero carbon</b>	REGIONAL	NOT	

BARRIERS (MITIGATION)			
CONSTRUCTION MATERIALS	SCALE	ADDRESSED BY	BARRIERS
Production emissions	LOT	NOT	<p><u>General:</u></p> <ul style="list-style-type: none"> <li>Costs/ Affordability of the use of lower emissions construction materials for the lower and middle segments of the housing market.</li> <li>Suppliers of standard construction materials are embedded in the construction sector/ high volume housing market, and may advocate to retain status quo, and not set standards.</li> <li>Question of current availability/supply of low emissions materials to meet the overall market demand - Market may require lead up time to prepare for new standards/ requirements</li> <li>The regulation of materials within the planning system has been typically limited to aesthetic dimensions, and regulating construction materials has been more the domain of the building regulations. Unclear whether planning system has role or regulation of carbon intensity of materials could come through Building Act.</li> </ul>
Transportation emissions	LOT	NOT	<ul style="list-style-type: none"> <li>Materials selection is often changed/varied through the planning process after a permit is issued, and a challenge would be ensuring permit conditions are written to ensure outcomes not compromised via changes.</li> </ul> <p><u>Specific:</u></p> <ul style="list-style-type: none"> <li>Potentially a lack of a consistent approach to documenting and rating the embodied emissions of different types of building materials. Need for an accepted and consistent framework/rating approach.</li> <li>Capacity to accurately measure and verify transportation emissions associated with construction materials.</li> </ul>
SUSTAINABLE SETTLEMENT PATTERNS / DENSITY	SCALE	ADDRESSED BY	BARRIERS
Settlement patterns	MUNICIPAL/ REGIONAL	Planning Scheme (Planning & Environment Act)	<ul style="list-style-type: none"> <li>Unsustainable settlement patterns have been locked-in in a number of growth areas. In this respect, PSPs for largely car dependent and still relatively low density greenfield suburbs have already been completed for many areas, and these will be built out over the coming years.</li> <li>This greenfield settlement typology is heavily backed by large land developers who will resist dramatic changes to the product.</li> <li>The VPA may utilise the need to provide for 'housing diversity' to continue to justify current density levels in growth areas, and they will be lobbied heavily by Greenfield developers to ensure as much flexibility as possible in terms of requirements for the design of growth areas.</li> </ul>
Density	MUNICIPAL/ REGIONAL	Planning Scheme (Planning & Environment Act)	<ul style="list-style-type: none"> <li>Increasing density in inner and middle ring areas continues to face backlash from community groups and a number of Councils (via Councillors).</li> <li>Some negative community perceptions of density can stem from examples of poor design.</li> </ul>

BARRIERS (MITIGATION)			
SUSTAINABLE TRANSPORT	SCALE	ADDRESSED BY	BARRIERS
<b>EV Readiness</b>			<u>General:</u>
Commercial/ industrial	LOT/ PRECINCT OR SUBDIVISION	NOT	<ul style="list-style-type: none"> <li>Unsustainable transport systems are partly a result of past decisions which have locked in car-dependent settlement patterns, and allowed for continual under-investment in sustainable transport infrastructure. Significant shifts in mode-share are consequently difficult to now realise given the car dependent layout of Melbourne.</li> <li>Major Transport Planning Decisions are highly politicised, and in reality are not significantly influenced by the planning system.</li> <li>Density requirements to support public transport provision not being delivered.</li> <li>Electric Vehicles (EVs) appear as the most likely path to lower emissions transport at scale, but uptake/ rate of change appears to be largely tied to affordability and whether a future Government policy to ban fossil fuel cars emerges.</li> </ul>
Residential	LOT/ PRECINCT OR SUBDIVISION	NOT	
On-street	LOT/ PRECINCT OR SUBDIVISION	NOT	
Charging of E-Bikes etc	LOT/ PRECINCT OR SUBDIVISION	NOT	
<b>Car parking</b>			<u>Specific:</u>
Car parking rates	LOT	Planning Scheme (Planning & Environment Act)	<ul style="list-style-type: none"> <li>Minimum car parking rates act to undermine greater prospect of mode-shift.</li> <li>Although some inner metropolitan municipalities have supported reducing car parking rates, for a majority of metropolitan councils there is often a reluctance to reduce rates, noting the potential to impact on-street parking availability (as often raised in objections from the community).</li> <li>Bicycle parking and associated facilities (eg end-of-trip) are now accepted elements of multi level residential and commercial building development, however the rate at which they must be provided is relatively low.</li> <li>Motorcycle Parking is not addressed at State Level.</li> <li>Timing of Delivery of public transport/ Zero emissions public transport/ Provision and Scheduling of Public Transport are matters considered beyond the domain of the planning system.</li> <li>Rezoning of land often occurs prior to firm commitments regarding delivery of public transport infrastructure.</li> <li>Further understanding is required about how EV will be used, such as in G2V and V2G.</li> <li>Different positions on role of street vs private development in relation to EV charging infrastructure, differing view of dispersed / consolidated provision of charging facilities / high speed charging. Unclear what amount of facilities will be necessary and what will be the optimal locations to provide the facilities. There will also be a need to determine at what scale of development they could be required under the planning scheme.</li> <li>Further guidance is required around the technical specifications for EV charging facilities.</li> </ul>
Adaptable car spaces	LOT	NOT	
Ventilation of car parking spaces	LOT	Planning Scheme (Planning & Environment Act)	
<b>Car Share</b>	LOT/ PRECINCT OR SUBDIVISION	NOT	
<b>Bicycle Parking</b>			
Commercial/ industrial	LOT/ PRECINCT OR SUBDIVISION	Planning Scheme (Planning & Environment Act)	
Residential	LOT/ PRECINCT OR SUBDIVISION	Planning Scheme (Planning & Environment Act)	
Other uses (education, PoA)	LOT/ PRECINCT OR SUBDIVISION	Planning Scheme (Planning & Environment Act)	
On street	LOT/ PRECINCT OR SUBDIVISION	NOT	
Supporting facilities	LOT	Planning Scheme (Planning & Environment Act)	
<b>Motorcycle Parking</b>	LOT	NOT	
<b>Bigger Strategic Issues</b>	REGIONAL	Transport Integration Act	
<b>Provision and Scheduling of Public Transport</b>	REGIONAL	Transport Integration Act	

BARRIERS (MITIGATION)			
SUSTAINABLE TRANSPORT (CONTINUED)	SCALE	ADDRESSED BY	BARRIERS
Zero Emissions Public Transport	REGIONAL	NOT	
Access and ease of PT use, urban design to support	PRECINCT OR SUBDIVISION	Planning Scheme (Planning & Environment Act) Transport Integration Act	
Timing of Delivery	REGIONAL	NOT	
Bike Routes	PRECINCT OR SUBDIVISION	Planning Scheme (Planning & Environment Act)	(REFER TO SUSTAINABLE TRANSPORT BARRIERS ON ABOVE PAGE)
Pedestrian environments / Streets for People / cool corridors	PRECINCT OR SUBDIVISION	Planning Scheme (Planning & Environment Act)	
Crossover widths / public realm interfaces / CPTED	LOT/ PRECINCT OR SUBDIVISION	Planning Scheme (Planning & Environment Act)	
RENEWABLE ENERGY GENERATION AND DISTRIBUTION SYSTEMS	SCALE	ADDRESSED BY	BARRIERS
Approval Processes	REGIONAL	Planning Scheme (Planning & Environment Act)	
Supporting Grid Infrastructure Facilitation	REGIONAL	Planning Scheme (Planning & Environment Act) - in so far as Infrastructure related approvals	<ul style="list-style-type: none"> <li>Approval for large scale renewable energy generation currently follows typical planning approval processes, with two particular provisions (wind energy facilities, and renewable energy facilities other than wind facilities) in Victorian Planning Schemes guiding assessment. Refining these guiding provisions to potentially facilitate expedited approvals/ reduced third party review rights, may face opposition from some rural communities (in particular with respect to wind energy facilities).</li> <li>The Victorian Government is looking to create a new agency 'VicGrid' to facilitate the expansion of grid infrastructure required to support the new renewable energy facilities. Ideally, new grid infrastructure will be deemed to be "critical infrastructure" and streamlined approval processes of new grid power lines adopted. Again, some rural communities may seek to ensure third party rights in this expansion process, to appeal perceived negative impacts (i.e. visual amenity).</li> </ul>
Micro Grids	PRECINCT OR SUBDIVISION	NOT	<ul style="list-style-type: none"> <li>Technical and legislative / regulatory complexity in the delivery of embedded networks and micro grids.</li> <li>Significant scalar differences in embedded networks and micro grids complicates drafting of any controls</li> </ul>

BARRIERS (MITIGATION)				
WASTE MINIMISATION	SCALE	ADDRESSED BY	BARRIERS	
Building adaptation and material reuse				
Retention and adaptation	LOT	In relation to heritage - Planning Scheme (Planning and Environment Act)	<ul style="list-style-type: none"> <li>• Current lack of policy within the planning system to require building retention and adaptation beyond when retention/adaptation is required on heritage grounds. Likely limited political appetite currently for expanding the situations in which building retention and adaptation would be required.</li> <li>• Relative cost of design for disassembly and use of recycled materials may see incorporating these responses into the planning scheme attract opposition on affordability grounds.</li> <li>• Sustainable Subdivisions Framework (which includes circular economy considerations) remains at trial stage and there is likely to be some resistance to implement the framework in a manner that includes mandatory standards.</li> <li>• Waste management standards for apartments and development of two or more dwellings on a lot recently updated to ensure WMPs are prepared in accordance with better practice guidelines. It is unclear however whether Future DELWP ESD reforms however will go beyond just encouraging the assessment of opportunities for small-scale recycling and resource recovery infrastructure in development, as opposed to mandating infrastructure.</li> <li>• Capacity/resourcing constraints for Councils/other authorities to monitor and enforce how construction waste management policies are adhered to in practice.</li> <li>• A current lack of legislation in Victoria specifically relating to waste may undermine the capacity to drive reforms across various sectors, including the built environment. The planned development of the Victorian Waste Act and Waste Authority will likely provided greater impetus for reforms to be implemented.</li> </ul>	
Design for disassembly	LOT	NOT		
Recyclable/ Recycled	LOT	NOT		
<b>Recycling and reuse facilitation/ landfill diversion</b>				
Precinct scale waste management	PRECINCT OR SUBDIVISION	Planning Scheme (Planning and Environment Act)		
Access and spatial req to support	PRECINCT OR SUBDIVISION	Planning Scheme (Planning and Environment Act)		
Appropriate provision of facilities/space	LOT	Planning Scheme (Planning and Environment Act)		
Construction waste management	LOT	Planning Scheme (Planning and Environment Act)		
<b>Robust, low maintenance materials</b>	LOT	Building Standards (Building Act)		

