



Environmentally Sustainable Development (ESD) Strategy

Version 1, 8 July 2024





City of Port Phillip

99a Carlisle Street
St Kilda VIC 3182

Phone: **ASSIST** 03 9209 6777

Email: portphillip.vic.gov.au/contact-us

Website: portphillip.vic.gov.au

Diversity

Receive the latest news from your City and Council portphillip.vic.gov.au/divercity



National Relay Service

If you are deaf or have a hearing or speech impairment, you can phone us through the National Relay Service (NRS):

TTY users, dial 133677, ask for 03 9209 6777

Voice Relay users, phone 1300 555 727,

then ask for 03 9209 6777.

relayservice.gov.au



Please consider
the environment
before printing.

Contents

- Acknowledgement of Country 5
- Introduction 6
 - Purpose..... 6
 - Vision 6
 - Objectives 7
- Background Context..... 8
 - Progress to Date 8
 - Strategic Context 9
- Part A: Council Building Projects..... 14
 - Scope..... 14
 - Key ESD Standards and Targets..... 14
 - Process 20
 - Roles and Responsibilities 20
 - Implementation 22
 - Monitoring, Evaluation and Reporting 24
 - Supporting Actions 26
 - Supporting Resources 26
- Part B: Private Development..... 28
 - Planning Context..... 28
 - Key ESD Planning Standards..... 29
 - Scope..... 32
 - Regulatory Mechanisms..... 32
 - Awareness, Incentives and Demonstration 32
 - Process 32
 - Roles and Responsibilities 32
 - Monitoring and Evaluation..... 34
 - Supporting Actions 35
 - Supporting Resources 36
- Appendices 37
 - A. Supporting Actions – Part A Council Projects 37
 - B. Supporting Actions – Part B Private Developments 40

C. Review and Update Activities..... 44

D. Glossary 44

Acknowledgement of Country

Council respectfully acknowledges the Traditional Owners and Custodians of the Kulin Nation. We acknowledge their legacy and spiritual connection to the land and waterways across the City of Port Phillip and pay our heartfelt respect to their Elders, past, present and future.

Introduction

The City of Port Phillip (Port Phillip) has shown strong and continued leadership in Environmentally Sustainable Development (ESD) in the built environment, first developing a Sustainable Design Strategy in 2006 to establish minimum ESD standards for Council buildings.

Council is responsible for the delivery and management of a range of public buildings such as offices, libraries, public toilets and pavilions, and has integrated a range of ESD measures in new buildings as well as in building extensions, upgrades and renewals. Within the community, Council also influences private development through the application of planning controls and delivery of programs to improve ESD outcomes. As City of Port Phillip is the most densely populated municipality in Victoria, embedding ESD across the municipality has the potential for significant benefit.

In recent years, Council's strategic context has evolved with the development of the Act and Adapt: Sustainable Environment Strategy 2018-2028, a declaration of a Climate Emergency in 2019 and the development of a Climate Emergency Action Plan in 2023. Council recognises the challenges faced in a changing climate and the need for urgent action and stronger collaboration across local governments through the Council Alliance for a Sustainable Built Environment (CASBE).

This document replaces the previous Sustainable Design Strategy dated 2013. This document reflects the current strategic context, acknowledges evolving industry best practice and communicates Council's ambition for improved ESD outcomes in Council projects and across the community. The continued integration of ESD provides significant opportunity for positive environmental, social and financial outcomes, and is supported by the Environmentally Sustainable Development Strategy.

Purpose

The purpose of this document - Environmentally Sustainable Development Strategy - is to provide clear direction for Council's approach to improving ESD outcomes across the City of Port Phillip, and to support strategic objectives relating to built form.

The Environmentally Sustainable Development Strategy details the direction and ESD ambition Council is pursuing throughout the municipality, both in Council projects and in private development, and outlines how Council will achieve these outcomes. It provides a central point of reference for matters relating to ESD in buildings within the municipality, consolidating and expanding upon existing commitments and resources.

Vision

Building developments in City of Port Phillip will contribute to the sustainable future of the City, achieving high levels of Environmentally Sustainable Development (ESD) to create a greener,

cooler, water sensitive and climate resilient urban environment with lower carbon emissions. Council aspires to lead by example by demonstrating ESD excellence, raising awareness and incentivising improved sustainability outcomes in private development.

Objectives

The implementation of this Environmentally Sustainable Development Strategy aims to achieve a range of objectives through the integration of ESD in buildings across Port Phillip. Council will:

- achieve net zero emissions from operational energy use, supported by on-site renewable energy generation and higher levels of energy efficiency
- reduce embodied carbon through dematerialisation and selection of materials with lower lifecycle impacts
- prioritise sustainable and zero emissions transport modes
- minimise operational potable water use, supported by rainwater reuse and higher levels of water efficiency
- reduce the amount of stormwater runoff and improve the quality of stormwater
- protect and enhance existing landscape values, increase vegetation cover, and achieve positive biodiversity outcomes
- improve the resilience of the built environment to climate change hazards, and minimise urban heat impacts
- create healthy and liveable indoor environments for people of all genders, ages, backgrounds and abilities by considering thermal comfort, air quality and daylight access
- support functional resource recovery and enable improved circular economy outcomes.

Background Context

Progress to Date

Council Projects

Since 2015, Council has delivered a range of sustainability outcomes for the City and community including:

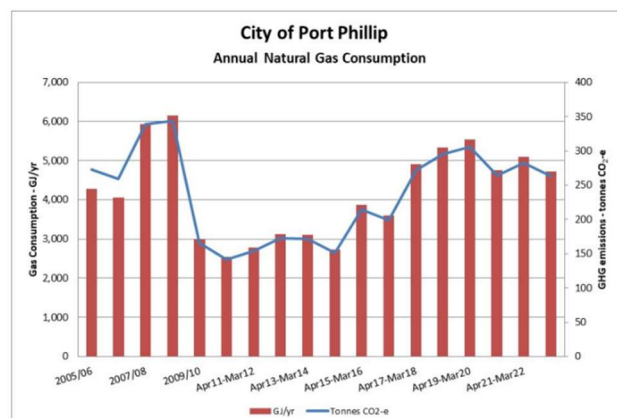
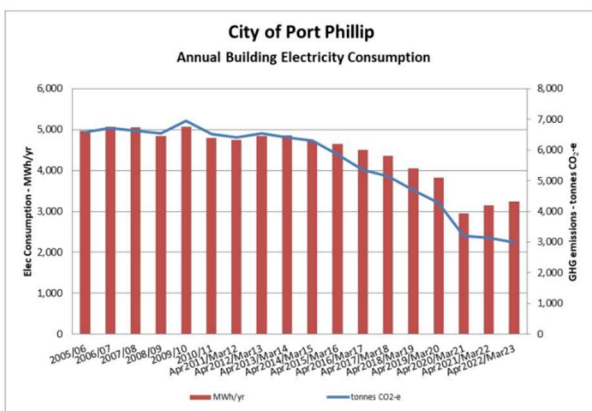
- achieving net zero emissions for Council operations in 2021
- reducing grid-imported electricity at St Kilda Town Hall from 1,600MWh (2010) to 600MWh (2022)
- installing 610 kilowatts of solar panels on Council buildings
- transitioning 11 Council-owned buildings from gas to electricity
- powering all council building operations with 100 per cent renewable energy* through the Melbourne Renewable Energy Project.

Other examples include projects in 13 Council buildings to transition from gas to all-electric, efficiency upgrades for heating, ventilation and cooling systems in seven of Council’s biggest buildings and lighting upgrades in 19 buildings.

**Council buys Large-scale Generation Certificates (LGCs) equal to our Renewable Energy Target (RET) mandatory requirements and 100% of our electricity volume.*

Council implemented the South Melbourne Market Sustainability Strategy, generating 771,672 kilowatt-hours of solar power since December 2019 and avoiding approximately 800 tCO₂-e in carbon emissions.

The Port Phillip EcoCentre redevelopment is pursuing a 6 Star Green Star Design & As Built certification demonstrating 'World Leadership', with measures and commitments including all-electric systems and appliances, inclusion of a 40 kilowatt solar PV system and the use of innovative materials such as Cross Laminated Timber.



