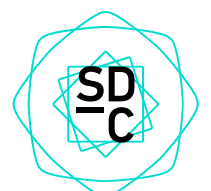


# SUSTAINABLE DEVELOPMENT \_CONSULTANTS

CREATE A BETTER PLACE TO LIVE.

Frankston City Council  
Environmentally Sustainable Development (ESD) Policy Investigation



# Frankston City Council Environmentally Sustainable Development (ESD) Policy Investigation

---

Background Information Findings

September 2019

---

S3845.V3

---

PREPARED BY:

**Sustainable Development Consultants**

2nd Floor, 555 Riversdale Rd.  
Camberwell VIC 3124

T: (03) 9882 9967 F: (03) 9882 9969  
info@sdconsultants.com.au

[sdconsultants.com.au](http://sdconsultants.com.au)



## Table of Contents

1. Introduction.....	5
2. Policy Context.....	5
2.1 Victorian Planning Provisions.....	5
2.1.1 Planning Policy Framework.....	5
2.1.2 Particular provisions .....	6
2.2 Local Planning Policies .....	7
2.2.1 ESD Policies.....	7
2.2.2 ESD Policy Thresholds .....	8
2.2.3 ESD Policy Planning panels .....	9
2.2.4 WSUD Policies & Thresholds.....	11
2.3 Frankston City Council Strategic Justification.....	13
2.3.1 Strategies, Plans & Policies.....	13
2.3.2 Frankston Planning Scheme.....	15
3. Best practice ESD & WSUD.....	17
3.1 Approaches.....	17
3.1.1 Sustainable Design Assessment in the Planning Process (SDAPP) .....	17
3.1.2 Building Regulations.....	17
3.1.3 Urban stormwater best practice environmental management guidelines.....	18
3.2 Tools and Software .....	18
3.2.1 Built Environment Sustainability Scorecard (BESS) .....	18
3.2.2 Nationwide House Energy Rating Scheme (NatHERS) .....	18
3.2.3 Section J Energy Assessment.....	19
3.2.4 National Australian Built Environment Rating System (NABERS).....	19
3.2.5 Green Star .....	19
3.2.6 Other ESD rating tools .....	19
3.2.7 Stormwater Treatment Objective - Relative Measure (STORM) .....	19
3.2.8 Model for Urban Stormwater Improvement Conceptualisation (MUSic).....	20
3.2.9 InSite Water.....	20
4. Types of developments.....	21
4.1 Frankston City Council development statistics .....	21
5. Financial implications .....	22
5.1 Community .....	22
5.1.1 Development Costs .....	22
5.1.2 Expert Advice .....	22
5.1.3 Tools.....	22
5.2 Council.....	23
5.2.1 Memberships.....	23
5.2.2 Tools.....	23

5.2.3 Staff Resourcing..... 23

6. Key insights ..... 24

Revision	Date of Issue	Description	Author	Approved
V1	09-07-2019	Final Report	NC	BdW
V2	22-07-2019	Final Report - updated development statistics	NC	BdW
V3	19-09-2019	Final Report - minor grammar & formatting amendments	NC	BdW

## 1. Introduction

Frankston City Council has engaged Sustainable Development Consultants to complete background research and prepare options with strategic justification for policy triggers in relation to a draft Environmentally Sustainable Development (ESD) planning policy to be considered by Council.

This background research will investigate existing local ESD policies, best practice approaches and financial/resourcing implications, and has been undertaken to inform stakeholders of key information and assist the implementation of an ESD Planning Policy appropriate for the municipality.

## 2. Policy Context

Addressing the impact of urban development on the natural environment can be undertaken through the town planning process when key decisions are made about building design. Applying the concept of Environmentally Sustainable Development (ESD) during the planning process allows consideration of environmental sustainability in order to achieve a range of environmental, social and economic benefits.

ESD aims to ensure that developments meet the needs of the present without comprising the ability of future generations to meet their own needs by adhering to appropriate environmental design standards. A concept related to ESD is Water Sensitive Urban Design (WSUD), an approach to planning and designing urban areas which aims to reduce the impact of development on the water cycle. While WSUD is a defined concept of its own, consideration of WSUD commonly also occurs when ESD principles are applied more broadly.

A range of approaches to ESD and WSUD through the planning process have been undertaken at both a state and local government level. The following aims to outline these current approaches.

### 2.1 Victorian Planning Provisions

Planning in Victoria is guided by the *Planning and Environment Act 1987* (the Act). The Act provides for a single instrument of planning control for each municipality, the planning scheme, which sets out the way land may be used or developed. The Act also provides for the Victoria Planning Provisions (VPP) - a template document of standard state provisions for all planning schemes to be derived from.

Below is a summary of provisions which relate to ESD in the planning process.

#### 2.1.1 PLANNING POLICY FRAMEWORK

The Planning Policy Framework (PPF) forms part of the strategic foundation of a planning scheme and aims to address issues of State importance. The PPF contains various references to the environment and sustainability. Examples include objectives and strategies of provisions such as:

- Clause 11 Settlement;
- Clause 12 Environmental and Landscape Values;
- Clause 13 Environmental Risks;
- Clause 14 Natural Resource Management;
- Clause 15 Built Environment and Heritage;
- Clause 16 Housing;
- Clause 18 Transport; and
- Clause 19 Infrastructure.

Examples of references related to ESD in the PPF include energy efficiency, environmental degradation, climate change, integrated water management, conservation and wise use of natural resources and sustainable transport. While these provisions highlight ESD, they are overarching objectives and do not act as specific planning controls.



Currently, a State planning policy which comprehensively addresses ESD does not exist. The Department of Environment, Land, Water and Planning (DELWP) is currently in the process of developing an approach to a state-wide ESD planning policy.

### 2.1.2 PARTICULAR PROVISIONS

Additional references to ESD in planning schemes can be found under the heading of Particular Provisions. Particular Provisions are planning controls that apply only to certain uses and development or to particular aspects of certain uses and development. Examples of Particular Provisions related to ESD include:

- Clause 52.17 Native Vegetation;
- Clause 52.34 Bicycle Facilities;
- Clause 53.18 Stormwater Management in Urban Development;
- Clause 55.03 Site Layout and Building Massing;
- Clause 55.07 Apartment Developments;
- Clause 56.07 Integrated Water Management; and
- Clause 58 Apartment Developments.

Some of these provisions more comprehensively address certain elements of ESD such as energy efficiency, stormwater management or indoor environment quality than the PPF. However, these provisions are limited to certain uses or development, or limited in their ability to address ESD holistically.

#### **Amendment VC154**

Planning Scheme Amendment VC154, gazetted on 26 October 2018, aimed to implement a range of reforms relating to integrated water management and stormwater management. New and amended planning provisions include:

- Clause 19.03-03S Integrated Water Management;
- Clause 53.18 Stormwater Management in Urban Development;
- Clause 55.07 Apartment Developments;
- Clause 56.07 Integrated Water Management; and
- Clause 58.03 Site Layout.

The new provisions ensure that stormwater generated from all forms of urban development, not just residential subdivision and apartment developments, is managed in an integrated way to mitigate the impacts of stormwater runoff on the environment, property and public safety, and to provide cooling, local habitat and amenity benefits.

The amendment extends the existing stormwater management requirements for residential subdivision and apartment developments to:

- All commercial and industrial subdivisions and developments;
- All public use developments; and
- All residential multi-dwelling developments.

