

Sustainable Buildings and Infrastructure Policy

Policy Number:	2007/01	Directorate:	City Liveability
Approval by:	Council	Responsible Officer:	Manager City Futures
Approval Date:	25 May 2026	Version Number:	5
Review Date:	25 May 2031		

1. Purpose

The purpose of this policy is to provide guidance for embedding Environmentally Sustainable Development (ESD) principles into the planning, design, construction, and operation of all Council buildings, civil infrastructure, and open space projects.

This policy aligns with the Knox Climate Response Plan 2021-2031, supporting Council's commitment to achieving net zero emissions by 2030 for Council operations.

These ESD principles provide guidance for achieving more sustainable outcomes, requiring fewer resources over the asset lifecycle while ensuring Council buildings and infrastructure remain liveable, accessible, and resilient to climate impacts.

By embedding ESD in new and existing buildings and infrastructure, Council aims to:

- reduce energy, water and material consumption;
- lower operational costs and carbon emissions;
- protect local waterways and biodiversity; and
- support health, equity, and resilience in the community.

Designing with ESD principles creates the opportunity to:

- Increase ambition and deliver innovative, community-leading outcomes.
- Align with other Council sustainability initiatives.
- Reduce lifecycle costs and ensure affordable operation by using passive design, durable materials, efficient systems and renewable energy - minimising long-term utility and maintenance expenses.
- Incorporate stormwater management consistent with EPA Victoria Best Practice guidance.
- Identify precinct-scale ESD opportunities.
- Embed Biodiversity Sensitive Urban Design considerations.
- Design for climate adaptability and future risks.
- Embed the waste hierarchy and resource recovery principles.
- Integrate equity and inclusion by complementing ESD with Equity Impact Assessments.

2. Context

The Sustainable Buildings and Infrastructure Policy 2026 succeeds the Sustainable Buildings and Infrastructure Policy 2019. The Policy should be referred to when planning for, designing or carrying out works on new and existing Council buildings, infrastructure and open space.

3. Scope

This Policy applies to all new, upgrade or renewal Council Capital Works Projects (over \$150,000) and the maintenance of Council Infrastructure within Operational budgets including:

- 1 Building works
- 2 Civil Infrastructure works
 - Bridges
 - Road Surface
 - Road Sub-structure and Kerb & Channel
 - Drainage
 - Drainage (WSUD)
 - Footpaths
 - Bicycle/Shared Paths
 - Car Parks
- 3 Open space
 - Roadside furniture
 - Street Tree Replacement
 - Playgrounds
 - Passive Open Space
 - Active (Structures) Reserves.

This Policy does not apply to non-Council projects.

4. Council Policy

It is Council policy that all new, upgrades and renewals of Council buildings and infrastructure projects will:

4.1 Identify at the Project Proposal stage, the ESD requirement according to the following criteria:

Categories for the implementation of ESD in new and upgrade projects or renewal programs. (construction cost, excluding GST)	Sustainable Design Assessment (SDA) Checklist	Sustainability Management Plan (SMP)	Green Star Certification & Green Star Certified ESD Engineer
Buildings			
Projects ≤ \$3M	✓		
Projects > \$3M		✓	
Projects ≥ \$20M		✓	✓ 4-Star
Projects ≥ \$50M		✓	✓ 5-Star
Renewal Programs	✓ Apply Program wide SDA checklist	NA	NA
Civil Infrastructure			
Projects ≤ \$1M	✓		
Projects > \$1M		✓	
Renewal Programs	✓ Apply Program wide SDA checklist	NA	NA
Open Space			
Projects ≤ \$1M	✓		
Projects > \$1M		✓	
Renewal Programs	✓ Apply Program wide SDA checklist	NA	NA

4.2 Ensure project briefs have regard to this Policy and any project specific ESD initiatives relevant to the specific project.

4.3 The Project Proposal should target a minimum budget of 3-5% of total project construction cost (excluding GST) for sustainable design and materials.

