





BUILT ENVIRONMENT SUSTAINABILITY FRAMEWORKS

NATIONAL PLANNING REVIEW

PREPARED FOR GBCA & NABERS

21 DECEMBER 2021

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ABBREVIATIONS

BASIX	The Building Sustainability Index
BESS	Built Environment Sustainability Scorecard
GBI Policy	Brisbane Green Buildings Incentive Policy
DCP	Development Control Plan
ESD	Environmentally sustainable development
ESD (in NSW)	Ecologically sustainable development GBCA
GBCA	Green Building Council of Australia
GFA	Gross Floor Area
IS Council	Infrastructure Sustainability Council
ISO	International Organization for Standardization
LEP	Local Environmental Plan
MEPS	Minimum Energy Performance Standards
MUSIC	Model for Urban Stormwater Improvement Conceptualisation
NABERS	National Australian Built Environment Rating System
NatHERS	The Nationwide House Energy Rating Scheme
NCC	National Construction Code
SDAPP	Sustainable Design Assessment in the Planning Process
SEPP	State Environmental Planning Policy
SLA	ACT Government's Suburban Land Agency
STORM	Stormwater Treatment Objective- Relative Measure
UDIA	Urban Development Institute of Australia
VPP	Victorian Planning Provisions
WAPC	Western Australian Planning Commission
WELS	Water Efficiency Labelling and Standards
WSUD	Water Sensitive Urban Design

EXECUTIVE SUMMARY

It is broadly accepted that the construction and development industry have a significant role to play in curbing Australia's carbon footprint, through high quality building design, limiting direct emissions from buildings, and increasing energy and water efficiency in the built environment. The findings of the sixth assessment report from the InterGovernmental Panel on Climate Change (IPCC) in August 2021, which identifies the world is on a trajectory to exceed 1.5 degrees warming within the next two decades; increases the urgency for Australia to accelerate towards achieving environmentally sustainable development (ESD). Undertaking and mandating ESD measures in the built environment is recognised by many Local Governments across Australia as a means by which they can have a direct impact on combating climate change with tangible outcomes delivered to communities that they serve.

In this context there has never been a more important time to review how ESD is applied to new developments and in particular in the planning stage, rather than the building stage, where it can be integrated into a project's design, budget and construction timelines. In preparing planning policies which incorporate ESD principles and objectives there has to be real and measurable ways to benchmark performance. This is and can be achieved through the use of sustainability rating tools such as Green Star and National Australian Built Environment Rating System (NABERS) and with organisations such as the Green Building Council of Australia (GBCA) advocating for all levels of Government to embrace and implement greater sustainability measures.

This report has reviewed the planning systems of each Australian State and Territory to identify where ESD principles and sustainability rating tools are implemented in the planning system through local planning policies.

Our research has focused on how each State or Territory planning system is administered and and demonstrates how individual Councils may formulate and implement their own local planning policies and controls to achieve ESD outcomes in new developments that are measurable and enforceable. This report compares the differences and similarities of the various State and Territory planning systems and provides a national overview of how local planning policies have sought to implement ESD standards and sustainability rating tools. In taking a national view this research has been able to draw out insights and trends within and between the States and Territories informing recommendations to encourage the increased adoption of sustainability measures in the built environment.

The research that has informed this report involved interviews and surveys with town planners, ESD officers and economic development officers from 27 Government organisations across Australia including:

- » NSW Waverly, North Sydney and Newcastle Councils
- ACT ACT Planning and Land Commission, Suburban Land Agency
- NT Northern Territory Planning Commission,
 Department of Infrastructure, Planning and Logistics
- » QLD Brisbane City Council, Gold Coast City Council, Sunshine Coast Council, Queensland State Government
- WA City of Perth, City of Vincent, City of Joodalup, City of Fremantle and DevelopmentWA
- VIC Yarra City Council, Moreland City Council, City of Stonnington, Mornington Peninsula Shire
- » SA Adelaide City Council, City of Norwood, Paynham and St Peters, City of West Torrens
- * TAS City of Hobart, City of Launceston and Devonport City Council
- Desktop research of various Council policies was also undertaken when interview and survey responses could not be provided by a targeted Council.

The key findings of the research are that:

- » State policy and legislation is limiting Local Government's ability for ESD principles and sustainability targets to be consistently implemented/ mandated above minimum statutory requirements
- Some individual Councils are successful in enforcing sustainability targets in planning policy that go beyond legislated minimum requirements. These are typically larger metropolitan Councils that have established ESD policies and resources.
- » There can be a lack of understanding of ESD policy and objectives by town planners assessing development proposals. This can include a limited level of awareness of and value in developments achieving minimum sustainability ratings; limited responsibility to ensure sustainability ratings are or can be acheived; and limited capacity to drive greater ESD outcomes. Feedback indicates that town planners are often required to assess ESD reports without specialised knowledge to understand what ESD outcomes are being proposed and if the proposed outcomes are satisfactory.
- Green Star and NABERS are the commonly identified as sustainability rating tools in Australia and generally deemed as the benchmark to measure ESD compliance. Notwithstanding, the minimum sustainability rating requirements identified in local planning policy vary widely across jurisdictions where they are adopted.
- » Some jurisdictions attempt to use economic and development incentives to encourage development proposal to achieve minimum sustainability ratings.
- » There is a perception across all jurisdictions that there is resistance within the development industry's to increased costs arising from development that achieve Green Star and/or NABERS ratings.. These costs are related to the increased cost of building practices (capital cost) and materials, and the increased administrative costs for obtaining Green Star and NABERS certification particularly when achieving ratings 5 Star or higher.

This reports presents a series of recommendations for GBCA and NABERS to investigate opportunities to providing additional resources to and grow the understanding and awareness of local ESD planning policies that are robust, easy to implement and will achieved increased delivery of development achieving ESD outcomes.



An overview of national recommendations is as follows:

- All stakeholders interviewed across all States identify that further advocacy for policy change is required at State and Federal level to support ESD policies and guidelines at a Local Government level. This top-down change is a critical requirement to empower Councils to mandate higher ESD standards without fear of industry push back. GBCA and NABERS are recommended to further lobby State and Federal Government to demonstrate commitment to net zero carbon goals and articulate the social, ecological and economic benefits to the community in lifting sustainability in planning and construction regulatory frameworks.
- Despite existing training resources, feedback indicates that planners in Australia generally have a low level of awareness and technical capabilities of ESD and how to interpret ESD reports, which may include proposing to achieve a minimum Green Star or NABERS target. GBCA and NABERS are recommended to continue awareness campaigns to all levels of local government to generate interest and understanding in strategic planners, development assessment planners and senior officials to enable a holistic culture shift. Particular effort is encouraged to increase the level of resources available to smaller jurisdictions, which have physical and financial limitations to accessing training available in major cities on the Eastern Seaboard. Requests include additional online training.
- Centralised platform for Councils to share successful policies and methods for facilitating development that achieves minimum sustainability ratings. This may include discussing policy mechanisms, information demonstrating return on investment for developers achieving Green Star and NABERS ratings and incentive mechanisms in the absence of State and Federal policy and legislation changes.
- Councils indicated management of costs related to obtaining sustainability rating certification, particularly for smaller development markets, could incentivise further adoption of sustainability targets for new developments. GBCA and NABERS are recommended to work with Councils to identify how additional funding or reduction of costs could be leveraged to drive change by local government.
- In State led based planning systems (NT, SA, TAS and ACT) any changes to incorporate ESD need to be made at that level. Local Government does have the ability to produce local policies. Although these sit outside of the planning system there may be opportunities for Council planners to be involved in assessing or setting criteria for these and linking this back to the development application. However this would require support and training for the planning staff from existing material such as Green Star training.

- Many jurisdictions are victims of distance to major urban areas. Feedback indicates that the time and cost for travelling to training is disincentivising further effort in upskilling staff to drive sustainability policy and implementation. As such, there are concerns that planners and sustainability specialists in more remote jurisdictions are falling behind major cities. It is recommended from discussions that further training be made available for planners and sustainability specialists remotely and/or that specialised training in these regions are available that are tailored to these local markets and circumstances.
- Local Planning policy needs to be worded for simplicity and user friendliness. This also applies to the tool outcomes and this means it will be more likely supported by the development community and wider community.
- There is greater support for the use of tools that have transparent frameworks. One way of ensuring this is to allow a range of tools to be used and this should be a consideration when writing policy and mandating a tool to be used in a local planning policy.
- Build ESD in to the planning stage of a development If ESD can be built into the planning stage it is cost neutral rather than the building stage. What this means that at the outset of a project ESD measures can be budgeted and often are minor expenses to the overall budget of a project. If implemented at building stage when budgets are locked in there is more resistance to finding the funding or it cause changes to the development which costs the developer time and money.

These recommendations are also summarised in Section 2 of this report. However, more State specific findings and recommendations are provided in each Chapter.



INTRODUCTION **URBIS I NATIONAL PLANNING REVIEW REPORT**

1.1 PURPOSE AND STRUCTURE

This report has been prepared by Urbis on behalf of the Green Building Council of Australia (GBCA) and National Australian Built Environment Rating System (NABERS) and will provide a national overview and comparison of the differences and similarities of the use of the individual State and Territory planning systems by Local Government authorities to implement sustainability requirements into new buildings. This research has a particular focus on which sustainability tools are used to measure compliance and how they are used in local planning policy context. The comparisons will be drawn from detailed analysis for each State and Territory and will provide an overview to draw out common themes and recommendations. These will provide an opportunity for Local Government staff (in particular urban and regional planners) to generate ideas in implementation of ESD policies and principles and use of sustainability tools that are fit for purpose for their Local Government Area (LGA) within their States and Territories.

For each individual State and Territory this report is structured as follows:

- » Overview of the relevant planning system
- » Sustainability rating tools
- Case studies of relevant projects or planning policies as they relate to ESD
- » Discussion of issues including identification of any barriers

1.2. WHAT INFORMED THIS REPORT

Three key activities were undertaken in the preparation of this report which has been founded on robust research, see figure below.

Desktop review

Review of the planning systems for all States and Territories.

Stakeholder Consultation
Interviews with key stakeholders in
Local Government.

Case study analysis
Review of Council policy
and case studies.

1.3. BACKGROUND

In Australia, net zero carbon targets are imposed by the Commonwealth and State Governments (driven at a strategic level by the Commonwealth, States and Territories agreement to a national plan called the Trajectory for Low Energy Buildings. This plan aims to achieve zero energy and carbon-ready commercial and residential buildings in Australia). The planning system is expected to contribute towards achieving these targets and many Councils, having declared a climate emergency, are seeking to achieve net zero emissions for their own operations through self-imposed targets. The planning system is expected to contribute towards achieving these targets and many Councils, having declared a climate emergency, are seeking to achieve net zero emissions for their own operations through self-imposed targets. The use of the planning system in the various States and Territory's to impose and mandate sustainable criteria in new developments varies significantly and is dependent on how that State or Territory's planning system is structured and administered. Other factors influencing implementation include drivers from within an LGA such as development mix, economy and individual officers' passion for sustainable outcomes.

Sustainability requirements have historically been imposed upon new developments through building standards, requiring that certifiers check that minimum energy efficiency requirements are met (National Construction Code). In some instances, these national standards have been exceeded by more stringent state Government requirements.

Building standards are usually of a minimum standard which is to be met with no recognition for exceedances. Independent organisations have therefore developed sustainability tools as a way of assigning easy-to-understand ratings to developments to compare performance like for like. A greater range of attributes are assessed, primarily relating to resulting carbon emissions through construction and operation.

Independent sustainability frameworks allow developers to gain recognition for going above and beyond minimum compliance with building standards and allow consumers to make informed choices. Certification is ordinarily performed by independent practitioners, who issue a rating which can be understood by the public and removes the need for detailed assessments by approval authorities.

Through different approaches, planning approval authorities have started mandating the use of sustainability tools as part of the development assessment process, imposing certain minimum standards for different types of developments. The stringency of performance requirements is therefore beginning to vary across Australia.

1.4. SUSTAINABILITY RATING TOOLS

1.4.1. SUSTAINABILITY TOOLS USED IN AUSTRALIA

There are a wide variety of sustainability tools used in Australia which are identified in Figure 1 taken from the ASBEC report *Ratings Snapshot: Built environment sustainability frameworks commonly used in Australia.*

Below in Table 1 is a brief overview of each tool that is used in the various planning systems across Australia. Note the tools mentioned below are either specified as a tool used to measure compliance or may be used to measure compliance across planning policies and are specifically stated within a planning policy. This does not encompass every tool in use today as there are policies which either seek an equivalent standard to a green rating tool, suggest a tool that may be used (but allow self-assessment) or have an absence of how sustainable development will be measured and thus its left up to developer to demonstrate this.

Figure 1 - Sustainability Rating Tools in use in Australia (Source: ASBEC, 2021)

BASIX

A regulatory mechanism to measure the energy and water efficiency, and thermal comfort performance of homes in NSW. BASIX applies to all residential dwelling types and is part of the development application process in NSW.

Climate Active Carbon Neutral Certification

A voluntary standard to manage greenhouse gas emissions and to achieve carbon neutrality. It provides best-practice guidance on how to measure, reduce, offset, report and audit emissions for the operations of buildings and precincts.

EnviroDevelopment

An assessment scheme that independently reviews development projects and awards certification across Ecosystems, Waste, Energy, Materials, Water and Community.

Green Star

An internationally recognised rating system that aims to create healthy, resilient and positive places for people and the natural environment.

IS Rating Scheme

A comprehensive rating system for evaluating sustainability across the planning, design, construction & operations of infrastructure assets.

Liveability Real Estate

A program for real estate agents to recognise, appraise and market 17 'Liveability Features' relating to the sustainability of the dwelling.

NABERS

An internationally recognised rating system that measures the design intent and operational performance of commercial buildings, tenancies and the common areas of apartment buildings.

NatHERS

A star rating system (out of ten) that rates the energy efficiency of a home based on its design.

Victorian Residential Efficiency Scorecard

A rating system to assess the energy performance of homes. Includes fixed appliances and building fabric and produces a star rating reflecting the cost of operation.

Table 1 – Overview of Sustainability Tools in use in the Planning Systems in Australia

Table 1 provides a brief overview of the more prominent tools that are used in planning systems across Australia. These tools are listed in existing planning policy to measure compliance with policy ESD standards. This table however does not include every tool in use within Australia. There are policies which either seek an equivalent standard to a green rating tool or there is an absence of direction or lack of clarity on how sustainable development will be measured to comply with the planning policy.

ASBEC (2021) has completed a review of rating systems which also reviews equivalence and found that "The only way to confirm a project complies with a third-party verified sustainability standard or scheme is for it to be certified. Green Star, NABERS and IS certifications all rely on quality control mechanisms which are repeatable and auditable. You can trust the claims being made under these schemes. For example, Green Star includes a certification process that has achieved ISO 9001 accredited quality control.

These types of schemes are also registered trademarks approved by the Australian Competition and Consumer Commission. Some projects make claims of sustainability standards that are not independently verifiable or transparent. For example, claims that a project has 'Green Star equivalence' or has been 'designed/ built to a high NABERS rating', or is 'aligned with the IS Rating Scheme' are misleading. If claims are made around targeting a specific NABERS rating, these claims must be verified to be true. There is growing awareness about the misuse of so-called "equivalency,"

It is clear that self-assessment and equivalency are not recommended. However as we have found out in our discussions with Councils in Victoria (See section 8.4) this does not mean that individual Councils want to be locked into mandating a certain rating system. Council have expressed the preference to not mandate which tools to use to avoid a perceived lack of transparency over the management and updates to these tools. However this point should not be confused with allowing self-assessment or equivalency and any local planning policies need to clearly provide a certified tool or a range of certified of tools that can be used to demonstrate compliance with that local planning policy.

Sustainability Tool	Overview and Strengths and Weakness in regard to Planning Systems	Jurisdiction Used
Green Star	Green Star is an internationally recognised, holistic, voluntary sustainability rating system run by the GBCA. The Green Star Rating System includes rating tools which provide a means of certification for design, construction, and operational performance of buildings and master planned communities. These rating tools include Green Star Buildings, Green Star - Interiors, Green Star - Performance and Green Star - Communities. Green Star Homes assesses the design and construction of Class 1A housing. Green Star uses a 6 star scale to assess the performance and sustainability outcomes of development. Green Star Homes provides a certification rather than a star rating. Strengths: Internationally recognised tool. Takes a holistic view of the development and can be applied to all types of development (residential/commercial/industrial). Clear measurable targets can be set at rezoning or development application (DA) stage with documentation to support this, jurisdictions should ensure that this can be legislatively complied with post consent. Ability to set in consent conditions seems to be limited to NSW, VIC and WA). Green Star provides a pathway for some building projects to demonstrate compliance for requirements under Section J of the National Construction Code (NCC). Weaknesses: Post construction documentation requirements to achieve Green Star rating can add additional time and cost to projects which lessen uptake and is perceived by some Councils to discourage build to sell developer models. Compliance within a planning system can be difficult to achieve as exiting planning legislation limits the ability to provide development consent conditions that can be legally enforced, where they are linked to achieving a particular certified rating (QLD, NT, TAS, SA and ACT). Perceived as complex for planners to assess with accessible and simple guidelines for planners limited (often left to Council ESD officers to assess and therefore limited to Councils with resources to have these staff positions).	ACT – Outside of planning system within SLA lease agreements NSW – Where adopted by Councils it is referenced in Development Control Plans (DCP) VIC – Only in 19 Councils local policies WA – Only within five Councils local policies QLD – Outside of planning system and voluntary within the Brisbane City Council – Green Buildings Policy. NT – outside of planning system and voluntary TAS – Outside of planning system and voluntary SA – Outside of planning system and voluntary

Sustainability Tool	Overview and Strengths and Weakness in regard to Planning Systems	Jurisdiction Used
NABERS	NABERS is national initiative managed by the NSW Department of Planning, Industry and Environment on behalf of the Commonwealth, State and Territory Governments of Australia. This tool compares similar developments with rating tools for energy performance, water, waste, indoor environments and carbon neutrality. The tools look at environmental uses over the course of a year, factoring in building size, local climate, and usage patterns, before comparing the data with other equivalent or similar buildings.	ACT – Outside of planning system NSW – Where adopted by Councils it is referenced in DCPs
	NABERS implements a 6-star rating system for a buildings efficiency across: energy, water, waste, and indoor environment.	VIC – Not specifically mentioned in local planning policies but accepted as
	The primary difference between NABERS and Green Star is that Green Star rates the design of the building (both at the conceptual and at the 'as built' stages) and NABERS rates the effectiveness of the operation of the building (after it is built and is operational) through the use of Commitment Agreements which can provide evidence of compliance	rating tool QLD – Outside of planning system and voluntary
	Strengths:	SA – Outside of planning system and voluntary
	» Nationally recognised tool.	TAS – Outside of planning
	Good for marketing a development to lease tenants in commercial buildings.	system and voluntary
	As evidenced by City of Parramatta's ESD policy it is a very useful and 'best in class' benchmarking tool against similar developments within a region.	
	NABERS Commitment Agreements allows a developer to demonstrate compliance at DA/ Planning permit stage when targeting measures and has mechanisms (In VIC and NSW) to be put into consent conditions.	
	The NABERS Commitment Agreement provides a pathway for some building projects to demonstrate compliance for requirements under Section J of the NCC.	
	Weaknesses:	
	» NABERS does not assist at design stage	
	Perceived as complex for planners to assess with accessible and simple guidelines for planners limited (often left to Council ESD officers to assess and therefore limited to Councils with resources to have these staff positions).	
State Environmental Planning Policy Building Sustainability Index (SEPP BASIX)	The Building Sustainability Index (BASIX) is a development scheme implemented by the NSW Government to regulate the energy efficiency of residential buildings. SEPP BASIX aims to reduce water consumption and greenhouse gas emissions by 40% compared to pre-BASIX (2004) buildings. In order to obtain a BASIX Certificate, the design of a residential development needs to meet minimum requirement for water, energy and thermal comfort. A minimum score of 40 for Water and Energy is required for houses and a simple pass or fail is required to assess the thermal comfort of a dwelling.	NSW – Used for residential development and embedded into planning system.
	Strengths: "Embedded into development assessment i.e. has clear compliance and requirements at development application stage.	
	Weaknesses:	
	» Limited to smaller scale residential developments.	
	" In use in NSW only.	
Water Efficiency Labelling and Standards scheme	The Water Efficiency Labelling and Standards (WELS) scheme is an Australian Government initiative to assess the efficiency of water appliances such as washing machines, dishwashers, toilets and tap equipment. WELS star ratings assist in identifying the water efficiency of different products. Developments are generally encouraged to include WELS-regulated products to achieve water efficiency.	NSW – Adopted by a limited number of Councils implemented through DCPs
	Strengths:	
	» Nationally recognised tool.	
	Weaknesses:	
	Limited to water efficiency and does not measure whole of development sustainability standards.	

Sustainability Tool	Overview and Strengths and Weakness in regard to Planning Systems	Jurisdiction Used
Minimum Energy Performance Standards	 The Minimum Energy Performance Standards (MEPS) scheme is an Australian Government initiative used to assess the energy efficiency of appliances. The MEPS scheme specifies the minimum level of energy performance that appliances, lighting and electrical equipment must meet or exceed prior to being sold. Developments are encouraged to incorporate MEPS-regulated products to achieve minimum energy ratings and energy efficiency. Strengths: Nationally recognised tool. Weaknesses: Limited to energy efficiency only and does not measure whole of development sustainability 	NSW – Adopted by a limited number of Councils implemented through DCPs
	standards	
Nationwide House Energy Rating Scheme	The Nationwide House Energy Rating Scheme (NatHERS) measures a home's energy efficiency by way of a star rating. The higher the star rating, the less energy needed to heat and cool the home to keep it comfortable.	NSW – Adopted by a limited number of Councils implemented through DCPs
	 NatHERS tools estimate the amount of heat that needs to be added or removed to keep that home comfortable. The NatHERS tools then generate a NatHERS star rating out of 10 and a certificate. This star rating measures the home's thermal performance, based on its structure, design and materials. A star rating of 6 or above is required in most parts of Australia for detached dwelling houses. Strengths: NatHERS is an established rating tool across Australia having been introduced in 1993 and remains the most popular pathway to demonstrate compliance with the NCC energy efficiency requirements. 	VIC – This is highlighted as an example of a rating tool with a minimum star rating to achieve energy efficiency that can be used in a select number of Councils to demonstrate compliance with their local planning policy
	Weaknesses: * Is applicable only to houses (Class 1 Buildings) and individual units in apartments (Class 2 buildings).	WA – Used in City of Canning Local policy and in DevelopmentWA projects
	There is no mechanism to assess the ongoing performance of houses and apartments following construction	NT – Outside of planning system and voluntary
	The distance between the departments and authorities who administer the scheme has led to criticism that the scheme does not innovate, and development has a focus on regulatory minimum building fabric standards that does not facilitate implementation of higher standards on a voluntary basis.	TAS – Outside of planning system and voluntary
EnviroDevelopment	EnviroDevelopment was developed by the UDIA and involves an independent assessment across six areas of sustainability: water, ecosystems, community, waste, materials and energy.	ACT – Outside of planning system
	 Developments can achieve certification on one or more of these elements and can then use this (where accepted by relevant authorities) to certify sustainability and in marketing material. Strengths: 	QLD – Outside of planning system and voluntary
	 Transparency to see in which of the six areas a development has been certified. Can be used as a marketing tool for developments to potential purchasers/lessees. Weaknesses: Introduced in 2011, and appears to not be widely used. There may be scepticism about the validity of a scheme introduced by an industry association, 	
	rather than an authority or NGO which focuses solely on sustainable building outcomes.	
Life Cycle Assessment (ISO 14044 and EN15978)	Life Cycle Assessment (ISO 14044 and EN15978) is an international standard which provides a methodology to estimate and evaluate the environmental impact throughout the product life cycle of a building project. This includes the development itself and also supply chains and waste involved in all aspects of a project. This standard applies not only to buildings but product manufacturing and is therefore not development specific Strengths:	WA – Specified in Town of Vincent local planning policy
	 Internationally recognised standard for lifecycle assessment and includes supply chains. Weaknesses: It is not a rating tool it is an international standard that has a clear methodology needed to 	
	achieve the standard based on the construction materials and supply chains used in new developments. * This standard is not specific to buildings and developments and if used for developments can be	
	applied incorrectly.	

Sustainability Tool	Overview and Strengths and Weakness in regard to Planning Systems	Jurisdiction Used
Infrastructure Sustainability (IS) Rating Scheme	The IS Rating Scheme prepared by the IS Council and describes itself as Australia and New Zealand's only comprehensive rating system for evaluating economic, social and environmental performance of infrastructure across the planning, design, construction and operational phases of infrastructure assets. The scheme can assess the sustainability performance of infrastructure at the individual assets level, for portfolios or networks, or even at a regional scale. Strengths: "The IS Rating Scheme differs from other rating systems by providing a higher level of detailed communication between primary stakeholders, owners, and assessors during the rating process. "Unlike the other rating systems, which have strict and specific compliance criteria, IS rating is less prescriptive and allows a level of flexibility in proving overall compliance. Weaknesses: "The scheme is restricted to rating infrastructure (roads, bridges, electricity infrastructure, schools, hospitals, sport facilities etc) as opposed to buildings which are the target of many other schemes, making comparisons with other tools difficult. "The less prescriptive nature despite allowing flexibility also means that it can be difficult to measure consistency and benchmarking across infrastructure projects. "Could be difficult to implement via a planning policy due to its inherent flexibility and challenges	ACT – Sits outside of planning system in SLA agreements for development such as privately owned infrastructure
	to achieve benchmarking as discussed above.	
	» Limited take up and use in Australia.	
Built Environment Sustainability Scorecard	BESS assesses energy and water efficiency, thermal comfort, and overall environmental sustainability performance of a new building or alteration.	
(BESS) VIC – Specifically designed for use within the Victorian Planning System	BESS was designed to be compatible with the Victorian Planning permit process and can be tied back to the Sustainable Design Assessment in the Planning Process (SDAPP) framework as a means of demonstrating compliance with ESD principles and the overall objective of sustainable development built into the Victorian Planning and Environment Act 1987.	
	BESS can assess any size of type of development. It has inbuilt flexibility with multiple options to demonstrate compliance.	
	» Strengths:	
	 Built for use within the Victorian Planning permit process and is accessible to Council planners. Council planners trained to assess developments using BESS. 	
	 Allows some flexibility which can keep development costs down on smaller residential development where budgets costs are key drivers. 	
	Weaknesses:	
	Tends to be used in planning permits for residential and smaller developments in Councils with ESD policies to demonstrate compliance as part of sustainable design assessments (SDA). Cannot be scaled up as a tool to cover all development types.	
	Flexibility to meet standards results in variability in how developers meet the standards resulting in inconsistency in like for like developments across different LGA's.	
	Deemed unsuitable for larger developments (i.e over 10 dwellings, large mixed use and commercial buildings).	
	» In use in Victoria only.	



1.4.2. INTERNATIONAL

Figure 2 sets out some sustainability rating tools which are used internationally. It should be noted that where a Council planning policy allows equivalency or has ambiguity over the way this is assessed either by design or lack of compliance documentation, a developer may seek to use one of these tools to achieve compliance with an ESD policy. Use of these tools is limited in the planning and development process within Australia. LEED and WELL are used in Victoria and Western Australia and implemented by ESD strategy reports submitted as part of planning applications. These strategy reports are often produced at the planning stage and look at the building's initial building design and provide high level strategies and targets using certified rating tools for the development to achieve across a variety of ESD measures (Energy and water usage etc). These tools are included for reference purposes with the focus of this report being on the tools included in Table 1.

Figure 2 - Tools used internationally (Source: ASBEC, 2021)

BEAM Plus

The dominant building sustainability system used in Hong Kong, addressing planning, design, construction, commissioning, fit-out, management, operation and maintenance.

BREEAM

A sustainability assessment method for masterplanning projects, infrastructure and buildings. It recognises and reflects the value in higher performing assets across the built environment lifecycle.

CEEOUAL

The evidence based sustainability assessment scheme for civil engineering, infrastructure, landscaping and public realm projects.

DGNB

A planning and optimisation tool for evaluating sustainable buildings, interiors and urban districts.

EcoDistricts

A process-based urban development standard that helps set collaborative strategic goals and responsibilities for precinct projects.

Fitwel

A certification system developed by the US Centers for Disease Control and Prevention and the U.S General Services Administration. It aims to optimise buildings and communities and is committed to building health for all.

Green Mark

The national rating tool for Singapore. Forms part of legislation for new and existing buildings.

LEED

A global rating tool that addresses the entire lifecycle of buildings; interior fitouts; and neighbourhoods, cities and communities.

