Abstract

Title Sustainable Development in the Irish Construction Industry

Sub Title Evaluating the importance of the role of the project manager in sustainable construction.

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Purpose: The aim of this paper was to highlight the importance of the role of the project manager in the construction industry in relation to sustainable development. It was expected that the findings and the recommendations from this research would highlight the need for a national framework for sustainable construction practices. The findings were intended to act as guidelines for project managers on future sustainable developments.

Methodology: A comprehensive literature review was undertaken into the areas of sustainable development, the construction industry, climate change, ecological building and project management. For the primary research semi-structured interviews were carried out with participants from the construction project management and sustainability sectors. A questionnaire was used to provide further weight to the findings of the interviews.

Findings: The research found that the construction industry in general has been slow to adapt to the changes necessary to curtail the energy losses from buildings and CO₂ emissions from a nation which continues to be overly dependent on fossil fuels. The construction industry in 2008 produced 13.5 million tonnes of waste. It was responsible for 13.81 MTCO₂ in 2005, which translates directly to 3.44% and indirectly to 8.26% of national emissions. Primary and Secondary sources point to the role of the project manager as being the position of greatest influence in a project, yet they corroborate that historically the project manager has been part of the problem, not part of the solution, 38% of respondents indicate that project managers need to focus on reducing the running costs of projects. The research concluded by recommending that a framework of sustainable construction practices be established for project managers. This framework would act as a reference manual of best practices in sustainability and enable the project manager to make decisions which would benefit the project in the long term.

Keywords: Sustainable development, project management, renewable energy, construction industry