

Title of the measure:	IRL 8 Public Sector Programme
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General description

The Public Sector programme, administered by Sustainable Energy Ireland (SEI) promotes **energy efficient design, technologies and services in new and retrofit public sector projects**. These projects are excellent examples of good practice and a demand leader for the services and technologies involved. The Public Sector Programme began in 1994 administered by the Irish Energy Centre (now SEI).

The programme has three main elements:

1. Design Study Support Scheme provides support for professional expertise to examine the technical and economic feasibility of design and technology solutions.

The Design Study Support Scheme encourages public bodies to include improved energy efficiency design specification in new public sector and major refurbishment projects.

Under this scheme, financial support of up to 50% of the cost of procuring external consultants to produce a study was made available up to a maximum of €20,000.

Such studies should examine and report on the technical and economic feasibility of energy efficient design and technology solutions. The solutions should lead to an improvement in energy performance, over and above that required by present building regulation standards. Ideally studies are completed at earliest stage of the design consultation process.

79 Design Studies have been approved to date.

2. Model Solutions Investment Support Scheme supports energy management and technology solutions in existing buildings and new build specifications.

The Model Solutions Investment Support Scheme demonstrates energy efficient solutions in new and existing public sector buildings and to offer examples of good practice which encourage replication into the wider commercial building market.

Under this scheme, financial support of up to 50% of the cost of implementing energy efficiency solutions was made available, to a limit of €500,000. All applications were supported with an independently commissioned Design Study or a feasibility study.

76 projects were funded under this scheme.

Technologies and measures approved for funding under the Scheme include:

- Improvements to building fabric
- Natural ventilation measures
- Passive solar measures
- Maximising use of daylight
- HVAC systems and controls
- Electrical energy use including motive power
- Efficient lighting systems and controls
- Building Energy Management Systems
- Occupancy Controls
- Monitoring and Targeting Systems
- Efficient Heating systems and controls including boilers (condensing and High Efficiency boilers)
- Heat Recovery Systems
- Combined Heat and Power (CHP)
- Solar Water Heating Systems
- Ground Source Heat Pumps
- Wind Turbine

3. Energy Management Bureau supports outsourced energy management services to report on energy usage and identify energy related projects.

Energy use and associated costs in the public sector are distributed over a large building stock. At individual building level, the motivation, skills and economies of scale to manage the use of energy are generally not available.

Under this programme, SEI encourages private sector energy management services to provide specialist off-site energy control and management for public sector organisations.

Successful demonstration of this exemplar approach is expected to lead to replication in the commercial sector.

E3 Energy Management Bureau

The E3 Energy Management Bureau is assisting the four Dublin based colleges, DIT, TCD, DCU and UCD in achieving a target reduction in energy consumption by 10% over a three-year period.



A 'bureau service provider' consisting of White Young Green and Powertherm Solutions has been appointed to manage the bureau on behalf of the four colleges. These services cover: energy monitoring and reporting, development of benchmarks, energy auditing and project management services, and on site awareness/ training.

At the end of the first year the colleges achieved a 3.3% saving, valued at €158,000 (at 2004 prices). At the end of the second year the colleges achieved a 6.3% saving, valued at €258,000 (at 2005 prices). In 2006 (the final year), the colleges achieved a 12% reduction in energy use, valued at €643,000. Total savings from energy management activities over 3 years exceeded €1million and 6,200 tonnes of greenhouse gas. Savings from competitive procurement of electricity and gas saved approximately another €1million.

Link to E3 Energy Management Bureau Website www.e3.ie

Estimated Savings are from the National Energy Efficiency Action Plan.

Ex-ante evaluation	2010 ESD Target	2016 ESD Target	2020 National Target
CO ₂ (kt)	40	40	40
Energy (GWh)	160	160	160

Estimated Impact evaluation (Semi Quantitative Estimate)

Measure Impact		
low	medium	X high

Definition of Impact:

Low: Impact below 0.1 % of overall energy (fuel/electricity) consumption or energy-related CO₂ emissions in the tertiary sector of Ireland.

Medium: 0.1 to below 0.5 % of overall energy (fuel/electricity) consumption or energy-related CO₂ emissions in the tertiary sector of Ireland.

High: 0.5 % upwards) of overall energy (fuel/electricity) consumption or energy-related CO₂ emissions in the tertiary sector of Ireland.

References

For full details, including a number of case studies, go to www.seai.ie.