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SDCC Energy Efficiency Pre Planning Guidance

Energy efficiency is an important consideration for planning applications. Major developments should maximize energy efficiency and support the transition to a low carbon future and encourage the reuse of existing resources, including conversion of existing buildings and encourage the use of renewable resources.

For all commercial developments of over 1,000 sq.m. or developments of over 30 residential units, an Energy Statement should accompany the planning application outlining the anticipated energy performance / CO2 emissions of a proposal and detailing consideration of renewable technologies and extra energy efficiency measures.

Design statements which are submitted as part of planning applications for larger/more complex development proposals (comprising of over 30 residential units or over 1,000sq.m commercial) should include sections in relation to Energy Efficiency and Climate Change adaptation measures thus ensuring that the development is equipped for challenges anticipated energy demand and from a changing climate. For residential development regard should be had to Criteria 9 of the DoEHLG, 'Urban Design Manual, A Best Practice Guide' (2009) which relates to adaptability.

The Planning Authority will require all applications to meet the highest standards of sustainable design and construction and conform in full with the sustainable energy policies outlined in Sections 1.15, 10.1 and 11.7 of the South Dublin County Council Development Plan 2016 - 2022.

Developments which include major refurbishment or change of use, may be required to submit an Energy Statement with the planning application addressing how demolition, construction and long-term management of the development will be catered for and how energy considerations have been inherently addressed in the development. This will be dealt with on a case-by-case basis through the pre-planning process.

Energy Statements submitted should be in accordance with Article 8.0 'Operation' of IS 399 'Energy Efficient Design management' developed by 'Sustainable Energy Authority of Ireland' (SEAI) in conjunction with the 'National Standards Authority of Ireland '(NSAI). The author of the energy report should be appropriately qualified or competent to undertake the assessment. Other approved certification methods such as BREAM, LEED, PHPP or equivalent standards will be deemed as acceptable in lieu of IS 399 2014.

Where possible, building materials with low embodied carbon should be used.

For small scale development improving energy performance could make sense, however some regard should be given to carbon cost-effectiveness. This measure is the capital cost of the measure, less the lifetime fuel cost savings, divided by the lifetime carbon dioxide emissions savings. Understanding the carbon cost effectiveness of measures may help decide which measures to achieve the maximum carbon emissions reduction and energy efficiency for money.

The table below provides a rough guide to the approximate carbon cost effectiveness

Measure	Cost	Carbon Dioxide Emissions Reduction	Carbon cost effectiveness
Solar PV panels	Medium-High	Low-Medium	Medium
Solar thermal panels	Medium	Low-Medium	Medium
Air source heat pumps	Medium	Low-Medium	Low
Biomass heating	Medium	Low-Medium	Low-Medium
Wind turbine	Medium	Low	Low
Solid Wall insulation	High	High	Medium
Double glazing	Medium-High	Low-Medium	Low-Medium
Loft insulation	Low	High	High
Floor insulation	Medium	Medium-High	Low-Medium
Condensing boiler	Medium	Low-Medium	Medium
Draught-proofing	Low	Low-Medium	High
Led Lighting	Low-Medium	High	High

Full details of the Council's Strategy, Policies and Objectives regarding Energy Planning is available in Section 10 of the South Dublin County Council Development Plan 2016 - 2022.