

Relevance of Energy Efficiency Design Management in the Public Sector

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Public Sector Topics

- Drivers of EED in the public sector
- Approach to EED in the public sector
- Examples of EED savings, key learnings & barriers
- SEAI supports
- Questions & answers

Drivers of EED in the Public Sector



Public Sector EED Drivers

“Public bodies that are contracting the development of capital projects with projected energy consumption in excess of 1GWh per annum are obliged to formally integrate the principles of energy-efficient design into the project development phase”

The National Energy Efficiency Action Plan (NEEAP)

Public Sector EED Drivers

- Green Public Procurement
 - DECLG ‘Green Tenders – an action plan on Green Public Procurement’
 - EPA ‘Green Procurement – guidance for the public sector
- Energy Efficiency Directive, S.I. 426 of 2014
- S.I. 147 of 2011 – ‘exemplar’ in terms of use of renewable energy
- Various EPBD directives and legislation
 - Building Energy Rating – asset rating
 - Display Energy Rating – operational rating
- Value for money

Approach to EED in the Public Sector



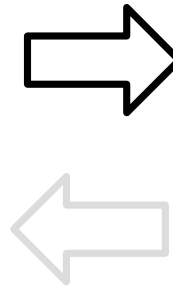
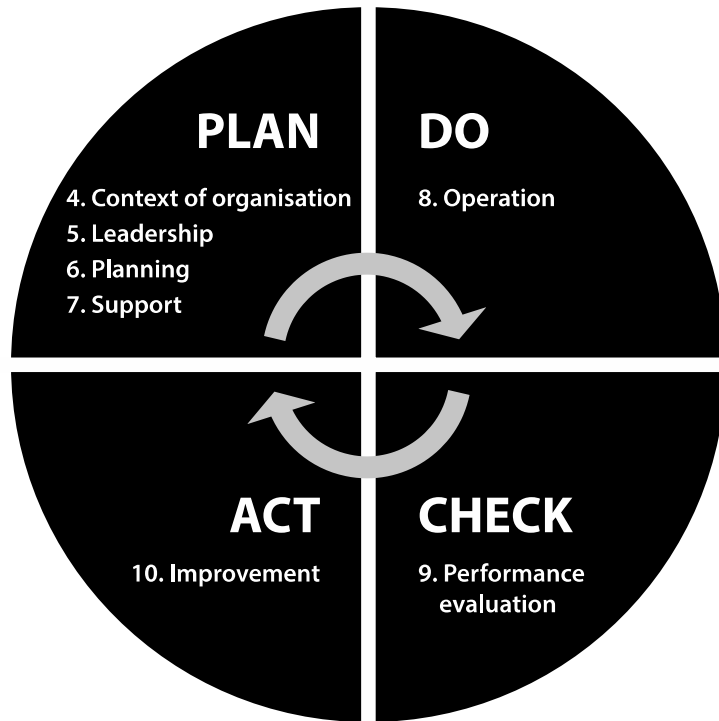
Where can EED apply ?

Addresses energy performance of new and retrofit/modified buildings, equipment and facilities in all sub sectors:

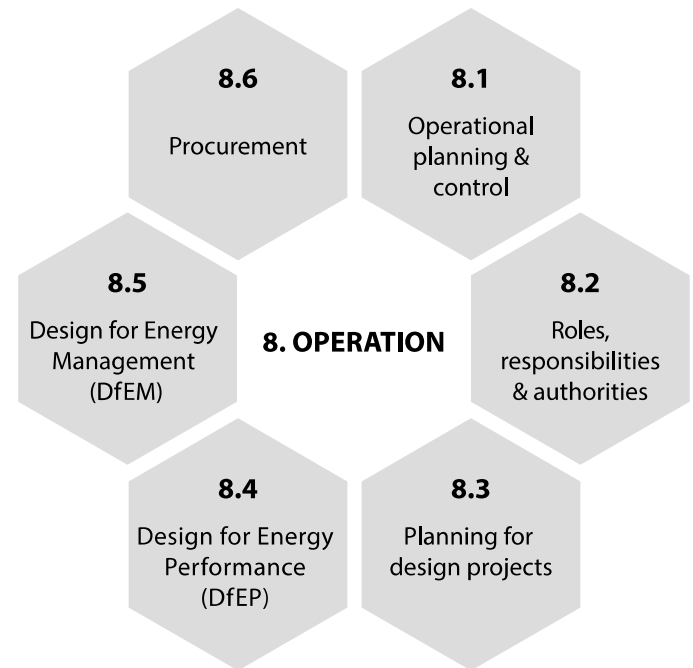
- water and wastewater services
- lighting.
- offices and other buildings.
- schools and colleges.
- hospitals and healthcare facilities
- transport infrastructure.
- energy facilities and power stations.
- buildings and processes in semi state companies.