While the reforms have increased the number of development types required to address stormwater management, one of the exemptions, as listed under Clause 53.18-1, is an application to construct a building or construct or carry out works associated with one dwelling on a lot.

Under these provisions, standards commonly state that stormwater management systems should be designed to meet the current best practice performance objectives for stormwater quality as contained in the Urban Stormwater - Best Practice Environmental Management Guidelines (Victorian Stormwater Committee, 1999).

## 2.2 Local Planning Policies

In the absence of a comprehensive state-wide approach to ESD or WSUD in the planning process, several Victorian local governments have addressed sustainable design assessment through the Local Planning Policy Framework (LPPF).

The introduction of specific local ESD planning policies aims to support and strengthen a range of existing clauses in the PPF and LPPF.

### 2.2.1 ESD POLICIES

In 2009, a number of Victorian councils coordinated their efforts to introduce a consistent Environmentally Sustainable Development (ESD) policy into their planning schemes. Since then, a total of 17 Victorian local governments have incorporated a local ESD planning policy into their planning schemes.

On 19 November 2015, six Victorian Councils had their local ESD planning policies gazetted. These included:

- Banyule City Council *Clause 22.05*;
- Moreland City Council *Clause 22.08*;
- City of Port Phillip *Clause 22.13*;
- City of Stonnington *Clause 22.05*;
- City of Whitehorse *Clause 22.1*; and
- City of Yarra *Clause 22.17*.

Subsequently, several other councils had a local ESD planning policy gazetted, including:

- City of Monash *Clause 22.13* (gazetted 29 September 2016);
- Manningham City Council *Clause 21.1* (gazetted 31 August 2017);
- City of Darebin *Clause 22.12* (gazetted 31 August 2017); and
- Knox City Council *Clause 22.04* (14 December 2017).

Gazetted on 18 October 2018, Amendment GC110 saw the most recent addition of local ESD planning policies into Victorian Planning Schemes. This included the following councils:

- City of Whittlesea *Clause 22.01*;
- City of Greater Bendigo *Clause 22.1*;
- Brimbank City Council *Clause 22.02*;
- City of Greater Dandenong *Clause 22.06*;
- Hobsons Bay City Council *Clause 22.13*;
- City of Kingston *Clause 22.21*; and
- Wyndham City *Clause 22.08*.

Currently awaiting approval, Amendment C388 seeks to incorporate a local ESD planning policy into the Greater Geelong Planning Scheme.

Other local policies with ESD requirements include:

- Maribyrnong City Council *Clause 21.06* (gazetted 15 September 2011);
- City of Melbourne *Clause 22.19* (gazetted 4 April 2013);
- City of Moonee Valley *Clause 21.04* (gazetted 5 March 2015); and
- Mildura Rural City Council *Clause 22.03* (gazetted 17 November 2016).

These amendments introduced local planning policies. They are not planning controls or provisions that outline the need to require planning permits. The local policies are only applied when another provision of a planning scheme triggers the need for a planning permit.

## 2.2.2 ESD POLICY THRESHOLDS

Across the 17 specific local ESD planning policies which currently exist in Victorian Planning Schemes, there are a variety of thresholds for the level of development which these policies apply to. Such variation exists due to each local government determining thresholds relevant to their local development profile.

Below is a summary of the different thresholds present within the 17 ESD policies, and how commonly each threshold is applied.

Table 1: Threshold variation and frequency for residential developments

Res - Small (Dwellings) <sup>1</sup>		Res - Small (GFA m <sup>2</sup> ) <sup>2</sup>		Res - Large (Dwellings)		Res - Large (GFA m <sup>2</sup> )	
Threshold	Occurrence	Threshold	Occurrence	Threshold	Occurrence	Threshold	Occurrence
2-9	10	50-1000	4	>10	17	>1000	12
3-9	7	50-2000	1			>2000	2
		100-999	1			>2499	3
		100-1000	3				
		500-1000	4				
		500-1999	1				
		1000-2499	3				

Table 2: Threshold variation and frequency for non-residential developments

Non-res - Small (GFA m <sup>2</sup> )		Non-res - Large (GFA m <sup>2</sup> )	
Threshold	Occurrence	Threshold	Occurrence
50-1000	1	>1000	12
50-2000	1	>2000	3
100-999	1	>2499	2
100-1000	5		
300-1000	1		
500-1000	4		
500-1999	1		
500-2000	1		
1000-2499	2		

The size of the development determines the application requirements. Common requirements include:

- Small: Sustainable Design Assessment (SDA); and
- Large: Sustainability Management Plan (SMP), Green Travel Plan (GTP).

It should be noted that six councils explicitly list thresholds for alterations and additions. All 17 councils include a note which states that: 'To remove any doubt, development also includes alterations and additions'.

<sup>1</sup> Accommodation/Mixed Use with residential component of dwellings

<sup>2</sup> Development of a building for accommodation other than dwellings



### 2.2.3 ESD POLICY PLANNING PANELS

The introduction of ESD Policies has generally included consideration by a planning panel as part of the planning scheme amendment process. This section outlines various relevant matters that have been addressed by the planning panels.

Table 3: Summary of amendments related to local ESD planning policies

Amendment	Gazetted	LGA
C73	19/11/2015	Banyule
C71	19/11/2015	Moreland
C97	19/11/2015	Port Phillip
C177	19/11/2015	Stonnington
C130	19/11/2015	Whitehorse
C133	19/11/2015	Yarra
C113	29/09/2016	Monash
GC42	31/08/2017	Manningham
GC42	31/08/2017	Darebin
C150	14/12/2017	Knox
GC110	18/10/2018	Brimbank
GC110	18/10/2018	Greater Bendigo
GC110 (formerly C201)	18/10/2018	Greater Dandenong
GC110	18/10/2018	Hobsons Bay
GC110	18/10/2018	Kingston
GC110	18/10/2018	Whittlesea
GC110	18/10/2018	Wyndham
C388	Approval Under Consideration	Greater Geelong

#### Justification

Prior to being gazetted on 19 November 2015, the six local ESD planning policies were subject to a joint Planning Panel and Advisory Committee. The Environmentally Efficient Design Advisory Committee (the Committee) was appointed by the Minister for Planning on 15 June 2013 with the purpose of providing “advice to the Minister for Planning on the applicability and suitability of including environmental sustainability requirements in planning schemes generally” as proposed in the six policies.

Some of the 26 findings<sup>3</sup> of the Committee included:

- There is a strong legislative and policy framework that supports the need for sustainable development, and which recognises that both planning and building have a significant role to play in achieving it.
- There is a role and a statutory obligation for planning to advance sustainability.
- Whilst the existing State Planning Policy Framework and Victoria Planning Provisions provide a good starting point for the inclusion of sustainability, there are clear areas for improvement.
- A State-wide approach to sustainability in planning would be the most effective way to achieve the greatest sustainability outcomes; however, there is still a potential role for local policies to play in achieving greater local sustainability outcomes.
- There is a clear need for an integrated planning and building approach to achieve sustainable outcomes.
- There are clear positive economic, social and environmental benefits to be gained through improved sustainable development outcomes in planning.
- The use of Local Policies until such time as a State-wide approach is developed should be supported, with the inclusion of a sunset clause.