BARRIERS (ADAPTATION)				
COASTAL HAZARDS	SCALE	ADDRESSED BY	BARRIERS	
<b>Sea level rise</b>				
Settlement patterns/ retreat	REGIONAL	Planning Scheme (Planning & Environment Act)/	<p><b>General:</b></p> <ul style="list-style-type: none"> <li>Perception that engineering solutions will address sea level rise issues undermines an understanding of the importance of planning measures as an adaptation response.</li> <li>Rate of change means some community members see sea-level rise as a far-away problem that doesn't warrant pre-emptive planning actions.</li> </ul> <p><b>Specific:</b></p> <ul style="list-style-type: none"> <li>Complex governance context of for Coastal flood management.</li> <li>Public Open Space and coastal biodiversity are not priorities in adaptation context relative to property and human life.</li> <li>Unclear if addressing salinity/ground water intrusion is a policy priority at the present moment.</li> <li>Clause 13.01-2S Coastal Inundation and Erosion was very recently updated via Amendment VC171 in September 2021, with Siting and Design Guidelines for Structures on the Victorian Coast 2020 and Marine and Coastal Policy (2020) being implemented into the scheme. It is potentially unlikely that DELWP will be looking to entertain further reforms in the immediate future.</li> </ul>	
Flood management (coastal)	REGIONAL	Planning Scheme (Planning & Environment Act)/		
Public open space	REGIONAL	Planning Scheme (Planning & Environment Act)		
Coastal Biodiversity	REGIONAL	Planning Scheme (Planning & Environment Act)/ Marine & Coastal Act		
Building design for coastal inundation	LOT	Marine & Coastal Act, associated guidelines		
Access	LOT	Marine & Coastal Act, associated guidelines		
<b>Salinity/ ground water intrusion</b>				
Building foundations	LOT	NOT		
Contamination	LOT	NOT		
<b>Coastal Erosion</b>				
Settlement patterns/ retreat	MUNICIPAL	Planning Scheme (Planning and Environment Act)		
Development/ design	LOT	Planning Scheme (Planning and Environment Act)		
<b>BUSHFIRE HAZARDS</b>				
<b>Settlement patterns/ retreat</b>				
	REGIONAL	Planning Scheme (Planning and Environment Act)	<ul style="list-style-type: none"> <li>Lack of political appetite to entertain changes to settlement patterns/ enforce retreat in relation to bushfire hazards. Build-back-better ethos still popular. Current approach of managing risk via assessment (BAL) which directs construction requirements, and also defensible space, is now well embedded, and there is an established process whereby current reqs are assessed against agreed criteria and automatically updated every 6 months</li> <li>Human life and property is considered the priority within the planning system in relation to bushfires, and there appears to be limited policy activity on incorporating biodiversity concern into bushfire related planning policy.</li> </ul>	
		Building Act		
<b>Building design for fire/ vegetation removal</b>	LOT	Planning Scheme (Planning and Environment Act)		
<b>Biodiversity Management</b>	REGIONAL			

## BARRIERS (ADAPTATION)

HEAT	SCALE	ADDRESSED BY	BARRIERS
<b>Green Infrastructure</b>			
Canopy vegetation	LOT/ MUNICIPAL/ REGIONAL	Planning Scheme (Planning and Environment Act)	<ul style="list-style-type: none"> <li>Tension between greater infill development and protection of existing canopy vegetation on a lot (or at subdivision/precinct level), can result in existing canopy being compromised, even with explicit local planning policy and overlays that seek to protect canopy in place.</li> <li>Requiring a certain number of canopy trees per residential lot in new development has been implemented by some individual Councils (via varying cl 54/55 landscaping requirements in zone schedules). Potentially slow process of other Councils individually amending schemes to update these requirements. Overall net loss of canopy may still result due to infill development even with canopy tree requirements for new development.</li> <li>Limited inclusion of standards related to urban heat in the planning scheme, and the question of quantifying standards relating to urban heat responses beyond canopy tree no's.</li> <li>Willingness of DELWP to implement standards relating to canopy cover and response to heat in the planned particular provision ESD updates, and the strength of those standards.</li> <li>Sustainable Subdivisions Framework (which includes urban heat considerations) remains at trial stage and there is likely to be some resistance to implement the framework in a manner that sets mandatory standards.</li> <li>Limited evidence of State level support for future integration of Green Infrastructure into planning scheme as single concept, and more indication of policy being oriented around individual components of water, heat, landscaping and biodiversity.</li> <li>Species selection in landscape plans for development can be addressed through the permit process, with landscape plans being subject to Council approval. Potential problem of other factors/achievement of other outcomes influencing species selection rather than shading/canopy/cooling potential.</li> </ul>
Green Cover	LOT/ MUNICIPAL/ REGIONAL	Planning Scheme (Planning and Environment Act)	
Parks	LOT/ MUNICIPAL/ REGIONAL	Planning Scheme (Planning and Environment Act)	
<b>Blue Infrastructure</b>	PRECINCT OR SUBDIVISION	NOT	
<b>Protection of existing canopy vegetation</b>	LOT	Planning Scheme (Planning and Environment Act)	
<b>Landscape species selection</b>	LOT	Planning Scheme (Planning and Environment Act)	
<b>Materials</b>	LOT		
<b>WATER SHORTAGES</b>	<b>SCALE</b>	<b>ADDRESSED BY</b>	<b>BARRIERS</b>
<b>Retention and Reuse</b>			
Fire protection systems	LOT	Building Act	<ul style="list-style-type: none"> <li>Regulation of the provision of garden tanks and fire protection systems is the role of Building regulations, and potential for duplication if addressed further by planning.</li> <li>No willingness yet to require alternative water sources in planing schemes - policy currently seeks to facilitate/ encourage. For the subdivision scale, Clause 56.07-2 seek to provide for the use of recycle water sources, however in practice this source needs to be first available for proposed subdivisions to utilise.</li> <li>Precinct scale third pipe is to be provided at some precincts of note (ie Fishermans Bend) however potential lack of political will to mandate for all precinct scale development.</li> <li>Lack of technical understanding of irrigation of green infrastructure.</li> <li>Irrigation of green infrastructure requires ongoing monitoring and enforcement.</li> <li>WELS provides current system of rating efficiency of appliances, and it is questionable as to whether the planning system should be responsible for specifically regulating efficiency of water appliances.</li> </ul>
Tanks: garden	LOT	Building Act	
Greywater	LOT	Some Planning Schemes (Planning and Environment Act)	
Blackwater	LOT	Some Planning Schemes (Planning and Environment Act)	
<b>Precinct scale third pipe</b>	PRECINCT OR SUBDIVISION	Some Planning Schemes (Planning and Environment Act)	
<b>Efficiency of appliances</b>	LOT	Plumbing Standards (Plumbing Act)	
<b>Irrigation of green infrastructure</b>	LOT/ PRECINCT OR SUBDIVISION	Not	

## BARRIERS (ADAPTATION)

### FLOODING

Issue	Scale	Addressed By	Barriers
Settlement Patterns	SUBDIVISION/ MUNICIPAL	Planning Scheme (Planning and Environment Act)	<ul style="list-style-type: none"> <li>Resistance to equitable responses in catchment wide approaches to flooding.</li> <li>Various planning tools (LSIO, SBO, UFZ, FO) identify areas of flood risk, with the overlays requiring proposed development to provide design responses to address the level of flood risk identified. Not all areas of current and future flood risk are however likely to be mapped within planning schemes.</li> <li>New subdivision and growth area planning factors in flood risk into settlement patterns, however there is no mechanism within planning relating to retreat.</li> <li>Uncertainty around drainage capacity in some areas.</li> <li>Some council and developer resistance to WSUD due to ongoing maintenance costs and management burden.</li> <li>Tension between on-site permeability provision and development in inner-urban areas where lot sizes are relatively smaller. Seen as a constraint on development and achievement of increased densities.</li> <li>Permeability is a potentially crude tool in planning to achieving stormwater flow and stormwater quality outcomes</li> <li>Existing permeability requirements relate to Clause 54/55 which do not capture many development typologies, and also non-residential development.</li> <li>OSDR and 'permeability equivalence' emerging as responses, however not within planning systems currently.</li> <li>Unclear if review of Stormwater compliance requirements by State Government will result in broader application of standards currently in 56.07, to more development types. Achieving best practice outcomes on In-lieu stormwater quality off-site contributions schemes emerging as an alternative mechanism for developers unable to comply on-site.</li> </ul>
Flood management (Rainfall and runoff)	MUNICIPAL	Planning Scheme (Planning and Environment Act)	
Stormwater management			
Permeability	LOT/ MUNICIPAL/ REGIONAL	Planning Scheme (Planning and Environment Act)	
Onsite Stormwater Detention and Retention	LOT/ MUNICIPAL/ REGIONAL	Plumbing Regulations	
Stormwater Quality	LOT/ MUNICIPAL/ REGIONAL	Planning Scheme (Planning and Environment Act)	

### FOOD SECURITY

#### SCALE

#### ADDRESSED BY

#### BARRIERS

Urban Farming	PRECINCT OR SUBDIVISION	NOT	<ul style="list-style-type: none"> <li>The provision of urban farming or community garden areas as part of new precincts or subdivisions requires consideration be given to the ongoing maintenance and management of these areas - which is a cost developers or councils may not be keen to take on. Viable urban farming appears to occur where there are committed community members or appropriately funded organisations/businesses.</li> <li>Requiring urban farming as part of the open space component of development may not be suitable to all development projects.</li> <li>Protection of future agricultural activities at the urban fringe and in green wedge areas is currently being considered as part of DELWP's 'Planning for Melbourne's Green Wedges and Agricultural Land' project, and there may be unwillingness within DELWP to immediately consider reform outside the processes of that project.</li> </ul>
Agricultural production / protection of future opportunities	MUNICIPAL/ REGIONAL	Planning Scheme (Planning and Environment Act)	

### BIODIVERSITY PROTECTION

#### SCALE

#### ADDRESSED BY

#### BARRIERS

Biodiversity Protection	MUNICIPAL	EPBC Act (Federal) FFG Act (State)  Planning Scheme (Planning and Environment Act)	<ul style="list-style-type: none"> <li>Political barrier of unwillingness for Government to acquire further land or require a further amount of land to be set aside in greenfield development to provide additional range/habitat for species as an adaptation to the impacts of a changing climate compromising existing habitat.</li> <li>Also a question of which species to be prioritised and need for landscape ecology based technical modelling.</li> </ul>
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## 4.0 RECOMMENDATIONS

This Section of the report identifies a range of Initiatives which may be of assistance in responding to the barriers identified. As noted previously within this report, the focus has been on changes that are relevant to the environment in which decision-makers operate, with a particular focus on decision-makers at local government level.

It is important to acknowledge, however, that these options are likely to be only one part of the solution and that barriers exist across a range of areas as outlined. While the recommendations have focused primarily on the changes to legislation and policy which underpin decision-making and the tools available to practitioners, there are a number of other matters which are also relevant considerations in the delivery of an 'authorising environment' which support climate change responsive decisions. These are less easily defined or require additional consideration as to what the appropriate initiatives would be. Nonetheless, they are important to capture. Where these other barriers have a strong influence on aspects of the planning framework which drive decisions, these have been included as Complementary Initiatives, and include matters such as enforcement and education.

Table 3 below includes all Initiatives identified through this process. The inclusion of all Initiatives is important as there may be different priorities across different sectors of the planning community and stakeholder groups. A brief explanation as to the rationale for each Initiatives inclusion is also outlined.

Following the table are further recommendations for priority initiatives based on various factors. They provide the thread between the recommendations and reflect the feedback received during engagement. The Recommendations outlined below have been generated on the basis of both analysis and feedback through the engagement phase. The prioritisation of these has been informed by assessment criteria developed through this project (and outlined in the relevant section below) and engagement.

### 4.1 FOCUS AREAS FOR CHANGE

Table 3 below has been framed with reference to a number of focus areas which have been identified to guide the recommendations of this report. They represent the link between the initiatives recommended and the barriers identified in the previous section of this report and encapsulate the findings of both the analysis and engagement.

