

Urban regeneration for a sustainable city:

The role of housing

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Studies in Public Policy:

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Executive summary

Urban regeneration entailing sustainable housing can substantially contribute to the sustainable development of urban areas. While regeneration in Dublin has improved some of the areas worst affected by urban decay, aspects of it are questionable from a sustainability perspective. Continuing urban sprawl and relatively low densities have exacerbated problems of the over-consumption of green-field land, dependence on private transport and long commuting distances. Crucially, there is an increasing distance between where people work and live, which is contrary to sustainable development goals. In addition, the sustainability of much of the housing constructed in the urban renewal areas of the city is open to question. Problems include: high levels of residential turn-over; rising levels of tenancy; poor quality designs; and a lack of affordable accommodation to suit varied household types. For sustainable communities to be implemented, these issues must be addressed.

There are a number of significant barriers which must be overcome if more sustainable urban housing is to be implemented. The latest housing policy and practice documents are a welcome advance, but their shortcomings include an insufficient emphasis on: brown-field development; sustainable construction, design and use; renovation rather than demolition; and ‘partnership’ with residents. Moreover, these documents have not been adequately communicated to those who should be implementing them. Hence, there is a lack of agreement about the nature of sustainable housing among housing providers and planners. Recent changes in the building regulations are welcome but do not go far enough. Also, past experience reveals that without adequate enforcement, compliance will be limited. The other key barriers include: limited knowledge and expertise in sustainable construction and renovation methods; limited expertise in sustainable urban regeneration; nimbyism (negative attitudes to higher density and social and affordable housing); poor quality and design of some higher density housing; accommodating multiple interests in regeneration projects; an emphasis on demolition rather than renovation; and limited resources.

The implementation of sustainable housing and regeneration in Dublin might be facilitated in a number of ways. First, housing and regeneration policy needs to place more emphasis on: brown-field rather than green-field development; sustainable construction, design and use; renovation rather than demolition; and ‘partnership’ with residents. These issues must be highlighted as important concerns for Irish housing practitioners. In particular, regeneration plans must emphasise each of the social, economic and environmental pillars that are essential to the sustainable redevelopment. Most regeneration approaches seem to focus on improving and extending the physical rather than the natural or social environments. In areas of significant social disadvantage, regeneration projects have involved, and continue to involve, the demolition of the worst estates when the causes of many of the problems are social rather than physical. In addition to improving the physical environment, social resources and processes are essential for the creation of what Thomas (1991) calls ‘viable’ and ‘coping communities’. This requires not just the provision of community facilities but also supplying a range of social supports (e.g. education and training, childcare, assistance with childcare costs) to build a socially inclusive and sustainable community.

Second, the building regulations need to be strengthened and the level of inspections increased to ensure compliance with them. Third, the provision of training programmes in this area is essential if sustainable construction, design and maintenance are to be achieved. These training programmes should highlight information on reliable techniques and products as well as the availability of certified suppliers, and maintenance services. Education is required not just for new build but, in particular, to ‘retrofit’ the unsustainable housing which has already been built. Existing grants schemes could be extended to provide incentives for the completion of this work. The Irish Government’s framework for sustainable economic renewal (2008) promises that ‘retraining of construction and other workers will be re-focused and enhanced in order to support retrofitting of our housing stock and provide the skills for the green economy’. In addition, it suggests that €30 million will be spent in 2009 on improving insulation in approximately 25,000 houses. These commitments are a welcome start to these important processes.

International research suggests a limited implementation of eco-neighbourhoods, despite the fact that the technology is well-demonstrated, which is attributed to inertia on the part of public and private agencies engaged in housing provision. In the Irish context, strong leadership and political commitment in this area is required by the government, the Department of the Environment and local authorities. All housing policies, strategies, action plans and development plans should be sustainability proofed and monitored with penalties for failure to comply with the objectives for the sustainable development of the area. In particular, planning authorities must be required to implement sustainable housing rather than simply advised to do so, a factor which has also impeded sustainable housing in England (Williams and Dair, 2007). Special attention must be devoted to the integration of housing, land-use and public transportation policies and a strong regulatory framework to ensure that planning decisions are in line with policy. Nimbyism in the form of negative attitudes to higher density and social/affordable housing needs to be challenged. This may be done by improving the design of such schemes and by better information campaigns targeted at both local politicians and residents. Higher density housing might be more popular if designs were improved but also if the issue of noise pollution was resolved as well as concerns regarding the management of mixed tenure, multiple occupancy dwellings.

Those who have built up expertise in urban regeneration need to be enabled to transfer this knowledge to others who are working in this area. This could occur in a number of ways. First, staff with the experience and requisite skills could be tasked with working on new projects both within and across local authorities so that regional or national expertise is established. Second, guidance documents outlining the key points should be produced and used so that the lessons of the past are not forgotten and that other projects progress at a faster pace. The economic, social and environmental dimensions need to be addressed in all documentation. On the basis of past experience it is clear that the each of the following is useful:

- A regeneration board
- An integrated partnership model, including both the community and the local authority

- Strong mediation and leadership skills are essential for those engaged in the process
- An independent Chair of the Board with strong mediation skills
- A small, multi-disciplinary, multi-agency team with a range of expertise (e.g. education, health, social welfare)
- A good regeneration plan which can be completed in designated timeframe, including social, economic and environmental elements
- A good project manager
- Resources (local authority support, including finance and staff)
- A regional/national community representative group consisting of those who have developed skills in this area with the aim of passing on these skills to other communities.

Achieving sustainable housing and regeneration requires considerable resources. This presents a considerable challenge in the current economic climate. As a result, it is a matter of some urgency that resources be targeted at: training of all involved in the construction of new housing to ensure that it is sustainable; training of those involved in the retrofitting of the unsustainable housing constructed in the past; improvement in and enforcement of the building regulations; providing sufficient social and affordable housing; supplying the social infrastructure required for sustainable communities; and adequate staffing of community services in these areas. In addition, local authorities will need to prioritise the housing regeneration projects they undertake in the next few years according to the extent of deprivation in these areas.

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Abbreviations

AHP	Affordable Homes Partnership
BER	Building Energy Rating
CDB	City/county Development Board
CHP	Combined heat and power
Comhar SDC	Comhar Sustainable Development Council
DCC	Dublin City Council
DDDA	Dublin Docklands Development Authority
DLRD	Dun Laoghaire Rathdown County Council
DOE	Department of the Environment, Heritage and Local Government
HSE	Health Services Executive
IHBA	Irish Home Builders Association
NU	New Urbanism
PPP	Public-private partnership
RIAI	Royal Institute of Architects of Ireland
SD	Sustainable development
SDCC	South Dublin County Council
SEI	Sustainable Energy Ireland
SH	Sustainable housing
SPC	Strategic Policy Committee
UV	Urban Villages

1

Introduction

Environmentalism forces us to re-examine the wide ranging impacts that housing activities are responsible for, from the micro-climate of the dwelling to global warming, and to do something about them (Bhatti, 2001, p. 42).

1.1 Introduction

Housing policy and practice can make a significant contribution to or detract from the sustainable development (SD) of urban areas. Its importance was recognized in the report of the World Commission on Environment and Development and in the global action plan for SD, Agenda 21. However, housing and its regeneration are relatively neglected topics in the SD literature with a few exceptions (Bhatti, 2001; Hall and Purchase, 2006; Huby, 1998; Ng, 2002; Tosics, 2004; Williams and Dair, 2007). Various aspects of housing can have significant negative impacts on the environment, including its location, construction, design, maintenance, management, use and demolition. In addition, there are ecological limits to the key inputs to housing, namely land and many non-renewable construction materials. Similarly, these inputs along with various outputs from housing can be significant pollutants to the ecosystem.

This report focuses on methods to achieve a sustainable city. In the Irish context, previous housing policies and practices have resulted in unsustainable trends. The regeneration of existing neighbourhoods is required to offset much of the resulting damage. Characteristics of sustainable housing (SH) include: sustainable land-use planning; resisting scattered settlements; mixed-use developments; encouraging housing close to employment and public transport; promoting higher residential densities; sustainable construction and design; sustainable use, management and maintenance of buildings; high quality; access to green space; attractive, clean and safe residential environment; affordable; tenure and social mix; and access to social resources (Winston, 2005). However, to a large extent, Irish housing development has

consisted of suburban sprawl on green-field sites, and low-density housing, including one-off housing in rural areas. There is a strong dependence on the car and very limited public transport. These unsustainable housing trends were exacerbated since about the mid 1990s when the demand for housing increased significantly as a result of economic growth and a range of demographic factors. National policy focused on increasing the supply of housing and construction was at all time high from the mid-1990s to the end of 2006, when it was consistently the highest in the EU (CSO, 2008). For example, in the year 2000, 14.73 units were constructed per 1,000 inhabitants compared to an average of 4.25 per 1,000 among the 25 EU members (Norris and Shiels, 2007a, 2007b).

A National Sustainable Development Strategy (1997), Residential Density Guidelines (1999) and a National Spatial Strategy (2002) have been produced. These have been influenced by the World Commission on Environment and Development (WCED), Agenda 21 and the European Spatial Development Perspective, all of which called for the integration of social, economic and environmental aspects in place making processes. In addition, the Planning and Development Act, 2000 requires that sustainable development be central to the plans of local authorities. However, policy implementation remains problematic in the Irish context. First, there is no effective mechanism for ensuring that national and regional objectives are translated into local authority development plans. Second, there is no 'working definition' of sustainable development, which results in conflicting and selective interpretations. In addition, most approaches focus on a particular dimension - economic, environmental or social - resulting in outcomes which fall short of sustainable development. This report assesses the sustainability of housing policies and practices at national and local government level in Dublin. To this end, it focuses on the policies of the Department of the Environment, Heritage and Local Government (DoE), the Irish government department responsible for housing and regeneration. In addition, it examines the policies and practices of the four Dublin local authorities: Dublin City Council; Dun Laoghaire-Rathdown; Fingal; and South Dublin county councils. Social partnership operates at local level in Ireland via strategic policy committees (SPCs) and county and city development boards (CDBs). It is argued that the CDBs and SPCs are central to the delivery of local sustainable development in Ireland (Mullally, 2001; Ellis *et al*, 2004). As a result, these organisations were also included in the study.

1.2 Research objectives and questions

The objectives of the research were as follows:

- To assess the sustainability of housing and regeneration policies and practices
- To examine how local authorities define sustainable housing and regeneration
- To explore methods of achieving a sustainable city involving housing and regeneration
- To identify best practice in sustainable urban housing and regeneration
- To examine key barriers to attaining sustainable housing and urban renewal in Dublin.

The following research questions were the focus of the study.

- What is the impact of relevant policies on sustainable housing and regeneration in Dublin?
- What is the relative importance of different levels of governance?
- What resources are available to achieve sustainable regeneration (e.g. financial, time, expertise)?
- Who are the relevant actors (institutional, political, technical, residents, etc), what roles do they play and what is the quality of the relationships between them?
- What tools are used to implement sustainable urban regeneration (e.g. Integrated Area Plans, and Strategic Development Zones)?
- What are the barriers to implementing sustainable housing and regeneration and how might they be overcome?
- How might local government be supported to achieve sustainable regeneration?

1.3 Methodology

This research assessed the barriers to achieving sustainable housing and regeneration policies at central government level and the policies and practices of the four Dublin local authorities. The first stage of the project involved extensive documentary

research, commencing with a review of the international literature in this area. This was followed by a detailed analysis of the following documentation for the regional authority, the four local authorities, the CDBs and relevant SPCs (e.g. the Planning and Housing SPCs):

- current local and regional authority development plans
- current housing strategies in each of the four Dublin local authorities
- annual reports for each organisation: 2002-date (post National Spatial Strategy which provided a template for sustainable housing)
- minutes of meetings of CDBs and relevant SPCs: 2002-date (post National Spatial Strategy).

In addition, it involved 40 depth interviews with members of relevant organisations and key stakeholders including:

- The Department of the Environment, Heritage and Local Government
- Heads of housing, planning, regeneration experts and chairs of relevant SPCs in:
 - Dublin City Council
 - Dun Laoghaire-Rathdown County Council
 - Fingal County Council
 - South Dublin County Council
- Voluntary and Co-operative Housing Sector
 - The Irish Council for Social Housing,
 - National Association of Building Co-operatives
 - Cluid Housing Association
 - Respond! Housing Association
- The Affordable Homes Partnership
- The Irish Home Builders Association
- The National Building agency
- The Royal Institute of Architects of Ireland
- Duncan Stewart and Earth Horizon Productions
- Gavin Harte, Sustainable housing expert
- Sean Harrington Architects
- Sustainable Energy Ireland
- Fatima Regeneration Board and community representatives

- Dublin Docklands Development Authority and community representatives

The interviews focused on a) the conceptualisation of sustainable housing and urban regeneration, b) obstacles to implementing sustainable housing and regeneration, c) means of overcoming these barriers, and d) innovative regeneration projects in the region.

1.4 Outline of the report

The next chapter presents an analytical framework for conceptualising and assessing sustainable urban housing and regeneration. In addition, it outlines a number of models of urban regeneration and assesses their potential to contribute to sustainable housing. Chapter 3 presents a brief overview of housing and urban regeneration policy and practice in Dublin and evaluates the extent to which they are sustainable. Chapter 4 presents the key barriers to attaining a sustainable urban regeneration and housing in Dublin while Chapter 5 presents some suggestions for overcoming these barriers in the Irish case.

Urban Regeneration for Sustainable Development: the Role of Sustainable Housing?

2.1 Introduction

Housing is one of the most important public policies affecting urban development and, as such, it has a significant potential to contribute to sustainable development (SD) (Priemus and ten Heuvelhof, 2005; Tosics, 2004). Despite this, it is one of the more neglected aspects of sustainability and the concept of sustainable housing is relatively neglected in the literature. The location, construction, design, management, maintenance, use and demolition of housing can have significant negative effects on the environment (Huby, 1998; Tosics, 2004; Winston, 2007; Winston and Pareja-Eastaway, 2007). In addition, there are obvious ecological limits to the inputs to housing, including land and non-renewable construction materials. Similarly, a range of inputs to and outputs from housing are significant pollutants to the eco-system.

Turning first to land, the quantity, type (brown versus green-field) and location of land used to construct housing will determine its impact on environmental resources such as wildlife, landscape, and amenity value. In addition, construction consumes a considerable amount of other valuable environmental resources such as wood, minerals, energy, and water (Huby, 1998). The use of housing entails the consumption of energy and water as well as the production of waste, all of which can be reduced depending on the design of housing and its facilities (Edwards and Turrent, 2000). Another aspect of the way housing is used relates to the location of a house, which affects the extent to which residents use public transport and their car use. From a regeneration perspective, many environmental measures have concentrated on new construction while strategies to address the environmental and energy efficiency of the existing stock have failed to keep pace (Priemus, 2005). Finally, the demolition of housing involves the production of vast quantities of waste, some of which is potentially toxic.

The environmental impacts associated with housing may be worst for lower income groups (Huby, 1998). Poorer households have less choice of environment and may be concentrated in areas of dereliction, air and noise pollution, with limited access to high quality green space. This concentration of lower income groups may be linked to their increasing spatial segregation and the residualisation of social housing (Fahey, 1999). In addition, they are less likely to be able to afford to undertake energy efficiency improvements to their homes without financial support. These environmental factors may detract from the quality of life of poorer households and have a negative impact on their physical and mental well-being.

Despite this litany of negative impacts, it is obvious that housing can also enhance the environment (Bhatti, 1999). Therefore, from both policy and practice perspectives, it is important to examine the role of housing in planning for sustainable development. Ireland, like many countries, has a long history of unsustainable housing practices, such as constructing low density, energy inefficient dwellings on green-field or suburban sites using non-renewable sources (e.g. Tosics, 2004; Williams and Shiels, 2002; Williams *et al*, 2003; Winston, 2007). In light of this, there are significant challenges for the regeneration of urban areas. Kennedy and Kennedy (1997) have argued that regeneration policies in most countries have progressed independently of the sustainability agenda. This chapter assesses the sustainability of selected urban regeneration approaches from a housing perspective. It includes evaluations of three specific planning approaches: New Urbanism, Urban Villages and Eco-neighbourhoods. It begins with a discussion of the nature of sustainable urban housing.

2.2 Sustainable Development and Urban Housing

The most frequently cited definition of SD was produced by the World Commission on Environment and Development, which defined it as development that meets ‘the needs of the present without compromising the ability of future generations to meet their own needs’ (WCED, 1987, p. 8). Its vision of SD entailed economic, social and environmental pillars, a model which some have extended by adding an institutional or governance pillar (e.g. Pareja-Eastaway and Stoa, 2004, UNCED, 1992). SD is often represented as a balance between economy, environment and equity (Berke,

2002). This model is now one of the most common models of SD (Hodge, 1997), and it is utilised by many sustainable housing researchers (e.g. Tosics, 2004; Winston, 2007; Winston and Pareja-Eastaway, 2007).

While relatively little attention is paid to the issue of sustainability by housing researchers, the influence of the WCED report is clear in one case:

When we speak of ‘sustainable housing’ we mean housing that is geared to meeting the needs of the current residents without compromising the ability of future generations to meet their own needs (Priemus, 2005, p. 6).

Despite this, some researchers choose to focus on the environmental aspect to the neglect of the economic and social pillars (Priemus and ten Heuvelhof, 2005; Priemus, 2005). For example, Priemus (2005, p. 5) defines sustainable housing as ‘housing with a minimum impact on the environment’. Others adopt a more inclusive approach to sustainable housing (e.g. Brown and Bhatti, 2003; Godschalk, 2004). Brown and Bhatti (2003, p. 510) argue that a ‘sustainable housing system must incorporate social, economic, and environmental sustainability in a mutually reinforcing way’.

A number of authors highlight conflicts in SD (Campbell, 1996; Chifos, 2007; Godschalk, 2004). Godschalk (2004) extends Campbell’s ecology, environment and economy SD triangle by adding a ‘liveability’ dimension and outlines the following conflicts for sustainable planning:

- the ‘growth management’ conflict (between liveability and economic growth) is due to competing views on the extent to which unmanaged development can provide high quality environments
- ‘the green cities’ conflict (between liveability and ecology) is due to differing views on the primacy of the natural environment over the built environment
- the ‘gentrification conflict’ (between liveability and equity) is a result of competing views on preserving poorer neighbourhoods for the present population versus redevelopment to attract middle and upper classes back to city centre (Godschalk, 2004, p. 8).

Godschalk (2004, p. 12) argues that none of the major planning approaches deals adequately with these significant value conflicts.

