

DESIGN GUIDANCE NOTE NO. XX

Environmentally Sustainable Development

REVISION HISTORY

Revision	Date	Author	Approval	Description
Rev A	15.10 2019	D&I Team		

PURPOSE

The purpose of this Guideline is to provide instructions on the how Environmentally Sustainable Development (ESD) is to be addressed on all HI Projects.

BACKGROUND

Health Infrastructure (HI) is committed to improving the environmental performance and sustainability of its projects in accordance with NSW Government policy. This Guideline documents HIs process, and minimum expectations its Projects.

The process described in this Guideline involves a robust assessment of a project to determine its ability to meet HIs ESD criteria. This process will ensure practical and cost effective ESD outcomes on all HI projects while delivering results that facilitate good clinical solutions.

While based on the approach used by the Green Building Council of Australia's (GBCA) Green Star the process, it is **NOT** a Green Star rating. Rather it is a set of scores that reflect the merit of various ESD initiatives applicable to health facilities, developed by ESD specialists to meet the needs of HI. It is intended that this Guideline and tool is periodically updated to allow for development in line with NCC updates and any other relevant ESD standards specific to healthcare.

For all NSW Health Infrastructure projects it is intended that an independent ESD consultant will be appointed for the duration of the project. All consultants and contractors working on NSW Health Infrastructure projects are to allow for the process defined in this Guideline.

RELATIONSHIP WITH THE ENGINEERING SERVICES GUIDELINES

This DGN supersedes Section 2.5.8 of the Engineering Services Guidelines (GL2016_020) in respect to Green Star and accordingly the process contained in this document should be followed.

GUIDELINES

Evaluation Tool

The evaluation tool has been developed by Steensen Varming and Arup in consultation with HI. It uses some of the key ESD initiatives included in the GBCA rating tools however does not produce a "Green Star" rating, but instead prescribes a minimum number of "points" to be achieved. This document describes the assessment procedure required by HI on all of its projects and how to use the attached tool to evaluate the projects performance. HI has defined minimum targets for individual point categories, and these are outlined in the following Sections of this Guideline.

In summary, the required targets for the design are:

- A **minimum of 45 points** to be achieved by the design in accordance with HI's ESD Evaluation Tool; and

- A **minimum 10% improvement** in energy efficiency compared to a baseline of National Construction Code (NCC) Section J compliance applicable to the development.

In order to facilitate the above targets, the assessment of the development at the point of procurement of the Head Contractor shall contain a minimum of 5 buffer points. Buffer points are defined as points over and above the minimum 45 points required target. This is to allow for some variation during the construction period. Note that some point categories are required as standard HI practice and cannot be removed from the assessment.

At project completion, the project **must achieve a minimum of 45 points**.

HI ESD Consultant, Roles and Responsibilities

For all HI projects, an independent ESD consultant will be engaged by Health Infrastructure to review the project and provide advice on what mechanisms or design features are to be adopted to achieve the minimum 45 points required. This could include:

- Provision of specification clauses etc to project design consultants to facilitate greater ESD outcomes
- Review of ESD documents provided by other consultants
- Provision of ESD reports for submission with SSD applications
- A completed Evaluation Tool spreadsheet showing the points to be achieved by the project.
- Input to the development of collateral for messaging to the community of the value of the ESD options provided by a project- e.g. fact sheet publicising key achievement's

ESD Process Overview

During the design phase of the project, the HI ESD consultant will provide input to the project team (incl architects, engineers etc) on performance requirements that the designers will be required to integrate into their design to meet 45 Points. This will ensure that the planning applications will be able to comply with the requirements of this guideline.

As part of the tender process, the design requirements will form part documentation along with the planning consent. By the time a Contractor (or ECI) is engaged, the ESD consultant will have sufficiently documented the required information into an ESD Performance Specification to provide confidence to the Contractor that the design achieves the required ESD performance.

