



THE UNIVERSITY OF  
**NEWCASTLE**  
AUSTRALIA

## **The University of Newcastle**

Infrastructure and Facilities Services

Project Briefing Document

## **ENVIRONMENTALLY SUSTAINABLE DESIGN**

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## CONTENTS

1	Background .....	1
2	Purpose .....	1
3	Corporate Alignment .....	1
4	The ESD Tool .....	1
4.1	Purpose of the ESD Tool.....	2
4.2	Location of the ESD Tool .....	2
4.3	When to Complete the Tool.....	2
4.4	Where to File the ESD Tool .....	2
5	Achieving A Green Star Accreditation .....	3
5.1	New Builds .....	3
6	Contact Information.....	3

## 1 BACKGROUND

The University recognises the importance of integrating Environmentally Sustainable Design (ESD) principles across the life cycle of all infrastructure projects undertaken with a particular focus on energy and emission reduction. As the University considers the future of the campuses, a changing education model and maintaining a world-class university in harmony with the environmental and social responsibilities, the ambitious capital works program will see sustainability principles at work.

Environmentally Sustainable Design (ESD) principles should be integrated into all construction projects from mini-minor to major projects, from the earliest design stages. The role of the ESD Tool is to drive the sustainability agenda for the project and ensure integration and justification of design direction at all appropriate stages.

## 2 PURPOSE

The purpose of this document is to provide direction on the implementation of Environmentally Sustainable Design into all new build and refurbishment projects undertaken at the University.

## 3 CORPORATE ALIGNMENT

This document is supported by the Environmental Sustainability Plan 2018 - 2025 (ESP) under Environmental Sustainable Design.

### Priority Actions

- Embed Environmentally Sustainable Design principals through all capital projects.
- Implement the UON ESD Tool across all University-wide refurbishment projects to achieve a five-star Green Star or equivalent rating from 2018.

### Measures of Success

- A minimum six-star Green Star 'Design & As Built' at all new buildings by 2025.

Implementing Environmentally Sustainable Design for all projects undertaken by the University is supported under Goal 11 of the United Nation's Sustainable Development Goals (SDGs):

**Goal 11:** Sustainable Cities and Communities – Make cities and human settlements inclusive, safe, resilient and sustainable.

## 4 THE ESD TOOL

The ESD tool is required to be completed for all Major, Minor, and Mini-minor projects. For all refurbishment and mini-minor to major projects, the completion of the ESD tool is the responsibility of the Project Manager with the assistance of the Environment team. The completed tool is to be handed over to the contractor, where the items outlined must be designed and implemented, as a minimum. This includes the contractor providing supporting ESD documentation to the University for auditing purposes.

For all new-builds an ESD consultant should be engaged as planning and documentation beyond the scope of the ESD tool is required to achieve the University's target of achieving a minimum six-star Green Star 'Design & As Built' rating for all new buildings by 2025.

#### 4.1 PURPOSE OF THE ESD TOOL

The purpose of the ESD Tool is to support the Project Management team and relevant stakeholders to integrate sustainability initiatives across all mini-minor to major projects, and to ensure priority actions outlined in the ESP are achieved.

It is an excel based tool and covers the following themes;

- Energy
- Waste
- Water
- Indoor Environment Quality (IEQ)
- Ecology
- Sustainable Procurement
- Transport

The 'Innovative' credit points must be selected under each of the above themes to ensure the project achieves a five-star Green Star or equivalent rating from 2018.

#### 4.2 LOCATION OF THE ESD TOOL

The tool is located in the Design Standards folder under Knowledge Bank.

[S: > Knowledge Bank > Design Standards > ESD > UON ESD Guidelines Tool-v1.0](#)

The corresponding instructional manual 'Functional Description UON ESD Guidelines Tool' is located in the Design Standards folder under Knowledge Bank.

[S: > Knowledge Bank > Design Standards > ESD > 161220 Functional Description UON ESD Guidelines Tool rev06](#)

A copy of the completed UON ESD Guidelines Tool and Functional Description should be sought from your Project Manager if not already provided.

#### 4.3 WHEN TO COMPLETE THE TOOL

The tool should be completed at the initiation phase of mini and mini-minor projects and should be executed at the business case stage of major projects. The ESD tool should then be reviewed and updated as the project progresses through each stage.

Additional information of when the ESD tool should be completed and implemented within a project can be found in the Functional Description UON ESD Guidelines Tool.

#### 4.4 WHERE TO FILE THE ESD TOOL

The Project Manager should store the completed ESD tool spreadsheets in the relevant project folder and refer to them on a regular basis.

## **5 ACHIEVING A GREEN STAR ACREDITATION**

### **5.1 NEW BUILDS**

All new build projects undertaken from 2018 are to achieve a six-star green star Design and As Built V1.2 certification.

Credits targets under the Green Star certification should align with priority actions listed in the ESP 2018 – 2025, with a focus on energy and carbon, and waste and recycling. Other credits include water, ecology, indoor environment quality (IEQ), sustainable procurement and transport.

## **6 CONTACT INFORMATION**

The Environment team will provide assistance in completing the ESD tool for all mini-minor to major projects. An ESD consultant will be engaged for ESD matters relating to new builds and Green Star accreditation.