



Moreland
City Council

Environmentally Sustainable development of buildings and subdivisions: A roadmap for Victoria's planning system

February 2021

Moreland Council Officer Submission

Moreland has reviewed DELWP's Environmentally Sustainable Development (ESD) of buildings and subdivisions: A roadmap for Victoria's planning System (Roadmap), 12 January 2021, that outlines planning reforms to strengthen sustainability policy in the Scheme.

Moreland supports the work that the Department of Land, Environment Water and Planning (DELWP) are undertaking in updating and expanding environmentally sustainable policy within the Planning Scheme.

Related Projects

It is worth noting that there are concurrent projects being undertaken by CASBE and a number of metropolitan Council's, in particular the Cities of Moreland, Yarra and Melbourne, that align with the proposed ESD related planning reforms. These projects seek to modernise ESD outcomes in new development focused on policy that aims to ensure zero carbon development and underpinned by robust evidence. Of prominence, Moreland City Council is undertaking a project to develop a set of Planning Scheme objectives and standards that will guide new development to incorporate renewable energy systems (including a solar roof zone) and electric vehicle infrastructure. Moreland would be pleased to share the project outcomes with DELWP in the near future. A summary of these projects is included in this feedback and draft outcomes are included in **Appendix 1** to this submission relating to the 'Elevating Environmental Targets' program.

Moreland, with representatives from Yarra and Melbourne City Councils, as well as, CASBE, have been regularly meeting with representatives from DELWP to discuss collective interests and projects in support of renewing and enhancing ESD Planning Scheme requirements. Given the joint pursuit between State and Local Governments to elevate current ESD Planning Scheme requirements, it is strongly encouraged that representatives from Moreland are a part of the stakeholder discussions over the coming months to finalise the particular provisions. Through the existing works delivered by Moreland to date to pursue a zero carbon Planning Scheme Amendment, Moreland would value the opportunity to be a part of the Stakeholder Reference Group referred to on Page 28 and wrote separately on 12 February 2021, to representatives from DELWP to formally request this

Moreland Council Summary of Recommendations

Moreland's review has identified a number of opportunities for the reforms, as well as some gaps and issues that could result in poorer sustainability outcomes than what is currently being achieved. These are detailed in Moreland's submission, with some key points detailed below:

- State ESD planning policy needs stronger links to overarching objectives and targets associated with the Climate Change Act 2017, such as outlining planning's role in contributing to 'net zero emissions' targets with zero carbon development.
- The ESD planning policy framework needs to ensure Councils' have the ability to include requirements (objectives, strategies and standards) beyond State policy for each environmental category to address local conditions and assist in achieving local government targets. Moreland advocates for an ESD focused particular provision that applies to residential, commercial, mixed use and industrial development with a schedule that provides opportunity for additional objectives, standards/requirements and application requirements for each ESD category.

- Timing of the review of Councils' Local ESD policies is critical to ensure sustainability outcomes are not diminished. It is recommended that this process is undertaken in collaboration with Moreland, CASBE and other local Councils with Local ESD policies after the implementation of Stage 2 (i.e. at Stage 3).
- Planning policy should not be explicitly linked to any National Construction Code performance measures to ensure planning policy is flexible enough to readily adapt to changing technologies and best practice.
- Any economic consideration on the sustainability measures must go beyond just the additional costs to build into a development but also consider the long-term economic benefits to occupants and additional costs to retrofit at a later stage.
- The ESD policy measures and performance measure outlined in the Roadmap are limited in detail to fully understand what sustainability outcomes State policy will achieve. Nevertheless, Moreland has identified opportunities to expand ESD State policy to achieve better outcomes, including but not limited to:
 - Indoor Environmental Quality (IEQ): This sustainability component includes measures such as thermal comfort, access to fresh air and daylight and directly influences the comfort of the indoor living environment. IEQ is a key matter considered in current planning applications in Moreland (and all Local ESD policies) and should be incorporated as objectives and measures within State ESD policy in the Scheme (rather than just included in guidance material).
 - Energy: Planning policy has the opportunity to direct development to go beyond just being 'solar ready' by including prescriptive measures to incorporate solar photovoltaic infrastructure in development.
 - Water management: There is opportunity to expand the application of Clause 53.18 (Water Management in Urban Development) beyond just the inclusion of single dwellings and incorporate VicSmart applications that could result in large buildings, such as buildings and works applications within Industrial and Commercial Zones.
 - Waste: Waste policy should expand to include four waste streams (glass, organics, recycling and garbage) to align with State Government recycling reforms and apply to residential, commercial, mixed use and industrial development.
 - Transport: Additional strategies should be included in the ESD reforms to address State objectives that encourage mode shift and minimising car dependency. This is not only needed to help achieve State emission targets but also support compact, high density neighbourhoods and improved sustainable transport options that are a directive of Plan Melbourne.
 - Landscaping, Biodiversity & Urban Heat: Additional strategies are needed in the PPF to recognise that the building layout and design needs to provide space for healthy trees. Additionally, with policy reforms that elevate Biodiversity, Greening and Urban Heat mitigation outcomes, guidance is needed from DELWP to support planners and developers to balance housing growth with these competing elements.

Moreland also request that all the background documents/evidence base that inform the policy measures for Stage 2 are included in the consultation of the Stage 2 ESD reforms. This will enable Council to better understand the rationale for the proposed changes for a more comprehensive review.

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1. Environmentally Sustainable Development Defined

The State ESD planning reforms will elevate the term Environmentally Sustainable Development (ESD) within the Scheme. The Roadmap identifies that there are a number of different definitions being used and this can pose an issue in how ESD is determined. As such, there is value in the inclusion of a planning definition of 'Environmentally Sustainable Development' to articulate a consistent understanding of what it encompasses. This is especially important as ESD encompasses processes and resources focussed not on ecological systems but also on our social systems to improve the quality of life now and into the future (as detailed on page 5 of the Roadmap).

Council's existing Local ESD policy was developed with the inclusion of the following description of the term Best Practice:

'In the context of this policy best practice is defined as a combination of commercially proven techniques, methodologies and systems, appropriate to the scale of development and site specific opportunities and constraints, which are demonstrated and locally available and have already led to optimum ESD outcomes. Best practice in the built environment encompasses the full life of the build.'

This concept of Best Practice is important element of this local policy as it allows flexibility within the policy to keep up with innovation and industry standards over time, as well consistency with how the term is interpreted. A definition of ESD would provide this same opportunity through clearly articulating how ESD involves ecological and social systems.

