

## 22.10 ENVIRONMENTALLY SUSTAINABLE DEVELOPMENT

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This policy applies throughout the City of Greater Bendigo to residential and non-residential development that requires a planning permit in accordance with the thresholds in Table 1 of this Policy.

### 22.10-1 Policy basis

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Greater Bendigo City Council is committed to creating an environmentally sustainable city. Critical to achieving this commitment is for development to incorporate appropriate environmentally sustainable design standards. This policy aims to integrate environmental sustainability principles into land-use planning, new developments and redevelopment of existing infrastructure.

This policy provides a framework for early consideration of environmental sustainability at the building design stage in order to achieve the following efficiencies and benefits:

- Easier compliance with building requirements through passive design;
- Reduction of costs over the life of the building;
- Improved affordability over the longer term through reduced running costs;
- Improved amenity and liveability;
- More environmentally sustainable urban form; and
- Integrated water management.

If environmentally sustainable design is not considered at the time of planning approval, the ability to achieve environmentally sustainable development (ESD) may be compromised by the time these matters are considered as part of a building approval. In addition, there may be difficulties or extra costs associated with retro-fitting the development to implement environmentally sustainable design principles.

This policy does not prescribe performance outcomes. The policy enables the provision of information and provides decision guidelines which will assist in the assessment of whether development meets environmentally sustainable development objectives.

This policy complements a range of non-statutory measures aimed at encouraging environmentally sustainable development. These measures include educating residents and applicants, assisting applicants to use ESD tools, leading by example with Council projects, promotion of exemplary private projects and promotion of the use of materials with favourable life cycle impacts.

### 22.10-2 Objectives

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The overarching objective is that development should achieve best practice in environmentally sustainable development from the design stage through to construction and operation.

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

The following objectives should be satisfied where applicable:

#### Energy performance

- To improve the efficient use of energy, by ensuring development demonstrates design potential for ESD initiatives at the planning stage.
- To reduce total operating greenhouse gas emissions.
- To reduce energy peak demand through particular design measures (eg, appropriate building orientation, shading to glazed surfaces, optimise glazing to

exposed surfaces, space allocation for solar panels and external heating and cooling systems).

**Water resources**

- To improve water efficiency.
- To reduce total operating potable water use.
- To encourage the collection and reuse of stormwater.
- To encourage the appropriate use of alternative water sources (eg. greywater).

**Indoor environment quality**

- To achieve a healthy indoor environment quality for the wellbeing of building occupants, including the provision of fresh air intake, cross ventilation, and natural daylight.
- To achieve thermal comfort levels with minimised need for mechanical heating, ventilation and cooling.
- To reduce indoor air pollutants by encouraging use of materials with low toxicity chemicals.
- To reduce reliance on mechanical heating, ventilation, cooling and lighting systems.
- To minimise noise levels and noise transfer within and between buildings and associated external areas.

**Stormwater management**

- To reduce the impact of stormwater run-off.
- To improve the water quality of stormwater run-off.
- To achieve best practice stormwater quality outcomes.
- To incorporate the use of water sensitive urban design, including stormwater re-use.

**Transport**

- To ensure that the built environment is designed to promote the use of walking, cycling and public transport, in that order.
- To minimise car dependency.
- To promote the use of low emissions vehicle technologies and supporting infrastructure.

**Waste management**

- To ensure waste avoidance, reuse and recycling during the design, construction and operation stages of development.
- To ensure durability and long term reusability of building materials.
- To ensure sufficient space is allocated for future change in waste management needs, including (where possible) composting and green waste facilities.

**Urban ecology**

- To protect and enhance biodiversity within the municipality.
- To provide environmentally sustainable landscapes and natural habitats, and minimise the urban heat island effect.
- To encourage the retention of significant trees.
- To encourage the planting of indigenous vegetation.
- To encourage the provision of space for productive gardens, particularly in larger residential developments.

**22.10-3 Policy**

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It is policy to ensure innovative technology, design and processes positively influence the sustainability of all development.

It is policy that applications for the types of development listed in Table 1 be accompanied by information which demonstrates how relevant policy objectives will be achieved.

**22.10-4 Application requirements**

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An application must be accompanied by either a Sustainable Design Assessment or a Sustainability Management Plan as specified in Table 1, as appropriate.