<sup>3</sup> Advisory Committee and Panel Report - Environmentally Efficient Design Local Policies (2014), p. 101-102.

The Planning Panel for Amendment C113 (Monash ESD policy) supported the approach of Council in progressing this issue and concluded the amendment would advance Council's consideration of applications in important environmental areas<sup>4</sup>.

The Planning Panel for Amendment GC42 (Darebin and Manningham ESD policies) concluded<sup>5</sup>:

- There is strong policy support for the inclusion of the proposed ESD policies within the local planning policy framework and supports them.
- That the Amendment was both sound and strategically justified.

The Planning Panel for City of Greater Dandenong found that the Amendment C201 "is strongly supported by existing Council policy and other Advisory Committee and Panel processes and reviews which have generally supported the recognition and introduction of local ESD planning policy"<sup>6</sup>.

Through the Amendment process undertaken by a number of Victorian councils relating to local ESD planning policies, it has been found that "the introduction of such policies is appropriate and a consistent approach until such time as the state government determines to introduce a state-wide planning policy position relating to ESD"<sup>7</sup>.

### Thresholds and triggers

So, while the various Panel reports included much commentary about various aspects of ESD policy, the key consideration for Frankston City Council is what was concluded in relation to the setting of ESD Policy triggers.

The Committee (for the first group of Councils) reviewed whether policies should have the same thresholds or whether it is appropriate to vary the thresholds between planning schemes, having regard to the type and intensity of its development within each municipality and Council's ability to implement the policy. The Committee concluded that "the ability of the individual Councils to set particular thresholds should be retained"<sup>8</sup>.

The Committee also discussed issues of equity, whether it is fair for only those developments which require a planning permit to incorporate a higher level of sustainability than those that do not. The Committee concluded that such developments should not necessarily be expected "to achieve a higher level of sustainability than a single dwelling just because they are subject to a planning permit"<sup>9</sup>. The Committee found that "all developments including metropolitan and non-metropolitan applications can incorporate forms of sustainability, therefore, to ensure fairness, the Committee considers they should"<sup>10</sup>. However, the Committee acknowledged that it could be argued that planning has a limited role to play in achieving sustainable development for a significant area of new residential development and that "for planning to have a greater role or wider coverage, it would be necessary to have greater permit triggers"<sup>11</sup>.

During the Planning Panel for Amendment C113, it was questioned whether it was appropriate for an ESD policy to apply to such a broad range of permit triggers. It was submitted that the Planning Practice Note 8 (PPN8) 'Writing a Local Planning Policy' allows for application to a 'specific discretion or group of discretions', and noted that there were existing long standing policies in the scheme with such an application, with such policies applying to 'All land' in the municipalities, and presumably all permit applications<sup>12</sup>. The Panel was "satisfied that even though the policy does not apply to a specific permit trigger, it is consistent with PPN8 in its form and content and the application to a 'group of discretions' is appropriate"<sup>13</sup>. Regarding the operation of policies in relation to permit triggers not relating directly to sustainability, the approach included in Clause 22.19 of the Melbourne Planning Scheme has also been noted by the 2014 Committee<sup>14</sup>, "where the policy is called up for buildings and works for certain developments regardless of the permit trigger" and that "this policy has been in place since early 2013 and the Committee is not aware whether this aspect of that policy has been challenged". Additionally, it has

<sup>4</sup> Panel Report - Amendment C113 Gaming, Licensed Premises and Environmentally Sustainable Design Policies (2015), p. 24.

<sup>5</sup> Panel Report - Amendment GC42 Environmentally Sustainable Development Policy (2016), p. 13 & p. 16.

<sup>6</sup> Panel Report - Amendment C201 Environmentally Sustainable Development (2018), p. 8.

<sup>7</sup> Panel Report - Amendment C201 Environmentally Sustainable Development (2018), p. 8.

<sup>8</sup> Advisory Committee and Panel Report - Environmentally Efficient Design Local Policies (2014), p. 86.

<sup>9</sup> Advisory Committee and Panel Report - Environmentally Efficient Design Local Policies (2014), p. 46.

<sup>10</sup> Advisory Committee and Panel Report - Environmentally Efficient Design Local Policies (2014), p. 46.

<sup>11</sup> Advisory Committee and Panel Report - Environmentally Efficient Design Local Policies (2014), p. 45.

<sup>12</sup> Panel Report - Amendment C113 Gaming, Licensed Premises and Environmentally Sustainable Design Policies (2015), p. 20.

<sup>13</sup> Panel Report - Amendment C113 Gaming, Licensed Premises and Environmentally Sustainable Design Policies (2015), p. 23.

<sup>14</sup> Advisory Committee and Panel Report - Environmentally Efficient Design Local Policies (2014), p. 84.

been noted that the *Boroondara CC v 1045 Burke Road ([2015] VSCA 27)* case “actually clarifies and strengthens the application of the policy, making it clear that even if the trigger being considered is, for example, the Heritage Overlay, ESD considerations may be relevant”<sup>15</sup>.

Issues of equity were also discussed during the Amendment C113 (Monash) panel process, with concern that the policy will only apply to those developments requiring a planning permit. However, the Panel concluded that “on balance, and noting the exemption of small developments (1-2 dwellings) from requiring sustainability assessment in the policy, the Panel considers that most significant development will be covered by virtue of it requiring a permit”<sup>16</sup>.

During the Panel hearing for Amendment C150 (Knox), a submission relating to a desire that the proposed ESD policy apply to single dwellings because they represent a large proportion of housing stock was discussed. The Panel concluded that “only a relatively small proportion of single dwellings require a planning permit therefore the policy would have limited influence”<sup>17</sup>.

The City of Greater Dandenong originally proposed a minimum residential threshold of five dwellings, however, after the majority of submissions received relating to Amendment C201 proposed a minimum threshold of three dwellings, the council altered the threshold to three. The Panel believed that the revised policy would “still allow the most significant development to be covered by the ESD policy by virtue of it requiring a planning permit”<sup>18</sup>. The Panel noted that “further reducing the threshold levels under proposed Clause 22.06 presents challenges for single dwellings, where in much of the context of residential zones no planning permits may be required, effectively omitting the application of the local ESD policy”<sup>19</sup>. Although the Panel concluded that “further reducing the residential development thresholds for application of the ESD policy to fewer than three dwellings is not considered necessary, at this point in time, due to the uncertainty with respect to any state-wide review of ESD policy” it also accepted that “thresholds can be set by Councils to suitably address their unique context”<sup>20</sup>.

### Cost

Regarding the cost of incorporating ESD principles into a development, in an expert witness statement received by the Committee, it was submitted that “for all the development types, including single dwellings, there is a significant positive cost benefit ratio”<sup>21</sup> and the Committee found that the proposed local policies were “unlikely to impose an unreasonable regulatory cost burden on applicants”<sup>22</sup>.

### 2.2.4 WSUD POLICIES & THRESHOLDS

Currently 11 Victorian councils have local planning policies with objectives relating to stormwater and/or Water Sensitive Urban Design (WSUD). These Councils include:

- City of Monash;
- Bayside City Council;
- Hume City Council;
- City of Moonee Valley;
- City of Port Phillip;
- City of Stonnington;
- City of Yarra;
- City of Melbourne;
- Campaspe Shire Council;
- City of Casey; and
- City of Kingston.

Below is a summary of use and development types which the provisions apply to.