Private Development

The introduction of an ESD Policy (Clause 15.01-2L-02) into the Port Phillip Planning Scheme was achieved in 2015 and it set objectives and standards for private development in the municipality. At the same time, the Built Environment Sustainability Scorecard (BESS) was developed by CASBE to support the assessment of planning applications against ESD planning objectives. From 2015/16 to 2022/23, a total of 820 projects have used the BESS tool, resulting in the assessment of nearly 5,000 dwellings and over 300,000m² of non-residential building area.

In addition to those applications which use the BESS tool, some Port Phillip planning applications (e.g. single dwelling extensions) address Water Sensitive Urban Design (WSUD) objectives without the use of BESS. Additionally, some developments specifically in the Fishermans Bend area pursue Green Star certification as required by the Planning Scheme. Therefore, the number of private developments addressing ESD is even greater than the above figure.

As demonstrated by BESS data*, a range of positive outcomes have been committed to in private development over the years such as:

- solar PV systems with a combined capacity of 3.55 MW
- rainwater tanks with a combined capacity of 6.54 ML
- residential greenhouse gas emissions reductions generally greater than 55 per cent
- potable water reductions generally greater than 30 per cent
- residential thermal performance outcomes regularly above National Construction Code minimum energy efficiency requirements, with one third of Class 1 (e.g. townhouses) and two thirds of Class 2 (i.e. apartments) buildings achieving an average NatHERS star rating of 6.5 or greater.

**BESS data is only for the planning applications that have been submitted in recent years, they exclude developments in the Fishermans Bend area and all other existing community consumptions.*

Strategic Context

City of Port Phillip has benefited from strong strategic direction relating to sustainability and the built environment for many years. Several key strategic documents and projects have particular relevance to, and influence on, ESD outcomes in buildings.

Council Plan 2021-2031

With a Community Vision of “*Proudly Port Phillip: a liveable and vibrant City that enhances the wellbeing of our community*”, the Council Plan provides overarching long-term direction for the City and guides Council’s action.

The Vision is supported by five Strategic Directions, one of which is “*Sustainable Port Phillip: A City that has a sustainable future, where our environmentally aware and active community benefits from living in a bayside city that is greener, cooler, cleaner and climate resilient.*”

The role of the built environment is integral in achieving this sustainable future, with the Council Plan noting that investment in Council buildings, infrastructure and transport assets is required to address the long-term challenge of climate change and the environment.

Act and Adapt: Sustainable Environment Strategy 2023-2028

First developed in 2018 and refreshed in 2023, Act and Adapt outlines the long-term direction and commitments to environmental sustainability for the organisation and the community. The Strategy establishes a pathway to transition Port Phillip into a greener, cooler, more liveable city with lower carbon emissions; a water sensitive city adapting and resilient to climate change and with a sustained reduction in waste. Priority areas of the Strategy are:

1. A water sensitive city
2. A greener, cooler and more liveable city
3. A city with lower greenhouse gas emissions
4. A city that is adapting and resilient to the impacts of climate change
5. A sustained reduction in waste.

The current strategy details 45 initiatives for Council and the community to reduce Port Phillip’s collective environmental impact and become more resilient to climate change. This strategy will help in achieving the initiatives listed below and improving ESD outcomes.

Table 1: Act and Adapt Initiatives Relevant to ESD Outcomes

Initiative	What’s Involved
2. Planning and development	<ul style="list-style-type: none"> • Define onsite stormwater detention requirements for new developments based on the work undertaken in 2021/22, including clear technical guidance and assessment criteria for development applications.
10. Urban Forest Strategy	<ul style="list-style-type: none"> • Implement permeability initiatives such as de-paving, increasing green space and building green infrastructure.
14. Vegetation and canopy cover on private property	<ul style="list-style-type: none"> • Use technical guidance to influence and advocate for regulatory interventions to protect vegetation and increase canopy cover on private property, including green roofs, walls and facades.
16. Emissions, energy use and electrification in Council buildings and asset	<ul style="list-style-type: none"> • Undertake an environmental performance audit and reduce energy use in key Council buildings by investing in renewable energy, energy efficiency and water efficiency initiatives and changing our behaviour in a targeted way. • Progressively electrify existing Council buildings where feasible. • Build new assets with no gas connections (with minimal exceptions where needed for commercial cooking).

	<ul style="list-style-type: none"> • Introduce minimum sustainability performance standards for key asset classes, such as drains, footpaths, buildings and open space. • Measure and reduce embodied carbon in our buildings and assets.
17. South Melbourne Market Sustainability Strategy	<ul style="list-style-type: none"> • Implement the South Melbourne Market Sustainability Strategy, focusing on reducing waste, transitioning towards zero-carbon operations and reducing water use and impact on waterways.
18. Green leases and tenant engagement	Enhance green lease provisions and tenant engagement to drive and report on emissions reduction and improved waste management, focusing on large commercial leaseholders.
23. Community emissions reductions	<ul style="list-style-type: none"> • Provide support to the community to enhance transition from the use of fossil fuels such as gas.
25. Environmental upgrade agreements	<ul style="list-style-type: none"> • Work with partners to drive the uptake of environmental upgrade agreements for commercial and residential buildings – legislation pending.
26. Sustainable solutions for apartment buildings and low-income and rental households	<ul style="list-style-type: none"> • Seek partnerships to drive sustainable solutions for apartment buildings, including supporting owners corporations to undertake sustainability retrofits and giving residents access to renewable electricity and energy-sharing platforms. • Advocate to the Victorian and Australian Governments for funding and support mechanisms that support residents on low incomes and rental households to invest in solar and sustainability retrofits through alternative financing arrangements.
27. Environmentally sustainable design (ESD) in planning and development	<ul style="list-style-type: none"> • Encourage and enforce sustainable, climate-resilient buildings by applying ESD planning policy guidelines and providing clear, accessible information to the community. • Advocate to developers to achieve climate-positive buildings, properties and precincts, which are fossil fuel free, highly efficient, powered by renewables and built with lower upfront emissions. • Update our Sustainable Design Strategy to highlight the minimum standards for new buildings and tenants in rented buildings. • Advocate to the Fishermans Bend Taskforce and Victorian Government for planning policy regulation to support their

	commitment to a certified Green Star community in Fishermans Bend.
30. Electric vehicle uptake	<ul style="list-style-type: none"> Support the uptake of electric vehicles in the community by investigating, trialling and facilitating the installation of public charging stations and private charging infrastructure and removing barriers to charging infrastructure in new developments and existing buildings.

Climate Emergency Action Plan (2023-28)

In 2019, Council declared a Climate Emergency in recognition of the challenges faced in a changing climate and the need for urgent action. The Climate Emergency Action Plan outlines how the City of Port Phillip will respond and how Council will collaborate with community to cut emissions and prepare for the future. The Action Plan focuses on five priorities:

1. Enhancing community resilience
2. Minimising greenhouse gas emissions
3. Enabling more sustainable transport options
4. Creating resilient and liveable public spaces
5. Planning for buildings and places

The plan brings together actions from many Council strategies, including Act and Adapt: Sustainable Environment Strategy 2023-28, and builds on existing commitments. Delivering a high level of ESD outcomes in Port Phillip’s built environment will support Council’s Climate Emergency response.

Fishermans Bend Water Sensitive City Strategy (2022)

Located to the south-west of Melbourne's CBD and covering an area of approximately 491 hectares, Fishermans Bend is Australia’s largest urban renewal area. To ensure development addresses the current and projected impacts of climate change, the Water Sensitive City Strategy was developed to deliver a vision of “a water sensitive, climate resilient, biodiverse and liveable Fishermans Bend”.

The delivery of this vision will occur through a range of interventions at various spatial scales across the public and private realm, supported by innovative planning provisions related to rainwater harvesting and stormwater treatment.

Elevating ESD Targets Project

Led by CASBE, the Elevating ESD Targets Project aims to build on the existing local ESD Policies held by numerous councils across Victoria. The project developed revised objectives and standards to update ESD requirements for new developments, informing a collaborative Planning Scheme Amendment.

The proposed updated ESD requirements will benefit health and liveability by delivering healthier indoor environments, greener and cooler outdoor environments where natural elements are preserved and enhanced and lower operating costs for tenants and owners. Key standards and targets of this strategy align with standards in the Elevating ESD Targets Planning Scheme Amendment.

The research underpinning the elevated ESD requirements involved a technical feasibility and viability analyses, a cost benefit analysis (CBA) and a peer and legal review of the revised ESD policy objectives and standards. The CBA shows that under the default 7 per cent discount rate, the total net present value of applying the Amendment to 20 years' worth of construction amounts to \$6.89 billion dollars across Victoria; or a benefit cost ratio (BCR) of 1.52, which means that \$1 spent on Amendment upgrades produces \$1.52 worth of benefits.

