

Sustainable Design Assessment (SDA) & Sustainability Management Plan (SMP) Reports

Submission Guidelines

1.0 Overview

Knox City Council strongly encourages that sustainability and Environmentally Sustainable Design (ESD) are addressed as a part of planning permit applications. This includes summarising the sustainable design initiatives incorporated within proposed developments submitted to Council.

Either a **Sustainable Design Assessment (SDA) Report** or **Sustainability Management Plan (SMP) Report**, along with **ancillary documentation**; such as performance reports from recognised assessment tools, are **required by Council to support planning permit applications** subject to the extensivity of the proposed development.

The requirement to submit respective reports and documentation is outlined under Knox City Council's **ESD Policy** which is stipulated under **clause 22.04 of Knox City Council's Planning Scheme**.

Additional ESD provisions may be drawn upon and referenced within several other clauses and objectives, a part of Knox City Council's Planning Scheme. Such provisions include, and are not limited to:

- **clause 21.03 – 'Environmental and Landscape Values'** regarding biodiversity and native vegetation;
- **clause 21.05 – 'Built Environment and Heritage'** regarding the overarching strategy towards Environmentally Sustainable Development;
- **clause 21.09 – 'Transport and Infrastructure'** regarding sustainable transport and integrated water management;
- **clause 52.34 – 'Bicycle Facilities'** pertaining to the Victorian State Government's provision of bicycle facilities and onsite amenities.
- **clauses 55.03–5** which applies to **Two or More Dwellings on a Lot and Residential Buildings** pertaining to the Victorian State Government's approach towards site coverage, permeability, energy efficiency, and indoor environment quality; and
- **clauses 55.07 and 58 – 'Apartment Developments'** which encapsulates the Victorian State Government's Better Apartments Design Standards (BADS) and the Apartment Design Guidelines promoting ESD within apartment developments.
- **Relevant objectives from the State Policy Protection Framework (SPPF) clauses**

The **ESD Application Requirements Table** is an excerpt from Knox City Council’s ESD Policy which may be used to determine the type of Report and ancillary documentation that is required to support an application, assessed by the Responsible Authority.

With respect to the Table, the **Built Environment Sustainability Scorecard (BESS)** and **Green Star** assessment tools are overarching, comprehensive, sustainability assessment tools. The other ‘Example Tools and Ancillary Documentation’ are specified to assist assessing only one particular independent category (i.e. Stormwater Only). The overarching sustainability assessment tools will require input from the specific, independent assessment tools, where requested to complete an assessment.

ESD Application Requirements Table

Type of Development	Report Type	Example Tools and Ancillary Documentation
Accommodation and Mixed Use with Residential Component of:		
<ul style="list-style-type: none"> • 2 - 9 additional dwellings; or • Development of a building for accommodation (other than a dwelling), with a gross floor area between 500m² and 1,000m²; or • Alterations and additions of 500m² or more of additional gross floor area (excluding outbuildings). 	Sustainable Design Assessment (SDA) Report	BESS InSite Water (Stormwater Only) STORM (Stormwater Only) MUSIC (Stormwater Only) FirstRate5 (Energy Only) JV3 (Energy Only) BCA Section J (Energy Only)
<ul style="list-style-type: none"> • 10 or more additional dwellings; or • Development of a building for accommodation (other than a dwelling), with a gross floor area of more than 1,000m². 	Sustainability Management Plan (SMP) Report	BESS; or Green Star InSite Water (Stormwater Only) STORM (Stormwater Only) MUSIC (Stormwater Only) FirstRate5 (Energy Only) JV3 (Energy Only) BCA Section J (Energy Only)
Non Residential		
<ul style="list-style-type: none"> • Development of a non-residential building with a gross floor area between 500sqm and 2,000m²; or • Alterations and additions of between 500sqm and 2,000m². 	Sustainable Design Assessment (SDA) Report	Green Star; or BESS InSite Water (Stormwater Only) STORM (Stormwater Only) MUSIC (Stormwater Only) JV3 (Energy Only) BCA Section J (Energy Only)
<ul style="list-style-type: none"> • Development of a non-residential building with a gross floor area of more than 2,000m²; or • Alterations and additions greater than 2,000m². 	Sustainability Management Plan (SMP) Report Green Travel Plan (GTP)3	Green Star; or BESS InSite Water (Stormwater Only) STORM (Stormwater Only) MUSIC (Stormwater Only) JV3 (Energy Only) BCA Section J (Energy Only)

Note 1: ‘Development’ has the same meaning as in Section 3 of the *Planning and Environment Act 1987* (Vic), but does not include subdivision. To remove any doubt, development also includes alterations 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.