2.3 Analytical framework for conceptualising and assessing sustainable urban housing and regeneration

With the exception of a few notables (Bhatti, 1993, 1999, 2001; Bhatti *et al*, 1994; Bhatti and Dixon, 2003; Bhatti, 2001; Hall and Purchase, 2006; Huby, 1998; Priemus, 2005; Tosics, 2004; Williams and Dair, 2007), inadequate attention has been given to conceptualising the nature of sustainable housing. Table 1 outlines the analytical framework for assessing sustainability of housing including characteristics that may be associated with the key aspects of housing, namely location, construction/design, dwelling use and regeneration. In terms of location, sustainable land-use planning is required which entails a shift towards more housing being built within mixed use developments. It also means resisting scattered settlements and a preference for brown-field rather than green-field sites. Finally, sustainability demands that housing be built closer to good quality public transport and, ideally, employment. In terms of construction, sustainable development demands a shift towards high quality housing built at higher residential densities in an attractive, clean, and safe residential environment. There should be access to green space. In addition, it requires the use of sustainable construction and design techniques to increase the energy efficiency of buildings, reduce the use of non-renewable materials, utilise local sources of renewable materials, and facilitate the recycling of resources (e.g. water, energy, waste). Another aspect of the construction of sustainable housing involves ensuring that there is a supply of affordable housing to facilitate social mix in the community. Providing for mixed tenure can facilitate this. A related issue is the need to design the development to enhance the social resources of the area. For example, the design should provide facilities to promote social contact (e.g. centres for community organisations and offices, cafes, childcare, play facilities etc). Not all of these social resources have to be within the development but they should be within walking distance of it.

Regarding the use of housing, dwellings built to facilitate low energy use are more likely to result in a high standard of energy efficiency. However, a ‘rebound effect’

may occur where, for example, residents utilise air-conditioning in well-insulated dwellings during the summer months (Priemus, 2005, p. 11). Similarly, sustainable designs can increase the extent of recycling among residents. Another aspect of use is the sustainable management and maintenance of housing. Priemus (2005) notes that the potential of housing providers (local authorities, housing associations and private landlords) to contribute to SD is often neglected, despite their pivotal role in managing and maintaining housing. This may include the regeneration of housing stock which should be done by implementing all of the aforementioned characteristics. In addition, it should involve partnership with residents or potential residents. The emphasis should be on renovating housing rather than demolishing it, where feasible. Where demolition occurs, materials should be recycled as much as possible. Finally, the sustainable regeneration of run-down housing estates with substantial social problems will require that the provision of considerable social supports for vulnerable households.

Table 1: Analytical framework for conceptualising and assessing sustainable housing

Aspects of housing	Sustainable housing characteristics
Location	<ul style="list-style-type: none"> • sustainable land-use planning <ul style="list-style-type: none"> ○ resisting scattered settlements (brown-field over green-field) ○ within mixed use developments ○ close to good public transport
Construction & design	<ul style="list-style-type: none"> • higher residential densities • sustainable construction (e.g. energy efficiency, local renewable materials) • Design for sustainable use (e.g. energy use, water recycling & treatment, waste recycling) • housing quality • access to green space • attractive, clean and safe residential environment • housing affordability • tenure mix & social mix • social resources
Use	<ul style="list-style-type: none"> • high standards of energy efficiency in use of dwellings • waste recycling • sustainable management & maintenance
Regeneration	<ul style="list-style-type: none"> • all of the above & • emphasis on renovation rather than demolition • partnership with residents • social supports for vulnerable households

Table 2 summarises the extent to which the main goals of selected urban regeneration approaches incorporate sustainable housing characteristics. Eco-neighbourhoods include more of these dimensions than any of the other approaches. However, in practice they entail a number of important disadvantages. First, many are built on green-field sites and housing is constructed at lower densities than might be considered sustainable. One of their goals is to provide affordable housing but problems of affordability have arisen in some cases. The other approaches to urban regeneration have some way to go before they may be considered sustainable. The rest of this chapter examines each approach in some detail, assessing the extent to which they have the potential to contribute to sustainable development.

Table 2: Key sustainable housing characteristics in selected urban regeneration approaches

<u>Sustainable Housing Characteristics</u>	<u>General Urban Regeneration</u>	<u>New Urbanism</u>	<u>Urban Villages</u>	<u>Eco-neighbourhoods</u>
1. Mixed use	Yes	Yes	Yes	Yes
2. Brownfield over greenfield	Yes in many cases	Yes but much greenfield in practice.	Yes but much greenfield in practice	Some brown, some green
3. Resisting scattered settlements		Yes but much suburban development	Yes	
4. Emphasis on public transport		Yes but emphasis on accommodating the car.	Yes but problems of access and use	Yes & cycling & walking
5. Higher density	Yes	Density dependent on location in transect.	Yes but also use of 'appropriate' densities - mix of housing types e.g. terraced, mews	
6. Sustainable construction		In practice, majority = single family dwellings.	In some plans but not much implementation	Yes
7. Design for Sustainable use (energy, water, recycling)			In some plans but not much implementation	Yes
8. Social resources	Yes but often not implemented			
9. Affordable housing		Yes but problem in practice		Yes but problem in practice
10. Mixed tenure / social mix		Yes & mix of age & household types	Yes	Yes & age mix
11. Quality design		Yes	Yes	Yes
12. Access to green space		Yes. Rural preserve.		Yes. For wildlife, recreation, pollution control, organic recycling, local energy & food supplies
13. Attractive environment	Yes	Yes	Yes	Yes
14. Sustainable Management and maintenance				Yes. Maximizes resident management of housing, land & services
15. Shift from demolition to renovation	Yes but much demolition in practice			
16. Partnership with residents	Yes		Yes but problems	Yes, resident management
17. Social supports for vulnerable households	Yes in many cases			

2.4 Models of Urban Regeneration and Sustainable Housing

Sustainable regeneration has been defined as involving environmental sustainability, economic efficiency and meeting social needs (Percy, 2003). However, Percy argues that sustainability is a new agenda in urban regeneration (Percy, 2003). Studies which refer to 'good' examples of regeneration (Couch *et al*, 2003; Raco, 2003) have very little to say about housing, with the exception of Raco (2003) who focuses on the inadequate supply of affordable housing for local residents. The limited supply of affordable accommodation is one of the housing themes in urban regeneration research. Even in areas of economic growth, when local authorities can direct developers to supply a certain amount of social and affordable housing, Raco (2003) shows that developers have been extremely reluctant to meet these targets. As he points out, social exclusion is created via the rising cost of housing. As Adair *et al* (1995, p. 112) have argued, 'meaningful and sustainable urban renewal' requires the provision of affordable housing to attract people back into inner urban areas.

Another housing related theme in the urban regeneration literature is the recurring debate on demolition versus renovation. Following World War Two, urban regeneration involved a policy of slum clearance and replacement (Couch and Fraser, 2003, p. 3). By the late 1960s, most Western European countries substituted this approach with one of renovation and renewal (Couch, 2003b; Fraser, 2003). This was in recognition of the value of much of the older stock as well as an acknowledgment of the problems associated with replacing inner city housing with suburban high rise estates. However, the environmental benefits of this approach were not highlighted until the 1990s. While this policy is still in place in many countries, many urban authorities are pursuing the demolition option, particularly for unpopular social housing estates (see for example, Kennedy, 2004). There are a number of reasons for this, including resident dissatisfaction with some renovated stock, low demand, falling values and abandonment in extreme cases (Couch, 2003b, p. 178). By the mid-1970s, it was recognised that social problems cannot be solved simply by providing new housing (Fraser, 2003). However, demolition has been, and continues to be, employed as a potential solution to social problems in disadvantaged areas (Crump, 2002; Goetz, 2000; Power, 1993, 1999).

The use of tax incentives for property-led regeneration is another theme in the urban research. They have been particularly popular in Britain, Ireland and the United States at various points in time (Adair *et al*, 1995; Lloyd *et al*, 2003; Moore, 1999). These tax incentives are frequently accompanied by a significant degree of deregulation, including the withdrawal of land-use planning controls. However, much of the research highlights the limited social and environmental benefits of this approach (Atkinson and Moon, 1994; Jones and Watkins, 1996). In addition, it emphasises the problem of displacement of local residents via gentrification (Drudy and Punch, 2002, 2005; Lloyd *et al*, 2003; McLaren and Murphy, 1997). In some cases, it entails the enforced relocation of homeless people (Lloyd *et al*, 2003). While the property led approach has some limitations, it can be more successful when it entails complementary strategies (Imrie and Thomas, 1999; Lloyd *et al*, 2003).

Environmental improvement is often a goal in urban regeneration programmes (Percy, 2003). A growing service sector in many cities demands a better environmental quality to attract inward investment. However, much of the literature points out that economic development often takes precedence over environmental concerns and that environmental sustainability is sidelined even in area of strong demand where local authorities have a relatively high degree of influence (Couch, 2003a, Fraser *et al*, 2003; Raco, 2003). It is interesting to note that when the environment is discussed there is rarely any mention of sustainable housing. One exception to this is the fact that much of the research calls for urban regeneration programmes to entail higher density, mixed-use developments on brown-field sites. In addition, the policy shift towards renovation rather than demolition could be interpreted as a move towards more environmentally sustainable regeneration. However, as I mentioned above, many local authorities continue to engage in significant demolition programmes.

The importance of social resources was one of the key lessons of early regeneration programmes which involved the demolition of inner city slums, and relocating residents to new estates on the outskirts of cities (Worpole, 2003). While the quality of housing might have been better, residents were often disconnected from their social networks as well as from essential community services. The social dimension has been highlighted by a number of authors (Meegan and Mitchell, 2001; Thomas, 1991; Peillon *et al*, 2006; Worpole, 2003). For Worpole (2003), this includes: the safety and

mobility of children; the 'play street'; schools in a central location as a social forum; homes for older people in the centre; the management and maintenance of public open space, including the school playground which is open and accessible at all times; a high quality public realm; and streets as a public space for social interaction including shops, bus stops, railway stations and parks. Thomas (1991) has highlighted the key role of social resources and processes in producing 'viable' and 'coping communities'. Such communities require: facilities that promote social contact; daily routines that promote interaction; a variety of social and recreational networks; a variety of active organisations in which people can represent their ideas and concerns; and the capacity to enable residents to take on public roles outside the household that are satisfying to themselves and of service to others (Thomas, 1991, p. 19). He argues that there is a 'ladder of community interaction' from mutual recognition of other residents, to casual contacts, routine contacts, social contacts, involvement in informal networks, informal mutual aid, participation in community activities, joining community groups, co-operation with other community groups, working with policy makers to owning and managing local facilities (Thomas, 1991). Meegan and Mitchell call for policies to provide the social resources and processes to assist in creating coping communities by facilitating residents to move up the ladder towards inter-group co-operation, working with policymakers and the ownership and management of local facilities (2001, pp. 2176-2177). Such an approach might help to overcome some of the partnership problems frequently experienced by local residents in urban regeneration programmes (Atkinson and Cope, 1997; Brownill and Darke, 1998; Brownill and Thomas, 1998; Munt, 1991).

For schemes in disadvantaged areas, social supports are crucial for the success of regeneration programmes. Some progress in addressing social disadvantage may be made by the provision of high quality, affordable housing in an attractive environment. However, also required are a whole range of important local support services such as: education and training, employment, libraries, childcare, family support, health, leisure as well as local management of housing and community services. These elements of community and neighbourhood regeneration tend to be neglected in the research, despite much acknowledgement that the physical regeneration alone is insufficient. Neglect of these important aspects of community may result in the failure of regeneration programmes. In addition, failure to tackle the

social causes of problems in these areas will result in the need for recurring demolition, which is most problematic from an environmental perspective, but it will also result in the continued social exclusion of people in these areas.

New Urbanism and Sustainable Housing

New Urbanism (NU) was originally designed to curtail suburban sprawl in the United States (Alexander 1977; Calthorpe, 1993; Calthorpe and Fulton, 2001; Duany *et al*, 2000; Duany, 2003; Duany and Talen, 2002; Hall, 2003; Katz, 1994). It became formally recognised in the early 1990s following the First Congress of NU in 1993 and was incorporated into the guidelines for public housing by the Clinton administration (Duany, 2003, p. 93). NU is linked with the Smart Growth movement in the US which emerged from state-wide growth management initiatives (Godschalk, 2004). A key proponent of NU describes it thus:

The alternative to sprawl is simple and timely: neighbourhoods of housing, parks and schools placed within walking distance of shops, civic services, jobs and transit – a modern version of the traditional town. The convenience of the car and the opportunity to walk or use transit can be blended in an environment with local access for all the daily needs of a diverse community. It is a strategy which could preserve open space, support transit, reduce auto traffic, and create affordable neighbourhoods (Calthorpe, 1993).

A key feature of NU is the Transit Oriented Development (TOD), in which public transport is centrally located in a mixed use, attractive living and working environment. Higher density housing, consisting of flats or terraced houses, and key retail, institutional and social facilities are located near the public transport hub but housing density declines outside the urban core (Duany, 2003). TODs purport to provide housing for all income groups and household types (individuals, families, students and older people), using tenure mix to facilitate this diversity.

From an environmental perspective, NU has some appeal, including its aims to curtail urban sprawl on green-field sites and preserve open space. In addition, it emphasises the restoration of existing urban centres and towns within metropolitan regions, conserving the built legacy. Other elements of NU are to be commended including locating higher density housing at public transport nodes, the creation of mixed use developments and attractive public spaces. However, there is a considerable body of

literature which criticises NU. Research has shown that NU created housing shortages in successful areas, resulted in spill-over to the suburbs and increased commuting and traffic flows for those forced out of these communities (Hall, 2003, p. 46). Another critique has been that the developments are not particularly urban (Beatley and Manning, 1997, p. 21). Hall shows that in the 39 largest metropolitan areas, 80-85 percent of construction has been suburban (Hall, 2003, p. 43). Many new developments are not particularly environmentally friendly (Beatley and Manning, 1997, p. 21; Godschalk, 2004). First, most are built on large green-field sites, in suburban locations and the majority of housing units are single family dwellings (Hall, 2003). Second, there is limited evidence of ecological construction or design methods or attempts to reduce the environmental impact of the development (Beatley and Manning, 1997). For example, many do may not incorporate special energy, water or wildlife features (Barton and Kleiner, 2000). Third, the need to accommodate the car is mentioned everywhere, especially in relation to the design of housing and streets. Duany (2003) argues that dimensions for street patterns should be set so that they equitably service both the needs of the car and the pedestrian. Barton and Kleiner (2000) conclude that NU results in 'islands of relative transport-efficiency in a sea of wastefulness and the intensive commercial developments that are part and parcel of urban TODs typically will serve wide hinterlands predominantly reliant on car access except along the one transit corridor' (Barton and Kleiner, 2000, p. 78). It appears that the environmental dimension is often an 'afterthought or marketing ploy' (Beatley and Manning, 1997, p. 21).

Urban Villages and Sustainable Housing

In the UK, the Urban Villages Forum shares many of the aims and values of NU. The concept is now part of the planning guidance there, which favours high-density, mixed-use development on previously developed urban land. Historically, the concept of the village has played an important part in planning. During the nineteenth century, a number of industrial philanthropists constructed planned model villages as prototypes of the ideal settlement. Examples include Cadbury's Bourneville, Lever's Port Sunlight, and Rowntree's New Earswick (Darley, 1975). All were built to high standards with integral community facilities, and village greens. They remain popular, desirable, safe places to live (Neal, 2003). These ideas influenced a number of

twentieth century planners, including Ebenezer Howard and Patrick Abercrombie (Howard, 1965). Howard's 'garden cities' involved the construction of village scale neighbourhoods and the implementation of green belts around cities. Abercrombie's plans for London's new towns after World War Two also emphasised the neighbourhood concept (Abercrombie, 1945).

More recently, the concept of urban villages gained prominence in the 1980s, with its high profile being linked to one of its main proponents, the Prince of Wales. As with NU, the characteristics of UVs include mixed tenure, mixed use developments, varied architecture and higher density housing developments. In addition, from an environmental perspective, UVs are commendable in that they tend to be pedestrian oriented with a strong focus on public transport. The most prominent example is Poundbury in Dorset, which was built on land owned by the Prince of Wales. Poundbury was constructed at twice the normal green-field density, drawing extensively on terraced housing and mews. Another high profile UV development is the Millennium Village in Greenwich, London. However, it has much higher sustainability aspirations than Poundbury. It is a high density, low rise, pedestrian friendly brown-field development beside the river Thames consisting of 1,377 flats and townhouses, 80 percent of which are for owner occupation with 20 percent for shared ownership with housing associations. The original plans included ecological construction techniques and it has been described as being 'relatively' resource friendly in its construction and energy requirements (Worpole, 2003). Specifically, this includes adaptable buildings with low embodied energy, a Combined Heat and Power plant to provide 60 percent of heating, the reuse of grey water, water management systems in an 'ecology park', communal courts without cars, public transport, and cycle lanes.

Many of the criticisms of NU also hold true for UVs. For example, developments of this nature require considerable land, approximately 40 hectares and most are green-field developments (Lock, 2003). This contravenes the urban renaissance planning guidance which stipulates that, at national level, at least 60 percent of new homes be constructed on previously developed land. Other criticisms include the fact that the dominant motives are aesthetic not ecological (Barton and Kliener, 2000). In addition, one survey of 55 UVs found that the term has been hijacked in order to obtain

planning permission and generate sales but often the developments have fallen short of meeting the UV principles (Biddulph *et al*, 2002). Indeed, Poundbury is far from ideal in terms of public transport, involves no ecological construction, and utilises conventional approaches to energy and water (Barton and Kleiner, 2000). The Millennium Village master planners resigned as many of its environmental objectives were modified or eliminated (Worpole, 2003). The local metro is not being used by many as the station is considered to be too far away from housing and car use is high for travel to work, shops and schools (Worpole, 2003). UVs are also criticised for their assumption that people will chose to live close to work, which Mace *et al* (2007) contend is not true for white collar workers. There is evidence to show that white-collar workers are increasingly mobile while the socially excluded tend to lead the most localised existence (Hoggett, 1997).

Despite these criticisms, Barton and Kleiner (2000, p. 78) argue that one of Poundbury's greatest achievements was in 'confounding assumptions of house purchaser conservatism, and pointing the way to much more efficient and effective use of green-field sites'. It is not high density, by any means, but it is a higher density, attractive and popular development. While most planners and urban regeneration programmes promote the construction of higher density dwellings, some have criticised this aspect of UVs and the urban renaissance (see Neal 2003 for a discussion of this). Some argue that British people do not want to live at such high densities (Neal, 2003). Mace *et al* (2007) suggest that families, in particular, may be opposed to higher densities. In the context of shrinking cities, some argue for lower density housing to be constructed in order to attract the family market, (Hall, 2003; Mace *et al*, 2007). Furthermore, Mace *et al* (2007) suggest that families are essential for the creation of 'sustainable, stable, mixed communities' compared with 'gentrified ghettos of exclusion' as they are less likely to be 'footloose' and will have a stake in the quality and quantity of local services. (Mace *et al*, 2007).