- **Shifting the balance of decision-making**

'High level' legislative obligations are important in driving change at the more fine-grained level. Planning is structured to flow from legislative requirements to objectives, which are then supported by the application of zones and overlays and the articulation of strategies. In turn, these are implemented by standards and guidelines. Failing to include, as part of legislative obligations, robust and comprehensive references to climate change, and to highlight the key role decisions made within the planning system play can compromise support for climate action. How we live our lives is strongly influenced by the places we inhabit and these are the remit of planning. Ensuring that these places are focused on the twin goals of adaptation and mitigation has the potential to make a significant contribution to global objectives in responding to climate change.

- **Supporting statutory decision-making**

Statutory planners and other decision-makers need specific content in Planning Schemes to support them in delivering climate responsive outcomes. If there is no reference in the scheme, the ability to deliver particular outcomes is compromised and inconsistent, and relies more heavily on individual decision-making and capacity. In addition, planning relies heavily on the presence of a permit trigger for there to be any relevant assessment of the appropriateness of an application. If there is not a permit trigger which relates to the issue within the Planning Scheme, there is no opportunity for a decision to be made on the matter through the planning system.

- **Making climate change considerations explicit**

In responding to climate change, planning needs to look to the longer-term impacts and requires greater consideration of the impacts on future generations. This is sometimes incompatible with other objectives of planning and with the interests and obligations of some decision-makers. Climate change considerations must be made explicit, or they will continue to be overlooked in favour of policy considerations that are more explicitly spelled out within Planning Schemes.

- **Aligning planning with best practice and science**

Planning Schemes currently speak to the need to identify at-risk areas using the best available data and climate change science. Specific policy benchmarks stated in the schemes therefore need to be consistent with the *"best available data and climate change science."* These benchmarks and standards need to be kept up to date to provide clear guidance for decision-makers.

- **Supporting strategic decisions**

Climate change needs to be more strongly integrated into the documents and frameworks. As a result, in some cases, work can be undertaken to plan for places like activity centres and land can be rezoned, without paying particular attention to the impact on either mitigation and / or adaptation goals. Improving the robustness of the integration with strategic planning sets the groundwork for long term responses.

- **Planning for climate resilient communities**

Current planning practices at precinct scale, including huge areas of greenfield development, as well as more standard subdivisions, are failing to take into consideration the scale of change needed to standard practice. This is a key barrier, as once these foundations are set through the subdivision and precinct planning stages, they are very difficult to change or to retrofit. Many of these areas will still be developing when a net zero target is envisaged to be met.

- **Integrating climate change actions**

Adopting integrated responses and avoiding 'siloiing' is critical to addressing climate change. A current lack of integration between planning and other areas of government addressing adaptation planning, across various portfolios and departments, has been identified as a barrier. In addition, the current practice of including references to large and complex Policy Documents to *"consider as relevant"*, without explicitly extracting content relevant to planning and including this within Planning Schemes, means many key parts of government policy are being poorly applied through the planning system. Explicit attention is needed to integrate policy content on climate action into the planning system.

## 4.2 ALL RECOMMENDATIONS

The following initiatives are proposed to support Victoria's commitment to net zero greenhouse gas emissions and climate resilient communities, through the authorising environment of the planning and building systems. The initiatives are also intended to support councils in delivering their obligations in relation to supporting the adaptation of their communities to the existing and future impacts of climate change. Issues that may require further consideration or investigation are flagged and the barrier and initiative 'type' are identified. The initiatives are in no specific order.

INITIATIVE	FOCUS	COMMENTS
<b>LEGISLATIVE CHANGE</b>		
<p><b>1</b> Seek an amendment to Schedule One of the <i>Climate Change Act 2017</i> to include reference to decisions made in regard to amendments or the issue of permits under the <i>Planning &amp; Environment Act 1987</i>.</p>	<p>Shifting the balance of decision-making</p>	<p>Updates to the <i>Climate Change Act 2017 (CC Act)</i> are needed to impose a legislative obligation to consider climate change in planning decisions to establish the high level support for net zero emissions and climate resilient outcomes.</p> <p>Amendments to Planning Schemes (PSAs) under the <i>Planning &amp; Environment Act 1987 (P&amp;E Act)</i> represent (generally) strategic decisions which should be aligned with responses to climate change. It therefore follows that amendments under the <i>P&amp;E Act</i> should be referenced in Schedule One of the <i>CC Act</i>. Exceptions may be needed for administrative amendments.</p> <p>Further investigations would be required to establish whether there are specific types of planning permit applications that may also benefit from reference in Schedule One, or whether PSAs are sufficient. One issue may be that without reference to specific development applications the nexus with the <i>CC Act</i> would only be established where a PSA is proposed and not to any development under current schemes.</p>
<p><b>2</b> Seek an amendment to the <i>Planning &amp; Environment Act 1987</i> to provide clearer direction on the consideration of climate change in assessment and decision-making.</p>	<p>Shifting the balance of decision-making</p>	<p>The key mechanism for implementing change under the <i>P&amp;E Act</i> are Planning Schemes and updates to these remain the priority. However, the inclusion of a specific reference to climate change within the <i>P&amp;E Act</i> could provide additional strength to any policy contained within Planning Schemes. Updates could include an additional, and specific, reference to climate change considerations within the Objectives of the Act, similar to the recent change relating to affordable housing. If affordable housing required a specific reference, then it is logical that climate change would also benefit from an explicit reference. In addition, clarity on the duties required under the <i>P&amp;E Act</i> could be referenced under Section 12 (duties and responsibilities) to confirm that a Planning Authority must provide appropriate responses to climate change. Further changes could be made to Section 46AZL to ensure that the principles guiding decision-making in declared areas also have consideration for appropriate mitigation and adaptation responses. This would support changes to require consideration of net zero carbon precincts referenced at Initiative 36.</p>

Table 3: Recommended initiatives to enable planning responses to climate change

INITIATIVE	FOCUS	COMMENTS
<b>LEGISLATIVE CHANGE</b>		
<p><b>3</b> Promote opportunities for additional ‘greening’ in established urban areas through broadening definitions of Public Open Space under the <i>Subdivision Act 1988</i>.</p>	<p>Supporting strategic decisions</p>	<p>Urban greening is widely recognised as a key response to increasing temperature and as critical to maintaining liveability. Throughout COVID-19 the importance of open spaces and access to nature has been highlighted – and these open spaces take many forms. For most councils, the majority of funding for green infrastructure is acquired through developer contributions to open space. This is a requirement of the <i>Subdivision Act</i> and can be in the form of land or a monetary contribution. The amount is set within the Planning Scheme of each council at CI 63.01 Public Open Space Contributions. However, the definition of open space within the <i>Subdivision Act</i> is quite narrow (i.e land has to be zoned or put aside for public recreation in order for funds to be utilised). This restricts the ability of councils, in particular those who may have trouble acquiring the large parcels of land needed to deliver traditional parks, from increasing the amount of green space. This is frequently the case in densely settled urban areas where the need is greatest. Broadening the definition of what can be funded using public open space contributions contained within the <i>Subdivision Act</i> would assist in urban cooling.</p>
<p><b>4</b> Seek an amendment to the ‘Objects’ of the <i>Victorian Planning Authority Act 2017</i> to reference need to deliver net zero and climate resilient communities .</p>	<p>Planning for climate resilient communities</p>	<p>The Victorian Planning Authority (VPA) is the main decision-maker in relation to the urban structure and overarching principles of development in both greenfield areas, and increasingly, in renewal precincts. They are guided by a separate piece of legislation which outlines their obligations to the State Government. While their primary object is to provide advice and assistance to the government in line with the Objectives of planning in Victoria (see page 6), there are six further specific responsibilities outlined. One of these is “to encourage land development that is sustainable and that takes into account natural and other hazards” but there is no specific reference to the role that growth and renewal area planning can, and should, play in delivering net zero emission and climate resilient neighbourhoods. Precincts are a key focus in the delivery of net zero outcomes worldwide and an explicit reference to this in the objects of this Act would remove any ambiguity in the organisations role in delivering the State’s legislated target of net zero emissions and in ensuring that the liveability of these areas is based on the anticipated environment at the time of development.</p>

INITIATIVE	FOCUS	COMMENTS
<b>STATE GOVERNMENT PROCESSES</b>		
<p><b>5</b> Update <i>Minister's Direction No. 11 – Strategic Assessment of Amendments</i> and <i>Practice Note 46: Strategic Assessment Guidelines</i> for Planning Scheme amendments to ensure that Explanatory Reports prepared for every amendment include an explicit assessment against relevant climate change considerations including consistency with emission reduction targets over the life of any potential development, and any relevant adaptation measures.</p>	<p>Making climate change considerations explicit</p>	<p>When a Planning Scheme Amendment is proposed, there is a requirement to assess this against a range of measures outlined in a Ministerial Direction. In a practical sense, updating this to require assessment against current climate policy or legislated emissions targets provides a clear signal that changes to Planning Schemes in Victoria should all be working towards the delivery of climate change responses.</p>
<p><b>6</b> Document preferred practice for the delivery of climate responsive planning through new or amended Practice Notes.</p>	<p>Supporting strategic decisions</p>	<p>In undertaking both strategic planning, and in the assessment of developments, planners rely heavily on Practice Notes produced by the State Government. The integration of climate change consideration into these Practice Notes is currently poor, and in many cases, non-existent. Key areas that could benefit from new or updated Practice Notes include:</p> <ul style="list-style-type: none"> <li>• How to manage coastal hazards, with regard to relevant benchmarks.</li> <li>• The consideration of climate change in the application of rural zones.</li> <li>• The integration of climate change responses in the preparation of Structure Plans.</li> <li>• How to prepare Climate Change Response Plans (see Initiative 36).</li> <li>• How to apply ESD policy in practice, with particular reference to the role of external tools in demonstrating delivery of best practice.</li> </ul>
<p><b>7</b> Establish principles, processes and the most appropriate mechanisms (i.e Public Acquisition Overlay, land swap) to ensure there is a sound basis for equitable and strategic relocation in areas of unmitigated risk, and to allow this process to begin early.</p>	<p>Supporting statutory decision-making</p> <p>Supporting strategic decisions</p>	<p>The recent <i>draft Built Environment Adaptation Action Plan</i> touched on the need to begin consideration of areas which may be identified under adaptation planning as being susceptible to unacceptably high unmitigated risks under climate change scenarios. This is a very sensitive and emotional issue and the failure to see any meaningful change in settlement patterns following the Black Saturday tragedy speaks to this. Nonetheless it is a critical issue that should be highlighted as the retreat or transition of these at-risk areas and settlements will be a long process, and one which must be undertaken in a robust, equitable and strategic manner. Central to any process is avoiding any further development of areas where transition or retreat is a strong possibility to avoid the associated financial and other burdens. Without a robust, State-led framework for managing these areas, it is impossible for individual decision-makers to address this aspect of any climate change response.</p>