As this is a very important term that underpins the entire planning reforms, workshopping a proposed definition of ESD for the Scheme with Councils, Industry and other relevant groups, such as CASBE, is suggested as they are currently, or will be, key implementers and users of the ESD term.

2. Economic consideration

The Roadmap outlines that:

"Economic factors must also be assessed – improved sustainability standards can reduce the operational costs of a building and improve whole of community outcomes, but care is needed to ensure new performance standards are cost effective and do not impose unreasonable costs. All new ESD standards will be subject to economic assessment and stakeholder feedback"

Any economic consideration needs to go beyond just the additional costs to build in ESD measures into a development. There needs to be strong consideration to the long-term benefits, which will be necessary to meet Victorian Government climate and sustainability commitments. Furthermore, economic support for ESD at the construction stage is only increasing as:

- It is cheaper to build than to retrofit
- It has long term economic benefits, such as cheaper bills for occupants
- Sustainable buildings are a product valued and wanted by the community
- It supports improved health and environmental outcomes

3. Changes to the Planning Policy Framework

The table below provides feedback specific to the proposed PPF changes proposed for Stage 1. This feedback is limited due to the limited details of the Stage 2 reforms. The PPF and particular provisions work together and without the details of Stage 2, it is difficult to comprehensively respond to the proposed PPF changes. Moreland hopes that as part of Stage 2 consultation, a review of the PPF is included to ensure a robust analysis of the policy framework is considered.

Much of the Roadmap talks about a transition to a 'low emission future'. This should be made stronger and refer to the 'net zero emissions' target in the Climate Change Act. Policies (both PPF and Stage 2 changes) should also be made stronger to align with this goal. In particular, the PPF should explicitly link back to an overarching objective associated with the Climate Change Act regarding achieving zero carbon development and addressing emissions from the built environment system.

PPF Clause	Feedback on proposed Stage 1 reforms in Appendix A
01 – Purpose	<p>New purpose – ‘To promote environmentally sustainable development’.</p> <p>The word ‘promote’ needs to be replaced and strengthened. Promote means to support or actively encourage and is therefore not binding or enforcing on development which must be the case. Consider wording such as: ‘ensure’, ‘provide’, ‘enable’, ‘deliver’. Reference should also be made to the objectives of the Climate Change Act 2017 (Vic).</p>
11 - Settlement	<p>The Climate Change Act establishes a long-term emissions reduction target of net zero by 2050. The Roadmap outlines that planning can help support achieving this target and supports this statement by referencing emissions targets under the Climate Change Act 2017 in proposed objectives and strategies of the PPF.</p> <p>As such, Clause 11 (Settlement) should acknowledge planning’s role by including an additional dot point <i>‘net zero emissions’</i> under “Planning is to recognise the need for, and as far as practicable contribute towards:”</p>
11.01-1S - Settlement	<p>New strategy – ‘Plan for regional responses to climate change adaptation and mitigation.’</p> <p>The use of the word <u>regional</u> could be interpreted as this strategy only applies to regional settlements, however, this strategy should apply to all areas of the State. As such, the word ‘regional’ should be removed from this strategy.</p>
12.01-1S - Protection of biodiversity	<p>New Strategy – ‘Support land use and development that contributes to protecting and enhancing urban biodiversity values’</p> <p>This is an aspirational strategy that in practical sense is unlikely to be delivered. Based on this strategy, support would only be for designs that contribute to biodiversity and discourage those that don't. Would need guidance on how to balance biodiversity with managing growth directed by Plan Melbourne.</p> <p>What are 'urban biodiversity values', and how does urban biodiversity differ from other types of biodiversity? This needs to be explained. For example, a diverse range of weeds could contribute to biodiversity but perhaps is not the intent of the phrase.</p> <p>There is federal biodiversity information available on the location of threatened species that should also be considered and referenced in the policy guidelines.</p>
13.06-1S - Air quality management	<p>New strategy - ‘Limiting air emissions, including dust’</p> <p>If this is applied to the construction of a building, it could lead to a requirement for construction management plans. This is a concern to Moreland, as this should be managed through other compliance processes rather than by planning.</p> <p>Moreland suggest further clarity is needed in the PPF to ensure that this strategy relates to limiting air emissions from a proposed use rather than during the construction phase of a building.</p>

<p>13.01-3S – Urban heat mitigation</p>	<p>The objectives and strategies detailed should align and encompass reciprocal objectives and strategies developed as per Action 91: Whole-of-government approach to cooling and greening Melbourne.</p> <p>As part of CASBE Elevating Environmental Targets Project (further described in this submission), objectives and standards related to this clause ((Draft Urban Ecology and Urban Heat Elevating Environmental Targets) have been developed and attached to this submission as a useful reference.</p> <p>Tree health also relies on adequate space for the tree to grow (root and canopy). Council suggests an additional strategy to recognise that the building layout and design needs to provide space for healthy trees. This will also support the long-term retention of trees, as the strategy (and supporting policy in the particular provisions) ensures tree planting numbers and location balances the greening and cooling outcomes with access to sunlight and having useable recreational space.</p>
<p>15 - Built environment and heritage</p>	<p>New Policy - <i>'Minimises detrimental impacts on the built and natural environment'</i></p> <p>The use of the term detrimental is open for interpretation and has a subjective application. What is the test for 'detrimental'? Is this linked or traded off with the precautionary principle as to what is considered detrimental to the built and natural environment? Should this be built 'or' natural environment and not 'and'. The reason being, the two should be treated mutually exclusive and both not deemed to be satisfied to qualify 'detrimental' impact.</p>
<p>15.01-2S - Building design</p>	<p>New Strategy – <i>'Encourage retention of existing vegetation and planting of new vegetation as part of new developments.'</i></p> <p>Include the word ensure to the policy to affirm that new vegetation is an expectation to support greening and cooling outcomes and realise Urban Heat Mitigation objectives:</p> <p><i>'Encourage retention of existing vegetation and ensure planting of new vegetation as part of new developments.'</i></p> <p>Moreland has concerns with the strategy (or any planning policy) that links planning design with National Building Code. This code is not only outdated, using it as a reference removes the flexibility for planning outcomes to engage with changing technologies and best practice as they emerge (discussed further under the heading Energy).</p> <p>Such provision will only impede 'best practice' development that is required as per Councils' local ESD policy. The overarching objective of 'best practice' encourages that development exceeds minimalistic, federally administered, building code standards. Such provision must be removed with the need for cost effective considerations otherwise covered and drawn from the objectives of the Planning and Environment Act 1987 (Vic), particularly s 4(1)(a) 'to provide for the fair, orderly, economic and sustainable use, and development of land'.</p> <p>As such, Moreland does not support the following strategy that outlines siting and design measures should support:</p>