Eco-neighbourhoods and Sustainable Housing

Developing eco-neighbourhoods may be part of a strategy to promote ecological stability (Barton *et al*, 1995; Barton, 2000; Taylor, 2000). As with the previous two approaches, eco-neighbourhoods emphasise the connectivity between housing, local

community facilities and open space, higher densities and mixed use developments. However, there is a much stronger emphasis on walking or cycling to local services and public transport. In addition, ecological construction and design techniques are a crucial aspect of this approach as well as a high degree of local autonomy for food, energy and water supplies. Eco-neighbourhoods vary from small demonstration projects to city scale projects, and consist of both green-field and brown-field developments (Barton, 2000).

Housing in such schemes tends to be built at a higher density, but, in addition to this, it entails ecological construction or renovation methods with a heavy reliance on local sources of renewable materials and energy. Social mix is also valued, including a mix of incomes, tenure types, household size, special needs, age and family status. Unlike NU and UVs, the rationale for social mix is more clearly articulated. According to Barton (2000, p. 91) the availability of housing in different tenures helps to accommodate a range of household sizes and incomes. When there are such options, then people will choose local residence to maximise family convenience and reduce the cost of travel (Hillman and Whalley, 1983). This reduces environmental pollution. In addition, Barton argues that social mix in terms of age and family status avoids the 'syndrome of the social wave, whereby almost all the initial residents of an estate are one family status – young parents with babies and toddlers – leading to uneven demand progressively for child clinics, nursery education, primary schools, secondary schools, and so on right through to sheltered accommodation and undertakers' (Barton, 2000, p. 91). This social mix also helps to ensure the viability of local services, trades and skills as well as providing the staff for these services.

The most distinctive aspect of this approach is its attention to environmental issues such as the preservation of energy, water, and green space in the construction, design, use and management of these neighbourhoods. Houses are ultra energy efficient with many being zero energy developments, for example, BedZed, in South London. They utilise local renewable energy sources such as solar gain, wind or geothermal energy as well as combined heat and power plants, fuelled by recycled wood. There is local treatment of waste water while both organic water and refuse are recycled locally. Housing developments have access to green space but this is not for aesthetic purposes alone as it also tends to serve a function. For example, trees are used for

wind and noise breakers, and permaculture or food-production is a common feature of such neighbourhoods. Another characteristic of eco-neighbourhoods is the active participation of residents in the planning and management of the area. The development is designed with this in mind by providing a range of communal facilities.

Many urban Eco-neighbourhoods were originally inspired by social ideals such as housing co-operatives. More recently, some have combined this with ecological motivations to produce 'co-housing', which usually consists of 20-30 units of owner occupied or shared ownership dwellings with a communal house, open space and shared essential infrastructure. These are sometimes linked together into larger projects such as the Ithaca Eco-village which consists of five small co-housing neighbourhoods around a village green. Each neighbourhood is ultra energy efficient and entails permaculture. Ecological Townships are larger than the urban eco-communities, because the whole neighbourhood, township, town or city is target of sustainability plan. Examples include: Delft; Freiburg; Davis city, California; and Bamberton, Vancouver Island.

Urban regeneration eco-neighbourhood projects are of particular interest here, although they are relatively few in number (Barton, 2000). One example is in Kolding, Denmark (Barton, 2000). This is a high density development of over 150 units, on inner urban brown-field land. It involved extensive renovation with grant assistance to upgrade the quality of housing and semi-private open space, save energy, increase solar gain, catch and recycle rain (grey) water, as well as local natural treatment and recycling of sewage. In addition, it entailed diversifying ground floor uses to accommodate local facilities.

The process of building partnerships and engaging the local community is quite widely practiced in the eco-neighbourhood context. This is in contrast with other forms of regeneration, where numerous problems arise in this regard (Atkinson and Cope, 1997; Brownill and Darke, 1998; Brownill and Thomas, 1998; Munt, 1991). Barton and Kleiner (2000) conclude their research on eco-neighbourhoods by noting that developments which are putting together the whole integrated concept of

sustainability demonstrate the value of partnership, voluntary sector drive, private sector funding and local authority facilitation.

In sum, eco-neighbourhoods entail more sustainable housing characteristics than any of the other approaches to regeneration. However, they have a number of limitations. As with the other approaches, successful projects have led to problems of affordability and exclusion for those on lower incomes (Barton, 2000). In addition, some are built on green-field sites and are relatively low density. Another problem is that there is relatively limited implementation of such schemes, despite the fact that the technology is very well-demonstrated (Barton, 2000). While financial factors can be a barrier in some cases, bureaucratic factors as well as political and institutional inertia are the key impediments (Barton, 2000). The lead role tends to be taken by the community and voluntary sectors.

2.5 Conclusion

Urban regeneration entailing sustainable housing can substantially contribute to the sustainable development of urban areas. However, with the exception of eco-neighborhoods, the focus of most regeneration approaches seems to be on improving and extending the physical rather than the natural or social environments. Eco-neighbourhoods offer considerable scope for sustainable urban regeneration but they are not without limitations. Like each of the approaches outlined here, the supply of affordable housing for locals is often a problem. Without some means of ensuring a proportion of new or renovated build for those on lower incomes, inequity and social exclusion may be exacerbated or created by regeneration processes.

In areas of significant social disadvantage, regeneration projects have involved, and continue to involve, the demolition of the worst estates when the causes of many of the problems are social rather than physical. In addition to improving the physical environment, social resources and processes are essential for the creation of 'viable' and 'coping communities'. This requires not just the provision of community facilities but also supplying a range of social supports (e.g. education and training, childcare, assistance with childcare costs) to build a socially inclusive and sustainable community.

A major problem with eco-neighbourhoods is their limited implementation, despite the fact that the technology is well-demonstrated technology. International research suggests that their limited implementation is a matter of inertia on the part of public and private agencies engaged in housing provision. The next chapter examines the extent of sustainable housing provision in Dublin.

Housing, urban regeneration and sustainability? The case of Dublin

3.1 Introduction

Dublin has grown by means of unsustainable housing development for most of the twentieth and early twenty first century. To a large extent, housing development consisted of suburban sprawl on green-field sites, low-density housing and one-off housing in rural areas. These unsustainable trends were exacerbated during the 'Celtic Tiger' years when the demand for housing increased significantly due to economic growth and a range of demographic factors. There was a dramatic increase in house prices during the 1990s, by far the highest in the European Union (Norris and Winston, 2004). Both house price and private rent inflation were particularly significant in Dublin. National policy focused on increasing the supply of housing and construction was at all time high from the mid-1990s to the end of 2006, and it was consistently the highest in the EU (CSO, 2008). Rising demand and price inflation motivated landowners to sell land for housing thereby facilitating more green-field housing beyond the traditional suburbs. While contrary to spatial and planning guidelines, in practice this development was facilitated by a laissez-faire planning system in which there are relatively few restraints on new house construction. With limited affordable housing available in Dublin, buyers searching for lower house prices moved further away from the city. The outward growth of the commuter belt now stretches over 100 kilometres, and smaller settlements are growing at the fastest rates (Williams *et al.*, 2007). With a poorly developed public transport system, these residents are forced to drive long distances to work, with detrimental effects on both the environment and social life. At the same time, population losses in some Dublin suburbs 'are leading to the potential under utilisation of social infrastructure while this infrastructure is required for the natural growth in population which is now shifting to hinterland counties' (Williams *et al.*, 2007: 4). In addition, an edge city has developed along a motorway which bypasses the city (the M50) with a range of "town centres", retail and business parks increasingly located along this route.

Earlier work on sustainable housing in Ireland revealed that international developments have had some impact on policy but that policy implementation remains problematic (Winston, 2007). In light of this, the regeneration of urban areas is of considerable interest. In the Republic of Ireland, national housing and regeneration policy is the responsibility of the central government Department of the Environment, Heritage and Local Government (DoEHLG). Implementation of these policies in Dublin is the remit of the four local authorities: Dublin City Council, Dun Laoghaire-Rathdown, Fingal and South Dublin County Councils. This chapter assesses the sustainability of housing and regeneration policies at central government level and the policies and practices of the four Dublin local authorities.

3.2 Housing and regeneration in Dublin

From the eighteenth century, Dublin has been the dominant centre of urban development in Ireland. At the beginning of the twentieth century, very poor housing conditions resulted in a series of slum clearance programmes beginning in 1877 but occurring on a large scale in the 1930s, continuing through the 1940s and 1950s (Power, 1993). This process involved in the demolition of relatively high density housing tenements in the city centre and the construction of cottage type housing in the outer suburbs. Power (1993: 324-325) contends that, following the 1908 Housing of the Working Classes (Ireland) Act, 'housing developments were from then on to be largely on the periphery of the city with poor and expensive transport links, few amenities or open spaces and an often monochrome aspect'. Following independence from Britain, housing policy was biased towards rural Ireland, where most of the population still lived. The devastating problems of Dublin's tenements received relatively less attention. The focus on building low density, suburban housing was continued, undermining attempts to revive inner city Dublin and to make inroads in meeting the extreme housing needs of a large population of Dubliners. For example, Dublin's first 'Garden city' estate, Marino, was completed by 1930, providing 1,000 cottage style dwellings with fewer than ten dwelling to the acre (Power, 1993: 328-329). Kincaid (2006) argues that the suburban home, intended for owner occupation

rather than for rent, was viewed as a means to create the healthy, self-reliant, property-owning middle class that was a prerequisite for Irish nationalism's entrance onto the world stage.

This approach to regenerating housing was continued over time, gaining new impetus with the Wright plan adopted by Dublin Corporation in 1966 which advocated the development of new towns to clear the inner tenements. This did little to stem the suburban sprawl, or the outward migration of employment and resources from the inner core. Since the 1970s, the availability of a range of monetary and tax incentives for first time home owners played an important part in the expansion of low-income suburban home ownership (Murphy, 1995). During the 1970s and early 1980s, emphasis was placed on quantity over quality construction and, with flats remaining unpopular and no shortage of land, this resulted in a 'suburban landscape characterised by monotony and devoid of necessary community facilities' (Murphy, 1995).

By the early 1980s, Dublin was experiencing a severe economic recession, physical degradation, and housing conditions were considered to be intolerable in many parts of the inner city (Moore, 1999, 2008). Policies introduced since the mid 1980s led to a significant increase in office developments in the inner city, followed by residential property boom (MacLaren and Murphy, 1997). In 1982, a minister of state was appointed in the DoE with special responsibility for Urban Affairs including urban renewal. Tax reforms were introduced to encourage building and refurbishment in areas designated for urban renewal (Norris and Winston, 2004). These reforms were introduced originally by the Finance Act 1981 and extended and developed by the Urban Renewal Act 1986 to address inner city problems and decay, particularly in the under-utilised Docklands area. This early 'property led regeneration' involved informal networks between central government, and developers, while the local authority and community had very little, if any, involvement (Russell, 2001; McGuirk, 2000). Urban renewal was centralized and new regeneration agencies created.

As Table 3 shows, new dwellings built in the urban renewal scheme areas accounted for a significant proportion of total new housing output in these areas over this period,

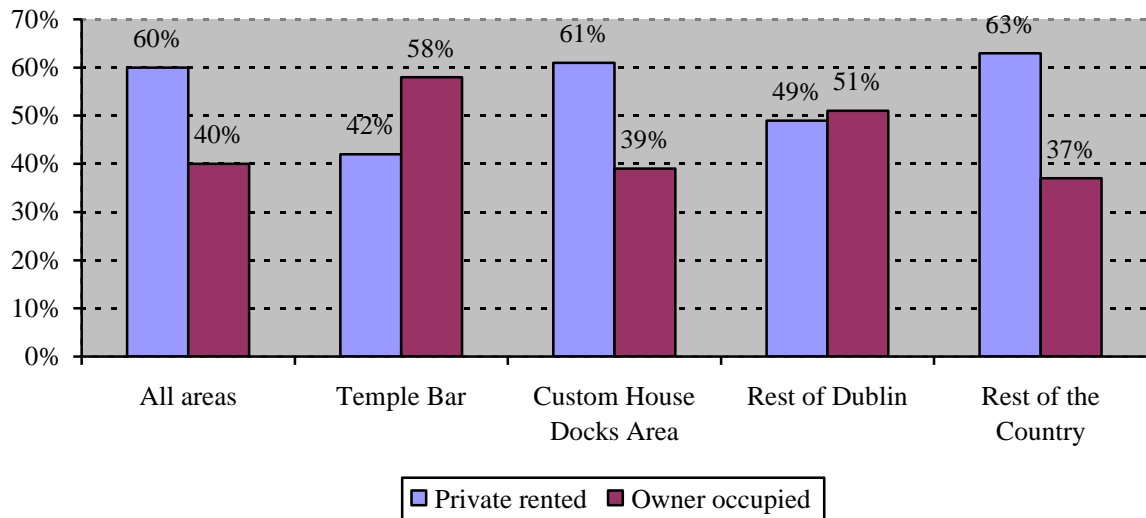
particularly in Dublin (KPMG *et al*, 1996). Housing schemes ranged from traditional type redevelopment of mews and infill of small plots to large scale development of over 200 dwelling units, on previously industrial land. Most were in the form of apartments but smaller numbers were in the townhouse style. There was a bias towards the construction of new build rather than refurbishment, despite the fact that the incentives were for both (McLaren and Murphy, 1997). Initially the owner occupier reliefs were more generous for new constructed dwellings than for refurbishment. However, in the early 1990s, the reliefs were reformed so that the same tax allowances were available for both new construction and refurbishment. Rates of owner occupation varied by area due to differences in incentives, as shown in Figure 1. There was a relatively high proportion of investment in the Custom House Docks area due to significant corporate interest in investing in this area (KPMG *et al*, 1996). In the case of Temple Bar, residential units were relatively expensive and the financial incentives for owner occupiers of refurbished residential development were significantly higher. This resulted in a lower level of investment in rental property in this area.

Table 3: Number of dwellings completed under the urban renewal scheme, by location 1986-1995

City Council	Dwellings built in designated areas using tax incentives N	Total number of dwellings built in the local authority operational area N	% of new dwellings in designated areas
Cork	839	6,422	13
Dublin	5,350	24,018	22
Galway	553	5,653	10
Limerick	661	3,930	17
Waterford	200	2,484	8

Source: KPMG *et al* (1996).

Figure 1: Tenure of dwellings developed under the urban renewal scheme by location, 1986-1995



Source: KPMG *et al* (1996).

Bartley and Threadwell-Shine (2003) outline four models of urban regeneration in Dublin (see Table 4). The first phase began in 1986 and involved the establishment of the Custom House Docks Development Authority (CHDDA) to regenerate that area, much of which was a port and docks site in public ownership. CHDDA was an independent planning authority required to 'have regard for' the provisions of Dublin Corporation's Development plan. However, development compatible with the planning scheme was exempted from the traditional planning process. The new authority provided the infrastructure but construction costs were underwritten by the private sector. Initially, the plan was for unbalanced land use, mainly offices but, due to considerable opposition, this was amended so that a somewhat more balanced land use plan was put in place including housing, industrial, commercial and social/amenity uses. In terms of housing, there was no social housing component in the master plan and high density developments were strongly advocated. A Community Liaison Committee was not established until 1995 despite the fact that the 1987 planning scheme for CHDDA stated an intention to establish one.

Following its perceived success, a decision was made to redevelop the greater docklands area, which represented one tenth of the city area between the two canals. In 1997, the Dublin Docklands Development Authority was established to do the job subsuming CHDDA. Its 15 year plan was for social, physical and economic regeneration, in that order. It utilised precinct action plans, targeting areas of greatest need, tax breaks and public-private-partnerships. Given that a large proportion of the land was in public ownership, it was expected that this would speed up development. Moore (1999) argues that tax incentives, public private partnerships and an autonomous pro-development organisation were central to the renewal of the area. In the early stages, there was little opportunity for local residents to influence development. A Community Liaison Committee was established but its effectiveness in the early years was strongly criticised by locals (Moore, 1999). However, there was more opportunity for democratic control and participation in later years.

Table 4: Models of urban regeneration in Dublin

Model	Mark I	Mark II	Mark III	Mark IV
Representative project (inception)	Custom House Development Authority UDC (1986)	Temple Bar (1991)	HARP (1995)	Integrated Area Plans (IAPs) (1998)
Changing governance	Local authorities by-passed by independent executive agency (UDC) which produces master plan for designated area	Local authority included in negotiated framework plan by dominant UDC	Local authority leads in project & prepares planning scheme for site; local authority also retains planning control over site	Central govt selects IAPs via competitive bidding contest; local authority, UDC or other agencies can lead project
Partnership	Public-private partnership (PPP) only	PPP; some formal co-operation between UDC & local authority	Early tripartite partnership approaches. Liaison between local authorities, community, private sector	Intensified & more diverse partnership approaches (incl. tripartite stakeholder partnerships between state agencies, communities, businesses, etc)
Social housing component	None	Minimal	Significant housing dimension – mixed tenures	Major focus on social benefits incl. local housing needs

Source: Bartley and Treadwell-Shine, 2003

The second model relates to the Temple Bar area. This regeneration programme involved the renovation and development of a mostly derelict part of the city centre, approximately 28 acres. As Payne and Stafford point out (2004), residents were living in very poor conditions and the poor structure of the dwellings was such that they required considerable investment. The owner of much of the area, and landlord for most tenants, was the Irish national transport company – Coras Iompair Eireann (CIE). It was unwilling to undertake the significant task of renewing the stock. In

1991, the urban renewal tax reliefs were extended to this area and a designated company established to manage its renewal. As with CHDDA, implementation involved a PPP but the local authority was more involved in negotiating the plan and a minimal level of social housing was proposed. The renewal of the Temple Bar 'cultural quarter' was facilitated by special legislation, the Temple Bar Area & Renewal Act, 1991, which created Temple Bar Properties limited as the development company. Special tax incentives for the renewal of the area were outlined in the Finance Act, 1991 and funding was also available from the EU Urban Pilot Project.

