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New Horizons

Planning for Renewable Energy

Final Report

November 2003

Planning for Renewable Energy

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Foreword

Brook Lyndhurst would like to thank all those who contributed to our research, the results of which are presented in this report. In particular, without the time and expertise of the many individuals and organisations with whom we consulted, we would not have been able to conduct our research and analysis. We would also like to thank the Research Steering Group, whose feedback and advice at the various stages of the work proved invaluable. Nevertheless, the responsibility for this report, including the errors, lies with Brook Lyndhurst Ltd.

We hope that this report proves of interest to all those that read it, and that, as we hoped at the beginning of our research, it provides a useful basis for further research and policy development in the field of “planning for renewables”.

The field is, perhaps inevitably, jargon-ridden, and we set out below the various acronyms used in the report:

CHP	Combined heat and power
CO ₂	Carbon dioxide
CRI	Community Renewables Initiative
DHS	District heating system
DTI	Department for Trade and Industry
LA21	Local Agenda 21
NFFO	Non-Fossil Fuel Obligation
NGO	Non-governmental organisation
NRU	Neighbourhood Renewal Unit
ODPM	Office of the Deputy Prime Minister
PIU	Performance and Innovation Unit of the Cabinet Office (now the Strategy Unit)
PPG	Planning Policy Guidance
PPS	Planning Policy Statement (the new name for PPG)
PV	photovoltaic cell
RDA	Regional Development Agency
REIC	Renewable Energy Investment Club

A Glossary (arranged alphabetically) follows on the next page, which gives brief definitions of many of the terms above and other technical terms used in this report.

Glossary

Biomass

In this context, biomass refers to organic (plant or animal) material that can be used for fuel directly by burning or extraction of combustible oils. It includes energy crops as well as forestry and agricultural residues.

CHP (Combined Heat and Power)

The simultaneous generation of usable heat and power (usually electricity) in a single process. It exhausts less waste heat into the environment than conventional power production which is not combined with the production of usable heat.

Community Renewables Initiative

A Countryside Agency initiative aimed at helping local people and organisations devise and implement renewable energy developments. The term Community Renewables has been used throughout the Report to describe energy developments that have local-level participation and/or leadership.

Community Strategy

Each County, District and Borough has a statutory requirement to prepare a *Community Strategy* designed to promote the economic, social and environmental well-being of an area. The *Government Guidance to Local Authorities* (DETR, 2000) sets out the key areas the Strategies should address.

County Structure Plans

County Councils are responsible for producing Structure Plans, which are development plans at the County level. The Structure Plan sets out the overall plan for the development, land use and the protection of the environment. They provide the framework for the preparation of Local Plans (at District level) and they should ensure that the provision for development within the county is realistic and consistent with national and regional policy.

Where a 'unitary' authority is in place rather than the County and District system, Unitary Development Plans are produced.

Development Control

Along with strategic planning through development plans (see below), development control is the main element of the land-use planning system in England. Development control refers to the process by which planning applications are determined.

Development Plans

These describe the intended use of land in an area (currently at regional, county and local levels – see 'County Structure Plans' above) and aim to provide an objective basis for considering planning applications.

DHS (District Heating Systems)

District Heat refers to heat generated in a central boiler plant and distributed through pipes to customers. District Heating systems can provide the means to exploit waste heat from a number of different sources and can be used in conjunction with CHP (see above). District Heating systems can vary substantially in size, from systems supplying only a few buildings, to systems that supply an entire city.

Embedded Energy

Electricity generation, usually on a relatively small scale, that is connected to the distribution networks rather than directly to the national transmission systems.

Energy Saving Trust

A non-profit organisation set up (and largely funded) by the UK Government after the 1992 Rio Earth Summit. It aims to achieve sustainable and efficient use of energy.

Gas and Mixed Waste Fuel

Energy produced from the anaerobic digestion of sewage and industrial waste.

Local Agenda 21

A policy tool for implementing the local sustainable development agenda. This incorporates social, economic and environmental issues with a focus on community involvement and improving the standard of living in deprived areas.

Local Strategic Partnership (LSP)

A non-statutory, non-executive organisation that brings together, at a local level, the different parts of the public sector as well as the private, business, community and voluntary sectors. It is designed to enable different initiatives and services support each other and work together.