<sup>15</sup> Panel Report - Amendment C113 Gaming, Licensed Premises and Environmentally Sustainable Design Policies (2015), p. 23.

<sup>16</sup> Panel Report - Amendment C113 Gaming, Licensed Premises and Environmentally Sustainable Design Policies (2015), p. 22.

<sup>17</sup> Panel Report - Amendment C150 Planning Scheme Review (2017), p. 19.

<sup>18</sup> Panel Report Amendment C201 - Environmentally Sustainable Development (2018) p. 12.

<sup>19</sup> Panel Report Amendment C201 - Environmentally Sustainable Development (2018) p. 12.

<sup>20</sup> Panel Report Amendment C201 - Environmentally Sustainable Development (2018) p. 12.

<sup>21</sup> Advisory Committee and Panel Report - Environmentally Efficient Design Local Policies (2014), p. 65.

<sup>22</sup> Advisory Committee and Panel Report - Environmentally Efficient Design Local Policies (2014), p. 68.

The City of Monash has a Stormwater Management Policy (Clause 22.04), gazetted on 19 January 2006, which aims to address management of stormwater flows and applies to all land. While protection of the natural environment is mentioned, the focus is primarily on drainage.

On 26 May 2011, Bayside City Council had a local WSUD planning policy (Clause 22.08) gazetted. The policy applies to:

- Accommodation;
- Construction of a building to be used for commercial, industrial or mixed-use purposes; and
- A subdivision in a business zone.

On 13 December 2012, Hume City Council had an Industrial Stormwater Management Policy (Clause 22.19) gazetted. This policy applies to:

- Industry;
- Warehouse; and
- Subdivision for Industry and Warehouse.

Five councils had local WSUD planning policies gazetted on 13 March 2014 in an effort to improve stormwater quality. These councils included:

- City of Moonee Valley *Clause 22.03*;
- City of Yarra *Clause 22.16*;
- City of Port Phillip *Clause 22.12*;
- City of Stonnington *Clause 22.18*; and
- City of Melbourne *Clause 22.23*.

These five policies have similar objectives to the existing stormwater management policies of other councils; however, they capture more development types. Although there is slight variation in the application of the policies between the councils, generally the policies apply to new buildings and extensions to existing buildings which are 50 square metres in floor area or greater. They also apply to subdivision in particular zones, either commercial or business.

Campaspe Shire Council had a policy (Clause 22.07) similar to Bayside City Councils', gazetted on 4 April 2014. One main difference is that it applies to subdivision in a commercial and residential zone, as opposed to a business zone only.

The City of Casey have a Stormwater policy (Clause 22.05, gazetted 9 February 2017) which applies to all land.

On 31 May 2018, the City of Kingston had a Stormwater Management policy (Clause 22.2) gazetted. The policy applies to:

- Medium Scale Development:
  - Residential and/or mixed-use developments of 3 to 9 dwellings.
  - Non-residential developments with a new building gross floor area between 500m<sup>2</sup> and 1000m<sup>2</sup>.
  - Subdivision of vacant land between 1,000m<sup>2</sup> and 4,999m<sup>2</sup>.
- Large Scale Development:
  - Residential and/or mixed-use developments of 10 or more dwellings.
  - Non-residential developments with a new building gross floor area greater than 1,000 m<sup>2</sup>.
  - Subdivision of vacant land greater than 4,999m<sup>2</sup>.
  - Subdivision of land involving public road networks or public open space as determined by Council.

Most policies do not apply to an application for an extension or alteration of an existing building of less than 50 square metres in floor area, nor subdivision of an existing building.

All except the Monash provisions include reference to an objective of achieving the best practice water quality performance objectives set out in the Urban Stormwater Best Practice Environmental Management Guidelines (CSIRO 1999).

Although recent state-wide changes (Amendment VC154) to Victorian Planning Provisions relating to stormwater have occurred, some of these existing local policies address limitations of the amended VPPs. For example, Clause 53.18 does not apply to buildings or works associated with one dwelling on a lot, whereas several of the local policies apply to all buildings. Additionally, Clause 53.18 does not apply to applications under zones such as

Low Density Residential and Green Wedge, whereas several of the local policies either apply to all land or do not contain exemptions based on zones. Depending on the development types which Council would like to address stormwater objectives, a local stormwater/WSUD policy which goes further than the VPPs may be advantageous.

## 2.3 Frankston City Council Strategic Justification

Reference to the natural environment and sustainability can be found throughout a number of Frankston City Council documents and the Frankston Planning Scheme. Examples of such references are outlined below.

### 2.3.1 STRATEGIES, PLANS & POLICIES

The **Frankston City Council Plan 2017-2021** comprises four key pillars, with one of the long-term community outcomes being 'A Planned City', with the aim that the 'natural environment is protected and enhanced, resources are used efficiently, and waste is minimised'<sup>23</sup>. Council's **Community Plan 2017-2021** lists environmental and sustainability initiatives as a 'Think Big Top Ten Idea'<sup>24</sup>, which are ideas of great community interest as voted for by residents. The Community Plan states that the community believes "it is vital that development is appropriate and sustainable"<sup>25</sup> and that there is "a need for information and support as to how we can all contribute to a better environment"<sup>26</sup>.

Council's **Sustainability Policy** states that Council is "is committed to achieving a sustainable way of life for current and future generations through a common understanding of sustainability"<sup>27</sup>. Furthermore, the objective of Council's **Environmental Sustainability Policy** is to "demonstrate leadership and achieve best practice in environmental sustainability in partnership with the community", with the principle of "practicing and promoting ecologically sustainable development principles (ESD) in planning and development of the city"<sup>28</sup>. The **Environment Strategy: Greening Our Future** contains an action to implement the Frankston Housing Strategy utilising appropriate ESD tools<sup>29</sup>.

**Frankston City Health and Wellbeing Plan 2017-2021** seeks to enable "equitable access to affordable energy efficient housing that promotes healthy living conditions, equitable access to the means to improve the energy performance of homes, a culture of efficiency with access to the means to live more sustainably, and resilience to climate change"<sup>30</sup>. The Plan lists an emerging area of concern within Frankston City is the impact that poor quality housing is having on health and wellbeing<sup>31</sup>.

A key theme of Council's **Housing Strategy** aims to provide direction "to improve the design, quality and environmental performance of new and existing dwellings in the City"<sup>32</sup> and recognises that incorporation of ESD principles in buildings can help to address long-term housing affordability issues by reducing ongoing utility costs<sup>33</sup>. The Strategy contains actions such as advocacy to the Victorian Government on stronger ESD requirements, provision of ESD information to planning applicants and investigation of implementing the Sustainable Design Assessment in the Planning Process (SDAPP) framework<sup>34</sup>.

Council's **Building Asset Management Plan** notes energy and water efficiency works identified during a facilities audit which can be carried out as part of Council's maintenance and renewal program<sup>35</sup>. Further demonstrating leadership, Council's **Environmentally Sustainable Design Standards for Council Buildings** "provide Council

<sup>23</sup> Frankston City Council Plan (2017-2021), p. 17.

<sup>24</sup> Frankston City Community Plan (2017-2021), p. 4.

<sup>25</sup> Frankston City Community Plan (2017-2021), p. 17.

<sup>26</sup> Frankston City Community Plan (2017-2021), p. 21.