The third model, the Historic Area Rejuvenation Project (HARP), began in 1995. It represented a 'turning point in urban policy' as the local authority led the project (Russell, 2001). There was a significant housing component to the framework plan, including a focus on tenure mix (Bartley and Threadwell-Shine, 2003). A 'quasi partnership' approach meant that the community was represented on the steering group and consulted on the plan (Russell, 2001). However, Russell (2001:17) concludes that partnership acted as a 'mask to the continuing emphasis on facilitating private sector development'. Nevertheless, the community was sufficiently empowered by the process to successfully challenge some of the private sector proposals.

In 1996 a comprehensive review of the urban renewal scheme found that it had proved useful in attracting investment to the designated areas (KPMG *et al*, 1996). However, results were mixed when it came to urban design and architectural standards. On the social side, indigenous residents and those in adjoining areas found it difficult to reap the benefits in terms of employment and other opportunities. Following the review, a more targeted Urban Renewal Scheme was introduced in 1999, Bartley and Threadwell-Shine's fourth model of urban regeneration. Under the terms of the 1999 Urban Renewal Scheme, local authorities were required to draw up Integrated Area Plans (IAPs) setting out their views of the districts within their operational area appropriate for designation, together with a plan detailing how the renewal of the selected area might most effectively be achieved (Department of the Environment, 1997). Seventy-eight IAPs were submitted by local authorities under the auspices of the scheme with forty-nine receiving approval. Several of these target

areas would not traditionally have been the focus of urban renewal, such as suburban districts and local authority estates. In addition, there was more of an emphasis on social benefits, including housing for locals. It also entailed more diverse partnerships including local residents, and community businesses.

Refurbishment has been the focus of two schemes, neither of which is mentioned in the Bartley and Threadwell-Shine models. First, some renovation of older local authority dwellings occurred under the Remedial Works Scheme which was introduced in the mid-1980s (Norris, 2001). It provided capital assistance to those local authorities who did not have resources for major refurbishment of dwellings with serious design or construction defects in urban estates. One of the conditions of the scheme was that the local authority implement improved management and maintenance procedures for the estates involved. Second, the Living Over the Shop Scheme (LOTS), introduced in 2000, provided tax relief for the provision of residential accommodation in vacant space above commercial premises on designated streets in the five major cities, including Dublin. However, demolition has been and continues to be a popular option for local authorities. Dublin city council has a number of social housing regeneration projects underway, the aims of which it argues are to 'build sustainable communities through a combination of the following initiatives: physical, social, educational, arts & culture and estate management, economic'. It is interesting to note that the environmental dimension is missing and, most importantly, there is a significant emphasis on demolition and 'the construction of new high quality and sustainable homes, taking urban design guidelines into account' (Dublin City Council, 2008). Public Private Partnerships are central to the delivery of many of these projects, some of which have lost private investors due to the downturn in the housing market (see for example Bissett, 2008).

3.3 Sustainable housing and urban regeneration in Dublin?

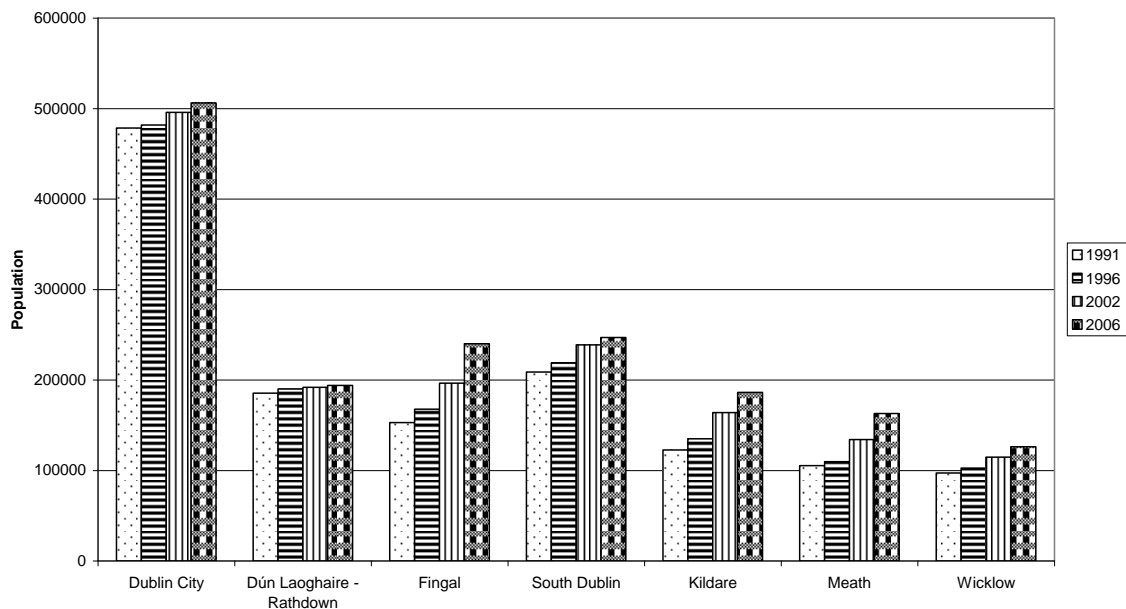
Views differ on the effectiveness of regeneration in Dublin. Referring to the early development of the Custom House Docks, Moore states:

Although criticism of public and private redevelopment activity in Dublin Docklands since 1987 may be justified, the indisputable fact remains that the CHDDA successfully fulfilled what appeared an impossible task. An entire

section of the city was transformed from derelict wasteland into international financial and corporate centre in one decade (Moore, 1999: 146).

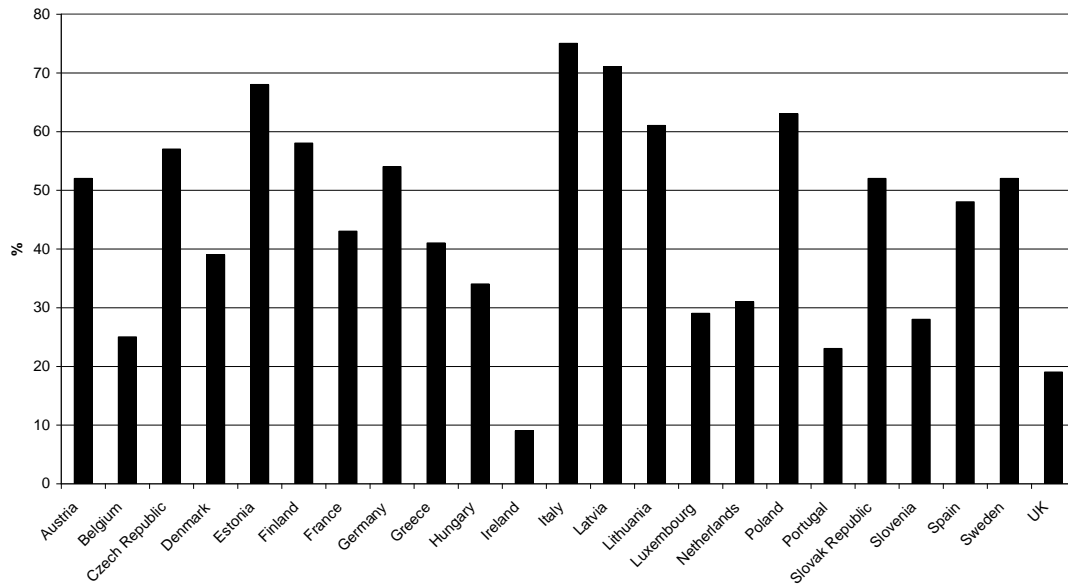
Adair *et al.* (1995:105) refer to the ‘imaginative use of tax incentives in achieving effective urban regeneration’. The evaluation of the scheme pointed out that it had attracted investment to the designated areas (KPMG *et al.*, 1996). It also helped to increase the inner city population. Figure 2 shows that Dublin grew during the period 1991-2006. However, much greater increases took place in the adjacent county of Fingal and the commuter counties of Meath, Kildare and Wicklow. Compared with Dublin city, those counties offered higher levels of affordability and a higher proportion of low density housing, which is very popular with Irish house-buyers. Ireland has the lowest proportion of multi-family dwellings in the EU (see Figure 3). However, in line with calls for higher residential density (Bacon *et al.*, 1998; DoEHLG, 1999), apartment construction increased in Dublin during the second half of the 1990s and higher density housing is much more common in the city than elsewhere in the GDA (see Figure 4).

Figure 1: Population of the Greater Dublin Area, 1991-2006



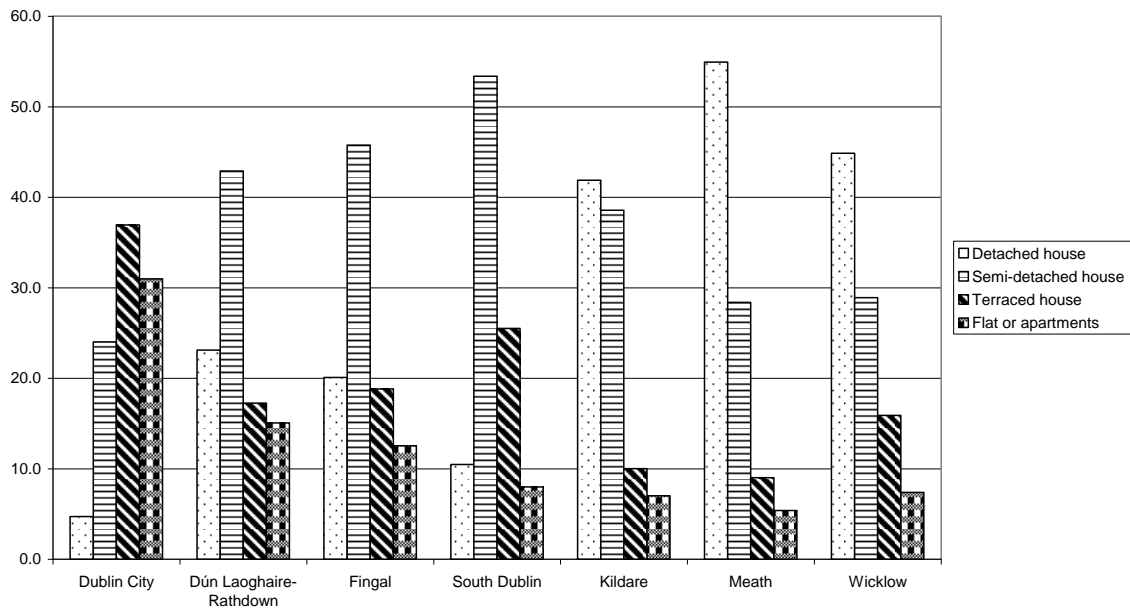
Source: Census of population 1991-2006

Figure 2: Dwellings in Multi-family Units



Source: Housing Statistics in the European Union 2005/06.

Figure 3: Type of Accommodation, Greater Dublin Area 2006 (%)



Source: Census of population, 2006

There is evidence to suggest that some of the regeneration of Dublin is unsustainable. Research on residents in the early apartment developments in the urban renewal areas showed that 47 percent of owner occupiers intended to move within 3 years and over

82 percent intended to move in 5 years (MacLaren and Murphy, 1997). Furthermore, eighty percent of tenants wanted to move within a 12 month period. A more recent survey of apartment dwellers in the Docklands also revealed a high level of transiency (Redmond *et al.*, 2007). Both studies showed that the vast majority wished to move to lower density housing areas. In addition, MacLaren and Murphy (1997) point out that, with a weakly developed second hand market, former occupiers placed their property on the rental market resulting in rising levels of tenancy in those areas. This residential turnover combined with rising levels of tenancy detracts from attempts to regenerate the city and create sustainable urban communities.

High residential turnover in city apartments and the popularity of lower density housing may be linked to the quality and nature of higher density housing in Dublin. The quality of much of the urban renewal stock has been strongly criticised (Society of Chartered Surveyors, 1993; KPMG *et al.*, 1996; Redmond *et al.*, 2007). Problems include inadequate size, noise, affordability and designs for single or two person households rather than families. MacLaren and Murphy (1997) contend that the less desirable schemes may shift from being a ‘stepping stone to suburbia’ to the ‘tax-driven tenements of the twentieth century’. Redmond *et al.* (2007) revealed high levels of dissatisfaction among apartment dwellers with kitchen layout and size, the availability of storage space, and lack of open space (Redmond *et al.*, 2007). Various noise related problems were mentioned, including dissatisfaction with the quality of noise insulation, noise from neighbours and noise in the neighbourhood. Developers tended to cater for single or two person households with little variation in size, design or price (Society of Chartered Surveyors, 1993). This led to the creation of residential environments physically and socially distinct from the surrounding neighborhoods or, as McLaren and Murphy (1997) argue, ‘enclaves of young professional persons in an urban landscape of considerable deprivation’. Survey data of Dublin commuters reveals that apartment size and suitability for families are key issues they consider most important to make apartment living more attractive as well as access to green space, and low cost (Lansdowne Market Research, 2007). Finally, some question the wider socio-economic effects of this incentive based regeneration (Drudy and Punch, 2002; MacLaren and Murphy, 1997). It is argued that there were limited benefits for indigenous residents in terms of employment or other opportunities, and that local

residents and businesses were displaced as property values and rents rose (KMPG *et al.*, 1996; MacLaren and Murphy, 1997; Drudy and Punch, 2002). This raises additional questions about the sustainability of the regeneration if it fails to address issues of social mix in terms of income and household type.

Vacancy rates in Dublin are significant and a cause for some concern. Table 5 shows that there has been a significant increase in the proportion of permanently vacant dwellings since 2002 such that 52,260 dwellings were in this category in 2006. It was envisaged that the majority of these would be apartments. This is true in the case of Dublin city, where they constitute 52 percent of vacant dwellings but the majority in each of the other council areas are houses. The rate of vacant dwellings in the Republic of Ireland is high by north western European standards (Norris and Winston, forthcoming). This may be attributed to a number of factors. First, as in other countries, rising vacancy rates coincided with increased affluence during an economic boom. Second, tax incentives to encourage house building in designated areas have played a role. There were significant geographic variations in investment in urban renewal schemes as development authorities varied in the extent to which they targeted it at investors rather than owner occupiers (KPMG *et al.*, 1996). For example, the Custom House Docks was highlighted as an area in which there was significant investor activity. Third, the fiscal treatment of housing in Ireland is generous when compared with other investment vehicles (Fitz Gerald and Winston, 2005). There are no fiscal disincentives to remaining in possession of vacant dwellings and no on-going taxes on housing. Accordingly, some investors may leave dwellings vacant to minimise physical depreciation while awaiting capital appreciation. The significant and increasing influence of investors in the Irish housing market was highlighted by a number of government commissioned reports on house prices from the mid-1990s (Bacon *et al.*, 1998; 1999; 2000). Despite a number of policy responses, mainly involving reforms to stamp duty, the final report highlighted the continuing role of speculators in the market (Bacon *et al.*, 2000).

Table 5: Permanently Vacant Dwellings, 1991, 1996, 2002, 2006

	1991		1996		2002		2006	
Location	N	%	N	%	N	%	N	%
Dublin	15,455	4.6	16,119	4.5	20,394	5.0	52,260	11.0
Other Cities	5,838	6.6	5,668	6.0	6,955	6.5	16,035	12.9
State	104,731	9.1	104,939	8.6	143,527	9.9	265,543	15.1

Source: Published and unpublished census data provided by the Central Statistics Office.

Note: Permanently vacant includes all those unoccupied inhabitable dwellings which are not categorised as temporarily vacant or holiday homes. Dwellings refer to habitable dwellings.

Table 6: Permanently Vacant Dwellings by Type of Dwelling, Selected Areas, 2006

Geographic area	Houses (%)	Flats (%)
Dublin City	48.3	51.7
Dun Laoghaire - Rathdown	67.9	32.1
Fingal	76.4	23.6
South Dublin	75.3	24.7
Kildare	79.8	20.2
Meath	88.2	11.8
Wicklow	86.8	13.2
Cork City	65.1	34.9
Limerick City	58.5	41.5
Waterford City	71.4	28.6
Galway City	64.3	35.7
State	80.8	19.2

Source: Unpublished census data provided by the Central Statistics Office.

Note: Additional detail on dwelling type (e.g. detached, semi-detached or terraced dwellings) was not recorded by census enumerators.

Current housing policy defines sustainable communities as ‘places where people want to live and work, now and in the future (DoEHLG, 2007a). They meet the diverse needs of the existing and future residents, are sensitive to their environment, and contribute to a high quality of life. They are safe and inclusive, well-planned, built and run, offer equality of opportunity and good services to all’ (DoEHLG, 2007a:7). This appears to be taken directly from the Bristol accord, the outcome of the EU Ministerial Informal on Sustainable Communities (ODPM, 2006). Another definition is supplied:

Sustainable communities have a high quality natural and built environment, with a dynamic and innovative economy, good transport, supportive

community and voluntary services and are environmentally sound (DoEHLG, 2007a:21).

These definitions cover some of the characteristics of sustainable housing outlined in Table 1 above, namely: quality, attractiveness, safety, transport - although the definition does not specify public transport, it is referred to later in the document. While the policy does not mention mixed use developments, it refers to the need for place of residence to be integrated with employment and services. With regard to land, there is only one mention of construction on brownfield and derelict sites and that is in the final chapter (:75). However, it does mention the use of underutilised land, including open space which is underutilised, 'compact and sustainable settlements', the 'efficient use of land', and the construction of apartments to accommodate a greater diversity of household types, including families. Aspects of sustainable construction and design are referred to in the policy such as housing which is 'environmentally friendly', 'adaptable', energy efficient, durable as well as the 'effective use of materials'.

Compared with previous policy documents, this document places more emphasis on the social resources that are required at various stages in the life cycle. It states that a central aim will be to make a 'change in the provision of housing support to obtain more effective delivery in ways that ensure that individuals in need of support are offered options tailored to their needs...This approach requires an holistic perspective on people's needs as they move through key life cycles phases – childhood – working age, older people' (DoEHLG, 2007:10). Building on previous policy, tenure mix, social mix and affordability are important concerns. The importance of management and maintenance of social housing is also highlighted. However, the document makes reference to tenant participation and consultation rather than partnership.

There is no evidence of a policy concern with the issue of demolition and major demolition programmes are in progress around the country despite the fact that some of the dwellings being demolished are relatively new. Access to green space is not mentioned anywhere in the document, although it does refer to the 'the effective use' of landscape at one point but also outlines the need to use 'underutilised open space' for housing at another point.

While current housing policy is more concerned with sustainable development issues than any previous one, the importance of environmental issues seems to disappear as you move through the document. At times the environmental aspect appears to be tacked on. There is a need for much more emphasis to be placed on mixed use developments, construction on brown-field rather than green-field sites, higher densities, sustainable construction and design methods, access to green space, a shift away from demolition and more genuine ‘partnership’ with residents.