Council endorsed the outcomes of the Elevating ESD Targets Project on 15 June 2022, with the Planning Scheme Amendment lodged by 24 local councils on 21 July 2022. The Amendment is currently awaiting authorisation by the Planning Minister.

South East Councils Climate Change Alliance (SECCCA)

Through SECCCA, Port Phillip participates in collaborative projects with eight other local councils, to meet ambitious emissions reduction targets. One objective of SECCCA member councils is to achieve net zero council corporate emissions and lead action to achieve net zero community emissions. Work relevant to improving ESD in Council buildings is the development of Green Tenancy Guidelines for facilities rented out by Port Phillip.

Gender Impact Assessment

The Gender Impact Assessment for this strategy commits to incorporation of a people lens to the implementation of Council projects. This is to be informed by undertaking a literature review of how ESD and gender intersect. Opportunities for ongoing monitoring of the resulting interventions will also be built into this strategy.

The integration of ESD in built form is driven and supported by the strategic documents and projects above, as well as a suite of other policies and plans such as the Asset Management Policy (2021) and Building Portfolio Asset Management Plan (2023). The review and update processes for all strategic documents will consider opportunities to further increase Council's sustainability and climate action ambition over time and further elevate ESD in built form.

Part A: Council Building Projects

Scope

The Environmentally Sustainable Development Strategy applies to all Council building projects and works* including:

Category 1 – New and Additions (Major / Complex Projects) >1000sqm GFA	Category 2 – New and Additions (Small-Moderate / Standard Projects) 100-1000sqm GFA
Category 3 – Upgrade and Renewal (Major / Complex Projects) >70% GFA	Category 4 – Upgrade and Renewal (Small-Moderate / Standard Projects) <70% GFA

**Where Council owns the land and another party develops, the ESD Strategy is applicable and should form part of the project brief. If a property is tenanted and Council's responsibility is limited to the structural integrity of the building, then the ESD strategy is not applicable and the Green Tenancy Guidelines are applicable. The ESD Strategy is applicable to all buildings where the council maintains operational control.*

Key ESD Standards and Targets

To achieve a high level of ESD outcomes, key standards and targets have been committed to by Council. These standards and targets are priority focuses and will be the minimum level of ESD to be integrated into Council projects.

These align with the objectives and broader City of Port Phillip goals and targets, as well as the standards and targets in the Elevating ESD Targets Planning Scheme Amendment. Through the incorporation of the key targets and standards, Council will demonstrate ESD excellence and lead by example.

The standards and targets are categorised according to project characteristics, ensuring that ESD ambition is appropriate for the diversity of Council building projects.

In addition to the key commitments outlined below, a broader set of minimum ESD standards and targets is detailed in a supporting internal document and will also be applied to Council projects.

Table 2: Key ESD Standards and Targets - New and Additions Projects

ESD Focus	Category 1 - Major / Complex Projects (>1000sqm GFA) & Category 2 - Small-Moderate / Standard Projects (100-1000sqm GFA)
Certification/Rating	<p>BESS 'Excellence' (overall score 70% or greater).</p> <p>Category 1 only: Consider 5 Star Green Star Buildings rating or Passivhaus certification for significant building projects where Council would like to lead by example.</p>
Net Zero Emissions - Electrification	<p>Net zero carbon emissions from all operational energy use through all electric design and no gas connections.</p>
Building Fabric Efficiency	<p>Thermal fabric reduces heating and cooling energy consumption to achieve at least a 10% improvement compared to the reference case (NCC Section J).</p>
On-site Renewable Energy	<p>Provide a solar PV system with a capacity of at least 25W per square metres of the development's site coverage.</p>
Renewable Energy Supply	<p>All residual operational energy is 100 per cent certified renewable energy.</p>
Upfront Embodied Carbon Reduction	<p>Reduce embodied carbon emissions by selecting environmentally sustainable materials such as those containing recycled content, and through dematerialisation strategies. Demonstrate embodied carbon emissions are less than those of a reference building. *</p> <p>Specify all concrete on the site contains at least 25% supplementary cementitious materials (SCMs), to reduce Portland cement content.</p> <p>Specify steel sourced from accredited responsibly produced steel manufacturer.</p> <p>Explore reducing embodied water by selecting appropriate materials such as specification of reclaimed water in concrete mix to reduce embodied water.</p> <p><i>*Reference building to be defined as Business as Usual or as defined by Green Star Buildings 'Upfront Carbon Emissions' Credit. Aim to achieve 10% reduction.</i></p>
EV Charging Infrastructure	<p>Electrical capacity capable of supporting the provision of an appropriate moderate speed, efficient EV charging outlet to 20% of all car parking spaces.</p> <p>Consider opportunities to install EV charging infrastructure complete with charger and signage to a minimum of one car parking space.</p>

	<p>Category 1 only: Install EV charging infrastructure complete with chargers and signage to 5% of all car parking spaces.</p>
Water Efficiency	<p>Reduce potable water use on site by at least 30% in interior and irrigation uses, in comparison to an equivalent standard development.</p>
Stormwater Quality	<p>Improve the quality of stormwater discharging from the site by meeting best practice urban stormwater standards:</p> <ul style="list-style-type: none"> • Suspended solids: 80 per cent reduction • Phosphorus: 45 per cent reduction • Nitrogen: 45 per cent reduction • Litter: 70 per cent reduction <p>Category 1 only: Explore opportunities to improve the quality of stormwater discharging from the site to meet the additional targets below:</p> <ul style="list-style-type: none"> • Suspended solids: 85 per cent reduction • Phosphorus: 65 per cent reduction • Nitrogen: 45 per cent reduction • Litter: 90 per cent reduction
Green Infrastructure	<p>All new development should achieve a Green Factor score of 0.55 (0.25 for industrial and warehouse uses), or a minimum of at least 40% of the total site coverage area (20% for Industrial or Warehouse) must comprise green cover, including indigenous plant species (external landscaping).</p> <p>For tree canopy cover targets refer to City of Port Phillip’s Urban Forest Strategy.</p>
Climate Change Risk and Adaptation Assessment	<p>Development of a project-specific Climate Change Risk and Adaptation Assessment* for the building informed by a project-specific site investigation using Council’s climate risk datasets, with 'High' and 'Extreme' risks addressed through specific design responses. This assessment must account for people of all genders, ages, backgrounds and abilities.</p> <p><i>*Assessment to achieve requirements of Green Star Buildings 'Climate Change Resilience' Credit.</i></p>
Urban Heat Mitigation	<p>Provide at least 75% of the development’s total site area with a combination of the following elements to reduce the impact of the urban heat island effect:</p> <ul style="list-style-type: none"> • Green infrastructure • Roof and shading structures with cooling colours and finishes that have a solar reflectance index (SRI) of:

	<ul style="list-style-type: none"> • For roofing with less than 15 degree pitch, a SRI of at least 80 • For roofing with a pitch of greater than 15 degrees, a SRI of at least 40 • Water features or misters • Hardscaping materials with SRI of minimum 40
Low Refrigerant Emissions	All refrigerant emissions are minimised. It is recommended that refrigerants with Global Warming Potential (GWP) of 10 or less are specified.
Construction Waste Minimisation	A minimum of 80% of construction and demolition waste is diverted from landfill.
Inclusive Construction Enabled	During the construction phase require provision of inclusive facilities for workers with supporting workplace policies to enable gender-inclusive construction work sites.
Impacts To Nature Avoided	No building is constructed on a site of ecological significance and light pollution to the night sky is minimised.

