



Fact Sheet

Defence Green Building Requirements

Part 1 – Procurement and Delivery

Overview

Green Buildings are buildings, which are designed, built, renovated, operated, or reused in an ecological and resource-efficient manner. They are designed to meet certain objectives such as protecting occupant health; improving occupant productivity; using energy, water, and other resources more efficiently; and reducing the overall impact to the environment.

Defence’s environmental vision is to be:

“... a leader in sustainable environmental management to support the ADF’s capability to defend Australia and its national interests.”

Defence is committed to reducing the environmental impact on its land, building and infrastructure assets, which form the largest property portfolio in the Commonwealth. The Defence Ecologically Sustainable Development Strategy defines one of Defence’s strategic initiatives as being to:

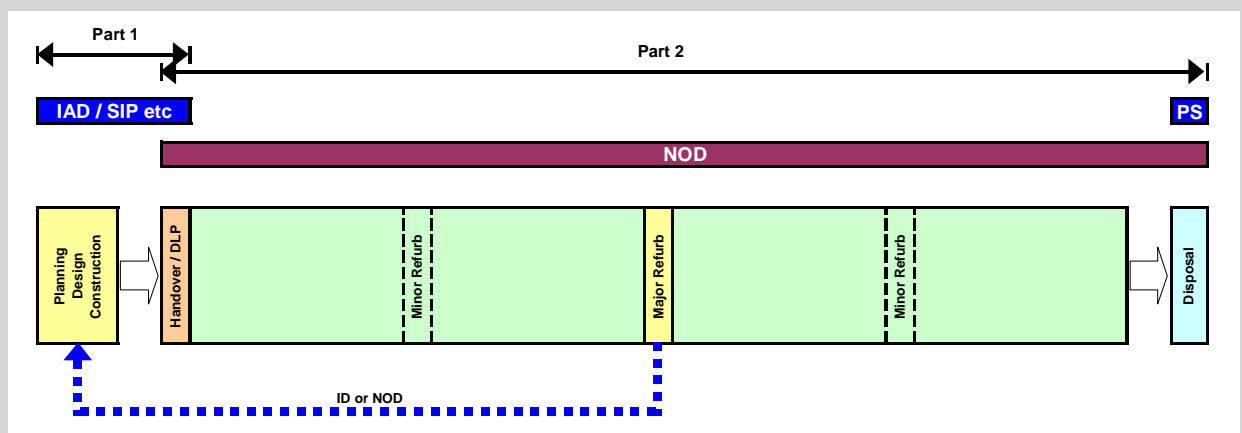
“Integrate ESD into the built environment, including development of new facilities and refurbishment of older properties by establishing specific ESD principles and guidelines.”

Defence Green Building Requirements

The Green Building Requirements (GBR) are set out in two parts:

- » **Part 1** – Procurement (covering Planning & Development and Delivery)
- » **Part 2** – Operation (covering Commissioning & Handover, Operation & Maintenance and Disposal)

Figure 1 Overview of Defence GBR Parts 1 and 2 in the Building Life Cycle





Aim and Purpose

The purpose of Green Building Requirements is to provide Defence customers, staff and contractors in the areas of planning, design, project management, construction, facilities and maintenance, garrison support, and energy and environmental management, with guidance and minimum requirements for the:

- » Implementation of the Defence Ecologically Sustainable Development (ESD) Strategy in the built environment, and;
- » The integration of ESD goals into the Defence Infrastructure Asset Development and Approval processes for buildings.

Defence ESD Goals for Buildings

The key ESD goals for Defence's buildings can be summarised as the provision of healthy internal and external environments for Defence's customers, staff and contractors and reducing the whole-of-life environmental impacts of buildings, including:

- » Greenhouse emissions
- » Potable water consumption
- » Pollution and emissions
- » Impact on local ecology
- » Use of natural resources
- » Generation of waste
- » Toxicity of materials

Roles and Responsibilities

The Defence Green Building Requirements Part 1 defines the roles and responsibilities for the implementation of ESD in Defence building projects, from planning through to handover and end of defects liability period. This includes:

- » Key ESD Tasks
- » ESD Performance Requirements
- » ESD Budget
- » Documenting compliance and reporting

Key Factors for Success

The successful delivery of Green Buildings for Defence relies on an integrated design process with good communication and collaboration between a multi-disciplinary team experienced in ESD design. It is also essential that green building concepts are integral to the construction, commissioning and handover stages so that the buildings can be set up and operated in a manner such that the ESD design goals and targets can actually be achieved in operation.