The publication of this policy document was followed by a set of best practice housing design guidelines (DoEHLG, 2007b). These represent a significant advance in the direction supplied to housing providers in Ireland as they incorporate many of the characteristics of sustainable housing. However, they could be stronger in terms of sustainable design and use. For example, with regard to the design of individual buildings it calls for ‘the use of particular materials, components or equipment which are considered desirable for sustainability reasons *‘in so far as practicable’* (emphasis added) (DoEHLG, 2007b:17). In addition, it states:

It is recognised that natural gas is the most efficient non-renewable source of fuel for space heating. Designers *may* (emphasis added) however wish to consider the possibility of utilising renewable sources of energy (DoEHLG, 2007b:52).

Consideration should also be given to making provision for obtaining part or all of the space and/or water heating from alternative sources, such as solar collectors, wind energy, wood pellets, district heating, geothermal and waste/surplus energy, *where this is found to be economically advantageous* (emphasis added) (DoEHLG, 2007b:61)

It suggests that water saving fittings should be used *‘where feasible and acceptable’* (emphasis added) (DoEHLG, 2007b:52). There is no specific mention of the need to shift away from Greenfield towards brown-field development. Finally, there is remarkably little attention to issues of regeneration, refurbishment or retrofitting and there is nothing on the need to shift away from demolition and no mention of partnership with residents.

In 2008, two excellent consultation documents were published by the Department, *The Urban Design Manual* (DoEHLG, 2008), which aims to complement the planning guidelines, and *Sustainable Residential Development in Urban Areas*

(DEHLG, 2008) which will replace the earlier density guidelines. Both appear to provide considerable support for more sustainable housing development but as they are still at the consultation stage, they are not discussed here.

Some welcome developments have occurred in the building energy field. While the Irish residential sector is an increasing source of CO₂ emissions, there has been a shift away from using solid fuel to more efficient heating systems, and a high level of energy-related home improvements (Winston, 2007). Sustainable Energy Ireland (SEI), Ireland's national energy agency, operates a Greener Homes Scheme, providing grants for the installation of residential renewable energy heating systems. Since 2008, this scheme has been restricted to existing houses. SEI also operated a 'House of Tomorrow' programme, a demonstration scheme introduced in 2001, which part funded private and social housing developments that delivered a saving of over 40 percent in energy consumption and associated CO₂ emissions compared with the building regulations. Initial take-up was modest, due to limited awareness and problems overcoming 'traditional attitudes to change within the industry' (SEI, undated). The scheme is now closed. Overall, its impact was relatively limited as it was a demonstration programme. There have been significant improvements in the building regulations. Following the European Communities (Energy Performance of Buildings) Regulations, 2006, a Building Energy Rating system is now in place for new buildings and will be in situ for existing buildings from January 2009. In addition, revisions to Part L of the Building regulations in 2008 require energy efficiency and CO₂ emissions that are 40 percent better than the 2005 regulation and it is proposed that this be increased to 60 percent in 2010. In addition, renewable energy is now compulsory in all new dwellings. The regulations have been criticized for not going far enough (they will have a BER rating of B1 or A3 by 2010). Almost in recognition of this, a new 'Low Carbon Homes' Programme was introduced in 2008 to encourage the construction of large developments of new homes with an energy performance standard well in excess of the recently adopted building Regulations. The scheme will provide financial support to developers for the building highly energy efficient, low carbon housing (BER A2 rating) with grants covering up to 40 percent of eligible expenditure. The developments will require a significant element of auto-generation of electricity from renewable technologies such as solar

photovoltaic, micro-wind and micro combined heat and power (CHP). Unfortunately, funding for the scheme is relatively limited (€9m from 2008-2011).

3.4 Summary

While regeneration in Dublin has improved some of the areas worst affected by urban decay, aspects of it are questionable from a sustainability perspective. Continuing urban sprawl and relatively low densities have exacerbated problems of the over-consumption of green-field land, dependence on private transport and long commuting distances. Crucially, there is an increasing distance between where people work and live, which is contrary to sustainable development goals. In addition, the sustainability of much of the housing constructed in the urban renewal areas of the city is open to question. Problems include: high levels of residential turn-over; rising levels of tenancy; poor quality designs; and a lack of affordable accommodation to suit varied household types. For sustainable communities to be implemented, these issues must be addressed. However, there are a number of significant barriers to progress in this area. These are outlined in the next chapter.

4.

Barriers to implementing sustainable housing policy in Dublin

4.1 Introduction

One of the main objectives of this research was to identify the key barriers to sustainable housing and regeneration in Dublin. To this end, interviews were conducted with a range of relevant officials to ascertain their views on the main impediments they encounter in their work in this area. A number of key themes emerged, each of which is discussed below.

4.2 Barriers to implementing sustainable housing policy in Dublin

This research identified a range of barriers to implementing sustainable housing in Dublin. These are summarised in Table 1, including some which were highlighted in Chapter 3.

Lack of a shared definition of sustainable housing

The first major problem is that there no shared definition and vision of sustainable housing among those working in the field. Current housing policy defines it in terms of sustainable communities, as was outlined in Chapter 3. However, interviewees outside of the Department complained that sustainable housing means different things to different people. One housing association went further to argue that there is no real housing policy in Ireland but instead an economic system based on paternalism ('the poor will always be with us') and a laissez faire attitude which guards against the regulation of the cost of land. In tandem with this, they argued that there is no policy to reduce the dependency culture and no genuine community development work within local authorities.

There was more agreement on the nature of unsustainable housing, many of the respondents were critical of the planning system and there is a considerable literature of the nature of planning problems in the Greater Dublin Area and Ireland generally (Bannon, 2005; NESC, 2004; Norris and Shiels, 2007; Redmond *et al*, 2005; Scott, 2005; Williams *et al*, 2007). These include: inadequate recognition of the need for

proper planning; a relatively laissez faire planning regime; the lack of a strong regulatory framework to ensure that planning decisions are in line with policy; inadequate resources including staff; limited policy instruments; underdeveloped system of land and infrastructure management. In particular, respondents highlighted the problems associated with constructing large quantities of housing without providing the services that are required for a sustainable community. The following quotes illustrate the problems that have been created in one area in Dublin.

You get more and more cross when you see the sort of planning they're talking about, and that there isn't a school or any of the basic things—the shops, the playgrounds, community centre, playing pitches—that none of them are in the area (SPC member).

To me that would be sustainable, whereby you don't necessarily have to get into your car, where you're about to go to bed at night and there's no milk for breakfast or bread for the kids' lunches. And there's no place—you know—in the place in the area here—you might have to drive miles to find something that's open (SPC member).

If you move into an area and you have a family or whatever, where do you meet? And especially in apartment living, that is relatively new to this part of Dublin, you can feel very isolated... So I think it's important to have some central area, some focal point. And if you haven't even the local shop, it creates all those problems ...any group that wants to meet, whether it's a residents' association or whatever, they have it in a noisy pub (SPC member).

In this area, there is not a swing or a seesaw. And I'd have to go to X park, or to Y Park—again, it's not what is meant by sustainable. It's a car journey—carbon footprint, and people needing a car as they need here. There's no bus to take you to either of those places from here (SPC).

There were particular problems regarding education.

You have the local school in X and what they're doing is putting temporary classrooms on the playground. At a time when we're talking about obesity and kids not getting enough exercise, and a playground for a much smaller number of children is being reduced hugely... and then they're saying you must not run in the playground because there's not enough space... certainly a need for 2 extra schools in the area... It wasn't all new couples that were moving in here and having children in 5-6 years' time. Many came in with families, ready for the go, and the schools weren't here. The same with secondary schools (SPC member).

Inadequate public transport was a recurring theme.

There's a school in X, and that was renovated to state-of-the-art classrooms, but it is 3 miles up the (very steep) road...and the only way you can get to it is by

car. If that's what they mean by sustainable! And on a very bad road, in frosty weather—you couldn't expect kids to cycle on it safely...

Policing was also an issue:

they service the area we had about ten years ago, before this development. I can give you an example I came across about 4-5 years ago...an attempted suicide...What do you do? You ring the guards. And they said, they don't have a car...And I think if you were to ring there and say I live in 26A whatever, they probably don't even know where it is. Because they haven't upgraded—the big numbers are down in X or wherever, but the census will show that the increase in population is up here.

Overall, the need for integrated planning was reiterated on numerous occasions.

The frustration is that nobody is ever looking at the bigger picture—just at this site. It may not look too bad to put 700 units on this site. But if you look at the other sites around, given permission or under construction, that these are going to be real people with real needs, and nobody was looking at the whole picture. For example, there's one development for 169 units, and we did appeal it to An Bord Pleanála ... and with that particular one, with the appeal, we had a letter from all the schools in the area...saying we will not be able to facilitate any potential children who will be on the site. But even with that, it was granted permission (SPC).

If you take, for example, the area action plan for here was passed in 2000. This is 2008, and the 8 year old child then is now 16... You have to plan for the future and for all age groups. Because the planning guidelines say that you have to put in a crèche for whatever amount of housing units—the crèches will go in anyway because they're market-driven, so they'll happen, even if it isn't put in at first...It's not such a surprise, or shouldn't be, that all these toddlers with crèches for newborn babies, that they're going to grow up and become teenagers and have different needs—so we're not planning for the whole way through for those people, for the full life cycle of people. And we're—there's nothing for the teenagers...and you're down to driving them to everything again.

Due to water and sewage problems in the area, a decision was recently made to halt development until these issues have been resolved.

Another aspect of unsustainable planning is the extent to which development occurred on green-field sites. As was mentioned in Chapter 3, Irish housing policy fails to emphasise the need to develop on brown-field rather than green-field sites. It was also noted that housing policy gives insufficient attention to sustainable construction, design and use of dwellings.

Table 7: Barriers to achieving sustainable housing and regeneration

Implementation barriers
<p>Lack of conceptual clarity on nature of sustainable housing</p> <ul style="list-style-type: none"> • Inadequate planning • Inadequate emphasis in housing policy brown-field rather than green-field development • Inadequate emphasis in housing policy on sustainable construction, design and use
<p>Inadequate building regulations</p>
<p>Non-compliance with regulations & limited inspections</p>
<p>Limited knowledge and expertise</p> <ul style="list-style-type: none"> • Regeneration • green building methods and eco-products
<p>Social segregation</p>
<p>Nimbyism</p> <ul style="list-style-type: none"> • negative attitudes to social housing • Negative attitudes to higher density and infill
<p>Poor quality and design of some higher density housing</p>
<p>Accommodating multiple interest groups (community etc) in regeneration planning</p> <ul style="list-style-type: none"> • Inadequate communication between housing & planning sections of the local authority
<p>Limited resources</p> <ul style="list-style-type: none"> • Failure to provide for the social dimension
<p>Emphasis on demolition rather than renovation</p>
<p>High level of permanently vacant dwellings in the city</p>

Inadequate building regulations and non-compliance

As mentioned in Chapter 3, there have been significant improvements in the building regulations following the European Communities (Energy Performance of Buildings) Regulations, 2006 and revisions to Part L of the Building regulations in 2008. However, these regulations were criticized for not going far enough. Furthermore, while the ‘Low Carbon Homes’ Programme introduced in 2008 is welcome, funding for it is very limited.

Another aspect of the problem is that concerns were expressed in this study that some developers and construction companies are failing to comply with the existing building regulations. This has led to fears that there will be a low level of compliance with the new energy efficiency regulations.

We had said to the Dept of the Environment back in 2004, in a document called *Strengthening the Enforcement of the Building Regulations*, that enforcement is patchy to say the least (Architect).

Two of the largest practices dealing with large scale housing and apartments have said to us quite frequently in the last couple of years, they will say to a major developer 'I can't sign off on that'. 'It's not a problem we'll get Mr. x to do it and Mr. x does it.' (Architect).

...they struggled for years to get them to agree to variations in the building regulations, to adjust to county development plans. That has been a real struggle. It has never been a pleasant experience trying to drag them through... There is an issue with the home builders if you would overcome that (voluntary and co-operative sector).

A lot of development is developer led. Other countries own the land and are in control of the design. A lot of that is now being addressed through local area plans. There is more direction now and the issues of the infrastructure are being addressed. There is an issue of how you get developers working in the context of sustainable communities (DoE)

There was a degree of very, very strong resistance from the house building industry to part v, particularly in relation to the provision of social housing and in a curious way that seems to have rubbed off in relation to the provision of affordable housing too... seems to be some kind of perception that it reduces the marketability of the remaining private sector housing even though affordable housing is for sale (DoE official).

The standards of workmanship are generally not as good as one might hope for compared with other places, especially regarding air-tightness (architect).

Part of the explanation for non-compliance with the building regulations is that there is a low level of inspections by the relevant department, something which has been linked back to limited resources.

The next stage is ensuring on site that these (regulations) are achieved and that falls to the actual people who are construction workers but also those who are charged with provision in terms of clients' responsibility and also the public sector in ensuring that building regulation standards are being achieved and I understand that the target will be 10 or 15 percent of buildings might be inspected at different stages. One of the problems is that you really have to

have almost continuous supervision because so much of this will be behind walls, inside roofs and so on...A major challenge in ensuring on-site standards and on-site supervision at different stages of construction (DoE official).

Another issue is that is lack of engagement between developers and local authorities or housing associations at a sufficiently early stage for certain important decisions to be made which results in 'local authorities and housing associations being delivered homes by developers without consultation' (local authority housing official). This can result in designs being implemented which may be very expensive for social housing tenants to maintain or in segregated housing with the social housing units located together in one part of the development.

Limited knowledge and expertise

An important barrier to achieving progress is the limited expertise within local authorities on sustainable housing regeneration, which is linked to staff mobility.

The other barrier is probably just the lack of expertise or getting the right team in to do a project. That you often have people assigned to do something and they've no background. A big problem in local authorities is that there's too much staff mobility (Affordable Homes Partnership).

This gives rise to the problem of making the same mistakes repeatedly, a point made by one housing provider with experience of regeneration work. Speaking of local authorities, he argues:

They actually go through the same series of mistakes. Dublin City Council made mistakes and has gone about correcting them...and it's clear that South Dublin and Fingal are making the same mistakes, and then Kildare or Meath.

There appears to be limited knowledge of and expertise in green building methods and eco-products as well as the relative impacts of different measures. This applies across the board to the range of professional including architects, engineers and construction industry. Furthermore, there is a high degree of skepticism among many of relevant professional groups about the effectiveness of many green building measures, despite their established use in other countries and in specific cases in Ireland.

...Architects are always nervous about new systems, new products because when the dust settles they are usually the last person standing (Architect).

You can have your solar panels and wood pellet boilers and district heating systems, but as yet what we're facing in the industry are challenges because an

awful lot of products on the market are yet to be certified...and also we would have questions as to the durability of some of those products, and the costs that may be incurred by residents ten years down the line (IHBA).

I suppose solar panels are really at the moment—they're the ones causing quite a few problems, just because of their allowed-time guarantee, whether it's ten years or more. And the replacement costs that are there (IHBA).

Training courses are oversubscribed and difficult to get onto and quite expensive. ...training is limited by time...But generally speaking people are approaching it from a provision of relative ignorance. We are all learning and that is going to take a bit of time (architect).

Some local authorities are just beginning the work of 'green' housing and are concerned about aspects of the 'new' technology and maintenance of it.

I suppose, we really are only beginning our very first, what you would consider to be, a green... social housing scheme. You know, it has things like grey water retrieval, solar panels and underground heating, and various things like that. So that's a big departure for us. And then obviously newer schemes that we're planning at the moment, we'll have to address things like the type of heating that we're putting in. And that's a big challenge at the moment, in terms of what's going to be the best system to use. And there isn't a huge track record, and certainly not a huge track record in social housing, either, we'll say. People have an expectation that if they're clients of ours that they'll be in a house where everything works properly, and that if they don't we'll sort the problems out. So that's a challenge, if we use a new technology (local authority official).

However, some local authorities and housing associations pointed out that they have been doing this work for quite a number of years on the grounds that it makes both environmental and economic sense.

Others are preparing for the future.

But now, in the schemes we're designing now for senior citizens, we'll put in a boiler system, but maybe make the boiler house big enough that it could take, say, a woodchip system in time—you know, that it would be a simple matter of changing the boiler, with enough storage facility...So when you look at our schemes, you might say, gosh, that's a very big boiler. There's just a boiler in the corner that looks completely out of size for that particular scheme, but it's just looking to the future, and it's very worthwhile doing because we don't know what's going to happen (local authority official).

One respondent argued that there is a lack of investment in research and evaluation of green-building techniques and products.

Expertise is growing...it's changing. It's more a question of capturing the expertise, evaluation and communicating it to the broadest possible audience...

There is a lack of commitment to research and innovation processes. Sustainable Energy Ireland are doing a great deal in this area ... but despite the national issue it doesn't seem to have penetrated ...we are all talking about it but there aren't many structures evident on the ground (Architect).

Social Segregation

Those with experience in regeneration emphasised the importance of getting the balance right when it comes to social mix but it is recognised that this can be very difficult.

There was a lot of pressure from the Council to keep the number of social housing units down. There was a lot of pressure from the community to keep it up. And there had to be—because if the numbers are too low, you don't have a strong sense of community, but if they're too high you might have too many social problems still. So it's how you get that balance (FRB).

A number of respondents noted that local authority housing allocation systems can result in segregation.

Allocations can result in segregation. Travellers and the new Irish are at the top of list according to priorities. Travellers need larger houses (4 beds) and if all 4 beds are together you have a ghetto of Travellers (local authority official).

The current policies by the local authorities are actually helping to perpetuate the difficulty of social integration...what we would like to see—a greater, what you might call social engineering, whereby you mix the communities better. Not that you discount the needs of those who are in significant need, but if you mix the communities a little bit more, so that there is potential cross-role model situations, and also potential economic role models for people to see as well (voluntary and co-operative sector).

And I suppose, then, if possible trying to develop a mixed community—one-two-three-and-four bedroom houses, by and large. Traditionally one-beds weren't provided to any great extent. But now you try to get a balance. Now, there is probably an argument to say that you shouldn't do more of that—like, the housing list is done on how many points you have and that. But there would be examples in other countries where you would look at what percentage of employed people are in housing in a new area, and things like that.... the schemes don't really allow you to do that, to be honest with you...There's always a difficulty in that, in that the current systems don't encourage people to declare their partners ... which is understandable. So you might think you're dealing with a lone parent when they actually have a partner...Maybe there is an argument instead that rather than the hard and fast rule that those most in need, that you'd try at the allocation stage of developing a more mixed community—a better mix, possibly, at that stage (Local authority official).