NFFO (Non Fossil Fuel Obligation)

This was formerly the government's market intervention mechanism to promote renewable electricity. It was the predecessor to the Renewables Obligation (see below). It worked by allocating sites for specific kinds of renewables developments and then awarded contracts for bringing forward the developments. However, the contracts were not awarded with planning permission and many sites were in controversial locations, making permission difficult to obtain.

Planning Policy Guidance Notes (PPG) and Planning Policy Statements (PPS)

There are 25 PPGs, covering a range of strategic land-use issues. PPGs set out national policy on land use and all other tiers of strategic planning – regional, county and local – should be consistent with them. (There are also Mineral Planning Guidance notes and circulars, policy statements, good practice guidances, advice on procedures and other material, which together make up national planning policy in its entirety). PPSs are the replacements for PPGs and in future are intended to streamline national planning policy guidance.

Photovoltaics (PV)

The direct conversion of solar radiation into electricity by the interaction of light with the electrons in a semiconductor device or cell. Cells are incorporated either into panels that can be attached to buildings (or mounted in other suitable locations), or into tiles which can be used instead of conventional roof tiles or cladding materials.

Renewable Energy

Energy derived from resources that are regenerative or for all practical purposes cannot be depleted. Types of renewable energy resources include moving water (hydro, tidal, and wave power), thermal gradients in ocean water, biomass, geothermal energy, solar energy, and wind energy.

Renewables Obligation

The current government market-based initiative designed to encourage the production of renewable electricity. It requires electricity suppliers in England and Wales to produce evidence that they have supplied a proportion of their electricity from renewable energy sources. The proportion figure rises from 3% to 10% by 2010 and the Obligation is expected to remain in place until 2027.

Solar Thermal

Solar thermal devices use direct heat from the sun, concentrating it in some manner to produce heat at useful temperatures. A common application of solar thermal energy is in the production of hot water via roof-top or other suitably located panels.

Sustainable Energy

Energy production and use that takes account of the social, economic and environmental needs of the present generation, without compromising the ability of future generations to meet their needs.

1 Introduction

The Office of the Deputy Prime Minister ('the ODPM') has commissioned this research into *Planning for Renewable Energy* as part of its New Horizons research programme.

The New Horizons programme aims to introduce new research ideas, develop innovative, cross-cutting approaches to research and offer a forward-thinking perspective on medium- to long-term policy issues pertaining to the ODPM.

The specific objectives of the *Planning for Renewable Energy* research have been:

- to explore and identify how the planning system can move from being perceived as a barrier to the implementation of renewable energy technologies, to a situation in which it is playing a positive and enabling role¹;
- to explore and identify how local governance and engagement structures, particularly those in urban areas, can best involve and include energy issues – and in turn identify the role that renewable energy solutions might play as catalysts for urban and community regeneration.

The research programme was devised in May 2002 and the research was conducted over the course of eleven months, commencing in October 2002.

The research is especially timely because the results are able to inform the revision of Planning Policy Guidance 22 (renewable energy) and the accompanying documentation for the new Planning Policy Statement 22 (renewable energy). The research has also been able to take account of the Energy White Paper, *Our Energy Future, Creating a Low Carbon Economy* (2003) and *The Sustainable Communities Plan* (2003), both of which were published during the course of the project.

1.1 Scope of the research

Under the heading *Planning for Renewables*, particularly with the additional focus of this project on governance and regeneration, there is scope to research very widely. However, it is also important to achieve a balance between the depth and the breadth of the research within the project's timetable. With this in mind we set out below our boundaries for the project.

Timescale

The perspective we have taken – both historic and future - has been informed by the following interrelated factors:

- The long evolution of the planning system
- The trajectory of energy policy and production
- Climate change perspectives, including related targets

¹ As set out in *The Energy Review*, of the Performance and Innovation Unit of the Cabinet Office (February 2002)

- The timescale for developing governance capacity and effecting community engagement

The above factors inform our analysis of the policy implications that the ODPM, and where relevant other government departments, may have to face over the next five to ten years.

Renewable energy

Given the report's objectives, we have been concerned primarily with renewable *electricity*, however embedded energy production has also been considered within the remit of the research. The research has only been concerned with renewable electricity developments or renewable energy in the built environment.

