CITY OF YaRRA

Environmentally Sustainable Design (ESD) Buildings Policy

Yarra City Council
Adopted August 2014

1.0 Purpose and Scope

The *Environmentally Sustainable Design (ESD) Buildings Policy* embeds ESD principles into the creation, renewal and demolition of Councils Buildings.

It is the purpose of the *ESD Buildings Policy* to apply Environmentally Sustainable Design principles into Council's building standards and design processes for its building assets. This policy applies to all Council owned buildings and covers all building projects associated with new, upgrades, maintenance and renewal as well as their final demolition.

2.0 Background and Context

Yarra City Council is responsible for the management and upkeep of over 170 buildings and facilities that are utilised by either staff or community members. In order to improve the environmental sustainability of these facilities, Council developed an *ESD Buildings Policy in 2011*.

The ESD Buildings Policy should help Council achieve its set environmental targets:

Indicator	Baseline	2017	2020
Gross organisational carbon emissions	16,820 tCO2e (2000/01)	↓55%	↓60%
Net organisational carbon emissions	Zero tCO2 (2013)	Zero	Zero
Carbon emissions reduced through renewable energy generation by Council	500 tCO2e (2012)	850 tCO2e	1,250 tCO2e
Waste to landfill from Council operations	31.7 Tonnes (2011/12)	↓60%	↓70%
Use of Potable water in Council operations	334ML (2000/01)	↓45%	↓50%
Council water requirements supplied by locally harvested water sources	4.5ML (2.5%)(2011/12)	10ML	20ML

3.0 Policy Statement

Council sets the following standards for Council buildings:

Building Project Type	ESD Standard
Major New **Major Upgrade**	**Green Star rating tool** • 6 Star*, *and* • Minimum 8 points for the Green Star energy credit "Ene-1" *or*
	NABERS rating tool • Energy: 5 Stars + 20%, *and* • Water: 5 stars
Minor New **Significant Upgrade** **Renewal**	**SDS or BESS rating tool#** Exceed energy benchmark by 50%, and water benchmark by 30%, and meet all other benchmarks for the portion of building where works undertaken.
Minor works **Maintenance**	Use **Yarra ESD Specification Tool** and ensure project endorsement from Representative from Environmental Management Team
Demolition	Minimum 80% reuse and recycling

*Project Managers to provide a cost benefit analysis comparing a 6 Star with a 5 Star Green Star standard, including an estimated environmental benefit for consideration by the Council, during the most appropriate design phase of a building.
#Use the SDS tool until it has been superseded by the new BESS tool.

4.0   Implementation and Role of Project Sponsors & Project Managers

To enable the implementation of the *ESD Buildings Policy*, Project Sponsors of building and construction projects must:

- initiate projects that comply with the *ESD Buildings Policy,*
- include ESD requirements into project scoping phase.

To enable the implementation of the *ESD Buildings Policy*, Project Managers of building and construction projects must:

- implement projects that comply with the *ESD Buildings Policy*, following all steps listed in *ESD Buildings Policy Implementation Guidance for Project Managers* (Attachment 1);
- incorporate the *ESD Buildings Policy* when developing their Service/Asset Management Plans with support from the Sustainable Asset Management Branch; and
- participate in appropriate training to develop the skill sets required to undertake sustainable building practices as appropriate for the responsibility of the role or position
- ensure "sign-off" by the ESD Supporting Officer at relevant stages.

To assist with the implementation of the ESD Buildings Policy, key stakeholder engagement will be incorporated into Council's new Project Management software, which currently in development.

5.0   Monitoring and Review

This *ESD Buildings Policy* will be monitored regularly to ensure its relevance in terms of community needs and expectations, Council goals, Council targets and statutory requirements. The Organisation shall undertake regular audits to monitor compliance with *ESD Buildings Policy* strategic direction, regulatory obligations and plans. Key performance indicators include:
- ratio of projects including ESD policy requirements,
- uptake in different policy categories,
- measurement of total efficiency improvements.

The effectiveness of the policy be reviewed after 24 months and reported back to Council.

Attachment 1 – ESD Buildings Policy Implementation Guidance for Project Managers
Below are three simple steps to implement the ESD Buildings Policy;

Step 1 – Assess the Project Category
Different building project types vary in their ability to improve efficiency or introduce other environmental benefits. Determine a project's category by using *Table 1* below.

NOTE: If, during the course of project, the scope of the project expands due to site requirements or similar, the project's Building Project Type, as defined by Table 1, must be consulted and if the ESD requirements for that project may have also changed, then the new changed requirements must be met to suit the expanded scope of the project..