	<ul style="list-style-type: none"> • 'Cost effective compliance with energy performance standards in the National Construction Code.' (Delete)
15.01-3S - Subdivision design	<p>Strategy - <i>In the development of new residential areas and in the redevelopment of existing areas, subdivision <u>should</u> be designed to create liveable and sustainable communities by:</i></p> <p>The should in this strategy undermines the importance of the objective and strategy and suggest liveable and sustainable communities is a discretionary outcome. Suggest the strategy is reframed to necessitate the design outcomes directed in the strategy.</p> <p>Examples on how ESD can be incorporated in subdivisions would be useful guidance material. CASBE has prepared a Sustainable Subdivision Framework which may be a useful reference and can be accessed via the following link:</p> <p>https://www.casbe.org.au/resources/sustainable-subdivisions-resources/</p>
15.02-1L	<p>Clause 15.02-1L should also be retained and reviewed following the implementation of Stage 1 & Stage 2 ESD State policy reforms (ie create a Stage 3). This will ensure that local policy outcomes are not lost in the implementation of state policy.</p>
18.01-1S – Land use and transport planning 18.02-2S – Public transport	<p>Council supports the updated objective to the Public Transport Clause to include 'minimise car dependency'. Minimising car dependency also relates to Land use and transport planning and should also be detailed in Clause 18.01-1S.</p> <p>Additional strategies are needed in these PPF Clauses, and in the particular provisions, to understand how planning can support this mode shift away from car use.</p>
19.01-1S - Energy supply	<p>Reference to mechanisms such as embedded networks, power purchase agreements (PPAs) and offsets must be entertained to ensure that the net zero emission greenhouse gas objectives of the Climate Change Act will be achieved.</p> <p>Strategy - <i>Support the development of <u>energy infrastructure in appropriate locations</u> where it provides benefits to industry and the community and takes advantage of existing infrastructure.</i></p> <p>'Energy infrastructure' should be referred to as 'low emission energy infrastructure' or 'net zero energy infrastructure.'</p> <p>It is not clear what an 'appropriate location' is, further clarity is needed. Moreland believes that all locations are capable of harnessing low emission infrastructure. If 'appropriate locations' is referring to particular land uses than this needs to be stated for clarity.</p>

4. ESD categories included in the reforms

The following feedback relates more specifically to the specific ESD categories (detailed below), and future performance objectives and standards to achieve meaningful and sustainable outcomes:

- Energy efficiency of buildings and renewable energy usage
- Stormwater management and water usage
- Recycling and waste minimisation
- Active and sustainable transport

- Cooling of the urban environment
- Air and noise pollution

Currently, the scheme includes some State based prescriptive performance measures to direct particular sustainable outcomes for the above ESD categories. However, they are not consistently applied across the different typologies and often don't go far enough to achieve meaningful environmental outcomes. The Moreland review of Stage 2 detailed in the Roadmap has identified a number of gaps and issues that may have undesirable results.

Expanding the ESD categories to include Indoor Environment Quality

The comfort of living, working or visiting in and around a building is directly related to the environmentally sustainable design elements of a building. This is important to remember, as a key focus of sustainable development is around the human experience, as acknowledged in the Roadmaps definitions of ESD that sustainable development is development that 'improves the total quality of life'. An obvious omission in the framework is explicit planning policy (objectives and measures) around indoor environment quality (IEQ) and associated matters such as thermal comfort, access to fresh air and daylight.

Moreland considers IEQ as important as the other ESD categories and is a key design measure sought in current planning applications directed by local policy. State ESD planning reforms should go beyond describing relevant design measures in guidance materials and elevate IEQ by including strategies and measures within the Scheme.

Location and Structure of a new Particular Provision

Page 13 of the Roadmap refers to 'inconsistency between councils over building ESD expectations can place a financial burden on businesses that are required to understand and comply with different standards across the state'. This will only be improved with better direction and guidance from the State by introducing prescriptive standards and requirements which align with a common overarching objective – arguably the objectives and obligation to comply with the Victorian Climate Change Act 2017.

Additionally, reference to the publication 'Victorian Competition and Efficiency Commission 2010, Local Government for a Better Victoria: An Inquiry into Streamlining Local Government Regulation' on page 13 is outdated (11 years old) and predates the introduction of local ESD policies introduced in 2015; 5 years later. Currently, as at February 2021, 19 Councils throughout the State have a very consistent local ESD policy. All ESD objectives articulated throughout each ESD policy are identical between all Councils that have adopted a local ESD policy. Moreland suggests that the reference to this report is no longer relevant and should not form part of the discussion.

The framework around Councils Local ESD policy has been successful due to the way the ESD elements are considered together in one policy, acknowledging that the measures collectively influence each other for a holistic approach to sustainability design. A way to ensure sustainability design is consistently and easily applied to all building typologies is through an ESD focused particular provision (ie Clause 53.XX) that captures all (or most) ESD categories, includes objectives and standards and applies to all residential, mixed use, commercial and industrial buildings in a similar way to Councils Local ESD policies. This kind of structure would assist in addressing duplication throughout the Planning Scheme by creating a central area focused on ESD requirements and provide the opportunity for local schedules to be used for Council's to develop local requirements where appropriate for all ESD categories.

A Scheme structure that provides opportunities for local requirements for each of the ESD categories is essential to ensure that Councils have the ability to tailor planning policy to respond to their local conditions or go beyond State targets where appropriate.

Energy

The Roadmap details that the proposed planning reforms will not include any new policy to direct design and siting measures to improve the energy efficiency of residential development. Instead, the Roadmap outlines that this sustainable design elements will be included in guidance material only. This approach results in a very limited consideration on what influences energy efficiency and seeks to align and link planning policy to the National Construction Code (NCC). Moreland is concerned with linking the NCC performance standards with planning policy for the following reasons:

- The energy performance standards in the NCC are currently outdated and are not considered to achieve the adequate sustainability outcomes. Aligning with the NCC would result in poorer buildings being built than

currently being approved. For example, the minimum NatHERS rating outlined in the NCC is well below best practice sustainable design.