INITIATIVE	FOCUS	COMMENTS
<b>PLANNING SCHEME UPDATES</b>		
8	Update definitions at Clause 72 to include relevant climate change or ESD related definition to ensure consistent application of policy. Of note are definitions around net zero emissions, electric vehicle (EV) readiness, green infrastructure and permeability.	<p>Supporting statutory decision-making</p> <p>In introducing climate related policy there are a number of new concepts that are likely to be introduced. It will be important that relevant aspects are included in definitions in the scheme to ensure that there is certainty as to what terminology means and that resources are not diverted to arguing about definitions.</p> <p>Ideally these definitions should be derived at a State level and included at Clause 72. Alternatively, if there is no appetite for this, an Incorporated Document containing a glossary could be included into relevant Planning Schemes. While there is some suggestion that definitions should be included in the body of any control, for the most part definitions are generally accepted and so their inclusion in a Planning Scheme is only necessary if they are challenged by an applicant, in which case statutory weight becomes important. In addition, many of these definitions are relevant to multiple Clauses or standards in Planning Schemes. Further to this, consideration could be given, while existing ESD Local Policies remain, to including the CASBE endorsed definition of best practice.</p>
9	In addition to proposed updates to the Planning Policy Framework to embed emission reduction targets, include the explicit target of net zero emissions by 2050 as State policy at Clauses 15 and 19.	<p>Shifting the balance of decision-making</p> <p>Aligning planning with best practice and science</p> <p>While the State Government’s ESD Roadmap proposes to include the emissions reduction target within the Planning Policy Framework, including the longer-term ambition of net zero emissions is important having regard to the lifecycle of buildings and the fact that decisions made through Planning Schemes will significantly outlast the interim emissions targets, making the long-term goal a more appropriate benchmark for consideration.</p>
10	Review all Decision Guidelines to ensure that, where relevant, appropriate references to matters related to climate change adaptation or mitigation are included.	<p>Supporting statutory decision-making</p> <p>Making climate change considerations explicit</p> <p>Decision Guidelines play a key role in Victoria’s planning system, which is generally discretionary. Greater clarity and more effective use of Decision Guidelines can increase the effectiveness of existing policy or requirements that support climate responsive outcomes. A review of current intersections which are currently addressed in Planning Schemes to update any associated Decision Guidelines to explicitly reference climate change could assist in supporting further consideration of climate change through existing policy and statutory approval processes.</p>
11	Replace references at Clause 11 to require that planning is to contribute to ‘net zero emissions outcomes’ rather than “energy efficiency”.	<p>Supporting statutory decision-making</p> <p>Making climate change considerations explicit</p> <p>While planning is not the key driver of net zero emissions outcomes, acknowledging planning’s important contribution to that end goal is important in embedding this concept in statutory decision-making. Planning currently talks clearly to the delivery of energy efficiency, with the levels of efficiency currently undefined through the building system. There is potential benefit in clearly identifying that the outcome being sought is not energy efficiency but net zero emissions, of which energy efficiency is a core component. This further supports a position acknowledging that planning as a system is involved when change and renewal is proposed and that, given the lifecycles of development and the required emission reduction, an objective of delivering net zero emissions is a more appropriate benchmark within the system.</p>

INITIATIVE	FOCUS	COMMENTS
<b>PLANNING SCHEME UPDATES</b>		
<b>12</b>	Amend the Objective of Clause 11.02-2S Structure planning to reference climate change resilience and to add a new objective to Clause 11.03-2S Growth areas to reference net zero and climate resilient neighbourhoods.	Supporting strategic decisions
		These parts of the scheme talk to the outcomes sought in planning for precincts and growth areas. These areas should be looking to the delivery of net zero emissions neighbourhoods and the embedding of climate resilience in the planning for new spaces. Note also relevant comments above regarding Practice Notes which would provide guidance as to the implementation of these objectives. More ambitious or innovative precincts may look towards climate positive outcomes and this may also have benefit in reference.
<b>13</b>	Include a specific strategy to avoid new development in areas subject to coastal hazards at Clause 11.03-4S Coastal settlement (as per Clause 13.02)	Making climate change considerations explicit
		While the relevant clause dealing with coastal hazards references avoiding new development, there is not a corresponding reference in the associated settlement policy. At the moment this policy suggests “limiting” development in areas subject to coastal hazards, as opposed to CI 13.02 which seek to “avoid” development, creating ambiguity as to expectations in these areas.
<b>14</b>	Update all references to benchmarks to reflect a 100 year cycle (e.g. rather than plan for 2100, plan for 2125) and update relevant interim benchmarks (2040 to 2070).	Supporting statutory decision-making
	Aligning planning with best practice and science	Planning and flood management generally uses a 100 year cycle (the 1% AEP) for considering flood impacts. While more broadly, climate change may require a reassessment of this benchmark, more specifically within Planning Schemes, the timescale is out of date. A 100 year consideration would require planning to 2121 (at the time of writing) rather than 2100 as currently referenced. Associated with this is the need to update relevant interim benchmarks which are significantly out-of-date. Further, distinctions between greenfield and urban areas is problematic and should be removed – floodwaters do not distinguish between these areas and there is no scientific rationale for setting a different benchmark. Policy should instead talk to the different planning or design responses that may be appropriate in these two areas.
<b>15</b>	Identify and protect agricultural land that will remain highly productive under climate change scenarios in relevant regional plans and associated policy and mapping at Clause 14.01.	Supporting statutory decision-making
	Making climate change considerations explicit	While agricultural productivity is a complex matter, and highly reliant on the skills and knowledge of individual farmers, it is clear that some parts of the State will be more resilient in terms of the scope of agricultural production than others. CI 14.01-1S currently has no reference to climate change. Policy supporting the transition of agricultural uses (at CI 14-01-2S) is not the same as prioritising protection of this land. Identifying climate resilient areas, which in many cases will overlap with existing strategic agricultural areas will be important. References to these areas at CI 14-01-2R and requiring them to be shown spatially on relevant maps within the PPF, rather than in external documents may assist planners in protecting these areas.
<b>16</b>	Support updates to the Purpose of the Planning Policy Framework but require inclusion of specific reference to sustainability, ‘having regard to climate change’, or similar.	Making climate change considerations explicit
		While it is acknowledged that responding to climate change is an integral part of delivering “sustainable” outcomes as currently required by the <i>P&amp;E Act</i> and proposed as part of the Purpose of Planning Schemes through the ESD Roadmap, sustainability is a complex matter that is open to a wide variety of interpretations. Without explicit reference to climate change, broad brush references to sustainability may not support appropriate longer-term outcomes.

INITIATIVE	FOCUS	COMMENTS
<b>PLANNING SCHEME UPDATES</b>		
<b>17</b>	Support an alignment between protection of agricultural land and the availability of alternate water sources as proposed through the <i>Planning for Melbourne's Green Wedges and Agricultural Land Consultation Paper (2020)</i> and extend this consideration beyond peri-urban areas.	Supporting statutory decision-making
<b>18</b>	Establish a policy basis for decisions relating to land uses such as carbon storage and their relationship to the protection of agricultural land.	Supporting statutory decision-making
<b>19</b>	Apply relevant Overlays (Land Subject to Inundation and Floodway Overlay) to land affected by coastal inundation to provide permit trigger.	Supporting statutory decision-making

Recent proposed changes to planning controls in peri-urban and green wedge areas (not yet implemented) drew a much clearer link between areas where alternate water sources were available and the encouragement of agricultural uses which could utilise this resource. Similar policy would be useful across all agricultural areas, as climate change impacts reduce water availability.

As net zero carbon ambitions become more entrenched, development applications for carbon storage / sequestration are increasing. Currently there is no State level policy providing guidance for how such applications should be assessed and/or balanced with a potential reduction in productive agricultural land. Policy would assist planners in assessing such proposals in a balanced manner

While policy identifies that development should be avoided in areas subject to coastal hazards, currently there is no permit trigger in place to allow most councils to assess this.

While it is appreciated that Local Coastal Hazard Assessments (LCHAs) can provide a more nuanced understanding to guide assessment, it has been established through Planning Panel findings that the use of 'Second Pass' data is sufficient to inform a PSA. A permit trigger to identify the need to consider potential impacts is important in supporting planners to implement State policy. In addition, it avoids potentially significant issues which arise when such impacts are then identified at building stage, if the application has not been referred to the Floodplain Management Authority (FMA) through the planning process. As articulated in the relevant DELWP Guidelines: *"Land that is affected by flooding should be identified by a flood overlay, unless it is zoned for flood purposes. This makes the flood risk clear to all and provides the necessary trigger for development proposals to be referred to a floodplain management authority. It also enables future purchasers of land to be informed of the flood risk through vendor disclosure statements."*

Further to this, there may be benefit in some additional refinements to existing policy around coastal hazards, given it is clearly not the intention of policy to "avoid" development in all areas subject to coastal hazards (i.e. in some areas a design solution or precinct based outcome is proposed rather than preventing development).

See also related Initiatives (30, 31, 33, 37 and 38) related to the updating of data and the relevant provisions.

INITIATIVE	FOCUS	COMMENTS
<b>PLANNING SCHEME UPDATES</b>		
<b>20</b>	Integrate references to place-based Coastal Adaptation Plans and Integrated Water Management Plans proposed by various State Government programs into Planning Schemes to ensure they are 'activated' as soon as adopted.	<p>Supporting statutory decision-making</p> <p>Supporting strategic decisions</p> <p>Integrating climate change actions</p> <p>There are a number of current State Government programs which aim to address key aspects related to climate change. Notable among these is the Integrated Water Management (IWM) program, which will lead to place-based IWM plans, and the Resilient Coasts 2100+ program which is framing adaptation planning for coastal areas. References to the outcomes of these place-based adaptation plans in relevant parts of Planning Schemes in advance of their finalisation will ensure that, once signed off by the government, they have an immediate relevance to planning decisions that might otherwise be delayed until associated PSAs are undertaken by each council.</p>
<b>21</b>	Update the Planning Policy Framework to more comprehensively address integrated delivery of infrastructure in State Policy by being explicit about outcomes (i.e. the need for coordination of infrastructure delivery to ensure delivery of sustainable canopy vegetation).	<p>Supporting statutory decision-making</p> <p>Supporting strategic decisions</p> <p>Explicit policy at CI19.03-2S (Infrastructure design and provision) could provide support for greater integration of in-street infrastructure and the delivery of canopy vegetation. In most current circumstances, service provision is still siloed. Without explicit recognition of canopy trees as a critical part of street planning, delivery of broader objectives around greening are challenging.</p>
<b>22</b>	Update Clause 56 to align with the findings of the CASBE led Sustainable Subdivisions Framework (pending completion of pilot phase).	<p>Supporting statutory decision-making</p> <p>Planning for climate resilient communities</p> <p>The Sustainable Subdivisions Framework (CASBE) represents a clear and evidence-based update to how we currently plan for subdivisions. Subdivisions are the building blocks of urban development and, as such, are critical to get right. Testing through the pilot phase, particularly with reference to the diversity of councils participating in the pilot, should give confidence in the applicability of any new standards Statewide. As such, updating Clause 56 accordingly should be pursued once updates following the pilot phase have been endorsed.</p>
<b>23</b>	<p>Update the Planning Policy Framework to more comprehensively address renewable energy generation in State Policy by:</p> <ul style="list-style-type: none"> <li>Addressing the provision and siting of lot scale renewables at Clause 19.</li> <li>Addressing energy storage facilities at Clause 19.</li> <li>Updating relevant clauses within Clauses 54, 55 and 58 to include more explicit requirements for on-site generation, siting and storage / energy management.</li> </ul>	<p>Supporting statutory decision-making</p> <p>While there is significant policy to assist in decision-making around larger scale renewable energy, there are gaps in current policy when it comes to smaller scale microgrids, embedded networks, siting and provision of lot scale renewables (noting recent changes to protect solar panels). There is also no current guidance around energy storage / management either at small or large scale. Addressing these gaps would support decision-makers in the facilitation of renewable energy at varying scales.</p>