Living Certification

The Living Building Challenge and Living Community Challenge (LCC) together form the world's most rigorous green building and precinct scheme.

Passive House

A world-leading standard in energy efficient building design. The standard focusses on energy efficiency, health and comfort, and is based on decades of building science and research.

SITES

A sustainability focussed framework recognising high performance landscapes and outdoor spaces that protect and restore ecosystem services, improve human health and wellness, and enhance community resilience.

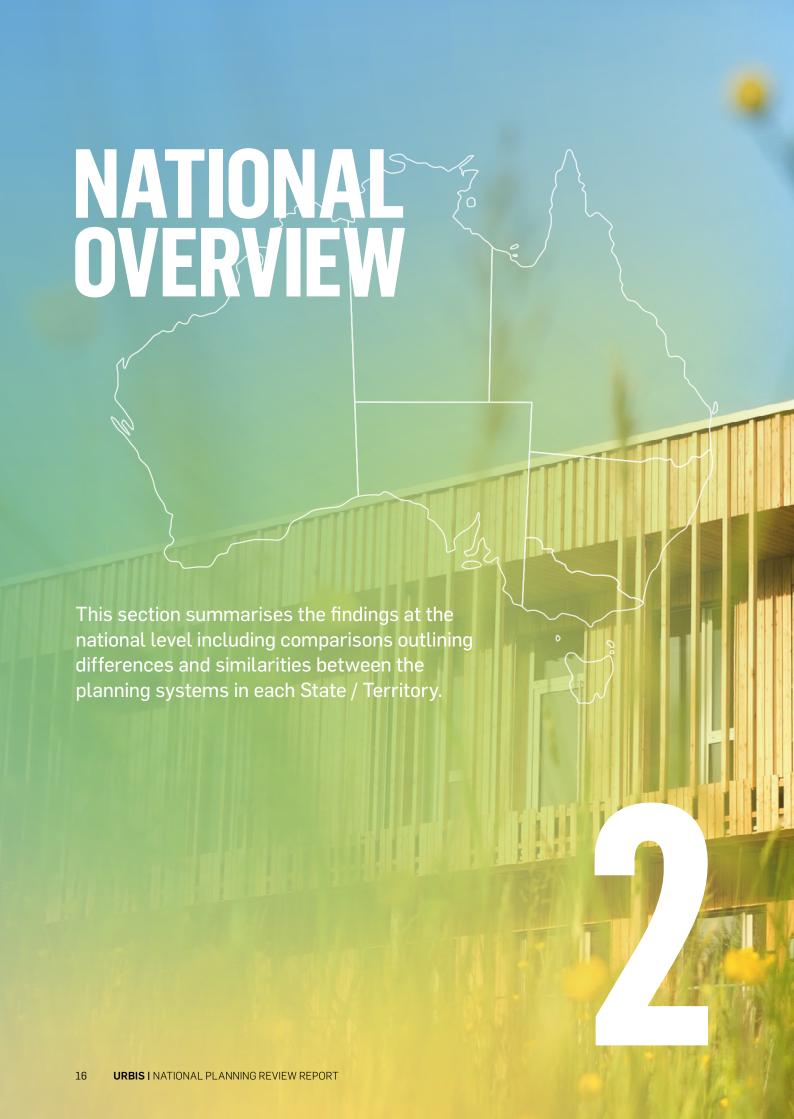
STARS

A transparent, self-reporting framework for colleges and universities to measure their sustainability performance.

WFII

A third-party verified certification program managed by the International WELL Building Institute (IWBI), which measures the health and wellness of buildings, organisations, and communities by integrating design strategies with improvements to ongoing operational and policy protocols.





2.1. ESD IN LEGISLATION

The findings from each State and Territory have informed a high level comparison in Table 2 below. This table sets out how planning legislation is or is not mandating ESD policies and the use of sustainability rating systems and tools across Australia. Table 2 shows:

- ESD Principles in Planning system Which States or Territories have plans and policies in their planning system (State planning controls) which contain development controls pertaining to ESD which must be complied with to obtain development consent.
- ESD principles in local policies Which States or Territories have local policies developed by a Council to sit within their planning system that refer to ESD standards. These may be voluntary or mandatory.
- ESD principles in local planning controls Which States or Territories have local policies that sit within their planning controls which mandate compliance with ESD standards for new developments.

- Sustainability rating tools used in local planning controls – Which State or Territories have local planning policies that refer to use of sustainability rating tools to achieve compliance with the local planning policies.
- Including Green Star If sustainability rating tools are referenced in a policy, and if Green Star is a mandated tool.
- Including NABERS If sustainability rating tools are referenced in a policy, and if NABERS is a mandated tool.
- Case law supporting sustainability rating tools Which State or Territory has planning case law that refers to ESD principles and/or the use of sustainability tools

We have rated the States and Territories as follows:

- This means that this category does apply in that State or Territory.
- » Draft This means that that State or Territory has drafted this item (such as policies and controls) and implementation is pending.
- Limited This means that this category has limited application in that State or Territory by either being unique to a certain LGA or being restricted in its application.

Table 2 - Comparisons of use of ESD in legislation across Australia

	ACT	NSW	NT	QLD	VIC	SA	TAS	WA
ESD principles in state planning system	/	~			DRAFT	/		
ESD principles in local policies		~			*Limited	4		*Limited
ESD principles in local mandatory planning controls		~						*Limited
Sustainability rating tools used in local planning controls		*Limited						*Limited
Sustainability rating tools implemented through other mechanism	~			*Limited	*BESS and STORM			
Including Green Star	4	✓	*Voluntary only	*Voluntary only	✓	*Voluntary only	*Voluntary only	*Limited
Including NABERS	*Limited	~		*Voluntary only	/	*Voluntary only	*Voluntary only	
Case law supporting sustainability rating tools					*Limited			

2.2. NATIONAL FINDINGS

2.2.1. COMMON FINDINGS

- State policy and legislation is limiting Local Government's ability for ESD principles and sustainability targets to be consistently implemented/ mandated above minimum statutory requirements (i.e. BASIX, Section J in NCC). This limitation is applicable to Local Government in all States and Territories. Some jurisdictions are particularly concerned that without legislative support requiring ESD outcomes, there is a risk that applications refused by Council on grounds of not achieving ESD principles will be appealed and there is limited policy backing or legal precedence to support the Council's position.
- Some individual Councils are successful in enforcing sustainability targets in planning policy that go beyond legislated minimum requirements. This is typically for larger metropolitan Councils that have established ESD policies and resources.
- Often there is a disconnect between planners and ESD, including level of awareness and value in developments achieving minimum sustainability ratings; limited responsibility; and limited capacity to drive greater ESD outcomes. Feedback indicates that often planners are required to assess ESD reports without specialised knowledge to understand what ESD outcomes are being proposed and if it is satisfactory.
- » Green Star and NABERS are two sustainability rating tools that are widely used across Australia. However, the range of sustainability requirements and tools used to benchmark and measure ESD vary widely across jurisdictions.
- Examples of economic incentives include the reduction of infrastructure contributions/charges and increasing development potential as reward for achieving a given sustainability outcomes (development bonuses). This approach is not widespread.

The development industry's resistance to the perceived additional costs of delivering developments that achieve Green Star and/or NABERS ratings is a common issue across all jurisdictions. These costs are related to the increased costs of building practices (capital cost) and materials, and the increased administrative costs for obtaining Green Star and NABERS certification – particularly when achieving 5 Star or higher ratings. Many Councils are conscious of this cost and concerned about disincentivising development in their jurisdictions due to costs and pressure on elected officials from developers and community due to impact on affordability.

2.2.2. UNIOUE FINDINGS

- » North Sydney Council identified the importance of Council staff passionate about achieving sustainable development and the ability to create change in their LGA by adopting sustainability principles in assessing development. Experience shows that it also important to support these change leaders and embed sustainability principles and practice in organisational culture before these people move on, so as to maintain long term momentum and continuously acheive best practice. Alternatively, implementing policies that self-regulate to remain best practice, such as Parramatta City Council's NABERS policy in the draft Parramatta Local Environmental Plan, requires all non-residential developments in the Parramatta CBD to perform as well as the top 15 percent of comparable existing buildings in the Sydney metropolitan region. This is an inventive way to use policy as it means there is little requirement for Council to regularly update its policy to remain relevant with current sustainability development trends
- » Smaller jurisdictions such as ACT, Tasmania and the Northern Territory are struggling to progress ESD best practice due to economic drivers, technical knowledge and awareness, and support from the State/Territory Governments and the local development industry. As such, sustainability rating tools are achieving limited application – often only either through voluntary arrangements, or in ACT's case, a requirement for minimum sustainability rating as part of a leasing agreement for land (see section 3.3 and 3.5 of this report).
- Victorian Councils stated that it was important that a range of sustainability tools are provided in planning policies to demonstrate compliance. This is to ensure transparency from the tools developer as well as ensuring that a mechanism for compliance with the policy is available to all of the community no matter the size of their project or budget..

2.3. NATIONAL RECOMMENDATIONS

- All stakeholders interviewed across all States identify that further advocacy for policy change is required at State and Federal level to support ESD policies and guidelines at a Local Government level. This top-down change is a critical requirement to empower Councils to mandate higher ESD standards without fear of industry push back. GBCA and NABERS are recommended to further lobby State and Federal Government to demonstrate commitment to net zero carbon goals and articulate the social, ecological and economic benefits to the community in lifting sustainability in planning and construction regulatory frameworks.
- Despite existing training resources, feedback indicates that planners in Australia generally have a low level of awareness and technical capabilities of ESD and how to interpret ESD reports, which may include proposing to achieve a minimum Green Star or NABERS target. GBCA and NABERS are recommended to continue awareness campaigns to all levels of Local Government to generate interest and understanding in strategic planners, development assessment planners and senior officials to enable a holistic culture shift. Particular effort is encouraged to increase the level of resources available to smaller jurisdictions, which have physical and financial limitations to accessing training available in major cities on the Eastern Seaboard. Requests include additional online training.
- Centralised platform for Councils to share successful policies and methods for facilitating development that achieves minimum sustainability ratings. This may include discussing policy mechanisms, information demonstrating return on investment for developers achieving Green Star and NABERS ratings and incentive mechanisms in the absence of State and Federal policy and legislation changes.
- Councils indicated management of costs related to obtaining sustainability rating certification, particularly for smaller development markets, could incentivise further adoption of sustainability targets for new developments. GBCA and NABERS are recommended to work with Councils to identify how additional funding or reduction of costs could be leveraged to drive change by Local Government.
- Greater supporting information to Council officers, senior decision makers and Councillors on why to support ESD and sustainability ratings.

- In State led based planning systems (NT, SA, TAS and ACT) tany changes to incorporate ESD need to be made at that level. Local Government does have the ability to produce local policies. Although these sit outside of the planning system there may be opportunities for Council planners to be involved in assessing or setting criteria for these and linking this back to the development application. However this would require support and training for the planning staff from existing material such as Green Star training
- Many jurisdictions are victims of distance to major urban areas. Feedback indicates that the time and cost for travelling to training is disincentivising further effort in upskilling staff to drive sustainability policy and implementation. As such, there are concerns that planners and sustainability specialists in more remote jurisdictions are falling behind major cities. It is recommended from discussions that further training be made available for planners and sustainability specialists remotely and/or that specialised training in these regions are available that are tailored to these local markets and circumstances.
- Local Planning policy needs to be worded for simplicity and user friendliness. This also applies to the tool outcomes and this means it will be more likely supported by the development community and wider community.
- There is greater support for the use of tools that have transparent frameworks. One way of ensuring this is to allow a range of tools to be used and this should be a consideration when writing policy and mandating a tool to be used in a local planning policy.
- Build ESD in to the planning stage of a development If ESD can be built into the planning stage it is cost neutral rather than the building stage. What this means that at the outset of a project ESD measures can be budgeted and often are minor expenses to the overall budget of a project. If implemented at building stage when budgets are locked in there is more resistance to finding the funding or it cause changes to the development which costs the developer time and money.



3.1. OVERVIEW OF PLANNING SYSTEM

The ACT Planning system, management of land use and development applications are governed solely at a Territory level by the ACT Government's Environment, Planning and Sustainable Development Directorate (EPSD). The Planning and Development Act 2007 establishes the EPSD as the relevant ACT planning authority, the legal planning framework for the Territory, and the requirements of the Territory Plan.

The Planning and Development Act 2007 identifies the requirement for a "planning strategy for the ACT that sets out long term planning policy and goals to promote the orderly and sustainable development of the ACT, consistent with the social, environmental and economic aspirations of the people of the ACT".

The Planning and Development Regulation 2008 sets out the process and documentation requirements for the assessment of development applications in three "tracks" depending on the land use zone and the type of development (refer to section 3.1.2). The development assessment tracks are referred to as code, merit, or impact tracks.

3.1.1. THE TERRITORY PLAN

The Territory Plan is the overarching planning strategy for the ACT. Its purpose is to manage land use change and development in a manner consistent with strategic directions set by the ACT Government, Legislative Assembly, and the community. It must not be inconsistent with the National Capital Plan which is the strategic plan for Canberra and the ACT administered by National Capital Authority (statutory authority of the Australian Government established to manage the Commonwealth's interest in the planning and development of Canberra).

There are three types of development codes in the Territory Plan that must be considered, where relevant in the assessment and determination of development applications.

If there is any inconsistency between applicable codes, then the Precinct Code will always take precedence over the Development Code, which in turn takes precedence over the General Code.

The Territory Plan codes are divided into rules and criteria.

Figure 3 - The Development Codes in the ACT Planning System (Source: Urbis Pty Ltd, 2021)

PRECINCT CODES

apply to individual suburbs or geographical areas

eg. the City Precinct

DEVELOPMENT CODES

apply to specific zone or type of development

eg. multi-unit residential or commercial

GENERAL CODES

relate to any kind of development across any of the zones

> eg. the Parking and Vehicular Access General Code

Figure 4 - Territory Plan - Rule and Criteria (Source Urbis Pty Ltd, 2021)

RULES

provide definitive controls for development. If a provision contains only a rule without any applicable criteria, then the rule is mandatory

CRITERIA

provide the qualitative controls for development. Development may be considered against criteria if the corresponding rule has not been met, or if there is no applicable rule.

3.1.2. DEVELOPMENT APPLICATION 'TRACKS'

Development applications are assessed in different tracks depending on the zone and the type of development.

Figure 5 - Development Application Tracks in ACT (Source Urbis Pty Ltd, 2021)



3.2. ACT PLANNING SYSTEM REFORM AND REVIEW

The format of the Territory Plan and Codes establishes a highly prescriptive planning system with little scope for alternative outcomes. The ACT Government is currently undertaking a review of the Territory Plan. Reviews are legislated as a mandatory requirement every five years. It is understood that the format of the Territory Plan and the ACT planning system are being reformed to a performance/outcomes based planning system, meaning greater flexibility and merit based assessment for development applications are to be introduced.

Preliminary discussions with the ACT Government indicate a preparation of a draft Territory Plan will be staged, with draft District Strategies prepared to guide specific outcomes at a precinct or local level. The draft strategies are targeted for exhibition in mid to late 2022.

3.3. SUSTAINABILITY RATING TOOLS

In the ACT, sustainability targets are not mandated under any legislation. Preliminary discussions with the ACT Government indicate that it is unlikely that current planning reform will introduce a mandatory requirement for sustainability targets in the future.

However, the ACT is unique in Australia in that all land is Crown land and leased to property developers to develop and occupy. The process of leasing Crown land to property developers in the ACT is managed by the ACT Government's Suburban Land Agency (SLA). The SLA was established as a statutory authority under the City Renewal Authority and Suburban Land Agency Act 2017 and sits within the ESPD.

SLA will plan and prepare the site for development, including subdivision and servicing, before leasing to a developer to construct the building. Within the leasing contract, SLA will often include any requirements for sustainability targets. The SLA has reviewed multiple sustainability ratings tools including:

- » Green Star
- » NABERS
- » EnviroDevelopment
- » Infrastructure Sustainability rating

SLA has selected Green Star as the common sustainability target for developments and often the highest rating that is applied will be 4 stars and will be scaled up depending on the value of land.

3.4. CASE STUDIES

The ACT Government does not participate in the delivery of buildings that are required to achieve a sustainability target according to a lease agreement prepared by the SLA. This means the ACT Government has little line of sight of the final sustainability outcome.

The development of greenfield communities that occur over multiple decades provides the ACT Government opportunity for a clearer oversight of sustainability outcomes.

Ginninderry was identified as one of the best examples of a sustainable development project currently underway in the ACT. This project has been certified as a 6 Star Green Star Community – the highest rating available under the Green Star Communities rating tool.

The 6 Star Green Star Community rating was voluntary and therefore learnings on its application to the planning are limited, however this rating was sought as a decision to showcase sustainable development in the ACT.

Ginninderry was the first project for which the ACT Government waived the requirement for all new suburbs to include gas infrastructure. The ACT Government is now removing mandatory requirements for gas connections to new suburbs. It is too early to determine what other long term benefits this will have and if this showcase will encourage other developments to follow suit due to the project being delivered over the next 30 years. This project is certainly one to watch for marketability impacts and influences on other developments within the ACT.

3.5. DISCUSSION

As outlined in section 3.3, the ACT planning system does not mandate sustainability targets. The requirement for sustainability outcomes is required through lease agreements implemented by the SLA. As such, sustainability rating targets are not considered within planning case law.

3.5.1. SUBURBAN LAND AGENCY

An interview was conducted with senior directors and project managers from the SLA to ascertain the process and requirements behind SLA's sustainability targets. The key discussion points from this interview are outlined as follows:

The motivation for achieving sustainable development in ACT is led by two sources. Firstly, the ACT Climate Strategy 2019-25 presents the ACT Government's climate change actions and response to meet its legislated emission reduction target of 50-60% (below 1990 levels) by 2025 and establish a pathway for achieving net zero emissions by 2045. This was developed in coordination with the ACT Planning Strategy 2018, although specific sustainability provisions are not included in the Territory Plan or Codes. Secondly, the SLA Board drives the

requirement for the Agency to achieve sustainable development outcomes and this is achieved through sustainability target requirements incorporated into lease agreements with developers in greenfield and urban renewal projects.

- » Goal 5B of the ACT Climate Strategy requires:
 - 'Ensure all new Government capital works with a budget of more than \$10 million either seek or are consistent with an independent sustainability rating such as an Infrastructure Sustainability rating from the Infrastructure Sustainability Council of Australia (ICSA) or a Green Star rating from the Green Building Council of Australia or equivalent, and review ratings at least every five years'.
 - However, the ACT Government advised that the number of applicable Government projects is limited and so this goal has minimal overall effect. This does however provide a clear policy goal for sustainability in Government development admittedly without opting into any particular sustainability tool and the use of the word equivalent leaves a lot of room for selfinterpretation.
- The typical sustainability target developers are required to achieve under lease agreement is a minimum 4 Star Green Star rating. SLA identified it is restricted in requiring a higher target for a number of reasons:
 - Land value, site areas and scale of development in the ACT are typically significantly lower than in major cities such as Sydney and Melbourne. As such, developers are more sensitive to increased development costs in the ACT.
 - SLA is essentially marketing sites to developers and must be aware of the financial impact of requiring higher sustainable targets due to cost of development and increased administrative cost of achieving a higher Green Star rating. Increased costs places downward pressure on the value of land and leases that SLA can achieve.
 - Typically SLA can only require a minimum 4 Star Green Star rating for the most prominent sites in Canberra.
 Elsewhere, the value of land is lower, and SLA must accommodate that through lower sustainability targets to remain feasible.
 - The ACT development market is smaller than Sydney and Melbourne and a smaller proportion of projects involve large scale developers and prominent architects. As such, familiarity and experience working with Green Star is limited, further increasing costs of delivery.

- The SLA is also time constrained in securing a lease agreement with developers, meaning the time to negotiate sustainability targets is often minimal to non-existent.
- The SLA are including NABERS requirements in lease agreements for large commercial buildings, focusing mostly on water efficiency. However, there are very few large commercial buildings being developed in the ACT. It's therefore questionable how often NABERS requirements will be utilised by the SLA in lease agreements. This appears to be a lost opportunity by the SLA as the application of NABERS in other jurisdictions is not limited to just commercial developments.
- The SLA identified additional barriers for implementing sustainability rating tools in the ACT, including:
 - The time and cost for achieving a sustainability rating with any of the rating tools is a significant barrier in the ACT that the market is struggling to accommodate.
 This includes time taken by Government and developers in administering the rating process. Without a consistent statutory mandate for a sustainability target in the planning system, it is likely that sustainability targets will be partially market driven.
 - The ACT is a smaller market and there is less support for public and private industry professionals to access training, that is often located in Sydney or Melbourne.
 This further increases costs for professional training on sustainability rating tools and limits advocates for these tools. It was suggested that either more training be made available online, or that more training sessions in person be made available in Canberra.

3.6. KEY FINDINGS AND RECOMMENDATIONS

Planning policy and development assessment within the ACT is undertaken at a state level with no 'local government' as found in other States such as NSW, Victoria or Western Australia. Despite this centralised authority, ACT planning legislation and policy is limited in terms of mechanisms to implement targeted sustainability outcomes. Government policy and the Territory Plan only provide direction on sustainability outcomes at a high strategic level such as within the ACT Climate Change Strategy 2019-2025. There are no specific development controls or policies relating to sustainability outcomes that are assessed as part of the development application stage.

This greatly limits the planning system's influence on sustainability or requirements for implementing sustainability rating tools such as Green Star or NABERS

Sustainability targets are therefore implemented in development through commercial agreements prepared by the SLA, typically requiring up to a 4 Star Green Star rating for new developments. Based on the findings, the following actions are recommended for GBCA and NABERS to investigate to assist SLA:

- » Support smaller markets to facilitate feasibility of sustainability tools - Smaller development markets such as the ACT tend to be less familiar and experienced with sustainability rating tools such as Green Star or NABERS. The property market has also not matured or reached a value that meets other jurisdictions on Australia's Eastern Seaboard. As such, there is typically resistance from developers and SLA in requiring sustainability ratings due to additional administrative costs and development costs which equate to a larger proportion of development budget in the ACT and less understanding of return on investment. Consideration of adjustment to costs to achieve sustainability certification for smaller markets such as the ACT would potentially incentivise greater requirements for more widespread requirements for sustainability targets and higher minimum rating requirements. This adjustment could be for a period of time while the market matures or to be applicable to a certain category of projects. For example this could function via an application by a developer for a grant to cover the cost of certification. One if the conditions with this grant would be for the development to provide a real case study to the local development community in the use of sustainability tools. This may have the effect of raising awareness of the benefits of the use of such tools which in turn may increase usage on new applicable projects within the ACT.
- Extension of support to remote jurisdictions Many jurisdictions are victims of distance to major cities such as Sydney and Melbourne. Feedback indicates that the time and cost for travelling to training is disincentivising further effort in upskilling staff to drive sustainability policy and implementation. As such, there are concerns that planners and sustainability specialists in more remote jurisdictions such as the ACT are falling behind major cities. It is recommended from discussions that further training be made available for planners and sustainability specialists remotely.





4.1. OVERVIEW OF THE PLANNING SYSTEM

In New South Wales (NSW), the Environmental Planning and Assessment Act 1979 (EP&A Act) and the Environmental Planning and Assessment Regulation 2000 (EP&A Reg) provides the regulatory framework governing planning in the state. The Act establishes the framework for matters such as planning administration, planning instruments, development assessment and building certification.

The EP&A Act defines sustainable development as ecologically sustainable development (as opposed to the commonly used term of environmentally sustainable development). One of the objectives of the EP&A Act is to 'to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment'.

The planning process involves an assessment of a proposed development against specific statutory and policy requirements, some of which are contained in State Environmental Planning Policies (SEPP) and Local Environmental Plans (LEP). These environmental planning instruments (EPIs) are made under the EP&A Act. The planning process also has regard to a set of non-statutory plans prepared by Councils that set out detailed planning controls to support the statutory provisions within the LEP. These are called development control plans (DCPs). These can detail specific controls for a type of development or a particular geographical area. DCP controls support the provisions of an EPI and can be varied.

Figure 6 - Overview hierarchy of NSW Planning Instruments (Source: Urbis Pty Ltd 2021)

STATE Prepared by NSW Department of Planning and Environment LOCAL Prepared by Local Councils LOCAL Prepared by Local Councils LOCAL Prepared by Local Councils Development Control Plans

4.1.1. DEPARTMENT OF PLANNING, INDUSTRY AND ENVIRONMENT

The Department of Planning, Industry and Environment (DPIE) is the State planning authority, with responsibility for establishing and guiding urban and regional strategic land-use planning and statutory planning across NSW and administering the EP&A Act. DPIE also brings together specialists in water, Government property, environment, energy and science, Aboriginal heritage, and NSW Government Architects.

DPIE advises the Minister of Planning and Public Spaces on land use planning and implements policy direction at State-level, including:

- Preparing Regional and District Plans for strategic land use and growth for 20 years to be implemented by Local Government (i.e. Sydney Region Plan A Metropolis of Three Cities).
- Preparing Place Strategies for coordinated land use, transport and infrastructure planning.
- Policy and statutory planning, including the EP&A Act and EPIs, such as SEPPs, standardised LEP and review of State Environmental Planning Policy No 65 – Design Quality of Residential Apartment Development (SEPP 65), and the Apartment Design Guide (ADG).
- Determining state significance development applications for large scale development.
- Review and determination of planning proposals submitted by landowners for rezoning of land.

4.1.2. LOCAL GOVERNMENT

NSW contains 128 local Councils, responsible for land use planning and development assessment at a local level to maintain quality amenity for its residents. This is achieved by abiding by the EP&A Act, the Environmental Planning and Assessment Regulation 2000 (EP&A Reg) and the Local Government Act 1993 (LG Act).

Local Councils are required to prepare Local Strategic Planning Statements (LSPS), which are strategic documents to locally deliver the strategic objectives set by the Regional Plans prepared by DPIE and inform the review of LEPs, which are the principal planning controls for each LGA. A LEP guides land use planning through zoning and mandatory planning controls. However it does not contain any ESD controls currently (these are provided in the DCPs).

In addition to preparing and implementing LEPs, Councils also prepare DCPs to provide more detailed planning controls that define built form, character and other requirements, including ESD guidelines (refer to Section 4.2.1 and Section 4.2.2) for more detail.

4.1.3. DEVELOPMENT APPROVALS

Depending on a number of factors, a proposed development may be considered as either state significant development, meaning a development application is assessed by the NSW Government's Department of Planning, Industry and Environment (DPIE) — or the development is regionally or locally significant and is assessed by Council. State significant development applications do not need to comply with but can have regard to DCPs.

Whilst there are alternative triggers to elevate a development application to regional or state significance, the following thresholds generally apply:

- State significant development applications Generally development with a capital investment value over \$30 million and is an identified development type in Schedule 1 of the State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP).
- Regionally significant development applications Generally development with a capital investment value over \$30 million, which is not identified as a development type in Schedule 1 of the SRD SEPP. Alternatively, Council related development over \$5 million is categorised as regionally significant development.
- Local development applications Development applications that do not exceed the above thresholds.
- In addition to the above, there are exempt and complying development pathways for lower impact development that require no development approval from Councils but must comply with the provisions of the State Environmental Planning Policy (Exempt and Complying Development Code) 2008 (CDC SEPP).

4.1.4. NSW LAND AND ENVIRONMENT COURT

The NSW Land and Environment Court specialises in legal proceedings related to development in NSW under the Land and Environment Court Act 1979. Its jurisdiction includes merits review, judicial review, civil enforcement, criminal prosecution, criminal appeals and civil claims about planning, environment, land, mining and other legislation.

The two classes of proceedings that are relevant to sustainability in planning are Class 1 – Merit Appeals and Class 4 – Judicial Reviews.

In Class 4 proceedings, interested parties can bring proceedings seeking to argue and establish that the consent authority failed to take into consideration relevant matters such as implementation of ESD principles and impacts on climate change in approving a development – and the interested party is therefore seeking a declaration from the Court that the consent as granted is invalid, void and of no effect. The majority of cases on ESD fall into this category.

They relate to large scale infrastructure, resource and similar projects. These are usually State significant development projects such as coal mines or solar farms and consequently the nature of such developments mean that they are unlikely to have elements of NABERS or Green Star rating considerations involved.

Class 1 matters, being merit appeals, give the applicant an opportunity to appeal a refusal of a development application. There are limited cases where the reasons of refusal or the Statement of Facts and Contentions on which the proceedings are run include failure to demonstrate compliance with ESD principles only. Failure to comply with a sustainability rating tools was not raised as a means to demonstrate non-compliance with ESD principles. The use (or not) of sustainability tools has not been raised in merit proceedings and as such, there is no case law in NSW related to the implementation of sustainability rating tools.