- By limiting relevant energy efficiency objectives and standards for planning purposes with NCC 2022 requirements, given their potential shortfalls, this would be perceived to discriminate against and conflict with the objectives and requirements that are required to be achieved under the *Climate Change Act* and for the built environment system.
- The role of planning is not to necessarily align with the NCC. Planning policy, and associated ESD provisions need to be flexible enough to readily adapt to changing technologies and best practices, and this link will get in the way of this flexibility.
- There are already clear examples in Victoria of varying the NCC code, as demonstrated by Victorian specific code variations related to solar hot water systems and rainwater tanks.
- Will impede 'best practice' development required by Councils' Local ESD policy, an overarching objective outcome Council seeks to continue to pursue in new development (as detailed in response to proposed PPF changes).

This issue is discussed further at section 7 - ESD: should it form part of the Planning Scheme or the National Construction Code.

Energy efficiency

The roadmap only outlines improved guidance is to be undertaken for energy efficiency relating to residential development and not changes to planning policy. However, there is a place for planning policy to direct design measures to support the energy efficiency of buildings and the comfort within them, such as:

- Indoor Environment Quality – indoor environment quality and matters such as thermal comfort, access to fresh air and daylight are very important to and should be included as an area of reform either as a separate ESD category or incorporated in energy efficiency reforms.
- External shading to all north, west and eastern facing habitable room window. This is a design measure that can be easily prescribed and will stop heat gains during the summer months. It is also a design measure included in the BESS tool related to energy efficiency and one directed by Moreland for all residential development.
- Double glazing to all habitable rooms. Such design measure not only improves energy efficiency through promoting thermal performance however reciprocally improves the thermal comfort of residential development to ensure living areas remain tolerable for occupants when the development is exposed to temperature differentials. Double glazing is also a design measure included in the BESS tool with the inclusion of such measure also extending to other development typologies where applicable.

Renewable energy usage

'Solar ready' building design to support the future installation of rooftop solar systems is a reiteration of what several Councils have in their existing local ESD Policy, that being '...space allocation for solar panels'. Essentially, most medium density development can be 'solar ready' and therefore there is little improvement between what is stated as a proposed consideration for the particular provisions and what already occurs or what exists in local ESD policy.

Moreland has experienced great traction in the ESD Planning space with the installation of solar panels in new buildings. For example, in the time period of 1st July 2019 – 30 April 2019, the Moreland Sustainability Built Environment Unit assessed in excess of 372 formal planning applications which included approximately 283kW solar photovoltaic (solar PV) committed to being installed. It is clear that solar panels are not only able to be accommodated during the design phase but are a readily accepted ESD feature in the Victorian planning and building system. Moreland considers renewable energy systems must be provided in new development; particularly if the building framework (ie. NCC) does not address this matter.

The design of a roof form in terms of area, pitch and orientation are all elements that need to be considered to ensure the roof design can occupy an efficient solar PV system. Related planning policy should therefore acknowledge and detail these elements as requirements to facilitate renewable energy systems in new buildings (rather than be in guidance material). If the roof design is not resolved during the planning stage, it will require landowners/developers to seek a variation of their planning approval in order to install a solar PV system and/or obtain building approval. In some instances, such as with apartment buildings, retrofitting solar systems is particularly difficult due to the different and competing elements already included on their roofs.

In acknowledgement that solar panels have become a common part of building design, Moreland has undertaken extensive work investigating the feasibility of specific solar PV requirements for new development, including developing 'solar ready' zones and detail minimum solar PV requirements for different typologies. The evidence to date outlines that:

- That there is space to include solar PV in residential, mixed use and industrial development
- Solar PV on an industrial building could offset the energy use of the building. Solar PV for residential and mixed-use buildings in conjunction with energy efficient services and appliances and some offsite renewable energy purchases, would support only renewable energy sources for the building.
- The cost to include a solar PV is a very small percentage of the cost of the total construction costs. Whilst this is an additional cost, their inclusion will generate long term electricity cost savings.

Objectives and standards to support this evidence have been developed and have been included as an appendix to this submission (**Appendix 1**).

Moreland considers at a minimum the planning reforms should apply 'solar ready' to all commercial and industrial development (not just residential development). Additionally, there is opportunity to expand the State ESD planning reforms to require solar energy systems within the design for all residential, commercial and industrial buildings.

Water

As a part of supporting the implementation of earlier stormwater reforms that are also under consideration, support must be provided to both local government and industry to adequately assess the integrated water management performance of development. Whilst not mentioned in the Roadmap, DELWP must continue pursuing the development of a revised stormwater assessment tool that extends beyond assessing merely stormwater quality and facilitates the broader integrated water management framework (i.e. flow, volume and water efficiency etc.). This will align with the future requirements proposed under the Environment Protection Authority Victoria's 'Draft urban stormwater management guidance' (publication 1739).

Stormwater management

Currently Clause 53.18 – Stormwater Management in Urban Areas directs development to address the management of stormwater in the design 'to mitigate the impacts of stormwater on the environment, property and public safety, and to provide cooling, local habitat and amenity benefits'. Clause 53.18 however does not universally apply to all development applications, with Clause 53.18.1 providing a number of exemptions. Stormwater management however is critical to all areas of Victoria, not just urban areas or particular types of development. Moreland supports the expansion of this Clause to apply to single dwellings.

There is also an opportunity in these reforms to expand the application of Clause 53.18 beyond just to single dwellings as detailed in the Roadmap. For example, there are a number of developments that fall under the VicSmart class of applications, such as (but not limited to) 'buildings and works' applications in an Industrial Zone where the cost of the works can be up to \$1,000,000, or in a Commercial Zone if the works is up to \$500,000. These type of VicSmart developments can be a substantial building that would generate considerable stormwater impacts if not managed appropriately, however, they are exempt from Clause 53.18.

Raingardens are detailed as a useful tool for stormwater management at page 25 of the Roadmap. Raingardens however impose a number of challenges when included in developments, especially within medium density developments (construction, maintenance and enforcement). Moreland has developed a number of resources to assist applicants in choosing design measures, including a hierarchy of treatment options, that can be accessed via the following links.

<https://www.moreland.vic.gov.au/planning-building/environmentally-sustainable-design/water-sensitive-urban-design/>

Any review of stormwater tools or requirements should consider these challenges and potentially rely more heavily on simpler forms of stormwater management.

Water usage

The figure on page 18 suggests the planning reforms will include direction for the re-use of grey water in the water management of development. Moreland supports this direction. Currently, it is not popular to include the re-use of grey water in the design due to the perceived health impacts and maintenance issues. Policy reforms by

DELWP, including improved guidance material on the benefit of grey water re-use and how to incorporate it in the water management of new buildings will assist in greater uptake.