INITIATIVE	FOCUS	COMMENTS
<b>PLANNING SCHEME UPDATES</b>		
<b>24</b>	Update the Planning Policy Framework to more comprehensively address climate change hazards in State Policy.	Supporting statutory decision-making
	Making climate change considerations explicit	Currently the risks associated with climate change in the Planning Scheme are addressed in a very limited fashion, focused on only the most critical: bushfire and coastal hazards. A more comprehensive identification of the hazards associated with climate change and overarching policy as to how these hazards will be addressed would be of benefit in setting the scene for managing such hazards through development approvals or strategic planning processes.
<b>25</b>	Include a Particular Provision/s that articulates mandatory minimum standards of Environmentally Sustainable Design in key areas such as energy efficiency, green infrastructure, electric vehicle readiness, etc.	Supporting statutory decision-making
	Making climate change considerations explicit	While Victoria’s planning system is, by nature, a discretionary one, there are some aspects where mandatory controls are applied where strategically justified – building heights being a key example. Given that, there is a clear case to be made for key aspects of any ESD standards, in particularly those pertaining to energy efficient / net zero emissions buildings, electric vehicle (EV) readiness and green infrastructure to be applied on a mandatory basis. Articulating clear minimums that will be required of all development is of fundamental importance. There is not sufficient time to just hope that applicants and developers do enough to support necessary cuts to emissions. As noted previously, planning becomes involved where change is occurring. Given the global context, and urgency of action, it is clear that any new development must meet higher standards than currently expected. A mandatory requirement provides for both consistency and certainty.
<b>26</b>	Ensure that forthcoming updates to the Regional Growth Plans and their relevant background work integrates more explicit and spatially based recognition of climate change impacts and ensure these are considered in growth planning.	Supporting strategic decisions
		Climate change impacts should be one of the key considerations in identifying areas for future growth in line with the principles of Avoiding hazards as a first priority. Regional Growth Plans are the spatial planning documents for Victoria’s regions. They are a key influence on the content of planning schemes, and therefore on decision-makers. The plans have evolved through a regional development lens, with a focus on growth. While this is a reasonable lens, in the face of climate change, this growth must also be considered in view of the future hazards and changes that can be anticipated under climate change scenarios. This may mean significant changes in how settlement is approached in some areas. The Regional Growth Plans offer a logical place to integrate regional adaptation strategies and ensure they translate to land use and development decision-making. They could also provide a regional understanding of matters such as habitat linkages, impacts on agricultural areas, renewable energy zones and transmission corridors so that planners have a holistic understanding of these matters.

INITIATIVE	FOCUS	COMMENTS
<b>PLANNING SCHEME UPDATES</b>		
<p><b>27</b> Update the Planning Policy Framework to more comprehensively address sustainable transport in State Policy by:</p> <ul style="list-style-type: none"> <li>Aligning the rates and delivery of car parking to best practice at Clause 52.06.</li> <li>Amending Clause 52.06 to reference 'vehicular' parking, rather than just 'car' parking within a particular provision. This would support the inclusion of standards relating to motorcycles / scooters / car share / e-bikes / shared delivery spaces, etc.</li> <li>Including requirements to support future adaptation of car spaces in Clause 52.06.</li> <li>Including requirements to provide EV charging points and EV ready spaces for both residential, commercial and other developments, either at Clause 52.06 or in a new Particular Provision.</li> <li>Updating the requirements for bicycle parking including rates and associated facilities and their design at Clause 52.34.</li> <li>Providing direction around the requirements and provision of on-street EV charging stations at Clause 19.</li> </ul>	Supporting statutory decision-making	Transport is a critical part of the mitigation picture, and one of the sectors where emissions are rising. The planning system currently fails to adequately facilitate the modal shift referenced in policy. Updates to Planning Schemes to address the items identified would be of significant assistance in facilitating sustainable transport outcomes. In particular, adjusting car parking rates, introducing policy relating to electric vehicles and reframing specific standards to address 'vehicles' more holistically, rather than just 'car parking' could all make a significant contribution to the modal shift and transition to net zero emission vehicles, and more sustainable forms of transport, required to reduce emissions from transport.
<p><b>28</b> Review and identify opportunities for greater recognition of relevant State policy in areas such as biodiversity to be represented spatially through Regional Growth Plans and to be specifically referenced as relevant regional policy (e.g. <i>Protecting Victoria's Environment – Biodiversity 2037 – "Identify future reserve system priorities through strategic land-use planning"</i>).</p>	Supporting strategic decisions	The planning system is an incredibly important tool in guiding spatial outcomes. Currently relevant spatial outcomes identified in areas such as biodiversity protection are poorly integrated into planning, and there is little reference to key areas of habitat or to regional habitat linkages. Integrating specific relevant regional matters included in other adopted State documents into both policy at 12.01-1R and into relevant municipal maps will help give effect to policy included in C111 and 12. Many of the areas referenced in policy are known but the generic nature of current policy and lack of specific references means they are often not given much weight in decision-making.
<p><b>29</b> Support the identification of key habitat corridors as part of regional planning processes to ensure these are recognised and mapped within relevant Planning Schemes to support decision-makers.</p>	Supporting statutory decision-making	Habitat corridors are recognised as a key component in building resilience of the natural environment in the face of climate change. Work has been undertaken in identifying key habitat corridors, at both a local and regional scale. However, these rarely find their way into Planning Schemes, other than on an ad-hoc basis at a municipal scale. This is not compatible with the delivery of such linkages which generally extend beyond a municipal scale and require overall connectivity to achieve their intended purpose.

INITIATIVE	FOCUS	COMMENTS
<b>PLANNING SCHEME UPDATES</b>		
<b>30</b>	Advocate for the creation of new Planning Overlay to address coastal erosion and application of the Overlay to affected land.	Supporting statutory decision-making
<b>31</b>	Undertake further updates to the Land Subject to Inundation Overlay and the Floodway Overlay to ensure they are fit for purpose in guiding planning decisions in areas subject to coastal hazards.	Supporting statutory decision-making
<b>32</b>	Insert a new Clause in the Planning Policy Framework which recognises and addresses Green Infrastructure under Community Infrastructure (Clause 19.02)	Supporting statutory decision-making Supporting strategic decisions
<b>33</b>	Update Victorian Planning Provisions to include land use triggers for sensitive uses in flood prone areas	Supporting statutory decision-making

There is currently no tool available to planners to address coastal erosion, significantly impeding their ability to appropriately manage development approvals subject to this coastal hazard, despite policy directing them to do so. The application of the existing Erosion Management Overlay provides an option but is not fit-for-purpose. Coastal erosion behaves very differently and requires consideration of very different matters than inland landslip, for which the tool was originally developed. Development of a fit-for-purpose tool would allow planners to consider the risks to a development and make decisions accordingly. It would also support referral to the Catchment Management Authorities (Swho have responsibility for coastal erosion under the *Marine and Coastal Act 2017*).

While minor changes have been made to the purpose of the Land Subject to Inundation Overlay (LSIO) and Floodway Overlay (FO) and to some of the matters which require consideration, they are still primarily drafted to provide relevant tools for assessment of riverine flooding, rather than coastal inundation. Updates to Decision Guidelines and reference to matters relevant to coastal inundation should be pursued. Reviewing aspects such as earthworks triggers will become increasingly important as residents seek to protect their properties through works on private land.

Inserting a new Clause which recognises Green Infrastructure as a critical component of how we plan our places would assist in ensuring appropriate consideration of these assets alongside other infrastructure. It would provide a logical place for relevant policy and allow local councils to clearly articulate their ambitions from State through to Local level policy.

While there is an expectation that councils avoid the siting of sensitive uses (such as hospitals, aged care or child care centres) in floodprone areas, in some instances there is no permit trigger for a change of use, or the use of 'as-of-right' in the underlying Zone. This means decision-makers cannot prevent such uses establishing, despite this being contrary to policy. Updating the flood provisions to include a land use trigger could address this. Alternatively, updating land use tables in all relevant zones may also address this issue.

INITIATIVE	FOCUS	COMMENTS
<b>STRATEGIC DOCUMENT UPDATE</b>		
<b>34</b>	Ensure that recent updates to the Victorian Planning Authority's <i>Precinct Structure Planning Guidelines</i> are aligned with the findings of the Sustainable Subdivisions Framework (pending completion of pilot phase).	Supporting statutory decision-making
	Planning for climate resilient communities	While it is understood that the <i>Precinct Structure Plan (PSP) Guidelines 2.0</i> are in their testing phase, there remains the option to advocate for more ambitious outcomes within the update. There was significant scope in the draft released to improve both the specific content and the ambition of the guidelines, without compromising the broad structure and process proposed. The CASBE Sustainable Subdivisions Framework contains many elements which could be effectively integrated into the <i>PSP Guidelines 2.0</i> . Doing so would greatly assist in the alignment of any subdivision assessments which may occur in areas subject to PSPs, particularly if the content of the framework is embedded in Clause 56 (as suggested) or other parts of policy for councils participating in the pilot.
<b>35</b>	Include requirements within the Victorian Planning Authority's <i>Precinct Structure Planning Guidelines</i> to require new communities to be net zero and designed appropriately to respond to climate change impacts.	Planning for climate resilient communities
	Planning for climate resilient communities	A 'net zero emissions' neighbourhood should not be considered "innovative" – it should be the expectation given the timescales for the development of these areas. A 'carbon positive' neighbourhood would be more appropriate representing the 'innovation' pathway outlined in the <i>Guidelines</i> . Every <i>PSP</i> prepared should also be clearly articulating the steps being taken to ensure the future community will be resilient, taking into account the changes in climate anticipated over that timeframe, rather than just existing conditions, ideally through requirements for a Climate Change Response Plan.
<b>36</b>	Include explicit requirements for all decision-makers, under relevant legislation that all precinct planning should include the development of a 'Climate Change Response Plan' which documents the estimated emissions for the precinct at full development potential, the anticipated impacts of climate change, and the measures that will be taken to deliver net zero and to integrate appropriate adaptation measures.	Planning for climate resilient communities
	Supporting strategic decisions	There is a clear opportunity for the development of a standard requirement that any precinct planning includes a process whereby the anticipated emissions and climate impacts are identified upfront and there is an explicit requirement to outline the proposed mechanisms by which emissions will be mitigated and climate impacts moderated for future communities. This is becoming standard practice overseas, and has already been explored by the Victorian Planning Authority (VPA) in areas such as the Arden Urban Renewal Precinct. Importantly, this requirement should not just apply to entities like the VPA, but also to other agencies and authorities engaged in precinct planning including the Suburban Rail Loop Authority, Department of Transport and the Department of Jobs, Precincts and Regions.