<sup>27</sup> Frankston City Council Sustainability Policy (2012), p. 1.

<sup>28</sup> Frankston Environmental Sustainability Policy (2010), p. 1.

<sup>29</sup> Environment Strategy: Greening Our Future (2014-2024), p. 87.

<sup>30</sup> Frankston City Health and Wellbeing Plan (2017-2021), p. 42.

<sup>31</sup> Frankston City Health and Wellbeing Plan (2017-2021), p. 43.

<sup>32</sup> Frankston Housing Strategy (2018), p. 61.

<sup>33</sup> Frankston Housing Strategy (2018), p. 93.

<sup>34</sup> Frankston Housing Strategy (2018), p. 106.

<sup>35</sup> Frankston Building Asset Management Plan (2016), p. 96.

with a guide to improve the environmental performance of Council's buildings through the integration of ESD principles in the creation, renewal, upgrade, expansion, maintenance and disposal of Council's buildings"<sup>36</sup>.

To assist the community in reducing their vulnerability and facilitate an adaptive response to climate change impacts, Council's **Climate Change Impacts and Adaptation Plan** contains an action to "encourage climate friendly building design in new developments"<sup>37</sup>. Council's **Towards Zero Emissions Plan 2019-2023** contains several actions relating to ESD including working with developers to improve local development standards, development of an ESD policy planning scheme amendment, introduction of an ESD tool for assessing planning permit applications, staff training in ESD and creation of a dedicated staff resource to conduct on-site ESD inspections to determine as-built compliance<sup>38</sup>.

Frankston's **Biodiversity Policy** lists development as a potential impact on biodiversity, noting that "the objectives of urban growth and development and protection of natural values and biodiversity are potentially in conflict and need to be finely balanced through careful planning"<sup>39</sup>. The Policy also states that Council is committed to "advocating for Frankston's future growth, land use, land zoning and urban design to be sympathetic to existing natural areas and habitat corridors", and to critically assess use and development proposals with regard to impact on ecological functions<sup>40</sup>. Frankston's **Urban Forest Policy** has a vision of a "resilient, healthy and diverse urban forest providing benefits for the entire community, in the present and for future generations"<sup>41</sup>.

Council's **Integrated Water Action Plan 2016-2026** includes actions relating to "improving the capacity of community members to increase the uptake of integrated water management activities and initiatives"<sup>42</sup>. An action of Council's **Waste Minimisation and Management Plan 2015-2020** is to "continue to use best practice guidelines to assess development applications"<sup>43</sup>. The Frankston **Integrated Transport Strategy** includes a vision of "providing a sustainable transport system that minimises negative impacts on the natural environment"<sup>44</sup> and actions such as requiring certain development types to incorporate a Green Travel Plan as part of the planning permit process<sup>45</sup>.

The **Frankston Metropolitan Activity Centre Structure Plan** contains the built form principle of design excellence, which aims to "ensure all development provides excellence in the standard of architecture and ESD and contributes to the creation of exciting and inspiring streets in Frankston"<sup>46</sup>. Strategies contained in the **Karingal Major Activity Centre Structure Plan** include to "encourage the evolution of a high-quality built form which maximises sustainable building practices"<sup>47</sup> and to "encourage Water Sensitive Urban Design (WSUD) to meet current best practice performance objectives for stormwater quality"<sup>48</sup>.

While there is an evident commitment by Frankston City Council to facilitate positive environmental outcomes and their associated benefits, there is a lack of means to achieve this using the planning system. The **Frankston Planning Scheme Review Report**, due for public exhibition in June/July 2019, recommends "that Council progress its ESD planning provisions to require mandatory ESD assessments for new development in the Frankston Planning Scheme"<sup>49</sup>.

The adoption of a local ESD planning policy will help to achieve the various environmental sustainability objectives of Council's strategic documents. While many of these documents comprehensively address sustainability issues, these are often in isolation. An ESD policy will facilitate improved sustainability outcomes across multiple priority areas, particularly by influencing development of private land throughout the municipality.

<sup>36</sup> Frankston Environmentally Sustainable Design Standards for Council Buildings (2015), p. 1.

<sup>37</sup> Frankston Climate Change Impacts and Adaptation Plan (2011), p. 42.

<sup>38</sup> Frankston Towards Zero Emissions Plan (2019-2023), p. 29.

<sup>39</sup> Frankston Biodiversity Policy (2018), p. 2.

<sup>40</sup> Frankston Biodiversity Policy (2018), p. 4.

<sup>41</sup> Frankston Urban Forest Policy (2017), p. 1.

<sup>42</sup> Frankston City Council Integrated Water Action Plan (2016-2026), p. 14.

<sup>43</sup> Frankston City Council Waste Minimisation and Management Plan (2015-2020), p. 56.

<sup>44</sup> Frankston Integrated Transport Strategy (2013), p. 48.

<sup>45</sup> Frankston Integrated Transport Strategy (2013), p. 49.

<sup>46</sup> Frankston Metropolitan Activity Centre Structure Plan (2015), p. 18.

<sup>47</sup> Karingal Major Activity Centre Structure Plan (2013), p. 19.

<sup>48</sup> Karingal Major Activity Centre Structure Plan (2013), p. 24.

<sup>49</sup> Frankston Planning Scheme Review Report (2019), p. 25.



### 2.3.2 FRANKSTON PLANNING SCHEME

The Municipal Strategic Statement (MSS) establishes the strategic framework for the municipality and provides part of the strategic basis for the application of zones, overlays and particular provisions in the planning scheme. The MSS provides the broad local policy basis for making decisions under a planning scheme. Acting as a planning authority or responsible authority, a council must aim to achieve the objectives and follow the strategies set out in the MSS.

The MSS, that underpins the local section of the Frankston Planning Scheme, contains a number of references to the environment and environmental sustainability. These include, for example:

#### Clause 21.02 Key Issues

- Climate change impacts:
  - Frankston City Council is significantly exposed to climate extremes and natural hazards such as storm surges and coastal inundation, floods, bushfires and extreme temperatures.
- Environmental sustainability:
  - Incorporating the principles on environmental sustainability into planning for the municipality is a key priority for the community and this is to be achieved through:
    - Encouraging new development to incorporate both environmentally sustainable design and integrated water management principles and features.
- Health and wellbeing:
  - Incorporating the principles of a healthy, connected community into planning for the municipality is a key priority for Council and this is to be achieved through:
    - Encouraging sustainable living and climate change adaption.

#### Clause 21.03 Vision and Strategic Framework

- The Council Plan contains a number of key strategies that are relevant to the Frankston Planning Scheme:
  - Embed sustainability principles into strategic planning.
  - Deliver planning frameworks that protect and enhance heritage, unique characteristics and the environment of the municipality. Develop an urban design policy incorporating environmentally friendly and sustainable principles to guide assessment of proposed developments and deliver design innovation and architectural excellence.
  - Minimise the impact of climate change, reduce pollution and encourage the sustainable use of natural resources.

#### Clause 21.04 Settlement

- Objective 4: Achieve higher standards of efficiency and sustainability in new developments.
  - Strategies:
    - Advocate for the use of energy efficient and passive design principles in new developments, including subdivisions, such as lot and building orientation, green roofs and walls, and solar and / or wind powered street lighting.
    - Advocate for the incorporation of Water Sensitive Urban Design principles into new development.