Table 1 – Project Category

Building Project Type	Building Project Inclusions	Project Example
Major New	All new major building works with a total design and construction value of $5M or more.	Construction of a new community centre.
Minor New	All new minor building works with a total design and construction value of less than $5M.	Construction of a new sports pavilion. Installation of a public toilet or construction of a storage shed.
Major Upgrade	A major upgrade to an existing building with a total design and construction value of $2M or more	Upgrade or expansion of a Town Hall or leisure centre.
Significant Upgrade	All upgrade or extension work from $200,000 to $2M	Upgrade or expansion of a Library.
Renewal	All renewal works to refurbish or replace existing facilities with facilities of equivalent capacity from $200,000 to 2M	Refurbishment/ renewal of a childcare centre or sports pavilion.
Minor Works	Partial retrofit of existing plant or building construction to value up $200,000	Eg. Replacement of a roof or equipment
Maintenance	All routine and reactive maintenance	Replacing lighting system
Demolition	All major demolition work that includes 10m^3 or more of waste.	The complete or partial demolition of a building.

Step 2: Confirm the ESD Performance Standards

Once you have confirmed the category in Step 1, refer to *Table 2* (below) to confirm what ESD standard is required for your project.

Table 2 – ESD Performance Standards

Building Project Type	ESD Standard
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Step 3: Establishing ESD Sign Off and Endorsement

A key factor in the successful implementation of the *ESD Buildings Policy* is the involvement of a 'ESD Supporting Officer' to confirm the ESD standards are being met, to gain their endorsement and "sign off".

The relevant ESD Supporting Officer for each project type is detailed in **Table 3** below. It is the ESD Supporting Officer's responsibility to ensure that the purpose of the *ESD Buildings Policy* is met, and that all ESD standards are met where practicable.

Most categories of project require "sign off" at several stages; these will be incorporated into Council's new Project Management software and are detailed in **Table 3** below.

Once you have confirmed the project type, refer to **Table 3** to establish who your ESD supporting officer is for endorsement and signoff.

Table 3 – ESD Supporting Officers

Building Project Type	Project Scoping	Concept Design to Design Development	Documentation	Construction & Handover
Major New **Minor New** **Major Upgrade** **Significant Upgrade** **Renewal**	ESD Advisor	ESD Advisor	ESD Advisor	ESD Advisor
Minor Works **Maintenance**	Representative from Environmental Management Team	Representative from Environmental Management Team		Representative from Environmental Management Team
Demolition	Waste Minimisation Coordinator			

Abbreviations and Definitions

BESS (Built Environment Sustainability Scorecard)	The Built Environment Sustainability Scorecard (BESS) is the new ESD tool that integrates STEPS and SDS into an updated single free online ESD tool, specifically designed for town planning applications and to complement the SDAPP program. BESS v1 is due for public launch September 2014. It covers Building Classes 1 to 10 of building projects and assess project across the 10 Key ESD Categories developed by the SDAPP program (see below).
ESD (Environmental Sustainable Development)	Council promotes environmental sustainable developments in order to meet its high level environmental targets. ESD commonly includes achieving or exceeding 'best practice' standard for buildings, infrastructure, transport, landscaping and streetscapes.
GBCA (Green Building Council Australia)	The Green Building Council of Australia (GBCA) was established in 2002 to develop a sustainable property industry in Australia and drive the adoption of green building practices through market-based solutions. Its key objective is to drive the transition of the Australian property industry : • towards sustainability by promoting green building programs, technologies, design practices and operations • towards integration of green building initiatives into mainstream design, construction and operation of buildings.
Green Star	Green Star is a comprehensive, national, voluntary environmental rating system that evaluates the environmental design and construction of buildings. Green Star was developed by the GBCA for the property industry in order to standardise, promote and recognise sustainable building practices. Green Star covers nine different categories that assess the environmental impact that is a direct consequence of a projects site selection, design, construction and maintenance.
NABERS (National Australian Built Environment Rating System)	NABERS measures an existing building's environmental performance during operation. NABERS rates a building on the basis of its measured operational impacts in categories such as energy, water, waste and indoor environment quality. Currently NABERS only officially rates offices, hotels, shopping centres and homes. Further tools are under development for schools, retail buildings, hospitals and data centres.
SDS (Sustainable Design Scorecard)	The Sustainable Design Scorecard (SDS) is intended to assess and quantify the environmental performance of non-residential developments in Victoria. Similar to the building rating tools STEPS and Green Star, SDS assesses and scores the sustainability initiatives of new building developments or refurbishments in seven different categories. The SDS tool is currently administered by Port Phillip Council and is available as a free Excel download on their website.
SDAPP (Sustainable Design Assessment in the Planning Process)	Council adopted the SDAPP program in March 2011. Since then, planning applicants may be requested or required to provide sustainable design information with their planning application and meet best practice sustainable design standards. The SDAPP program contains different application categories and submission requirements. All submissions address the following 10 Key Sustainable Building Categories: 1. Indoor Environment Quality, 2. Energy Efficiency, 3. Water Resources, 4. Stormwater Management, 5. Building Materials, 6. Transport, 7. Waste Management, 8. Urban Ecology, 9. Innovation, 10. Ongoing Building and Site Management.
Yarra ESD Specification Tool	A list of ESD performance standards for equipment, materials and fittings, designed to suit 'Minor Works' undertaken by Council, where the use of other ESD tools is not suitable. The tool is a word document located on TRIM and regularly updated by the ESD Advisor and member of the Environmental Management Team.