

Council Policy

Council policy title:	Sustainable Building and Infrastructure Policy
Council policy sponsor:	Director Environment, Recreation and Infrastructure
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1. INTRODUCTION

The Sustainable Building and Infrastructure Policy supersedes the Sustainable Infrastructure Policy 2017. The revised policy seeks to reflect current best practice in Environmentally Sustainable Development (ESD).

2. OBJECTIVES

The objectives of this policy are to:

- 2.1 Establish a consistent approach to best practice ESD for the design, construction and disposal of all Council owned and managed buildings and infrastructure to reduce environmental impact and improve climate resilience;
- 2.2 Set clear expectations for ESD to be integrated into the operation of buildings and infrastructure and new lease and licence agreements;
- 2.3 Support Council's commitments to achieve our environmental sustainability targets and to maintain our status as a 'carbon neutral' organisation; and
- 2.4 Ensure upfront project costs to incorporate ESD requirements are viewed as an investment that will return financial savings and other co-benefits over the life of the asset.

3. SCOPE

- 3.1 This Policy applies to all projects within Council owned and/or managed buildings, Council owned and/or managed infrastructure (including roads and streetscapes, car parks, drainage and open space assets) and Council owned assets that are managed by lessees and licensees.
- 3.2 The Policy clauses apply to all project stages including planning, design, construction, operation, maintenance and disposal.
- 3.3 This Policy focuses on environmental sustainability, however the importance of cultural, social and financial aspects of sustainability should be acknowledged and considered within the scope of delivery.

4. POLICY

- 4.1 Council is committed to integrating ESD principles into building and infrastructure projects and new lease and licence agreements to reduce their environmental impacts and enhance community wellbeing, as set out in **Appendix 1 General ESD Objectives**.
- 4.2 ESD considerations will be included at all stages of the project lifecycle for building and infrastructure projects including monitoring operations, as described in **Appendix 2 ESD Process Requirements**.
- 4.3 Building and Infrastructure projects will address all relevant requirements described in **Appendix 3 Project Specific Requirements**.
- 4.4 Council will support the organisation to develop clear and aligned processes to embed ESD into everyday operations, and will facilitate training to ensure staff are qualified, knowledgeable and accountable.
- 4.5 If it is not feasible for a particular project to address one or more of the ESD objectives or requirements described in **Appendices 1, 2 and 3**, an exemption may be approved under the authority set out in **Clause 4.23**.
- 4.6 Council lease and licence agreements will be re-negotiated when renewed to ensure buildings are operated to achieve Council's performance standards for ESD, or during existing long-term leases to deliver ESD improvements that benefit both parties.

Investment in ESD

- 4.7 The financial requirements for Council's building and infrastructure renewal are managed through the Service Driven Asset Management Policy and Asset Management Plans. The utilisation of existing assets to meet service needs must be maximised to reduce demand for new buildings and infrastructure, as described in **Appendix 2**.

- 4.8 Council will ensure the financial costs of implementing ESD initiatives and the benefits of reduced operating costs and carbon offsets are integrated into long-term renewal forecasting, respective asset management plans and associated operational and capital budgets.
- 4.9 Council will progressively increase the cost allowance for ESD initiatives in all new project concept plans to ensure that the project specific requirements in **Appendix 3** can be achieved.
- 4.10 Maintenance budgets will be reviewed or planned to include allocations to implement ESD improvements and upgrades, to cover ongoing maintenance of ESD initiatives and to facilitate performance monitoring.
- 4.11 Co-benefits including: improved climate resilience; user well-being; support for low carbon transport; and suppliers of sustainable building materials will be favourably considered.
- 4.12 Council's investment in ESD outcomes will align with its goal to maintain 'carbon neutrality' and its approach of Avoid, Reduce, Switch then Offset to minimise the future costs to offset greenhouse gas emissions.

Monitoring and reporting

- 4.13 Council will ensure accountability by reporting annually on the achievements of this Policy against the following performance measures:

Performance measures
Percentage (%) of total capital expenditure on ESD initiatives in building projects in each financial year.
Percentage (%) of total capital expenditure on ESD initiatives in infrastructure projects in each financial year.
Energy consumption of buildings pre and post implementation of ESD in projects (in MJ/m ²).
Energy consumption of infrastructure pre and post implementation of ESD in projects (in MJ)
Potable water use of buildings pre and post implementation of ESD in projects(in kL/m ²).
Potable water use of infrastructure pre and post implementation of ESD in projects (in kL/m ²)
Percentage (%) of total waste materials from demolition and construction of buildings which is recycled or re-used
Percentage (%) of total waste materials from removal and renewal of infrastructure which is recycled or re-used

- 4.14 Council will also report on any capital works projects for which exemptions have been granted under **Clause 4.5** and the reasons for granting exemption.