4.2. SUSTAINABILITY RATING TOOLS

There are a variety of sustainability rating tools used in NSW sitting within existing planning controls. These include Green Star, NABERS and NatHERS.

In consultation with the GBCA and NABERS, Urbis selected five Councils to understand and illustrate the spread and the individual Council approach to the incorporation of sustainability rating tools in their local planning policies and guidelines. These Councils are City of Newcastle, North Sydney Council, Penrith City Council, City of Ryde and Waverley Council. These Councils assess developments against the tools listed below and this is indicative of the tools generally used widely by Councils within NSW.

- State Environmental Planning Policy Building Sustainability Index (SEPP BASIX)
- » Water Efficiency Labelling and Standards (WELS) scheme
- » Minimum Energy Performance Standards (MEPS)
- » Green Star
- » NABERS
- » NatHERS

The application of sustainability tools in the NSW planning system is achieved through LEPs and DCPs. There are also high level controls that are proposed within the upcoming Design and Place SEPP (D&P SEPP) and reference to the use of sustainability tools within the NSW Net Zero Plan Stage 1 which will trickle down to tangible controls within the planning system. An examination of the NSW Net Zero Plan, LEPS, DCPS and the D&P SEPP is undertaken below.

4.2.1 NSW NET ZERO PLAN STAGE 1 – 2020-2030

The NSW Net Zero Plan is an attempt by the NSW government to work towards meaningful actions to achieve net zero carbon emissions by 2050. The plan is set out decade by decade to accommodate rapid changes in technology. The plan aims to provide confidence to the people of NSW that the NSW government will meet the 2050 net zero target. The Stage 1 plan sets out four priorities which are:

- 1. Drive uptake of proven emissions reductions technology
- 2. Empower consumers and businesses to make sustainable choices
- 3. Invest in the next wave of emissions reduction innovation.
- 4. Ensure the NSW Government leads by example

The second priority relates to sustainable choices in buildings. It is noted within the plan that '...medium and large-scale infrastructure projects in NSW offer a significant opportunity to drive uptake of sustainable building materials and energy efficiency technologies'.

To assist in meeting this priority there is an objective of leveraging off of the existing use of NABERS to compare building sustainability by expanding the NABERS rating scheme to other major building types including schools, retirement living, industrial warehouses, retail tenancies, and supermarkets. The plan also aims to improve the NCC and BASIX to provide a pathway to deliver cost-effective, low emissions outcomes for residential, commercial and public buildings. This is to align with the national Trajectory for Low Energy Buildings Plan, which was agreed by the Commonwealth and all States and Territories. The Trajectory proposes increases to the energy efficiency provisions in the NCC for residential buildings from 2022. The BASIX updates are being delivered in stages with the first release of a sandbox beta version in December 2021.

The NSW Government is also seeking to implement some high level objectives to provide transparency around building material supply chains namely:

- » supporting industry led targets and certification schemes for low emissions building materials, such as concrete and aluminium embedding sustainable building material standards and targets into the design and construction of major NSW Government infrastructure projects.
- » leading a national strategy to achieve net zero embodied carbon in building materials, through mechanisms such as the NCC and the Green Star Rating System.
- working with large developers and infrastructure providers to drive their use of low emissions materials in procurement processes.

Its anticipated that the objectives set out in the plan will filter their way into the planning system via State planning policies and provide Councils confidence to bolter their own carbon zero objectives through development control plans and other local planning policy mechanisms.

4.2.2 THE DESIGN AND PLACE STATE ENVIRONMENTAL PLANNING POLICY

An explanation of intended effect (EIE) for the proposed D&P SEPP was released in February 2021 for public exhibition purposes. Following a period of public consultation a program of targeted engagement with key stakeholders and industry groups was undertaken with the objective of releasing a draft D&P SEPP for exhibition and comment at the end of 2021.

The EIE identifies that the D&P SEPP is part of the process underway to simplify and improve the NSW planning system and reduce complexity without reducing rigour. Two existing SEPPs SEPP No 65 – Design Quality of Residential Apartment Development and SEPP BASIX will in 2022 be repealed and relevant provisions placed into the D&P SEPP: Some outcomes sought to be achieved by the D&P SEPP are to:

- * establish matters for consideration and application requirements that collectively respond to each of the principles
- » provide a single point of reference for design-related considerations and performance criteria in the planning system
- define scales of development precincts and significant development, and all other development
- introduce a robust and consistent design process through requirements for design skills, design evaluation and review, and design excellence

An outcome sought by the incorporation of SEPP BASIX into the D&P SEPP are to:

- » improve customer experience and promote innovation through regular tool updates and by recognising emerging technologies
- include updated sustainability targets and provide flexibility in the available assessment pathways
- continue to drive energy and water efficiency, and sustainability commitments for housing in NSW.

It is expected that the D&P SEPP will give effect to section 1.3 of the EP&A Act to facilitate ecologically sustainable development through an assessment of sustainability and resilience and contributing to NSW targets for resource use and emissions. It would also contribute to productive local economies and social cohesion through adequate provision of public space.

The details of the draft SEPP have not been released at the time of writing this report.

4.2.3 LOCAL ENVIRONMENTAL PLANS

In NSW, the Standard Instrument LEP (the policy framework that standardises all Council LEPs) does not mandate any sustainability targets or sustainable development outcomes. Therefore, there is no requirement for Local Governments to provide development controls which pertain to the assessment of development against Sustainability Rating Systems. This is despite the objective of the EP&A Act to facilitate ecologically sustainable development.

Notwithstanding, some LEPs include provisions within their Design Excellence control for developments (which require evidence of design excellence) to demonstrate how sustainability is achieved. Design Excellence is a voluntary provision that Councils may choose to add to their LEP and there is no standard format. However, a design excellence control generally can take the form such as the following extracted the Penrith LEP 2010:

- (3) In considering whether the development exhibits design excellence, the consent authority must have regard to the following matters—,
- (v) environmental impacts such as sustainable design, overshadowing, wind and reflectivity,
- (vi) the achievement of the principles of ecologically sustainable development,

As the above shows, an LEP requirement that seeks to achieve the principles of ecologically sustainable development does not mandate a requirement to achieve an independent sustainability rating. However, Councils who choose to include a Design Excellence clause within an LEP, can use this pathway to require achieving a sustainability rating such as Green Star (for residential for example) and NABERS (for commercial developments) to demonstrate design excellence and provide a clear means to a developer in complying with the ESD portion of the provision. Notwithstanding, this is still at the discretion of design excellence juries and what they see are appropriate in accordance with DCP provisions.

4.2.4 DEVELOPMENT CONTROL PLANS

While controls for sustainability rating tools are not included in Council's LEPs, most Council's will provide some direction for achieving sustainability outcomes and/or ratings within their DCP.

DCPs are non-statutory plans that set out detailed planning controls to support the statutory provisions within the LEP. The Act specifically states that provisions within the DCP are not statutory requirements, therefore alternative solutions to development controls can be applied.

Some Councils have chosen to provide sustainability rating targets for specific types of development, where as other Council's require sustainability ratings to be achieved for developments within a specific area such as a town centre.

Table 3 provides a summary of how each of the five chosen Councils applies controls for Sustainability Rating Tools within their DCP.

In addition to the selected Councils, it is worthwhile referring to the ESD provisions within DCPs for City of Sydney and City of Parramatta. These Councils have established good frameworks to support targets for more sustainable development and reduce greenhouse gas emissions.

The City of Sydney's Guidance on sustainable development provides a resource for incorporating sustainable elements early in the design process to save money, time and effort. The City of Sydney includes in its DCP requirements for NABERS and Green Star for commercial office developments, and BASIX and WELS for residential development. It is common for developments in the City of Sydney to utilise the Design Excellence clause to access bonus floor space. Council will typically leverage this process to require a minimum sustainability rating requirement to demonstrate design excellence, including entering into a NABERS Commitment Agreement where appropriate. With this approach, it becomes a condition of consent as part of a Concept Development Application, to require a development to achieve a Green Star and/ or NABERS rating as part of a Detailed Development Application.

The City of Parramatta has recently adopted a "best-in-market" approach as part of its planning policy, to require all non-residential developments in the Parramatta CBD to perform as well as the top 15 per cent of comparable existing buildings in the Sydney metropolitan region on energy and water efficiency. This approach will use the NABERS rating scheme to measure performance and provides a 'floating' benchmark that will continue to rise in line with the average building efficiency performance across Sydney.

4.2.5 ESD DOCUMENTATION REQUIRED

Table 3 identifies that all Councils consulted in the preparation of this report have requirements for non-residential development to achieve a Green Star and/ or NABERS requirement (not applicable to residential development). The Councils also require an ESD report to accompany development applications to demonstrate how the sustainable design outcomes will be achieved, including efficiency, renewable energy generation and building materials. This can typically be in the form of:

ESD report identifying selected methods, including assessment against a selected sustainability rating tool (i.e Green Star) and/or A completed Efficient Use of Resources Commitment Table.

If an applicant has proposed to achieve a sustainable design rating, or Council has enforced this requirement as part of a design excellence process, then a condition of consent will require formal certification that the resultant development has achieved the design rating. The applicant will then progress through the relevant administrative process for formal certification.

However it must be noted that controls for sustainability rating tools are not included in the Council's LEPs and sustainability outcomes for development are guided through a DCP. The EP&A Act specifically states that provisions within the DCP are not statutory requirements, therefore alternative solutions to development controls can be applied. This means an applicant can request Council to not require formal certification for a sustainability rating and that an alternative sustainable design outcome is proposed.

In this scenario, Councils can permit development applications to propose sustainable development outcomes to be designed to an equivalency of a sustainability rating targets, rather than requiring formal certification through a sustainability rating target system.

This can occur on a case-by-case basis regardless of whether a DCP requires a development to achieve a sustainability rating target.

If a Council accepts the proposal to achieve an equivalency of a sustainability rating target, then a condition of consent will be applied in a manner similar to the below:

C9. Prior to the issue of a construction certificate, the Applicant must demonstrate that ESD is being achieved by either:

(a) registering for a minimum 4-star Green Star rating with the Green Building Council Australia and submit evidence of registration to the Certifier; or

(b) submit evidence to the satisfaction of the Certifier from a suitably qualified ESD Accredited Professional that the ESD measures equivalent to a minimum of 4-star rating have been incorporated into the design of the works proposed.

Table 3 - Sustainability tools used in New South Wales Local Government policies

Local Government	ESD Tools utilised	Planning Framework	Documentation Required	Implementation / Compliance
The City of Parramatta	BASIX and WELS (residential) and NABERS (non-residential) depending on GFA of proposed development.	Parramatta DCP 2011 (currently under review to create a consolidated DCP)	ESD report. Refer to section 4.2.5 for detail.	Condition of consent requiring development to be consistent with ESD report, prior to issue of occupation certificate.
The City of Sydney	BASIX and WELS (residential) and Green Star and NABERS (non residential) depending on GFA of proposed development.	Sydney DCP 2012	ESD report. Refer to section 4.2.5 for detail	Condition of consent to be consistent with ESD report, prior to issue of occupation certificate.
Newcastle	BASIX (residential) and Green Star (non residential)	Newcastle DCP 2012	ESD report. Refer to section 4.2.5 for detail	Condition of consent requiring development to be consistent with ESD report, prior to issue of occupation certificate.
North Sydney	BASIX (residential) and Green Star (5 star) and NABERS (4.5 Star) (non residential) depending on GFA of proposed development.	North Sydney DCP 2013	ESD report and Efficient Use of Resources Commitment Table (Commercial development only). Refer to section 4.2.5 for detail	Condition of consent requiring development to be consistent with ESD report, prior to issue of occupation certificate.
Penrith	BASIX and WELS (residential) and Green Star (4 Star) and NABERS (4.5 Star) (non-residential development, including mixed use developments)	Penrith DCP 2014	ESD report. Refer to section 4.2.5 for detail	Condition of consent requiring development to be consistent with ESD report, prior to issue of occupation certificate.
Ryde	BASIX and Green Star (4 Star) (residential) and Green Star (4-5 Star) (non-residential)	Ryde DCP 2014	ESD report Refer to section 4.2.5 for detail	Condition of consent to be consistent with ESD report, prior to issue of occupation certificate.
	BASIX, Green Star, NatHERS WELS and MEPS ratings (residential) and Green Star and NABERS (non-residential)	North Ryde Station Precinct DCP	ESD report Refer to section 4.2.5 for detail	Condition of consent to be consistent with ESD report, prior to issue of occupation certificate.
Waverley	BASIX (residential) and Green Star (minimum 4 star) encouraged.	Waverley Development Control Plan 2012	ESD report Refer to section 4.2.5 for detail	Condition of consent to be consistent with ESD report, prior to issue of occupation certificate.

4.3. CASE STUDIES

4.3.1. NEWCASTLE CITY COUNCIL ESD POLICY

In 2008 Newcastle City Council prepared an Ecologically Sustainable Development (ESD) Procurement Policy (TCoN, 2008a). The objective of the Policy was to embed ESD principles in Council's procurement process. The policy focused on three ESD criteria including waste reduction, energy efficiency and water conservation.

In 2011 Council prepared a Carbon and Water Management Action Plan. Similarly to the ESD Procurement Policy, the plan was developed to lead carbon mitigation and water management into the next decade. A summary of these plans is provided within Council's Environmental Management Strategy 2013.

Following the release of these plans, Council subsequently adopted development controls for energy, water and waste management within the Newcastle Development Control Plan 2012, adopted in June 2012. The NDCP 2012 can be accessed here: https://www.newcastle.nsw.gov.au/development/land-use-planning/development-control-plan-and-technical-manuals/development-control-plan-dop

Section 7 of the NDCP 2012 contains specific development provisions for energy efficiency, water efficiency and waste management. These controls for energy and water efficiency specifically apply to business development and industrial development only.

Council encourages the use of rating tools, which is noted in section 7 of the NDCP as follows:

- Development (both business and industrial) is to meet a minimum 4 Star Green Star Rating in the Green Building Council of Australia rating system where applicable.
- An energy efficiency report from a suitably qualified consultant should accompany any development application for new commercial office development over \$5 million in estimated cost.
- The following controls apply only to "change of use applications over 2000m²" as defined within Newcastle Local Environmental Plan 2012, where not complying development
- Development is to achieve a minimum 3.5 Star Energy Rating with NABERS

Currently, the DCP controls listed above are the only requirements by Council for Green Star and NABERS rating systems. These controls for energy and water efficiency were last amended in July 2017. An updated Environmental Management Strategy has not been released since its initial inception in 2013.

Section 4.4 provides insight into Council's concerns regarding implementation of ESD principles and hesitancy to incorporate Green Star and NABERS rating systems into the current planning framework.

4.3.2. NORTH SYDNEY COUNCIL ESD POLICY

In 2013, North Sydney Council commenced the Ecologically Sustainable Development (ESD) Best Practice Project, to audit and test the effectiveness of Council's planning provisions. Its objective was to implement best practice provisions and assist Council in driving sustainable outcomes in the LGA.

The project involved five areas of research, including:

- » Energy
- » Water
- » Waste
- » Biodiversity
- » Transport

An ESD best practice report was considered by Council on 13 May 2013. This report can be accessed at https://www.northsydney.nsw.gov.au/files/assets/public/docs/8 business amp projects/planning frameworks/pds01 esd bpp.pdf

The ESD best practice report contains a number of recommendations on how to achieve best practice, including draft amendments to the North Sydney DCP (which have since been adopted), the drafting of an ESD Commitment table to be completed and submitted with DAs, energy efficiency requirements and a Green Roof and Wall Resource Manual. As the ESD best practice report advises on actions for ESD practices, it does not contain any specific planning provisions.

Council subsequently adopted the ESD project and its recommendations, which remain in effect.

Noting the above comment that the ESD best practice report was not prepared to propose ESD planning controls, a significant discussion item within the ESD best practice report is extracted below for reference to the role of sustainability tools in the NSW Planning system. It discusses how the planning regulatory framework enables and limits Councils in mandating ESD outcomes and is applicable to all Local Governments in NSW:

1. Does the regulatory framework at Commonwealth and State levels allow scope for intervention at the local level to achieve energy use objectives?

Residential development

Section J – Energy Efficiency of the BCA does not apply to dwellings in NSW. Energy efficiency in dwellings in NSW is regulated by BASIX. Since the introduction of BASIX, EPIs, including LEPs, and DCPs cannot include any further provisions relating to reducing potable water consumption, reducing greenhouse gas emissions or improving the thermal performance of new dwellings. For this reason, provisions relating to dwellings in Sections 1 and 2 of the draft DCP under the heading 'energy efficiency' merely make reference to BASIX and provide guidance on what issues may impact upon the assessment of a development under the BASIX scheme.

However, provisions under EPIs and DCPs that are for purposes different to BASIX and aim to improve residential amenity or influence built form continue to have effect for the design and assessment of new dwellings. For example, mechanical services, equipment or fittings (e.g. efficient hot water systems, showerheads or lighting), passive solar design (e.g. aspects such as insulation, glazing types and shading), orientation of glazing for heat gain, and cross ventilation are all taken into account by BASIX and cannot be regulated via an EPI or DCP for the purposes of reducing energy consumption. However, good orientation for daylight access and cross ventilation can be required under an EPI or DCP for the purpose of 'amenity' despite having implications for energy use. This is obviously a 'grey' area where the difference between 'amenity' and 'thermal comfort' is not clear. Regardless, Council has the scope to regulate for the purposes of achieving amenity or built form outcomes and this can be used to create environments that do not overly rely on artificial heating or cooling.

Non-residential development

Unlike for dwellings, no legislation exists at State or Commonwealth level which restricts the ability of local government to regulate the use of energy within non-residential developments, or the non-residential component of mixed use developments. Draft DCP 2012 already contains provisions that aim to achieve energy use objectives for non-residential developments. Section 2 'calls-up' the use of NABERS and Green Star rating systems (s.2.6.1). All developers of commercial properties, regardless of size, are required at Construction Certificate stage to produce a NABERS Energy Commitment Agreement that shows that the building and its services will be capable of achieving a minimum 4.5 star rating.

Large scale commercial properties that are greater than 5000m² in size are required at development application stage to demonstrate that they can achieve a minimum 5 star rating under the Green Building Council of Australia's Green Star Office rating tool (s.2.6.1). Non-residential developments are also subject to a provision that certain issues be considered when assessing the energy rating of a building (s.2.6.1), a requirement that the energy efficiency of other buildings in the vicinity not be affected (s.2.6.1), and provisions regarding energy efficient lighting (s.2.3.5; s.3.2.7).

2. Is the LEP/DCP an appropriate place for regulation regarding energy use?

Residential development

Given that BASIX restricts the use of energy use provisions relating to dwellings, a review of draft DCP provisions that relate to dwellings was undertaken to identify provisions that detract from, or exceed, BASIX requirements (Appendix B). Provisions that detract from or exceed BASIX requirements should be deleted so as not to weaken the applicability or credibility of the document as a whole. However Appendix B shows that each provision relating to dwellings can be allocated a 'residential justification':

- Amenity The provision aims to improve amenity which is not covered in BASIX assessments; or
- BASIX guidance The provision aims to 'encourage' the adoption of measures beyond those required by BASIX without requiring them or to provide guidance which will assist in the achievement of BASIX targets; or
- Alterations & additions The provision applies to alterations and additions valued at less than \$50,000, which are not covered by BASIX. The DCP is therefore an appropriate place for provisions relating to dwellings that can be justified for one of these reasons.

Non-residential development

As discussed above, there are no mandated State or Commonwealth requirements for energy use in new non-residential buildings. It is therefore appropriate that local provisions in LEPs and DCPs aim to fill the gap and contain energy use provisions. Meanwhile, there are no statutory requirements for Councils to require ESD targets in local planning controls beyond that required under the BASIX SEPP and general consideration of ESD principles.

4.3.3. PENRITH COUNCIL ESD POLICY

Penrith City Council released its first sustainability program in 1999, Sustainable Penrith Program. Since its release, Council has developed three controls within the Penrith LEP 2010 for ESD, including clause 5.13 Eco tourist facilities, clause 7.4 Sustainable Development and clause 8.4 Design Excellence. Evidence in the form of an ESD report is required to be submitted to demonstrate how the proposed development to which these clauses apply achieve sustainability. An ESD report would typically identify ESD measures for efficiency or design materials, and if the development will be implementing any sustainability ratings tool such as Green Star or NABERS. However, there may be occasions where an applicant proposes to design to an equivalent rating level.

Council's DCP also includes requirements for ESD, with specific emphasis on Sustainability Rating tools used for the assessment of industrial development and development within the Penrith Village Centre. Specifically, Council mandates the following requirement for non-residential developments:

» Non-residential developments including mixed use developments, with a construction cost of \$1 million or more are to demonstrate a commitment to achieving no less than 4 stars under Green Star or 4.5 stars under NABERS

In 2021 Council adopted the Resilient Action Plan 2021-2030 with a key objective to "Review procurement and supply chain processes and procedures to imbed Ecological Sustainable Development principles and resilience" (Direction 4). This is a promising sign of Council's action towards embedding ESD principles in future planning regulations. Despite this, a comprehensive framework for ESD is still lacking within the local planning system.

4.3.4. CITY OF RYDE ESD POLICY

In 2010, City of Ryde introduced ESD objectives into the local planning framework. The results of community consultation undertaken during the preparation of the Ryde 2030 Community Strategic Plan demonstrated residents' aspirations to live in a sustainable area.

A series of recommendations emerged from community consultation including the inclusion of an ESD clause within the LEP, as well as a review of the DCP to include provisions for ESD.

Subsequently, Council developed two LEP controls requiring the consideration of sustainable development for developments in business and industrial zones. Clause 6.6 Environmental Sustainability, and clause 6.13 Design Excellence, provide specific requirements for sustainable development to which certain development applies.

6.6 Environmental sustainability

- (1) The objective of this clause is to ensure that development on land in a business or industrial zone embraces principles of quality urban design and is consistent with principles of best practice environmentally sensitive design.
- (2) Development consent must not be granted to development on land in a business or industrial zone if the development is 1,500 square metres in gross floor area or greater unless the consent authority is satisfied that the development has regard to the following—
 - (a) water demand reduction, including water efficiency, water recycling and minimisation of potable water usage,
 - (b) energy demand reduction, including energy generation, use of renewable energy and reduced reliance on mains power,
 - (c) indoor environmental quality, including daylight provision, glare control, increased outside air rates, thermal comfort,
 - (d) a reduction in new materials consumption and use of sustainable materials, including recycled content in concrete, sustainable timber and PVC minimisation,
 - (e) emissions reduction, including reduced flow to sewer and light pollution,
 - (f) transport initiatives to reduce car dependence such as providing cycle facilities, car share and small vehicle parking spaces,
 - (g) land use and ecology, including reduced topsoil removal and contaminated land reclamation.

6.13 Design excellence

- (1) The objective of this clause is to ensure that development exhibits design excellence that contributes to the natural, cultural, visual and built character values of Ryde.
- (2) This clause applies to land identified as "Design Excellence" on the Design Excellence Map.
- (3) Development consent must not be granted for development to which this clause applies unless the consent authority considers that the development exhibits design excellence.
- (4) In considering whether the development exhibits design excellence, the consent authority must have regard to the following matters—
 - (a) whether a high standard of architectural design, materials and detailing appropriate to the building type and location will be achieved,

- (b) whether the form and external appearance of the development will improve the quality and amenity of the public domain,
- (c) whether the development detrimentally impacts on view corridors,
- (d) whether the development detrimentally impacts on any land protected by solar access controls established in the Ryde Development Control Plan,
- (e) the requirements of the Ryde Development Control Plan,
- (f) how the development addresses the following matters—
- (i) the suitability of the land for development,
- (ii) existing and proposed uses and use mix,
- (iii) heritage issues and streetscape constraints,
- (iv) the relationship of the development with other development (existing or proposed) on the same site or on neighbouring sites in terms of separation, setbacks, amenity and urban form,
- (v) bulk, massing and modulation of buildings,
- (vi) street frontage heights,
- (vii) environmental impacts such as sustainable design, overshadowing, wind and reflectivity,
- (viii) the achievement of the principles of ecologically sustainable development,
- (ix) pedestrian, cycle, vehicular and service access, circulation and requirements,
- (x) the impact on, and any proposed improvements to, the public domain,
- (xi) achieving appropriate interfaces at ground level between the development and the public domain,
- (xii) integration of landscape design, including the configuration and design of communal access and communal recreation areas, to incorporate exemplary and innovative treatments and to promote an effective social atmosphere.
- (5) Development consent must not be granted to the following development to which this Plan applies unless an architectural design competition that is consistent with the Design Excellence Guidelines has been held in relation to the proposed development—
 - (a) development in respect of a building that is, or will be, higher than 45 metres or 13 storeys (or both) in height,
 - (b) development having a capital value of more than \$5,000,000,

- (c) development for which the applicant has chosen to have such a competition.
- (6) Subclause (5) does not apply if the Council certifies in writing that the development is one for which an architectural design competition is not required.
- (7) In deciding whether to grant development consent to the development application, the consent authority is to take into account the results of the architectural design competition.
- (8) In this clause—

architectural design competition means a competitive process conducted in accordance with the Design Excellence Guidelines.

Design Excellence Guidelines means the Design Excellence Guidelines issued by the Planning Secretary, as amended from time to time.

Ryde Development Control Plan means the Ryde Development Control Plan, as in force at the commencement of Ryde Local Environmental Plan 2014 (Amendment No 24).

Additional changes to the DCP were also made including requirements for BASIX certificates for residential dwelling houses and boarding houses, as well as Green Star and NABERS requirements for development in town centres and transport corridors.

The DCP is a large document which incorporates provisions for a variety of development types and zoning areas. Controls for ESD are not consistent within the DCP and vary depending on the development type or location. Some examples of DCP controls include:

Part 4.2 Shepherds Bay Meadowbank – All commercial buildings over 1500 m² are to be designed to a minimum of 4 stars under the Green Star rating system

Part 4.4 Ryde Town Centre – Development within Precinct 1 is to achieve a minimum 5.0 Green Star Rating and development in Precinct 2 is to achieve a minimum 4.0 Green Star Rating.

North Ryde Station DCP – 1. All multi-unit residential buildings are to be assessed and certified against Green Star (Design Rating) and achieve a minimum 4 star rating. AND 2. All commercial buildings are to be assessed and certified against Green Star (Design Rating) and achieve: A minimum 6 star rating

The Local Planning Study published in 2015, acknowledges that the incorporation of ESD objectives into statutory planning instruments and development guidelines is a key challenge for Council. One of these challenges for Council includes understanding the evolving research into sustainability and awareness of the appropriate measures for development ESD provisions.

4.3.5. WAVERLEY COUNCIL ESD POLICY

Waverley Council has set a goal for achieving a 70% reduction in greenhouse gas emissions (GHG) emissions by 2030 within the LGA. To achieve that target, the Council acknowledges that the performance of building stock is crucial. The Waverley DCP contains two controls specifically relating to Sustainability Rating Tools (Part 2.4) and Energy Assessment (Part 2.5). These controls provide a comprehensive pathway for development to assess energy and water efficiency in line with national sustainability rating systems.

Council encourages the use of rating tools to achieve and maintain sustainable development to achieve compliance with the controls noting that certification is an optional pathway to achieving compliance. The controls are as follows:

- Control 2.4: Green Star certification is encouraged for all developments with a cost of works of \$3 million or greater.
- Control 2.5: A commitment to the provision of an Energy Assessment Report must accompany a development application for new mixed use and commercial development with a cost of works of \$3 million or greater.
- The commitment is to demonstrate: (i) A draft proposal of how the project will deliver a development with greenhouse gas emissions that are 30% less than those of a reference building

In a discussion with Waverley Council, it was acknowledged that there is great success in implementing Control 2.5, which requires buildings to achieve 30% reduction in greenhouse gas emissions than those of a reference building. However, due to the nature of the built environment in Waverley, where residential development is the dominant built form, compliance with BASIX requirements tend to override Green Star and NABERS certification for residential development.

4.4. DISCUSSION

While an objective of the EP&A is:

(b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment

There are no statutory requirements to consider the environmental performance of developments against sustainability rating tools. However, while the assessment of sustainability rating tools is not a requirement under any SEPP or LEP, sustainable building performance is generally

encouraged for larger developments as required within Council DCPs.

In the absence of mandatory requirements, some Councils such as Waverley have taken progressive steps towards achieving local energy targets in line with State and district targets for sustainability.

In the absence of mandatory requirements, some Councils such as Waverley have taken progressive steps towards achieving local energy targets in line with state and district targets for sustainability.

4.4.1 NEWCASTLE CITY COUNCIL

An interview was undertaken with Newcastle City Council to understand the key drivers for achieving ESD, as well as to identify potential barriers for implementing sustainability rating tools in development assessment.