Note 3: Applications for a warehouse are excluded from requiring a Green Travel Plan.

2.0 Typical Submission Preparation Process

A tentative outline of the submission preparation process is provided as follows.

Please note that the following process is a general approach for standard residential developments (i.e. up to 9 townhouses or apartments) whereby the BESS Assessment Tool is utilised. For more extensive projects, whereby a SMP Report may be required, it is recommended that a suitably qualified professional (i.e. sustainability and/or ESD consultant) is engaged to assist the applicant with the assessment and submission process.

1. Determine the type of Report required to be submitted to the Responsible Authority (either a SDA or SMP Report).
2. Register the development on the online and free sustainability assessment tool platform the Built Environment Sustainability Scorecard (BESS) at www.bess.net.au.

Please note that the former STEPS and SDS tools have been phased out. Additionally, for more complex and significant developments, applicants should consider utilising the Green Building Council of Australia's Green Star process to undertake an assessment.

3. Use the BESS Assessment Tool to assist making decisions about how to reduce the environmental impact of the development by incorporating ESD principles and sustainability features. A development must achieve the minimum expectations for sustainable design performance as measured by the Tool. This includes achieving a Minimum Overall Score of 50%. Additionally, a minimum 50% score must be achieved for each of the categories 'Energy', 'Water' and 'Indoor Environment Quality (IEQ)' and a 100% score for the category 'Stormwater'; supported by ancillary assessment tools, as deemed necessary.
4. When undertaking the BESS Assessment, the Tool will require that supporting assessment tools will need to be utilised in order to complete the assessment. For example, the 'Stormwater' category will require the applicant to use either the InSite Water, STORM or MUSIC assessment tools to generate respective reports indicating performance. This may also be the case for satisfying the 'Energy' category by providing accompanying preliminary energy efficiency reports justifying respective ratings achieved (i.e. NatHERS certificates, FirstRate5 or Section J assessment). Values from these assessments must be input into the BESS Assessment Tool to complete a valid assessment.
5. Create a Sustainable Design Assessment (SDA) Report (or Sustainability Management Plan (SMP) Report for more complex projects) outlining the sustainability initiatives and ESD principles that will be implemented into the development. The SDA (or SMP) Report must be consistent with all information input and generated by respective assessment tools.
6. Print the completed SDA (or SMP) Report, as well as, ancillary documentation such as the BESS Assessment Report and supporting InSite Water/STORM and Energy Efficiency Reports which are treated as mandatory appendices accompanying a submission.
7. Additionally, document decisions by noting or drawing the major sustainability measures and ESD features on relevant plans (e.g. vegetation, permeable surfaces, water tanks, WSUD features such as raingardens, clothes lines, individual/smart utility metres, drainage, eaves and shade structures). Section 4 of this Guideline provides a detailed checklist that may be utilised, where applicable.
8. Collectively, submit such documentation with a planning application submission to Knox City Council. The SDA (or SMP) Report will be attached to the final planning permit issued by Council and must be fully implemented into the final development.

3.0 Preparing an SDA or SMP Report

An SDA Handout sheet including templates for an SDA Report for Residential and Non Residential developments are available on the Knox website (www.knox.vic.gov.au) for download.

For more extensive projects, whereby a SMP Report may be required, it is recommended that a suitably qualified professional (i.e. sustainability and/or ESD consultant) is engaged to assist the applicant.

4.0 Items to Note on Plans

☑ Please check against the Submitted Plans and ensure that information provided is consistent and transparent with content detailed in the SDA or SMP Report, as well as, respective assessment tool reports (i.e. BESS or Green Star) and ancillary assessment reporting documentation (i.e. NatHERS certificates FirstRate5, InSite Water and STORM assessments). Additionally, where applicable, it is advised to request a suitably qualified professional to assist with documenting relevant sections (i.e. a drainage engineer to provide guidance to reflect the approach towards stormwater management and performance).