The community representatives on Dublin Docklands Development Authority were adamant about the need for 'pepper-potting' the social housing in with the private

housing. To a large extent, this has been in the recent regeneration of that area of the city. In mixed tenure estates, access to services by social housing tenants was also raised as an issue. For example, a number of people in the study referred to a housing scheme in which a separate garden was provided for the social housing tenants (voluntary and co-operative sector).

A related concern raised by some local authorities was the problem of families trying to find large dwellings while 'empty nesters' live in homes which are 'too big' for them. There is evidence to support the view that some 'empty nesters' are living in accommodation which they consider to be too large for them (Watson and Williams, 2003).

Our biggest challenge I think, just in relation to suburban areas in the whole city really... the empty nesters, the declining population. An example was Greendale, out in Coolock...there's great opportunity for development out there. But you have the ridiculous situation in Greendale—you have a school that closed. And there's a big area of ageing population. You've got a lot of houses with just two people living in a house that has a good number of bedrooms. Everything you see—the green—it has shopping facilities near there...the Dart line just down the road—and they close the school! And then we have 20 miles up the road—they're trying to build schools, in Balbriggan and places like this. The whole thing is unbalanced (local authority official).

Nimbyism

Nimbyism (not in my back yard-ism) was felt to be a major barrier in two important areas. First, local authorities encounter significant problems when they attempt to introduce social mix to areas by adding new social or affordable units. This barrier was experienced in a range of different settings and by both local authorities, housing associations and the Affordable Homes Partnership.

(one barrier is) existing residents and Nimbyism, especially in older estates and infill. This issue is not confined to middle class estates. Estates which have had problems in the past, and are now quiet, object to the idea of unknown newcomers (DoE official).

Opposition to social and affordable housing comes not only from local residents but also from politicians and local authority officials, including planners.

There is no real commitment yet in terms of affordable or social housing, in some cases at political level, but also even at official level (Affordable Homes Partnership).

And I get a bit disappointed with local reps who have some responsibility for the delivery of social housing, who seem to be quite associated with exiting residents assoc, for people who are already housed. And some years afterwards, when we finally get the housing units built. Then it's the mummies and daddies who are looking for the houses and apts for their children in the same local area—or indeed, perhaps the local reps who weren't so enthusiastic when we were getting the planning (Voluntary and co-operative sector).

Specific comments referred to the role of local politicians in blocking attempts to introduce social mix and higher density housing.

you will often get significant opposition to social housing schemes, and even affordable housing schemes, in actual fact. And that can result in a reduction of the units in a scheme, in order to get it through rather than to lose it (local authority official).

We'd been building very low-rise developments in the city and a lot of it came down to the economics of the time as well, but there was also a great reluctance for us to build anything of a certain height because of the experience of Ballymun... the councillors were hearing about this from residents and they were opposed to any scheme that we might put forward that might have a density to them. We found ourselves building two-storey houses (in the city centre) ...it was probably a shameful use of land, but that was the thinking of the time (local authority official).

The second of nimbyism is the considerable resistance from local residents to higher density housing and infill on Greenfield sites.

But there's always going to be local opposition to anything to do with height or density...and building on green spaces. And, you know, it's our role I suppose to try and convince people that this can be done and can be done well and the benefits that accrue to a community from that—extra numbers, more vitality, younger people moving around. I know some people see younger people as problems, but they're not (local authority official).

As noted in Chapter 3, negative perceptions of higher density may be attributed in part to the poor quality design of some higher density schemes and, indeed, the notoriety of these. Negative attitudes to apartments among social housing tenants may be linked to the fact that the tenant purchase scheme, an important route to home ownership in the Republic of Ireland, does not apply to apartments.

It's a challenge for people to move from the idea of not getting a house, to getting an apartment. That has been a challenge, because at the minute you can't buy an apartment from a local authority—you can buy a house, but not an

apartment. And a lot of people housed by local authorities would aspire to owning that home (local authority).

A related problem is the difficulty local authorities face when trying to get a community to share facilities.

Our mapping system will show a catchment area and where community centres are, so that, parks, playgrounds, libraries and sports clubs, so that it informs our decisions in planning. Do we need to put a community centre in here, if there's one across the road or two blocks away? The idea is that you try to get the mix and get them to use that one. Some communities take ownership of the community centre, and it's for THEM. And they don't want anyone else coming into it. That's what our residents, tenants want when we're building, regeneration of a flat complex. They want a community centre for themselves. With all the mixed tenure now, we're inclined to say no, that this is for everybody... The managing of these facilities...it nearly always it falls back onto the city council to do that. And paying for all these things, it takes revenue, and it isn't always there. We have to be conscious that we're—that if there's one close enough to provide for that community (local authority official).

Accommodation multiple interest groups

This study found that there are three major challenges in accommodating multiple interest groups involved in housing regeneration. First, there were mixed views on the role of the local community. One local authority official talked about the difficult but important task of getting residents 'on-board' for regeneration projects, arguing that this required building confidence and trust, especially in situations where you are dealing with people who have very low self-esteem, such as the third generation employed. Another local authority official argued that community involvement 'slows things down and there is a question of whether people are representative of the community. The community can't have a veto' (local authority official). Other views of community participation:

On the one hand you could say a strong local community is important for support of the project, driving it, building in and buying into it but, on the other hand, strong local community frequently is inward looking, defensive, comes up with solutions that are short term and inevitably won't work and ends up as an obstacle to be overcome and that is not what they should be (DoE official).

There is an imbalance between _____ council folk who have to be accountable for everything and the community who are not accountable for anything...can

be very difficult especially when they want the sun, moon and stars (local authority official).

Second, some respondents referred to the problem of reaching an agreement when there are multiple interest groups involved in housing regeneration.

a big barrier at the moment is the multiplicity of interest groups. Here you have again the twin edge. You have lots of groups doing, in many cases, very useful jobs, some voluntary, some paid for, some very progressive but they all will have their own axe to grind and even if they didn't have their axe to grind the simple fact of their being so many of them ...confusion, complications and just trying to consult. We are talking for large areas like Ballymun and Limerick, you are talking a 100 different groups involved...trying to keep everyone on board has become a real issue. You are talking about consultation but also networking and driving networks. I am not sure we have the skills at the moment... So we have to manage it but it is certainly an obstacle and a problem and a delay...and that's with everyone having good intent (DoE official).

Third, problems with interagency working were a prevalent theme in the study. This included communication problems between different sections of a local authority with diverse perspectives. These views were expressed by a range of housing providers.

There may be consultation but not agreement (local authority official).

A major problem with part v at the moment is the standoff between planners and housing...it's quite acute in the local authorities. Difficulty is people say planners should take the lead role but the housing people say 'they don't know about housing' (voluntary and co-operative sector).

I'd say the biggest difficulty we're finding is getting planning and housing to work together (Affordable Homes Partnership).

However, collaboration problems also exist between the DoE, local authorities, developers and a whole range of agencies.

We would like to see, of course, though that the planning authorities, and also the DOE would work much more in collaboration, and that there'd be much more joined-up thinking with the transport and education departments, because it's the development sector that's always blamed for putting up all these apartments and houses with very little infrastructure in place (IHBA).

You have to have total co-op between the different agencies and unfortunately there would be different agendas in different agencies and doesn't augur well when you try to get some co-operation on the ground. When there are financial constraints...that makes it worse. The HSE (Health Services Executive) have pulled out a lot of projects recently. Education for instance, goddammit, one of the most important tools in the chest to resolve the issues...where are we at

when we don't have enough teachers, kids in converted toilets, class sizes (local authority official).

An over-reliance on personal contacts was also considered to be an issue in terms of making progress in certain areas.

It all relies on personal contacts. ... inter-agency links between the HSE and the local authority which is a disaster. We tend to get one step ahead and two steps back (voluntary and co-operative sector).

Most of what we achieve now is through personal contacts in agencies...that is not good enough. Should have systems in place that don't depend on good will. Can change from day to day....People move (local authority official).

A significant problem is the lack of regeneration agencies with multi-disciplinary teams to provide housing, health, education and employment services.

I think one of the critical things about Ireland in terms of regeneration programmes is that it's actually seen as a single-agency work...you don't actually have the other agencies in terms of education and health, particularly, alongside the regeneration project. They're seen as separate bodies which have to be brought in at a different stage. This is a model that has changed quite a lot in the UK particularly in places like London and Birmingham where the agencies are actually managed effectively through one regeneration agency within the respective local authority. Therefore you have the three elements around the table at planning, not at a late stage when planning is completed and you're looking for funding then. And that kind of immensely improves the potential for the social integration as well as the economic integration that's required to make true regeneration work (voluntary and co-operative sector).

Problems also arise between the different agencies involved in regeneration projects:

The main problem in interagency working from a local authority perspective is whether the people around the table from other agencies that may not have a regional or local basis have the authority to engage. So you have a mix of central and local bodies (DoE official).

Multi level governance is really, really difficult. ...We have people operating at different levels at every point in the system. So when I attend a local regeneration project I am part of a national organisation. I am dealing with bodies that may be regional bodies of national organisations...maybe local territorial bodies. ...So you have all these different sets of rules. The head of a really small organisation can call the tune. Somebody else might be a small cog in a big wheel and can't deliver (DoE official).

And another thing, from our point of view, is that most of our bigger housing sites are in the newer areas, so, people, most of our big land is out in X and Y, and they don't have the necessary infrastructure. You really are talking about building new communities, and the challenge then is to see can you build them and ensure that the infrastructure is delivered at the same time...So if we are

building in an area, and a school is needed—do we wait til the Department of Education is on board to build a school, or do we build the houses because of the people waiting on the list, to have houses built for them...I think the hope would be that the local area plans would sort of try and deliver on eliminating some of those obstacles. That if these things are identified as being needed in a community (local authority).

Problems with interagency co-operation can be related to both personnel and other resource issues. Both the Department of Education and the Health Services Executive were criticised.

But I think the struggle has always been the education side of things (local authority).

Sometimes dealing with respective opposites in some of the other authorities—like the health authority or the Department of Education... tends to be a little bit tricky, to say the least. To get things moving at the same time, so that all the services are delivered at the same time...If you're dealing with very good people there, it seems to be moving along. But in other places we have had difficulties. Take for example, the health service—we would have a lot of connection with them on schemes, in particular in some of our big senior citizens' developments where we might be putting in large centres—there would be a concern in some of those areas, but some of that experience has been good—and others haven't been good. It can be difficult... homeless schemes can't be operated because of difficulties with operations. We fund the building of them, but they're supposed to manage them from the beginning when it's finished. And it's a resource issue (local authority official).

Resources

The most frequently cited barrier to implementing sustainable housing was the limited resources available for the task. Some recent developments have given rise to additional costs for local authorities. With the advent of mixed tenure multiple occupancy schemes, there is the issue of payment of management fees and services charges for social housing tenants. In addition, part v housing can be more expensive to provide due in part to the types of fixture and fittings required but also to the expense of management and maintenance fees. Furthermore, it was recognised that this situation would deteriorate significantly with the down-turn in the economy. One planner pointed out that it would impede their ability to tackle the waiting lists for social housing. It had been envisaged that PPPs would be employed to assist in the regeneration of a number of social housing estates in Dublin. However, some respondents noted that the withdrawal of private sector funding from many of these arrangements would curtail the delivery of social housing.

In the past, the DoE funded social housing. Now it's PPPs, and the private is dropping off and there are immediate effects (local authority official).

And the economic downturn is a barrier at the moment, because we've some projects on the go and with private developers putting a lot of money into it and we were getting a return, and the market is gone. All of the PPP developments we're talking about here, they're all predicated on a buoyant market and that's the way it works. And it works best in a buoyant market and the PPP model doesn't work when there's a downturn, and the banks won't finance these people ...and we don't get our product (local authority official).

There is clearly a problem of inadequate funding for many of the essential community services required for sustainable housing, including community buildings and staffing of social services.

So, if you're putting in sustainable, so called, housing in the private context, you also have to ensure that you're actually putting in sustainable services later on, like proper management services. And by guarding against the local authority view that it provides those 20 social houses within the private dimension, that they can wash their hands of them in the end and just collect the rent—I don't think that's sustainable at all. I think it can lead to real problems in the future (voluntary and co-operative sector).

With regard to regeneration, the particular importance of resourcing the community after the completion of the project was highlighted. The decentralisation of local authority housing management services was highlighted as a major advance in social housing, especially with regard to regeneration projects. However, it was argued that some staff must be retained on site after the regeneration is completed to ensure continued success of the programme.

We now realise that when we are regenerating areas and developing complexes that we have to be out there and stay out there. So we've gone to an area-based system, where the city is divided into five areas and the housing functions have been delegated to the areas as well so that a lot of the maintenance issues, the ongoing problems are dealt with in the estates. They develop relationships with the tenants...You know, if we walk away from any of these, they'll just degenerate again (local authority official).

Concerns were expressed about the limited funding for the social dimension of sustainable housing.

I think perhaps a lot of what goes into a sustainable community is what is in the social infrastructure....that can be more difficult to cost and perhaps to sustain and maybe that's where the difficulty is. In many respects, this department deals with capital expenditure. People can convince us of environmental features ...looking at the longer term climate change scenarios so all of these things may

stack up. But if you are talking about tenant liaison officers, this is the level of management and maintenance there needs to be, much of that may be coming from the local authority's own resources, That's dependent on their rent income (DoE official).

In Ireland it's focussed on the buildings, creating new premises and removing high rises, and in some places replacing them with high-rises, as they've done in Ballymun.. Without actually creating any of the other facilities that allow those people living in the high rises to be better-off than they were in the old towers...So the size and quality of the accommodation is not really what's at question, at fault here. It's the services and lack of being able to provide for facilities for children, and access employment, recreation and that is what's causing difficulties in these regeneration projects (voluntary and co-operative sector).

Lots of vulnerable households with special needs need tenancy support... need help to sustain accommodation... That is continually not there or lacking...There is lots of money for capital works but the revenue funding needed to sustain the scheme just is not there...Money has begun but not enough (voluntary and co-operative sector).

Furthermore, the fact that capital programmes are frequently accompanied by the demolition of existing valuable resources was also criticised.

Under the scheme being mooted by the Moyross Regeneration Plan, the 35 (x housing association) houses which were only built 8 years ago are all to be knocked, with the common facilities attached for the women and children, for the general public, pre-schooling and that. They're all to be knocked. And what's really required here is some form of understanding of what regeneration is about—physical regeneration is necessary in Moyross, certainly, but I would say half the houses in Moyross are perfectly good houses (voluntary and co-operative sector).

As was noted in chapter 3, the focus on demolition rather than renovation is contrary to the concept of sustainable housing and the predominance of it in Irish housing regeneration projects constitutes a barrier to progress in this area.

Another theme in the research was the inadequate resources dedicated to ensuring compliance with the new building regulations on energy efficiency and carbon emissions.

Resources would have gone into fire safety. There isn't commensurate staffing for inspections in relation to the other requirements of building regulations. The target will be something like 10 percent. I think the idea is more spot checks. One would query whether a level of 10 percent would be adequate, particularly in relation to the new part L standards (energy efficiency standards) (DoE official).

The cost of green-building was identified but, in general, it was felt that this would be cost-effective in the long run. However, the urgency of pursuing some of these measures was highlighted due to the threat of rising fuel poverty.

At the same time, particularly in rental housing, our members are pretty low-income. We need to be trying to push the boat out in this because energy costs are rising, and that impacts on their disposable income (voluntary and co-operative sector).

A pressing issue was the lack of resources for research and training for those involved in the varied aspects of the construction and use of sustainable housing.

(The Department of) Finance has moved into a lowest cost procurement system, fee bidding by professionals, fixed price by constructors... how we find a way for innovation, research, evaluation of buildings is now very difficult to see. If an architect is working on a low cost basis he will just roll out what he did before. You don't have the time for research. (Architect).

I don't believe the prime focus should be on indiscriminate grants. It should be on training across the industry, familiarisation, testing and verification of products. We have to get that right first (Architect).

We would see that there's an added cost involved and essentially a training issue as well, for the owners of the homes...It's not just about the industry building these houses, that people don't know how to live in and treat (IHBA).

4.3 Summary

There are a number of significant barriers which must be overcome for more sustainable urban housing to be implemented. The latest housing policy and practice documents are a significant advance, but their shortcomings include an insufficient emphasis on: brown-field development; sustainable construction, design and use; renovation rather than demolition; and 'partnership' with residents. Moreover, these documents have not been adequately communicated to those who should be implementing them. Hence, there is a lack of agreement about the nature of sustainable housing among housing providers and planners. Recent changes in the building regulations are welcome but past experience reveals that without adequate enforcement, compliance will be limited. In addition, given the extent of new construction in Dublin over the past decade, it may be argued that they are 'too little too late'. The other key barriers include: limited knowledge and expertise in sustainable construction and renovation methods; limited expertise in sustainable urban regeneration; nimbyism (negative attitudes to higher density and social and

affordable housing); poor quality and design of some higher density housing; accommodating multiple interests in regeneration projects; an emphasis on demolition rather than renovation; and limited resources.

5.

Overcoming barriers to implementing sustainable housing and regeneration in Dublin

5.1 Introduction

The respondents in this study made a number of suggestions for overcoming some of the barriers to implementing sustainable housing and regeneration outlined in chapter 4. These are discussed under the following headings; improving policy and regulations; implementing policy and regulations; governance; DoE, housing providers and other agencies; and resources.

5.2 Overcoming barriers

Improving policy and regulations

As was noted in chapter 3, the latest housing policy and practice documents are a significant advance. However, their shortcomings include an insufficient emphasis on: brown-field rather than green-field development; sustainable construction, design and use; renovation rather than demolition; and ‘partnership’ with residents. It is essential that these issues of sustainability are also addressed and highlighted as important concerns for Irish housing practitioners. In particular, regeneration plans need to emphasise each of the social, economic and environmental pillars that are essential to the sustainable redevelopment of areas. In areas of significant social disadvantage, a strong social vision of what is needed to strengthen the community is required, such as a social regeneration plan.

The latest building regulations are inadequate. As was mentioned in Chapter 3, the new regulations require that all new dwellings have a BER rating of B1 or A3 by 2010 rather than aiming for A1 or A2. As was pointed out by one of the key architects in this field, all new housing should be passive. A related problem is that there is relatively limited compliance with building regulations, which must be addressed by means of increasing the level of inspections that are conducted and the competence of all those involved.

We have to get serious about enforcement of the building regulations. What we are saying... is that certification on the building regulations should only be done by competent professionals...Certification should be viewed as an extremely serious exercise. If somebody is fraudulent or careless it should be a matter for their respective registration bodies. We do need an effective random monitoring system. At present the state's objective is about 12-15 percent of buildings being inspected (Architect).