Table 3: Key ESD Standards and Targets - Upgrade and Renewal Projects

ESD Focus	Category 3 - Major / Complex Projects (>70% GFA) & Category 4 - Small-Moderate / Standard Projects (<70% GFA)
Certification/Rating	BESS 'Excellence' (overall score 70% or greater) recognising any limitations related to the scope of what is being upgraded / renewed.
Net Zero Emissions - Electrification	If systems and appliances within scope: Net zero carbon emissions from all operational energy use through replacement of gas systems and appliances to all-electric alternatives.
On-site Renewable Energy	If no existing solar PV system, investigate for inclusion within scope: Provide a solar PV system with a capacity of at least 25W per square metres of the development's site coverage.
Renewable Energy Supply	All residual operational energy is 100 per cent certified renewable energy.
Upfront Embodied Carbon Reduction	<p>Reduce embodied carbon emissions by selecting environmentally sustainable materials such as those containing recycled content, and through dematerialisation strategies.</p> <p>Specify all concrete on the site contains at least 25% supplementary cementitious materials (SCMs), to reduce Portland cement content.</p>

	<p>Specify steel sourced from accredited responsibly produced steel manufacturer.</p> <p>Explore reducing embodied water by selecting appropriate materials such as specification of reclaimed water in concrete mix to reduce embodied water.</p> <p>Category 3 only: Demonstrate embodied carbon emissions are less than those of a reference building. *</p> <p><i>*Reference building to be defined as Business as Usual or as defined by Green Star Buildings 'Upfront Carbon Emissions' Credit. Aim to achieve 10% reduction.</i></p>
<p>EV Charging Infrastructure</p>	<p>If retrofit of car parking areas is within scope:</p> <p>Electrical capacity capable of supporting the provision of an appropriate moderate speed, efficient EV charging outlet to 20% of all car parking spaces.</p> <p>Consider opportunities to install EV charging infrastructure complete with charger and signage to a minimum of one car parking space.</p> <p>Category 3 only: Install EV charging infrastructure complete with chargers and signage to 5% of all car parking spaces.</p>
<p>Water Efficiency</p>	<p>Minimum WELS star rating of fixtures, fittings and appliances:</p> <ul style="list-style-type: none"> • Taps: 5 star • Toilets: 4 star • Urinals: 5 star • Showers: 4 star • Dishwashers: 5 star • Washing Machines: 5 star
<p>Stormwater Quality</p>	<p>Investigate opportunities for inclusion of a rainwater tank/s, with capacity optimised to maximise capture from available roof catchment and aligned to predicted reuse demand.</p> <p>Consider opportunities for permeable pavements.</p>
<p>Green Infrastructure</p>	<p>Investigate opportunities for inclusion of building based green infrastructure (e.g. green facades or walls).</p> <p>For tree canopy cover targets refer to City of Port Phillip’s Urban Forest Strategy.</p> <p>Category 3 only: Assess green infrastructure outcomes using the Green Factor Tool.</p>

Climate Change Risk and Adaptation Assessment	Consider relevant climate vulnerability / risk information for project site, and address risks with specific design responses.
Urban Heat Mitigation	<p>If horizontal external surfaces within scope: Provide at least 75% of the development's total site area with a combination of the following elements to reduce the impact of the urban heat island effect:</p> <ul style="list-style-type: none"> • Green infrastructure • Roof and shading structures with cooling colours and finishes that have a solar reflectance index (SRI) of: <ul style="list-style-type: none"> • For roofing with less than 15 degree pitch, a SRI of at least 80 • For roofing with a pitch of greater than 15 degrees, a SRI of at least 40 • Water features or misters • Hardscaping materials with SRI of minimum 40
Low Refrigerant Emissions	All refrigerants emissions are minimised. It is recommended that refrigerants with Global Warming Potential (GWP) of 10 or less are specified.
Construction Waste Minimisation	A minimum of 80% of construction and demolition waste is diverted from landfill.
Inclusive Construction Enabled	During the construction phase require provision of inclusive facilities for workers with supporting workplace policies to enable gender-inclusive construction work sites.
Impacts To Nature Avoided	No building is constructed on a site of ecological significance and light pollution to the night sky is minimised.

Process

The implementation of Environmentally Sustainable Development Strategy and application of minimum ESD standards is supported by a range of internal stakeholders within Council. Through a collective effort, improved ESD outcomes will be achieved across the asset lifecycle of Council buildings.

Roles and Responsibilities

The following table lists key Council stakeholders and a high-level overview of relevant responsibilities.

Table 4: Roles and Responsibilities of Council stakeholders

Stakeholder	Responsibilities
Project Sponsors/Initiators	<ul style="list-style-type: none"> • Include ESD objectives and minimum ESD standards & targets when defining the scope, budget and benefits. • Ensure Principal Environmentally Sustainable Design has opportunity to provide preliminary input on projects. • Ensure climate change vulnerability assessment is completed as part of scoping. • Ensure that ESD commitments continue to be included and delivered throughout the project.
Project Managers	<ul style="list-style-type: none"> • Ensure Principal Environmentally Sustainable Design is consulted on projects, particularly for any proposed scope/budget variations relating to ESD. • Ensure ESD objectives and minimum ESD standards & targets of project scope are consistently reflected in project documentation and communicated to stakeholders. • Undertake handover meeting with Maintenance and Assets once project is complete, ensuring ESD measures relating to building systems and processes are communicated and maintenance is in place to ensure they continue to operate as intended. • If applicable, undertake handover meeting with Parks once project is complete, ensuring vegetation maintenance requirements and schedules, including trees, shrubs, grasses, ground covers, turf, green roofs or green walls and are communicated and adequately captured within asset management system, and implemented. • Undertake Gender Impact Assessment (GIA) for each project.

	<ul style="list-style-type: none"> • Ensure response to climate change vulnerabilities is responded to as part of project documentation
Asset Managers / Building Maintenance	<ul style="list-style-type: none"> • Share learnings from ESD measures relating to building systems, processes, products and materials during building operation with Principal Environmentally Sustainable Design. • Consider sustainability and climate resilience as one of the criteria in assessing building's asset performance during building audits.
Principal Environmentally Sustainable Design	<ul style="list-style-type: none"> • Serve as the primary contact for ESD queries relating to Council building projects. • Provide ESD advice to inform activities such as the development of project scopes, budgets, business cases and specifications. • Review project documentation such as business cases, concept designs, GIA, and tender documentation. • Contribute to the delivery of Supporting Actions.
Sustainability and Climate Change Team	<ul style="list-style-type: none"> • Where relevant, provide ESD advice additional to that provided by Principal Environmentally Sustainable Design • Assessment of stormwater modelling for large development (i.e. MUSIC calculations). • Where relevant provide advice on climate change hazards to consider at site. • Provide assessment against sustainability standards where relevant.
City Design	<ul style="list-style-type: none"> • Where relevant review and provide input into project briefs. • Where relevant provide advice on accessibility, materiality, character, adaptability, legibility & permeability and context. • Review project documentation such as business cases and concept designs.
Heritage	<ul style="list-style-type: none"> • Review and provide advice where heritage buildings or values will be impacted. • Provide input into briefs or at project inception.
Urban Forest and Parks teams	<ul style="list-style-type: none"> • Where relevant provide advice on trees, green roofs and walls. • Provide tree and vegetation advice to inform activities such as the development of project scopes, budgets, business cases and specifications.

	<ul style="list-style-type: none"> • Review project documentation such as concept designs.
--	---

Implementation

Capital Works Projects

The implementation of the Environmentally Sustainable Development Strategy will align with Council’s existing processes. Council has a defined process for capital works projects called the Project Framework. The Framework provides guidance, primarily for Project Sponsors/Initiators and Project Managers, for the delivery of a project from initiation to post-implementation.

The successful integration of ESD measures within Council projects requires the consideration of ESD at various points in the project lifecycle. Key integration points and considerations mapped to relevant Stages of the Project Framework are detailed below.

The following integration points and considerations will be supported by continual process improvements within the organisation, such as further alignment of Project Framework Checklists with ESD requirements.