INITIATIVE	FOCUS	COMMENTS
<b>STATE DATA UPDATE</b>		
<b>37</b>	Update all coastal inundation data to align with scientific projections contained in the <i>Sixth Assessment Report</i> prepared by the Intergovernmental Panel on Climate Change (IPCC), having regard for any local variations identified through relevant Local Coastal Hazard Assessments.	<p>Supporting statutory decision-making</p> <p>Supporting strategic decisions</p> <p>Aligning planning with best practice and science</p> <p>The <i>Marine &amp; Coastal Act 2017</i> and associated Policy and Strategy (currently draft) underpins planning responses in coastal areas. The need to update benchmarks contained in Planning Schemes was identified in the <i>Marine &amp; Coastal Policy</i> (finalised in 2020), which suggested they should be updated to reflect the finding of the IPCC report. The corresponding benchmark to the existing 0.8m SLR was updated to 1.1m SLR in the <i>Sixth Assessment Report</i>. The <i>Marine &amp; Coastal Policy</i> suggested that the figure in Planning Schemes would be updated “as necessary and supported by modelling that places global projections into the Victorian context to provide greater accuracy for regional and local-level adaptation”. A corresponding update has yet to be made to the Victorian Planning Provisions (VPPs). Conversations with the community around adaptation in this space must be underpinned by a realistic understanding of impacts.</p>
<b>38</b>	Implement a process of regular review of coastal hazard data and a streamlined process for State-led updates to associated planning controls.	<p>Supporting statutory decision-making</p> <p>Supporting strategic decisions</p> <p>Aligning planning with best practice and science</p> <p>A more streamlined and timely process for updates based on science should be implemented, given there is likely to be ongoing change and impacts in relation to coastal hazards. This should include a program of automatic updates to coastal hazard mapping if required by relevant data reviews every six month, consistent with the process of updating hazard mapping which occurs with bushfire. This is particularly important given the rate at which scientific understanding is evolving in relation to sea level rise, and also the potential for ‘jumps’ in projections as a result of particular events or tipping points being reached.</p>
<b>39</b>	Undertake a Statewide review and update of all relevant flood mapping to align with the most recent Rainfall & Runoff projections prepared by the CSIRO and which reflect anticipated patterns of rainfall as a result of climate change.	<p>Supporting statutory decision-making</p> <p>Aligning planning with best practice and science</p> <p>As with coastal inundation, much of the data that underpin flood overlays that trigger consideration through the issue of a permit are out of date. CSIRO has updated modelling which reflects the changed conditions expected under climate change but these have (generally) yet to be integrated into Planning Schemes. As with coastal inundation, relying on local governments to prosecute these updates is problematic and they would be more effectively implemented by the State in the same manner as bushfire hazard updates.</p>

INITIATIVE	FOCUS	COMMENTS
<b>EDUCATION / MONITORING</b>		
40	Work with the Department of Environment, Land, Water and Planning and the Victorian Civil and Administrative Tribunal (VCAT) to provide information or training for VCAT Planning & Environment List members on their role in delivering climate responsive outcomes.	Supporting statutory decision-making  Decision-makers under the Planning & Environment (P&E) List are not always from a planning or ESD background. They rely heavily on interpretation of the statutory instrument of the Planning Scheme, aided by evidence provided by relevant experts. However, clear direction from the State as to the intention behind some of the existing or (hopefully) future content of the Planning Policy Framework (PPF) and broader system, as pertains to climate change could assist in providing a clearer lens to the application of such policy. Articulating the role of the PPF and the relationship between policy contained within Planning Schemes, and other background documents, which may not be the subject of specific review through a hearing unless explicitly referenced such as the <i>Climate Change Strategy</i> , may also be useful. At a minimum, highlighting the importance of these decision-makers and the options available to them to consider climate change through their decision-making would be valuable.
41	Improve post-approval monitoring and review processes in relation to Environmentally Sustainable Design (ESD) outcomes.	<div data-bbox="788 667 1115 850">Supporting statutory decision-making</div> <div data-bbox="788 850 1115 943">Supporting strategic decisions</div> <div data-bbox="788 943 1115 1062">Aligning planning with best practice and science</div> There has been significant concern over the delivery of ESD related actions proposed as part of the planning permit process on the ground. Work undertaken by a number of councils, including the City of Melbourne identified that the 'design to support' principle that underpins much of current ESD policy is not leading to optimal outcomes, with many developments not delivering on their ESD potential. While more explicit and mandatory requirements are important to resolving this issue, a more robust program of monitoring, or exploration of a more formal post-construction or post-occupancy certification requirement (for example, as part of the Built Environment Sustainability Scorecard) would also assist. Alternatively, a program of randomised checking of conditions endorsed through Sustainability Management Plans / Sustainable Design Assessments (SMPs / SDAs) would provide both an understanding of key areas of non-compliance, in addition to promoting increased focus on compliance across the development industry, and could be facilitated through organisations such as CASBE.

### 4.3 COMPLEMENTARY INITIATIVES

As noted previously, there are a number of actions which would also assist in overcoming some of the barriers identified in delivering climate change responses through Victoria's planning system. These are discussed in some more detail in this section of the report.

#### Information and Education

In many cases, the barriers identified through this project relate to a general understanding of exactly *how* particular outcomes could, or should, be delivered. While there is significant information available on the benefits of aspects of sustainable design, current and practical information is less readily available. This can lead to perceptions that things are too hard or too costly, which may be based on outdated information. Opportunities to support the identified Initiatives include:

- Prepare information sheets about how to deliver a net zero development, building on the established hierarchy of reducing energy demand through siting and design, reducing energy use through efficient appliances, onsite energy generation and finally, use of green power or other offset arrangements for residential carbon emissions.
- Continue to develop real-life case studies, and work with relevant project partners, to provide examples from suburban and regional contexts, and embracing single dwellings and commercial buildings.
- Prepare information sheets explaining the opportunities of key concepts:
  - What is Vehicle 2 Grid and Grid 2 Vehicle charging? The processes and the benefits, parameters and standards that would be suitable for different development typologies.

- What is an embedded network? How would this work at a lot or precinct scale? What issues might you face and how might you address them?
- Practical implementation of green infrastructure. Addressing issues of how to deliver Integrated Water Management and where to find resources on building standards and appropriate species.

Notwithstanding the above, it must be acknowledged that there are significant resources available to guide, support and assist in the delivery of a built environment that is more responsive to climate change. However, much of this information is dispersed, differs between councils and not all of it is easily accessible to decision-makers, let alone permit applicants. The creation of a single government portal where all relevant material, technical standards and guidance could be accessed and searched by typology and aspect, may support better access to relevant data.

It may also be of assistance to provide some additional clarity around the relationship between the planning and building systems and how this might affect the practicalities of the development approval process. While there has been reasonable clarity around the overarching role that the planning system has to play in the delivery of ESD, and as an extension, in climate change responses, there remains considerable diversity of opinion at a more granular scale. A simple exercise of conveying the appropriate planning benchmarks and then the appropriate location of specific standards (i.e. within Planning Schemes or the building regulations) would assist many decision-makers in navigating this contested space.

In addition, some clear guidelines on the appropriate specifications at the planning stage to support climate change outcomes may be of use. This might be in the form of a framework which outlines the relationship between planning policy objectives and strategies, any specified standards or policy guidelines within Planning Schemes, as well as the information that needs to be provided at planning stage, in the post-permit stage (i.e. through the endorsement of a SMP) and at the building

stage. This could be supported by model application requirements, model permit conditions or SMP templates.

It is also important that the Municipal Association of Victoria (MAV) continues to provide a consistent understanding of the legal obligations of Local Government in relation to planning for climate change mitigation and adaptation, with clear linkages to the typically relevant roles and responsibilities within councils, based on the findings of relevant research.

While the State Government has provided some guidance to councils as to their obligations and commissioned research to assess the integration of obligations in responding to climate change across different parts of Local Government (*Local Government Climate Change Adaptation Roles and Responsibilities under Victorian legislation*, DELWP 2020), this remains an important space and an area where practical examples and the articulation of best practice would be useful in further embedding climate change responses across Local Government. This is particularly important given the role that key documents such as the Council Plan and Municipal Health and Wellbeing Strategies play and their influence on the broader authorising environment within councils. It is also noted that the document identified above relates specifically to adaptation responses, and further guidance may be useful in terms of the obligations in delivering emissions reduction pledges under the *Local Government Act 2020* and *Climate Change Act 2017*, noting these pledges are currently voluntary.

There is also potential benefit in the preparation of material to support community awareness and advocacy with the intention of driving change to community appetite for climate change action and to support relevant inputs to Council Plans and Municipal Health and Wellbeing Plans. The community drives change and establishes political pressure to translate action into policy at both Local and State levels. Current momentum and the public appetite for climate action, identified through polling, is an important source of support for changes to the authorising environment for planners and other decision-makers. Councillors are democratically elected and the community has significant power to drive change at the local level.

In addition to supporting community engagement, an education campaign for internal council staff (outside planning) to raise awareness of the health and wellbeing implications of climate change to more fully embed adaptation and mitigation actions into legislated requirements such as Council Plans and Municipal Health and Wellbeing Plans may be of benefit. As noted in the decision-making flow charts, referrals from other council departments are an influence, particularly at subdivision and lot scale. If other departments are educated and empowered to apply a climate change lens on their referrals this can significantly strengthen the decision-making process. Referrals are often given significant weight due to the generally technical and specific nature, as opposed to more general policy.

There are also important climate change outcomes to be gained by supporting actions and campaigns to deliver 'density done well' in recognition that low densities of development are a key barrier to the delivery for public transport and other services required to support sustainable settlement patterns. It must be acknowledged that the delivery of sustainable communities relies on density. Density has often been delivered poorly and evokes strong resistance in many areas. Supporting and highlighting where this is done well is important in generating social licence for increases in density which are critical to mitigation efforts.

## Resourcing and funding

Resourcing is a constant issue for Local Government and the technical knowledge required to implement climate change responses is beyond many councils. Innovative approaches to enabling councils will need to be pursued. Options could involve establishing a pool of ESD experts available to councils, in particular to regional and rural councils, to support the upskilling of both internal council staff as well as applicants. Additional benefit may be gained by an explicit mandate to engage with, and educate, applicants on a project-by-project basis. Funding for ongoing training and capacity building is a key area where State investment could be pursued.

## Approaches to post-approval monitoring

One of the most challenging aspects of the planning system is that, once a permit has been issued, there is generally very little monitoring or enforcement. This is due to a combination of factors, not least the resources required for monitoring compliance and enforcement. This results in only matters which are a clear risk to the community, or which are pro-actively identified by the community, being pursued. However, it is consistently highlighted as one of the key issues in delivering ESD outcomes, a fact emphasised by the current policy approach which sees Planning Schemes require only the *potential* for sustainable design, which is often not translated into practice. Use of tools with certification processes such as Green Star is one way of addressing such an issue but there needs to be wider consideration – perhaps by building in a monitoring and review process to BESS, or setting up a shared resource to undertake reviews to establish if sustainability outcomes are being delivered and if not, where the greatest areas of non-compliance are occurring so that targeted actions can be undertaken. A randomised monitoring system can assist in compliance.

## Managing planning reforms

Ensuring ESD / climate change outcomes are still considered through fast-track process is also particularly important in the context of ongoing changes to the Victorian planning system. There are currently significant reforms underway at a State (and to a lesser extent, Local) government level, many of which are focused on fast track processes using Particular Provisions or VicSmart. In some cases, these processes may turn off other policy, meaning ESD and climate change considerations may be overlooked. It is important, therefore, that any proposed changes are carefully scrutinised to ensure they do not lower the bar on ESD or climate resilient responses. Ideally, a fast-track process should set the bar higher.