Specifically with regard to passive housing:

It is hard to see how you can achieve it (here) without more regulation and oversight. We need to strengthen the enforcement of existing regulations (Architect).

The following proposal was made by the RIAI:

A commencement notice is sent in before you start building, when that's done, the designer should be asked to lodge a set of building regulations compliance drawings. They are not checked by the local authority but it means that the person signing off can say 'what you've got there is not the same as what was lodged'. It means that if the local authority goes out to do an inspection - it does some random inspections, not very many - they've got the basis of their inspection, they can see it has changed. Also, that the opinions on compliance should be lodged with the local authority. It is a form of much more rigorous and strengthened self certification which actually the original building regulations legislation envisaged and the minister has the power to do this (Architect).

At the request of the Department of the Environment, new robust compliance details will be adapted from the UK for Irish conditions. This involves taking standard construction details that would deliver better air-tightness, and insulation for people to use them in their work.

Given the extent of new construction in Ireland over the past decade, one of the most significant tasks is to 'retrofit' the unsustainable housing that has already been built, a subject which is almost ignored in the latest housing policy. Grants could be provided to assist people with retro-fitting their homes but the personnel employed to do the work must be certified professionals with a competence in green construction and renovation techniques. This strategy would extend the work of the Warmer Homes Scheme and the Home Energy Saving Pilot Scheme. The Warmer Homes Scheme is part of the Low Income Housing Programme, introduced in 2002 and administered by SEI. It provides funding through community based organizations to those on low incomes for the installation of energy efficiency

measures in their homes including: upgrading the fabric of the building with attic insulation; cavity wall insulation; draught proofing the home; and provision of lagging jackets. In 2008, SEI introduced the Home Energy Saving Pilot Scheme to help people with energy savings in three areas: North Tipperary; Limerick/Clare; and Dundalk. The second phase of the pilot scheme targets groups of homes, the 'Cluster' phase, and is open to all parts of the country. In this pilot scheme, SEI provides grants of up to €2,000 per household in clusters of five or more houses for energy improvements such as insulation and heating controls. It also operates a database of certified trades-people and professionals who are competent in the use of green construction and renovation techniques.

Implementing policy

The recent guidance documents on sustainable communities from the DoE were strongly welcomed by those who were familiar with them. However, the diversity of views on sustainable housing and the limited penetration of current housing policy documents is a cause for concern. Considerable work is required in communicating this policy and guidance to the relevant personnel at local authority level, but with the revised focus on: brown-field development; sustainable construction, design and use; renovation rather than demolition; and 'partnership' with residents. There could be a range of workshops in each local authority targeted at all of the relevant sections such as housing, planning, roads, engineering, water supply, cdb's, spcs, and local agenda 21 officers. However, all housing providers should be encouraged to attend, including the voluntary and co-operative housing sector, developers, the construction industry and private landlords. The first of these workshops need to focus on the nature of sustainable housing and ways to implement it. Other workshops could examine green construction and renovation techniques, energy efficiency measures and their relative impacts. It would be particularly valuable to include information on best practice in places which have similar climatic conditions, such as Scotland and Wales. Many respondents had heard stories of problems with some 'green technology', and this might help to evoke a more balanced view. The desire for Irish examples was a recurring theme in the research.

Our members are generally looking for ground source heat pumps, probably wood pellets but you might not have space for that...water collection. If somebody came to us 'there's a programme for your members and take it'. We have had some exchange with members in Europe...but mostly driven by

southern Europeans who have the benefit of the sun ...if somebody in Scotland or Wales said it...where you have similar precipitation, similar situations...would help more on the energy stuff (voluntary and co-operative sector).

While there was some criticism of the narrow focus of television programmes which highlight sustainable housing techniques, these could be useful if there was more of an emphasis on ways of introducing these in urban, higher density situations. It would be useful to target housing providers (local authority, voluntary and co-operative and private landlords), tenants (private and social) as well as owner occupiers.

Obviously one pays great attention to what one sees on TV—I'm afraid to say they tend to be somewhat middle-class. They might not agree with this—but they can afford beautiful, sustainable houses on their own—and the difficulty for us, and it's been somewhat of a discussion between us and our colleagues around Europe—how do you take some of those worthwhile ideas and apply them in the mass-housing context. And produce something that's affordable, reliable and durable (voluntary and co-operative sector).

There was evidence from the study that good models are helpful to housing providers in implementing sustainable schemes. For example, the attractiveness of one scheme enabled Dublin City Council to continue to construct higher density housing in the city.

Bride Street came along, and an opportunity came in Bride Street... the councillors found it an attractive scheme. They were interested in it and it went through and it was voted through. After that we were always able to build schemes of better density throughout the city. It was a good model...tenants began to take an interest in that particular building and they look after it. You'll see today that it's still a very popular building and we don't have problems with that particular complex (local authority official).

Resistance among some social housing residents to 'green housing' could be overcome by enabling them to view such schemes and interact with people who are living in them.

Public information campaigns need to be increased and more focused on assisting housing consumers in the more sustainable use of their dwellings.

A lot could be done from the point of view of users of housing...how they can, in terms of energy efficiency, make the most of the accommodation that they live in. Fuel poverty is tied into that as well. To have least waste in terms of how they make use of their house (voluntary and co-operative housing sector).

Some information has been sent to households. This combined with the grant system outlined above could help to improve the energy efficiency and carbon emissions of the housing stock.

In order to monitor implementation, all development plans should be sustainability-proofed, including housing strategies, local area plans and framework plans. These should be consistent with the Regional Authority plans, which, of course, should be focused on the sustainable development of the region. In addition, it was recommended that annual reviews be conducted in each local authority. This should involve developing local indicators of sustainable housing - none were in use at time of writing but work was in progress on this topic at the Centre for Housing Research. It should be pointed out that the lack of housing indicators in sustainable development indicator sets is a common problem at both national and international levels (Winston and Pareja-Eastaway, 2008). The local authority housing strategy could be used as a central document in the implementation of sustainable communities at local level but tools such as framework plans and local area plans were also viewed as valuable.

The Housing strategy is the key thing. If you recommend a change to a housing strategy, local authorities ...their vision would dictate how we would implement it in different forms...social, affordable ...creating sustainable communities but they don't know what is meant by that. If there were some more practical vision about that but I think that that housing strategy is a tool for local authorities, developers and ourselves to provide the discipline. Should not just give you number and profile of housing need but also the parameters in which you can work. ...housing strategy is just housing...we are talking about sustainable communities (voluntary and co-operative sector).

What would be something that would help us in relation to these—it's good framework development plans ...well-considered framework development plans are really what we should be doing to be able to sustain it (local authority official).

A Sustainable housing awards system needs to be developed, with information about the winning developments communicated broadly. This would assist in overcoming some of the negative attitudes to sustainable housing, especially towards higher density and infill projects. Both the Royal Institute of Architects of Ireland and the Irish Council for Social Housing have housing awards. However, these are insufficiently focused on sustainability issues. In addition, it was recommended that a name and shame system be put in place, highlighting examples of negative

developments. Fines could be levied at developments which contravene sustainable housing guidelines, with resources ring-fenced for sustainable housing and regeneration projects.

A major challenge is to overcome nimbyism, including negative attitudes to infill, higher density housing and social housing. One approach would be to improve the design of these housing schemes. In this regard, the importance of ‘pepper-potting’ of social and affordable housing throughout a development was raised by many respondents.

Some of the design in these things is very important, in designing houses with mixed tenure that you don’t have a distinctive difference between what is going to be private and what is going to be public housing—that the quality isn’t any different. That it’s not dumbed down in any way (local authority official).

Now the Part Five agreements, now, we insist on that with developers. That the affordable and social—they have to be the very same design as the private. And we want them pepper-potted ... throughout the complex (local authority official).

In addition, there is a need for information and awareness campaigns to be targeted at both local politicians and residents. One local authority is already doing this with regard to decreasing local opposition to social housing:

We do a lot of work with the local councillors on advising them on the design issues and the rest of it, and the level of need in areas and things like that. And the quality of the housing and training courses that we provide for tenants ... (local authority official).

Similarly, with regard to higher density schemes:

We’ve only lost one scheme completely in recent years. Generally there may be a reduction in the number of units, and there would be a bit of room for manoeuvre. If we thought it was going too far, as to make it unsustainable—there’s only a finite amount of land in the county and you can’t justify low-density development in those circumstances. And when they’re built and occupied—the general impression is that they’re great, and what were we worried about. So a lot of it is education and awareness, particularly with our councillors. We would work very closely with them to try to bring them along as best we can (local authority official).

While there have clearly been problems trying to introduce more social/tenure mix, one local authority official argued that some progress has been made and lessons learned:

I think it might be being managed a bit better now. But in some of the initial ones, especially in the Part Five, where we got housing from developers, we knew that one of the courtyards... it was being used by children from the social housing element of it, and the residents had difficulty with that. So we had to try and manage that somewhat (local authority official). Unfortunately, the negative experience in this case had spread around the city, adding to the already negative perceptions of mixed tenure, multiple occupancy housing.

Another element of social mix is the family. One local authority official argued that there was a need to attract the family back into the city by offering family specific housing in the city centre with all of the appropriate services. DCC has increased the size of its apartments (Dublin City Council, 2007). However, one official suggested that incentives could also be offered for the provision of social infrastructure to address deficiencies in services. Additional resources would have to be targeted at enhancing the inner city in terms of safety and cleanliness for example, more policing and street cleaning. The issue of the clustering of the homeless population could be addressed by tackling homelessness at a regional level so that services are not concentrated in certain inner city areas. The official argued that another key element of any strategy to attract families back into the city would be to tackle noise pollution caused by the '18 hour city'. There are numerous issues here, including considerable problems with nightclubs obtaining late licences in residential areas. It was argued that the noise regulations need to be strengthened. In August 2008 the Minister for the Environment, Heritage and local Government issued a consultation document on noise pollution, with the intention of introducing legislation in this area. Tackling the issue is particularly important for higher density living and might assist in overcoming some of the negative attitudes that exist towards it.

Governance

A number of recommendations were made regarding the governance of sustainable housing. First, it was suggested that there be a Minister of State for Sustainable Communities who would be responsible for the cross-cutting initiative, especially focused on interagency co-operation. This ministry could be supported by a Forum on sustainable communities, charged with overcoming the main barriers to implementing sustainable housing. Stronger local government was also called for by a number of

officials in local authorities, as local government in Ireland is relatively weak and housing is relatively centralised. Strategic policy committees were to have been central to sustainable development. However, the fact that the housing and planning are separate SPCs is problematic, and may be a reflection of the separation of housing and planning departments in local authorities which should also be examined.

Another recommendation was the creation of co-ordinated multidisciplinary clusters within the local authority focused on achieving sustainability in particular areas. This would overcome some of the communication and operational barriers within local authorities. This approach is already in operation in Fingal County Council. One local authority talked about community development led-interagency collaboration in housing.

We've also quite a good estate management process here which is led by our community development department...And it deals with wider issues than estate management—street cleaning, bin collection. And it involves the guards and the health services. We've learned a lot from that interaction, and our CDB people would, we'd always discuss with them all our major developments—getting advice from them about what community facilities should go into an area. And obviously the guidance that comes from the Department of the Environment on best practice and standards and our own architects' department would give advice and guidance from their broader perspective...And then, I suppose, the interagency working that goes on in a local authority—we don't do anything on our own any more. You're working with the guards and HSE and all sorts of different voluntary and community groups. The County Development Board have an input as well (local authority official).

Others called for more genuine community development to occur within local authorities.

There's an awful lot being stuck onto local authorities, but I think a community development office within local authorities, with its own budget—overseen by elected members if necessary, and by government as appropriate—I think a community development office that would have an independence in terms of its targets and sustainability and housing programme—I think that's the way to go (voluntary and co-operative sector).

Much has been learned from past experience of regeneration. However, it is most important that this experience is transferred to others who are tackling urban renewal both within and across local authorities. This could occur in a number of ways. First, staff with the experience and requisite skills could be tasked with working on new projects. Second, guidance documents outlining the key points should be produced and used so that the lessons of the past are not forgotten and that other projects

progress at a faster pace. Dublin City Council pointed out that it is preparing briefing documents for regeneration schemes on the basis of its work in Fatima Mansions and Fatima Groups United has produced a book which highlights ten strategies for ‘quality’ regeneration. The economic, social and environmental dimensions need to be addressed in all documentation.

There were numerous calls for a stronger local authority role within multi-disciplinary regeneration teams or agencies.

My own view is that the local authority as the territorial body needs, must have, a much stronger leading and co-ordinating role...the local authority has to be able to bring together the different groups with their different philosophy (DoE official).

If the main focus is to rehabilitate a seriously deprived community and possibly the physical environment, as you have in Moyross and some of the others, then the local authority probably has to play a bigger role (DoE official).

The need for a multi-agency approach was also highlighted.

... we’ve said over and over again—the integration of the multiagency approach, at the early stages—not afterwards, but at the very beginning of the process. And that the same people are maintained in place all the way through the process (voluntary and co-operative sector).

On the basis of past experience it is clear that the each of the following is useful:

- A regeneration board
- An integrated partnership model including both the community and the local authority. Those with experience of regeneration programmes made a strong case for community involvement in the design and implementation of a plan for the project. These could be elected from the community as in the case of DDDA. Another respondent pointed to the need for a range of alternative methods of community involvement ranging from round table discussions, to the use of the internet for people to add comments. Guidance is required on ways to involve the community. Furthermore, consideration should be given to the establishment of community councils as recommended by Peillon *et al* (2006). Their proposal was to grant a statutory function to representative

groups of local residents, and provide financial support for their work in tandem with a set of regulations governing their operation.

- Strong mediation and leadership skills are essential for those engaged in the process. Considerable commitment is required for ‘minding’ the partnership, given that considerable difficulties can arise in terms of competing agendas.
- An independent Chair of the Board with strong mediation skills.
- A small, multi-disciplinary, multi-agency team with a range of expertise (e.g. education, health, social welfare). ‘Where you have too many people involved it becomes impossible’ (AHP).
- A good regeneration plan which can be completed in designated timeframe, including social, economic and environmental elements.
- A good project manager
- Resources (local authority support, including finance and staff).
- A regional/national community representative group consisting of those who have developed skills in this area with the aim of passing on these skills to other communities.
- PPPs may be useful as a method of procurement. For example, in the case of Fatima Mansions, the evidence to date suggests that that particular ppp model has been satisfactory.

For us the experience has been a positive one because our timing has been good in terms of the overall economic situation, and when the land is valuable and attracts the developers you can get a dividend and a good deal. But obviously now you see other city projects struggling, because the situation has changed and developers are struggling in terms of selling the properties that they’re building... And I think, you know, we’re lucky here because of the model and the timing, we’ve got a really good dividend in terms of social regeneration...the things we’ve been able to achieve here, would have been difficult to achieve if we didn’t have the dividend from the physical regeneration (Fatima Regeneration Board).

However, it is recognised by the Department and others with experience in this area that PPPs might not work in some cases: 1) in areas of extreme deprivation, where the housing is mainly social; 2) in small scale schemes of less than 100 dwellings; and 3) when there is a slump in the housing market. Furthermore, it was argued that ‘It partly involves the local authority taking on some of the demand risk or sharing it with the developer’.

A key theme in the research was the need to decrease bureaucracy and simplify procedures, especially with regard to procurement methods as well as rules surrounding fixed price contracts.

We need to lift some of the restrictions, for example planning and other restrictions. The statutory regulations are very cumbersome and slow...it means we miss the moment sometimes. For example, the procurement process is very bureaucratic (local authority official).

And the government contract—new contract rules, a fixed price contract...it has slowed things up considerably because everybody is learning how to get it right and also ensure that they identify any possible eventualities...and the builders, they have to price for every eventuality as well, and that has slowed up the process. The theory is that in the longer term you will have certainty about the price, both of the consultant and the length of time and all of it. But the danger is that the prices will go up so much because you are covering all the eventualities... So, the really big issue is that for the smaller schemes...if we have to be subject to these new contracts, and imagine a small builder now, doing the paperwork for that type of work, and how time consuming it is. We're told it will be better, but we're not so sure (local authority official).

One respondent with considerable experience of PPPs argued:

One of the problems of PPPs is that with the National Building Finance Agency and all these organisations, the whole thing is too complicated—you can't see the wood for the trees. From a financial point of view, you could put the big picture on one page, and even working out the financials, quite simply. But again it's pages and pages of documents. I would insist on going back to look at the basics, what will you get out of it, and what does it cost....

From a housing association perspective:

Simplification and take the bureaucracy out of a lot of the processes. Local authorities need to be there in terms of the housing need, evidencing and monitoring schemes being built to a good standard and so on but other than that they shouldn't be in the process (voluntary and co-operative sector).

Similarly, another representative of the voluntary and co-operative sector argued for the need to 'streamline and rationalise' the capital funding arrangements for social housing provision to speed up supply. In addition, there were a number of calls from the voluntary and co-operative sector for assistance with the acquisition and financing of land for development.

We had a low-cost subsidised site scheme in operation, where the local authorities were the main source of building sites. That appears to have diminished (voluntary and co-operative sector).

Effective management companies are crucial to the operation of multi-unit developments and higher density dwelling more generally. Due to considerable problems in this area, the National Consumer Agency established a voluntary stakeholder forum on the issues in March 2007. It has produced a code of practice for developers, a Consumer Training Guide, and a number of guidance documents for consumers. However, there are special difficulties in managing mixed tenure, multiple occupancy schemes and additional costs for the housing providers. These still need to be addressed.

Resources

In the current economic climate, it is important that resources be targeted at the following areas: inspections of the building regulations; grants for sustainable renovation and retrofitting; and high priority regeneration projects. Within these priority projects, the social and community infrastructure should be emphasised including: adequately funded services and facilities such as a neighbourhood centre, education, homework clubs, childcare and pre-school services, youth projects, family support services with professional social workers, health, leisure, retail, chemists, policing, public transport, employment and enterprise promotion facilities.

The importance of on-going estate management and commitment to community facilities was emphasised by those with experience of regeneration.

There's always the temptation to consider the job done and to pull back. But it's vital that the gains we've made here are sustained. And I think that antisocial behaviour is one thing—the drug trade is mobile and will always gravitate to a point of least resistance...So there's a need to stay on top of it. ...and obviously the neighbourhood centre is DCC's building so there needs to be a commitment to supporting that in the future—staffing and resourcing it—I'm taking that as a given. Originally X would have said that the council would have staffed and managed the centre—and now the council says they can't afford that. And they want the community to manage it. So we're doing a study to see if that is feasible, because there could be advantages in that, actually. But what the research is showing us is that there is a need for ongoing DCC investment in it—it's a big building and it's impossible for it to be supported fully through revenue and there is a need for ongoing subvention from the council (FRB).