4.15 This Policy will be reviewed every four years and/or prior to each four-year capital plan, to ensure it remains effective.

Roles and responsibilities

- 4.16 All staff, contractors and stakeholders involved in capital works projects are required to work collaboratively to ensure the intent of this Policy is achieved.
- 4.17 The Manager Climate, Waste and Integrated Transport has responsibility to guide delivery of a consistent approach to ESD for all Council owned and managed buildings and infrastructure, to endorse ESD initiatives at the concept and planning stages, and to support the Policy Review Steering Group to evaluate the ongoing effectiveness of this policy.
- 4.18 Project Sponsors and Executive Sponsors have accountability to give effect to this policy by: evaluating demand for new buildings and infrastructure as part of service planning as detailed in **Appendix 2**; ensuring the costs of ESD initiatives are integrated into capital budget submissions and the operation and maintenance of services (**Clauses 4.7 to 4.12**); and annually reporting as described in **Clauses 4.13 and 4.14**.
- 4.19 The Executive Project Board and divisional project control groups have responsibility to support the integration of ESD into the project management framework and ensure projects meet agreed ESD objectives and requirements.
- 4.20 The Manager Commercial Services is responsible for delivering the intent of **Clauses 4.1 and 4.6** and the leasing section in **Appendix 2** of this Policy.
- 4.21 The Manager Project Services is responsible for the deployment of the policy in the early planning and delivery of all capital projects.
- 4.22 The Manager City Assets and Presentation is responsible for the deployment of the policy in the delivery of Council's infrastructure assets, and for the integration of the intent of this policy into Asset Service Level Standards.
- 4.23 The Director Environment, Recreation and Infrastructure has authority to approve or refuse an exemption to delivering ESD objectives for individual projects, as set out in **Clause 4.5** of this Policy.

5. ASSOCIATED COUNCIL DOCUMENTS

This Policy is an integral part of Council's Strategic Planning Framework and aligns with the following documents:

Policies	Service Driven Asset Management Policy Lease and Licence Policy Procurement Policy
Strategies/Plans	Council Plan Community Plan Biodiversity Action Plan Climate Emergency Action Plan 2020-25 Environmental Sustainability Framework Municipal Strategic Statement (MSS) Clause 21.06-2 Sustainability Open Space Sustainable Water Management Strategy Asset Plan (subject to adoption by Council) Service Driven Infrastructure Asset Management Plan – Buildings Service Driven Infrastructure Asset Management Plan – Drainage Service Driven Infrastructure Asset Management Plan – Roads Service Driven Infrastructure Asset Management Plan – Open Space Water for Bayside Integrated Water Management Plan Recycling and Waste Management Strategy Urban Forest Strategy
Other	'Climate Active' Carbon Neutral Certification (2019-20)
Procedures/ Processes	Budget Preparation Guidelines
Internal documents	Sustainable Building and Infrastructure Policy Guidelines (to provide further information on Policy implementation) Sustainability Management Plan templates (to describe intended ESD elements and practices relative to project size, location and use) ESD Brief for Architects (developed using the SECCCA BriefEzy tool)

6. EXTERNAL REFERENCES AND RESOURCES

Federal Legislation	Environment Protection and Biodiversity Act 1999
Victorian Legislation	Local Government Act 1989 Local Government Act 2020 Environment Protection Act 1970 SEPP (Waters) State Environmental Protection Policy Aboriginal Heritage Act 2006 Catchment and Land Protection Act 1994 Planning and Environment Act 1987 Planning and Environmental Regulations 2005 This Policy has been assessed as being compatible with:

	<i>The Charter of Human Rights and Responsibilities Act 2006 (Vic) and The Gender Equality Act 2020 (Vic)</i>
State and Local References	<p>Victorian Planning Provisions (VPP) 53.18-5 Stormwater Standard W2 Integrated Water Management Framework for Victoria 2017 Environmentally Sustainable Development of Buildings and Subdivisions: a roadmap for Victoria's planning system 2021 (State ESD Roadmap) Urban Stormwater Best Practice Environmental Management (BPEM) (State) Asset Service Level Standards for key asset types Compliance with this policy may result in projects exceeding the requirements of the Building Code of Australia Parts 1 & 2 (Section J and Part 3.12)</p>
International Agreements	This Policy assists in achieving elements of the UN Sustainable Development goals.

