

DEVELOPER STRATEGIES FOR SUSTAINABLE DEVELOPMENT IN THE UK

Redevelopment versus refurbishment and the Sustainable Communities Plan



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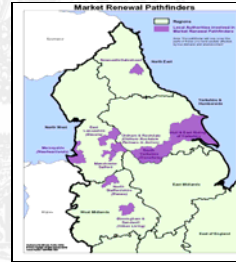
The College of Estate Management
Reading (UK)

Introduction

A key problem in some parts of UK housing = low demand & high vacancy

- **LOW DEMAND** – exacerbated during 1980s and 1990s across Midlands and Northern England. Low demand is characterised by:

- ✓ Depopulation – caused by industrial collapse and loss of manufacturing jobs
- ✓ Chronic mismatch of supply and demand (at local level)
- ✓ Unpopular neighbourhoods – e.g. high crime, stigma, anti-social behaviour
- ✓ High turnover of tenants and poorly-managed private rented sector



The Wider Issues?

- UK construction industry = energy intensive
- Residential property = 27% CO₂ emissions
- 25% could be saved cost-effectively (DoE, 1997)
- Monitoring sustainability increasingly important
- Barriers exist towards sustainable practice:
 - ✓ Absence of suitable set of indicators
 - ✓ Uncertainty in criteria for sustainability
 - ✓ Lack of fiscal incentives & consumer market
 - ✓ Poorly defined planning goals
 - ✓ Prohibitive costs associated to high environmental standards

Background and policy

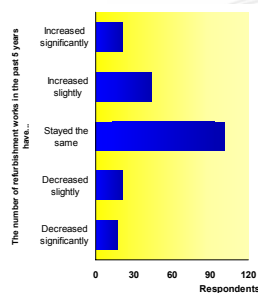
Literature review highlighted several key themes:

- Growing awareness of sustainability within UK construction industry – BUT standard definition or **measurement criteria lacking**
- A robust set of indicators are required to measure sustainable development
- UK practitioners are slow to adopt sustainability measures – due to economic/financial reasons e.g. lack of consumer market for eco-property.

Survey Work

- Greater level of certainty required in decision making processes/site evaluation
- Number of common toolkits exist (EcoHomes, EcoHomes XB, SAP, Envest, BEQUEST and Code for Sustainable Building Codes)
- National postal survey of over 3,000 practitioners (December 2006):
 - ✓ House builders (private and social)
 - ✓ Professional advisors (architects, building surveyors, QS)
 - ✓ 7.8% response rate (218 respondents)
 - ✓ Gained opinion on use of toolkits amongst profession

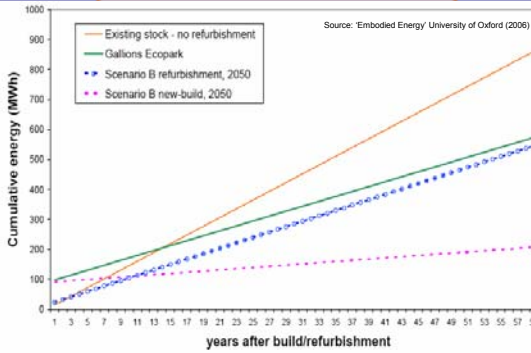
Main Findings



Results suggest that UK house builders still focussing on new build. Feasibility studies – redevelopment rather than refurbishment.

Why is new build favoured?

- **Financial cost** is a barrier to refurbishment (elemental costs for refurbishment were mentioned as being higher per sq.m)
- Private housebuilders – **lower cost, greater speed in delivery** and ability to incorporate **modern day layouts** ('push' factors for new build)
- Social housing providers also noted ability of **higher densities**



Development Type	Average cost (per dwelling)
Refurbishment (minimal)	£6,645.76
Refurbishment (major)	£45,314.00
New Build	£75,297.37

Economically, refurbishment appears to be more cost-effective. However, one must consider:

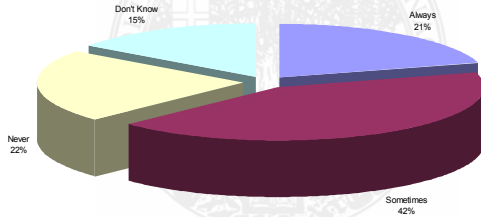
DEVELOPMENT PRESSURES:

- ✓ Land is scarce (e.g. emphasis on brownfield)
- ✓ Greater levels of risk with refurbishment
- ✓ Developers and planning authorities seeking higher densities
- ✓ Modern layouts (for 'failed communities') – parking spaces, alleys, recycling points
- ✓ Premium values for new build



Reliable assessment may be lacking – minimal uptake of sustainability toolkits

Frequency of monitoring sustainability in UK residential projects



Company size versus Monitoring sustainability

- Larger house builders and professional advisors more likely to monitor sustainability (31%)

- ✓ Available resources for sophisticated monitoring?
- ✓ Strict protocol for CSR?

- In contrast, 25% of medium-sized housing providers and 14% of smaller developers 'always' monitor sustainability.

- Private developers and social housing providers – preference to SAP rating and EcoHomes. Professional advisors were more accepting of whole life costing.

- 53% of respondents were in agreement with the statement that 'whole life cycle costing techniques are currently not sufficiently well developed to be useful for appraising the relative sustainability of new build and refurbished housing projects.'

- **Common-sense approach in assessment methodology** (16%) – consistency in scoring, definitions and measurements
- **Simpler methodology/process** (14%) – format could be simplified to improve the usage of assessment methods
- **More guidance required** (11%) – to combat the uncertainty surrounding the definition of sustainability
- **Enhanced criteria in environmental profiling** (11%) – to allow for greater transparency and levels of understanding

Research found:

- Lack of consistency in government-led incentives when looking at redevelopment or refurbishment options (e.g. taxation on refurbishment)
- Absence of clear measurement technique – practitioners seek simpler, more transparent assessment methodology for sustainability appraisals
- Cost is important BUT not sole factor
 - ✓ energy saving ('embodied energy')
 - ✓ social issues (retention of communities, heritage)
 - ✓ environmental issues (energy efficiency)

Final report can be accessed on the College's website:
www.cem.ac.uk/research