We have a project team here from DCC. That team won't be here in the future because it was established to get regeneration delivered and one or two of the staff we expect to stay, as part of the ongoing presence, and that is important. And we need that presence here. An estate management officer and a community development officer (FRB).

Given the importance of social and affordable housing for sustainable communities, additional resources are required for this purpose.

There were a number of suggestions as to how resources could be enhanced. A number of interviewees suggested tackling the issue by increasing social housing rents so that they are 'economic rents'.

My preferred solution is that housing associations be allowed to charge an economic rent, not a profiteering rent...then those who need assistance, that they would be able to get it. My suggestion is that the rent be fixed for what it costs to manage and maintain it (voluntary and co-operative sector)

The Affordable Homes Partnership suggested altering current practice for purchasers of affordable housing whereby they do not have to pay any 'clawback' on their discount if they sell the dwelling after 20 years. This money could be used to provide additional affordable housing. In addition, tackling the issue of the betterment value of land was also raised by a number of respondents, including the Affordable Homes partnership.

You don't want the situation where the owner gets a windfall because of the rezoning...we shouldn't let one or two people benefit from the rezoning... let's share the rezoning in terms of the owner can get 50 percent of the betterment value, and the state gets 50 percent. And in relation to what we were doing, you could nearly round it that the State was getting 70 percent of the betterment value, and the owner 30 percent (Affordable Homes Partnership).

This issue was highlighted in the NESC report on Housing (2004) which proposed the selective compulsory purchase of land before zoning and 'betterment-sharing measures, designed in a way that does not damage supply especially where public land management provides an opportunity for negotiated betterment sharing' (NESC, 2004:222). In addition, some respondents questioned the allocation of development contributions, an issue which was also highlighted in the report of the Interdepartmental Committee on this matter (Interdepartmental Committee, 2007). That Committee suggested waiving development contributions in respect of certain types of development such as schools and childcare facilities and allowing some of the funds to be used for lands for social and affordable housing, schools.

It was also argued that local authorities could adopt land banking as a key strategy to meet housing needs.

We would certainly feel that local authorities should be playing a strategic role there, in land-banking...we have not had political consensus around the issue of

building land and the local authorities have been left effectively in the situation of having to compete against other players in the field. And we've never been able to resolve that politically. But certainly in the past local authorities have played an important role in land-banking etc for the provision of modestly-priced home-ownership dwellings...Unfortunately those policies seem to have faded away (voluntary and co-operative sector).

The NESCC (2004) report on housing recommended a more proactive approach to the acquisition and/or development of land, including land banking and compulsory purchase where necessary.

Another means of raising resources for the considerable work that is required in this area is to introduce a carbon tax. This has been recommended by a number of studies, with certain provisos such as it being accompanied by a reduction in labour taxes and simultaneous implementation in other EU member states (Bergin *et al*, 2004; Comhar, 2008; Fitz Gerald *et al* 2007; Tol *et al*, 2008). Comhar SDC has recommended that some of the revenue could be used to: eliminate fuel poverty; provide grants to increase alternative fuel use in homes; give tax credits to spending on energy efficiency measures such as home insulation; continue grants for renewable heating and electricity systems. The introduction of a carbon is being considered by the Commission on Taxation.

The Department of the Environment, Housing providers and other agencies

The importance of leadership in overcoming the key institutional barriers was highlighted by a number of respondents. SEI argued that the DoE and the local authorities must have ownership and responsibility for the issues:

There's a question as to whether they have the tools, the people and the systems to actually make that happen...the vision and the understanding? ...I think inevitably there are deficits there—this is a learning process. And I think there is, as I indicated earlier, an encouragingly growing appetite at departmental and at local authority level, and maybe sub-local authority level, in this regard (SEI).

The potential of housing providers (local authorities, housing associations and private landlords) to contribute to SD is often neglected, despite their pivotal role in managing and maintaining housing (Priemus, 2005). A number of interviewees called for increased leadership and professionalism in local authorities. Among the suggestions was the need for more multidisciplinary professionals combining skills in planning, urban design, and project management with a social science background.

For those local authority officials working in multidisciplinary teams, and working with the community, the need for improved networking skills was seen as a priority. While acknowledging the difficulties of working with local communities, the importance of doing so from an early stage was recognised by many respondents as crucial for sustainable regeneration.

What do they want? Get them involved. And that will inculcate ownership with them and the end product, if they have a say in it, they'll be more responsible and manage it better. So at the beginning consultation is a vital point. And this is not being foisted on them by the city council and we're not making all the decisions. They're the locals and they know the issues, intimately and they've lived with them (local authority official).

if you don't crack that in the beginning, you're going nowhere (local authority official).

Developers also need to be engaged in the planning process at an earlier stage. This was seen to be particularly important for the successful implementation of part v (local authority official).

Some suggestions were made to improve interagency collaboration. First, the city and county development boards were considered to be important for this purpose. Second, enhanced co-operation between the Departments of Health, Education, Environment and the CDBs was also perceived as essential. Third, there was a strong view that specialist regeneration agencies should involve strong leadership by the local authority. The role of the Dublin Docklands Development Authority was praised but its special circumstances were also noted.

In areas where there is a strong economic focus, so the Docklands, it is easier for the agency to be successful ...the local authority is very important but in those circumstances you can understand why the DDDA worked well. It could become the planning authority it could do certain things. It had some protection from the political system. There were attractions to it but that was because you were dealing with very valuable land and had opportunities (DoE official).

With regard to social housing in sustainable communities, one interviewee highlighted both the importance of interagency co-operation and adequately funded care services at the planning stage.

Sustainable community proofing....rather than people looking at capital costs it's to look at what it will look like in 5, 10, 15 years time...planning what the maintenance obligations are going to be for social housing...Increasingly we are working in the area of special needs with protocols with other agencies, particularly the HSE. ...It's a matter of saying at the outset of capital programmes this is actually what the care costs are going to be and how do we ensure they are planned into it... Yet we can't build things if the HSE is not in a position to fund it. It comes back to everybody being on board (DoE official).

The formal engagement of the police on anti-social behaviour issues was also considered to be an essential aspect of maintaining progress on sustainable housing regeneration. As one official put it, 'anti-social behaviour can wreck everything'. Another local authority official stated:

There is very good legislation but we need more formal relationships with gardai. We have good working relationships but need it to be formal and not dependent on a willing superintendent... formal engagement of gardai and disengagement of local authorities (local authority official).

The voluntary and co-operative housing sector called for greater independence to provide housing, linked with more accountability/governance procedures.

If there are housing needs in a particular local authority area, the housing association should be able to use that information to bring forward projects for approval and, once they go through planning and so on and identify the need, they should be allowed to progress those schemes...the difficulty is that there is a range of bureaucratic inputs both from the local authority and central government which effectively make the process extremely cumbersome (voluntary and co-operative sector)

I'd like to see us be able to develop mixed tenure estates (voluntary and co-operative sector).

If we are looking for more autonomy, I would be willing to accept a lot more governance requirements.....more regular returns to local or central government about our performance, are our properties let, are tenants happy with what we are doing (voluntary and co-operative sector).

Another theme in the research was the need for training for all those involved in various aspects of green construction, renovation and use. SEI highlight the 'technical issues associated with unfamiliarity with these technologies, not just with the products but with their installation, and with standards and good practices'.

If you're sticking up a mini-electrical generator on your roof, there are health and safety issues and durability issues, not just an energy issue (SEI).

However, SEI argued that there is a need for investment in training across the board, including architects, engineers, crafts and trades people, and the educational institutions. This training should be targeted at continuing professional development as well as at the new recruits.

There is no investment in the industry...other than apprenticeship training...a little less money spent on fancy tv ads and a bit more investment in integrated training and up-skilling of professionals would be very useful. This is something we (architects) would want to be part of, as the engineers would, but you know it's a big task. It goes right across the boardin particular delivering higher standards requires higher craft skills and different building systems (Architect).

But with anything like this there is a lot of training needed both on the part of builders and the professionals too, just that there's the know-how there (IHBA).

From an information point of view, the DOE has produced technical guidance for the industry, which will be accompanied by three supporting documents from SEI. Training must also be needed for occupants to ensure they are adequately informed about the correct use and maintenance of green technology (Priemus, YEAR). While the Irish Home Builders Association echoed these calls for more training, it also argued that increased certification of green products is required. SEI has a panel of companies which have the required training and competence to install and maintain new products, as well as a database of independently tested and accredited products. They also maintain the national register of BER assessors.

Research and Development are important in overcoming some of the barriers to the adoption of some of the green housing technology. Referring to programmes such as the Low Carbon Homes programme, SEI argues:

Ultimately the aim is we want to provide the evidence base. By recruiting early adopters within the industry, we want to provide the evidence base so as to persuade their peers and regulators of the readiness of the whole system to move up another gear (SEI).

The financial institutions need to be informed about some of the technical aspects of sustainable housing so that they provide finance to those undertaking these schemes.

I guess it is about the financial institutions being engaged, listened to and persuaded in relation to the opportunities that this agenda presents to them...for example in relation to the whole question of facilitating the micro-generation, say, of electricity (SEI).

5.3 Summary

The implementation of sustainable housing and regeneration in Dublin might be facilitated in a number of ways. First, housing and regeneration policy need to place more emphasis on: brown-field rather than green-field development; sustainable construction, design and use; renovation rather than demolition; and ‘partnership’ with residents. These issues must be highlighted as important concerns for Irish housing practitioners. In particular, regeneration plans need to emphasise each of the social, economic and environmental pillars that are essential to the sustainable redevelopment of areas. In areas of significant social disadvantage, a strong social vision of what is needed to strengthen the community is required, such as a social regeneration plan. Second, the building regulations need to be strengthened and the level of inspections increased to ensure compliance with them. Third, training in green construction, renovation and maintenance techniques needs to be targeted at all of those involved in these processes, including users. This is required not just for new build but, in particular, to ‘retrofit’ the unsustainable housing which has already been built. Existing grants schemes could be extended to provide incentives for the completion of this work.

Leadership in this area is required by the Department of the Environment and the local authorities. All housing policies, strategies, action plans and development plans should be sustainability proofed and monitored with penalties for failure to comply with the objectives for the sustainable development of the area. Nimbyism in the form of negative attitudes to higher density and social/affordable housing needs to be challenged, which may be done by improving the design of such schemes and by better information campaigns targeted at both local politicians and residents. Higher density housing might be more popular if designs were improved but also if the issue of noise pollution was resolved as well as concerns regarding the management of mixed tenure, multiple occupancy dwellings.

Those who have built up expertise in urban regeneration need to be enabled to transfer this knowledge to others who are working in this area. This could occur in a number of ways. First, staff with the experience and requisite skills could be tasked with working on new projects. Second, guidance documents outlining the key points

should be produced and used so that the lessons of the past are not forgotten and that other projects progress at a faster pace. The economic, social and environmental dimensions need to be addressed in all documentation. On the basis of past experience it is clear that each of the following is useful:

- A regeneration board
- An integrated partnership model, including both the community and the local authority
- Strong mediation and leadership skills are essential for those engaged in the process
- An independent Chair of the Board with strong mediation skills
- A small, multi-disciplinary, multi-agency team with a range of expertise (e.g. education, health, social welfare)
- A good regeneration plan which can be completed in designated timeframe, including social, economic and environmental elements
- A good project manager
- Resources (local authority support, including finance and staff)
- A regional/national community representative group consisting of those who have developed skills in this area with the aim of passing on these skills to other communities.

6.

Summary and Conclusions

Urban regeneration entailing sustainable housing can substantially contribute to the sustainable development of urban areas. While regeneration in Dublin has improved some of the areas worst affected by urban decay, aspects of it are questionable from a sustainability perspective. Continuing urban sprawl and relatively low densities have exacerbated problems of the over-consumption of green-field land, dependence on private transport and long commuting distances. Crucially, there is an increasing distance between where people work and live, which is contrary to sustainable development goals. In addition, the sustainability of much of the housing constructed in the urban renewal areas of the city is open to question. Problems include: high levels of residential turn-over; rising levels of tenancy; poor quality designs; and a lack of affordable accommodation to suit varied household types. For sustainable communities to be implemented, these issues must be addressed.

There are a number of significant barriers which must be overcome if more sustainable urban housing is to be implemented. The latest housing policy and practice documents are a welcome advance, but their shortcomings include an insufficient emphasis on: brown-field development; sustainable construction, design and use; renovation rather than demolition; and ‘partnership’ with residents. Moreover, these documents have not been adequately communicated to those who should be implementing them. Hence, there is a lack of agreement about the nature of sustainable housing among housing providers and planners. Recent changes in the building regulations are welcome but do not go far enough. Also, past experience reveals that without adequate enforcement, compliance will be limited. The other key barriers include: limited knowledge and expertise in sustainable construction and renovation methods; limited expertise in sustainable urban regeneration; nimbyism (negative attitudes to higher density and social and affordable housing); poor quality and design of some higher density housing; accommodating multiple interests in regeneration projects; an emphasis on demolition rather than renovation; and limited resources.

The implementation of sustainable housing and regeneration in Dublin might be facilitated in a number of ways. First, housing and regeneration policy needs to place more emphasis on: brown-field rather than green-field development; sustainable construction, design and use; renovation rather than demolition; and ‘partnership’ with residents. These issues must be highlighted as important concerns for Irish housing practitioners. In particular, regeneration plans must emphasise each of the social, economic and environmental pillars that are essential to the sustainable redevelopment. Most regeneration approaches seem to focus on improving and extending the physical rather than the natural or social environments. In areas of significant social disadvantage, regeneration projects have involved, and continue to involve, the demolition of the worst estates when the causes of many of the problems are social rather than physical. In addition to improving the physical environment, social resources and processes are essential for the creation of what Thomas (1991) calls ‘viable’ and ‘coping communities’. This requires not just the provision of community facilities but also supplying a range of social supports (e.g. education and training, childcare, assistance with childcare costs) to build a socially inclusive and sustainable community.

Second, the building regulations need to be strengthened and the level of inspections increased to ensure compliance with them. Third, the provision of training programmes in this area is essential if sustainable construction, design and maintenance are to be achieved. These training programmes should highlight information on reliable techniques and products as well as the availability of certified suppliers, and maintenance services. Education is required not just for new build but, in particular, to ‘retrofit’ the unsustainable housing which has already been built. Existing grants schemes could be extended to provide incentives for the completion of this work. The Irish Government’s framework for sustainable economic renewal (2008) promises that ‘retraining of construction and other workers will be re-focused and enhanced in order to support retrofitting of our housing stock and provide the skills for the green economy’. In addition, it suggests that €30 million will be spent in 2009 on improving insulation in approximately 25,000 houses. These commitments are a welcome start to these important processes.

International research suggests a limited implementation of eco-neighbourhoods, despite the fact that the technology is well-demonstrated, which is attributed to inertia on the part of public and private agencies engaged in housing provision. In the Irish context, strong leadership and political commitment in this area is required by the government, the Department of the Environment and local authorities. All housing policies, strategies, action plans and development plans should be sustainability proofed and monitored with penalties for failure to comply with the objectives for the sustainable development of the area. In particular, planning authorities must be required to implement sustainable housing rather than simply advised to do so, a factor which has also impeded sustainable housing in England (Williams and Dair, 2007). Special attention must be devoted to the integration of housing, land-use and public transportation policies and a strong regulatory framework to ensure that planning decisions are in line with policy. Nimbyism in the form of negative attitudes to higher density and social/affordable housing needs to be challenged. This may be done by improving the design of such schemes and by better information campaigns targeted at both local politicians and residents. Higher density housing might be more popular if designs were improved but also if the issue of noise pollution was resolved as well as concerns regarding the management of mixed tenure, multiple occupancy dwellings.

Those who have built up expertise in urban regeneration need to be enabled to transfer this knowledge to others who are working in this area. This could occur in a number of ways. First, staff with the experience and requisite skills could be tasked with working on new projects both within and across local authorities so that regional or national expertise is established. Second, guidance documents outlining the key points should be produced and used so that the lessons of the past are not forgotten and that other projects progress at a faster pace. The economic, social and environmental dimensions need to be addressed in all documentation. On the basis of past experience it is clear that the each of the following is useful:

- A regeneration board
- An integrated partnership model, including both the community and the local authority

- Strong mediation and leadership skills are essential for those engaged in the process
- An independent Chair of the Board with strong mediation skills
- A small, multi-disciplinary, multi-agency team with a range of expertise (e.g. education, health, social welfare)
- A good regeneration plan which can be completed in designated timeframe, including social, economic and environmental elements
- A good project manager
- Resources (local authority support, including finance and staff)
- A regional/national community representative group consisting of those who have developed skills in this area with the aim of passing on these skills to other communities.

Achieving sustainable housing and regeneration requires considerable resources. This presents a considerable challenge in the current economic climate. As a result, it is a matter of some urgency that resources be targeted at: training of all involved in the construction of new housing to ensure that it is sustainable; training of those involved in the retrofitting of the unsustainable housing constructed in the past; improvement in and enforcement of the building regulations; providing sufficient social and affordable housing; supplying the social infrastructure required for sustainable communities; and adequate staffing of community services in these areas. In addition, local authorities will need to prioritise the housing regeneration projects they undertake in the next few years according to the extent of deprivation in these areas.

Research on sustainable urban regeneration in other countries has demonstrated that much of what is marketed as ‘sustainable’ falls short of these goals in practice. In the Dublin context, no urban regeneration project met all of the criteria for sustainability outlined in Table 1 above, particularly regarding the environmental dimension. In part this is due to the fact that regeneration began prior to the introduction of the new building regulations (e.g. Ballymun, Dublin Docklands and Fatima Mansions). Future research should monitor and evaluate a number of projects which claim a high level of sustainability. Some of these are on green-field sites, such as Elm Park, and the Strategic Development Zones of Adamstown and Clonburris. A most interesting

project is the renewal of York Street local authority housing. Its main weakness is the lack of social mix but, at the time of going to press, its prospects for meeting the other criteria were relatively good, even though it too commenced prior to the introduction of the new regulations. Urban renewal projects outside of Dublin which should be monitored include the Dundalk Sustainable Energy Zone, and Cork Docklands. Each of these projects has the potential to contribute to more sustainable communities in those areas.

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Appendix 1

Glossary of terms

Adaptable housing

Autonomous housing

BER certificate

Brownfield housing

CHP

Co-housing

Green-field housing

Grey water

Higher density housing

Lifelong housing

Low carbon homes

Low embodied energy

Part V

Passive housing

Zero energy housing