Waste and Recycling

Currently the Planning Scheme deals with waste only for Apartment buildings at Clauses 55.07-11 and Clause 58.06-3, and focuses on only three waste streams: organics, recycling and garbage streams. The State Government's 'Recycling Victoria: a new economy (2020)' outlines reforms to the recycling system, including expanding the waste streams from three waste streams to four to include glass. The Planning Scheme should align with these changes to the Victoria's recycling system. The planning reforms should expand the existing waste policy to direct space and waste management for four waste streams (glass, organics, recycling and garbage) for all multi dwelling developments, and also be expanded to apply to commercial and industrial development.

Sustainability Victoria's Better Practice Guide is yet to be updated to reflect changes to waste management as outlined in Recycling Victoria. Moreland has participated in the Sustainability Victoria working group in amending the waste guidelines for multi-unit development, however no final amended guidelines have been released. Updated guidance material for how to meet ESD 'waste' will be extremely helpful as the current guidelines are not considered to be user friendly and subsequently not embraced by Council and planning applicants.

Additionally, at present the guide relies far too heavily on kerbside collection of mobile garbage bins for all development types. The introduction of a four-stream waste system for all residential properties will mean it is not feasible to store the required number of bins on site much less collect them at kerbside for most medium and high density developments. Planning for on-site collection of bulk storage bins will be required for these developments in preparation for the introduction of the 4-stream system.

The reforms also seek to encourage opportunities for subdivision infrastructure to include small scale recycle and resource recovery technology. Guidance material could also include on site, separation, storage and collection for e-waste, hard waste, soft plastics and charity bins and apply other development types.

Transport

Active & Public Transport

The Roadmap outlines on page 23:

'There is an opportunity to significantly reduce the state's emissions through prioritising walking, cycling, public transport and use of low emission vehicles (e.g. electric vehicles).'

It further states:

'Plan Melbourne supports the role of compact, higher-density neighbourhoods to create demand for more sustainable transport options including public transport, walking and cycling, and to reduce overall travel time.'

And includes in the proposed Clause 18.02-2S Public Transport the following updated objective:

'To facilitate greater use of public transport, promote increased development close to high quality public transport routes and minimise car dependency.'

But confusingly the Roadmap also outlines the reforms seek to make changes to development design so to not impact on the public transport system.

'To support these positive changes, it is also vital to adequately consider the additional pressure new developments can put on the existing public transport system. By taking actions in the planning and design phase of new developments these effects can be better managed for the benefit of future and current residents.'

Investment in public transport systems to cater for the growing population is key to support sustainable 'compact high-density neighbourhoods' sought by Plan Melbourne, rather than relying purely on building design.

Directing a building design that encourages a mode shift away from car ownership however would be a useful policy directive to include in these ESD planning reforms,. Mode shift can:

- Contribute significantly towards a reduction of carbon emissions given transport currently accounts for about 20% of Victoria's greenhouse emissions;

- Allow a greater proportion of roads space and limited public spaces to be used for greening and open space to improve the quality of streets and public places, while also addressing the Urban Heat Island Effect;
- Provide opportunity for improvements to the pedestrian and cycling network;
- Improve health through increasing physical activity and improving air quality; and
- Facilitate better quality development outcomes if less car parking is required to be provided.

Bicycle provision at 52.034

The recommended change to bicycle provisions is welcomed. Moreland currently pursues one space bicycle parking space per dwelling for medium density and apartment typologies. This is considered appropriate and an important element of new dwellings to encourage active transport mode shift.

Bike parking has become a standard design for medium density developments, with bike racks/space easily incorporated in garages. Similarly, with apartment typologies Moreland achieves this rate with the bike spaces generally located within the basement. There are challenges however with the bike parking for apartment typologies due to competing spaces in basements and subsequent quality of the bike parking. However, stronger planning policy in the Scheme would improve outcomes, such as policy that:

- Directs a minimum bike space rate of one bike space per dwelling
- Design measures in accordance with bike parking related Australian Standard to ensure the spaces are large enough and spaced out enough for safe and easily accessible bike parking.
- Encourages bike spaces in apartment buildings to be located on the ground level and/or close to entrances of basements.

Low emission vehicles

The Roadmap is not clear on how the planning policy reforms will address supporting low emission vehicle infrastructure in new development, i.e., direct buildings to be 'electric vehicle (EV) ready'. There is a need for the Scheme to include policy that requires developments to consider how EV's will be used and design accordingly to support the growing uptake of low emission vehicles. For example, a recent planning permit application for an apartment building in Moreland containing in excess of 200 dwellings provided only 1 'EV ready' car space which could only be accessed by 1 car space in the future (as each car parking was allocated to a particular dwellings). Clear and unambiguous planning policy is needed to prevent this outcome as well as guidance on how to demonstrate a development is EV ready.

Moreland has responded by investigating the feasibility for new residential development to include either low emission infrastructure or ensure buildings are EV ready (ie that the building has the energy capabilities and EV infrastructure within the building, or, is built so the infrastructure can be easily installed at a later date). The evidence to date outlines that:

- Electric vehicle infrastructure can easily be installed in medium density development with charging provided from dwelling electricity.
- There is scope to provide electric vehicle infrastructure for an entire apartment development, ensuring that parking bays are, at the minimum, EV ready with sufficient provision for wiring and cabling to be included within new development.
- Prioritising the location of electric vehicle parking bays within development, including EV charging units where there are shared spaces, as well as, ensuring that other electric vehicles such as motor cycle, moped, bicycle and scooter parking can be serviced by EV charging systems.

Objectives and standards to incorporate electric vehicle infrastructure and charging systems for a range of building typologies have been developed (supported by evidence) and would be a useful inclusion in the State ESD planning policy reforms. They have also been included in **Appendix 1** to this submission.

Landscaping, Biodiversity & Urban Heat

Broader uptake of a suite of climate resilience and adaptation objectives and standards should be considered as a part of this category. Currently, the Planning Scheme does not have sufficient provisions to explicitly address climate resilience matters other than flooding and bushfires. The opportunity to review and incorporate broader climate resilience requirements should also bridge a nexus between local government's responsibilities under the Local Government Act 2020 (Vic) and requirements detailed under a Council's Planning Scheme.

DELWP's Cooling + Greening Project

Moreland supports strengthening planning policy to elevate greening and cooling outcomes and have recently provided Officer feedback on planning reforms to DELWP's Cooling + Greening Project. This Officer feedback has been included in **Appendix 2** to this submission. Moreland looks forward to the formal consultation on the proposed cooling and greening planning policy outlined in an email to Moreland from DELWP on the 15 December 2020 as part of a preliminary review.