For the sake of clarity, the following energy issues have *not* been considered:

- Renewable energy in transport and electrical goods;
- Combined Heat and Power systems that are not powered by renewable energy sources (i.e. those powered by gas or mixed-waste fuel);
- Energy efficiency measures;
- Grid connection and network issues;
- Off-shore wind and wave technologies (as they fall outside the scope of the planning system, even though their connection to the grid falls within).

Geographical scope

This research has focussed on the planning system in England, as planning has been devolved to Scotland and Wales.

The study of governance has similarly focussed on England, although some references to community initiatives come from Wales and Denmark.

The focus of regeneration has also been on urban, rather than rural areas, to reflect the responsibilities of the ODPM. However, rural examples have also been drawn on where these offer useful comparisons.

1.2 The research approach and methodology

The focus of the research has been primarily upon the interaction of players involved in planning for and governance of renewables. This approach follows the recommendation of *The Energy Review* which called for increased development of renewable energy and stated that, "the time for action is now and all the players in the energy system have a role to play"². In order to achieve the focus on the behaviour of players in the energy system, in-depth qualitative research has been carried out, focussing on key personnel and processes.

The research was conducted in four phases:

² Ibid Executive Summary p14

- (1) **A literature review**
The aims were twofold: to look at work that had been carried out on the 'planning barrier' to renewables developments and find any examples and evaluations of renewables developments used as regeneration schemes.
- (2) **In-depth interviews with experts in the fields of planning, renewables and regeneration**
15 semi-structured interviews were conducted by Brook Lyndhurst to discuss the issues raised in the literature review, and to talk more widely about the interviewees' own experience of renewable energy and the planning system, and/or of developing renewables as regeneration schemes.
- (3) **A case study of the South West Region's governance and planning policy towards renewables**
Forty interviews with people involved in renewables in the South West, two seminars, three regeneration project site visits and primary documentation analysis formed the case study. The aim was to explore in greater depth the regional governance structures, networks and strategies that had been developed to facilitate renewables and to explore how the regional-level networks and policies influenced local regeneration schemes in the region.
- (4) **Follow-up interviews with experts**
This final stage of the research involved returning to some of the experts interviewed in the previous phases, and also speaking to several new interviewees. Its aim was to address any outstanding issues or new questions thrown up during the course of the research, and where appropriate to discuss Brook Lyndhurst's analysis and findings with interviewees.

Interim reports were prepared at the end of each phase and submitted to the Research Steering Group. Discussion between the Steering Group and the research team at each phase informed subsequent phases, and formed an important and useful part of the research method.

The research has not sought to be 'representative' in the statistical sense, but has used qualitative methods to achieve a depth of understanding on the relevant issues. The conclusions drawn reflect this approach.

1.3 Structure of the Report

Following this Introduction, the report discusses, in Section 2, the broad policy and institutional context for the research. The main body of the report, in three parts, covers each of: the planning system and renewable energy (Section 3); community renewables and urban regeneration (Section 4); governance of renewable energy (Section 5).

In Section 6, finally, we present our conclusions and recommendations. An accompanying volume of Appendices provides a detailed bibliography, a list of web resources, notes from the expert interviews, the detailed South West case study results, and a review of current approaches in the other English regions.

2 Context for the Research

In this section we outline the key areas that represent the contextual backdrop for our research.

2.1 Planning policy

The planning system is currently under review. Following the government's Planning Green Paper, *Planning: delivering a fundamental change* (December 2001), consultation has been undertaken and key issues addressed in planning policy statements. The Planning and Compulsory Purchase Bill (December 2002) was, at the time of writing, progressing through Parliament.

There are a number of proposed changes to the planning system, which are of particular importance to this piece of research:

- The stipulation that planning functions must be carried out with a view to contributing to the achievement of 'sustainable development'.
- Regional Planning Guidance will be replaced by Regional Spatial Strategies. These will provide the spatial framework for local development planning and transport planning and are intended to be complementary to the Regional Development Agencies' strategies. They will also contain sub-regional strategies.
- County Structure Plans and Unitary Development Plans will be abolished.
- Local authorities will be required to produce Local Development Frameworks which set a planning strategy for their area, including action areas for change or conservation, which include a statement of community participation in the preparation of the plan. They must conform with the Regional Spatial Strategy and Community Strategy.

In addition to the above-mentioned general reforms of the planning system, the national planning policy guidance on renewable energy – PPG22 – was also being revised at the time of writing.