Table 5: Project Framework Stages and ESD Integration Points & Considerations

Project Framework Stage	ESD Integration Points & Considerations
1. Project Candidate	<p>Contact Sustainability and Climate Change Team for preliminary ESD input, to learn from previous ‘like projects’ and consider opportunities for ESD innovation.</p> <p>Consider ESD objectives and Council’s minimum ESD standards & targets (refer to supporting resource) when:</p> <ul style="list-style-type: none"> • defining the scope • defining a provisional budget • defining benefits to be realised.
2. Project Initiation	<p>Ensure Principal Environmentally Sustainable Design, and other relevant staff from the Sustainability and Climate Change team, are identified for consultation as part of stakeholder analysis. Include in Kick-Off meeting.</p> <p>Consider relevant climate vulnerability / risk information for project site.</p> <p>Consider inclusion of Principal Environmentally Sustainable Design in Project Teams/Working Groups of Major/Complex projects.</p> <p>Integrate ESD objectives and minimum ESD standards & targets when:</p>

	<ul style="list-style-type: none"> refining the scope reviewing project cost and funding / creating Cost Plans assessing any future operational cost/savings implications creating Initial Business Case creating project Gender Impact Assessment (GIA).
3. Concept	<p>Contact Principal Environmentally Sustainable Design when writing the specification for both design and construction.</p> <p>Ensure external consultants engaged for concept and detailed design are aware of Council’s minimum ESD standards & targets, and the ESD requirements within the scope of the project including data collection requirements from key systems.</p> <p>Seek review of early concept design from Principal Environmentally Sustainable Design.</p> <p>Demonstrate how the project’s GIA is informed by this strategy’s GIA.</p> <p>Seek input from Asset Managers in relation to key systems and other building elements which have frequent / or potentially costly maintenance requirements.</p>
4. Planning and Design	<p>Ensure ESD objectives (including climate hazards requiring response) and minimum ESD standards & targets are included in:</p> <ul style="list-style-type: none"> Project Brief Design Documentation Specifications RFT/RFQ Documentation. <p>Consult Principal Environmentally Sustainable Design on the interim business case, and if any changes are sought to the previously agreed ESD measures with the project scope.</p>
5. Delivery	<p>Ensure ESD objectives and minimum ESD standards & targets are included in construction documentation.</p> <p>Consult Principal Environmentally Sustainable Design on any proposed scope/budget variations (Project Change Requests) relating to ESD.</p>
6. Close	<p>Ensure ESD measures of the project scope have been realised and evaluated and noted in Closure Report.</p> <p>For major projects and selected smaller projects, undertake a Lessons Learnt Workshop to ensure all lessons are captured and published, with learnings relating to ESD communicated to Principal Environmentally Sustainable Design.</p>

	Undertake a handover meeting with Maintenance and Assets, ensuring ESD measures relating to building systems and processes are communicated. A project-specific Building Users Guide should be developed to support ongoing management of ESD systems and processes.
7. Post-Implementation	Use the benefits/outcomes section of the Business Case as a reference for project reflections on ESD benefits realisation during building operation.

Maintenance Works

Although maintenance works are not delivered using the Project Framework, ESD outcomes can still be achieved during these works.

Table 6: Maintenance Activities and ESD Considerations

Activity	ESD Considerations
Maintenance works	<p>Maximise opportunities for the selection of products, materials or other building components with improved sustainability outcomes, such as lower environmental impact or reduced resource use. Guidance is provided in the supporting ESD Standards Matrix document, detailing relevant opportunities.</p> <p>Ensure climate resilience of building can be improved through the works being undertaken.</p>
Learnings	Share ESD learnings from reactive building maintenance, or gardens/parks/green roof maintenance with Principal Environmentally Sustainable Design. Use these learnings to inform project planning for new projects.

Given the majority of Council works are on existing assets, the potential role of Asset Management Plans in driving ESD outcomes will be considered as those plans are reviewed.

Monitoring, Evaluation and Reporting

Ongoing monitoring and evaluation is key to understanding success in applying the minimum ESD standards and targets and progress to achieving Council's ESD objectives. The following table details key indicators which will support evaluation of implementation of the Environmentally Sustainable Development Strategy and progress towards the ESD objectives. The responsibility and reporting frequency for each indicator is also noted.

Table 7: Key Indicators for Council Projects

Ref	Indicator	Responsibility	Frequency
	Indicators currently being tracked for all council assets		
CM1	Total annual energy use (kWh) from buildings	Sustainability and Climate Change Officer	Quarterly
CM2	Total capacity (kW) of solar PV systems installed in Council projects	Sustainability and Climate Change Officer	Annual
CM3	Total actual annual gross greenhouse gas emissions (CO ₂ -e) from buildings	Sustainability and Climate Change Officer	Quarterly
CM4	Total annual potable water use (kL) from buildings	Sustainability and Climate Change Officer	Quarterly
	New Indicators to be tracked across all the council projects	(System to collect this data to be built in 24/25, reporting to commence from 25/26)	
CM5	Proportion (%) of relevant Council projects referred to the Principal Environmentally Sustainable Design	Project Portfolio manager – Property and Assets	Annual
CM6	Proportion (%) of Council projects achieving all key ESD standards and targets	Project Manager to report at project closure for each project Principal ESD to compile all projects data annually	Annual
	New Indicators to be tracked for each project	(System to collect this data to be built in 24/25, reporting to commence from 25/26)	
CM7	Predicted energy savings (absolute and %) compared to reference building To be reported for each project	Project Manager to report at project closure (based on the NCC Section J report received from the consultant)	Project Completion
CM8	Green Factor Tool score, or predicted total green cover as	Project Manager to report at project closure (based on the consultant report)	Project Completion

	a proportion (%) of the total site area (sqm) To be reported for each project	Principal ESD to compile all projects data annually	
CM9	Embodied carbon (CO2-e) reduction (%) compared to a reference building To be reported for each project	Project Manager to report at project closure (based on the consultant report) Principal ESD to compile all projects data annually	Project Completion
CM10	Total capacity (kL) of rainwater tanks installed in Council projects	Project Manager to report at project closure for each project Principal ESD to compile all projects data annually	Project Completion

Note that all indicators to be reported at Project Completion will be known at the design stage.

Supporting Actions

The table in Appendix A details various actions which will support the integration of ESD within Council projects. Actions reflect opportunities identified during the development of Environmentally Sustainable Development Strategy and range from information provision to staff education and process and systems improvements.

Supporting Resources

The following table details relevant resources to support the integration of ESD in Council projects.

Table 8: List of Supporting Resources for Council Projects

Resource Name	Description
ESD Standards Matrix	Matrix detailing minimum ESD standards and targets applicable for different Council building project types. The Matrix should inform activities such as development of project scope, specifications and design documentation.
Green Star Buildings Submission Guidelines	The Submission Guidelines detail the categories and credits for a Green Star Buildings rating. This should be used to support projects pursuing a Green Star rating, or any projects including an ESD measure aligned to Green Star credit criteria.

Built Environment Sustainability Scorecard (BESS) Tool Notes	Online resource detailing Credit criteria/requirements for the BESS Tool. This can be used to better understand different ESD measures.
CASBE SDAPP Fact sheets	Online resource of factsheets covering the key ESD categories to consider during the building design and construction phases.
Sustainability Guide for Council Building Tenants	Details responsibilities and actions tenants can take to implement environmentally sustainable practices.
Building-specific Building Users Guides	Contain guidance to support the ongoing management of ESD systems and processes during building operation.
Green Factor Tool	Online rating tool to quantify the benefits of vegetation to a development's performance in relation to urban ecology.
Gender Impact Assessment for the ESD Strategy	Outlines the people lens to be applied to the design approach for council buildings to be delivered through project-specific GIAs.
Elevating ESD Targets documentation including the CBA Report	Documentation detailing the ESD standards that are proposed for the current planning scheme amendment process, including background cost-benefit analysis report.

Part B: Private Development

Planning Context

ESD in the Planning Process

The planning process plays a critical role in influencing the design of built form across the municipality. Consideration of ESD and WSUD during the planning process helps inform key decisions about building design for all types of development, and supports a range of environmental, social and financial benefits.

The adoption of local ESD planning policies has been pursued by numerous local governments in lieu of a comprehensive state-wide approach to ESD in the planning process. In 2015, Port Phillip had their first local ESD planning policies gazetted. Previously Clause 22.13 in the Port Phillip Planning Scheme, these ESD provisions are currently situated under Clause 15.01-2L-02 Environmentally sustainable development with the policy objective:

- To achieve best practice in environmentally sustainable development from the design stage through to construction and operation.

Strategies of the policy include:

- facilitate development that minimises environmental impacts
- encourage environmentally sustainable development that:
 - is consistent with the type and scale of the development
 - responds to site opportunities and constraints
- adopts best practice through a combination of methods, processes and locally available technology that demonstrably minimise environmental impacts.

Further strategies are detailed across the following themes:

- Energy Performance
- Integrated Water Management
- Indoor Environment Quality
- Transport
- Waste Management
- Urban Ecology

To secure a high level of sustainable design outcomes which support Council's ESD planning provisions, Port Phillip implements Sustainable Design Assessment in the Planning Process (SDAPP). The SDAPP program details 10 Key Sustainable Building Categories and outlines ESD information requirements for planning applications at different development scales.

