

# Planning for Efficient Environmental Resource Use and Its Social and Economic Effects

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## **Background to research**

The UK government has recognised in its consultation document on sustainable development, *Opportunities for Change(1998)*, that urban areas are both a major source of the waste and pollution of natural resources (i.e. energy, water, air, land) and also the best hope of establishing a more efficient pattern of resource use in the future. This document also emphasises the key role that the planning system has to play in promoting and pursuing the sustainable use of natural resources.

However while a number of documents explain why the planning system is of central importance there has not been a great deal of guidance on how UK planning authorities should address environmental issues. Nevertheless two things are clear :-

- Planning for environmental sustainability requires planning offices to take real and systematic account of environmental objectives (e.g. reduced car use, energy conservation) which they have generally paid lip service to in the past.
- A key challenge will be to meet the projected increase in housing demand in a manner which is environmentally sustainable both in terms of its location and design.

My research addresses both of these issues by examining how planning processes and urban design principles are being used in practice to deliver development which embodies environmental sustainability principles. Environmental sustainability is an elusive concept but for my purpose I have adopted a definition which puts quality of life aspects to one side in order to focus on issues relating to the efficient use of natural resources and the avoidance of waste and pollution.

***Research approach***

The initial research task (which is currently underway) is to identify examples of residential development which promote environmental sustainability objectives. This is being done via a national questionnaire survey of local authorities.

The questionnaire focuses on two main areas. The first asks about the development planning policies and processes being used to address environmental issues and the second asks planning officers to nominate one or more examples of development which promotes the sustainable use of natural resources. The project may be neighbourhood wide or involve development within a neighbourhood; it may involve a major new location or be an example of the incremental adaptation of an existing neighbourhood (perhaps as part of an urban regeneration scheme) however it must involve a project with a significant element of residential use.

I anticipate that by the time of the workshop I will be in a position to discuss the findings of this survey and in particular :-

- the ways in which resource use aspects of environmental sustainability are being pursued through the planning system
- the problems and barriers to implementing such initiatives faced by planning authorities.
- the knowledge of (and attitude to) sustainable environmental resource use issues among planners

***Research schedule and design******Stage 1 Dec '97 - Ongoing : Literature Review***

The literature review up to this point has concentrated on defining relevant theoretical concepts and searching for examples of innovative UK practice in sustainable urban planning and design. It has found that certain urban design principles ( including densely populated areas with a rich mix of uses accessible to non-car users) are being tested by bodies such as the Sustainable Urban Neighbourhoods Initiative and the Urban Villages Forum which believe they offer the prospect of combining environmental resource use objectives with a high quality urban experience. This

combination is embodied in the eco-neighbourhood - an ideal type which achieves economic, social and environmental sustainability.

*Stage 2 Sept '98- April '99 Questionnaire Design and Analysis*

The emphasis on planning and design at the neighbourhood level which has emerged from the literature review has given rise to a number of issues relating to how sustainable neighbourhoods can be brought into existence and their overall effectiveness assessed. These include

1. How and to what extent are sustainable design principles being used to pursue environmental protection and efficient resource use?
2. What are the obstacles to pursuing these objectives through the planning system?
3. Where these environmental objectives are being pursued, how effectively are they being delivered?

*Stage 3 April '99-Sept99 : Case Study Identification and Evaluation*

By this stage examples of planning and design for sustainable resource use should have been identified. Case study analysis will then be undertaken designed to establish the processes through which sustainable neighbourhoods can be brought into existence and the extent to which sustainable resource use objectives are being achieved in practice. At the end of this stage it is anticipated that a submission will be made for an MPhil degree.

*Stage 4 Sept '99 - Sep 2000 MPhil-PHD Transfer*

PHD research will also be case study driven. Further investigation will be undertaken of neighbourhoods which have been identified during the MPhil stage as representing good practice in planning/design for sustainable resource use. At this stage the focus will be the opportunities for (and threats to) achieving social and economic objectives. Here as throughout the research will have a practical emphasis - to identify opportunities for implementing development which is sustainable in all ways- not just environmentally.