Council acknowledged that the implementation of ESD principles within its planning and assessment framework has low priority. While an effort to incorporate ESD controls into the Newcastle DCP 2012 has seen the successful delivery of some large-scale commercial and industrial sites within the LGA, the Council is hesitant to push ESD principles due to the potential unfavourable response of the community and local developers.

Council raised several concerns regarding the implementation of ESD principles and sustainability rating tools. A summary of these concerns is provided below:

- » Low mandatory ESD requirements in planning legislation - Council identified that the assessment of sustainability in development applications fell into two categories applications which are subject to BASIX, and applications which are not. When developments are subject to BASIX, the applicant will typically use this as the minimum threshold. For applications not subject to BASIX, the applicant will generally indicate the development will comply with the sustainability requirements of Section J of the BCA. The Council could not provide an example where an applicant had documented compliance with Green Star or other sustainability rating other than that associated with BASIX or Section J. In the absence of specific policy guidelines for implementing ESD controls, the Council is hesitant to encourage controls beyond the minimum development requirements of BASIX and Section J. SEPP BASIX is the key driver for guiding the uptake of ESD by Council. Council acknowledged that the key to strengthening local policy will need to be led by State Government initiatives and policy frameworks that provide guidance and definitions for ESD and sustainability outcomes.
- » Complying development certificate (CDC) Pathway Council acknowledges that there is some hesitancy in progressing Council's current controls to include the use of sustainability rating tools. This is largely due to

concerns that the community will respond poorly to additional legislative changes that exceed the minimum requirements that will increase development costs. Council believes that the CDC pathway where available would present as a more attractive development pathway than Development Applications should additional ESD measures be put in place.

- ESD is overlooked for small development –The Council's general hesitancy to incorporate more sustainability measures into its planning framework largely revolves around the impact on smaller developments. Council acknowledges that larger commercial and industrial developments can be incentivised to produce energy and water efficient development, however this is not the case for single dwelling houses or other small scale development. Council relies on the minimum requirements of SEPP BASIX to inform sustainable development outcomes. Council considered that the additional cost imposed by achieving sustainability rating tools is discouraging to developers.
- Internal ESD knowledge Council currently requires minimum sustainability outcomes be met through the provision of a BASIX or NatHERS certificate prepared by a suitably qualified professional. There is an acknowledgement that existing checks and balances within planning legislation to ensure acceptable ESD measures are proposed at development application stage and then implemented at construction stage, may require further development to provide stronger and certain ESD outcomes. Council's assessing officers currently have limited expertise to interrogate the sustainability outcomes of a development and largely rely on and accept the reports produced by industry professionals as being accurate.

4.4.2 NORTH SYDNEY COUNCIL

An interview was undertaken with North Sydney Council to understand the key drivers for achieving ESD, as well as to identify potential barriers for implementing sustainability rating tools in development assessment.

North Sydney Council identified that there has been a long-term program to implement ESD outcomes to achieve emission reductions and facilitate the delivery of development that achieves environmental best practice. Similar to Waverley Council, the drive for implementing ESD principles in planning policy and controls originated from Council's strategic planners more than ten years ago. However, the agenda was primarily driven by a single Strategic Planner, who coordinated with Councillors to ensure ESD outcomes were promoted. This resulted in ESD, and energy efficiency measures being introduced into the North Sydney DCP that matched best practice at the time.

Notwithstanding Council's past progress on promoting ESD, Council has encountered several barriers to achieving high performance buildings and ESD outcomes. A summary of these barriers is presented below:

- Outdated ESD Planning Requirements Council acknowledged that whilst significant progress was made in promoting ESD outcomes in the past, its existing policies no longer represent best practice. Council's Sustainability team are currently collaborating with the Councils strategic planners to review and revise its ESD policies to be aligned with current best practice. This will firstly involve a review of ESD requirements for Council owned/operated buildings, with a potential target to achieve minimum 5 star Green Star rating for its assets. Learnings from this phase could then be broadened to development controls at a later stage, likely to apply to development with capital investment value greater than \$10 million.
- Gaps in planning policy to promote ESD outcomes Current policy is missing the opportunity to encourage proposals to be designed to easily incorporate greater ESD outcomes. For example, new buildings are typically designed with roof structures that contain limited space for the installation of photo voltaic (PV) solar panels or are obstructed by structures that would facilitate PV installation. It was identified that additional provisions could be incorporated into Council's DCP to encourage built form that could facilitate greater PV installation, particularly for east and west facing buildings to improve renewable energy generation throughout the day. Additional ideas discussed for incorporating into Council's DCP included promoting electrification of new buildings, rather than installing gas infrastructure for heating and cooking. However, these proposed ideas have been deferred or dismissed currently as they will need further consideration to how they can be drafted and implemented.
- Internal Culture and Awareness Council acknowledges the past successes of ESD promotion within Council has been heavily reliant on the personal interests of a single strategic planner and the ability to engage with Councillors on sustainable outcomes. Unfortunately the strategic planner left Council in 2016 and Councillor interest in ESD has also waned. This has resulted in ESD outcomes becoming less prioritised in strategic planning and development assessment processes. This highlights the importance of instilling a broader sustainability awareness within Councils to maintain progress long term.
- The Council's current focus on ESD outcomes is primarily at a strategic level. There is no internal requirement for the development assessment team to consult with or refer proposed ESD measures within development applications

to Council's Sustainability team. The Sustainability team is also within a separate department to the development assessment team, and so there is limited opportunity for exchange of ideas or priorities. This means that any development applications that provide an ESD technical report or Green Star rating are reviewed only by planners, and do not call upon the expertise of sustainability specialists. This means that its possible that there are lost opportunities for proposed development to achieve improved ESD outcomes and conditions of consent/compliance are less effective.

Value of ESD within Council – Council is experiencing internal resistance to implementing ESD outcomes and tools due to perceived lack of value or ability to convince internal decision makers that there is cost benefit of achieving sustainability targets, such as required by Green Star ratings. Some of this difficulty may be due to outdated assumptions on CAPEX costs and OPEX savings, benefits to occupants of buildings and benefits for the built environment, and/or efficiency savings. Despite commissioning external consultant advice to benchmark North Sydney against other Councils, the benefits of ESD outcomes remain a low priority.

4.4.3 WAVERLEY COUNCIL

An interview was undertaken with Waverley Council to understand the key drivers for achieving ESD, as well as to identify potential barriers for implementing sustainability rating tools in development assessment.

Waverley Council acknowledged that in order for the Council to achieve targets for emission reduction, the performance of building stock within the LGA needs to be improved. A collective effort between Council's strategic planners and assessment team resulted in the establishment of Control 2.4 and 2.5 within Waverley DCP approximately 12 years ago. Despite efforts to encourage Green Star and NABERS rating tools, the Council has encountered several barriers to achieve high performance buildings (5 to 6-star ratings). A summary of these barriers is listed below:

- Development Types Green Star and NABERS certification does not get applied broadly within the LGA as many development applications within Waverley LGA are generally smaller residential development and BASIX provides the clear assessment framework to drive sustainability outcomes. There is an acknowledgement by Council that Green Star and NABERS rating tools are more effective for office building stock and larger development formats.
- BASIX Due to the wording of the BASIX minimum requirements, it is difficult for Council to incentivise anything beyond those requirements. It is recognised that most developments present poor outcomes for ESD at a development application stage and most buildings rely on the NCC Standard. Currently, Council place

- greater emphasise on compliance with minimum BASIX requirements which achieves the sustainability outcomes.
- Section J The update to the NCC presents a challenge to achieving high sustainability rating for buildings. Council advised that the recent updates to Section J are quite stringent and will result in changes to the built form i.e. less glass towers as the NCC now requires exceptional performance glass, operable shutters and blinds. The benefit is this should provide better outcome for residents in terms of amenity and energy usage. However the increased stringency means that its more costly for developers to achieve.
- " Green Star Pathway Council identified there is a hesitancy from applicants to undertake Green Star certification due to the cost and challenges of receiving accreditation. Applicants are more likely to achieve compliance with control 2.5 of the Waverley DCP for a 30% reduction in greenhouse gas emissions. Presently there is only one building in the Waverley LGA that is Green Star rated, and that is the Bondi Pavilion, under renovation by Council.
- » NABERS Pathway NABERS is recognised as being tailored largely towards commercial buildings and other large-scale developments. NABERS is not structured for complex sites including mixed-use building typologies. Council regard NABERS as less of a design tool and rather a commitment agreement to sustainable design. Further information and education are required by Council to understand how to achieve NABERS ratings.
- Incentives Council does not support providing floor space bonus to developments to improve sustainability outcomes. The Councils preference is to implement sustainability targets (which can utilise tools such as Green Star or NABERS) within voluntary planning agreements (VPA) at a rezoning stage to mandate for better sustainability in design outcomes.
- Awareness and Training Council officers have little awareness of Green Star and NABERS targets and the requirements to satisfy these. This was discussed both within the Sustainability team and development assessment officers. There is a recognised need for further development and training for Council staff to understand what is required to achieve sustainable design.
- Compliance The NSW planning system allows for private certification of development with little involvement by Council to verify compliance with approval conditions, including to confirm a development has been delivered in a form that achieves its sustainability rating. This presents a challenge for Councils, although Waverley Council acknowledged that private certifiers are under closer observation at the moment, and this is likely to have positive outcomes.

4.5. KEY FINDINGS

The following provides a high-level synthesis of findings from Section 4.3 and Section 4.4. Learnings from the interviews with selected Councils are also considered in context of policies and successes from other jurisdictions, including City of Sydney and City of Parramatta.

1. Council staff's personal interest in ESD is powerful when they are empowered to create change.

North Sydney Council provides a good example of the successes of establishing ESD best practice when Council staff are personally passionate about sustainability.

This was dependent on pro-active staff that can create broader interest with colleagues and built internal momentum for change. The learnings from North Sydney show the importance of building a culture that can sustain this momentum and remain current with best practice, even when key individuals no longer are part of the team.

Discussions with Council indicate there are typically groups of staff who are passionate about achieving more sustainable outcomes. However, creating change from the bottom up is challenging, and often Council officers are unsure how to create change in planning outcomes or have limited opportunity to create change due to time constraints and workload pressures.

Further, there can be a general hesitancy from Councils to impose additional controls that slow development assessment or increase cost of development and so ESD becomes a lower priority than other planning issues such as housing affordability.

2. Councils have limited powers in implementing ESD above minimum compliance

Common feedback from Council officers is that Councils are bound by the State and National regulatory framework. In NSW, Councils are unable to require higher standards of sustainability outcomes for residential development above that required under BASIX. Councils do have greater influence for non-residential development, where minimum Green Star and NABERS ratings may be required within planning controls contained in a DCP. Some Councils however, are more successful than others in enforcing these requirements and alternative performance measures are accepted to avoid resistance from the community and industry. When formulating policy, Councils are often hesitant to support policies that go beyond the minimum requirements outlined in the NCC. The final policy position and implementation of ESD outcomes identified in DCPs typically aligns with the position and priorities of final decision makers, i.e. Planning Panels and Council. As such, there are occasions where Councils will overrule their own requirements to achieve Green Star and/or NABERS ratings and permit development to be designed to an equivalency of a rating.

4.6. RECOMMENDATIONS

Based on the findings of research and interviews in NSW, the following actions are recommended for GBCA and NABERS to investigate to assist Local Government:

Advocacy for policy change at a State and Commonwealth level:

Councils are calling for policy change at State and Commonwealth level (As in the federal position and policy on net zero carbon) that can then empower Councils to require high standards of ESD. This could include legislation mandating requirements for implementing sustainability targets for development over a certain capital investment value, or scale of development. This would provide a more uniform approach and circumnavigate local policy positions where ESD development is not a priority.

» Sharing of ESD best practices:

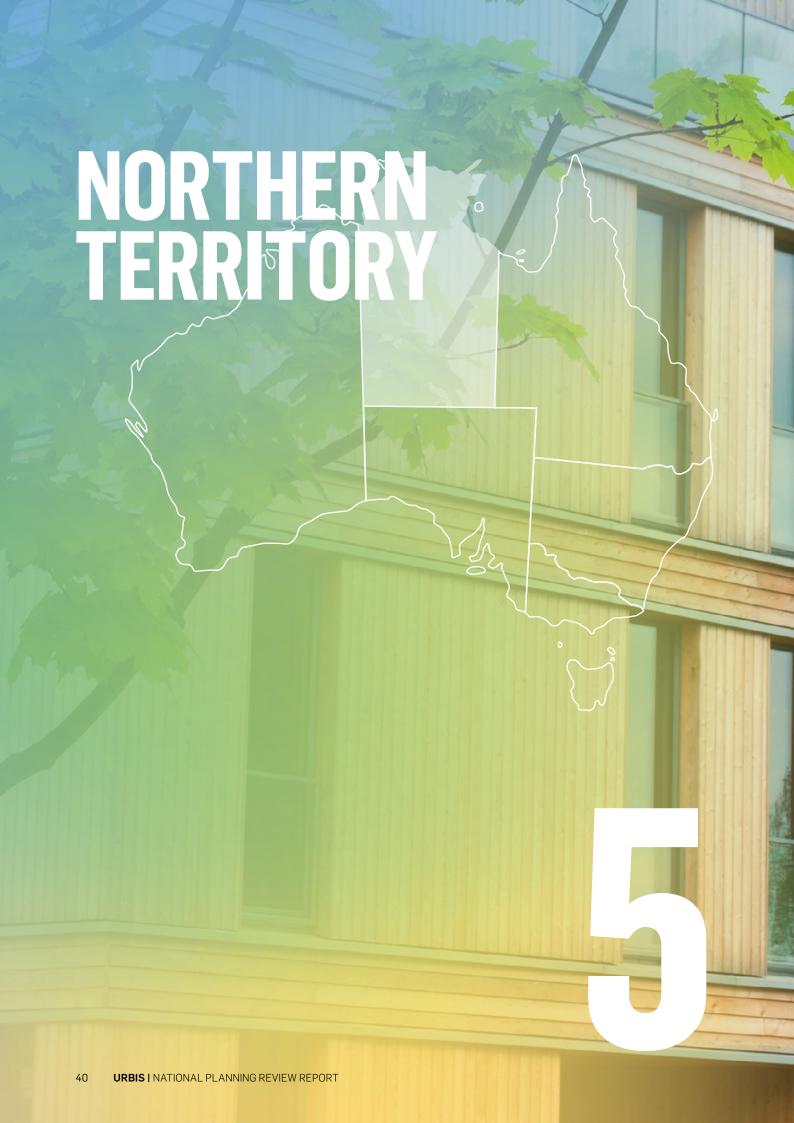
Some Councils are more successful than others in guiding ESD requirements, including some Councils requiring Commitment Agreements to be submitted as part of a development application, methods for embedding ESD requirements within Planning Agreements when a site is rezoned, or through design excellence processes. Examples of these solutions could be compiled in a centralised location accessible to Council planners, to encourage sharing of successful implementation more broadly.

^a Greater supporting information to Council officers, senior decision makers and Councillors on why to support ESD and sustainability ratings.

Findings of this research indicates that successful ESD indicatives have been led by passionate people empowered to influence change. However, Councils are concerned with requiring additional costs on development that further burdens affordability and project feasibility without clear benefits of return on investment. Whilst there are existing training resources available on ESD and sustainability tools, further resources on the benefits or "so what" of implementing ESD being made available to support passionate staff would be helpful in convincing senior staff to support the requirement for implementing ESD outcomes in planning policy.

Use of existing Design Excellence clauses in LEPS to encourage the use of sustainability rating tools to achieve ESD provisions.

Some LEPs include provisions within their Design Excellence control for developments (which require evidence of design excellence) to demonstrate how sustainability is achieved. Design Excellence is a voluntary provision that Councils may choose to add to their LEP and there is no standard format. Therefore Councils could use this Clause to encourage developers to achieve a sustainability rating such as Green Star and NABERS to clearly demonstrate design excellence. This also provides clarity for a developer to comply with the ESD portion of the provision.



5.1. OVERVIEW OF THE PLANNING SYSTEM

The Northern Territory (NT) planning system is run at a state Government level via the Planning Act 1999 and the Planning Regulations 2000. The majority of the NT is governed by the NT Planning Scheme 2000 (The Scheme). The Scheme applies to all areas of the NT with the exception of Jabiru.

5.1.1. MINISTER FOR PLANNING

The Minister for Planning makes and changes planning rules upon advice of the NT Planning Commission and in conjunction with the Development Assessment Services (statutory planning) and Land Planning (strategic planning) divisions within the Department of Infrastructure, Planning and Logistics (DIPL).

The Minister can:

- Establish the NT Planning Scheme and make required changes including the rezoning of land
- » Issue exceptional development permits
- » Issue interim development control orders
- Make decisions on development applications outside of Development Consent Authority division areas
- Appoint members of the Development Consent Authority and NT Planning Commission

5.1.2. NORTHERN TERRITORY PLANNING COMMISSION

The NT Planning Commission is an independent body appointed by the Minister which is responsible for researching best practice planning and providing advice to the Minister. The Planning Commission does not have any decision-making powers.

The Planning Commission's role includes:

- 1. Consultation with the local communities
- Preparation of strategic planning documents, guidelines and assessment criteria for ministerial consideration
- 3. Holding public hearings on behalf of the minister The NT Planning Commission is supported by the Development Assessment Services and Land Planning divisions within the Department of Infrastructure, Planning and Logistics.

5.1.3. DEVELOPMENT CONSENT AUTHORITY

The Development Consent Authority is an independent authority appointed by the Minister with the role of:

- Making decisions on development applications and subdivisions
- » Enforcement of planning rules
- » Holding public hearings on behalf of the Minister

5.1.4. LOCAL GOVERNMENTS

Local Governments act as referral agencies who provide comments for consideration to the Development Consent Authority regarding local development applications. Local Governments can have their own local policies or guidance documentation which guides their comments on the proposed developments.

5.1.5. DEVELOPMENT CONSENTS

Applications for Development Consents are submitted via an online portal to the Development Consent Authority or Minister for Planning. These are subsequently assessed by the Development Consent Authority with the relevant Local Government authority acting as a referral agency. Development is assessed against the provisions as set out within the Scheme and the relevant Strategic Land Use Plan.

5.2. SUSTAINABILITY RATING TOOLS

The NT planning system does not include the use of any ESD rating tools. A review of all the local governments within the NT has identified that whilst many have sustainability directives aimed at guiding local government operations, there are no policies on ESD. In discussions with DIPL it was noted that in the NT there are fewer stakeholders involved in planning and building approvals than in other jurisdictions. As a result, the demarcation is very clear between building requirements covered by the Building Act 1993 and Regulations, and planning matters covered by the Planning Act 1999 and the NT Planning Scheme 2020. Therefore ESD within the Northern Territory is limited to voluntary uptake of ESD through Green Star prior to development and/or via NatHERS within the building process.

5.3. NORTHERN TERRITORY CASE STUDIES

The format of the NT Planning framework results in a lack of case studies for analysis at either the state or Local Government level. Discussions with NT planning officers and a review of the Green Star Project Directory indicates there is limited uptake of Green Star certifications within the NT. Where these have been undertaken, they are largely limited to office fit outs.

Given the lack of case studies and implementation of Green Star through the planning system, there are no precedents, court decisions or case studies relating to the application of ESD tools through the planning system or within any existing Development Consents.

Urbis has initiated discussions with contacts within the Northern Territory government in order to ascertain whether there is any directive or appetite for ESD within the NT. Our discussions found that this is a relevant topic in DIPL and they identified a range of actions that sit outside of the planning system were raised which includes:

- » DIPLs Ecologically Sustainable Buildings Policy. This includes commitments to:
 - Implement DIPL's Sustainability Minimum Design Standard that requires compliance with NCC Section J minimum energy efficiency requirements for projects over a set threshold; and simplified minimum sustainability design standards for all other new building works; and
 - Select projects to showcase leading edge design for sustainability, above and beyond NCC Section J. Showcase projects currently include the State Square Art Gallery (in the design phase) and the National Aboriginal Art Gallery (design yet to commence).
- Office buildings leased by the NT Government over 2,000 m² need to meet minimum base building NABERS ratings of 4.5 stars (existing buildings) or 5 stars (new buildings).
- The National Construction Code (NCC) new residential building requirements for the Northern Territory state:
 - All new houses and renovations to existing houses must achieve a 5-star energy rating;
 - All new apartments must achieve a 3.5-star energy rating or equivalent NCC 2009 Deemed To Satisfy requirements.
- » DIPL has commissioned a cost benefit analysis assessing the possible adoption of the NCC Section J for nonresidential buildings in the Territory. This work is examining both the Section J requirements of the 2016 NCC and the 2019 NCC.

DIPL also raised some initiatives that are being discussed which are specific to the planning system and the recent reform of the Planning Act 1999 which introduced a comprehensive range of objectives under section 2A of the Act. Included in these objectives was an increased emphasis on sustainable development that responds appropriately to the social, economic and environmental needs and values of the community and future generations. However these are objectives and do not have any specific measurement for compliance such as use of a sustainability rating tool.

The use of a recognised rating tool could be used to both guide projects as well as demonstrate compliance against, the sustainability objectives outlined under section 2A.

It would be hoped though by having these in place it would encourage more sustainable building development and the use recognised sustainability frameworks and tools as an easy means for a developer to provide evidence of compliance with these objectives.

In addition to the objectives a Territory-wide Strategic Directions Planning Policy is currently being prepared by the Northern Territory Planning Commission. This Policy will respond to the social, economic and environmental challenges facing the Territory and will set directions to overcome these in the delivery of future Strategic Policies and Land Use Plans. DIPL have said that addressing Planning Scheme elements that influence sustainable building design is a key policy area that will be addressed as part of this work. Supporting this further the Northern Territory Planning Commission has recently completed their Designing Better project. This project seeks to introduce a range of initiatives to facilitate innovative higher density apartment and mixed use development outcomes to help deliver, amongst other things, an urban heat mitigation response to climate change, as well as contributing to the Territory's built form character and to embrace innovation through flexible, best practice planning solutions.

These planning initiatives are currently in their inception and the form, implementation and how they will tackle compliance with the proposed polices is yet to be developed and published. However, it is encouraging that responses to the unique climate and circumstances of the NT are being addressed with moves towards preparing specific ESD policies in the planning system.

5.4. DISCUSSION / KEY FINDINGS

Planning within the NT is undertaken at a state level with Local Governments input into the framework and development consents being limited. The current planning framework does not include consideration of ESD, and any uptake is purely voluntary through the Green Star rating process. Our discussions with planners working in the NT planning commission identified that the following barriers exist preventing the implementation of ESD policies within the planning system and subsequent use of sustainability tools to measure them in the NT:

Lack of Legislation / planning controls relating to ESD - The planning system has no controls or policies in legislation for ESD measures. Given that the planning system is mandated by the Territory government it would mean that these would be simpler to implement if other barriers could be overcome with a consistent approach across the NT. There are current initiatives in place to work towards this by the NT government however this would be accelerated by training and education

from GBCA and NABERS on the role and importance of sustainability outcomes. In particular, how rating tools can be used to measure sustainability attributes that are unique to the NT's longer term development goals and interests.

- Education of local government staff and consultants As there has been limited uptake in voluntary Green Star certifications or equivalent at planning officer level they have had little exposure to these measures and do not have a direct linkage to their work. Education around the sustainability tools and how they can be implemented particularly tailoring training content to NT's unique development and climate profile would be well received and be supported by DIPL. It is also believed that this would encourage a greater level of engagement for planners with regard to upcoming policy changes and encourage them to be able to provide advice and solutions to developers in obtaining compliance.
- General lack of resourcing for implementation and compliance – There is a lack of sustainability practitioners operating in the Northern Territory and likewise working within the planning system with the Northern Territory Government. As a result, there is a broad need to train planning staff, educate developers and build capacity within the NT market on sustainable property development and building rating tools.

5.5. RECOMMENDATIONS

The research and interview in the NT reveal some similarities to the ACT in terms of recommended actions that could embolden sustainable building practises and the use of recognised sustainability tools to measure these against. Therefore, there are similar recommendations which include:

Support smaller markets to facilitate feasibility of sustainability tools

As with the ACT smaller development markets are less familiar and experienced with sustainability rating tools such as Green Star or NABERS. The property market has also not matured or reached a value that meets other jurisdictions across Australia. Therefore there is resistance from developers and the NT Planning commission in requiring sustainability ratings due to additional administrative costs and development costs. Consideration of adjustment to costs to achieve sustainability certification for smaller markets such as the NT would potentially incentivise the NT Government into creating policy requiring greater requirements for sustainability targets and higher minimum rating requirements.

Likewise this would also encourage developers to aim for these requirements due to perceived reductions in certification time and therefore costs to a project. This adjustment could be for a period of time that assists in maturing the market.

This may also incentivise the NT Government to make the necessary changes to the planning system to incorporate this. Without these changes at State Government level, Local Government are unable to enact anything apart from voluntary policies which have little weight.

Greater supporting information to Council officers, senior decision makers and Councillors on why to support ESD and sustainability ratings.

The planning system is State based and therefore any changes need to be made at that level. Local Government does have the ability to produce local policies. Although these sit outside of the planning system there may be opportunities for Council planners to be involved in assessing or setting criteria for these and linking this back to the development application. Therefore there maybe lessons that can be taken from other similar jurisdictions (ACT, QLD for example) where Council has had to work outside the planning system to enact a policy that still might get some uptake (see section 6.3 for the example from Brisbane City Council). However, this would require support and training for the planning staff from existing material such as Green Star training (see recommendation on extension of support below) and also for the NT Planning Commission because it is important in State/Territory's that are State led in planning that if a Council will try to make headway it has support of the State/Territory as the planning regime has little separation between State/Territory and Council.

Extension of support to remote jurisdictions

As in the second recommendation to enable change it has to come through support for Council and the NT Planning Commission in terms of training and resources. Many jurisdictions are victims of distance to major urban areas. Feedback indicates that the time and cost for travelling to training is disincentivising further effort in upskilling staff to drive sustainability policy and implementation. As such, there are concerns that planners and sustainability specialists in more remote jurisdictions such as the NT are falling behind major cities. It is recommended from discussions that further training be made available for planners and sustainability specialists remotely and/or that specialised training in these regions are available that are tailored to these local markets and circumstances.



6.1. OVERVIEW OF THE PLANNING SYSTEM

In Queensland, Development Applications are guided by the Planning Act 2016 ('the Planning Act') and the Development Assessment Rules ('DA Rules').

The Planning Act defines what a development is, the types of development and the types of applications available. The DA Rules set out the assessment process for all parties involved including the applicant, assessment manager and any referral agency.

Categories of Development

Under the provisions of the Planning Act, there are three categories of development:

- Accepted Development Development for which planning approval is not required.
- Assessable Development Development for which a development application (Code or Impact) is required to be made and an approval is required; and
- Prohibited Development: Development for which a development application for an approval may not be made.

Categories of Assessment

There are two categories of assessment for assessable development, namely code assessment and impact assessment.

- » Code Assessment assessment is carried out against the codes (or assessment benchmarks) in the relevant planning scheme; and
- » Impact Assessment assessment is carried out against entire the planning scheme (codes and strategic framework) and other relevant matters including identified planning need. An Impact assessable application requires public notification and is subject to third-party appeal rights.

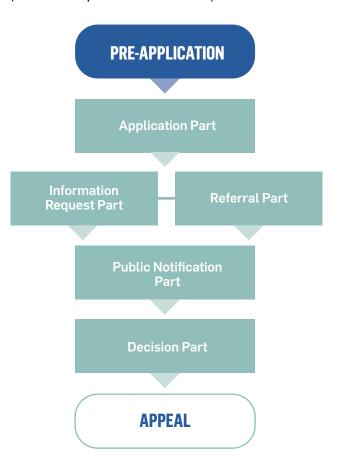
In most cases, the development categories or assessment level will be dictated by the relevant planning scheme based on the proposed development type and the land use definition (where relevant).

Development Assessment Process

The DA Rules sets out the statutory framework, sequence, timeframes and actions required for an assessable development. There are five key parts to the formal DA process—application, referral, information request, public notification, and decision.

A flow chart depicting the development assessment process is provided in the Figure 7 below.

Figure 7 - Queensland Development Assessment Process (Source: Development Assessment Rules)



6.2. SUSTAINABILITY RATING TOOLS

In Queensland, sustainability targets are not mandated under any legislation. Instead, the available sustainability rating tools are a voluntary mechanism which can be taken up by developers as a separate process, certified and managed by third-party consultants. This may be undertaken for various purposes such as marketing the property or seeking to ratify certain sustainable credentials of the development. Importantly though their use sits firmly outside the planning system and has no impact on development assessment of applications. Sustainability rating tools used voluntary in Queensland are generally as follows:

- » Green Star
- EnviroDevelopment (Urban Development Institute of Australia)

We have also seen use of NABERS on developments in QLD although it is not widely used or common place.