4.4 Refer to the Guide for Sustainable Buildings and Infrastructure for details on the application of ESD.

- 4.5 Aim for a 10% minimum use of recycled content for civil concrete construction works and specify geopolymer concrete or green star compliant concrete mix.
- 4.6 Design new buildings to be zero carbon in operation through electrification and provision of onsite renewable energy.
- 4.7 Apply integrated water management principles. Refer EPA 1739.1 Urban stormwater management guidance targets.
- 4.8 Consider the role of buildings to provide emergency resilience services.
- 4.9 Seek to enhance biodiversity values.

To ensure alignment with contemporary better practices, the Infrastructure Directorate's Standards Committee shall review civil construction and open space specifications and standards on an ongoing basis.

5. References

The Sustainable Buildings and Infrastructure Policy is supported by the following documents and legislation.

5.1 Council and Health and Wellbeing Plan 2025-2029

Theme 3 - Caring for and enhancing our environment

Strategic objective - Our environment is greener, healthier and sustainable through Council's environmental protection and enhancement, working in collaboration with our community.

- Strategy 3.1 - Our environment is healthy and sustainable by considering environmental factors when planning for and making decisions.
- Strategy 3.2 - Green spaces and waterways are protected, enhanced and enjoyed through planning, promotion and maintenance of our built and natural environment.
- Strategy 3.3 - Minimise waste to landfill through access to a suite of waste services and education.
- Strategy 3.4 - Energy consumption and the use of renewable energy resources are positively impacted through investment in assets, education, planning and advocacy.

Theme 6 - Planning our future city

Strategic objective - Our neighbourhoods, housing and infrastructure meet the needs of our changing community through effective planning, delivery and advocacy.

- Strategy 6.2 - High quality, integrated community services and facilities are available through the planning, design and maintenance of multifunctional places that promote connection and utilisation.
- Strategy 6.3 - Our evolving neighbourhoods are liveable and sustainable through planning and design that responds to population growth and our community's changing needs.

5.2 Relevant Legislation

- The Climate Change Act 2017
- Local Government Act 2020 – Objectives of a Council (Section 3C)
- Environment Protection Act 2017
- The Gender Equality Act 2020

5.3 Charter of Human Rights

- This policy has been assessed against and complies with the charter of Human Rights.

5.4 Related Council Policies and Plans

- Climate Change Response Plan 2021-2031
- Knox Biodiversity Resilience Strategy (2024-2034)
- Knox Open Space Plan 2012-2022
- Knox Greens Streets Policy
- Liveable Streets Plan 2012-2022
- Building Asset Management Plan 2019
- Stormwater Asset Management Plan 2025-2035
- Water Sensitive Urban Design & Storm Water Management Strategy 2010
- Water Sensitive Urban Design Policy and Procedures 2015
- Knox Revegetation Plan 2012
- Native Vegetation Net Gain Policy 2011
- Knox Planning Scheme
- Knox Integrated Transport Plan 2015 - 2025
- Community Facilities Planning Policy 2016
- Knox Procurement Policy
- Reconciliation Action Plan 2023-2025
- Electric Vehicle Charging Infrastructure Policy
- Knox Pavilion Strategy.

5.5 Related State and Local Government References

- EPA 1739.1: Urban stormwater management guidance
- Victorian Planning Provisions (VC154 amendments – Stormwater Management) 2018
- Knox Local Planning Policy – Environmentally Sustainable Development 2017
- Victorian Planning Scheme Clause 15.01 (Built Environment)

5.6 Other useful resources

- Australian Institute of Landscape Architects – Climate Positive Design
- Office of Victorian Government Architect – Good Design + Sustainability

6. Definitions

Term	Definition
Biodiversity Sensitive Urban Design	Biodiversity Sensitive Urban Design (BSUD) is an urban planning and design framework that integrates ecological knowledge into the development process to ensure that cities and urban areas provide net benefits for native species and ecosystems. It aims to embed biodiversity considerations from the earliest stages of planning, ensuring developments support habitat, ecological processes, and everyday human–nature interaction rather than diminishing them.
Capital Works	Capital works refers to the planned investment, renewal, upgrade, expansion, or creation of council owned infrastructure, property, plant, and equipment, funded through a Council’s annual budget. These works are essential for maintaining and improving the physical assets that support

community services and urban functioning.