Through the Council Alliance for a Sustainable Built Environment (CASBE), an association of Victorian councils committed to the creation of a sustainable built environment, Port Phillip is currently part of a council collaboration to increase the level of ESD ambition in the Planning Scheme. The collaboration - the Elevating ESD Targets Planning Scheme Amendment - provides

an evolved local planning policy aligned to current best practice and emerging sustainability and climate change issues. At the time of this strategy adoption the Amendment was seeking authorisation from the Planning Minister.

Note: The outcome of the Elevating ESD Targets Planning Scheme Amendment will inform final edits to content of this draft document (e.g. any standards which become Council's best practice standards without statutory weight)

Stormwater and Flood Management Controls

The Port Phillip Planning Scheme includes Clause 19.03-3L Stormwater management (water sensitive urban design) and Clause 53.18 Stormwater management in urban development, which seek to minimise the impact of development on Port Phillip's waterways and water resources.

Additionally, areas within the City of Port Phillip prone to overland flooding are identified in Clause 44.05 Special Building Overlay. The purpose is to minimise the effects of overland flows and flooding on new buildings and ensure that new developments do not adversely affect existing properties. Combined, these clauses provide an integrated approach to stormwater and flood management through the Planning Scheme.

ESD and Heritage Controls

A large proportion of the City of Port Phillip is covered by a level of heritage control. Heritage controls such as a Heritage Overlay aim to conserve or enhance heritage and be sympathetic and respectful to heritage places.

While heritage controls place certain restrictions on development, these do not necessarily preclude upgrades to the building to improve its ESD performance. Systems such as air conditioning, solar panels and water tanks can be added to existing properties, subject to requirements which aim to minimise visible impact to the surrounds. This approach ensures multiple objectives can be achieved.

Key ESD Planning Standards

The Elevating ESD Targets Planning Scheme Amendment contains 38 Standards across eight Themes. While the application of all Standards is important to holistically address ESD in private development, several Standards are considered particularly impactful and are key priorities for Port Phillip.

Key Standards from the Elevating ESD Targets Planning Scheme Amendment for private development – aligned to the focuses of key standards for Council buildings – will be publicised to highlight the evolution of Council's best practice expectations and encourage planning applicants to voluntarily adopt the higher standards.

Table 9: Proposed Elevating ESD Targets Planning Scheme Amendment – Summary of Standards

Category	Summary of Standards from Proposed Elevating ESD Targets Planning Scheme Amendment
Operational Energy	<p>Ensure new development achieves net zero carbon emissions from operational energy use, support the inclusion of renewable energy generation, ensure higher levels of energy efficiency and carbon positive innovation. Standards cover:</p> <ul style="list-style-type: none"> • Minimum 7 Star NatHERS rating. • Minimum requirements for onsite renewable energy generation. • Avoiding consumption of natural gas or other onsite fossil fuels. • Designing to minimise energy use and prioritising passive design to maximise thermal comfort. • Purchasing 100% renewable for all residual operational energy.
Embodied Carbon	<p>Encourage development that considers the lifecycle impacts of resource use and supports lower carbon emissions. Standards cover:</p> <ul style="list-style-type: none"> • Reducing impact of embodied carbon emissions in materials, through use of recycled content materials and those with lower impact. • Considering durability, recyclability and disassembly potential during material selection. • Demonstrating the potential for future adaptation and/or alternate uses in the design of buildings.
Sustainable Transport	<p>Ensure development supports sustainable and equitable transport patterns and encourage zero emissions transport. Standards cover:</p> <ul style="list-style-type: none"> • Minimum requirements for bicycle parking and end-of-trip facilities. • Minimum requirements to support the use of electric vehicles.
Integrated Water Management (IWM)	<p>Support development that minimises total potable water use, reduces the amount of stormwater runoff, improves quality of stormwater and considers future climate conditions. Standards cover:</p> <ul style="list-style-type: none"> • Achieving a potable water reduction target (at least 30%).

	<ul style="list-style-type: none"> • Efficiently using water resources including through collection and reuse of rainwater and provision of water efficient fixtures, fittings and equipment. • Reducing the volume and flow of stormwater discharge. • Improving the quality of stormwater runoff.
Green Infrastructure	<p>Deliver development that protects existing landscape values, increases vegetation, connects biodiversity corridors and increases amenity. Standards cover:</p> <ul style="list-style-type: none"> • Achieving a minimum site coverage for vegetation (at least 40% or Green Factor score of 0.55; 20% or 0.25 for Industrial/Warehouse). • Supporting complex and biodiverse habitat and incorporating understory and canopy planting. • Provision of indigenous, native and/or climate change resilient vegetation. • Retaining existing mature canopy trees or significant areas of other green cover.
Climate Resilience	<p>Improve the resilience of the built environment to climate change related hazards and natural disasters. Standards cover:</p> <ul style="list-style-type: none"> • Achieving a minimum site coverage for urban heat reducing surfaces (at least 75%). • Considering future climate impacts and addressing through design responses. • Designing pedestrian pathways with thermal comfort in mind.
Indoor Environment Quality (IEQ)	<p>Support development that achieves safe and health indoor environment addressing indoor temperature, air quality and daylight access. Standards cover:</p> <ul style="list-style-type: none"> • Designing to provide appropriate levels of thermal comfort and facilitating natural ventilation. • Utilising natural light and achieving minimum daylight levels for habitable rooms. • Selecting materials which are low toxicity.
Waste and Resource Recovery	<p>Facilitate development that supports functional waste management and resource recovery. Standards cover:</p> <ul style="list-style-type: none"> • Provision of adequate waste and recycling infrastructure.

Scope

ESD can be integrated in private development through two approaches – control and influence. Council has the ability to control some outcomes of private development through the application of planning provisions. Council can also influence outcomes by supporting, enabling and encouraging private development to pursue ESD measures.

The Environmentally Sustainable Development Strategy applies to private development including:

- development controlled by regulatory mechanisms (e.g. planning provisions / statutory controls)
- built form change influenced by awareness, incentives and demonstration.

Regulatory Mechanisms

Achieving built form with positive ESD outcomes can be achieved through the application of provisions of the planning scheme. Port Phillip's ability to control some outcomes is primarily driven by Clause 15.01-2L-02 Environmentally sustainable development and Clause 19.03-3L Stormwater management (water sensitive urban design), and in the future through the Elevating ESD Targets Planning Scheme Amendment.

Some areas within the municipality such as the Fishermans Bend Urban Renewal Area have additional ESD requirements, such as those under Clause 11.03-6L-04 and in Schedule 1 to the Capital City Zone. Strategic planning work also presents the opportunity to embed ESD measures and to further ESD outcomes in private development.

Awareness, Incentives and Demonstration

Some development – for example, single dwellings and residential extensions – are only subject to WSUD planning provisions. In lieu of more extensive regulatory control for this subset of built form in the community, other means are required to influence ESD outcomes.

Awareness relates to the communication of ESD and its benefits with the aim of educating the variety of stakeholders from residents to built environment professionals. Incentives can be explored to encourage improved ESD outcomes. An objective of Council's goal of delivering ESD excellence in its buildings is the ability to demonstrate to the community what is possible and to lead by example.

These complement regulatory mechanisms and provide a suite of approaches to facilitate and encourage the integration of ESD in private buildings. These are primarily driven by the Supporting Actions of this document.

Process

Roles and Responsibilities

The following table lists key stakeholders and an overview of relevant responsibilities.

Table 10: Roles and Responsibilities of stakeholders

Stakeholder	Responsibilities
Sustainable Design Planner	<ul style="list-style-type: none"> • Serve as the primary contact for ESD queries relating to planning applications. • Support planning applicants to integrate ESD in proposed developments. • Provide ESD advice and support to other planning staff. • Contribute to the delivery of Supporting Actions.
Statutory Planners	<ul style="list-style-type: none"> • Ensure ESD planning provisions are considered during the review of planning applications. • Seek ESD advice from the Sustainable Design Planner when needed.
Strategic Planners	<ul style="list-style-type: none"> • Integrate ESD in strategic planning work.
City Design	<ul style="list-style-type: none"> • Where relevant review and provide input into planning applications requirements. • Where relevant provide advice on accessibility, materiality, character, adaptability, legibility & permeability and context.
Urban Forest and Parks teams	<ul style="list-style-type: none"> • Where relevant provide advice on trees, green roofs and walls. • Review planning application documents.
Sustainability and Climate Change team	<ul style="list-style-type: none"> • Explore potential for Council's community programs and events relating to homes and businesses (e.g. those run by Sustainability and Climate Change team / from the Act & Adapt strategy) to facilitate improved ESD outcomes in private development. • Contribute to the delivery of Supporting Actions.
Planning Applicants (including the development industry)	<ul style="list-style-type: none"> • Ensure Planning Applications address Council's ESD application requirements. • Consider opportunities for the integration of ESD measures within proposed developments as early in the planning process as possible. • Seek ESD advice from Council's Sustainable Design Planner.