6.3. CASE STUDIES

In terms of case studies given that sustainability targets are not mandated under any legislation the only case study relevant to this study applies to a voluntary policy recently launched by Brisbane City Council (BCC) called the Brisbane Green Buildings Incentive Policy (GBI Policy). The aim of this policy is to support and encourage development of greener and more energy efficient buildings. Eligible applicants are provided with a 50% rebate on Council infrastructure charges upon commencement of the use and verification of successful installation of specific green and energy-efficient design elements.

Eligible developments need to demonstrate compliance against one of a range of design and sustainability criteria options, including:

- Criteria 1 Obtaining a 5-star Green Star rating from the Green Building Council of Australia;
- Criteria 2 Receiving UDIA Envirodevelopment six leaf certification (3 to 15 storeys);
- » Criteria 3 Complying with criteria and sub-elements from the New World City Design Guide – Buildings that Breathe;
- » Criteria 4 Obtaining carbon neutral certification; and
- » Criteria 5 Achieving a minimum green plot ratio.
- For a development to be eligible for the infrastructure charges rebate it must:
 - be a minimum of three storeys high;
 - have an eligible DA approval granted between 1 July 2020 and 30 June 2022;
 - lodge a request for incentive between 1 July 2022 and 31 December 2023; and
 - must not be receiving another development incentive benefit from Council.

BCC indicated that setting sustainability rating tools as two of the five criteria was an 'obvious' choice for Council, as there are already bodies such as the UDIA and the GBCA who provide certification and monitor these green credentials;

While three of the five criteria which are not linked to sustainability rating tools, they were considered necessary to ensure satisfactory uptake of the policy by the development industry.

Table 4 - Sustainability	toole used in Oue	oneland Local Co.	arnment nolicies
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Local Government	ESD Tools utilised	Planning Framework	Documentation Required	Implementation / Compliance
Brisbane	Green Star UDIA Envirodevelopment	None – voluntary policy and incentive only which is the Brisbane Green Buildings Incentive Policy	Currently being drafted by BCC	Currently being drafted by BCC
Sunshine Coast	None	None – Council strategy document only which is the Sunshine Coast Environment and Liveability Strategy	N/A	N/A
Gold Coast	None	None – Design Principles may have this built into it at later date	N/A	N/A

This is because the inherent cost of sustainability rating tools, both the upfront construction cost and the ongoing certification costs, were seen by BCC as a barrier to developers taking up the GBI Policy as the financial benefit of the infrastructure charges rebate may not outweigh the cost of implementing the sustainability rating tools;

The success or not of this policy is still to be determined, as the formal application process for the GBI Policy does not commence until 1 July 2022, BCC does not yet have data on uptake of the GBI Policy. Pre-lodgement meetings are offered to Applicants prior to this date to determine eligibility for the GBI Policy, however it was not possible to release information on these as the discussions are commercial-inconfidence. Further details regarding this case study and discussions with BCC over its drafting and feedback received is in the discussion in section 6.4 below.

It should also be noted that due the fact that sustainability targets are not mandated under any legislation there have been no legal challenges and thus no case law with regard to the application of ESD tools or policies in QLD.

6.4. DISCUSSION

There is an opportunity for the Queensland Government to follow the lead of other States throughout Australia and mandate sustainability rating tools for implementation in development in Queensland. This adoption of Statelevel regulation would then mean that Councils have the ability to enforce adoption of sustainability rating tools as a mandatory part of the planning process or assessment criteria.

In the interim, until mandatory tools are implemented and with the increasing push towards sustainability and environmental considerations within the development industry generally, some Councils have started to consider what voluntary mechanisms may be adopted to increase the uptake of sustainability rating tools within developments. We have considered this in discussions with Councils as detailed below:

6.4.1. BRISBANE CITY COUNCIL

As discussed in section 6.4 one such mechanism has been adopted by BCC with their GBI Policy. An interview was conducted with Councils engagement and partnership team and principal architect to ascertain the level of take-up of the GBI Policy, the motivation behind creation of the Policy and some of the perceived barriers behind other Councils adopting a similar voluntary scheme. The key discussion and learning/barriers for other Councils thinking of producing similar policies are:

BI policy key economic recovery from COVID

BCC indicated that the key drivers behind creation of the GBI Policy was as an economic recovery COVID response as well as BCC's vision for Brisbane to be put on the international map as a city of greener and more sustainable buildings.

Developments assessed by sustainability rating tools only attractive to developments held in ownership post construction

Council identified that sustainability rating tools such as Green Star are only feasible for certain building typologies, specifically those that are held in ownership by the developer such as Build to Rent apartments, hotels and commercial buildings. Those typologies which are 'build to sell' do not typically see as great an uptake of sustainability rating tools, as developers of these types of buildings do not benefit from the associated savings in ongoing building operating costs in the same way as developers, who retain and operate the assets themselves.

» Scale of Incentive will make or break GBI policy

The success of the uptake of any incentives-based GBI Policy is based on the scale of the incentive. Previous incentive policies have all offered a percentage rebate on infrastructure charges (typically 33% reduction on BCC charges, compared to 50% for the Green Buildings Incentive Policy), and Council indicated that any less incentive typically resulted in less uptake of the Policy. On larger projects, a 50% rebate on BCC infrastructure charges can be a substantial sum of money, and BCC indicated that they are likely to be the only Council in Queensland that has the budget and resources to be able to offer this kind of financial incentive. Therefore, a similar incentive policy based on sustainability rating tools (even in part) may be difficult to be adopted by other Councils.

Development costs and incentives most important factor for uptake of sustainability in new developments

BCC also noted that built form incentives, such as permitting increases in building height, GFA or yield for developments which adopt sustainability rating tools, is not an option which is well-received by the community. As a result, these type of incentive policies are rarely, if ever, adopted by Councils.

» Potential to influence other Councils thinking

BCC indicated that there had generally been positive feedback from other Councils towards the GBI Policy. This suggests that similar policies could be explored by other Councils in the future, particularly if the uptake of BCC's Policy is high.

6.4.2. SUNSHINE COAST COUNCIL

Sunshine Coast Regional Council was not able to participate in formal meetings, however conveyed the following feedback in response to written queries.

- The Sunshine Coast Council is currently preparing a new planning scheme which will represent Council's policy on development and sustainability. Current documents which incorporate these policies include the Sunshine Coast Design Strategy and Sunshine Coast Environment and Liveability Strategy. The Sunshine Coast Environment and Liveability Strategy includes a Sustainable Design Outcome which aims to "increase the number of developments which are verified as achieving a minimum Green Star Rating of 5 and/or NABERS rating of 5, or equivalent nationally recognised sustainability rating, by 2041". The document states that currently, 10 Sunshine Coast developments have Green Star accreditation of four stars or better. Barriers identified by Council were (and should be read in context of the findings from BCC:
- State legislation does not allow ESD in Planning Schemes Council also acknowledged that Councils are limited in what they can include in planning schemes by the current State legislation, thus the need to express a desire for Green Star and NABERS rated building in a separate policy which is voluntary as opposed to mandated.
- Resources/Cost to incentivise voluntary policy As we have touched upon the ability to incentivise a voluntary policy is limited to allowing variations to development controls (greater height or GFA) or financial incentives. The key learning of Council who are limited by an ability to only provide a voluntary policy, is the quality and attractiveness of the incentive that they can provide, and this depends on the availability and depth of Council resources.

6.4.3. GOLD COAST COUNCIL

Gold Coast Council provided written response to interview questions and as part of this they indicated that Gold Coast City Council has adopted '6 design principles' that will inform design and built form outcomes in the city. The application of these principles is intended to ensure buildings and places "support local identity and achieve excellence in urban and architecture design to make a positive contribution to our city's image";

These design principles do not explicitly reference any sustainability rating tools or mandate use of these tools in development, however the Office of Architecture and Heritage has stated that "building on the framework of the 6 design principals, the Office is supportive of sustainability provisions in the planning scheme and is currently undertaking research of precedents set by other Councils.

This concurs with the discussion with BCC and the success of BCC's GBI policy will be instrumental in providing confidence to Gold Coast City Councils and others, that in the absence of State mandated legislation there are avenues that can be explored to encourage sustainable development practises. However this is confined to those Councils that have the resources to do so noting the earlier comments on other incentives (additional height or floor space) not being well received by the general community. Therefore finding the type incentive that can be offered that is the right fit for that LGA (in terms of the Council and community) whilst also being attractive to developers is a key driver in QLD Councils providing voluntary polices in the absence of any State planning reforms in this area.

6.4.4. QUEENSLAND STATE GOVERNMENT

In addition to the above discussions and feedback from Local Councils, a meeting was also held with the Queensland Government Architect and Urban Design and Architecture team in the Department of Energy and Public Works. After feedback from the various Councils indicated that Local Government has limited power to incorporate sustainability rating tools in their Planning Schemes due to State requirements, it was considered important to explore the barriers and opportunities to introducing mandated sustainability rating tools in State legislation and policy at the State level. The discussion provided several important insights:

- It was acknowledged that political drivers in Queensland, including a reluctance to introduce mandates with an environmental focus where this could have economic impacts, have been a key barrier in implementation of mandatory sustainability rating tools at the State level.
- Another key barrier was a lack of understanding at the State level of Green Star, NABERS and other sustainability rating tools, their benefits and the mechanisms behind them.
- An opportunity exists for further discussion between GBCA/NABERS and the Queensland Government to outline how GBCA and NABERS have worked with other State Governments to implement sustainability rating tools into State policy. This would be a beneficial first step to allow the Queensland Government to determine if a similar approach could be adopted in Queensland.
- Another opportunity, which was identified as a way in which integration of sustainability rating tools into State policy can be further explored, is the Queensland Government's commitment to transitioning to a zerocarbon economy. Educating State Government on how tools like Green Star and NABERS can assist with this target, through reduction of a development's carbon, may assist in giving the Queensland Government the political incentive required to advance discussions on the mandatory implementation of these tools.

6.5. KEY FINDINGS

The following provides a high-level synthesis of findings from Section 6.3 and Section 6.4. Learnings from the interviews with selected Councils.

The ability of Councils to implement ESD policies is limited by lack of State legislation

Councils in QLD are severely limited in making any ESD policies and use of sustain ability tools to measure sustainable development tied to any part of the planning system due to the way it is set up and requires changes in State legislation to do so. There appears to be appetite from the State Government in exploring this and if there is a push from Councils to the State backed by the sustainability community (Including Green Star and NABERS) then this may gain momentum. The success or failure of Council voluntary policies and widespread development of such policies may also influence State Government thinking in regard to changes in the planning system.

Voluntary Policies need incentives and not necessarily tied to economic benefits

BCC has shown a pathway to other Councils in how to promote sustainable development and tie this to the use of sustainability tools as a clear and transparent means of measuring this. This is very important as their incentive is based around a reduction in Council infrastructure charges. The consensus from Councils is that economic incentives are the best way to get developers on board be they through infrastructure discounts or other means. Although BCC is clear that there is not community support for other incentives such as increases in height or GFA this may not be true State wide. Councils therefore need to explore what's the best incentives they can provide. An allowance in variation in development controls is a secondary economic benefit that can increase the buildings value or marketability, and this should not be overlooked if a Council is seeking to produce their own voluntary policy.

6.6. RECOMMENDATIONS

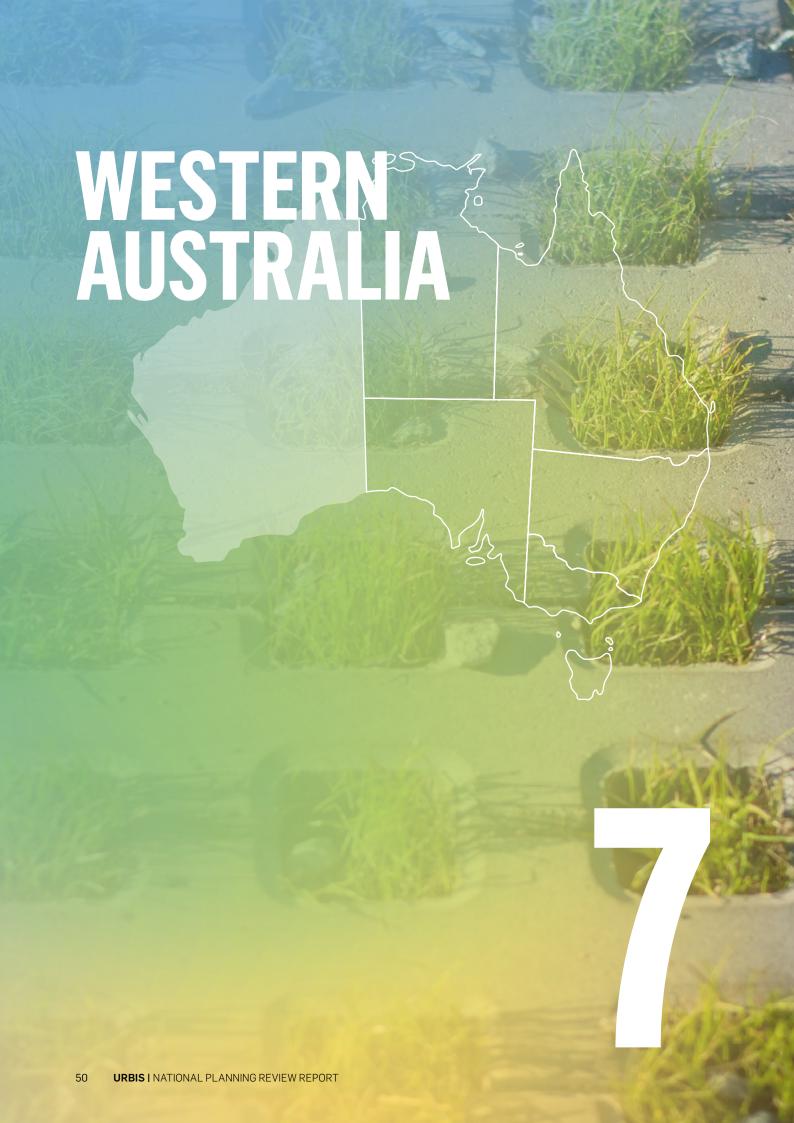
There is an opportunity for the Queensland Government to adopt mandatory sustainability rating tools into State planning policy, which is the primary way in which Local Councils are then able to carry these mandatory requirements into their Planning Schemes. In the interim, Councils should explore the adoption of voluntary schemes and incentives, similar to BCC's Brisbane Green Buildings Policy. The key recommendations for Queensland are as follows:

» Green Star and NABERS Engagement with QLD State Government

An opportunity exists for further discussion between GBCA and the Queensland Government, to outline how GBCA have worked with other State Governments to implement sustainability rating tools into State policy. It is suggested that in order to gain the political motivation to advance these discussions, a focus should be put on how tools like Green Star and NABERS can assist in the Queensland Government's commitment to transitioning to a zero carbon economy.

 Promotion of the outcomes of BCC GBI Policy (if successful)

To encourage greater adoption of sustainability rating tools in the interim, Councils should further explore opportunities to develop and implement incentive policies offering a financial rebate or built form/yield incentive for developments which incorporate sustainability rating tools. An example of this is BCC's Green Buildings Incentive Policy. The success (or not) of this policy should be shared and promoted by GBCA, NABERS and by Councils in Qld to show how a policy could be successfully implemented in the absence of any changes in State policy.



7.1. OVERVIEW OF THE PLANNING SYSTEM

Western Australia's Planning System is built through a combination of institutional arrangements which provide for centralised statutory regional planning, subdivision control and the facilitation of local planning. Planning and Development within Western Australia is guided by the Planning and Development Act 2005 and the Planning and Development (Local Planning Schemes) Regulations 2015.

7.1.1. WESTERN AUSTRALIAN PLANNING COMMISSION

The Western Australian Planning Commission (WAPC) is the statutory authority with state-wide responsibility for urban, rural and regional land-use planning and land development matters. The WAPC responds to the strategic direction of Government and is responsible for the strategic planning of the State.

The WAPC's responsibilities can be summarised as follows:

- Providing advice to the Minister for Planning on land use, transport planning and land development, and on legislation relating to these matters
- » Planning for the coordinated provision of transport and infrastructure for land development
- Providing advice and assistance on land-use planning and development, and advising Local Government on local planning matters
- Preparing and keeping under review State planning policies, region planning schemes, and improvement plans and schemes
- » Final assessment and adoption of structure plans
- Responsible for the approval of all subdivision within the State.

7.1.2. THE DEPARTMENT OF PLANNING LANDS AND HERITAGE

The Department of Planning, Lands and Heritage (DPLH) provides the WAPC with professional and technical expertise, administrative services and resources to assist with the implementation of decisions made by the WAPC. In this partnership the WAPC has responsibility for decision-making and a significant level of funding while the department provides the administrative and technical advice.

The WAPC also delegates some of its functions and responsibilities to DPLH planning officers. Delegated Authority can include decisions on subdivision and development applications, given that they comply with WAPC policies and practices.

7.1.3. LOCAL GOVERNMENT

Local Governments are involved in planning for local communities by ensuring proper planning controls exist for land use and development. Primarily, this is achieved by preparing and administering their local planning schemes and strategies.

Local planning schemes contain planning controls such as designation of appropriate land-uses, residential densities and development standards which assist LGA's with making planning decisions. All decisions must be made based on the provisions and controls in their local planning scheme, which must be consistent with State Government planning objectives and requirements.

7.1.4. DEVELOPMENT APPROVALS

There are two primary pathways for development approvals within Western Australia: Local Government application or a Development Assessment Panel application.

- » Local Government Applications: All applications with a development cost of up to \$2million shall be assessed and determined by the relevant local government. Applications between \$2million and \$10million are optional local government applications.
- Development Assessment Panel Applications: opt in from \$2million to \$10million cost of development and compulsory over \$10million. Applications are assessed by the Local Government who provides a responsible authority report to an appointed panel of 3 independent professionals and 2 local Councillors.

7.2. SUSTAINABILITY TOOLS

At a State level Western Australia does not currently have any planning mechanisms which incorporate ESD requirements or minimums. The leading built form policies refer to sustainability / sustainable design, however, do not elaborate on the implementation or monitoring of these elements.

At a State level State Planning Policy 7 – Design of the Built Environment (SPP7) identifies sustainability as a key design principle identifying that: "Good design optimises the sustainability of the built environment, delivering positive environmental, social and economic outcomes". The policy does not specifically reference the use of any ESD tools. Additional to SPP7, State Planning Policy 7.2 Precinct Design (SPP7.2) identifies the key elements of sustainable design but does not specifically reference the use of any ESD tools.

At a Local Government level there is no overarching guidance on the implementation of ESD requirements. A large proportion of Local Governments within Western Australia do not have any methods of implementing ESD principles.

Table 5 - Sustainability tools used in Western Australian Local Government policies

Local Government	ESD Tools utilised	Planning Framework	Trigger	Documentation Required	Implementation / Compliance
City of Perth	N/A	Currently under preparation	N/A	To be confirmed once Local Policy is in force	To be confirmed once Local Policy is in force
Clty of Vincent	Green Star (5 star)	Local Planning Policy (Local Planning Policy 7.1.1 Built Form) and associated information sheets (Residential, Mixed Use and Commercial)	Multiple dwellings, mixed use and commercial	N/A	N/A
City of Joondalup	Self-designed	Local Planning Policy (Local Planning Policy - Environmentally Sustainable Design)	Multiple dwellings, mixed use and commercial	N/A	N/A
City of Fremantle	Green Star (no less than 4 star) or its equivalent	Local Planning Policy (Local Planning Policy 2.13 Sustainable Buildings Design Requirements)	1000sq.m+ development or redevelopment	Documentation from Green Building Council of Australia	Documentation required prior to issue of building permit and confirmation of construction provided prior to issue of certificate of occupancy
City of South Perth	Green Star (minimum 4 star)	Local Planning Policy (LPP 350.01 Environmentally Sustainable Design)	1000sq.m+ development or redevelopment	Written statement confirming a Green Star Accredited assessor has made up part of the design team or	Documentation from Green Building Council of Australia confirming assessment and a minimum 4 star rating prior to issue of building certificate
City of Canning	Green Star (5 star minimum), NatHERS, E-Tool Gold or Envirodevelopment (as incentive for flexible development	Local Planning Policy (Local Planning Policy 10 Incentive-Based Residential Development Assessment)	Optional for single, grouped and multiple dwellings or mixed use development	Certification is required by a Green Star or NatHERS accredited professional	No information provided

Table 5 sets out the Local Governments within metropolitan Western Australia who have implemented ESD through their local planning framework:

As per Schedule 2 Part 2 Clause 4(5) and Schedule 2 Part 9 Clause 67 of the Planning and Development (Local Planning Schemes) Regulations 2015 the Local Government must have regard to the local planning policies made under the Scheme. This means that the ESD policies and use of sustainability tools listed in Table 5.

7.3. CASE STUDIES

There are a number of cases studies we have examined in regard to use of local policy ESD requirements and developments which have incorporated Green Star or other rating tools to illustrate their compliance with sustainability measures or their ESD credentials.

In order to consider the robustness of the ESD provisions within the below case studies, a review of the State Administrative Tribunal cases and findings has been undertaken to ascertain whether there have been any challenges mounted against the application of ESD within development.

Given the limited implementation of ESD tools within Western Australia and the relative newness of many of the policies, there have been no challenges to the use of ESD.

7.3.1. CITY OF PERTH

As the primary location for large scale commercial and multi-residential developments within Western Australia the City of Perth holds the largest conglomeration of Green Star certified projects within Western Australia.

The City of Perth does not currently have any ESD provisions within the local planning framework, all implementation of ESD is voluntary.

The City of Perth is currently in the process of preparing a Sustainability Strategy and a draft Local Planning Strategy (to inform the preparation of a new Local Planning Scheme and associated policies).

Both these documents acknowledge the importance of ESD, and the provisions of the Local Planning Strategy provide the head of power / guidance on actions to be undertaken in order to incorporate ESD provisions into the Local Planning Scheme and Policies. There has been no decision as to which ESD tools to incorporate, this will be subject to further review once the Local Planning Strategy has been finalised.

To date the City has encountered support from both the internal officers and the Councillors on the direction they are taking. They acknowledge there may be the need for further training for all involved in the assessment and approval process for development applications to ensure successful implementation of the ESD tools. This presents an opportunity for Council planners to be upskilled and take ownership of assessments via sustainability tools and clearly training directed at planners undertaking assessments would be well received.

7.3.2. CITY OF VINCENT

The City of Vincent incorporates ESD requirements into their Local Planning Policy 7.1 Built Form. The policy requires all applications for residential development, mixed use and commercial development to achieve ESD through meeting specific objectives and environmental performance standards. Local Planning Policy 7.1.1 identifies the need for "Development that considers the whole of life environmental impact of the building and incorporates measures to reduce this impact".

The LPP is supported by information sheets for Single House and Grouped Dwellings, Apartments and Mixed-Use Developments, and Commercial developments in order to provide additional guidance to developers.

For each form of development, the ESD requirements vary:

- Single and Grouped Dwellings: Developments must demonstrate they are capable of achieving a Life Cycle Assessment in accordance with EN15978 – Sustainability of construction works – Assessment of environmental performance of buildings – calculation method.
- Apartments and Mixed-Use developments: Developments must demonstrate they are capable of achieving a minimum 5 star Green Star rating or Life Cycle Assessment in accordance with EN15978 Sustainability of construction works Assessment of environmental performance of buildings calculation method or ISO 14044 Environmental management life cycle assessment requirements and guidelines (or equivalent). The assessment is a self-assessment and does not require accreditation from Green Building Council of Australia, however it must be prepared by a Green Star Accredited Professional.
- Commercial developments: Developments must demonstrate they are capable of achieving a minimum 5 star Green Star rating, or Life Cycle Assessment in accordance with EN15978 – Sustainability of construction works – Assessment of environmental performance of buildings – calculation method, or ISO 14044 Environmental management – life cycle assessment – requirements and guidelines (or equivalent). The assessment is a self-assessment and does not require accreditation from Green Building Council of Australia, however it must be prepared by a Green Star Accredited Professional.

As the provisions make up part of the Local Planning Policy, there is the requirement to have regard to these in the assessment of all Development Applications within the City of Vincent. This is considered a successful method of implementing ESD tools for the following reasons:

- The ESD requirements are clearly set out and link directly to Green Star, a nationally rated certification which can be easily undertaken by the proponents and interpreted by the Local Government planning officers.
- The ESD requirements are located within the policy which is, under the WA planning regulations required to be considered during the assessment of Development Applications.
- The requirement for a suitably qualified professional to prepare the required documentation gives the Local Government confidence in the accuracy and conformance of the documentation provided.
- The ESD requirements are located within the same policy as the general built form requirements. This ensures that they are given the same weighting and are taken into consideration by developers from the get-go rather than being a secondary thought or retrofitted into the development later on in the development application process.
- From a review of publicly available Development
 Assessment Panel records it has been found that large
 scale projects such as the Home Collective (Dale Alcock
 Homes, 301 Vincent Street, Leederville) have undertaken
 and provided the appropriate ESD assessments (Green
 Star) at the time of Development Approval. These
 assessments have been reviewed by planning officers
 during the assessment process allowing the officers to
 have confidence in the assessment of the ESD inclusions
 and provide support for the proposal. This is good practice
 as it allows the planners to be involved in the assessment
 instead of referring to specialised ESD officers. This can
 only increase a sense of ownership of this matter further
 embedding it into the planning realm.

7.3.3. CITY OF JOONDALUP

The objective of the City of Joondalup Environmentally Sustainable Design Policy is to: "encourage the integration of environmentally sustainable design principles into the siting, design and construction of both new and redeveloped residential, commercial and mixed-use buildings". The policy applies to the construction and redevelopment of Commercial, Mixed Use, and Apartment developments within the City of Joondalup. The policy does not apply to single or grouped dwellings.

The policy does not require the use of any recognised ESD tools however sets out design principles to incorporate into buildings which are consistent with the objectives of ESD.

The supporting Environmentally Sustainable Checklist makes reference to a 'Green' rating, requesting information to be provided should the development have been designed and assessed against a nationally recognised 'green' rating tool. The non-mandating of a tool means that there can be uneven outcomes from the policy and it's hard to ascertain if a development approved under this policy is achieving national benchmarks in sustainability. This is reflected in the amount of certified buildings in the LGA with the Currambine Community Centre and the Lakeside Joondalup Shopping Centre extension both 4 Star Certified buildings on the Green Star Building Project Directory. There are no further registered developments within the city.

7.3.4. CITY OF FREMANTLE

The City of Fremantle's Local Planning Policy 2.13
Sustainable Building Design Requirements seeks to:
"establish sustainable building design requirements for new
development". The policy is applicable to multi residential
development, mixed use and commercial developments.
Single and grouped dwellings and industrial development is
expressly exempt.

The policy requires all applicable development to be designed and constructed to a rating of not less than 4 Star Green Star or its equivalent.

The requirements of the policy are imposed on the approval of development applications with the following conditions placed on the approval requiring the following:

- (a) Prior to the issue of a building permit, the applicant/ owner is to submit a copy of documentation from the Green Building Council of Australia or a suitably qualified professional stating how the development will achieve a Green Star rating of at least 4 Stars or equivalent, to the satisfaction of the City of Fremantle. and
- (b) Prior to occupation, the applicant/owner is to submit a copy of documentation from the Green Building Council of Australia or a suitably qualified professional stating that the development as constructed achieves a Green Star rating of at least 4 Stars or equivalent, to the satisfaction of the City of Fremantle.

Our experience in undertaking development within the City of Fremantle confirms the implementation of the policy is occurring via the conditions of development approval requiring the ESD assessment being undertaken at the building licence stage. Discussion with proponents has confirmed that in obtaining a building licence the ESD documentation is required to be provided. This is considered a successful method of implementing ESD tools for the following reasons:

- The ESD requirements are clearly set out and link directly to Green Star, a nationally rated certification which can be easily undertaken by the proponents and interpreted by the Local Government building officers.
- The ESD requirements are located within the policy which is, under the WA planning regulations required to be considered during the assessment of Development Applications.
- The requirement for a suitably qualified professional to prepare the required documentation gives the Local Government confidence in the accuracy and conformance of the documentation provided.
- The policy requires a second ESD assessment post development, prior to occupation, thus ensuring the development has been constructed to the Green Star requirements.

It is acknowledged that a large part of the assessment of the ESD documentation is undertaken by the building officers rather than the planning officers. Providing another level of personnel who are versed in the ESD assessments is a positive in ensuring the local government has sufficient resources to implement ESD. However a lack of resources within Council is often raised as a barrier to successful development and implementation of ESD policies.