Please note: This policy is current as at the date of approval. Refer to Council's website (www.bayside.vic.gov.au) to ensure this is the latest version.

APPENDIX 1: GENERAL ESD OBJECTIVES

ESD Objective	
Context	Ensure the project is sympathetic to neighbourhood character, protects cultural heritage, supports the local economy, enhances community well-being and contributes to long term Council economic viability.
Climate resilience	Assess the risks and potential impacts of climate change in the location of current and future buildings and infrastructure (asset vulnerability) and design works within these constraints.
	Design for long term resilience to climate events and adaptability to maximise the asset life and reduce life cycle cost, with an aspirational target of 100 years.
	Reduce the impacts of higher density of development by designing and selecting materials to: minimise urban heat gain; improve permeability; and reduce flood risk.
Management	Ensure the development achieves best practice in ESD from the design stage through to construction and operation.
	A project or program specific Construction Environmental Management Plan (CEMP) should be completed by the main construction contractor and approved by Council.
Energy	Deliver energy efficiency, low energy peak demand and reduced greenhouse gas emissions in the design and operation of buildings and infrastructure to support achievement of greenhouse gas emission reduction targets and maintaining our status as a carbon neutral organisation.
	Use electrical building services to provide efficient heating, cooling and hot water and other appliances in preference to gas or other fossil fuelled services, subject to technological limitations.
	Use 100% renewable energy where feasible, through onsite generation and storage or offsite power purchase agreement.
Integrated water management (IWM)	Improve water efficiency to reduce use of potable water and encourage the collection and reuse of stormwater and appropriate use of alternative water sources (e.g., greywater).
	Apply Integrated Water Management (IWM) principles to increase stormwater retention, improve passive irrigation of vegetation, reduce flows entering Port Phillip Bay and to mitigate the impacts of stormwater runoff on property and public safety.
	Incorporate Water Sensitive Urban Design (WSUD) in drainage, car parks and streetscapes, to facilitate the flow of surface water to permeable vegetated areas, and to support the growth of trees that provide shade and protection against heat gain.
	Meet best practice standards as defined by the Urban Stormwater Best Practice Environmental Management Guidelines (BPEM).

ESD Objective	
Indoor environment quality (IEQ)	Achieve a healthy indoor environment quality for the wellbeing of building occupants through provision of fresh air intake, cross ventilation, selection of materials with low toxicity, thermal comfort, natural daylight and minimising noise transfer to external areas.
Circular economy	Divert a minimum of 70% of the demolition and construction waste to recycling.
	Require waste avoidance, reuse and recycling during the design, construction and operation stages of development and ensure sufficient space is allocated for future recycling and waste management needs.
	Make informed decisions about the materials selected for a project to minimise the impact on the environment from harvesting of raw materials, high embodied energy from manufacture and transportation, on-going maintenance requirements and inability to be recycled.
	Specify in tender documentation, where possible, the need to incorporate reused, recycled or eco-certified content construction materials and fittings to support markets for recycled materials and encourage a circular economy.
	All timber to be responsibly sourced and FSC (preferred) or PEFC certified. No unsustainable rainforest or old-growth timbers will be incorporated unless they are re-used or recycled.
Transport	Ensure the built environment is designed to promote walking, cycling and public transport to minimise car dependency.
	Provide parking facilities for bicycle users and assess demand for end of trip facilities (showers and lockers).
	Support the use of electric vehicles, bicycles and mobility scooters by providing charging infrastructure (chargers and cabling) where feasible.
Urban ecology	Retain and protect existing canopy trees, biodiversity and biodiversity corridors wherever possible.
	Minimise building footprint to maximise open space and support the retention of existing canopy trees, biodiversity and biodiversity corridors.
	Ensure landscaping and plant selection enhances local biodiversity and natural habitats, provides optimal shade to reduce heat gain, utilises any trees that have to be removed for habitat purposes, and encourages the provision of productive gardens.
	Use wildlife friendly external lighting and prevent light pollution into the night sky and light spill beyond the site boundaries.
	Investigate benefits of opportunities for green roofs and facades.