Following engagement of a Contractor, HI's ESD consultant will review the development of the Contractor's design. The Head Contractor (HC) will also engage their own ESD Consultant to manage the design finalisation of the ESD Strategy on behalf of the contractor. **Figure 1** below illustrates this approach.

When	What	Who
At design and before planning application lodged	ESD Report and Evaluation Tool	HI Project ESD consultant
Tender documentation	ESD Report, Evaluation Tool and Specification	HI Project ESD consultant
Before Award	Evaluate HC ESD response	Project Team incl ESD consultant
Before Commencement	Documentation validating detailed design meets target	Contractors ESD consultant
Within 6 months of Completion	As built evaluation	HI Project ESD consultant

Figure 1 – ESD Evaluation Process

Evidence of compliance of planning conditions will be managed in the same way as other aspects of the consent - by the PCA and Independent project audits. Should this process identify significant ESD discrepancies in the submitted documentation, HI's ESD consultant will review and provide HI with a strategy to ensure the minimum points are achieved. The contractor is then responsible for updating the documentation to satisfy the ESD design intent as nominated in the ESD Performance Specification in the contract.

The HI ESD Consultant will review and confirm the validity, process, and assumptions of Contractors ESD submission, and whether it meets the intent of the credit criteria. The HI ESD Consultant will provide an assessment (through spot checks of credits) to confirm the reliability of the contractor's ESD submission.

Upon completion of spot checks, the HI ESD Consultant will prepare a summary report outlining the findings of the assessment at the end of each stage, indicating discrepancies, further actions or acceptance of the Contractors self-certified submission. If discrepancies are identified, the Contractors ESD Consultant will be notified and the Contractor will be required to address the comments. The Project Manager will be responsible for submitting verification that any discrepancies are closed out.

At building sign-off, and to meet the conditions of DPIE, the building certifier will require the Contractors ESD submission and the HI ESD Consultant summary report confirming the acceptance of the submission. These two documents will form the basis of the confirming that the project meets the minimum number of credits. Verification of this is to be submitted to HI by the Project Manager

Evidence Requirements and NSW Health Infrastructure Specific Scoring Requirements

NSW Health Infrastructure's, ESD Matrix in Appendix A contains a detailed guidance on HI requirements and how these points are to be achieved. It has been developed in collaboration with Sustainability Consultants working in the construction and built environment industry. ESD Consultants engaged by HI to prepare reports, matrices and specifications in accordance with this Guideline are required to be suitably qualified to assess the design and as built plans to validate that the minimum points required for HI project can and has been achieved.

Evidence requirements are as follows:

Pre-Contractor Procurement:	
a	<ul style="list-style-type: none"> Written documentation of a design review and preliminary assessment matrix outlining how the design will achieve 45 points or how it can be amended to achieve this standard. An ESD report and matrix for submission with the SSD application. Where relevant, specialist technical consultants will provide input to the ESD consultant for inclusion in the subsequent ESD performance specification.
Post-Contractor Procurement:	
b	<ul style="list-style-type: none"> Contractors ESD consultant is to collate evidence from the relevant sub-contractors and sub-consultants to show compliance with the ESD performance specification. Evidence, including relevant reports to certify that the trade sub-contractor and sub-consultant ESD requirements as nominated in the ESD performance specification has been installed/delivered. Where evidence is qualitative and requires interpretation by the contractors ESD consultant, the contractors ESD consultant shall collate evidence as required and provide a comprehensive statement Documentation is to be made available to the project's Independent auditor upon request for inclusion in the regular consent audit process.

Process for periodically updating the Evaluation Tool.

This Guideline and the Evaluation Tool will be periodically updated to reflect changes in the NCC and Government Policy, and/or to incorporate other relevant criteria from rating systems such as 'LEED' and the 'WELL Building Standard' and alignment with overall State level sustainability commitments and United Nations Sustainable Development goals.

ATTACHMENTS

- A *Health Infrastructure ESD Evaluation Tool*
- B *Scope of work for ESD consultants*