

Acceptance and Implementation of
Environmentally Sustainable Options in the
Construction and Operation of
Low-Rise Commercial Developments

By

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Thesis submitted in partial fulfilment of the requirements
for the Degree of Bachelor in Building Construction Management
in the University of New South Wales

November 1999

Abstract

The acceptance and implementation of environmentally sustainable options (ESOs) in low-rise commercial developments in Australia is restrained by current perceptions of clients and building professionals, legislation and practices in the building industry and inadequate incentives for ESOs.

In the study an analysis is given of the perceptions of building professionals of ESOs specifically in relation to: client demand; ESO expenditure; incentives; corporate image; bottom-lines; life cycle analysis; buildability; construction time; functionality; project management; capital and operating costs; the emergence of the service sector and urban consolidation; financial incentives for stakeholders; rating schemes; and industry experience.

These views are researched by means of a survey of the attitudes of building professionals to environmental issues and ESOs and constraints to the acceptance and implementation of ESOs. This exploratory study has implications for future more detailed research into professional ESO education, ESO benchmarking and life cycle analysis, preparation of ESO impact statements in Development Applications and the establishment of composite "star" rating indices for ESOs.

A number of recommendations in these areas are made including alliance-based project management and intelligent Internet digital-based enhancements of ESO technologies.