

SCS-055 Environmentally Sustainable Council Facilities Policy

TRIM Reference: D21/157553 Due for Review: 2023
Responsible Officer: Manager of Environment and Community Safety

Purpose

This policy outlines Surf Coast Shire Council's (Council) commitment to Environmentally Sustainable Design (ESD) and ensuring climate adaptation considerations are incorporated into new facilities, as well as facility upgrades and renewals.

Policy Principles

The following principles underpin this policy:

- The overarching governance principles in the Local Government Act 2020 set an obligation for councils to promote the mitigation of climate change risks and plan for future generations.
- Council has declared a Climate Emergency calling for accelerated action to reduce greenhouse gas emissions within our organisation and the community.
- Council's Climate Emergency Corporate Response Plan 2021-2031, which also constitutes its local government pledge under the Climate Change Act, includes commitments to become a carbon neutral organisation, shift away from fossil fuels including gas, reduce corporate greenhouse gas emissions, offset all residual emissions that are not eliminated and demonstrate leadership on climate action.
- Greenhouse gas emissions directly related to the construction and operation of buildings are significant. This includes emissions created during construction and the embodied emissions in building materials, but also the ongoing emissions associated with the operation of facilities including ongoing energy and water use, as well as refrigerant leakages. Historically, emissions related to the operation of buildings and facilities has contributed to around 40% of Council's corporate greenhouse gas emissions, when excluding emissions from the Anglesea Landfill.
- The design of buildings can indirectly influence environmental outcomes and emissions arising in other sectors, e.g. through encouraging non-fossil fuel powered vehicles, promoting a circular economy, reducing waste, promoting biodiversity or stormwater quality improvements.
- The Victorian Government's Climate Change Strategy includes commitments to greener and more energy efficient commercial buildings, and the overall objective of reducing Victoria's emissions by 28-33% by 2025 and 45-50% by 2030 – Council must play its part in achieving these targets.
- Our climate is already changing, with worsening extreme weather events, particularly increased frequency and severity of high risk fire days and heatwaves. The Surf Coast Shire is already one of the most bushfire prone areas in the world - it is important that Council's facilities are designed to be suitable for these future climates.
- Appropriately climate adapted buildings can play a role in disaster mitigation and emergency response.
- Council can demonstrate environmental leadership and climate action in the design of new facilities, facility upgrades and renewals.

- ESD reduces the lifecycle costs associated with the management of facilities, including through reduced utility costs, reduced carbon offsetting requirements, and increased timeframes for maintenance and renewal.
- Council has a history of demonstrating environmental leadership at its facilities and an ongoing role in this space.

Scope

This policy applies to buildings owned, leased or managed by Council and sets minimum mandatory ESD standards for Council's:

- New buildings and facilities
- Significant renewals and upgrades of existing buildings and facilities;
- Appliance and scope to budget renewal programs subject to specific criteria in the mandatory ESD requirements; for example air-conditioning and hot water units.

This policy applies to all types of Councils buildings and facilities including: administrative offices; leisure and aquatic facilities; libraries; community buildings; recreation reserve facilities; town halls; child care/kindergartens and health centres; works depots; and other Council buildings.

This policy applies to all employees and contractors of the Surf Coast Shire Council engaged in the design, management, construction and operation of Council facilities.

This policy does not apply to Council's civil works programs and building maintenance activities.

This policy does not apply to building renewals that are not considered to be significant, because they are less than \$15,000 in value and where the renewal is to one element of the building.

Policy

Surf Coast Shire Council is committed to environmentally sustainable design, construction and operation of its facilities.