APPENDIX 2: ESD PROCESS REQUIREMENTS

Project stage	Requirement
Concept	<p>Respond to demand for new buildings and infrastructure by initially reviewing the benefits of alternative options to deliver improved services as part of service planning. Options to evaluate and compare for environmental, social and economic impacts should include:</p> <ul style="list-style-type: none"> • alternative non-asset means of delivering the services • capacity for shared use of existing assets • re-configuration of existing buildings and infrastructure, and • providing new or expanded assets.
	<p>Demonstrate at business case stage how the project will contribute towards achieving Council’s environmental sustainability goals, greenhouse gas emission reduction targets and maintaining our status as a carbon neutral organisation.</p>
	<p>Integrate ESD into the project brief inception, concept design, detailed design and in tender documents to achieve the greatest benefit at the lowest cost.</p>
	<p>Consult with respective teams to ensure the business case for projects includes the cost allowances for ESD initiatives required in Clauses 4.8 and 4.9 of this Policy.</p>
	<p>Seek specialist ESD technical advice for larger projects from project inception, delivery and commissioning.</p>
Plan	<p>Apply the Sustainable Design and Assessment in the Planning Process (SDAPP) to the design, construction and management of buildings to optimise Council’s ESD objectives set out Appendix 1.</p>
	<p>Prepare a Sustainability Design Assessment (SDA) or Sustainability Management Plan (SMP) using ESD tools as required in Appendix 3, and refer this to relevant internal stakeholders (ESD, WSUD engineering, transport, waste, biodiversity officers) prior to submitting for planning and/or tendering.</p>
	<p>Building and Infrastructure Sustainability Design Assessment (SDA) and Sustainability Management Plan (SMP) reports must consider all general ESD objectives described in Appendix 1.</p>
	<p>Utilise a variety of ESD tools and standards to guide design and assess future performance, and to generate ESD clauses for contract specifications.</p>
Procurement and Tendering	<p>Use costings over the lifetime of the building or asset in procurement and contracting to target the best long-term value to Council, rather than the cheapest up-front cost. Recognise the value of ESD to the community and environment.</p>
	<p>Ensure ESD objectives are included within the deliverables for tendered work.</p>

Project stage	Requirement
Deliver	Protect biodiversity, biodiversity corridors and significant trees to be retained.
	Ensure that commissioning and building tuning of ESD initiatives is undertaken, demonstrates compliance with the Policy and provides evidence to meet expectations of performance.
	Ensure handover includes the ongoing management of ESD initiatives.
Close	Collect data to evaluate and monitor the performance of the ESD initiatives detailed in Clause 4.13 of this Policy.
	Report annually as part of the capital works program delivery report against the performance measures detailed in Clauses 4.13 and 4.14 of this Policy.
Leasing	Re-negotiate lease and licence agreements at renewal or during long term leases to deliver ESD improvements that benefit both parties.
	Provide Council staff, tenants or operators of Council owned and/or managed infrastructure with information and advice to assist in implementing ESD measures.

APPENDIX 3: PROJECT SPECIFIC REQUIREMENTS

Specific requirements for different types of projects are set out in the table below:

Requirements for Buildings	Project cost			
	< \$1 million	> \$1 million	> \$10 million	> \$20 million
Sustainability Design Assessment (SDA)	Yes	No	No	No
Sustainability Management Plan (SMP)	No	Yes	Yes	Yes
Objectives	Meet General ESD Policy objectives (Appendix 1)			
Applicable ESD tools and assessment levels. Note* Dispensation can be given where the scope of works restricts opportunities for gaining credits in BESS.	BESS minimum score 55%*	BESS minimum score 60%*	BESS minimum score 65% and targeting excellence score 70%*, or Green Star 4 or 5 Design and As-Built certified by the GBCA	BESS minimum score 65% and targeting excellence score 70%*, or Green Star 5 or 6 Design and As-Built certified by the GBCA
	STORM 100%	STORM 100%	STORM 100%	STORM 100%
Requirements for Infrastructure projects	Project cost			
	< \$1 million	> \$1 million	> \$10 million	> \$20 million
Sustainability Design Assessment (SDA)	Yes	No	No	No
Sustainability Management Plan (SMP)	No	Yes	Yes	Yes
Objectives	Meet General ESD Objectives (Appendix 1) where applicable and feasible.			
Applicable ESD tools			Reference Green Star Communities Tool Materials Credits	Infrastructure Sustainability (ISv2) Design and As Built rating tool – Gold rating (certified by ISCA)
Requirements for Building and Infrastructure projects	Project cost			
	< \$1 million	> \$1 million	> \$10 million	> \$20 million
Appoint qualified ESD professional to the design team	Only if required to trial innovative approaches	Yes	Yes	Yes
Appoint Independent Commissioning Agent (ICA)	Only if required to trial innovative approaches	Yes	Yes	Yes