It is worth highlighting that guidance on how to balance biodiversity and greening with managing growth directed by Plan Melbourne is needed. Commonly housing growth outweighs greening and biodiversity outcomes. With these reforms which will elevate Biodiversity, Greening and Urban Heat mitigation outcomes, guidance is needed from DELWP to support planners and developers to balance these often competing elements.

Amendment C189more

[Moreland's Planning Scheme Amendment C189more](#) seeks to green and cool the urban environment through increasing canopy cover in residential areas. More specifically, C189more proposes additional tree planting requirements to be added to the Residential Zone schedules directing taller and wider canopy trees to maximise canopy shading; design of wider private open spaces to provide the space for trees to grow to their full potential; and particular planting locations to assist in shading of hard surfaces that absorb and radiate heat.

The metrics in C189more came from extensive analysis of medium density applications in Moreland that demonstrated with minor changes to the site layout, medium density development could better utilise the private open spaces to increase tree canopy with the planting of larger canopy trees without impacting dwelling yield. Recognising the different built form outcomes within different residential zones, the extent of canopy tree planting varies between different residential zones. Below is a summary of the tree planting metrics translated into the relevant zone schedules as additional B13 Landscaping requirement.

Summary of Standard B13 Tree canopy metrics in C189			
Zone Schedule	Front setback (4.5m or more)	Small front setback (less than 4.5m)	Other open spaces
NRZ & GRZ	Minimum of 1 tree: <ul style="list-style-type: none"> • 8-12m high • 7m wide canopy • 4.5m x 4.5m area 	Minimum of 1 tree: <ul style="list-style-type: none"> • 6-8m high • 5m wide canopy • 4.5m wide area 	Minimum of 1 tree in each SPOS: <ul style="list-style-type: none"> • 6-8m high • 5m wide canopy • 4.5m wide area
RGZ & MUZ	Minimum of 1 tree: <ul style="list-style-type: none"> • 6-8m high • 5m wide canopy • 4.5m wide area 		Minimum of 1 tree elsewhere on the site: <ul style="list-style-type: none"> • 6-8m high • 5m wide canopy • 4.5m wide area

Other findings were that tree positioning can improve shading and cooling outcomes, with C189 encouraging tree's to be positioned to shade the vehicle accessway where possible (orientation of the lot is the greater influence of this outcome). C189 directs this in the zone schedules B13 requirement:

Where a vehicle accessway is provided, the canopy tree(s) should be located to provide shading to the vehicle accessway, if practical.

The MD applications often included a landscape strip along the vehicle accessway, with the introduction of the garden area increasing their width. Meaningful landscaping in the common areas was found to improve the quality of MD housing and therefore is a design that Moreland wishes to encourage. C189 utilises B13 to highlight this with the following included in the zone schedule:

Additional planting should be provided along any vehicle accessway

C189 policy aligns with the ESD planning reforms and the preliminary changes proposed in the Greening + Cooling Project. The local landscaping requirements proposed by C189 is a good example how local requirements can work with State ESD reforms to achieve State mandated outcomes and expanded to focus on local conditions.

Air and noise pollution

Proposed Clauses 13.05-1S and 13.06-1S includes the State Environment Protection Policy (SEPP) as a 'policy document'. Council currently struggles in this area because it is often seen as the domain of the EPA, however, it is critically important at the planning design phase. One reason being that SEPP does not offer design solutions to reduce air and noise pollution.

Further State Government guidance is required to assist Council and applicants in how air and noise pollution can be ameliorated in new building, such as but not limited to:

- How will an apartment building cater for air pollution on arterial road?
- What design measures will these include?
- How will there be maintained?

Definitions

With new and improved sustainability policy in the Scheme comes a whole suite of new terms, including the following terms used in the roadmap: environmentally sustainable development, solar ready, solar zones, electric Vehicle readiness (EV read), green roofs, green walls and cool surfaces. Including definitions of these and other new terms within the Scheme should be part of the ESD planning reforms. This will provide clarity of what the term means to ensure there is consistency in how the policy is applied and considered.

As an example, green roofs are a useful cooling measure, however, a green roof can be interpreted as decking on a roof with plants. A definition of what constitutes a green roof will overcome this issue by clearly defining what a green roof is to not only inform a design, but also help assess the appropriateness of the design.

5. Moreland Council Goal - Towards Net Zero Emissions

Stage 3 – review of local ESD policies

Local ESD Policy has been consistently introduced and successfully implemented into 19 Victorian Planning Schemes, with a number of others currently in development. A key reason for this policies ability to influence sustainability in the built environment across Victoria is the way the policy and supporting tools interrelate and the collaborative way they are managed through Council Alliance for Sustainable Built Environment (CASBE).

Reviewing local ESD policy as part of the implementation of State ESD planning reforms is needed to ensure there is no duplication. Further clarity is required as to how, when and with whom 'DELWP will work with in the Local Government sector to review how local ESD policies are amended to complement the new state provisions and avoid any repetition or duplication with state objectives' (page 13). Moreland requests that the process to review the local ESD policy is a collaborative process that involves key developers and users of the policy. Given Moreland's extensive work and experience with ESD policy reforms, Moreland requests to be included in this working group as either representing local government or part of a group of 5-6 CASBE members.

Moreland also requests that this review occurs after the State policy has been updated, suggesting a Stage 3 to the Roadmap. This is to ensure:

- the nuance of the existing local ESD policy is understood
- changes are appropriate to continue to achieve sustainability outcomes currently being realised by the existing local policy and assessment tools
- local sustainability outcomes are not lost while Stage 2 is being developed and implemented

The Roadmap at page 14 refers to the DELWP format for ESD local policies as a part of the local Planning Scheme translation to the new PPF format under the Smart Planning reforms. The DELWP format for ESD local policies must retain the term 'best practice' currently included in Council's local ESD policies in both translated and non-translated Local ESD policies and should be modified to align with the CASBE resolved version that better describes the strategy to achieve 'best practice' environmentally sustainable development. The term and description of 'best practice' served as the overarching objective and primary function of the local ESD policy through evoking continual improvement for development against industry standards and legislative reform such as the emission targets and obligations specified under the Climate Change Act and a Council's climate change pledge. The CASBE resolved local ESD policy is included as **Appendix 3** to this submission.

Why CASBE

CASBE would be a welcomed inclusion in the review of existing Local ESD policy given their member base and their knowledge and contribution to sustainable design in the planning process to date.

CASBE was established in 2009 to lead and represent local Councils in achieving improved sustainability outcomes in the built environment. CASBE now has a membership over 30 Victorian Councils and is guided by a steering committee comprised of representatives from each member council within the Sustainability & Planning (Strategic and Statutory) fields for a collaborative process to decision making, as well as providing a forum to share information and ideas for best practice environmentally sustainable development.