Monitoring and Evaluation

Ongoing monitoring and evaluation are key to understanding success in applying the ESD planning provisions and progress to achieving ESD objectives of Environmentally Sustainable Development Strategy.

The following table details key indicators and metrics which will support evaluation of implementation of the Environmentally Sustainable Development Strategy and progress towards the ESD objectives. The responsibility and reporting frequency for each indicator is also noted.

Table 11: Key Indicators for Private Development

Ref	Indicator	Responsibility	Frequency
	Indicators currently being tracked		
PM1	Number (#) of applicable planning applications assessed against ESD provisions	Sustainable Design Planner	Annual
PM2	Tracking Built Environment Sustainability Scorecard (BESS) Data: <ul style="list-style-type: none"> Total number (#) of planning applications using BESS Total number (#) of dwellings Total non-residential area (sqm) Average project score (%) Total capacity (MW) of solar PV systems Total capacity (ML) of rainwater tanks Average potable water reduction (%) Average greenhouse gas emissions reduction (%) Average NatHERS star rating for Class 1 and Class 2 dwellings (%) of non-residential projects committing to all-electric commitment. Achieving credit for urban ecology credits. 	Sustainable Design Planner	Annual
	New Indicators to be tracked	(System to collect this data to be built in 24/25, reporting to	

		commence from 25/26)	
PM3	Total number (#) of planning applications using Green Star	Sustainable Design Planner	Annual
PM4	Total capacity (MW) of solar PV systems in planning applications not using the Built Environment Sustainability Scorecard (BESS)	Sustainable Design Planner	Annual
PM5	Total capacity (ML) of rainwater tanks in planning applications not using the Built Environment Sustainability Scorecard (BESS)	Sustainable Design Planner	Annual
PM6	Average potable water reduction (%) in planning applications not using the Built Environment Sustainability Scorecard (BESS)	Sustainable Design Planner	Annual
PM7	Average greenhouse gas emissions reduction (%) in planning applications not using the Built Environment Sustainability Scorecard (BESS)	Sustainable Design Planner	Annual
PM8	Average NatHERS star rating for Class 1 and Class 2 dwellings of planning applications not using the Built Environment Sustainability Scorecard (BESS)	Sustainable Design Planner	Annual
PM9	Proportion (%) of non-residential projects not using the Built Environment Sustainability Scorecard (BESS) committed to being all-electric	Sustainable Design Planner	Annual
PM10	Number of ESD Implementation Reports submitted to Council	Sustainable Design Planner / ESD Compliance Officer	Annual

Supporting Actions

The table in Appendix B details various actions which will support the integration of ESD in private development in Port Phillip. Actions reflect opportunities identified during the development of

Environmentally Sustainable Development Strategy and range from information provision to community programs and strengthening partnerships.

Supporting Resources

The following table details relevant supporting resources.

Table 12: List of Supporting Resources for Private Development

Resource Name	Description
City of Port Phillip website – Sustainable Design	Provides an overview of sustainable design as part of the planning process, including application submission requirements.
Sustainable Design Assessment in the Planning Process (SDAPP) Fact Sheets	Hosted on the Sustainable Design section of Council's website, the SDAPP Fact Sheets provide explanations and guidance on addressing various sustainable building categories as well as detailing Council's best practice standards for private development.
Fishermans Bend Green Star Buildings Summary Fact Sheet	Information resource detailing Fishermans Bend Green Star Requirements and their alignment to planning scheme objectives.
ESD Guidelines for Single Dwellings	Guidelines to support planning applicants for improved ESD outcomes in single dwellings.
Built Environment Sustainability Scorecard (BESS) Tool Notes	Online resource detailing Credit criteria/requirements for the BESS Tool, to support planning applications.
Elevating ESD Targets Planning Scheme Amendment	Joint Planning Scheme amendment (currently awaiting authorisation by the Planning Minister) with the aim of updating local ESD planning provisions to align with current best practice and emerging sustainability and climate change issues.
Council Alliance for a Sustainable Built Environment (CASBE) – Elevating ESD Cost Benefit Analysis (CBA) Report	Presents the results of the cost-benefit analysis of the proposed standards for the Elevating ESD Planning Scheme Amendment.

Appendices

A. Supporting Actions – Part A Council Projects

The following table details various actions which will support the integration of ESD within Council projects. Actions reflect opportunities identified during the development of Environmentally Sustainable Development Strategy and range from information provision to staff education and process and systems improvements.

Table 13: List of Supporting Actions for Council Projects

Ref	Category	Action Description	Timeframe	Resourcing
CA1	Project Management	Refine internal Project Delivery / Project Framework checklists to support ESD outcomes (e.g. a specific innovation workshop for major projects; review of site-specific climate risk information; more specific prompts seeking ESD input; incorporation of minimum ESD standards in brief and RFQ/RFT documentation)	Implementation of this strategy 2024-25	Within existing resourcing - approved funding
CA2	Project Management	Refine internal Project Delivery / Project Framework checklists to support improved evaluation of ESD outcomes with reference to the minimum standards, as part of broader lessons learned. Liaise with EPMD to established standardised benefits.	Implementation of this strategy 2024-25	Within existing resourcing
CA3	Project Management	Develop a process flow detailing how a site/project should respond to relevant climate hazards	On-going	Within existing resourcing - Currently being undertaken
CA4	Informed Decision Making	Integrate climate vulnerability information into Council's GIS system	On-going	Within existing resourcing - Currently being undertaken

CA5	Informed Decision Making	Integrate climate vulnerability information into Council's Asset Management System	On-going	Within existing resourcing - Currently being undertaken
CA6	Informed Decision Making	Undertake an annual review of the supporting minimum ESD standards to ensure alignment with current industry best practice	On-going	Within existing resourcing
CA7	Informed Decision Making	Define benchmarks for each building typology for the level of service delivery, climate resilience and energy intensity to be targeted by Council across the Buildings Asset Portfolio, used to inform an ongoing program of Capital Works upgrades	Implementation of this strategy 2024-26	Within existing resourcing - approved funding
CA8	Capacity	Continued periodic delivery of an Environmentally Sustainable Development (ESD) Information Session and Climate Risk training to relevant Council teams (e.g. Assets)	On-going	Within existing resourcing - Currently being undertaken
CA9	Capacity	Develop and deliver a program of site visits to completed Council projects for staff involved throughout project lifecycle and others as relevant. As part of the lessons learnt after project completion.	As part of lessons learnt - explore commencing these in 2025-26	Project to be scoped in 24/25. Likely to be able to be delivered within existing funding/ resources.
CA10	Capacity	Review and update the Sustainability Guide for Council Building Tenants to ensure content aligns with current context and best practice.	To be reviewed and updated with the review of this strategy.	Project to be scoped in 24/25. Likely to be able to be delivered within existing funding/ resources.
CA11	Maintenance	Develop internal guidance for maintenance works which identifies the top ten opportunities to achieve improved sustainability	Implementation of this strategy 2024-26	Within existing resourcing - approved funding

		outcomes for 'like-for-like' replacements of building systems		
CA12	Innovation	Develop an innovation process / framework linked to the Project Framework, to ensure opportunities for innovation are discussed early and learnings are embedded in future projects (e.g. recycled content materials and products) and scaled up to standard practice if successful	Implementation of this strategy 2024-26	Within existing resourcing - approved funding
CA13	Monitoring and Evaluation	Further define the process for documenting lessons learned / project outcomes as part of project closure, including referring to expected benefits/outcomes documented in the Business Case and interventions arising from the project's GIA to evaluate success	Implementation of this strategy 2024-25	Within existing resourcing - approved funding
CA14	Monitoring and Evaluation	Develop a protocol to ensure that suitable buildings are integrated either into Council's Building Management System (BMS) or assigned appropriate sub-metering to enable optimal energy avoidance. To be supported by personnel qualified in building engineering or similar fields.	Dependent on Building Maintenance and Asset Management undertaking BMS review.	Project to be scoped in 24/25 for consideration in 25/26 Council Plan and Budget.
CA15	Monitoring and Evaluation	Commission a literature review and analysis of research into the gender-related impacts of ESD. This will then inform specific people-centred design considerations when we incorporate ESD principles into council building projects.	Implementation of this strategy 2024-25	Within existing resourcing - approved funding

CA16	Monitoring and Evaluation	Develop principles for incorporating witness-testing into the construction process to guarantee as-built outcomes that perform to the project specifications for ESD.	Implementation of this strategy 2024-26	Project to be scoped in 25/26.
------	---------------------------	---	---	--------------------------------

CA – Council Projects Action

On-going actions	Actions to be scoped in next financial year	Actions needing more investigation prior to scoping
------------------	---	---

B. Supporting Actions – Part B Private Developments

The following table details various actions which will support the integration of ESD in private development in Port Phillip. Actions reflect opportunities identified during the development of Environmentally Sustainable Development Strategy and range from information provision to community programs and strengthening partnerships.