Although not on the Green Star directory, the Knutsford Precinct, touted as Western Australia's most sustainable development is a Residential redevelopment within the City of Fremantle. The delivery of sustainable community and built form outcomes was driven by DevelopmentWA and the City of Fremantle as a demonstration project. The built form outcomes are considered to be a successful implementation of the ESD principles with features including electric vehicle fast charging, solar panels and battery storage, provision for an electric vehicle car share scheme, waterwise homes and private and public gardens. The City of Fremantle's ESD policy was implemented within the assessment of the development where appropriate (noting single and mixed use dwellings are exempt). This shows that a successful sustainable development can be achieved without the use of Green Star or other recognised tools. However if these tools were used it could provide national exposure to the benefits of the project and take away any uncertainty that may exist from outside the Council or State on the developments sustainable credentials.

7.3.5. DEVELOPMENTWA

It is acknowledged that in some cases ESD is implemented through the developer led design guidelines for industrial or residential developments. In most instances where this is the case the Design Guidelines have been prepared and are administered by DevelopmentWA (Western Australia's State Development Agency).

These have been prepared by private consultants on behalf of DevelopmentWA and vary in the level of ESD incorporated and the methods of assessment and compliance. There is no specific reference to ESD tools or minimum ratings. Examples of this include the Peel Business Park Design Guidelines, Madigan Estate at Baynton West Design Guidelines, Montario Quarter Design Guidelines.

The assessment of these provisions is often undertaken by the estate architect, being a qualified architect or planning/urban design consultant. In order to facilitate an appropriate level of assessment a wide range of information the design guidelines require the provision of technical specifications and/or a certification from a suitably accredited consultant in ESD (generally a NatHERS assessment is provided).

Proposals subject to DevelopmentWA are still required to submit development applications with the relevant local authority. For those which do not have their own ESD policies this provides the opportunity for ESD to be implanted in locations where it may not otherwise occur. This is considered a positive outcome in a state where there is limited ESD policies.

7.3.6. METRONET

METRONET is a metropolitan wide integrated transport and land use programme targeted at delivering transport (rail) infrastructure and station precincts. In accordance with the Sustainability Strategy the Green Star ESD tools will be used in the construction of station design (4-5 star).

METRONET is a joint project with a number of State agencies undertaking roles in the roll out of the project and involved agencies have ratified the Sustainability Strategy.

7.4. DISCUSSION

Western Australia does not have any State level guidance or policies on the implementation of ESD within the planning framework. With this, there is no mandatory requirement for the implementation ESD within local planning frameworks and the development of local planning policies requiring the consideration of ESD is limited, being approximately 5% of Local Governments.

Where ESD has been incorporated into the local planning framework this is generally guided by the Green Star rating system with developers having to provide evidence of an assessment by a suitably qualified Green Star accreditor being undertaken and the outcome being to a minimum of a 4 or 5 star (policy dependant). In some instances, the policies are self designed taking into account ESD principles and requiring Local Government specific checklists and assessments to be undertaken.

In discussion with three larger Local Governments without ESD there is an acknowledgement of the importance of ESD and its place within the local planning framework. In both instances there is work occurring within the Strategic Planning teams to set up a ESD framework.

In both these Local Government areas although not mandated through a specific policy consideration of ESD has been seen to be considered through the Design Review Panel process.

This process undertakes a review of the proposed development early on in the development assessment process and considers a range of aspects, including in some instances, ESD.

Brief discussions with a handful of smaller Local Governments indicates ESD is not currently on their radar and that they utilise the energy efficiency and water efficiency requirements within the Building Code Australia/ National Construction Code. This is due in part to lack of capacity within the Local Government to prepare the required documentation and to undertake assessments and ensure compliance.

Whilst there are a number of barriers to the implementation of ESD within Western Australia there are also opportunities for Local Governments to establish ESD controls within their local planning framework without requiring significant changes. As demonstrated by the Local Governments in the case studies in section 7.3, the opportunities within the planning framework to implement ESD within Western Australia are relatively unconstrained. This is through the adoption of local planning policies which can guide ESD requirements. The way in which the framework is set up allows for Local Governments to establish policies with relative ease and the regulations ensuring consideration of these policies is required through the development application process.

Further, it is acknowledged that this research piece has been undertaken to look at the opportunities for increasing the ability for Local Governments to implement ESD however, the establishment of State guidance on ESD would be of significant benefit in assisting Local Governments with the implementation of ESD within Western Australia. State guidance through a State Planning Policy, Development Control Policy, Planning Bulletin or through the inclusion of text within the deemed or model provisions for Local Planning Schemes (through the Planning and Development (Local Planning Schemes) Regulations 2015) would be beneficial in providing Local Governments with some of the tools they need to apply ESD into the local planning framework. This could work two-fold, firstly providing a stop gap in applying ESD principles whilst Local Governments established their own policies and secondly providing guidance which would ensure consistency in application of ESD principles across Western Australia – providing the Local Governments with the guidance they need to develop robust and implementable policies.

7.5. KEY FINDINGS

Based on the case studies and discussions with Local Governments, the barriers to the implementation of ESD in Western Australia are seen to be:

Lack of State guidance on ESD within the State and Local Government Planning Framework

The lack of State guidance has meant that local Councils have been left to devise policies themselves. If the State were to provide guidance and encouragement for this, it would empower more Councils to implement policies (although a State policy providing consistency would be best practice).

Drafting of controls and where they sit within the planning framework (i.e. within the Planning Scheme, Local Planning Policies, Activity Centre Plans/ Structure Plans, Design Guidelines)

The six Councils that have or are preparing ESD policies show that they are suitable to sit as local policies. However again, guidance to where they sit and how they can be implemented (such as in the City of Fremantle mandated through Development Approval conditions) is required. Provision for ESD considerations within the local planning schemes would provide the highest weighting and require full consideration of ESD in the development assessment process, however policies bear significant weighting and allow for flexibility to be amended as ESD targets increase.

» Education of Local Government staff and consultants

Local Governments would benefit from additional education in the benefits of ESD and the assessment and implementation of ESD proposals.

General lack of resourcing within Councils for development of policies, implementation and compliance

There is an identified gap in resourcing in terms of funding and personnel to undertake the preparation, management, assessment and compliance of ESD

» Resistance and/or lack of understanding from industry

Generally in relation to costs associated with incorporating additional ESD measures in development (particularly in the realm of industrial development)

The Planning Framework is suitably set up to allow for adoption of ESD with relative ease

The hierarchy of the planning framework and delegations of Local Government provide a relatively unconstrained process for the adoption of local planning policies. This provides an opportunity for Local Governments to establish ESD within their frameworks provided the identified barriers can be overcome where necessary and appropriate.

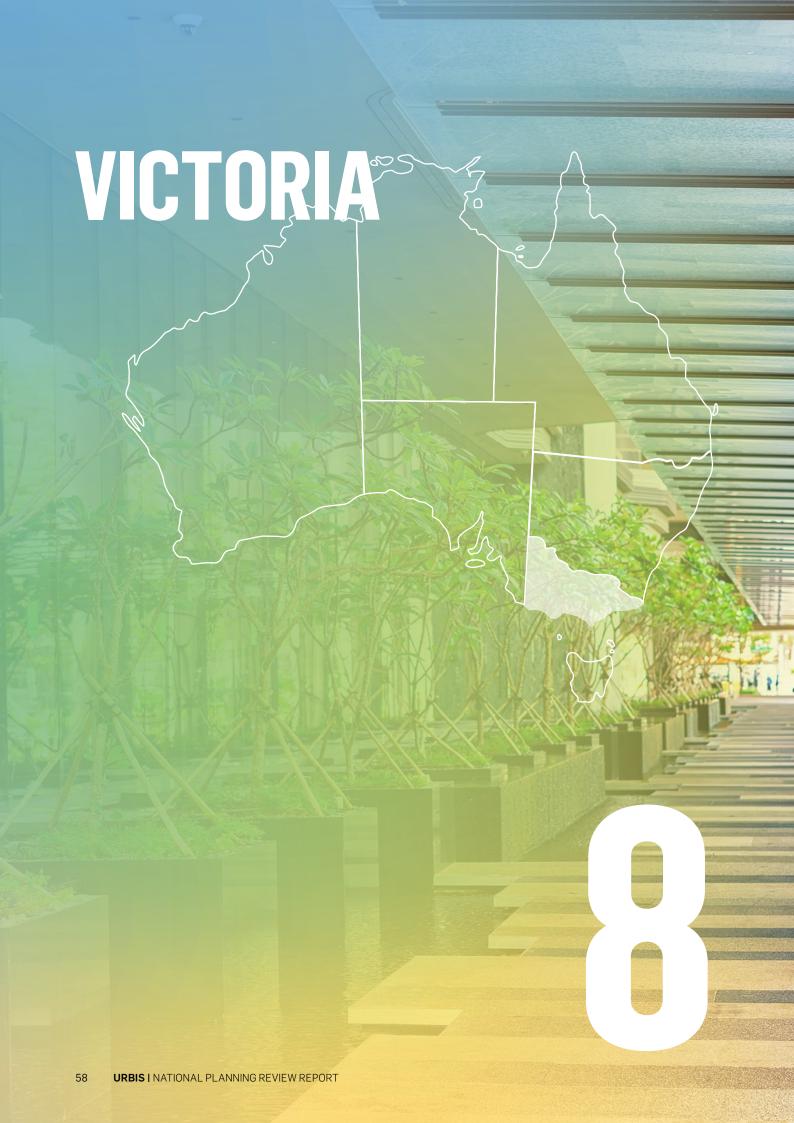
Overall, there seems to be a limited understanding of the benefits of incorporating ESD into the local planning framework in Western Australia, combined with a lack of internal resourcing to establish and implement such policies. The Local Governments who do apply ESD policies rely heavily on the reporting provided by suitably accredited practitioners to ensure ESD is being appropriately implemented into developments.

7.6. RECOMMENDATIONS

Based on the research interviews and key findings the following recommendations would assist in the Western Australian context:

- » State Policy or Guidelines: The outcome of engagement with Councils may be a consensus for the implementation of a State policy or a mandate and guidance for Councils to develop ESD policies.
- Nowledge Sharing: Given that some Councils that have already prepared or are preparing ESD policies, organising workshops and knowledge sharing forums could be useful to understand challenges and successes encountered and to build upon the work already undertaken.
- Raising awareness: A campaign targeting industry, Government could be beneficial in raising awareness and desire for new controls, particularly amongst Councils which are not currently exploring requirements for the integration of ESD principles into developments.
- Funding: To enable Councils to allocate time, funding may need to be made available by State Government and distributed to Councils to assist them in formulating their own local policies.





8.1. OVERVIEW OF THE PLANNING SYSTEM

The Victorian Planning system is comprised of several planning instruments which are used to regulate planning decisions, planning scheme amendments, section 173 agreements, planning permit applications, roles of different stakeholders and decision makers, public participation, and legislative changes in the Planning and Environment Act 1987.

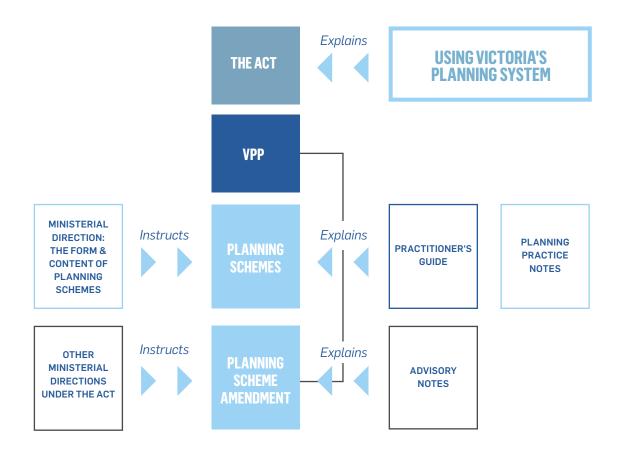
8.1.1. DEVELOPMENT ASSESSMENT PROCESS

Local Councils and State Government contribute the Victorian Planning Provisions (VPP) through the planning schemes for each individual LGA which control development approvals and land use. These planning schemes guide the planning decisions making, which shape the urban settlements throughout Victoria. Planning applications are assessed by local Councils or by the relevant State Government Planning Department and approved based on their merit and compliance with the planning schemes.

8.1.2. HIERARCHY OF LEGISLATION

The Planning and Environment Act 1987 is the legislation which provides the precedent for all of the State and local policy. The VPP is the state-wide application of strategies and policies used to administer the planning system and sets out the framework for the Local Planning Policy (LPP) to follow. The LGA's Planning Scheme outlines the planning controls which include zones, overlays, and particular provisions. They include permit prohibitions and requirements, as well as land use and development controls.

Figure 8 - Planning System Documents (Source: 'Using Victoria's Planning System' prepared by the Department of Environment, Land, Water and Planning)



8.2. SUSTAINABILITY RATING TOOLS

To date there has been no State-wide ESD policy for new development applications under the VPP. In early 2021, the Department of Environment. Land, Water and Planning ('DEWLP') released the draft Environmentally Sustainable Development of Buildings and Subdivisions – A roadmap for Victoria's planning system, which identifies two stages for introducing state-wide ESD policy in Victoria:

- Stage One involves updates to the Planning Policy Framework (PPF) to facilitate the state Government's broader policy objectives for supporting ESD.
- Stage Two (commencing mid-2021) is arguably the more significant part of the process and will focus on development of new ESD objectives and standards in the Planning Provisions to give effect to the strategies set out in planning policy. This stage will involve broad public and stakeholder consultation on the detailed provisions which was intended to commence from the middle of this year but is delayed and there is no firm date of when this will commence except it is now expected at some pint before the end of 2021.

Due to the lack of State-wide policy, a number of Local Governments have developed different approaches to ESD. As part of this in 2013, the Planning Panels Victoria supported the approval of amendments to be introduced to local policy for ESD requirements in five Local Councils. This amendment process was spearheaded by the Council Alliance for a Sustainable Built Environment (CASBE), who continue to assist Council's in implementing and expanding ESD policies.

The VPP did not include any specific ESD permit triggers that required a planning permit application to address sustainability issues. However some Councils do not require ESD issues to be addressed as part of any development proposal and some try to address ESD issues through voluntary agreements. A few other Councils mandate that ESD plans must be submitted as part of the planning permit application.

New ESD local policies were then introduced in 2018 for seven additional Councils. Planning Permit applications for single dwellings were excluded from these requirements because the general application requirement for a Sustainable Design Assessment (SDA) is for proposed developments of at least two or three dwellings.

Large developments (10 or more dwellings) will require a more comprehensive Sustainability Management Plan (SMP) and in most cases also a Green Travel Plan (GTP). For non-residential developments the triggers can vary between the different Councils and the requirement trigger for an SDA varies for a development site area between 50m² and 1000m², whereas an SMP/GTP is triggered between 1000 and 2500m².

All of these local policies contain a provision regarding the expiry of the policy. For example, in the Port Phillip Planning Scheme, the policy at Clause 22.13-8 will expire if it is superseded by a comparable provision in the VPP. Indicating that once the Sustainable Development Policy is implemented at the state-wide level (as intended by the States ESD roadmap the policy will be redundant).

The preferred sustainability tools being utilised by Councils as part of their ESD policies in Victoria are:

- » Smaller scale projects: BESS (Built Environment Sustainability Scorecard), and STORM (Stormwater Treatment Objective Relative Measure);
- » Larger scale projects: BESS, Green Star, MUSIC (Model for Urban Stormwater Improvement Conceptualization) and NABERS.

Table 6 highlights the local policy contained within the planning scheme of a sample group of Councils, thresholds and the documentation/compliance requirements.

Table 6 - Sustainability tools used in a sample of Victorian Local Government policies (for developments over 10 dwellings or non-residential developments)

Local Government	ESD Tools utilised	Planning Framework	Documentation Required	Implementation / Compliance
Greater Geelong	BESS, Green Star, MUSIC and STORM are suggested as tools that could be utilised:	LPP 22.71 Environmentally Sustainable Development	Applicants are to provide: ** For residential development. a Sustainability Management Plan and a Green Travel Plan for 10 or more dwellings, or accommodation (other than dwellings) with a GFA greater than 1500m² ** For Non residential development, a Sustainability Management Plan for development or alterations and additions with a GFA of 1500m²	Assessed by planning officers at Development Assessment stage. No details provided within the policy relating to compliance.
Moreland	For residential and non-residential development, BESS/Green Star, MUSIC and STORM are suggested as tools that could be utilised: For mixed-use development NatHERS is also suggested as tools that could be utilised:	LPP 15.02-1L Environmentally Sustainable Development	Applicants and Council are to consider as relevant: For residential development, a Sustainability Management Plan for 10 or more dwellings, or accommodation (other than dwellings) with a GFA greater than 1000m ² For non residential development. a Sustainability Management Plan for development or alterations and additions with a GFA of 1000m ²	Assessed by planning officers at Development Assessment stage. No details provided within the policy relating to compliance.
Port Phillip	BESS, Green Star, MUSIC and STORM are suggested as tools that could be utilised:	LPP 22.13 Environmentally Sustainable Development	Applicants are to provide: ** For residential development, a Sustainability Management Plan and a Green Travel Plan for 10 or more dwellings, or accommodation (other than dwellings) with a GFA greater than 1500m ² ** For Non residential development, a Sustainability Management Plan for development or alterations and additions with a GFA of 1500m ²	Assessed by planning officers at Development Assessment stage. No details provided within the policy relating to compliance.
Stonington	BESS, Green Star, MUSIC and STORM are suggested as tools that could be utilised	LPP 22.05 Environmentally Sustainable Development	Applicants are to provide: ** For residential development. a Sustainability Management Plan and a Green Travel Plan for 10 or more dwellings, or accommodation (other than dwellings) with a GFA greater than 1500m² ** For Non residential development, a Sustainability Management Plan for development or alterations and additions with a GFA of 1500m²	Assessed by planning officers at Development Assessment stage. No details provided within the policy relating to compliance.
Yarra	BESS, Green Star, MUSIC and STORM are suggested as tools that could be utilised:	LPP 22.17 Environmentally Sustainable Development	Applicants are to provide: ** For residential development. a Sustainability Management Plan and a Green Travel Plan for 10 or more dwellings, or accommodation (other than dwellings) with a GFA greater than 1500m² ** For Non residential development, a Sustainability Management Plan for development or alterations and additions with a GFA of 1500m²	Assessed by planning officers at Development Assessment stage. No details provided within the policy relating to compliance.

In addition to the local policies that some Councils have adopted, a number of Councils have also integrated guidelines and strategic documents geared towards achieving high standards of ESD. Table 7 below provides examples of different guideline and strategic policy documents from sample Councils within Victoria. Many of these include standards for ESD practices and impact the Council Projects with the potential to influence standards for private development.

Table 7 - Victorian Councils with Sustainability/ESD Policies

LGA	Strategic Document/Guideline	Description
Wyndham	Environmentally Sustainable Design (ESD) Framework	The aim of the Environmentally Sustainable Design (ESD) Framework is to incorporate ESD principles into all Council buildings. This will be achieved by applying the framework into all new Council building projects, asset renewal and extension of existing buildings and building maintenance works.
Port Phillip	Sustainable Design Strategy (2013)	The aim of the Environmentally Sustainable Design (ESD) Framework is to incorporate ESD principles into all Council buildings. This will be achieved by applying the framework into all new Council building projects, asset renewal and extension of existing buildings and building maintenance works.
Moreland	Moreland Sustainable Buildings Policy (2018)	The purpose of this Sustainable Buildings Policy is to incorporate sustainable design and operation into all Council buildings. This will be achieved by applying the policy to all new Council buildings and projects to upgrade, renovate and refurbish existing buildings where practical.
Mornington Peninsula	Environmentally Sustainable Design Policy and Guidelines (2020)	The purpose of this Policy is to apply the principles of Environmentally Sustainable Design (ESD) to the design, construction, refurbishment, operation and demolition of Council owned facilities and civil works.

In addition to the local policies that some Councils have adopted, a number of Councils have also integrated guidelines and strategic documents geared towards achieving high standards of ESD. Table 7 below provides examples of different guideline and strategic policy documents from sample Councils within Victoria. Many of these include standards for ESD practices and impact the Council Projects with the potential to influence standards for private development.

8.3. CASE STUDIES

A number of Local Governments with local policies have provided examples of developments that meet or exceed the relevant ESD requirements. These are detailed below:

8.3.1. YARRA CITY COUNCIL

Yarra City Council identified the following projects to have exemplar ESD outcomes within its LGA. These projects have been selected by Yarra City Council to highlight that the ESD requirements across a variety of development types can be successfully implemented to achieve higher standards of ESD outcomes. Each of the projects have been assessed for their merit and achievement of the 10 Sustainable Design Commitments (see https://www.yarracity.vic.gov.au/services/planning-and-development/planning-applications/environmentally-sustainable-design-in-planning/the-10-key-sustainable-building-categories)

- » 1-3 Railway Place, Cremorne 585 m² site with a 9-storey residential building with 38 dwellings, and a ground floor cafe. This project has a 7 Star NatHERS rating and 4 star Green Star rating.
- * 186 Street Georges Road, North Fitzroy 2800 m² site with a 3-Storey Community Hub. This project has a 6 Star Green Star rating.
- 231-235 Smith Street Fitzroy 2800 m² site with an additional 3-Storey residential renovation on top of existing building to provide 15 dwellings.
- * 677-679 Victoria Street, Abbotsford 585 m² site with 12-storey mixed use residential buildings with 568 dwellings.
- » 66-88 Green St, Cremorne 2868m² site with single storey commercial building with 1,004m² NLA retail /food and beverage and gallery space and 0,509m² NLA of office floor space – Ground floor to Level 9. This project has a 6 Star Green Star rating and 5 NABERS rating.
- * 116 Rokeby Street, Collingwood 11 storey commercial office building. This project has 70% BESS, WELL Core Gold Rating and Climate Active Carbon Neutral certification in operation for the base building office areas using the NABERS pathway within 18 months of a Certificate of Occupancy being issued.

Yarra City are a good example of a Council which has taken an active lead in ESD policy development and implementation in the absence of State guidance, which is illustrated in the project outcomes detailed above. They have a clear policy which similar to other Councils in Victoria. Although they do not mandate the use of a specific tool (they suggest BESS, Green Star, STORM and MUSIC, as well as NABERS for commercial buildings although this is not specified in the policy so developers in Victoria may not be aware of this), at officer level they encourage the use of tools to developers and ESD consultants to demonstrate compliance with the policy.

It's noted that for planning permits that ESD reports are submitted to support the permit application, and these are provided to Councils ESD officers for assessment and referral comments. The Council planners are not involved in the specifics of the ESD assessment against the local planning policy as the Councils ESD officer would then sign it off and the planner is just looking for their confirmation of that. One of the comments that gets picked up by the ESD officer particularly in regard to NABERS as opposed to the use of other sustainability tools, is that permit applicants tend to target NABERS at the planning stage but do not actually commit to the standard. This results in the Council planner having to enforce commitments either via seeking an amended report (which confirms that the applicant will meet the NABERS standard) or via consent condition. This example shows that the policy works in practice but could be strengthened by the ability for the planner to undertake part of the ESD report assessment and be engaged in these discussions with the applicant. This is important for Councils with limited resources or those unable to employ ESD officers to spread the load. Although there is a need to be mindful of Council planner's workloads, streamlining what they need to be looking at via easy to access fact sheets for tools such as Green Star and NABERS (similar to BESS factsheets currently circulated to Victorian Council planners) would help bridge this gap in knowledge and workload.

8.3.2. MORELAND CITY COUNCIL

In Moreland City Council, the Brunswick East Velodrome was one of the first buildings to test the Sustainable Buildings Policy, referenced in Table 7. It was a subsequent project that included the Coburg Children's Centre which is another Council building. In both cases the minimum standards for ESD requirements were met and Council was able to achieve these despite the heritage constraints for both buildings.

More recently, Moreland Council awarded Milieu's Brunswick East Project a Design Excellence Scorecard Award which places high importance on ESD standards. Brunswick East is the first development of its kind to achieve Moreland City Council's Design Excellence Scorecard by meeting the four criteria: building design and materials; environmentally sustainable design and building performance; building accessibility; and community benefit.

8.3.3. DAREBIN CITY COUNCIL

Within the Darebin ESD Building Policy Document, the Council identifies successful projects that have resulted in superior ESD outcomes and their associated financial savings. These include:

Melton Library and Learning Hub - Melton Council delivered a 5 Star Green Star rated building which achieved an annual utility cost saving of \$23,700 for gas and \$5000 for water compared to non-Green Star buildings.

Darebin highlighted a project outside their own LGA. In consulting this Council, they indicated that uptake in their LGA is limited and they want to highlight to developers what can be achieved on more significant developments, particularly social infrastructure which is important in private sector tenders for government buildings.

8.3.4. MELBOURNE CITY COUNCIL

Melbourne City Council identifies the proposed development of the Queen Victoria Market Precinct as one of the first to receive a 6 Green Star rating Communities accreditation. This is a large-scale project which was awarded this rating after being assessed against the best practice benchmarks for liveability, environmental sustainability, design excellence, prosperity, governance, and innovation. This was a \$250 million renewal project with sustainability features such as:

- Large scale waste and organic recycling facilities onsite to deal with the annual 6000 tonnes of solid and 60 tonnes of organic waste, along with meat and offal waste;
- Solar power and battery storage to generate on-site renewable energy;
- Rainwater collection, stormwater harvesting and water recycling to reduce water consumption and
- More public open space with planting, trees and water sensitive landscaping.

The market precinct in the expanding City North has been identified as a key growth area in the City of Melbourne's municipality.

This project went above the minimum standards, however is a high profile show case development and the marketability and landmark status of the site meant that achieving this rating was crucial and expected within the community. Although Melbourne City Council have significant resources it's important to note that Councils particularly on key landmark sites are able to raise the ESD credentials of landmark developments to a high level and use nationally credible tools to illustrate these ESD standards being achieved. Its also important for them to take lessons from these projects and use these lessons to build mechanisms into the planning process via local policies to achieve a high level of design and sustainability outcomes.

8.4. DISCUSSION

As is the case in other States there is no State based mandate for ESD policies or legislated use of sustainability tools to achieve benchmark standards in Victoria. However, Victoria is similar to NSW and WA in that there are local policies being put into action and this is due to there being strong linkages and direction between Councils in this area through the Council Alliance for a Sustainable Built Environment (CASBE). A good example of this is the current research project titled 'Elevating ESD Targets Planning Policy Amendment'. This project aims to build on the existing local ESD Policies and deliver revised and elevated ESD targets for new development, including targets for zero carbon development. Eventually a group planning amendment will take place to amend the existing policies, and this will be based around research on:

- New developments that produce zero net emissions, better manage water and waste, increase greening and biodiversity, and are more resilient to our changing climate.
- » Buildings that provide a healthier, more comfortable environment for our community and improve health outcomes.
- » A technical feasibility and viability analysis, a cost benefit analyses and a peer and legal review of the revised ESD policy objectives and standards

The project is being led by Yarra City and Moreland Council and builds off the commitment made by Yarra Council in March 2020 to progress a planning scheme amendment to implement a Zero Carbon Local Policy for new developments.

In discussions with Councils in Victoria some key findings and challenges revealed themselves as detailed in the following sections.

8.4.1. CITY OF STONINGTON

Stonington Council has an established ESD policy at Clause 22.05 of the Stonington Planning Scheme and additional standalone Sustainable Design Assessment in the Planning Process ('SDAPP') factsheets available on Council's website to assist future development applications.

Given the workload within this municipality, informal practice sees Planning Officers assess ESD requirements for applications of 10 or less dwellings, while larger residential applications and commercial development applications are assessed by a dedicated ESD Officer. Given this, the Planning Officers are afforded some level of training on the simpler applications but due to budget constraints and knowledge basis, the larger applications typically require the expertise of an ESD Officer. This can cause time delays, due to restrictions on funding ESD positions. As well as mixed application of policy, given different Planning Officers knowledge and experience.

8.4.2. MORELAND CITY COUNCIL

Moreland City Council is one of the Councils in Victoria who have an existing ESD policy within their planning scheme. This is located under Clause 15.02-1L. Like other Councils in Victoria with ESD policies they have additional standalone Sustainable Design Assessment in the Planning Process

('SDAPP') with factsheets available on the Council's website to assist future development applications.

Along with thirty one Councils in Victoria working with CASBE they are currently involved in the CASBE Elevating ESD Targets Planning Policy Amendment (as mentioned in section 8.4). As part of their involvement they are working to update their policy to be aligned with this ambition.

Their original policy was developed following the Councils Climate emergency declaration and a Councillor notice of motion regarding Achieving Zero Carbon in the Planning Scheme (this includes incorporating prescriptive standards such as solar photovoltaics, green roofs and electric vehicles for new development). Other drivers were the Councils Zero Carbon Action Plan and Strategy and the State's Statutory Climate Change Pledge made pursuant to the Climate Change Act 2017 (VIC).