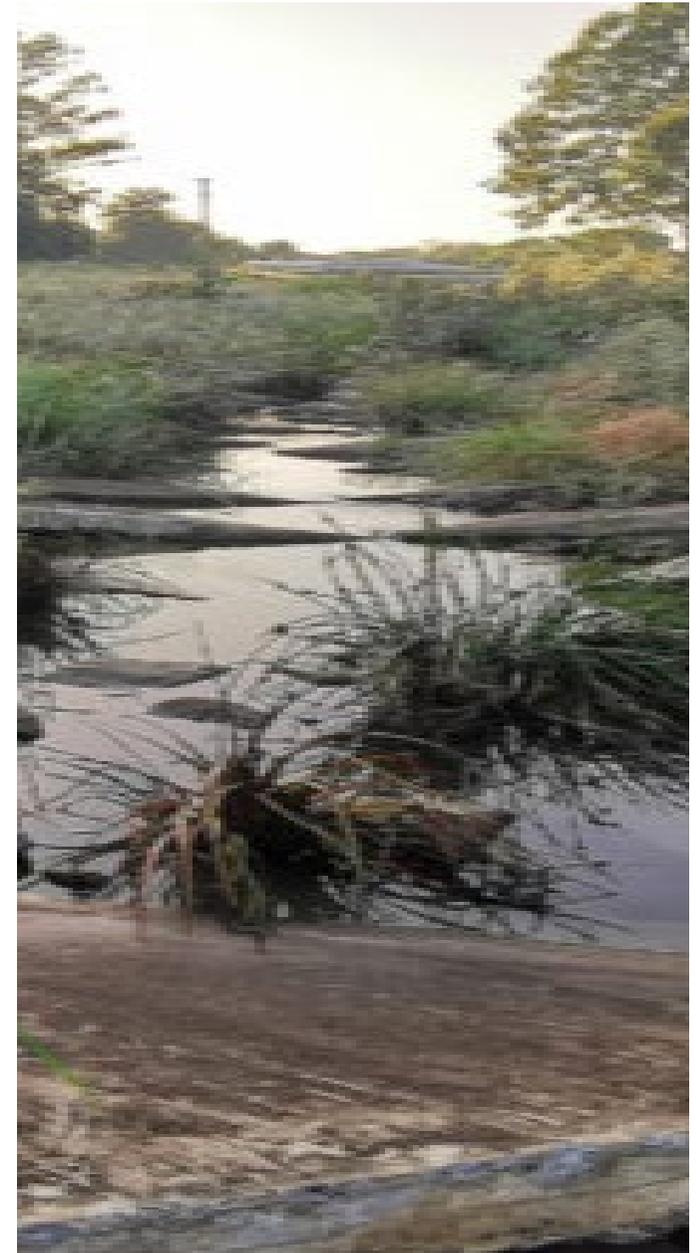
## Continue to engage with reforms across other key sectors of the built environment

While this report has focused on planning, it has also acknowledged that planning is only one part of the equation. A continued dialogue and open communication about the objectives and outcomes being pursued at the planning stage with the development sector would be of significant assistance, and many councils have begun this process. In addition, engaging in advocacy related to improvements within the building system is also important. This may be through supporting changes to other parts of the system (for instance, the updates to the NCC or changes to the Plumbing Code to remove outdated requirements for gas-boosted systems) or through broader engagement with built environment professionals. There are a number of groups active in this area, such as Architects Declare, Engineers Declare and Builders Declare, who may offer useful conduits in the sharing of information, resources and in clarifying advocacy priorities.

Updates to the Building Act may also be something that is considered. At the moment there is no explicit objective to ensure that buildings under the Act are resilient to climate change impacts. For example, an explicit objective that buildings are resilient to climate change impacts may provide a basis for requirements to ensure thermal safety in a blackout is maintained.

## Governance and external tools

Another key area worth consideration more broadly is the ongoing structure and governance of external tools, and their application within the planning system. External tools provide a number of advantages and there is significant potential for them to be used much more effectively through the planning system. The appropriate use of these tools could allow the Planning Scheme to identify the relevant benchmarks required (the 'what') while the tool could provide the technical 'how' in a manner which could be applied contextually, and in a way which aligned with the applicants' objectives. This would avoid the planning system needing to be framed in a way which meets the lowest common denominator and would encourage the type of innovative responses our performance-based system is intended to deliver. External tools also offer the potential to address some of the issues with compliance and monitoring identified earlier. Currently the way external tools are integrated is very inefficient, and there are concerns around the governance of tools which has been a barrier to the delivery of best practice (for example, the introduction of a Green Factor Tool into the planning system). An agreed framework for use of a Memorandum of Understanding may be an option for addressing this. It is highlighted that the use of external tools is explicitly noted in the ESD Roadmap.



## 4.4 PRIORITISATION

As clearly demonstrated, there are a number of barriers inhibiting decision-makers in fully embedding climate change in the discharge of their responsibilities. In considering responses to address those barriers, a large number of specific recommendations have been made. To that end, this section of the report identifies a number of Criteria for prioritising the Initiatives. Having regard to the intention of this project, the prioritisation must have regard to the effectiveness of any action in ensuring climate change is an overarching factor in decision-making, and also for its ease of implementation.

Criteria are identified in the relevant highlight box and the initiatives were placed in a matrix which allowed for the transparent comparison between different initiatives, and the identification of overarching priorities for any advocacy campaign.

CRITERIA
<b>Effectiveness</b>
Can be clearly linked to the delivery of a specific outcome which is understood to contribute to climate change adaptation or mitigation.
Addresses a critical barrier that, if overcome, would enable a number of other options to be pursued.
Will have a medium or high level of impact in terms of mitigation of carbon emissions from the built environment. <i>(measured in terms of an understanding of the relative contribution of varying parts of the built environment).</i>
Will increase the resilience of the community to climate change impacts likely to be felt in the next decade.
Provides a necessary basis or framework to support other actions on climate change adaptation.
Has the potential to be used effectively in communicating changes required to the built environment to a broader audience.
Supports a wide range of mitigation and adaptation measures.
Supports the adaptive capacity and resilience of ecological systems.
<b>Implementation</b>
Is applicable to metropolitan, regional and rural contexts.
Is subject to, or has the potential to be addressed, by current reform agendas.
Has an existing evidence base that would underpin proposed advocacy.
Is likely to be accepted by the development industry with only minor resistance
Is clear and specific in terms of change, rather than needing further definition or investigation
Will be able to be implemented within a 5 year timeframe.
Has an existing policy basis at State level.
Has an existing policy basis at Local government level (through ESD policy etc).
Will require manageable resourcing and financial inputs from local government.
Potential for additional resources to be available to support implementation
<b>Associated benefits</b>
Results in outcomes which are multi-beneficial and support integrated approaches to mitigation and adaptation.
Has the potential to bring about change that will be of benefit to those relatively more vulnerable to climate impacts

## 4.5 OVERARCHING PRIORITIES

These represent the Initiatives which achieve the highest overarching ranking on application of the Criteria.

- Initiative 1: Seek an amendment to Schedule One of the *Climate Change Act 2017* to include reference to decisions made in regard to amendments or the issue of permits under the *Planning & Environment Act 1987*.
- Initiative 2: Seek an amendment to the *Planning & Environment Act 1987* to provide clearer direction on the consideration of climate change in assessment and decision-making.
- Initiative 5: Update *Minister's Direction No. 11 – Strategic Assessment of Amendments and Practice Note 46: Strategic Assessment Guidelines* for Planning Scheme amendments to ensure that Explanatory Reports prepared for every amendment include an explicit assessment against relevant climate change considerations including consistency with emission reduction targets over the life of any potential development, and any relevant adaptation measures.
- Initiative 6: Document preferred practice for the delivery of climate responsive planning through new or amended Practice Notes.
- Initiative 7: Establish principles, processes and the most appropriate mechanisms (i.e. Public Acquisition Overlay, land swap) to ensure there is a sound basis for equitable and strategic relocation in areas of unmitigated risk, and to allow this process to begin early.
- Initiative 9: In addition to proposed updates to the Planning Policy Framework to embed emission reduction targets, include the explicit target of net zero emissions by 2050 as State policy.
- Initiative 11: Replace references at Clause 11 to require that planning is to contribute to 'net zero emissions outcomes' rather than "energy efficiency".
- Initiative 14: Update all references to benchmarks to reflect a 100 year cycle (e.g. rather than plan for 2100, plan for 2125) and update relevant interim benchmarks (2040 to 2070).
- Initiative 16: Support updates to the Purpose of the Planning Policy Framework but require inclusion of specific reference to sustainability, 'having regard to climate change', or similar.
- Initiative 19: Apply relevant Overlays (Land Subject to Inundation and Floodway Overlay) to land affected by coastal inundation to provide permit trigger.
- Initiative 20: Integrate references to place-based Coastal Adaptation Plans and Integrated Water Management Plans proposed by various State Government programs into Planning Schemes to ensure they are activated as soon as adopted.
- Initiative 22: Update Clause 56 to align with the findings of the CASBE led Sustainable Subdivisions Framework (pending completion of pilot phase).
- Initiative 23: Update the Planning Policy Framework to more comprehensively address renewable energy generation in State Policy.
- Initiative 24: Update the Planning Policy Framework to more comprehensively address climate change hazards in State Policy.
- Initiative 25: Include a Particular Provision/s that articulates mandatory minimum standards of Environmentally Sustainable Design in key areas such as energy efficiency, green infrastructure, electric vehicle readiness, etc.
- Initiative 26: Ensure that forthcoming updates to the Regional Growth Plans and their relevant background work integrates more explicit and spatially based recognition of climate change impacts and ensure these are considered in growth planning.
- Initiative 27: Update the Planning Policy Framework to more comprehensively address sustainable transport in State Policy.
- Initiative 32: Insert a new Clause in the Planning Policy Framework which recognises and addresses Green Infrastructure under Community Infrastructure (Clause 19.02).
- Initiative 34: Ensure that recent updates to the Victorian Planning Authority's *Precinct Structure Planning Guidelines* are aligned with the findings of the Sustainable Subdivisions Framework (pending completion of pilot phase).
- Initiative 35: Include requirements within the Victorian Planning Authority's *Precinct Structure Planning Guidelines* to require new communities to be net zero and designed appropriately to respond to climate change impacts.
- Initiative 36: Include explicit requirements for all decision-makers, under relevant legislation that all precinct planning should include the development of a Climate Change Response Plan which documents the estimated emissions for the precinct at full development potential, the anticipated impacts of climate change, and the measures that will be taken to deliver net zero and to integrate appropriate adaptation measures.
- Initiative 37: Update all coastal inundation data to align with scientific projections contained in the *Sixth Assessment Report* prepared by the Intergovernmental Panel on Climate Change (IPCC), having regard for any local variations identified through relevant Local Coastal Hazard Assessments.

## 4.6 EARLY ACTION PRIORITIES

In addition to the overarching priorities, it was considered beneficial to also identify those options which can be implemented with relative ease in the immediate term. There are a number of current State initiatives which provide opportunities to leverage short term outcomes through concentrated advocacy. Priorities for early action include:

- Initiatives which can be advocated for through participation in the State's ESD Roadmap process. These would include updates to the State Planning Policy Framework related to net zero emissions, green infrastructure and sustainable transport as they relate to lot scale development.
- Initiatives which can be advocated for through participation in the Coastal Adaptation planning processes (Victoria's Resilient Coasts 2100+) include matters relating to coastal hazards.
- Initiatives which can be advocated for through participation in the drafting of the *Built Environment Adaptation Action Plan* include bigger picture advocacy around adaptation measures. The cycle of updates to this work means that a program of forward looking advocacy items may be useful in ensuring that future iterations of the Plans are drafted in the first instance, with an awareness of Initiatives of importance to Local Government.