EPA 1739.1: Urban stormwater management guidance	EPA 1739.1: Urban stormwater management guidance available at https://www.epa.vic.gov.au/about-epa/publications/1739-1 which also introduces volume based stormwater controls.
Economic and Environmentally Sustainable Design (EESD)	Building design that seeks to improve performance, reduce environmental impacts, resource use and waste and create healthy environments for occupants. Also called Sustainable Development or Economic and Environmentally Sustainable Design (EESD) . Environmentally Sustainable Development (ESD) is the term more broadly in use and is therefore used through this Policy.
Emergency resilience services	Public buildings can increasingly function as resilience hubs that support communities, before, during and after emergencies. capabilities and services these buildings can provide include community preparedness & education services, heatwave & -climate response services, safe shelter & emergency relief functions
Equity Impact Assessment	The Gender Equality Act requires all councils to undertake Equity Impact Assessments on new and up-for review policies, programs and services that are community facing and have a direct impact on health and wellbeing. Equity Assessments provide a series of steps and questions that help determine how our decisions may affect people differently. They guide us in making adjustments to ensure that community facilities will benefit people equitably without unintended negative consequences. The Equity Impact Assessment process considers gender, cultural background, age, sexuality, ability and other identity factors that makes us individual.
Integrated Water Management (IWM) Water Sensitive Urban Design (WSUD)	A holistic approach to water management that integrates urban design and planning with social and physical sciences to deliver water services and protect aquatic environments in an urban setting. Also known as Water Sensitive Urban Design (WSUD). A WSUD approach could include the integration of raingardens, infiltration, water harvesting and wetlands in an urban area to manage stormwater.
Infrastructure	In the context of this policy, infrastructure refers to the physical assets and systems that support the delivery of Council services and community wellbeing. This includes roads, pathways, bridges, drainage networks, car parks, public spaces, open spaces, recreational facilities, lighting, and other built or landscaped elements that form the city's civil and public realm infrastructure. It encompasses both hardscape (constructed) and softscape (landscaped or natural) components designed to enhance WSUD, liveability, accessibility, biodiversity, and environmental resilience.
Public space	Areas in the public realm that Council either owns or is responsible for that provide a public use or recreation function, such as parks, reserves, plazas and street spaces.
Guide for Sustainable	A supporting document to this policy outlining specific sustainability

Buildings and Infrastructure	initiatives to be included in each project. They also provide additional details and procedures to accompany the policy.
Sustainable Design Assessment (SDA)	Sustainable Design Assessment (SDA): A simple sustainability assessment for small projects and renewal programs that documents how a project will address sustainability objectives, targets and standards.
Sustainability Management Plan (SMP)	A detailed sustainability assessment for larger projects that documents how a project will address sustainability objectives, targets and standards and how the performance outcomes will be achieved. The SMP must also provide a schedule for implementation, ongoing management, maintenance and monitoring and how the ESD elements and practices can be maintained over time. The SMP must include a stormwater management plan and address biodiversity and other items in the Guide for Sustainable Buildings and Infrastructure

7. Administrative Updates

From time to time, circumstances may change leading to the need for minor administrative changes to this policy. Where an update does not materially alter this policy, such a change may be made administratively. Examples of minor administrative changes include changes to names of Council departments or positions, change to names of Federal or State Government departments or a minor amendment to legislation that does not have material impact. Where any change or update may materially change the intent of this policy, it must be considered by Council.