THE UNIVERSITY OF SYDNEY

CIS Sustainability Standard

The University of Sydney

Engineering and Sustainability Team

Document Control

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Contents

1 PURPOSE

The CIS Sustainability Standard sets out the minimum requirements for achieving sustainable design of major building projects at the University of Sydney.

Requirements of this Standard are met by completing the University's Sustainability Framework which is a dynamic Microsoft Excel based tool used by project teams to benchmark sustainability performance for a particular project.

The Sustainability Framework provides a range of sustainability measures tailored to different University building types:

a. General university buildings
b. Laboratory buildings
c. Student accommodation

This CIS Sustainability Standard provides background information to the Sustainability Framework and describes how to apply it to projects. This Sustainability Framework refers to a number of Australian Standards, University of Sydney Standards and selected industry standards and guidelines. It must be read in conjunction with these documents.

Applicable requirements documented in Workplace Health and Safety legislation, Disability Discrimination legislation, State Environmental Planning legislation, Commonwealth and State legislation, National Construction Codes (NCC), the Building Code of Australia (BCA) and Australian and New Zealand Standards (AS/NZS) are the minimum and mandatory compliance requirements.

Where any ambiguity exists between this standard and the aforementioned mandatory requirements then:

a. the highest performance requirements must apply
b. applicable requirements must follow this order of precedence:
    i. Workplace Health and Safety legislation
    ii. Disability Discrimination legislation
    iii. State Environmental Planning and Assessment legislation
    iv. All other Commonwealth and State legislation
    v. NCC and BCA
    vi. AS/NZS
    vii. This standard and other University standards

2 SCOPE

The sustainability framework will be applied to all major projects with a capital value of at least $20 million. This may include major refurbishment projects.

The inputs of the Sustainability Framework and how they relate to The CIS Way gateway process is summarised in **Table 1**.

TABLE 1: INTEGRATION OF THE SUSTAINABILITY STANDARD INTO THE CIS GATEWAY PROCESS SUSTAINABILITY REQUIREMENTS

Gate 1 & 2	Gate 3	Gate 4	Gate 5	Gate 6
Initial Project viability Assessment & Project Brief Preparation & Assessment	**Project Endorsement** Final Project Brief(PDP/PPR) & Schematic Design & necessary documentation required for Authority approvals	**Project Procurement** Including Design Development, Tender Document Preparation, tender award Project delivery /relocation contractors /Consultants	**Project Delivery** Including Relocations Commissioning, Operational Readiness and Handover	**Occupation Management** Up to 1 year after occupation
CIS ESD consultant is appointed	CIS Project ESD consultant to identify and recommend Sustainability Framework strategy and ambition level in consultation with CIS Planning Team. CIS Planning Team to endorse the minimum sustainability ambition level required for the project. CIS Project ESD consultant to submit the Gateways 1-3 Preliminary Sustainability Framework with the ***"Preliminary design response"*** completed and accompanied by all documents identified in the Framework as ***"Preliminary Submission Requirements".*** This must be approved by the CIS Engineering and Sustainability Team representative prior to inclusion in Tender documentation.	The minimum ambition level and Preliminary Sustainability Framework must be included in Request for Tender documentation. Complying tenders must submit a completed Sustainability Framework demonstrating how the minimum sustainability ambition level will be met. Tender assessment criteria will include a value-added weighting for exceeding the minimum Sustainability Framework ambition level. The contractor must conduct an ESD workshop, nominally at 80% construction documentation for the CIS Project ESD Consultant to review and endorse the proposed method of compliance. The contractor must submit the completed Gateway 4 Sustainability Framework with the ***"Contractor Design Response"*** accompanied by all documents identified in the Framework as ***"As Built Submission Requirements".*** CIS Project ESD consultant must peer review the ***As Built Submission Requirements*** and sign-off that the project would meet the requirements of the Sustainability Framework.	CIS Project ESD consultant verifies completion of Sustainability Framework commissioning initiatives	CIS Project ESD consultant must verify completion of Sustainability Framework tuning and monitoring initiatives