## 5.0 CONCLUSION

The Initiatives identified in the previous section of this report as priorities represent the most effective Initiatives in relation to the project objectives. These prioritises in turn point to a number of overarching recommendations. The key messages which can be derived from the identified priorities are as follows:

- Recognise the fundamental role the Planning Scheme plays in guiding decision-makers, and its weight as a piece of statutory law. Focus attention on ensuring the planning scheme is reformed in a number of key areas:
  - Making the importance of considering climate change in decision-making explicit, rather than relying on generic references to sustainability.
  - Filling gaps where there is a policy void in key areas.
  - Introducing mandatory development standards in targeted areas.
  - Ensuring that the scheme and its application of controls is consistent with the scientific evidence base and best practice.
- Focus on changes that will assist in getting the fundamentals of future development areas right. This includes changes to planning for precincts and for subdivisions not only in ensuring appropriate urban structure is delivered but also in a the development of a much stronger focus on net zero and climate resilient communities

The barriers identified in this report are important to understand, but again, they do not represent the full scope of influences or restraints which can play out in day-to-day decision-making.

Many other matters were identified through engagement as part of this project, and relate to education, resourcing and other relevant observations such as regulatory barriers which will also need to be addressed. But aligning the planning system with the changes we know are needed is an important first step.

Despite the identification of key areas of focus, the scale of the challenge and the immediacy of action required to reflect scientific consensus means that there is actually an urgent need to pull all available levers. The application of the precautionary principle points to a need to not make minor changes, but to review all facets of the system and to 'activate' requirements for climate change responsive outcomes at all levels. The underlying premise of the precautionary principle, particularly considering the latest scientific guidance (IPCC 2021) on the speed at which mitigation must occur, suggests that it is better to have an over-abundance of requirements to consider climate impacts than to continue to deliver buildings, neighbourhoods and infrastructure which do not align with a sustainable future.

It is important to also recognise that the changes recommended in this report, which relate more specifically to the authorising environment for decisions made in the built

environment, only represent a small part of the picture in any advocacy campaign. While some associated initiatives are identified as complementary initiatives these are by no means comprehensive, and this document should not be seen as the whole picture in terms of advocacy priorities. Nonetheless, planning's role as a crucial determinant of what occurs during change and renewal in the built environment cannot be overlooked. There is a very strong case to be made that, as a system that is only activated when a change is proposed either to land use or to built form, that this change must be aligned with responses to climate change.

# APPENDIX ONE: ACRONYMS / GLOSSARY

**CC Act** - Climate Change Act 2017  
**P&E Act** - Planning & Environment Act 1987  
**LG Act** - Local Government Act 2020  
**LCHA** - Local Coastal Hazard Assessment  
**PSA** - Planning Scheme Amendment  
**PPF** - Planning Policy Framework  
**FMA** - Floodplain Management Authority  
**IWM** - Integrated Water Management  
**ESD** - Environmentally Sustainable Design  
**SMP** - Sustainability Management Plan  
**SDA** - Sustainability Design Assessment  
**MAV** - Municipal Association of Victoria  
**CASBE** - Council Alliance for Sustainable Built Environment  
**PIA** - Planning Institute of Australia  
**VCAT** - Victorian Civil and Administrative Tribunal  
**DELWP** - Department of Environment, Land, Water and Planning  
**DOT** - Department of Transport  
**SRLA** - Suburban Rail Loop Authority  
**DJPR** - Department of Jobs, Precincts and Regions  
**CSIRO** - Commonwealth Scientific and Industrial Research Organisation  
**IPCC** - Intergovernmental Panel on Climate Change  
**EV** - Electric Vehicles  
**OSDR** - On-site detention & retention  
**BCA** - Building Code of Australia  
**NCC** - National Construction Code  
**GBCA** - Green Building Council of Australia  
**BESS** - Built Environment Sustainability Scorecard

# APPENDIX TWO: ASSESSMENT MATRIX

The Table contained in this Appendix includes the relevant 'scores' of the Initiatives against the Criteria outlined in the body of the report. This informed the identification of rankings contained in Section 4.5.

INITIATIVE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	TOTAL
Seek an amendment to Schedule One of the Climate Change Act to include reference to decisions made in regard to amendments or the issue of permits under the P&E Act.		3			2		2		3					2			1		3		16
Seek an amendment to the Planning & Environment Act 1987 to provide clearer direction on the consideration of climate change in assessment and decision-making.		3			2		2		3					2			1		3		16
Update Minister's Direction No. 11 – Strategic Assessment of Amendments and Practice note 46: Strategic Assessment Guidelines for planning scheme amendments to ensure that Explanatory Reports prepared for every amendment include an explicit assessment against relevant climate change considerations including consistency with emission reduction targets over the life of any potential development and any relevant adaptation measures.		3			2	1			3				1	2			1		3		16
Update definitions at Clause 72 to include relevant definition to ensure consistent application of policy. Of note are definitions around net zero emissions, EV readiness, green infrastructure, permeability.	2							3	3	2		1		2		1	1				15
Support updates to the Planning Policy Framework to embed emission reduction targets but also include net zero target explicitly stated as State policy.	2		3						3	2	2		1	2			1		3		18
Support updates to the Purpose of the Planning Policy Framework but require inclusion of specific reference to sustainability 'having regard to climate change'.				2	2	1	2		3	2		1	1	2			1		3		20
Document preferred practice for the delivery of climate responsive planning through new or amended practice notes				2		1	2	3	3					2			1	1	3		18

INITIATIVE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	TOTAL	
Review all Decision Guidelines to ensure that where relevant, appropriate references to matters related to climate change adaptation or mitigation are included.						1	2		3					2	1		1					10
Replace references at Clause 11 that planning is to contribute to 'net zero emissions outcomes' rather than 'energy efficiency'.	2	3	3						3	2	2		1	2			1		3			22
Amend the Objective of 11.02-2S Structure planning to reference climate change resilience and to add a new objective to 11.03-2S Growth areas to reference net zero and climate resilient neighbourhoods.	2			2		1				2			1	2	1		1					12
Include a specific strategy to avoid new development in areas subject to coastal hazards at 11.03-4S Coastal settlement (as per CI 13.02)	2			2						2			1	2	1		1			3		14
Update all references to benchmarks to reflect a <u>100 year</u> cycle (e.g. rather than plan for 2100, plan for 2125) and update relevant interim benchmarks (2040 to 2070).				2	2				3	2	2		1	2			1			3		18
Apply relevant Overlays to land affected by coastal inundation to provide permit trigger.	2	3		2					3	2	2		1	2	1		1			3		22
Update all coastal inundation data to align with scientific projections contained in the relevant IPCC reports, having regard for relevant LCHAs.	2			2	2				3	2	2	1		2	1		1			3		21
Advocate for the creation of new provision to address Coastal Erosion and apply to affected land.				2					3	2				2			1			3		13
Advocate for further updates to the Land Subject to Inundation and the Floodway Overlay to ensure they are 'fit for purpose'.									3	2				2			1			3		11
Update all relevant flood mapping to align with the most recent R&R projections.				2	2				3		2		1	2				1				13
Identify and protect agricultural land that will remain highly productive under climate change scenarios in relevant regional plans and associated policy and mapping.														2	1		1	1				5

INITIATIVE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	TOTAL
Support alignment between protection of agricultural land and the availability of alternate water sources as proposed and extend this consideration beyond peri urban areas.	2									2		1	1	2			1				9
Establish a policy basis for decisions relating to land uses such as carbon storage and their relationship to the protection of agricultural land												1		2			1				4
Integrate references to place-based Coastal Adaptation Plans and Integrated Water Management Plans proposed by various State Government programs into the planning schemes to ensure they are 'activated' as soon as adopted.		3		2		1		3		2	2	1	1	2	1		1	1		3	23
Review and identify opportunities for greater recognition of relevant State policy in areas such as biodiversity to be represented spatially through Regional Growth Plans and to be specifically referenced as relevant regional policy (e.g. Protecting Victoria's Environment – Biodiversity 2037 – "Identify future reserve system priorities through strategic land-use planning").					2			3			2			2	1		1				11
Support the identification of key habitat corridors as part of regional planning processes to ensure these are recognised and mapped within relevant planning schemes to support decision-makers.	2							3	3		2			2	1		1				14
Promote opportunities for additional 'greening' in established urban areas through broadening standards for public open space planning provisions and changing the definitions under the Subdivision Act.				2													1		3	3	9
Ensure that the forthcoming updates to the Regional Growth Plans and their relevant background work integrates more explicit and spatially based recognition of climate change impacts and ensure these are considered in growth planning. Climate change impacts should be one of the key considerations in identifying areas for future growth in line with the principles of Avoiding hazards as a <a href="#">first priority</a> .		3		2	2	1	2								1		1	1	3	3	16

INITIATIVE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	TOTAL
Seek an amendment to the 'Objects' of the Victorian Planning Authority Act.		3			2								1				1			3	10
Insert a new Clause within the VPPs which recognises Green Infrastructure under Community Infrastructure (CI19.02)	2			2	2			3	3	2	2	1	1	2	1	1	1	1	3	3	30
Update the Planning Policy Framework to more comprehensively address integrated delivery of infrastructure in State Policy by being explicit about outcomes (i.e. the need for coordination of infrastructure delivery to ensure delivery of sustainable canopy vegetation).								3		2		1		2			1				9
Ensure that recent updates to the PSP Guidelines are aligned with the findings of the Sustainable Subdivisions project (pending completion of pilot phase).	2	3		2	2		2			2	2			2			1	1		3	22
Include explicit requirements within the PSP Guidelines to require new communities to be net zero and designed appropriately to respond to climate change impacts	2	3	3	2	2	1	2			2	2			2			1	1	3	3	29
Include more explicit requirements for all decision-makers, under relevant legislation that all precinct planning should include the development of a Climate Change Response Plan which documents the estimate emission for the precinct at full development potential and the anticipated impacts of climate change, and the measures that will be taken to deliver net zero and to integrate appropriate adaptation measures		3	3	2	2	1	2				2			2			1	1	3		22
Update Clause 56 to align with the findings of the Sustainable Subdivisions project (pending completion of pilot phase).	2	3		2	2		2		3		2			2	1		1	1	3	3	27
Update the Planning Policy Framework to <u>more comprehensively address renewable generation</u> in State Policy	2		3		2				3	2	2	1	1	2	1		1				18
Update VPPs to include land use triggers for sensitive uses in flood prone areas				2					3	2		1	1		1		1				11
Update the Planning Policy Framework to <u>more comprehensively address climate change hazards</u> in State Policy					2				3				1	2	1		1	1	3	3	17

INITIATIVE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	TOTAL
Include a Particular Provision/s that articulates mandatory minimum standards of Environmentally Sustainable Design in key areas such as energy efficiency, green infrastructure, EV readiness etc	2	3	3	2			2	3	3	2	2			2	1	1		1	3	3	33
Update the Planning Policy Framework to <u>more comprehensively address sustainable transport</u> in State Policy	2	3	3		2				3	2	2		1	2	1	1	1	1	3	3	30
Work with DELWP and VCAT to provide information or training for VCAT P&E List members on their potential role in delivering climate responsive outcomes.							2		3					2			1	1	3		12
Establish principles, <u>process</u> and most appropriate mechanisms (i.e PAO, land swap) to ensure there is a sound basis for equitable and strategic relocation in areas of unmitigated risk, and to allow this process to begin early.	2			2					3	2				2	1			1		3	16