#### Clause 21.05 Environmental Risk

- Objective 5: To manage the environmental health of the municipality's waterways and their catchments.
  - Strategies:
    - Encourage integrated water management approaches in new developments that maximise water efficiency and alternative water use.

#### Clause 21.06 Environmental and Landscape Values

- Objective 2: Maintain and enhance the current level of biological diversity in the municipality and encourage the retention and revegetation of indigenous and Australian native species, particularly along watercourses, wetlands, the foreshore and identified habitat corridors. Maintain and enhance vegetation and biodiversity of local and regional significance, in addition to vegetation and biodiversity of importance at the national and state level.
  - Strategies:
    - Ensure that new development anywhere in the municipality does not diminish the integrity of Frankston's biodiversity (natural resources and the maintenance of ecological

processes and genetic diversity). When there is doubt about the impact of any proposal, adopt the precautionary principle.

**Clause 21.07 Housing**

- Key issues:
  - Incorporate ecologically sustainable design principles into new and existing residential development.
- Other Actions:
  - Seek to include environmental sustainability measures for new residential development in the Frankston Planning Scheme.

**Clause 21.09 Natural Resource Management**

- Key issues:
  - Minimising water usage in domestic, commercial and industrial applications, and encouraging the use of alternative water sources such as stormwater and recycled water from the Eastern Treatment Plant.
  - Protecting and increasing public open space, remnant indigenous vegetation and wetlands and waterways.

**Clause 21.10 Built Environment and Heritage**

- Objective 1: Seek a high level of architectural, urban and sustainable design in new development, which projects a positive image of the City.
  - Strategies:
    - Encourage all development to be well designed, responsive to its context, and incorporate design features that demonstrate attention to quality and sustainability.
- Objective 4: Encourage the adoption of environmental sustainability principles in the design and development of all new buildings.
  - Strategies:
    - Ensure new development incorporates environmentally sustainable design principles in its design, layout, materials, energy and water provisions, construction and landscaping.
    - Incorporate water sensitive urban design principles in the layout and choice of landscaping materials and plants.
    - Retain existing canopy trees and provide sufficient space to accommodate new canopy trees.

We consider that a strong strategic direction for environmental sustainability exists within the Frankston Planning Scheme MSS. The adoption of a local ESD planning policy will help to achieve these objectives and strategies.

### 3. Best practice ESD & WSUD

A variety of approaches to incorporating ESD and WSUD into development exist and are supported by a range of assessment tools. Below is a summary of examples commonly used in Victoria.

#### 3.1 Approaches

##### 3.1.1 SUSTAINABLE DESIGN ASSESSMENT IN THE PLANNING PROCESS (SDAPP)

Victorian local governments have developed a framework known as the Sustainable Design Assessment in the Planning Process (SDAPP). The SDAPP framework:

- Recognises the role of local governments as a statutory authority for planning matters;
- Provides a framework for consideration of sustainable design elements of planning applications;
- Offers a consistent method for identifying opportunities for improved environmental building performance; and
- Ensures that sustainability is considered at the very early design phase – the best time to maximise opportunities for good orientation and other initiatives that create liveable, comfortable, efficient buildings.

The SDAPP framework covers 10 Key Sustainable Building Categories which should be considered by a development. It has been determined that the 10 categories “provide a sound basis for assessment, but it should be recognised that developments may not need to embrace all elements to achieve an acceptable level of sustainability”<sup>50</sup>.

This framework has been used for the past decade and there is a precedent supported by the Victorian Civil & Administrative Tribunal (VCAT) that upholds these requirements for developments. The SDAPP framework intends to facilitate environmental performance outcomes that are above the minimum requirements under building regulations. Encouragement by SDAPP to exceed the energy efficiency provisions of the Building Code of Australia (BCA) was not found to be a significant concern by the Committee in 2014<sup>51</sup>.

##### 3.1.2 BUILDING REGULATIONS

The National Construction Code (NCC) was developed by the Council of Australian Governments (COAG) and incorporates all on-site construction requirements into a single national code. The Building Code of Australia (BCA) comprises Volume 1 and 2 of the NCC. The BCA is produced and maintained by the Australian Building Codes Board (ABCB) on behalf of the Australian, States and Territories governments.

The BCA contains energy efficiency provisions that must be satisfied for different Classes of buildings, relating to the thermal energy rating of the building envelope, lighting energy efficiency, and energy efficiency of large fixed equipment such as air conditioning and lifts. In the case of a single dwelling, either a rainwater tank connected to all sanitary flushing systems or a solar water heater system must also be installed.

The Committee Report states that “the nationally agreed position is that building standards are to rule out ‘worst practice’, and therefore the thermal rating to be met is the minimum for the various Classes of buildings”<sup>52</sup>. It was also found that “the fact that the building regulatory system is generally not involved at the initial design stage of a development, when the orientation and internal layout of buildings is determined, can result in a less desirable design outcome, even though the minimum thermal energy rating is met”<sup>53</sup>.

It should be noted that Victoria adopted the 2019 update of the NCC on 1 May 2019. The 2019 provisions mainly affect non-residential development classifications, and significantly increase the level of energy efficiency required. While at the time of writing NCC Calculators have not yet been released, it is anticipated that the increase in efficiency will be in the order of 30-35%.

<sup>50</sup> Advisory Committee and Panel Report - Environmentally Efficient Design Local Policies (2014), p. 19.

<sup>51</sup> Advisory Committee and Panel Report - Environmentally Efficient Design Local Policies (2014), p. 62.

<sup>52</sup> Advisory Committee and Panel Report - Environmentally Efficient Design Local Policies (2014), p. 55.

<sup>53</sup> Advisory Committee and Panel Report - Environmentally Efficient Design Local Policies (2014), p. 56.

For NCC 2019 a 12-month transitional period, ending 30 April 2020, applies to the energy efficiency provisions in Section J of Volume One and Parts 2.6 and 3.12 of Volume Two. During this time either the new NCC 2019 provisions or those from NCC 2016 may be used.

### 3.1.3 URBAN STORMWATER BEST PRACTICE ENVIRONMENTAL MANAGEMENT GUIDELINES

The Best Practice Environmental Management (BPEM) guidelines have been designed to meet the needs of people involved in the planning, design or management of urban land uses or stormwater drainage systems. The BPEM guidelines assist developments in meeting minimum State Environment Protection Policy (SEPP) requirements.

Stormwater management provisions arising from Amendment VC154 (Refer 2.1.2) utilise the BPEM guidelines as best practice performance objectives which stormwater managements systems should be designed to.

## 3.2 Tools and Software

To demonstrate compliance with the requirements of an ESD policy, applicants may use relevant tools or assessment methods. Example tools commonly listed in ESD policies include BESS, STORM, Green Star and MUSIC. Assessments such as NatHERS, Section J and NABERS are required for compliance with other regulations, however, also provide input to ESD assessment tools such as BESS. Other tools listed below may be voluntary or not yet have a widespread use, however, could be used as an alternative approach to the satisfaction of the responsible authority to demonstrate compliance with ESD policy requirements.

### 3.2.1 BUILT ENVIRONMENT SUSTAINABILITY SCORECARD (BESS)

The Built Environment Sustainability Scorecard (BESS) is a recommended tool under the SDAPP framework. BESS is an online assessment tool which assesses sustainability criteria such as energy and water efficiency, thermal comfort, and overall environmental sustainability performance of a new building or alteration. Categories include:

- Management;
- Water;
- Energy;
- Stormwater;
- Indoor Environment Quality (IEQ);
- Transport;
- Waste;
- Urban Ecology; and
- Innovation.