The objective of this policy is to:

- Demonstrate environmental leadership and climate action reflective of a climate emergency at Council facilities.
- Ensure new Council facilities, upgrades and renewals generate positive environmental outcomes and do not negatively impact the environment and climate.
- Ensure all new major Council facilities are carbon neutral developments over the entire facility lifecycle.
- Ensure the efficient use of resources including electricity, water and construction materials.
- Avoid consuming fossil fuels, including transitioning away from gas at all Council facilities.
- Reduce the ongoing costs associated with managing these buildings through reduced utility bills and carbon offsetting requirements.
- Improve comfort, health, wellbeing and productivity outcomes for facility users.
- Promote renewable energy generation by incorporating solar and battery storage systems at all new facilities.
- Achieve best practice stormwater quality outcomes, including stormwater capture and reuse at all new facilities.
- Ensure waste avoidance, reuse and recycling during construction and also during operation and management of building.
- Promote innovation in the delivery of Council facilities that not only mitigate their impact on the environment but produce positive environmental outcomes and are appropriately adapted to future climates.

The ESD requirements for all projects covered by the scope of this ESD policy are set out in Table 1 below.

Table 1 - ESD rating tools and project requirements

| Total Project Value (Design + Construction) | ESD rating tools and requirements |
|---|---|
| All projects | Mandatory ESD requirements as set out in table 2 |
| >\$5mil | 6 star Green Star certified rating using the Buildings tool |
| \$1mil-\$5mil | BESS tool = Excellence score 70% |
| \$300k-\$1mil | BESS tool = Best Practice score 60% |

See ESD Rating Tools section below for more information on the ESD rating tools detailed here.

Table 2 below sets out the mandatory ESD requirements that are applicable for all projects covered by the scope of this ESD policy. Please note, for projects valued above \$300,000 these mandatory ESD requirements apply in addition to the ESD rating tool requirements set out in Table 1.

Any recommendations by the Project Sponsor for exclusions or exemptions from these mandatory ESD requirements are to be documented in the ESD Checklist of the Project Budget Proposal Document and approved by the Project Sponsor as part of the budgeting process, in consultation with the Environmental Sustainability team. The ESD elements of scope approved in the Project Budget Proposal will flow through to the Project Charter.

Annual renewal programs following a different budget process. ESD requirements are to be included in the list of candidates for renewal. The list of candidates and associated ESD requirements will flow through to Project Charters for annual renewal programs.

See Policy Implementation and Roles section for more details on policy implementation.

Environmental Sustainability team are available to assist in project planning to ensure compliance with this mandatory ESD requirements as required.

Table 2 – Mandatory ESD requirements

| Category | Mandatory ESD requirements |
|--|---|
| Carbon neutral buildings and facilities | Greenhouse gas emissions from key quantifiable emission sources associated with construction and operation of buildings and facilities are to be calculated and minimised, with all residual emissions offset as part of Council's carbon neutrality program. |
| Transition away from fossil fuels | No new gas installations are to be undertaken. Any gas appliances, including kitchen appliances, hot water units and heating systems, subject to renewal or upgrade are to be replaced with electric alternatives. |
| Promotion of energy efficiency and renewable energy generation | Renewable electricity is to be used to power all facilities. Rooftop solar is to be installed at all new buildings, with on-site battery storage considered where demand may warrant its installation. New equipment/appliance are to have a minimum 5 star energy rating. All new light fixtures including sports lightings is to be LED type. |
| Water efficiency | Rainwater tanks are to be incorporated at all buildings to capture rainwater for reuse on site. Rainwater tanks are to be sized with appropriate consideration to on-site demand, including for internal use in buildings for non-potable uses such as toilet flushing. Where a connection to the recycled water network is available it is to be utilised for appropriate non-drinking water end uses, such as irrigation. All new water fittings and appliances are to have a minimum 5 star WELS rating, or the highest rating available for the specific application if 5 star is not achievable following consultation with Strategic Asset Management and Environmental Sustainability teams. |