Table 14: List of Supporting Actions for Private Development

Ref	Category	Action Description	Timeframe	Resourcing
PA1	Capacity	Continued provision of and updates to internal resources on assessing Water Sensitive Urban Design (WSUD) and Environmentally Sustainable Development (ESD) in planning applications	Ongoing	Within existing resourcing - Currently being undertaken
PA2	Capacity	Undertake a program of sustainability training for relevant staff with focus on Built Environment Sustainability Scorecard (BESS) and Green Star training (e.g. Statutory	Implementation of this strategy 2024-26	Within existing resourcing - approved funding

		Planners; Strategic Planners; Buildings; Project Delivery)		
PA3	Capacity	Deliver an ongoing program of site visits to private developments which demonstrate a high level of ESD ambition/outcomes for planning staff and others as relevant	As part of lessons learnt - explore commencing these in 2025-26	Project to be scoped in 24/25. Likely to be able to be delivered within existing funding/ resources.
PA4	Capacity	Pilot Environmentally Sustainable Design (ESD) Planning Compliance Officer (1.0FTE) fixed term for 2 years to assess and enforce implementation of permit requirements	2-year Trail Proposed to commence in 2024	Pending approval to be delivered in 2024-2027.
PA5	Regulatory	Continue participation in the Council Alliance for a Sustainable Built Environment (CASBE) to collaborate and advocate for improved ESD outcomes through the planning system	On-going	Within existing resourcing - Currently being undertaken
PA6	Regulatory	Integrate sustainability considerations in Strategic Planning projects such as the development of documents (e.g. Housing Strategy) and reviews of planning controls (e.g. heritage controls) to capitalise on the opportunity to align with ESD objectives	Ongoing	Within existing resourcing - Currently being undertaken
PA7	Regulatory	Advocate to the Fishermans Bend Taskforce and Victorian Government for planning policy regulation to support their commitment to a certified Green Star Community in Fishermans Bend	Ongoing	Within existing resourcing - Currently being undertaken
PA8	Awareness	Continued provision of and updates to planning application resources such as the sustainable design (SDAPP) fact sheets and	Ongoing	Within existing resourcing - Currently being undertaken

		planning application ESD report templates		
PA9	Awareness	Explore potential for Council's community programs and events relating to homes and businesses (to facilitate improved ESD outcomes in private development, including for apartment buildings, low-income households and rental households)	Explore integrating in current community programs	Project to be scoped in 25/26
PA10	Awareness	Update web communication to improve links between planning ESD processes and other sustainability programs and clarity of information for planning permit applicants	Implementation of this strategy 2024-26	Within existing resourcing - approved funding
PA11	Awareness	Develop high level internal guidance for statutory planners to use for pre-application meetings, to ensure Council's ESD requirements and expectations are clear to planning applicants as early as possible	Ongoing	Within existing resourcing
PA12	Awareness	Investigate the development of a City of Port Phillip 'Better Buildings Partnership' (e.g. support existing commercial buildings seeking to improve) with potential to extend to other types of development (e.g. sustainable strata by supporting Owner's Corporations)	Implementation of this strategy 2024-26	Within existing resourcing - approved funding
PA13	Incentives	Continued delivery of Council's Design and Development Awards, with sustainability as an assessment criteria in all award categories	Ongoing	Within existing resourcing
PA14	Incentives	Publicise key/priority standards from the Elevating ESD Targets Planning Scheme Amendment to	Implementation of this	Within existing resourcing - approved funding

		highlight the evolution of Council's best practice expectations and request planning applicants to voluntarily adopt the higher standards	strategy 2024-26	and continued participation in CASBE initiatives
PA15	Demonstration	Deliver information/education sessions for the development industry to improve understanding of best practice ESD (e.g. planning consultants; trades), with a focus on the Elevating ESD Targets package and how Council is leading on ESD in Buildings	Implementation of this strategy 2024-26	To be scoped for 25/26 financial year.
PA16	Demonstration	Develop partnerships with exemplar private development to demonstrate ESD excellence to the broader community (e.g. support promotion through Sustainable House Day)	Implementation of this strategy 2024-26 Via Participation in CASBE projects only	Within existing resourcing - approved funding
PA17	Incentives	Explore possibilities of incentives to achieve better ESD outcomes	Explore if offering any incentives is feasible as part of the current planning approval processes	Project to be scoped in 25/26

PA – Private Development Action

C. Review and Update Activities

The following table details review and update activities for this document.

Table 15: Review and Update Activities

Activity	Frequency	Responsibility
Review and update document	At least once every 4 years Consider review if any major state/local policy changes impact the strategy	Principal Environmentally Sustainable Design

D. Glossary

Table 16: Glossary

Term	Definition
Built Environment Sustainability Scorecard (BESS)	A Victorian based tool integrating with local government Environmentally Sustainable Development (ESD) planning policies, maintained by the Council Alliance for a Sustainable Built Environment (CASBE).
Biodiversity	The variety of plant and animal species in an environment, genetic differences within and between species and differences between the ecological systems in which they live.
Circular economy	A circular economy continually seeks to reduce the environmental impacts of production and consumption by retaining the value of resources through reuse, repurposing and recycling.
Climate resilience	The ability to respond to and recover from disturbances related to a changing climate.
Embodied carbon	The carbon emissions associated with manufacturing of materials and construction processes throughout the whole life cycle of a building.
Environmentally Sustainable Development (ESD)	Development that seeks to improve performance, reduce environmental impacts and resource use, and create healthy and liveable environments.

Extension of existing building	Extends the capacity of an existing asset to provide benefits to new users at the same standard as is provided to existing beneficiaries.
Green infrastructure	Green infrastructure includes elements related to vegetation, including both natural and designed greening.
Green Star Buildings	A national voluntary sustainability rating system developed by the Green Building Council of Australia.
Green Factor	A built environment tool which benchmarks and 'scores' building scale approaches to green infrastructure at the planning stage.
Indoor environment quality (IEQ)	The quality of an indoor environment such as a room influenced by factors such as daylight access, air quality and thermal comfort.
Integrated Water Management (IWM)	A planning and management approach which considers all elements of the water cycle including managing and protecting the health of waterways, wastewater management, alternative and potable water supply and stormwater management.
Maintenance	Activities necessary to retain an asset as near as practicable to an appropriate service condition.
New building (Council assets)	A new asset that provides a service that does not currently exist.
Net zero carbon emissions	Net zero emissions involve balancing the carbon emitted into the atmosphere and the carbon removed from it.
Operational energy	Energy used during the operational phase of a building.
Renewal of existing building	Works on an existing asset or replacing an existing asset that returns the service capability of the asset to its original capability.
Sustainable transport	Transport that has low/zero emissions. Includes active transport options such as walking and cycling, using public transport and car share services or driving an electric vehicle.
Upgrade of existing building	Enhances an existing asset to provide a higher level of service or increases the life of the asset beyond its original life.

Urban heat	The higher levels of heat in urban areas compared to non-urban areas, commonly resulting from large amounts of surfaces that absorb heat and re-radiate it at night.
Urban Ecology	The relationships and processes occurring in urban environments with consideration of the interactions between humans and their surrounds including flora and fauna.
Water Sensitive Urban Design (WSUD)	A land planning and engineering design approach that integrates the urban water cycle – including stormwater, groundwater, and wastewater management and water supply – into urban design to minimise environmental degradation and improve aesthetic and recreational appeal

