

NAGA CASE STUDY

Moreland City Council: Sustainable Buildings Policy

What is the Sustainable Buildings Policy?

In September 2015, Moreland Council approved the *Sustainable Buildings Policy*, which formalises a process and set of standards to embed Environmentally Sustainable Design (ESD) principles into Council's capital works and building maintenance projects.

The policy is designed to provide clear, minimum standards for various ESD elements, which will assist in future proofing Council's building assets, reduce energy use, significantly reduce operational costs (for Council and/or community groups) and improve amenity. The requirements are deliberately specific; they are written for direct insertion into tender specification documents or for individual product selection specifications are provided.

The policy ensures that when Council buildings are upgraded they meet a suitably high environmental standard and provide environmental benefits through efficient appliances and good design to reduce greenhouse gas emissions and ensure more natural light, fresh air and lower levels of volatile organic compounds.

Buildings will capture water on-site and use it or treat it by filtering it through raingardens ensuring that the water will be clean if it reaches the local waterway. By capturing water on-site, buildings will use less mains water and reduce the stormwater flows that can erode waterways.



Photo: Brunswick East Velodrome, one of the first buildings to test the Sustainable Buildings Policy

Why did you do it? What prompted it?

The primary objective of the *Sustainable Buildings Policy* is to improve the sustainable performance of Council buildings and reduce operating costs.

Moreland is known for its environmental credentials in delivering sustainability outcomes in the built environment through the planning process; however, outside of specific ESD projects Council had no formal process for delivering sustainability outcomes in its own buildings. This often leads to expensive retrofitting post-project completion.

The policy formalises ESD building minimum standards and relationships across Council, thereby setting clear expectations and enabling consistent delivery of sustainability outcomes. A critical element of the policy is that a ESD representative be involved from the design and quantity surveying stage and participate in the project board for all large projects to ensure that the policy is applied as intended.



How does it align to existing policy?

This policy works in conjunction with all statutory building and planning requirements. The requirements of this policy are additional to the requirements such as the National Construction Code and do not replace these requirements.

This policy was developed as part of the review and update of Council's *Corporate Carbon Reduction Plan 2015-2022* which was adopted by Council on the 10 June 2015.

The *Sustainable Buildings Policy* aligns with a number of existing Council policies such as the *Council Plan 2013-2017* that has a specific objective to create an environmentally sustainable moreland.

What issues does the policy address?

In the past, project budget decisions were based on capital costs without consideration of value for money over the lifetime of a building.

Energy efficiency measures have been implemented on new Moreland buildings post-occupancy through the Carbon Management Strategy at a higher capital cost than can be achieved if ESD is considered up front. A recent example, the Oxygen youth centre, required energy efficiency improvements within one year of opening to address thermal comfort issues. Other buildings have failed to incorporate HVAC control in their design, resulting in high energy bills for the occupants. The *Sustainable Buildings Policy* provides an opportunity to consider expected operating costs of a building project, thereby incorporating them into decision making and reducing the risk of expensive retrofits.

The *Sustainable Buildings Policy* also includes a monitoring function to address issues regarding any unsatisfactory implementation of

building specifications. This provides clear monitoring and verification during design, construction and commissioning of large building projects through an independent commissioning agent.

The inclusion of an independent commissioning agent would have saved money on the Brunswick Baths project where sub-standard mechanical and lighting installations were installed. These resulted in higher maintenance costs, expensive investigations and subsequent retrofits to fix issues at the building. An independent commissioning agent would have identified the issues for the builder to fix at the time, rather than Council paying separately down the track once discovered.

How was it developed?

The ESD team worked over a number of months to develop standards that met environmental best practice, were straightforward to implement and were not cost prohibitive. To achieve this, a great deal of research was undertaken, workshops conducted with key staff and negotiations regarding what was practical for Council. Each member of the group brought different expertise and represented user groups within Council.

The development of this policy has included consultation with the capital works team which fully supports this policy.

Financing and budget issues

The financing of ESD for new buildings and retrofits is best considered at the very beginning of a project. The scoping and quantification of proposed works needs to adequately incorporate ESD designs and technologies as a non-negotiable component of the project budget as securing separate 'environmental' funds is problematic, time consuming and will not deliver a



long term approach to sustainable facility development and management.

Despite these funding challenges, unlike many other capital items, those items that deliver ESD outcomes often deliver financial savings that repay the initial investment. Factoring in this longer-term approach to facility investment is critical to supporting ESD initiatives. It is anticipated that at times the cost of incorporating ESD into building projects will be approximately 10-20 percent in addition to the base project cost. However, this often depends on particular specifications, performance requirements and designs. While additional costs are often recouped over time, smart ESD can prevent the need for capital investment thus cutting costs (e.g. passive design preventing the need for an air conditioning system).

Financial implications related to the implementation of the *Sustainable Buildings Policy* will be monitored and form part of the policy monitoring, evaluation and review with a report going to Moreland Executive Group (MEG) in September annually.

In addition, Council currently allocates community grants for capital works up to \$50,000. This Policy will ensure that those funds will be appropriately spent on infrastructure that will benefit the community financially into the future. The ESD team will work with Recreation Services to integrate the minimum standards into the community grants process for Council buildings.

How will it be implemented and by who?

Capital Works Planning and Delivery is responsible for ensuring the delivery of activities across the Engineering Services, Asset Management, Building Maintenance and Building Projects. As such, the Manager of Capital Works, Planning and Delivery is accountable for overseeing the successful implementation of the *Sustainable Buildings Policy*.

The ESD team at Moreland Council is also crucial to champion the implementation of the Policy and works closely with the Capital Works, Building Maintenance, Property and Community Grants teams to:

- establish processes for monitoring, evaluation and review to inform annual report to MEG in September 2016;
- raise awareness of policy with key stakeholders (Capital Works, Property, Maintenance Units, Community Grants);
- update relevant information and processes (ESD advice templates, handover report, independent commissioning agent brief, Community Grants documents, information for Panel Suppliers); and
- continue to trial application of the policy for 2015/16 with full application of policy in 2016/17 including ESD representation on the project boards for large projects identified from the 5 year capital works project budget report

Project level roles and responsibilities are detailed further in the policy.

Contact for further information

Louise Lovell
ESD Engineer
Moreland City Council
t: 9240 1138
e: llovell@moreland.vic.gov.au