In preparing their policy, Council sought the views and assistance from a range of internal and external

stakeholders including Councils statutory and strategic planners, environment and sustainability officers, transport, waste and stormwater/drainage officers, as, well as, landscape officers. Throughout various stages, industry was also engaged. More broader industry engagement and feedback will be sought in 2022 on the amendment project.

As Moreland have a mature existing policy, the potential revamped policy has been considerably welcomed and encouraged. Distribution Network Service Providers (DNSPs) have also welcomed the notion on prescriptive solar PV and EV standards.

When developing their policies there has been challenges such as the pending delivery of the State ESD Policy (Action 80 of Plan Melbourne 2050). This has resulted in Council trying to gauge (and arguably second-guess) where certain measures are best suited within the Planning Scheme and which planning tool to best utilise. For example, certain objectives and standards are best suited in a Victoria Particular Provision (or Schedule to the VPP thereto) given in certain cases prescriptive measures are being pursued. This is in contrast with a municipal Design and Development Overlay (DDO) or updated Local ESD Policy (whereby it is difficult or not possible to insert prescriptive measures).

The release of the National Construction Code proposed changes and finalisation of such changes in 2022 has also thrown up challenges and has resulted in is further delays with Planning deliverables. For example, in terms of ESD and the level of technical detail involved in some

areas as arguably the building framework is perceived to better address certain outcomes as opposed to planning. Therefore, certain projects and deliverables have been slowed down in order to gauge what the building framework will propose at a national level (i.e. NCC) or whether a State will pursue a State variation to the Code before matters are heavily entertained and implemented within Planning.

In terms of issues of timing on the amended policy, COVID 19 has presented problems from a State government delivery perspective. This has caused delays such as with government presenting to parliament the State Climate Change Interim Emission Reduction Targets, Climate Change Strategy and Adaptation Action plan, which has an indirect/roll on affect with the delivery of state programs and deliverables, as, well as, other planning reform. This has particularly impacted the State ESD Policy / ESD Roadmap deliverables such as the finalised State ESD Planning Policy Framework.

There has also been a pushback on their policy and amendments on the use of certain tools, with respect to, the tool's proprietors demonstrating that they have a reasonable governance framework established. This includes the user, adopter or supporter of the tool having adequate confidence in testing and understanding the back-end of the tool before Council can accept and mandate it into their policy.

Other barriers include a tool's suitability across multiple jurisdictions. Some tools have been developed to be fit for purpose (i.e. the City of Melbourne's Green Factor tool), as opposed to more wide spread adoption (e.g. BESS which is State-based, and Green Star which in a Nationally used tool).

Moreland also raised, in developing a policy and mandating a tool, it is important how the tool itself responds to the respective policy objectives, strategies and/or standards – essentially, can the tool support a development, meeting the respective objectives, strategies and/or standards. Of equal importance is also

Moreland also raised in developing a policy and mandating a tool it is important how the tool itself responds to the respective policy objectives, strategies and/or standards – essentially, can the tool support a development, meeting the respective objectives, strategies and/or standards. Of equal importance is also

- Simplicity The simplicity and user friendliness in both using and reading the tool outcomes which supports decision making.
- » Transparency Governance frameworks, as well as, frequency and types of updates the tool consists of (Is it current? Does it reflect or support current industry best practice?)

» Suitability - The suitability in how the tool is best integrated as a fundamental part of the planning process and that certain features the tool is asking for can be shown on development plans (and/or landscape, drainage plans etc.)

The user friendlessness also extends to Council staff particularly junior staff and planners so they can apply and understand what they are assessing. It was raised that training or simple fact sheets would benefit here.

Sustainability rating system are useful tools to negotiating outcomes via planning permit conditions between Council and developer for zero carbon development and Council has had success in this across the LGA. Tools can assist to demonstrate such outcome however only to a certain degree (e.g. energy efficiency performance from a building fabric, machinery [HVAC and hot water], lighting and glazing perspective, as well as the alleged use of certain energy efficient specified appliances). The negotiated permit condition would include details such as no connection to gas (i.e. an electrified building) and the requirement for green power purchasing. Additionally, from a Green Star perspective, when it can be negotiated with a developer that a development will register and certify their development with the GBCA for an official rating this also supports and delivers exemplary ESD outcomes.

There are examples however when sustainability rating systems and tools are used poorly, although this is generally when tools are not being used properly by 'mum and dad' developers who do not have a basic understanding of ESD (i.e. lack training, have not engaged a proper architect, sought advice from a basic drafts person, have not engaged a town planner). Other poor examples are when ad hoc submissions are made in order to obtain a permit quickly and therefore the rating tool is not being used properly (i.e. these submissions usually include a list of over specified commitments, specifying products or measures that either do not exist or that will have a significant impact on the project's budget). This highlights the need for Council to mandate a range of tools to be used to comply with the policy to allow accessibility and the ability for a development to achieving compliance in an equitable sense no matter the projects budget requirements.

There are also issues with the use of tools on large developments that are using tools in a tokenistic way and committing to certain design outcomes without a demonstrated basis or evidentiary undertaking (i.e. no performance or preliminary performance modelling being undertaken with the application. These are typically only supported by the completion of a Green Star Scorecard and this is arguably a binary, subjective, assessment with no real context provided). All of these issues can be and are overcome through the use of permit conditions and as mentioned being able to negotiate these with the developer generally means a better outcome for the development.

As highlighted empowering more Council staff in the use of these tools will mean earlier and more developed negotiations relieving time pressures on Council staff and better outcomes for new developments within the LGA.

8.4.3. YARRA CITY COUNCIL

Yarra City Council has an established ESD policy at Clause 22.17 of the Yarra City Planning Scheme and additional standalone Sustainable Design Assessment in the Planning Process ('SDAPP') factsheets available on Council's website to assist future development applications.

The policy was developed in 2001 as a voluntary program with Moreland, Port Philip and used a precursor to BESS as the sustainability tool. As with the other Councils highlighted in this discussion (and detailed in 8.2, 8.4 and 8.4.2) they are currently engaged in an amendment (CASBE Elevating ESD Targets Planning Policy Amendment) to implement a Zero Carbon Local Policy which Council has committed at a Council Meeting on 17 March 2020. This has also been committed to in their Climate Emergency Plan.

In developing policy and the use of tools to measure performance Yarra City has workshopped and has demonstrated experience in what works and doesn't work and how they believe this fits with their Council. Some of their key lessons were:

- If ESD can be built into the planning stage it is cost neutral rather than the building stage. What this means is that at the outset of a project ESD measures can be budgeted and often are minor expenses to the overall budget of a project. If implemented at building stage when budgets are locked in there is more resistance to finding the funding or it cause changes to the development which costs the developer time and money.
- Yarra City originally looked at prescriptive measures in the original voluntary policy, feedback from this meant they were able to reverse engineer the policy over 3 years to be more performance based Any local policy has to be performance based but be scalable to the type and stage of the development. Any tool being used has to be able to measure impacts of that element and how they tie into the overall development project.
- Simplicity and clear wording is essential. The policy should be clear with real and measurable goals. This also applies to standards, these need to be consistent and equitable. The information into how to measure standards using tools needs to be clearly worded and simple to understand. Yarra City was able to develop fact sheets based on their knowledge of what worked and didn't work. The example of the BESS fact sheets, and toolkit was raised as good examples of this. It was noted that its essential that these are in plain language and free to applicants and hence there is no ownership of

intellectual property. This ease of use and accessibility coupled with CASBE providing BESS legitimacy, means that for a planning based policy, Yarra City along with their counterpart Councils in Victoria have had a preference for BESS as one of the most suitable tools to use to demonstrate compliance with their ESD policies.

- In forming a policy, it needs to be sustainability tool agnostic. The reason being as has been discussed in the key lessons above and also for complete transparency. It's believed that being locked into a certain tool could cause issues if in the future that tool is amended behind the scenes by the tool developer with no input from the policy makers. This goes back to the comments regarding Councils needing to be equitable and fair to the communities they serve.
- » In putting a local planning policy in place being able to follow up and enforce compliance is very important for the policy to function. Yarra City has a good experience in negotiating outcomes with developers early in the planning process and therefore not blindsiding them later on at the planning permit determination stage or at the building stage. The planners being able to draw on the Councils ESD team to undertake and support them in this work means a better outcome for everyone involved in the process. Council often imposes a second condition seeking a compliance report for ESD measures on the final development to be issued prior to occupation certificates being issued. This can use sustainability tools and other measures (such as copies of electricity bills to illustrate electricity being generated via renewable methods) to demonstrate compliance with this condition. If the developer breaches the conditions, then there are clear and enforceable actions that can be undertaken within the planning system, these are the same enforcement actions as breaching any other consent condition. Council is also engaging in CASBE compliant spot checks on buildings to ensure compliance. These measures mean that they hope that a culture of compliance is being built and that ESD standards for new developments are integrated into the planning process. It is hoped that developers see this as good outcomes for their developments socially and also economically as it raises the standards and marketability of these developments.

8.4.4. MORNINGTON PENINSULA SHIRE

Mornington Peninsula Shire are currently seeking to implement local ESD policy under Planning Scheme Amendment C232. The key drivers for the formulating a policy was that Council's 2018 Planning Scheme Review identified a significant policy gap with respect to ESD and that an ESD policy would complement Councils existing strategic environmental policy. Council also have declared a Climate Emergency, with an adopted Climate Emergency

Plan which includes the formulation of a local ESD policy as an action.

However they have identified significant barriers which include:

What Sustainability Tools are best practice - It is unclear what sustainability tool Council should nominate per development and what is best practice. They view that it is important to nominate the preferred/mandatory tools to demonstrate compliance and to provide clear standards. Current best practice for this Local Government area relies on advice from external consultants, the CASBE, and other Local Governments.

In the end the Council settled on BESS as it seemed to be the tool most widely used and fitted the demographic of the shire (predominantly small-scale development and single dwellings).

- " State Government seeking ESD policies for larger scale developments State Government rejected attempts to include small-scale development (i.e. single dwellings, dwelling extensions, smaller-scale commercial and industrial development) in the ESD policy the Amendment was authorised on the basis that these elements are removed. This was on the basis that they did not want to unreasonably encumber small businesses and their justification for the inclusion of single dwellings was not accepted (all other Local Government ESD policies do not include single dwellings, only multiple).
- Additional economic Impacts on housing affordability and small business - Internally, there was some concern over the impacts on housing affordability and small businesses.
- Internal Resourcing Concern was also raised over internal resourcing implications (i.e. there is no current ESD Officer position). Some Planners felt that ESD/ Sustainability should sit within the Building Regulations, rather than in the Planning Scheme.
- Consistency and clarity in controls Developers (including housing developers, surveyors, draughtsmen) were concerned around clarity and consistency of the application of the policy (requirements, discretionary assessment etc.).

These barriers show how the development mix of the Council really impacts the policy and it's hard for a one size fits all approach. Also, the State Government rejecting the policy meant that it significantly diluted the intent of the policy and has resulted in a 'pause' to the amendment process. There is a concern that the forthcoming State-wide policy will be very similar to the stripped down version that the State Government has authorised. This is important to note as Victoria seeks to provide a State based approach. The experience at Mornington with larger developments has been that the approach to achieving ESD objectives has been inconsistent and hence the need for a local policy, but it is crucial that this policy suits the needs of the Council area.

Council also noted that once they have a clear policy training on the use of sustainability tools, the use of these tools will be crucial in delivering consistent assessment and standards. This is echoed by other Councils and thus simple user guides and/or training directed at Council planners are essential to support the use of these policies in planning assessments.

8.5. CASE LAW

Due to the lack of state-wide policy on ESD, there are a number of Victorian Civil and Administrative Tribunal ('VCAT') determinations that explore the merits of local ESD policies in development applications. The case of 'Vincent Corporation Pty Ltd v Moreland CC & Anor' is a red dot decision that sets precedent for applications that seek "reduction of on-site car parking to zero in major activity centre". This proposal was in line with the Moreland Planning Scheme, which places emphasis on encouraging sustainable and walkable neighbourhoods. It was assessed based on its merit and the net community benefit of the entire development beyond the car parking provision. In this case the decision of the Moreland Council was set aside, and the permit was granted with conditions. These conditions specifically state that the proposal must meet or exceed a certain standard of ESD conditions specified in the ESD Management Plan to the satisfaction of the Responsible Authority. This development, known as the Nightingale Residential Development, in Moreland is an example of where ESD considerations were significant to the success and approval of the proposed development despite the initial opposition from Council and the local community.

Another example where ESD targets contributed to the decision of approving a permit through VCAT was in the case of 'Richmond Icon Pty Ltd v Yarra CC' which is another red dot case. The proposal for the site 140-160 Swan Street, Richmond, for a 10 storeys mixed use development atop of the existing clock ball tower which is a significant landmark in the area. Council acknowledged that the proposal included 'notable ESD objectives' as a grounds for supporting the development.

Port Philip Council was opposed to an application for a 10-storey commercial building despite the fact that the proposal would meet the best practice Environmental Design Standards and achieve a 5-star Green Star & As Built rating and a 6-star NABERS energy rating. In the case of '134 Moray St Pty Ltd v Port Phillip CC', Council was opposed to this proposed development stating that it didn't meet several planning scheme objectives including a reduction in car parking requirements. VCAT found the built form response to be sufficient and the car parking proposed to be acceptable and approved the permit subject to conditions.

An example of a proposal which was refused by both Council and through VCAT is the case of 'Toorak Development Group Pty Ltd v Stonnington CC'. This proposal was for a 4-storey apartment building, and one of the key concerns was if it met the ESD policy within the Stonnington Planning Scheme. The overall design of the building did not achieve satisfactory ESD and internal amenity outcomes, so despite the applicant preparing the BESS Report as required by the policy it was still refused.

In the case of 'Wang v Moreland CC & Ors', the VCAT member noted that "now that the Building Code of Australia requires a 6-star energy rating for apartment buildings and a 5-star rating for individual apartments the Tribunal has made it clear that there is no benefit in the planning system duplicating and doubling up the requirements of the building approval system". This determination reflects growing commentary that having prescriptive ESD regulations within the planning scheme is not necessary since they are included within the Building regulation and assessments. It was also suggested that Moreland Council considered that the development should achieve best practice but couldn't advise if 'best practice' was a 4-, 5- or 6-star rating. The VCAT member concludes that the building should achieve a 4-star rating and they set aside Council's refuse to issue the permit with conditions.

8.6. KEY FINDINGS

The following provides a high-level synthesis of findings from Section 8.3 and Section 8.4. Learnings from the interviews with selected Councils are also considered in context of policies and successes from other jurisdictions.

- Clear state policy is required What we have found is that while there is a clear initiative at a Local Government level to implement ESD policy for new development applications, the lack of a consistent state-wide policy provides significant barriers to the implementation of any ESD requirements. A 2017 Audit of the Victorian Planning Systems, Managing Victoria's Planning System for Land Use and Development, undertaken by the Victorian Auditor-General's Office noted the following:
 - The VPP do not provide any clarity on the concept of sustainability, how to measure it and how to consider it in decision making. The policy framework does provide overarching goals for sustainability, but they are incorporated into a wide range of policies rather than one specific policy.
 - The guidelines for making decisions outline the matters to be taken into account when assessing planning permit applications. These guidelines do not currently address sustainability, and there is no overlay that specifically requires or triggers a permit requirement that proposed buildings must be sustainable.

 The VPP also fail to provide a more detailed framework to enable assessment of more quantifiable aspects of sustainability, such as energy conservation, water conservation, sustainable building principles and use of assessment tools. This makes it difficult for planners to conduct a comprehensive and quantifiable assessment against all relevant sustainability factors. As a result, analysis of sustainable development was generally poor or overlooked in assessment reports.

It is hoped that DELWP's ESD roadmap will provide a stronger basis for ESD policy within the VPP moving forward. However no indication to date from DEWLP has been provided as to what best practice may be and whether will be any preferred or mandatory tools provided for within future policy.

The Tools and learning are there for Councils in Victoria to pursue local ESD strategies

Notwithstanding the above comments the work of CASBE and the examples set by the likes of Yarra City, Moreland and Stonington show that there is a pathway for Councils in Victoria to pursue ESD standards for new developments within the planning system. Yarra City is a good example of it being built into the planning permit assessment process and although there are opportunities for the planners to be more engaged in the assessment of the ESD reports, a clear policy with engaged officers shows that there is an uptake in new developments using the likes of Green Star and NABERS to demonstrate this. Yarra City have also been proactive in ensuring these are more than just targets which should encourage planners in other jurisdictions to follow suit.

» Policy needs to be fit for purpose

Noting the experience of Mornington Peninsula Shire any local policy needs to fit the development make up of that Council, noting economic factors that may occur as an offshoot of the policy which impact its uptake. There clearly needs further work around this so that the ESD policies are not limited to Councils with a greater concentration of larger developments whilst maintaining a level of consistency over the use and selection of sustainability tools used in the policies. This maybe again where a State based approach to ESD policy provides clear direction and benefit (e.g. Green Star and NABERS for larger developments and BESS or similar for smaller developments/houses).

Upskilling of Council Planners in Sustainability Rating tools is essential

It appears that a lot of the complex detail particularly in the use and assessment of Green Star and NABERS is left to ESD officers. Whilst acknowledged that Council planners often are time poor and may not have the expertise, there is a clear theme that simple fact sheets and checklists similar to the ones they use for BESS would assist the Planners in their assessments and may mean that they are not solely reliant on the ESD officers (if Council has one) interpretations. This would also provide clarity to developers dealing with the Councils planners not solely through second hand knowledge.

Costs can be reduced if ESD is introduced at the Planning stage

Developers also prefer not to have unexpected, or unplanned for changes. At the building stage of a project there is great resistance to this and as unplanned for can put a large amount of risk onto a project. Councils have the ability to intr4icuce ESD measures in the planning stage. This ensures that the developer knows about these costs upfront and can design them into the project. Often these costs are minimal compared to the whole development cost and have added benefits in the developments value and marketability. This approach means a greater uptake and makes the process more transparent and simple for the developer and hence encourages greater uptake.

8.7. RECOMMENDATIONS

Based on the findings of research and interviews in Victoria, the following actions are recommended for GBCA and NABERS to investigate to assist Local Government:

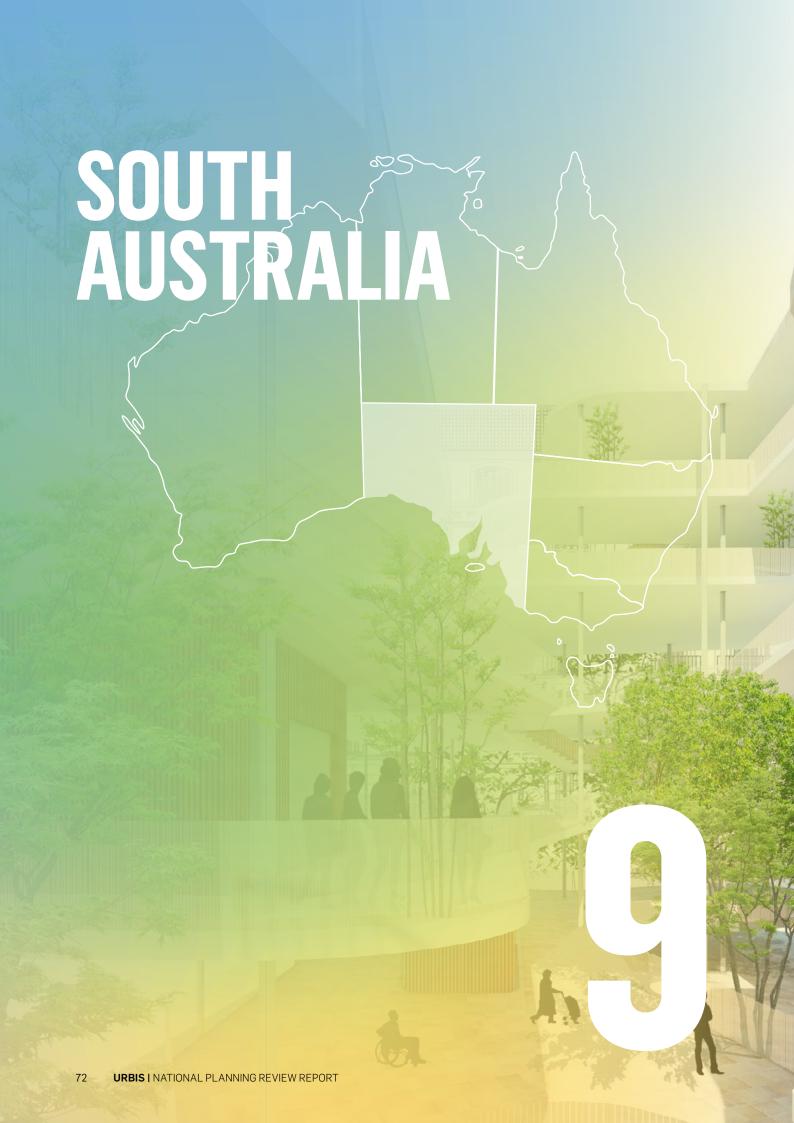
Advocacy at a State and Federal level - Councils are calling for policy change at State and Federal level that can then empower Councils to require high standards of ESD. This could include legislation mandating requirements for implementing sustainability targets for development over a certain capital investment value, or scale of development. It is noted that DEWLP are currently pursue State level policy, however the timeframe for delivery and what this policy will ultimately be unclear at this stage.

In addition to State and Federal level policy, additional funding from State Government would assist Councils in providing ESD Officer positions to properly implement and assess ESD requirements.

- Sharing of ESD best practices Some Councils are more successful than others in guiding ESD requirements. Examples of these solutions could be compiled in a centralised location accessible to Council planners, to encourage sharing of successful implementation more broadly.
- Greater supporting information to Council officers, senior decision makers and Councillors on why to support ESD and sustainability ratings Findings of this research indicates that successful ESD initiatives have been led by passionate people empowered to influence change. However, Councils are concerned with requiring additional costs on development that further burdens affordability and project feasibility without clear benefits of return on investment. Whilst there are existing training resources available on ESD and sustainability tools. Additional factsheets prepared by GBCA and NABERS, as well as training sessions with Local Government planners, will assist in the understanding and application of these policies to achieve best practice ESD outcomes.
- » Local planning policies need simple wording Local Planning policy needs to be worded for simplicity and user friendliness. This also applies to the tool outcomes and this means it will be more likely supported by the development community and wider community.
- » Local planning policy needs to be tool agnostic There is greater support for the use of tools that have transparent frameworks. One way of ensuring this is to allow a range of tools to be used and this should be a consideration when writing policy and mandating a tool to be used in a local planning policy.

- Sustainability Tool Suitability The suitability in how the tool is best integrated as a fundamental part of the planning process is important in it being able to be used to show compliance with a local planning policy. This includes the ability for certain features the tool is asking being able to be shown on development plans (and/or landscape, drainage plans etc.)
- Local Planning Polices need to be able to cover all mix of development types - Any local policy has to be performance based but be scalable to the type and stage of the development. Any tool being used has to be able to measure impacts of that element and how they tie into the overall development project.
- Build ESD in to the planning stage of a development If ESD can be built into the planning stage it is cost neutral rather than the building stage. What this means that at the outset of a project ESD measures can be budgeted and often are minor expenses to the overall budget of a project. If implemented at building stage when budgets are locked in there is more resistance to finding the funding or it cause changes to the development which costs the developer time and money.
- Able to enforce Compliance is essential Any local planning policy to have weight needs to be enforceable. Therefore when devising a policy Council needs to think of how they will enforce this and what conditions can be imposed on the permit to empower their compliance officers to take action if ESD measures are not implemented contrary to the planning permit.





9.1. OVERVIEW OF THE PLANNING SYSTEM

The South Australian Planning system was recently reformed and implemented in March 2021. The system is now directed by the Planning and Design Code (the Code) which applies all the metropolitan areas in the State. The previous 72 State development plans have been consolidated into one electronic code and located in the PlanSA portal. The Code supports the *Planning, Development and Infrastructure Act 2016* (PDI Act) by consolidating all the planning policies, rules and classifications used within the State for development assessment.

9.1.1. ASSESSMENT PROCESS

All proposals must go through the development assessment process to gain approval. The developments must adhere to the Planning, Development and Infrastructure Regulations 2017. There are three avenues for proposals to gain planning approval, these are:

- Accepted building consent required but not planning consent
- Code assessed development Assessed against the PDC and are either deemed-to-satisfy or performance based. Detached homes would be deemed-to-satisfy. Multi storey buildings would be performance based.
- Impact assessed development Major developments. These would be subject to Environmental Impact Assessment.

9.1.2. DECISION MAKERS

The key statutory authorities for planning and development applications in South Australia are:

- The Minister for Planning and Local Government Impact assessed developments such as state significant developments and key infrastructure projects.
- State Planning Commission Responsible for assessing restricted development applications occurring outside of local Council areas or directed by the Minister e.g. matters of state significance. They also assess developments in the City of Adelaide greater than \$10million.
- Assessment Panel Under the new planning system, Councils are no longer a relevant authority in their own right for planning consent and land division consent. They must appoint an Assessment Panel to perform the assessment functions.
- Assessment Manager Under the new planning system, Councils are no longer a relevant authority in their own right for planning consent or land division consent.

They must appoint an Assessment Manager to perform the assessment functions on their behalf. Assessment Managers are planners that are accredited under the Accredited Professionals Scheme as a Planning Level 1. They may be a senior planner from the local Council or a private consultant who has been engaged by the Council. The Assessment Manager helps support, advise and coordinate the work of the Assessment Panel and will also be responsible for the assessment of certain types of applications as a decision authority in their own right. The Assessment Panel may review an assessment decision made by the Assessment Manager, if requested to do so by an applicant.

9.1.3. DEVELOPMENT ASSESSMENT PROCESS

- 1. Development application lodged
- 2. Relevant authority may ask for more information (RFI)
- 3. Referrals to agencies, if required
- 4. Public notification, if required
- 5. Planning assessment
- 6. Planning decision
- 7. Appeals, if relevant

9.1.4. HIERARCHY OF LEGISLATION

The code which will be used to guide the South Australian Planning scheme adheres to the Planning, Development and Infrastructure Act 2016 and the Development Act 1993 (the old legislation for application submitted prior to March 2021). The Minister for Planning and Local Government can approve Practice Guidelines which are designed to assist with the application of the Planning and Building regulations outlined in the Code during the Development Assessment Process. The Practice Guidelines are developed by the State Planning Commission.

Figure 9 - Hierarchy of SA Planning Legislation (Source: South Australian Planning Commission 2021)

PDI ACT

Sets out that agency referrals on development applications are a part of the planning system

STATE PLANNING POLICY

Defines the state's interests and provides the policy framework for other planning instruments such as the Planning and Design Code (the Code)

Indicates an agency's referral role by setting out state interests up front

PDI REGULATIONS

Provides an overarching 'framework' for referrals such as:

- listing the prescribed bodies (agencies) who are to receive referrals
- the timeframe to provide a response on a referral
- the powers to direct, concur or provide advice to the decision authories.

PLANNING AND DESIGN CODE

Completes the 'referrals picture' by setting out:

- the specific details of what types of developments require referral and where (eg. via Overlays or statewide)
- the purpose of the referral (which guides what the agency should consider in its assessment
- may also set out criteria in which all being met exempts the need for a referral

9.2. SUSTAINABILITY RATING TOOLS

There is no mandated use of sustainability tools to measure any ESD principles within the planning system, noting that all Councils are bound by the State Planning and Design Code. However there are a number of clauses contained within the code that pertain to sustainable development and design. These are outlined in Table 8 below.

Table 8 - Sustainability tools used in the South Australian Planning and Design Code

Planning Policy/Code	ESD Tools utilised	Planning Framework	Documentation Required	Implementation / Compliance
State-wide – Planning and Design Code	N/A	Capital City Zone - PO 4.2 - Development exceeding the building height specified in the Maximum Building Height (Levels) Technical and Numeric Variation layer and the Maximum Building Height (Metres) Technical and Numeric Variation layer is generally not contemplated unless: (b) the building incorporates measures that provide for a substantial additional gain in sustainability	None specified in practice compliance may be achieved via a ESD Report produced by a specialist ESD consultant and/or a sustainability rating achieved from use of a recognised sustainability tool	Assessed by Planning officers and Development assessment stage No details provided within the policy relating to compliance.
State-wide – Planning and Design Code	N/A	City Main Street Zone In the Rundle Street, Rundle Mall, Hindley Street, and Gouger and Grote Street Subzones, development exceeding the building height specified in the Maximum Building Height (Levels) Technical and Numeric Variation layer and the Maximum Building Height (Metres) Technical and Numeric Variation layer is generally not contemplated unless: (b) the building incorporates measures that provide for a substantial additional gain in sustainability	None specified in practice compliance may be achieved via a ESD Report produced by a specialist ESD consultant and/or a sustainability rating achieved from use of a recognised sustainability tool	Assessed by planning officers at Development Assessment stage. No details provided within the policy relating to compliance.