IS399 – a formal approach

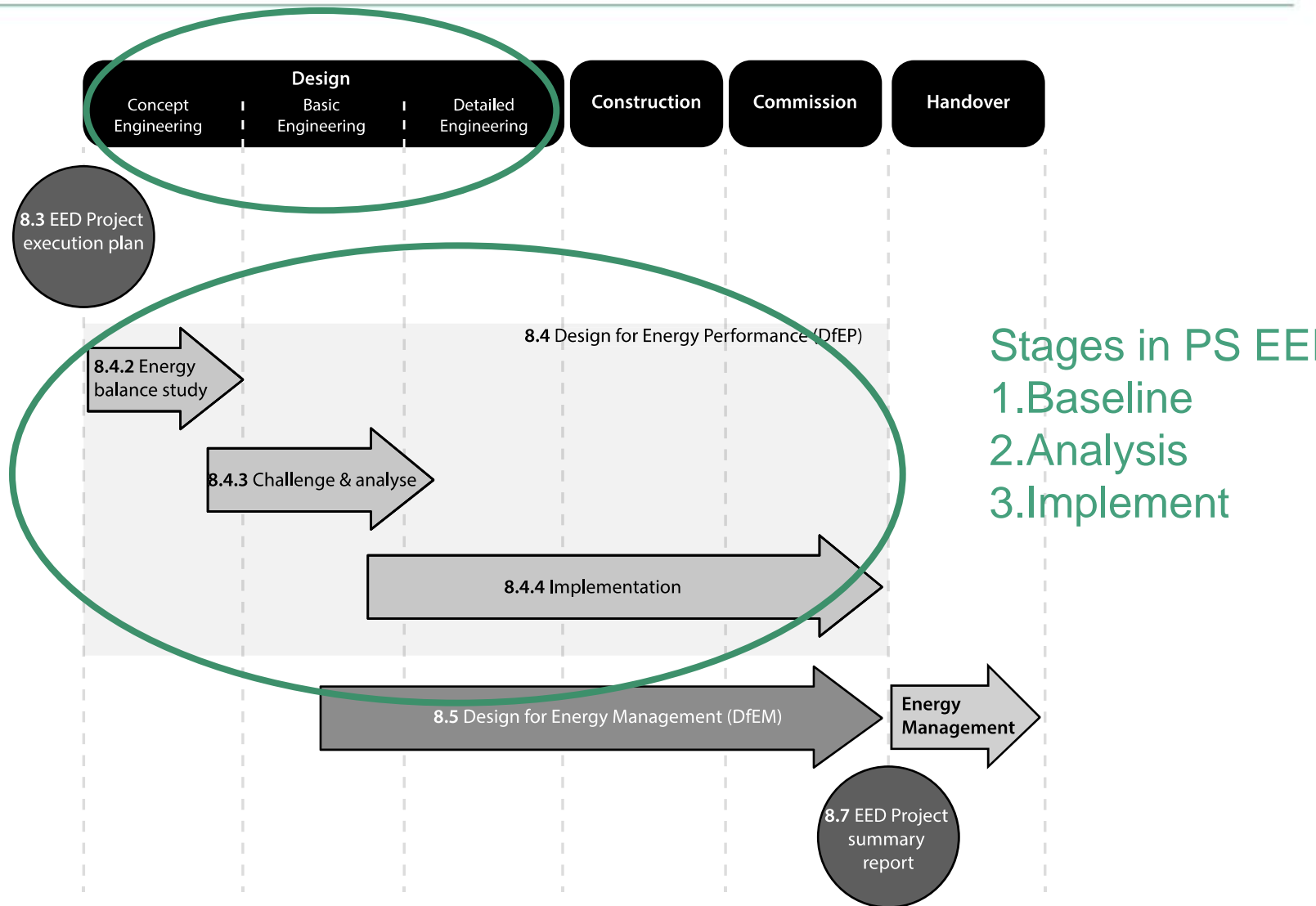
EED Management System



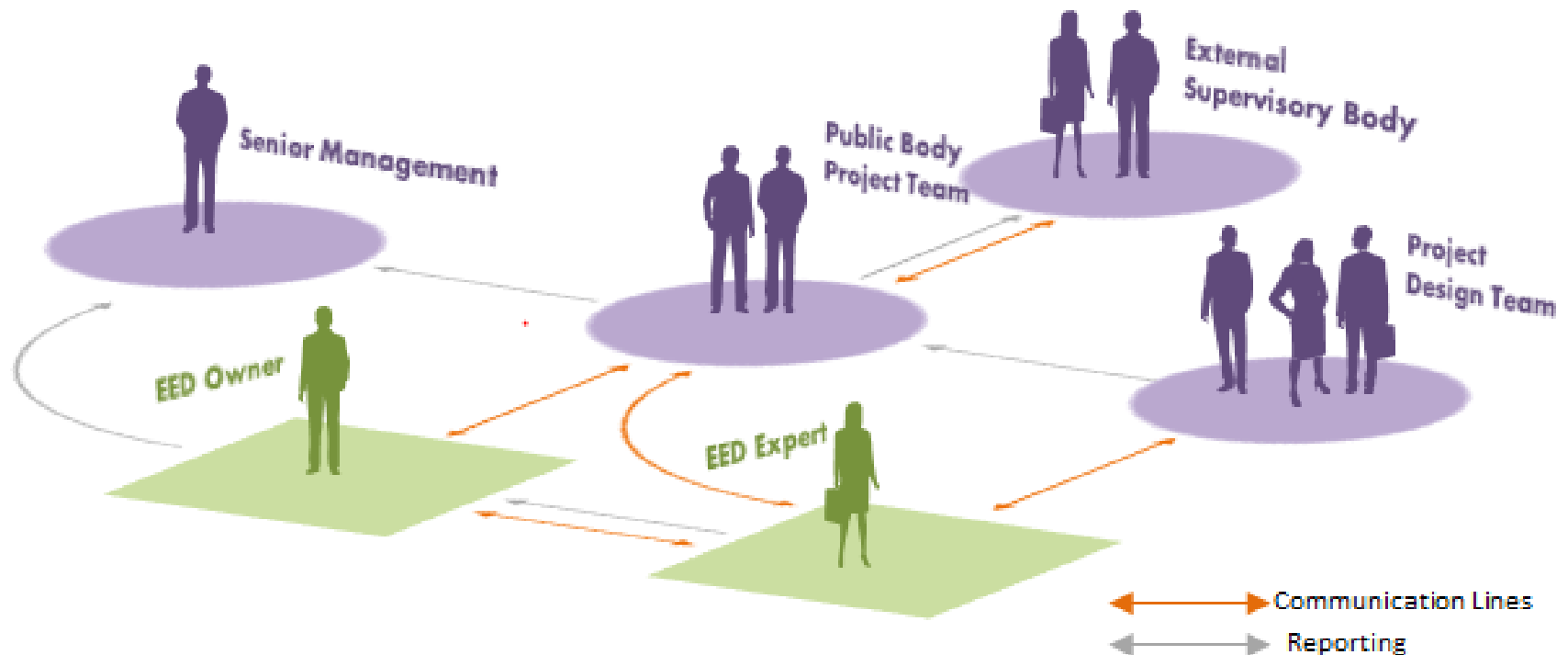
Design Project Application



IS399 project design stages



EED roles for public sector projects







New Organisational Roles

1. EED Expert
2. EED Owner

Examples of EED Savings, key learnings and barriers



Examples of EED Savings in the public sector

Project		Savings Identified (%)	Savings Implemented (%)	Payback (years)	20 Year Value of Savings (€)
Athlone Main Drainage Scheme		17	13	0	290,640
Osberstown Waste Water Treatment Plant		3	4	1.4	2,565,880
Leixlip Waste Water Treatment Plant		17	26	1.6	3,110,660
Laois Co. Co. Water Supply		9	6	0.1	544,020

Other examples..

- National Paediatric Hospital (Mater site)
- Trials in school design projects
- The Luas extension project
- Various local authority building projects (ongoing)

Experience to date

- Buildings
 - Focus on DEC Display Energy Certificate (operational rating) V. Building Energy Rating BER (asset rating)
- Existing sites
 - Focus on integration or energy services
- Design teams
 - Needs to be part of the Design teams brief
- New client roles
 - Involvement from Chief Financial Officer

Nuts to crack

- Independent EED expert
 - Procurement, experience/training
- Energy Contracting
 - Design for energy performance of buildings
- Engrained procedures
 - Building EED into existing capital development procedures

SEAI supports



Next Steps

- SEAI Public Partnership Programme
 - Advanced supports for strategic commitment to NEEAP targets
 - SEAI advisor performs 1-2 workshop based sessions with design team
 - 1-2 projects to familiarise partner with process then PB takes on board continual operation
 - Bigger projects – potential for more detailed supports
 - If a partner – contact Partnership Support Manager or publicsector@seai.ie
 - If not, join !

Thank You

Q&A



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