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|--|---|
| | Drought tolerant grass species are to be selected for sporting fields. |
| Stormwater treatment | Stormwater runoff from new facilities is to be treated to meet Best Practice Environmental Management Guidelines (BPEM), including the following criteria: <ul style="list-style-type: none"> • Suspended Solids - 80% retention of the typical urban annual load • Total phosphorous - 45% retention of the typical urban annual load • Total nitrogen - 45% retention of the typical urban annual load • Flows - maintain discharges for the 1.5 year Average Recurrence Interval at pre development levels |
| Sustainable transport | Where a proposed development of a new facility incorporates a new carpark or significant renewal/upgrade to an existing carpark (>50% carpark area), works are to include the installation of: <ul style="list-style-type: none"> - Electric vehicle charging infrastructure, designed to suit the predicted demand at the project site. - Bicycle parking - Connections to local footpath network |
| Circular economy | All new facilities or significant renewals/upgrades are to seek to incorporate at least one recycled material element into the project. |
| Demolition works | All demolition works to divert 80% of materials from landfill. Opportunities for materials to be salvaged within the local community are to be explored, for example for use by local men's sheds. |
| Air-conditioning, refrigeration and heat pumps | All new air conditioning, refrigeration or heat pump units are to utilise natural refrigerants where possible or refrigerants with lowest Global Warming Potential available for the specific application. In addition, a minimum 5 star energy rating is to apply to these units. |
| Landscaping | Landscaping is to take into consideration future climates, including drought tolerant species, consideration to cooling benefits of vegetation and fire risk. |
| Climate adaptation considerations | All new facilities or significant renewals/upgrades taking place in an area subject to a Bushfire Management Overlay are to liaise with Council's Emergency Management team to determine if a Bushfire Attack Level (BAL) assessment is required to inform the project design. |

Climate adapted buildings and bushfire resilient mandatory requirements

Council's Emergency Management team is to be consulted on the feasibility and design stages for new facilities or significant upgrades/renewals.

The Strategic Asset Management team will consult Council's Emergency Management team on the delivery of relevant renewal program items located in high fire-risk locations, for example decks.

Council's existing building stock

This policy will ensure ESD and climate adaption considerations are incorporated into new Council facilities as well as significant facility renewals and upgrades. However, to ensure the environmental performance of Council's existing building stock is progressively upgraded, the Solar & Energy Savings at Council Sites Program is utilised. This program can be accessed to facilitate the installation of solar, undertake energy efficiency upgrades and transition away from gas at existing facilities where a payback of less than five to seven years can be achieved.

For existing council facilities with heritage overlays or where buildings are heritage listed, it may not be possible, or practical, to achieve the mandatory ESD and climate adaptation requirements in the delivery of renewal or upgrade projects covered under the scope of this policy.

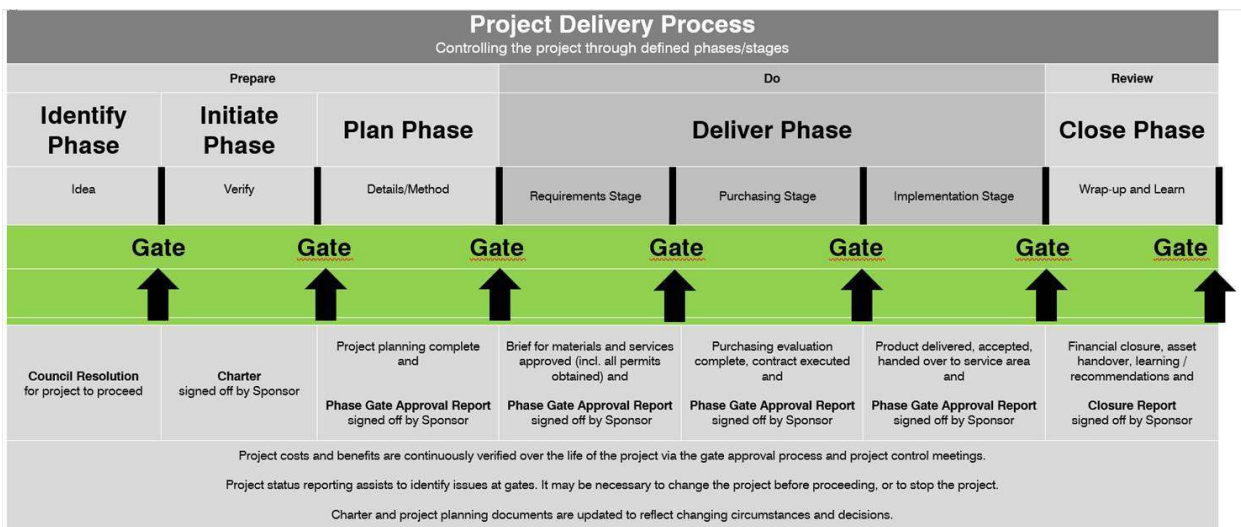
For tenanted Council buildings, Council will seek to support and work collaboratively with user groups to pursue funding opportunities and undertake upgrades works to achieve environmental objectives.