Planning Policy/ Code	ESD Tools utilised	Planning Framework	Documentation Required	Implementation / Compliance
SA Planning and Design Code	N/A	Innovation Subzone Buildings in the Innovation Centre (identified on the Innovation Subzone Concept Plan) only exceed 15 building levels or 53m in building height where: (a) exemplary standards of architectural merit and environmental sustainability are met (b) the building is designed to provide measures that provides for a substantial additional gain in sustainability	None specified in practice compliance may be achieved via a ESD Report produced by a specialist ESD consultant and/or a sustainability rating achieved from use of a recognised sustainability tool	Assessed by planning officers at Development Assessment stage. No details provided within the policy relating to compliance.
SA Planning and Design Code	N/A	Neighbourhood Subzone PO2.2 - Residential development that incorporates a high standard of architectural and urban design and sustainability.	None specified in practice compliance may be achieved via a ESD Report produced by a specialist ESD consultant and/or a sustainability rating achieved from use of a recognised sustainability tool	Assessed by planning officers at Development Assessment stage. No details provided within the policy relating to compliance.
SA Planning and Code	N/A	Urban Corridor Bouvard, Business Living and Main Street Zones Consolidation of significant development sites (a site with a frontage over 25m to a primary road corridor and over 1500 (Main Street Zone) 2500m² in area, which may include one or more allotments) to achieve increased development yield provided that off-site impacts can be managed and broader community benefit is achieved in terms of design quality, community services, affordable housing provision, or sustainability features.	None specified in practice compliance may be achieved via a ESD Report produced by a specialist ESD consultant and/or a sustainability rating achieved from use of a recognised sustainability tool	A performance outcome is passive heating and cooling design elements including solar shading are integrated into the building design. How this is achieved is not specified and would be assessed by planning officers at Development Assessment stage.
SA Planning and Design Code	N/A	Design Overlay Development positively contributes to the liveability, durability and sustainability of the built environment through high- quality design.	None specified in practice compliance may be achieved via a ESD Report produced by a specialist ESD consultant and/or a sustainability rating achieved from use of a recognised sustainability tool	Developments subject to this overlay may trigger a referral to the Government Architect or Associate Government Architect who will amongst other matters assess that the development supports sustainable and environmentally responsible development.

Planning Policy/ Code	ESD Tools utilised	Planning Framework	Documentation Required	Implementation / Compliance
SA Planning and Design Code	N/A	Design in Urban Specifies to ensure that Development is: "sustainable - by integrating sustainable techniques into the design and siting of development and landscaping to improve community health, urban heat, water management, environmental performance, biodiversity and local amenity and to minimise energy consumption. PO 14.2 under the Design in Urban Areas code specifies that Development incorporates sustainable design techniques and features such as window orientation, eaves and shading structures, water harvesting and use, green walls and roof designs that enable the provision of rainwater tanks (where they are not provided elsewhere on site), green roofs and photovoltaic cells.	None specified in practice compliance may be achieved via a ESD Report produced by a specialist ESD consultant and/or a sustainability rating achieved from use of a recognised sustainability tool	PO 14.2 specifies that development incorporates sustainable design techniques and features such as window orientation, eaves and shading structures, water harvesting and use, green walls and roof designs that enable the provision of rainwater tanks (where they are not provided elsewhere on site), green roofs and photovoltaic cells. Compliance with this is at discretion of the planning officer at development assessment stage and no details provided within the policy relating to compliance.

As can be seen sustainable design is encouraged by the Planning and Design Code however it does not mandate the use of any sustainability rating tools and the use of sustainability rating tools is not required under any legislation in South Australia for planning assessments.

In some instances, sustainable design details are prepared voluntarily to accompany planning applications to demonstrate sustainable performance (such as in the performance objectives highlighted in Table 8). Although the method of demonstrating compliance with the performance outcomes is left up to the developer. The use of a sustainability rating tool such as Green Star and NABERS would provide a simple and suitable means to assist with justification for meeting performance standards and should be encouraged in developments that need to meet these justifications particularly within the Capital City and Main Street zones seeking uplift in heights.

In general technical assessment of sustainable design is done under the building regulations. For an energy rating assessment, an energy rating of at least 6-stars (unless the building is eligible for a concession) must be gained using an accredited software program. The accredited software programs utilised in South Australia are: FirstRate5, AccuRate and BERSPro.

9.3. CASE STUDIES

The most relevant case study would apply to the height variation within the Capital City Zone. This Capital City Zone policy only applies to land within the Adelaide CBD. From our understanding, it is one of few instances where there is a regulatory requirement for sustainable design in South Australia. As was specified, for new developments to exceed the height limit a substantial gain in sustainability is to be incorporated as well as other design initiatives. The policy is shown below

Performance Outcome PO4.2:

Development exceeding the building height specified in the Maximum Building Height (Levels) Technical and Numeric Variation layer and the Maximum Building Height (Metres) Technical and Numeric Variation layer is generally not contemplated unless:

- a) the development provides for the retention, conservation and reuse of a building that:
 - i. is a State or local heritage place and the heritage values of the place will be maintained
 - ii. provides a notable positive contribution to the character of the local area

or

- b) the building incorporates measures that provide for a substantial additional gain in sustainability and it demonstrates at least four of the following are met:
 - i. the development provides an orderly transition up to an existing taller building or prescribed maximum height in an adjacent Zone or building height area on the Maximum Building Height (Levels) Technical and Numeric Variation layer and Maximum Building Height (Metres) Technical and Numeric Variation layer
 - ii. incorporates high quality open space that is universally accessible and directly connected to, and well integrated with, public realm areas of the street
 - iii. incorporates high quality, safe and secure, universally accessible pedestrian linkages that connect through the development site to the surrounding pedestrian network
 - iv. provides higher amenity through provision of private open space in excess of minimum requirements by 25 percent for at least 50 percent of dwellings
 - v. no on site car parking is provided
 - vi. at least 75% of the ground floor street fronts of the building are active frontages
 - vii. the building has frontage to a public road that abuts the Adelaide Park Lands;
 - viii. where the development includes housing, at least 15% of the dwellings are affordable housing
 - ix. the impact on adjacent properties is no greater than a building of the maximum height on the Maximum Building Height (Levels) Technical and Numeric Variation layer and Maximum Building Height (Metres) Technical and Numeric Variation layer in relation to sunlight access and overlooking.

As this policy is a recent adoption there is few examples of this being implemented and how the sustainability was measured to allow for the uplift in height for the development. From discussions with the South Australia Planning Commission, we understand that there are some developments under development assessment that are seeking to use this policy. They also noted that it is common for larger developments to include documentation to demonstrate the sustainable performance of the building. However, there is no specific metric that this is measured against in the planning system. Expertise is relied upon to request and assess sustainable design initiatives in proposed developments. The State Planning Commission includes a pre-application service which is where the expectations for sustainable design can be discussed.

From our understanding Green Star and other performance rating requirements are requested from time to time depending on the project. Otherwise, commitments to other sustainable initiatives such as solar panels, rainwater tanks and general energy performance are requested.

In regard to future policy development, the State Planning Commission is also working on Design Standards which will be a supporting document to the Planning and Design Code. This is in the early stages of preparation and there is minimal information available to inform what these standards might be at this stage.

9.4. DISCUSSION

Within the planning system in South Australia there is no requirement to consider the environmental performance of developments against specific tools. However, sustainable design performance is encouraged in the existing planning framework as sustainable performance is factored into decision making for larger developments, including when maximum height restrictions are exceeded in the Capital City Zone.

The State Planning Commission is the responsible authority for larger projects including projects over \$10 million (which is the predominate threshold for developments examined in this report. While environmental assessments are provided with some applications, depending on the controls that apply to the land, they often do not include an assessment of the performance of the building. It should also be noted due to the changes in the planning system being very recent there have been no challenges, appeals or legal case law relating to development applications being refused or approved on matters of sustainability. As the system develops and is tested by developers however this may change.

9.4.1. STATE PLANNING COMMISSION

We have interviewed planners at the State Planning Commission who advised that the State Planning Commission has seen examples of NABERS reports and are aware of Green Star reports that accompany development applications. These reports are assessed by the planning team, however, beyond the building regulations there is no minimum requirements that the State Planning Commission consider these reports in their assessments. Depending on the project, input from the Office of Design and Architecture South Australia (ODASA) assists with review of the sustainable performance of the development. However for more complex developments and development applications where the State Planning Commission is the planning authority (and not the Council), sustainable performance is a consideration by the State Commission Assessment Panel (SCAP) which includes members with expertise in sustainable design.

9.4.2. CITY OF ADELAIDE

Applications for development submitted to the City of Adelaide are sometimes accompanied by voluntary ESD reports, this would generally include details of the environmental impact on the site and landscaping considerations. The City of Adelaide's planners mentioned they have not seen many examples of sustainable design performance reports which accompany applications and are not aware of any minimum star rating requirements that are enforced at the planning stage and are of the understanding that this is only reviewed under the building regulations. Sometimes Council planning departments would refer the ESD report to a sustainable design consultant for comment due to Council not having the expertise to assess these.

9.4.3. NOORWOOD PAYNEHAM AND ST PETERS

No sustainable design assessment tools are used to assess planning applications; however Council generally seeks soft landscaping to be incorporated into designs. Council is aware of architects that develop sustainable buildings and therefore voluntarily integrate sustainability measures into developments. However due to the current set up of the planning system there is no means for Council to put in place sustainability policies of their own.

9.4.4. CITY OF WEST TORRENS

No sustainable design assessment tools are used to assess planning applications. A former Council policy required materials and landscaping details; however this policy is no longer in force since the adoption of the Planning and Design Code, which does not have comparable sustainability requirements. This is noted again the limitations of the new State led planning scheme which limits Council's ability to enact their own sustainability policies.

9.5. KEY FINDINGS

The following provides a high-level synthesis of findings from Section 9.3 and Section 9.4. Learnings from the interviews with selected Councils are also considered in context of policies and successes from other jurisdictions.

Lack of State guidance on ESD within the State and Local Government Planning Framework – While the reformed planning system evolves there may be opportunity to standardise sustainable design assessment measures into planning consideration such as the Design Standards however as things currently this would require education and upskilling of planners working within the SA planning system.

- Drafting of controls and where they sit within the planning framework (i.e. within the Planning Scheme, Local Planning Policies, Activity Centre Plans/ Structure Plans, Design Guidelines) The Planning and Design Code is drafted and controlled by state Government, and therefore there is no mechanism and little appetite for Councils to apply sustainability requirements via the planning system. However as the system is less than a year old Councils may be able to seek opportunities to put in place voluntary policies or other work around solutions as we have seen in QLD, if the desire and support is there internally in Council and in their communities.
- Education of Local Government staff and consultants

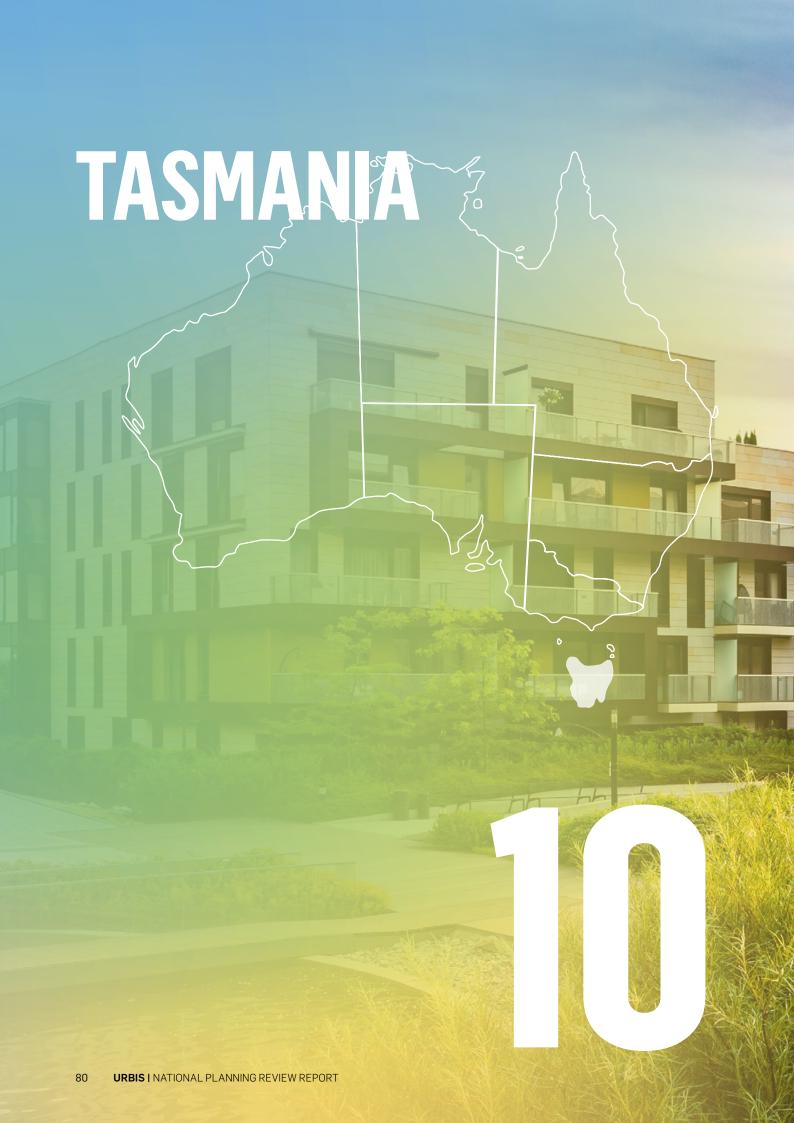
 Overall there is limited understanding by the State

 Planning Commission and LGA planners of the benefits of incorporating sustainable design performance tools at the planning stage in South Australia. While it is encouraged in the planning framework to incorporate sustainable design in developments, in practice the sustainable performance consideration is assessed on a case by case basis and external consultant expertise is relied upon for commentary.

9.6. RECOMMENDATIONS

- Planning and Design Code: There may be opportunities to include more sustainable design requirements to the state Planning and Design Code as the reformed planning framework evolves, requiring greater consideration for ESD principles at the planning stage rather than being addressed only at the building permit stage. The Plan SA website refers to Design Standards that are to be prepared as supplementary tools to support the Planning and Design Code, however, there is no indication on any sustainable design initiatives that would be included in these standards yet.
- Raising awareness: There appear to be few controls in place relating the integration of ESD principles and little evidence of work being undertaken to change this, therefore a campaign targeting industry and Government may be beneficial in raising awareness and desire for new controls.
- Voluntary Policies As the planning system evolves, Councils in South Australia might be able to take learnings from Councils in other States that are similar hampered by the setup of the planning system and use these learnings to set up voluntary policies with incentives to encourage developer buy in.





10.1. OVERVIEW OF THE PLANNING SYSTEM

The Tasmanian Planning system is undergoing significant reform which will impact the way in which the planning system functions. The current system consists of policies, strategies and frameworks used to guide the decision-making process for planning and development approvals. The current system is called the Resource Management and Planning System (RMPS). The proposed changes will move to a State based system with a centralised planning scheme for the State.

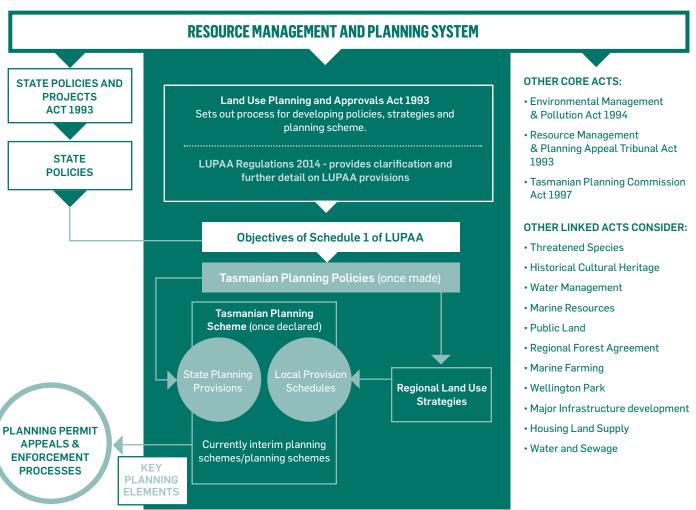
10.1.1. DEVELOPMENT ASSESSMENT PROCESS

Like the Victorian System, Planning Approvals are typically sought through the Local Council in adherence with the legislation. The applicant must show compliance with the planning scheme when seeking approval. The Tasmania Planning Commission was established under the Tasmanian Planning Commission Act 1997, and they are responsible for assessing major projects.

10.1.2. HIERARCHY OF LEGISLATION

The two key pieces of legislation which impact the Tasmanian planning system are the Land Use Planning and Approvals Act 1993 and the State Policies and Projects Act 1993. The Land Use Planning and Approvals Act is the legal framework for the State level Planning Policies, Regional Land Use Strategies, the Planning Scheme and Regulations. The Planning Scheme will replace the current structure which consists of 29 different schemes for each of the municipalities. The Tasmanian Planning scheme will consist of both State and Local Provisions to guide the development and land use assessment.

Figure 10 - Overview of the Tasmanian Planning System (Source: Tasmanian Planning Commission, 2021)



10.2. SUSTAINABILITY RATING TOOLS

The TAS planning system does not include the use of any ESD rating tools. A review of all the Local Governments within TAS has identified that there are no sustainability planning policies with the exception of sustainable transport measures within the planning scheme. Given this there are no documentation requirements if a developer choses to implement sustainability measures into a development. ESD within Tasmania is limited to voluntary uptake of ESD through Green Star prior to development and/or via NatHERS within the building process via the Building Act 2016. This sits outside of the planning system and commercial buildings must comply with the energy efficiency provisions of the Building Act 2016.

10.3. CASE STUDIES

There is only one relevant policy change on the horizon related to sustainable development and we have elected to look at this as it's a good example of Council seeking to work around the restrictions placed upon them by a State based planning scheme. The policy is the Central Hobart Precincts Plan (CHPP).

To inform the CHPP a discussion paper was released on 26 October 2021. The discussion papers intention is to inform the final scope of the CHPP.

The Paper outlines 5 City-shaping goals. Within each goal are several themed ideas. Of note was:

- City Shaping Goal 3 Sustainable Buildings with Character, Idea twelve – Environmental Excellence -The overarching idea of this goal is that by 2042, Central Hobart will adopt a range of measures that produce more sustainable buildings and precincts The idea notes that while many aspects of sustainable buildings are regulated by the NCC, there is a role for Local Government to play in setting the conditions to allow sustainable design to occur. This idea includes the following:
 - Flexible built form guidelines to allow designers to respond to climatic conditions on individual sites.
 - Incentives within a planning scheme could encourage sustainable design, such as providing setbacks that allow equitable sun access for properties.
 - That the CHPP could include a planning overlay to achieve sustainable precincts. This could include sunlight amenity standards to reduce heating loads, higher energy rating tools such as NABERS and

mandating that roofs are designed to provide positive benefits for the community. Rooftops can be used to house solar panels and rooftop gardens for communal outdoor space, air drying clothes, harvesting water and growing food.

Under this work potential options include:

- Investigation of frameworks for sustainable precincts
- Recognition of the importance of, and develop a framework for, blue and green infrastructure, water sensitive urban design and urban greening to increase the city's resilience
- Encouraging the development of green roofs and green walls, develop guidance and policy
- Design City of Hobart to meet best practice sustainable design
- Promotion and encouragement sustainable building design and where possible include planning scheme provisions to advocate changes to building provisions
- City Shaping Goal 5: Investment-ready and innovative, Idea Sixteen: Aligning the regulatory framework The overarching idea of this goal is that by 2042, developers and local community have a clear understanding of expectations under the Central Hobart Precincts Plan, and planning approvals are streamlined for preferred development in particular areas. The idea notes the following:
 - Implementing the precincts plan is likely to require some change to regulation – for example, changes to planning scheme provisions will be important to ensure that new uses, buildings and works in the private realm are located, designed and constructed in a way that achieves the plan's goals. There may also be other implementation requirements (such as by way of a stormwater system management plan under the Urban Drainage Act 2013).
 - The precincts plan will provide a place-specific understanding of the development needs for the area compared to the more generalised zoning standards that are in the planning scheme, which have been developed to suit a variety of development types.
 This creates certainty by clearly indicating which development can be readily invested in.
 - There are many triggers in the planning regulatory framework that can be used to require landowners and developers to address the precincts plan's objectives.
 For example, it's possible to introduce Specific Area

Plans to provide clarity about height, setback and required design standards, and to provide more certain pathways to permit approvals where particular standards are met.

 Proposals that do not align with the precincts plan could be put to a number of tests to determine whether they can be modified to provide an alternative not considered in the precincts plan, but that still achieves the objectives.

Under this idea, the potential future directions are outlined as follows:

- Undertake detailed analysis of preferred forms of development for individual city blocks to ensure that expectations of developers and the community are clearly articulated.
- Investigate means of including the preferred development forms in the planning scheme using provisions that create certainty for developers and the community and streamline approvals processes.
- Test the feasibility of proposed provisions before including them in the planning scheme.
- This plan will be open to community consultation inviting important stakeholders and the community to be involved in the development of the Precincts Plan.
- Once the framework of the Precincts Plan is finalised it will guide future growth in Central Hobart. The Plan will ultimately propose a suite of transformational moves, recommended actions and mechanisms that together deliver the desired outcomes as outlined in the Precinct Plans.
- Implementation mechanism may include changes to the planning scheme provisions.

In discussions with planners from the City of Hobart it was highlighted that despite the planning system moving to a single State based Planning Scheme the CHPP could provide an opportunity for real and measurable ESD principles to be placed onto the planning system as relates to Central Hobart. It's noted that the majority of significant commercial and residential development that should trigger Green Star certification or similar is based in Central Hobart (such as the 5-Star Green Star Ibis Hotel and the 9 Star NatHERS - The Commons Hobart) and as such there is a desire and resources to see this happen. As this is a discussion paper its far too early to judge any levels of success or failure but it shows Council is open to working around the limitations placed on them by a State based planning system. The other Councils interviewed in Tasmania (Launceston and Devonport) noted that they were watching to see if similar policies could be enacted in their own areas.

They did however caution that Hobart has the majority of the larger urban development, and this means that they have limits on where they could (as in areas of their cities) implement a similar policy. Discussions with the smaller Councils (Bruine, Brighton, West Coast) indicated that neither have the resources, funding or the types of development that warrant them seeking individual policies outside of the planning scheme. Smaller gains such as renewable energy and Council infrastructure projects, however could be considered if resourcing were available.

10.4. DISCUSSION

The Tasmanian Planning system does not currently mandate any type of sustainability rating tool for implementation in development in Tasmania. This lack of State-level regulation and the impending move to a single State based planning scheme means that Councils do not generally have the power or resources to enforce adoption of sustainability rating tools as a mandatory part of the planning process or assessment criteria. This situation also means that there has been no legal challenges or case law with regard to the implementation of ESD policies or the use of sustainability ratings tools.

10.4.1. HOBART CITY COUNCIL

In the absence of mandatory requirements, the only Council that has the resources and impetus to seek sustainability measures and use of sustainability rating tools within developments is the City of Hobart. As discussed in 10.3 the City of Hobart are seeking to use the CHPP as a means to use the planning system to implement sustainability measures and they have encouraged (and we would recommend) that GSCA and NABERS make representations on the discussion paper to assist in driving this change and the use of sustainability tools as a measure built into the CHPP. This policy realistically wouldn't come into use until late 2022 at that stage it would then take at least 12 months before its success (or not) could be measured. Unfortunately, other Councils in Tasmania seeking to use this an example may not be able to use this as a case study for a significant time.

However, its hoped that this provides a lead in Tasmania in providing an ESD Policy tied to the use of sustainability rating tools and may also provide an example to other States with similar restrictions (South Australia and QLD).

10.4.2. LAUNCESTON COUNCIL

Launceston have declared a climate emergency. However, in discussions with planning officers it was indicated that they have no planning controls or policies in place to promote sustainable development. There are minor policies such as roof mounted solar being exempt from development approval and instances where for instance if a sustainable outcome could be demonstrated then they may allow relaxation of a development control such as a height or setback limitation. This is not set out in written policy but is at the discretion of the planner and/or Councillors during the development assessment. There is a desire to see what is happening in Hobart with the CHPP and the outcomes of this may provide learnings that could be replicated in part in Launceston.

10.4.3. DEVONPORT COUNCIL

The outcomes from Devonport are similar to those from Launceston. Although Council has a prepared a Corporate Climate Change Adaptation Plan for 2018-2023 and also a number of policies such as cities power partnership pledge and an Environmental Strategy these are more focussed on overall measures across the LGA such as waste, energy usage (encouraging renewable energy) and conservation of biodiversity and less on specific development measures. Like Launceston they are limited by the State based planning system and a lack of resources . The development mix of the LGA also does not lend to the use of more complex sustainability tools and thus a mandated policy. However, there is a desire and acknowledgment and like some other Councils they are open to ideas around what can be done for smaller scale development and what other Councils of similar demographics and development mix are undertaking across the country particularly in South Australia and Victoria.

10.5. KEY FINDINGS

The following provides a high-level synthesis of findings from Section 10.3 and Section 10.4. Learnings from the interviews with selected Councils are also considered in context of policies and successes from other jurisdictions.

» Smaller market and limitations of planning system requires creative decision making by Council

In discussions with Councils, it's clear that Tasmania is a smaller market with less large scale development that would trigger sustainability measures that would require certification by Green Star or NABERS. There are similarities with South Australia, NT and the ACT in the move to a single planning scheme that is state led. Therefore, some of the key findings are similar.

Lack of State guidance on ESD within the State and Local Government Planning Framework/ Drafting of controls and where they sit within the planning framework

The lack of State guidance has meant that Councils such as City of Hobart have sought to find ways to devise policies themselves that can fit into the State led planning system. If the State were to provide more guidance and encouragement for this in the planning reforms, then it would assist more Councils to implement policies. Nevertheless, the mechanism of Hobart to lead with exploring a precinct specific control is a good example of how local policy could work in smaller jurisdictions and although at the early stages there are lessons here that could be replicated not just in Tasmania but also in South Australia and other States.

 Education through sharing of knowledge and examples between not only Councils but by sustainability practitioners can be infectious in devising alterative policy solutions for local Councils

Councils such as Launceston have declared climate emergencies and are developing Smart City policies but there is frustration at planning officer level that they are not seeking to drive any policy of their own. This is perceived to be down to a lack of education of these matters or a perception that they are not required at a Council of their size. This has also been raised by ESD consultants who tend not to be locally based and do not see a market in Tasmania and thus it tends to be harder for a developer to on board an ESD consultant for a development within Tasmania.

Lack of resourcing within Councils for development of policies, implementation and compliance

There is an identified gap in resourcing to undertake the preparation, management, assessment and compliance of ESD that may sit complementary to the Tasmanian Planning Scheme for many Councils. Launceston and Devonport citied that a lack of budget was a major barrier for smaller Councils which typically have development restricted to single dwellings or rural based land uses and cannot justify developing ESD policies.

10.6. RECOMMENDATIONS

Based on our findings and discussions with Councils in Tasmania the following recommendations apply:

Support smaller markets to facilitate feasibility of sustainability tools

As with the NT and ACT smaller development markets are less familiar and experienced with sustainability rating tools such as Green Star or NABERS. The property market has also not matured or reached a value that meets other jurisdictions across Australia.

Therefore, there is resistance from developers and Councils in requiring sustainability ratings due to additional administrative and development costs. Consideration of adjustment to costs to achieve sustainability certification for smaller markets such would potentially incentivise greater requirements for more widespread requirements for sustainability targets and higher minimum rating requirements (see similar recommendation for NT and ACT).

* Encouragement of local ESD practitioners

Most ESD consultants are brought in from the mainland (particular Victoria). This leads to increased costs to have them on a project. Levering off potential policies such as the CHPP should be economic incentives (see recommendation on supporting smaller markets) to upskill local practitioners in Council so they have the skills to assess the developments and in private practice to have more local practitioners attached to projects.

Support and promote the use of the Central Hobart Precinct Plan measures

Hobart City Council should be applauded for seeking an innovative way to implement ESD policy even when hampered by state planning legislation. The CHPP should be supported to ensure clear use of sustainability tools is used and so it's easy for Council officers to pick the correct tool for the type of development. This example should also be monitored and shared within Tasmania with other Councils in States with similar planning systems to support Local Government officers in uptake of similar measures in their Council where possible. This may also encourage more local ESD practitioners as per the recommendation above.



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