A Sustainable Design Assessment will usually not need to be prepared by a suitably qualified professional. It should:

- Provide a simple assessment of the development. It may use relevant tools from the examples listed in the table or an alternative assessment approach to the satisfaction of the responsible authority; and
- Identify environmentally sustainable development measures proposed in response to policy objectives, having regard to the site’s opportunities and constraints.

A Sustainability Management Plan should:

- Provide a detailed assessment of the development. It may use relevant tools from the examples listed in the table or an alternative assessment approach to the satisfaction of the responsible authority; and
- Identify achievable environmental performance outcomes having regard to the objectives of this policy (as appropriate); and
- Demonstrate that the building has the design potential to achieve the relevant environmental performance outcomes, having regard to the site’s opportunities and constraints; and
- Document the means by which the performance outcomes can be achieved.

Various assessment tools have been listed in Table 1 which may be used to assess how the proposed development addresses the objectives of this policy, as appropriate.

**Table 1 – ESD Application Requirements**

Type of development	Application requirements	Example tools
<b>Accommodation /Mixed Use with residential component</b>		
<ul style="list-style-type: none"> <li>▪ 3 - 9 dwellings; or</li> <li>▪ Development of a building for accommodation other than dwellings with a gross floor area of 1000m<sup>2</sup> to 2499m<sup>2</sup>.</li> </ul>	Sustainable Design Assessment (SDA)	BESS STORM
<ul style="list-style-type: none"> <li>▪ 10 or more dwellings; or</li> <li>▪ Development of a building for accommodation other than dwellings with a gross floor area more than 2499m<sup>2</sup>.</li> </ul>	Sustainability Management Plan (SMP) Green Travel Plan (GTP)	BESS Green Star MUSIC STORM
<b>Non-residential</b>		
<ul style="list-style-type: none"> <li>▪ Development of a non-residential building with a gross floor area of 500m<sup>2</sup> to 1000m<sup>2</sup>.</li> </ul>	Sustainable Design Assessment (SDA)	BESS MUSIC STORM

Type of development	Application requirements	Example tools
<ul style="list-style-type: none"> <li>Development of a non-residential building with a gross floor area more than 1000m<sup>2</sup>.</li> </ul>	Sustainability Management Plan (SMP) Green Travel Plan (GTP)	Green Star BESS MUSIC STORM

*Note 1: Development (in Table 1) has the same meaning as in Section 3 of the Planning and Environment Act 1987, but does not include subdivision. To remove any doubt, development also includes alteration and additions. In the case of alterations and additions, the requirements of the Policy apply only to the alterations and additions.*

*Note 2: Mixed Use developments are required to provide the information applicable to each use component of the development.*

## 22.10-5 Decision guidelines

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In determining an application, the responsible authority will consider as appropriate:

- The extent to which the development meets the objectives and requirements of this policy from the design stage through to construction and operation.
- Whether the proposed environmentally sustainable development performance standards are functional and effective to minimise environmental impact.
- Whether the proposed environmentally sustainable development initiatives are reasonable having regard to the type and scale of the development and any site constraints.
- Whether an appropriate assessment method has been used.
- Whether an ESD plan or framework has previously been approved by the responsible authority (whether under a planning control or otherwise).

## 22.10-6 Reference documents

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*BESS (Built Environment Sustainability Scorecard)* [www.bess.net.au](http://www.bess.net.au), Council Alliance for a Sustainable Built Environment (CASBE), 2015

*Green Star*, Green Building Council of Australia, [www.gbca.com.au](http://www.gbca.com.au)

*Nationwide House Energy Rating Scheme (Nat HERS)*, Department of Climate Change and Energy Efficiency, [www.nathers.gov.au](http://www.nathers.gov.au)

*STORM*, Melbourne Water, [www.storm.melbournewater.com.au](http://www.storm.melbournewater.com.au)

*Urban Stormwater Best Practice Guidelines*, CSIRO, 2006

*Greater Bendigo Environment Strategy, 2016-2021*

*Note: The above reference documents and websites may be amended from time to time. It is intended that these documents and websites (or amended versions) are relevant reference documents to this policy.*

## 22.10-7 Commencement

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This policy does not apply to applications received by the responsible authority before the gazettal date of this clause.

## 22.10-8 Expiry

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This policy will expire if it is superseded by an equivalent provision in the Victoria Planning Provisions.