2.2 Energy policy

The government published its *Climate Change Programme* in November 2000 containing targets for reductions in 'green house gas' emissions and strategies for achieving those targets. In May 2002, the UK ratified the Kyoto Protocol and made a legally binding commitment to reduce its greenhouse gas emissions to 12.5 per cent below 1990 levels by the period 2008-12. In February 2003 *The Energy White Paper* accepted the Royal Commission on Environmental Pollution's recommendation that the UK should try to reduce CO₂ emissions by 60% of current levels by 2050.

Spelling out the need for renewables to play their part in reducing emissions, the UK government has set the target of meeting 10% of electricity supply from renewable sources by 2010. *The Energy White Paper* also sets the aspiration to reach a 20% renewable electricity supply by 2020 and estimates that to reach the desired CO₂ reduction by 2050, at least 30-40% of electricity will have to be generated from renewables by that date. However, in 2000, the UK only generated 1.3% of its electricity from renewable sources.

The major policy tool for encouraging the growth in renewables is the Renewables Obligation, a market-based initiative which encourages the production of medium- to large-scale renewable electricity generation³.

However, despite signs of early success from the Renewables Obligation, the *Energy White Paper* identified a number of structural barriers to developing renewables. It called for the planning system to be streamlined and simplified, and indicated that a new regional-level strategic approach to renewables would be consulted on. The *Energy White Paper* also stated that the government would examine how to bring within the scope of the planning system the use of renewables in developments.

The *Sustainable Energy Policy Network* has been set up as the delivery body for the *Energy White Paper*, involving a number of government departments as well as non-government advisors. Cross-departmental working groups have been established to implement key provisions within the *Energy White Paper*, and the ODPM is involved in the renewable energy and energy efficiency work streams.

2.3 Urban regeneration, sustainable communities and the built environment

Regeneration is one of the ODPM's core responsibilities. Regeneration policy deals with both physical regeneration and community/social initiatives. Part of Brook Lyndhurst's research has been to explore the potential for incorporating renewable energy into regeneration, both into the built environment as part of physical regeneration schemes, and as community assets to act as catalysts for community/social regeneration.

Regeneration and the built environment

The *Sustainable Communities Plan* sets out the government's proposals for the development of additional housing in the South East. It states that two of the key requirements of a sustainable community are a 'safe and healthy local environment' and 'buildings that can minimise the use of resources' (2003, p5). A specific role is given to energy efficiency, but renewables in the built environment are not mentioned.

Many of the governance changes that are expected as part of the reform to the planning system are also to be used to implement the *Sustainable Communities Plan*. In general terms, there will be greater devolution of power to the regional level and more autonomy for local decision-makers. The *Regional Assemblies (Preparation) Bill* will allow devolution of responsibility for housing to regions that choose elected regional assemblies. Additionally, a Regional Housing Board will be set up in every region to implement the *Sustainable Communities Plan*.

The national regeneration body, English Partnerships, and the Regional Development Agencies (RDA) are the main organisations responsible for implementing physical regeneration policy. Although energy issues within physical regeneration may be raised as part of wider sustainability considerations, English Partnerships has only

³ The Renewables Obligation requires electricity suppliers in England and Wales to produce evidence that they have supplied a proportion of their electricity from renewable energy sources. The proportion figure rises from 3% to 10% by 2010 and the Obligation is expected to remain in place until 2027.

recently carried out a *Sustainable Energy Review* (March 2003) with the intention of producing policies on energy for their own and the RDAs' developments.

Housing policy is also one of the ODPM's responsibilities, and although there is no direct encouragement for Registered Social Landlords to fit renewables technologies into their new developments or refurbishments, some Housing Associations (such as Peabody's BedZED) have taken a lead. The organisation, *Sustainable Homes*, and the Housing Corporation's *Strategy for Sustainable Development* both encourage building in a more sustainable way, which may include the use of renewables.

A final 'built environment' responsibility falling within ODPM's remit is building regulations. The *Energy White Paper* pledged to start revision of the regulations with immediate effect, to be ready by 2005, but with the primary focus upon energy efficiency, not embedded renewables technologies.

Delivering sustainable communities

The *Urban White Paper* set out as one of its key visions the development of towns and cities that help people to live in a more environmentally sustainable way (Executive Summary, November 2000, p5). Community Strategies are the major tool for delivering that vision at the local level.