BESS is designed for the planning permit approvals process, can assess any size or type of development and uses in-built calculators, deemed-to-satisfy approaches and option of alternative compliance. To achieve a passing score in BESS, the development must meet a minimum 50% overall score and minimums in the Energy (50%), Water (50%), IEQ (50%) and Stormwater (100%) categories. BESS does not assess 'as built' outcomes or performance during operation.

Victorian councils must subscribe to BESS in order to allow planning permit applicants within their municipality access to the tool. BESS is provided free of charge to planning permit applicants. Ongoing management and maintenance of the tool is funded by participating local governments via annual subscription fees paid to the Council Alliance for a Sustainable Built Environment (CASBE).

### 3.2.2 NATIONWIDE HOUSE ENERGY RATING SCHEME (NATHERS)

The Nationwide House Energy Rating Scheme (NatHERS) assesses thermal performance and provides homes with a star rating out of ten based on an estimate of a home's potential (heating and cooling) energy use.

The main purpose of the NatHERS is to demonstrate compliance with mandatory energy efficiency requirements for homes and major renovations based on the National Construction Code.

There are currently three software tools accredited for use under NatHERS:

- AccuRate;
- BERS Professional; and
- FirstRate5.

Assessment must be undertaken by an accredited assessor.

### 3.2.3 SECTION J ENERGY ASSESSMENT

To demonstrate compliance with BCA Section J energy efficiency requirements, either a deemed-to-satisfy assessment can be undertaken, or an alternative solution provided based on modelling the thermal performance of certain non-residential developments.

Such assessment software must comply with the ABCB Protocol for Building Energy Analysis Software.

### 3.2.4 NATIONAL AUSTRALIAN BUILT ENVIRONMENT RATING SYSTEM (NABERS)

NABERS is a building performance assessment tool which can be used to measure a building's energy efficiency, carbon emissions, as well as the water consumed, the waste produced and compare it to similar buildings.

Development types which can be assessed by NABERS include office building, office space, apartment building, data centre, shopping centre and hotel.

Under the Building Energy Efficiency Disclosure (BEED) Act 2010, NABERS ratings are legally required for commercial building owners/managers for spaces within office buildings of 1,000 square metres or more. The NABERS Energy Rating must be disclosed at point of sale or lease.

Assessment must be undertaken by an accredited assessor.

### 3.2.5 GREEN STAR

Green Star is a national and voluntary rating system which can assess the sustainable design, construction and operation of buildings, fit-outs and communities.

Currently Green Star rating tools include:

- Design & As Built;
- Performance;
- Communities; and
- Interiors.

Green Star certification is a formal process during which a development is awarded a rating by an independent, third party assessment panel of experts through a documentation-based assessment.

A certification fee applies to projects pursuing a Green Star certified rating, with the cost borne by the developer.

### 3.2.6 OTHER ESD RATING TOOLS

There are a number of ESD rating tools which are either emerging or applicable to a smaller scope of development types. Some examples include:

- WELL Building Standard – focus on human health and well-being in buildings and communities;
- Passive House certification – a fabric-first construction standard focused on high performance and comfort; and
- Living Building Challenge – focus on regenerative spaces, natural systems, self-sufficiency and natural resource limits.

### 3.2.7 STORMWATER TREATMENT OBJECTIVE – RELATIVE MEASURE (STORM)

The Stormwater Treatment Objective - Relative Measure (STORM) calculator is a method of simplifying the analysis of stormwater treatment methods. STORM is designed for the general public to easily assess Water Sensitive Urban Design (WSUD) measures on their property.

The tool has been developed specifically for small residential and industrial developments to rate how well different properties treat stormwater and to compare them against a common measurement system.

The STORM Calculator displays the amount of treatment that is required to meet best practice targets, based on BPEM guideline stormwater quality objectives (Refer 3.1.3), using a range of WSUD treatment measures.

The STORM Calculator uses rainfall data from any region in Victoria, Australia, by looking at the municipality in which the development is located.

STORM is free to use.

### 3.2.8 MODEL FOR URBAN STORMWATER IMPROVEMENT CONCEPTUALISATION (MUSIC)

The Model for Urban Stormwater Improvement Conceptualisation (MUSIC) software predicts the performance of stormwater quality management systems. In contrast to the STORM calculator, MUSIC is best used for larger developments requiring multiple stormwater treatment measures, also known as a treatment train.

The tool is used to demonstrate compliance with BPEM guideline stormwater quality objectives (Refer 3.1.3).

Access to MUSIC software incurs a cost.

### 3.2.9 INSITE WATER

InSite Water is a newly developed integrated water management and stormwater assessment tool for use on small-scale development sites (less than 10,000 square metres).

The tool models aspects such as rainwater and detention tanks, raingardens and appliance efficiency.

Access to InSite Water incurs a cost.



## 4. Types of developments

It is estimated that of the buildings expected to be standing in 2050 in Australia, 51 per cent will have been built after the 2019 update of the National Construction Code in 2019<sup>54</sup>. While there is significant work required to improve the sustainability performance of existing buildings, the magnitude of new development/building construction makes the sustainability assessment of new buildings a key consideration if improved sustainability outcomes are to be achieved.

### 4.1 Frankston City Council development statistics

Development application data for a period of 2.5 years (Jan 2017–Jun 2019) was analysed to determine the average number of multi-dwelling residential applications received by Frankston City Council per year. On average, multi-dwelling applications total 106 per year. See below for further detail based on the number of dwellings per development.

**Table 4: Multi-dwelling residential application distribution by number of dwellings**

Number of dwellings	Average applications per year	% of multi-dwelling applications
2	40	38%
3	29	27%
4	12	11%
5	3	3%
6	6	6%
7	1	1%
8	3	3%
9	1	1%
10 or more	11	10%

On average, Frankston City Council only receives two applications per year for accommodation other than dwellings such as aged care facilities, motels and student accommodation.

On average, non-residential development applications total 22 per year, approximately half of which are for warehouse developments. Of non-residential and multi-dwelling residential applications combined, non-residential only accounts for less than 20 per cent of applications.

Currently over 80 per cent of the Frankston population lives in a house with the remaining population living in multi-unit developments (i.e. apartments, semi-detached houses and/or townhouses). It has been found that “Frankston City’s population living in multi-unit dwelling developments is predicted to sharply increase to 45% of all dwellings by 2031”<sup>55</sup>. While multi-dwelling developments currently account for a large proportion of applications received by Council, it can be expected that this development type will become even more significant in the future.

It should be noted that on average 110 applications per year are also received for single dwellings, either as the sole dwelling on a lot or in addition to an existing dwelling on a lot.

<sup>54</sup> Built to Perform: An industry led pathway to a zero-carbon ready building code (2018) ASBEC, p. 7.

<sup>55</sup> Frankston City Council Waste Minimisation and Management Plan (2015-2020), p. 32.

## 5. Financial implications

### 5.1 Community

#### 5.1.1 DEVELOPMENT COSTS

Many ESD interventions are cost-neutral and only require a more considered approach to building design. These include interventions such as maximising the orientation and internal layout of a building to increase benefits such as passive solar heating and more effective natural ventilation. These are best addressed early in the design stage.