Please note that the below list is non-exhaustive whereby additional requirements and details may be requested by the Responsible Authority, from the applicant, given the magnitude and complexity of the development. The list should be treated as a minimum requirement towards satisfying Council’s requirements.

Energy	
	Location of fixed clothes drying racks.
	The location and type of hot water systems (star ratings and fuel types - see www.energyrating.gov.au), including marking any solar panels on the roof; <i>Note:</i> <ul style="list-style-type: none"> • Aim to minimise the distance from the hot water service to the main kitchen and bathroom taps to save water. • Note that Australian Standards require gas hot water systems minimum clearance distances from doors and windows that may restrict possible installation sites. Feasibility of installing gas hot water should be checked.
	Specifications used to achieve the respective energy star rating (NatHERS Star Rating) or performance rating e.g. insulation R ratings and double glazed windows.
	The passive solar initiatives included in the design such as window shading louvers or external blinds.
	Any renewable energy systems (e.g. photovoltaic solar panels).
	Energy efficient air-conditioning and heating systems (star ratings and fuel types – see www.energyrating.gov.au) in accordance with AS/NZS 3823.2:2013.
	Specified lighting types (please note that low voltage halogen downlights are not considered efficient and are now banned as per the <i>National Construction Code</i>).
	Energy metres, including smart energy metres that are installed to record energy consumption for each individual dwelling or designated area depending on the building type.

Water and Stormwater	
	Site plans must depict the rainwater tank, sized, and showing or noting plumbing connections from the roof downpipes, connection to the toilets, laundry, hot water system and/or garden irrigation etc.
	Site plans should show location, size and type of stormwater treatment systems such as swales and raingardens (see https://www.melbournewater.com.au/community-and-education/help-protect-environment/raingardens and http://www.clearwater.asn.au/content/c56-fact-sheets).
	Please ensure that drainage plans, where applicable, show connection of water tanks to downpipes. Also include section details, planting schedules and maintenance requirements of stormwater treatment systems such as raingardens. Please ensure that landscape plans are consistent with drainage plans.
	Water efficient specified shower, toilet and basin types (WELS ratings – see www.waterrating.gov.au) in accordance with AS/NZS 6400:2016.
	Water metres, including smart water metres that are installed to record water for each individual dwelling or designated area depending on the building type.

Management, Indoor Environment Quality, Urban Ecology and Innovation	
	Include any special sustainable specifications that have been included in the BESS Assessment Report, particularly any shading devices or areas where double glazing is utilised.
	Where appropriate, provide ventilation/breeze path and heat map models indicating indoor air flow and thermal characteristics.
	Provide information regarding site permeability and garden area coverage including areas denoted for food production, if applicable.

Transport	
	Allocated bicycle parking spaces (this can be external secure parking designed to meet AS 2890.3:2015 or marked up internal space allocated in garages / sheds etc.).

Waste	
	Allocated space for waste management (general waste, recycling, green waste and composting bins).

5.0 Commitment and Enforcement

Please note that the sustainability aspects and ESD features of the development application will be checked by the Responsible Authority for consistency and as to whether they meet Council’s requirements. Unsatisfactory submissions will be returned to the applicant to address necessary shortfalls and undertake a resubmission.

Council planning enforcement officers will also check that initiatives have been implemented once the development is complete. The *Competition and Consumer Act 2010* (Cth) contains provisions relating to misleading or deceptive conduct and false or misleading representations. The Act ensures that the public; in that the Council, are provided with accurate information in order to make informed decisions. Persons which make environmental or ‘green’ claims should ensure that their claims are scientifically sound and appropriately substantiated as serious penalties can apply for activities that are in breach of the Act.

6.0 Further Support

Please refer to the relevant handouts and templates prepared by Council providing additional guidance on SDA and SMP Reports and supporting documentation respectively. Such documentation may be accessed via Knox City Council’s website (www.knox.vic.gov.au).

Additionally, information has been provided on Council’s website indicating the relevant expectations set out by the Responsible Authority that applicants should aim to achieve with respect to their development. The expectations align with the 10 key sustainability categories detailed under the Sustainable Design Assessment in the Planning Process (SDAPP) framework. Fact sheets for each of the 10 categories have also been prepared for inspiration and to facilitate the sustainable design process.

Knox City Council’s ESD Officer may be contacted via 9298 8125 to provide further assistance.