Due to the speciality of some Council assets, and the ongoing development of rating tools, this list may change as standards, including Council's own, need to be developed.

APPENDIX 4: GLOSSARY OF TERMS

Term	Meaning
BESS	An online sustainability assessment tool developed by the Council Alliance for a Sustainable Built Environment (CASBE) to assess building projects at the design stage.
BPEM	Victorian Urban Stormwater Best Practice Environmental Management Guidelines are administered by EPA Victoria
Buildings	Council buildings include administrative offices, town halls, community buildings, libraries, leisure and aquatic centres, depots, residential buildings, sportsground pavilions, child-care, aged care and cultural centres.
CASBE	The independent Council Alliance for a Sustainable Built Environment operates under the auspices of the Municipal Association of Victoria to make a difference to the sustainability of our built environment, through the Victorian planning process
ESD	Environmentally Sustainable Development that is designed, constructed and managed to optimise climate resilience, energy efficiency, integrated water management, indoor environment quality, the circular economy, low carbon transport and urban ecology.
Green Star	An ESD building certification system administered by the Green Building Council of Australia (GBCA). Green Star 4 is Australian Best Practice. Green Star 5 is Australian Excellence.
FSC	The Forest Stewardship Council is an independent global forest certification system to provide a guarantee that forest products come from responsibly managed sources.
ICA	An independent commissioning agent appointed by Council who is a professional engineer or qualified technician with demonstrated knowledge of mechanical, electrical, hydraulic and ESD systems commissioning.
IEQ	A healthy Indoor Environment Quality improves the wellbeing of building occupants through provision of fresh air intake, cross ventilation, selection of materials with low toxicity, thermal comfort, natural daylight and by minimising noise transfer to external areas.
Infrastructure	Council owned and/or managed infrastructure including roads, streetscapes, car parks, drainage and open space assets.
IS tool	The Infrastructure Sustainability tool is a rating scheme developed for a range of infrastructure types including road, utilities, waste and water assets developed by the Infrastructure Sustainability Council of Australia (ISCA). It evaluates sustainability across the planning, design, construction and operation phases of infrastructure programs, projects, networks and assets. Formal certification is only available for projects over \$20 million in value.
IWM and WSUD	Integrated Water Management and Water Sensitive Urban Design are holistic approaches to managing water to protect aquatic environments in an urban setting. Design approaches could include selection of water efficient appliances, integration of raingardens, infiltration, water harvesting and wetlands to manage stormwater.
PEFC	The Programme for Endorsement of Forest Certification is an independent global alliance of national forest certification systems. It is not a standards agency, but focuses on the ethical aspects of forestry management as well as the processing of timber
STORM	The Stormwater Treatment Objective Relative Measure is managed by Melbourne Water and is designed to assess the effectiveness of proposed treatment elements (e.g. rainwater tanks connected to toilets and infiltration systems). A score of 100% will meet the standards set by the CSIRO Urban Stormwater Best Practice Environmental Management Guidelines (BPEM).
SDAPP	Sustainable Design and Assessment in the Planning Process is used to demonstrate the environmental performance of buildings requiring a planning permit.
SDA	A Sustainable Design Assessment is a simple assessment that sets out how the ESD objectives will be addressed to deliver the required level of ESD performance. It can support a planning application.
SMP	A Sustainability Management Plan is a detailed assessment that sets out how the ESD objectives will be addressed to deliver the required level of ESD performance. It supports a planning application. Preparation of an SMP generally requires the engagement of an ESD consultant.