Some ESD initiatives may require greater capital investment, however, it has been found that items such as the installation of rainwater tanks and solar panels are cost beneficial, with payback periods for dwellings in Climate Zone 6 of 10 years and 4.1 years respectively<sup>56</sup>. Although inclusion of such features may result in increased initial costs, long-term benefits can be achieved through reduced utility costs. Additionally, an independent cost-benefit assessment undertaken in 2014 to determine the likely implications of Frankston City Council adopting ESD Standards for Council facilities found that achieving the environmental performance targets outlined in the Standards resulted in significant energy and water cost savings over time, with an estimated payback of 5.6 years<sup>57</sup>.

#### 5.1.2 EXPERT ADVICE

Councils which currently have local ESD policies often state that typically for smaller developments which require a Sustainable Design Assessment (SDA) it is not necessary for an applicant to engage an ESD consultant to prepare such a report. Councils also often state that a BESS report, generated after completing an assessment using the online BESS tool, can be submitted with a planning application to satisfy the requirement for an SDA. It has been noted in a planning panel witness statement that applicants of smaller developments “have no problems completing an SDA unassisted, through accessing information on the Councils’ websites or hardcopy”<sup>58</sup>, and that “the SDA level has been designed such that the architect can undertake the level of reporting necessary”<sup>59</sup>. Resources made available by councils, such as SDA templates, can help guide applicants in completing an SDA independent of an expert consultant.

Larger developments requiring a Sustainability Management Plan (SMP) will likely need to be prepared by an ESD consultant or similar. It has been noted that “the practice of hiring a consultant at this level is very well established and business as usual”<sup>60</sup>.

The 2014 Environmentally Efficient Design Advisory Committee found that local ESD planning policies are “unlikely to impose an unreasonable regulatory cost burden on applicants”<sup>61</sup>.

#### 5.1.3 TOOLS

The Built Environment Sustainability Scorecard (BESS), the predominant tool used by Victorian councils to assess planning applications against local ESD policies, is accessed free of charge by planning permit applicants for subscriber councils.

The Stormwater Treatment Objective - Relative Measure (STORM) calculator, suited to assessing stormwater treatments of simpler development types such as residential, is free to use.

Use of other rating or assessment tools such as Green Star or MUSIC would likely only occur for more complex developments which require input from ESD consultants. In this instance, the cost of access to such tools would be borne by the consultants. Use of the InSite Water tool would be free for applicants, with the cost of subscription borne by council, although a report generation fee to be paid by applicant may be applicable depending on the subscription type.

<sup>56</sup> Environmentally Sustainable Design for Subdivisions in Regional Victoria: Proof of Concept and Cost Benefit Analysis, p. 52.

<sup>57</sup> Frankston Building Asset Management Plan (2016), p. 165.

<sup>58</sup> Expert Witness Statement EED Policy Amendment - Euan Williamson (2013), p. 5.

<sup>59</sup> Expert Witness Statement EED Policy Amendment - Euan Williamson (2013), p. 9.

<sup>60</sup> Expert Witness Statement EED Policy Amendment - Euan Williamson (2013), p. 9.

<sup>61</sup> Advisory Committee and Panel Report - Environmentally Efficient Design Local Policies (2014), p. 68.

## 5.2 Council

### 5.2.1 MEMBERSHIPS

Membership to the Council Alliance for a Sustainable Built Environment (CASBE) allows Member Councils access to networking, education, training and resources, in addition to participation in the strategic direction of CASBE. A council must be a CASBE member to subscribe to the BESS tool. The cost of membership<sup>62</sup> is:

- \$6,000 ex. GST (per annum)

### 5.2.2 TOOLS

A separate fee is applicable for a BESS subscription. BESS subscription enables planning permit applicants within the municipality access to the tool. A subscription to BESS<sup>63</sup> is:

- \$7,500 ex. GST (per annum)

For Council to be best placed to assess all applications types, licensing for the Model for Urban Stormwater Improvement Conceptualisation (MUSIC) software is recommended. Access to this software will allow Council to critically evaluate the outputs of any submitted modelling results by reviewing the inputs and assumptions of the model. Costs for MUSIC<sup>64</sup> licensing are:

- \$4,500 ex. GST (MUSIC Single User USB Dongle and first 12 months Support & Maintenance)
- \$550 ex. GST (Annual Maintenance and Support including updates)

For Council to allow applicants the ability to assess stormwater measures using InSite Water, Council will need to pay a subscription fee. Costs for InSite Water<sup>65</sup> licensing are:

- \$3,490 ex. GST (per annum; Light subscription – full features, \$30 reporting fee for applicant)
- \$6,250 ex. GST (per annum; Standard subscription – full features and free report generation).

### 5.2.3 STAFF RESOURCING

ESD training modules are available for planning staff of CASBE Member Councils, in addition to reduced rate in-house BESS training for council staff. While training of planning staff in ESD principles and assessing planning applications against ESD planning provisions should occur to build internal capacity, it is recommended that a dedicated ESD planning officer position be created at Frankston City Council.

A dedicated staffing resource responsible for assessing ESD in planning applications has a range of benefits. These include the provision of expert ESD advice to planning applicants throughout the process, as well as support to planners for smaller ESD matters. A dedicated ESD officer will also increase the efficiency in processing applications and will result in a consistent response from Council to applicants regarding ESD planning requirements. This will increase the ability to achieve meaningful ESD outcomes and ensure applicants are provided with a clear approach to ESD in their developments.

Sufficient internal resourcing is required relevant to the expected workload, based on any proposed policy thresholds. The following are estimates of the time required to assess ESD requirements of planning applications. Note that the time it takes to complete an ESD referral varies depending on the development, and how well the documents have been prepared.

- Sustainable Design Assessment: 4 hours
- Sustainability Management Plan: 12 hours

Using the average development statistics for Frankston City Council and estimated assessment times, resourcing implications for different policy thresholds will be explored in an additional recommendations report.

<sup>62</sup> <https://www.casbe.org.au/who-we-are/membership/>

<sup>63</sup> <https://www.casbe.org.au/who-we-are/membership/>

<sup>64</sup> <https://ewater.org.au/products/music/access-licensing/>

<sup>65</sup> [https://insitewater.com.au/?page\\_id=311](https://insitewater.com.au/?page_id=311)

## 6. Key insights

A commitment to environmental sustainability by Frankston City Council is evident in strategic documents and local planning provisions. The introduction of a local ESD planning policy would strengthen this commitment and further Council's ability to achieve ESD outcomes in the built environment.

Past action taken by a large number of Victorian councils has set a solid precedent for the adoption of ESD policies in the planning scheme and is a proactive approach in lieu of a state-wide ESD planning policy.

Introduction of an ESD policy into the Frankston Planning Scheme will be supported by a range of existing tools, often purpose-built, to aid in assessing compliance against policy objectives and requirements.

The adoption of an ESD policy has been generally supported by Frankston City Council. The main point for consideration in this report is the thresholds at which such a policy will apply to development in Frankston. This issue will be explored in detail in an additional report providing recommendations for policy triggers.

With many of the costs associated with ESD assessment being free to the community, and the main cost to Council being staff resourcing, the investment of introducing an ESD policy will be highly beneficial in contributing towards a sustainable, healthy and resilient built environment in Frankston.