CASBE also creates, updates and manages key assessment tools such as the online tool BESS used widely by Councils and the development industry to demonstrate how a proposed development addresses sustainable design in the planning permit process.

Since its formation, CASBE has also formed successful partnerships with not only local Councils but also with relevant agencies and the development industry.

Importance of local variations

The Roadmap details that the ESD reforms will provide an opportunity for local objectives and strategies relevant to each municipality to be inserted in the PPF. However, the roadmap is not clear whether there will be opportunity for Council's to include local standards to achieve particular performance outcomes beyond what State policy directs.

Moreland has been a leader in environmental outcomes in new development through the planning process. Moreland was one of the first round of Councils to introduce local ESD policy into their scheme, using this policy to inform decisions since 2015 and are always looking forward, seeking out new ways to achieve improved sustainability outcomes for the community.

Moreland is currently working on projects to elevate the existing targets within the SDAPP framework and develop new sustainability measures to align with modern day sustainability outcomes that will support Council's Pledge in transitioning to net zero emissions community and economy (more detail of projects under heading Elevating Environmental Targets Project). As such, it is important that the planning reforms include a framework that will provide the opportunity for Council's to include local performance measures and additional sustainability categories to achieve Council 2040 targets and subsequent State 2050 targets.

Moreland's Pledge outlines Council's commitment to achieve a zero carbon Planning Scheme and help Victoria transition to a net zero emissions community and economy.

As detailed previously, Moreland's preference is for Stage 2 reforms to include an ESD focused particular provision that captures all (or most) ESD categories and which includes a local schedule that provides opportunities for local objectives and standards/requirements. As an alternative, existing provisions could be expanded to enable local ESD requirements.

The Scheme already includes a similar framework that allows local conditions for state-based performance measures within schedules to zones and particular provisions. For example, the residential zone schedules include the ability to include additional requirements for some Clause 54 and 55 standards. These additional requirements currently in the residential zone schedules could easily be expanded to include all ESD related standards for medium density development, as well as expanded to include local requirements for apartment developments prescribed by Clause 57 and 58. This would provide Councils the ability to include local requirements where evidence-based research has been demonstrated.

Residential, commercial and industrial areas can vary substantially within a municipality. Recognising this, allowing local requirements for ESD related measures will allow Council's to tailor requirements to suit the local environment. For example, the fine development pattern and urban structure of inner-city commercial strips like Sydney Road are substantially more constrained to incorporating additional tree canopy requirements for urban cooling than off corridor commercial sites such as Barkly Square. Similarly, Moreland's Newlands Road industrial precinct located along two creek corridor has the opportunity for more canopy cover than within Moreland's Coburg North industrial precinct.

BESS & State ESD Tool

BESS has been utilised by Councils and industry for the past 6-7 years with its development based upon the foundation of the former STEPS and SDS sustainability/ESD assessment tools. BESS is used more extensively by planning and sustainability professionals than the rating tools GreenStar and EnviroDevelopment referenced on page 5 of the Roadmap. This is for a number of reasons, including: the ease of BESS purposely synchronising with the ESD planning system; it's accessibility and legibility for non-ESD professional (as well as ESD and design

professionals); its status as a free and publicly funded tool; and ability to seek expert assistance when using BESS by calling the relevant Local Council.

The future of BESS as the State ESD tool must be entertained by the State government for reasons subject but not limited to:

- The BESS tool being utilised by at least, approximately, 90% of applications as the tool of choice where an ESD assessment is required. This emphasises the strong industry uptake, familiarity and acceptance of the BESS tool given its market share and dominance.
- Current free-for-use application with local assistance given by the relevant Local Council;
- A governance structure that is largely made up of government authorities including the MAV to ensure ongoing improvement and a robust framework in line with local and state government policy setting and regulation; and
- Significant government funding from both Local (LGA) and State (MAV) authorities to date has been utilised to develop and continually refine the BESS tool. BESS was originally created by Moreland City Council prior to being administered by the MAV. Much of the original seed funding to create BESS was from the Victorian State Government. Furthermore, the development of a new tool, to compete with BESS, would otherwise be perceived to have exhausted and wasted government funds merely to be superseded by a new ESD tool.

For the reasons above, it would be remiss of the State government to develop a separate ESD tool that would otherwise scatter the marketplace, require further education, upskilling and training by both government and industry to familiarise with the tool, and thus slow-down the planning application approval process.

Elevating Environmental Targets Project

Over the past 12 months, Moreland Officers, along with officers from the Cities of Melbourne, Yarra and Port Phillip, have been part of the Elevating Environmental Targets working group established through the Council Alliance for Sustainable Built Environment (CASBE). The Elevating Environmental Targets working group entails pursuing a project that requires reviewing Councils' local ESD policy and developing recommendations for changes to achieve improved sustainability outcomes. Such outcomes aim to ensure that development adheres to the principles of best practice, addresses emission reduction, is designed as climate resilient, incorporates social sustainability concepts, and includes innovation.

Several environmental building categories are being investigated and reviewed to address each of the outcomes and identify the relevant gaps to elevate the standard of development.

The environmental building categories include:

- Energy (including Energy Efficiency and Renewables)
- Urban Ecology (including Green Infrastructure)
- Circular Economy (including Waste, Recycling and Materials)
- Transport (including Electric Vehicles)
- Indoor Environment Quality
- Integrated Water Management
- Climate Resilience (including Urban Heat)

This review not only looks at the environmental targets of different environmental building categories in the SDAPP (Sustainable Design Assessment in the Planning Process - SDAPP) framework but also the tools to best achieve the targets. Additionally, leading Councils within the working group, including CASBE, regularly meet with personnel from DELWP to provide an update of the project's progress given its alignment with Action 80 of Plan Melbourne 2050 – the State ESD Policy.

Recently, the Elevating Environmental Targets working group established updated, draft, objectives and standards which pertain to each of the environmental building categories earlier detailed. The objectives and standards are raw in format and are yet to be translated for suitability within a future version of a Council's Planning Scheme. Such raw objectives and standards have been included in this submission for useful reference and also include Moreland's draft objectives and standards pertaining to the PV and EV projects that were independently commissioned (**Appendix 1**).

The raw objectives and standards have also been provided to CASBE member Councils for feedback which will be road tested to determine their suitability and applicability within a future version of a Council's Planning Scheme or, alternatively, an appropriate tool.

The project scope aligns with the work outlined in the Roadmap and would be useful to inform the prescriptive objectives and standards under the proposed environmental building categories.