Policy implementation and roles

Council has a Project Delivery Framework that standardises how projects are undertaken. To enable the implementation of this policy, Project Sponsors must consider the ESD and climate adaptation requirements of projects during the Identify Phase of projects, including incorporating these requirements in project feasibility, scoping and budgeting work that provides the basis for the Project Budget Proposal.

Project managers will be responsible for ensuring projects are implemented in accordance with the Project Charter, and will support the Project Sponsor to ensure that the approved Charter complies with the requirements of this policy. Council’s Environmental Sustainability team are available to support the project delivery process in a subject matter expert role as appropriate.

Figure 1 – Surf Coast Shire’s Project Delivery Process – ESD and Climate Adaptation considerations are to be incorporated from the identify stage of a project



ESD Rating tools

Built Environment Sustainability Scorecard (BESS)

BESS is an assessment tool created by local governments in Victoria, owned by the Municipal Association of Victoria on behalf of the Council Alliance for a Sustainable Built Environment. BESS measures and assesses ESD performance of a proposed new building or alteration across nine categories: Management, Energy, Water, Stormwater, IEQ, Transport, Waste, Urban Ecology, and Innovation. Once the assessment is completed a report is produced giving a BESS overall score with ‘Best Practice’ defined as an overall score of 50% or higher, and ‘Excellence’ defined as an overall score of 70% or higher. Further information can be found at the BESS website: <http://www.bess.net.au/>

Green Star

Green Star is a voluntary environmental sustainability rating system administered by the Green Building Council of Australia aimed at improving the environmental performance and reducing the climate change impacts of the built environment. The Green Star rating system benchmarks projects across a variety of environmental sustainability categories and then produces an overall “star” rating with 5 star considered Australian Excellence, and 6 star considered demonstrating World Leadership. The applicable tool to this policy is the Buildings tool which assess buildings across 8 criteria: Responsible, Healthy, Resilient, Positive, Places, People, Nature and Leadership. Buildings must be independently audited and certified to achieve star status. Further information can be found at the Green Star website here: <https://new.gbca.org.au/green-star/rating-system/buildings/>

Definitions

Climate adapted buildings: Buildings that are designed and built with consideration given to projected future climate conditions.

Environmentally Sustainable Design (ESD): The design, development and renewal of buildings and facilities that not just attempts to minimise the environmental impact of a project but actually works to enhance environmental outcomes. It is design which aims to achieve the best outcomes for our community and the environment today without compromising outcomes for future generations.

Related Procedure/ Documents

Climate Emergency Corporate Response Plan

Council Plan Incorporating the Health and Wellbeing Plan 2021 - 2025

References

Local Government Act 2020

Climate Change Act 2017 and Council's emissions reductions pledge

Victorian Government Climate Change Strategy

Document History

| Version | Document History | Approved by – Date |
|---------|------------------|--|
| 1 | <i>Amended</i> | <i>Council Resolution – 23 July 2019</i> |
| 2 | <i>Amended</i> | <i>Council Resolution – 23 November 2021</i> |
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