The Green Building Requirements Part 1 recognises the importance of these key success factors at each stage of the Asset Infrastructure Development Process and specific guidance on how Defence can integrate these into the process.



Table 1 Summary of Key Success Factors and key tasks

Task	Project Stage	CSIR	SBC	DBC	Delivery: Completion of design	Delivery: Construction	Delivery: Handover	Delivery: Defects Liability Period	Operation
ESD awareness of Defence staff & contractors									
Setting the ESD budget									
Team selection – ESD skills / experience									
Integrated Design Process									
Project Team Communication									
Setting vision, targets and goals									
Monitoring and reporting against targets									
Challenging conventional assumptions									
Whole of life and value management									
Clear documentation & specifications									
Regional feedback into design									
Commissioning plan & implementation									
Handover strategy									
Education of building occupants and managers									
Reporting actual building performance									
Maintenance									

Application to Defence Infrastructure Asset Development Process

This Green Building Requirements Part 1 defines the integration of ESD key tasks, performance requirements, budget and reporting into the planning, development and delivery phases of Defence buildings during:

- » Corporate Services and Infrastructure Requirement (CSIR)
- » Strategic Business Case (SBC) Plan
- » Strategic Business Case (SBC)
- » Detailed Business Case (DBC) Plan
- » Detailed Business Case (DBC)
- » Procurement Plan
- » Delivery – Design, Construction, Commissioning, Handover, Takeover, Defects Liability Period and Post Occupancy Evaluation

The Green Building Requirements refer to buildings as “major” or “minor” projects from SBC stage onwards and defines different requirements for each. Essentially minor projects will use a checklist type approach to delivering green building outcomes while major projects require a more rigorous integrated design approach with detailed evaluation of ESD options to deliver good design outcomes (as well as greener buildings).



Buildings for Defence may be procured under four broad categories:

- » IAD planning, development and delivery
- » FACOPS program
- » Private Finance Initiative (PFI)
- » Leased Buildings

Green Building Requirements Part 1 applies to all new buildings or refurbishments constructed by Defence. Minor new works and maintenance is addressed in Green Building Requirements Part 2.

Leased buildings are managed by the Property Services Group and by the regions and are addressed under the Green Building Requirements Part 2. Projects delivered under the Private Finance Initiative (PFI) procurement method must comply with both Green Building Requirements Part 1 and Part 2.

Table 2 Application to Defence Infrastructure Asset Development Process

PLANNING	DEVELOPMENT				DELIVERY				O & M
CSIR	SBC Plan	Strategic Business Case (SBC)	DBC Plan	Detailed Business Case (DBC)	Design	Construction	Completion, Commissioning & Handover	Defects Liability Period & Project Closure	Operation

The Defence Green Building Requirements aim to address ESD principles and a whole-of-life approach during all phases of asset development, and also the need to balance ESD goals with other Defence requirements.

ESD Performance Targets & Essential Requirements

The ESD Performance Targets & Essential Requirements are defined for the different building types such as residential, office, health care, education and temporary transportable. The ESD Performance Targets are quantifiable measures related to energy, water, waste and the use of environmental rating tools such as Australian Building Greenhouse Rating (ABGR) or Green Star.

The targets and requirements apply to new buildings and major refurbishments and may need to be refined on a project by project basis to reflect issues such as a desire to set higher benchmarks or to balance competing priorities between the targets and other Defence requirements such as security.

For further information

Further guidance, including checklists, tools, case studies, specification templates and sources of information are, or will be, included in the Defence Green Building Toolbox, which is a companion reference resource for the Green Building Requirements. It is intended that the Toolbox will be regularly updated and expanded to reflect growing knowledge and emerging technologies for improved green buildings operation.

For more information contact the Estate Policy and Environment Branch in the Defence Support Group, Department of Defence.

The Defence Green Building Toolbox can be found online by visiting:

http://www.defence.gov.au/im/policy/green_building/main.htm