3 GLOSSARY OF TERMS

Sustainability Standard	this document is the CIS Sustainability Standard
The Sustainability Framework (or, the Framework)	a dynamic Microsoft Excel based tool, which details the ambition level and project specific requirements of the Sustainability Standard
Measure	a sustainability initiative
Mandatory measure	a measure which must be targeted for a certain project type
Discretionary measure	a measure that is optional to target in order to meet the required number of points to achieve an Ambition Level
Category	a group of measures that relate to a particular sustainability theme
Points	each measure is allocated a number of points towards achieving an Ambition Level
Mandatory points	points associated with mandatory measures
Discretionary points	points associated with discretionary measures
Ambition Level	the targeted sustainability benchmark level for the project
Points required	the number of points required to achieve the targeted Ambition Level
Targeted measures	measures identified achieve the targeted Ambition Level for a project
General university buildings	administrative, or general teaching and learning buildings which do not contain laboratory space
Laboratory buildings	buildings which contain a combination of wet and/or dry laboratories, write up and administrative areas, and breakout and support spaces. Laboratory buildings may also contain a portion of teaching and learning space.
Student accommodation buildings	buildings that provide live-in accommodation and support functions for students

4 AUTHORITIES & RESPONSIBILITIES

The Sustainability Design Standard is issued by CIS. It is approved and signed-off by the Director CIS and the Planning Team is responsible for reviewing and maintaining the standard and keeping it up-to-date. The standard must be reviewed and kept up-to-date at least biennially.

5 TECHNICAL REQUIREMENTS

The specific technical requirements of the Sustainability Standard are prescribed in the Sustainability Framework.
Within the Sustainability Framework individual measures detail specific design and infrastructure requirements to enhance sustainability of the project. Measures are grouped into the following categories within the framework:

a. Place making and Landscape
b. Leadership, Communication and Community Benefit
c. Healthy Environment
d. Resource Efficiency
e. Materials
f. Climate change and Infrastructure

Each sustainability measure is awarded a number of points, proportional to the sustainability benefit delivered by it. Most initiatives are awarded one, two or three points, but specific measures that provide a high level of operational savings and broader sustainability benefits are awarded higher points.

The Sustainability Framework benchmarks sustainability across different building types by using common sustainability ambition levels. There are four ambition levels available:

a. Bronze – corresponds to 65-69% of the total points available
b. Silver – corresponds to 70-74% of the total points available
c. Gold – corresponds to 75-79% of the total points available
d. Platinum – corresponds to >80% of the total points available

The sustainability ambition level for a project is established by the CIS Planning Team and the project team through the schematic design undertaken for *Gateway 3 Project Endorsement* and must be incorporated into the project design and delivery.

Projects must select from a menu of measures in the Sustainability Framework in order to achieve sufficient points to meet the sustainability ambition level. The Sustainability Framework includes a number of mandatory measures and discretionary measures. The total points needed to meet the project sustainability ambition level are achieved by implementing mandatory measures plus additional discretionary measures.

6 COMMISSIONING

The Sustainability Framework identifies specific commissioning requirements under the CIS Sustainability Standard.

7 DOCUMENTATION & RECORDS

The Sustainability Framework identifies detailed submission requirements of the CIS Sustainability Standard using submission templates where appropriate.

Documentation requirements for each stage of the project are summarised in **Table 2.**