This progressive work also aligns and supports the Victorian Climate Change Act 2017, Victoria's Climate Change Framework, Victoria's Climate Change Adaptation Plan 2017 – 2020 and Victorian's Renewable Energy Action Plan. Moreland stresses to highlight that currently, that none of these Plans, legislation and framework, currently provide guidance or assurance that Victoria's ever-increasing construction and development sector is on track to meet mandated climate change targets (such as net zero emissions by 2050). The local ESD policies, as well as work by Moreland and others to increase existing standards through a future planning policy and the elevations environment targets work, offer a solution to assist the Victorian State Government meet these obligations.

Moreland Council – Sustainable Design Assessment Guidance Notes

A Sustainable Design Assessment (SDA) is a document that sets out the sustainable design features of a proposed developments and is key to understanding how a design responds to ESD policy in the Moreland Planning Scheme. In supporting applicants in their preparation of an SDA, Moreland has developed an example SDA and accompanying plans for a medium density development that commonly occurs in Moreland.

These plans contain the required ESD aspects, such as details about glazing, external shading, rainwater tanks and water sensitive urban design measures. The example SDA contains an overview of the development, a BESS report, preliminary NatHERS ratings and a STORM report. Links to these documents have been provided below as a useful reference.

Moreland Guidance Plans -

https://www.moreland.vic.gov.au/contentassets/02d13d928a64428d8e678ee95d05a03c/moreland-guidance_plans_20200825.pdf

Moreland Guidance SDA –

https://www.moreland.vic.gov.au/contentassets/02d13d928a64428d8e678ee95d05a03c/moreland-guidance_sda_20200825-edit.pdf

6. Lack of state evidence basis in the DELWP ESD Roadmap

Moreland thanks DELWP for the facilitative and constructive discussions it had with Local Government facilitated by the MAV on 9 February 2021 and with the CASBE Councils on Tuesday 16 February 2021.

In these discussions, it was clear that DELWP is keen to explore the evidence basis that ESD operates in Planning Scheme across Local Council's and an evidential basis for the financial costs of ESD, time taken to assess ESD and tangible and environmental outcomes this program achieves.

Moreland has progress ESD in the Planning Scheme (often known as the 'SDAPP' process) since roughly 2010. It was one of the original 6 Council's that received gazettal of its' local ESD planning policy in November 2015 after the Planning Panel Process in late 2013. Moreland believes that much of the discussion had during the sessions on the 9 and 16 February 2021 could serve to re-review the discussion had in the 2013 Planning Panel era. The Victorian Planning Panel Report discussed below will provide excellent insight.

Moreland is concerned that the ESD roadmap above includes analysis of the legitimacy for ESD being based on financial pressures (i.e. if it is cost-justified). Moreland has long demonstrated that ESD will not inappropriately increase the cost of construction – this is evidenced by Moreland's 10-year long ESD program and its continually rising development sector. Moreland is however concerned with language used in the meetings in February 2021 in which ESD has been reviewed with terminology such as 'red tape' and 'streamlining planning'. Moreland seek DELWP's explanation for why this is being posed, and confirmation that all aspects of the planning system are being reviewed (not just environmentally-aligned policies).

Furthermore, Moreland seeks confirmation about DELWP's concerns about ESD and 'streamlining' planning. Moreland records significant data which allows us to capture the environmental benefits the local ESD planning policy achieved, as well as the time impact this has on statutory deadlines. In the last 12 months, the Moreland

ESD referrals team assessed 367 formal planning referrals (the majority being larger developments) in under 10 business days. Many of the smaller referrals were in addition to this and reviewed in under 5 business days.

Moreland would be delighted to share this data with you to demonstrate that ESD does not contribute to 'red tape' or unfairly reduce planning decision timeframes.

7. ESD: should it form part of the Planning Scheme or the National Construction Code?

Moreland, along with the other Council's within the CASBE network, has long argued through an evidence basis that the ESD is integral to be integrated into the Victorian Planning System (and Planning Schemes) rather than rely on the equivalent measures to be achieved through the National Construction Code.

There are various reasons for this. Firstly, Moreland and other CASBE Council's have first-hand experience that effective ESD is required to be integrated into the development process as early as possible- this therefore means in the planning process. Simply, should matters such as building orientation, access to natural daylight or stormwater management, be left to the National Construction Code, little would progress.

This was reiterated by the Victorian Planning Policy report 'Advisory Committee and Panel Report: Environmentally Efficient Design Local Policies, 7 April 2014'¹. In this report, the Panel devoted an entire Chapter to this discussion, concluding that "Planning is best suited to dealing with the 'big picture' upfront issues, whereas building is best suited to managing the detailed aspects" (62).

Moreland experiences this in every ESD planning assessment and would be delighted to share these examples with DELWP. One such example is the provision of natural daylight. An apartment building could meet the relevant aspects of the NCC; whilst the same building was reviewed against Moreland's local ESD planning policy (including Indoor Environment Quality), an ESD assessment may reveal that the majority of windows within apartments may have almost zero natural daylight, even in the middle of the day during Summer. This is not only concerning because it would have dire implications for future residents, especially in covid-lockdown circumstances, but worrying as this demonstrates the type of buildings that the NCC delivers.

Moreland is nearing the completion of a 6-month research project investigating the construction phase integration of ESD and compliance with ESD planning requirements. This has involved the review of over 270 developments 'on paper' (planning and building documentation) and many on-ground sites visits. This also includes interviews with local Architects, energy raters and builders. It is overwhelmingly clear that ESD is not adequately addressed by the NCC; that builders and Private building surveyors do not check for ESD; and that to rely on the NCC to achieve ESD principles would be entirely ineffective. Moreland would be delighted to present this research to DELWP.

Moreland has a firm, 10 year evidential basis demonstrating why it is critical that ESD form part of the Planning System and Planning Schemes, and that NCC is not relied on as a way for ESD to be met. Recent compliance research has also shown that this is echoed by industry.

8. List of Appendixes

Appendix 1 – Elevating Environmental Targets Project – Draft Objectives and Standards

Appendix 2 – Moreland's Officer Feedback on DELWP's Greening + Cooling Project

Appendix 3 – Local ESD policy Clause 15.02-1L – CASBE resolved (November 2020)

¹ Accessed online at: <https://www.moreland.vic.gov.au/globalassets/areas/amendments/amendmentslib-7208/c71/amendment-c71--environmentally-efficient-design--eed-policy--advisory-committee-and-panel-report--environmentally-efficient-design.pdf>