TABLE 2: SUSTAINABILITY FRAMEWORK DOCUMENT SUBMISSION REQUIREMENTS

Checkpoint	Responsible party	Submission requirements
***Gateway 3 Project Endorsement* - Preliminary submission**	CIS Project ESD consultant	Completed Preliminary Design Sustainability Framework tool must be submitted to CIS Planning
	CIS Project ESD consultant	All additional documentation identified by the Preliminary submission requirements in the Sustainability Framework tool must be submitted to CIS Planning
***Gateway 4 Project Procurement* - 80% Construction documentation workshop**	Contractor	At 80% construction documentation, the Contractor must present how the project will achieve targeted measures in a workshop involving the CIS Project ESD consultant, appropriate personnel from the contractor and the CIS Planning representative.
	Contractor	A copy of any materials presented in the 80% construction documentation workshop must be submitted to CIS Planning
	CIS Project ESD Consultant	Completed Sustainability Framework tool with "Comments from the 80% Construction Documentation workshop" documented must be submitted to CIS Planning
	CIS Project ESD Consultant	Completed Sustainability Framework tool with "Comments from the 80% Construction Documentation workshop" documented must be submitted to the Contractor
***Gateway 5 Project delivery* - As built submission**	Contractor	Completed As-built Sustainability Framework tool must be submitted to CIS Planning
	Contractor	All additional documentation identified by the As-built submission requirements in the Framework tool must be submitted to CIS Planning. Each measure must be accompanied by a cover sheet summarising how the measure has been met. Any supporting documentation submitted must have the relevant sections highlighted.

8 OPERATIONS

Not applicable

9 AUTHORISATION OF VARIATIONS

Project managers, consultants, contractors, commissioning agents and facilities maintenance personnel must ensure compliance with these requirements is achieved.
Variations to this standard must only be considered where:

a. the University Standard's requirement cannot physically or technically be achieved.
b. the alternative solution delivers demonstrated and proven superior performance for the same capital and life cycle cost or better.

Consultants and contractors must identify and justify requirements of the standard that do not apply to the project or which need to be varied and these must be approved by the issuer of this standard. Formal requests for all variations to this Standard must be submitted using the **CIS Request Dispensation from Standard Form (CIS-ENG-F001)**. The issuer of this standard or their delegated authority must review and consider requirements of stakeholders from clients, projects and facilities management before deciding whether to approve variations. Their formal sign-off is required for acceptance of any non-compliances and departures from this standard's requirements.

10 QUALITY CONTROL

10.1 DESIGN STANDARD COMPLIANCE

Compliance with requirements of this standard must be checked throughout the design, construction and commissioning phases of projects by CIS' services consultant. Any issues or deviations from this standard must be reviewed and approved in writing by the issuer of this standard.

Competent CIS consultants and representatives must check compliance with this standard during design reviews and formal site inspections. Any non-conformances with requirements of this standard must be documented and provided to the CIS Project Manager for issue to contractors and their consultants.

Project Managers must maintain a formal register of non-conformances and manage close out of outstanding non-conformances. Contractors and their consultants issued with non-conformances must take appropriate corrective actions. The CIS Project Manager must ensure:

a. proposed corrective actions are implemented
b. close out of non-conformances in relation to this standard is formally approved and signed off by the author of the standard or their delegate

10.2 DESIGN STANDARD CERTIFICATION

Contractors and their consultants must certify compliance to the design standard by completing and submitting the CIS Project Design Certification Form, CIS-PROJ-F001 to the CIS Project Manager at each of the following project phases:

a. Design and Documentation
b. Tender
c. Construction

In addition the Contractors and their consultants are required to submit all documentation required by **CIS-ENG-F011**, and to certify compliance as required at the following check points:

a. Gateway 3
b. 80% Construction Documentation
c. Gateway 4

Notwithstanding CIS' internal quality control processes, contractors and their consultants must implement their own robust quality assurance and control procedures to ensure compliance with requirements of this standard.

11 REFERENCES

Standard	Title
-	All CIS Design Standards
--	Workcover requirements
--	All Health Authority Requirements
--	State Fire Brigade requirements
--	All Local Council regulations
AFRDI	Australasian Furnishing and Research Development Institute Sustainability Standard for Commercial Furniture - AFRDI Standard 150
BCA	Building Code of Australia Building Code of Australia, specifically Section J energy efficiency
Ecospecifier	Ecospecifier Technical Guides
GECA	Good Environmental Choice standards
Greenstar	Green Star Education Technical Manual
SIR	Supply Authority Service Installation Rules

12 NOTES

N/A

13 DOCUMENT AMENDMENT HISTORY

Revision	Amendment	Commencing
001	First Issue	18 September 2015

14 ATTACHMENTS

Attachment 1 – Sustainability Framework v2