Each County, District and Borough Council has a statutory duty to prepare a Community Strategy designed to promote the economic, social and environmental well-being of an area, and to contribute to national sustainable development. The *Government Guidance to Local Authorities* (DETR, December 2000) sets out the key areas that the Strategies should address, but does not include energy issues.

Local Strategic Partnerships are the bodies expected to deliver both Community Strategies and Neighbourhood Renewal. The Neighbourhood Renewal Unit has developed a policy and practice guide to *Achieving Environmental Equity through Neighbourhood Renewal* (undated) which addresses 'fuel poverty' and energy efficiency, but not renewable energy.

2.4 Regional government

The government has been developing a regional policy over the past six years, stated to be based on the desire for economic growth across the whole country, and the desire to allow the different parts of the country to evolve and carry out their own policy initiatives (ODPM, *Your Region, Your Choice*, May 2002). Underlying both of those stated principles is the belief that each of the English regions is different and that that difference requires a diversity of policy interventions.

The DETR conducted a literature review of the research into regional government, both national and international (October, 2000). It drew a number of conclusions that are of direct interest to this research:

- The form of regional government is dynamic, not static.
- There are four typical rationales for regional government – democratic; economic; European; technocratic.
- There is no clear distinction as to what constitute regional matters.
- Not all regions need to have the same powers at the same time.

- There has been little primary research on the implications of regional government for existing government structures, but it is expected to cause tensions, at least in the short term. In particular, the role for sub-regional government is called into question under a system of regional government.

Recent policy developments have enhanced funding and budgetary flexibility for RDAs and Chambers, and the potential for elected regional assemblies is soon to be tested in three northern regions.

Both energy and planning policies are moving towards the inclusion of a strengthened regional element. The examination of regional government and governance networks as they relate to renewable energy has been an integral part of this research.

2.5 Local government

Apart from its planning responsibilities, local government can influence the uptake of renewable energy in a number of ways. Local authorities are owners of considerable built assets into which renewables could be incorporated and they are also substantial consumers of electricity, which may be purchased from renewable sources.

However, local authorities also have a wider role to play in local sustainability, not least through their planning functions, but also through initiatives such as LA21, Local Strategic Partnerships, Community Strategies and their power under the Local Government Act 2000 to promote economic, social and environmental well-being.

In particular, it is anticipated that the power of well-being, combined with new trading powers that are proposed under the Local Government Bill, may give local authorities an increased flexibility with which to trade through companies. This in turn would have the potential to allow authorities to generate small-scale renewables, sell the power cheaply to residents and even set up Energy Service Companies (Welfare and Stookes, 2003, p18ff).

2.6 Summary: context of the research

- There is a clear shift in planning, housing and energy policy towards regional strategies.
- There is increasing emphasis on local delivery of regional strategies with widespread local consultation.
- Renewable energy is a central concern of energy policy and a matter for national planning policy, but it is generally not considered in policy relating to regeneration, the built environment and sustainable communities.
- Renewable energy has been earmarked to play a significant role in reducing the UK's carbon emissions and is expected to be used increasingly in the built environment as a result.

3 The Planning System and Renewable Energy

This section sets out the findings from both the literature review and the primary research on the issues surrounding the 'land use planning barrier' to the development of renewable energy.

3.1 The planning literature

Who's talking about planning as a barrier and why?

Naming planning as *the* barrier to increasing the provision of renewable *electricity* supply in England has become commonplace in industry and policy circles. *The Energy Review* highlighted the reported delays and refusals to renewables developments at the hands of the planning system (PIU, 2002). The Select Committee on Environmental Audit (Fifth Report) also noted planning as a key problem for renewable electricity. *The Energy White Paper* stated that it recognised planning as "a serious problem for renewables" (2003, p51).

The planning problem is seen as stemming from the system's perceived inability to balance national and local costs and benefits. The issue is one of both planning control – how to resolve the conflicts on the ground when applications are submitted – and development planning – the strategic framework within which decisions are made, represented by regional, sub-regional and local development plans and policies.

The result of the problem, it is argued, is that renewable energy developments have low rates of planning approval, and when approval is granted, it can be a lengthy process too often involving appeal to the Planning Inspectorate.

However, one report raised the distinction between real and perceived difficulties with the planning system. As the OXERA report on *Regional Renewables Assessments* for the DTI notes:

"Planning constraints are often perceived to be holding back the growth of renewable energy. However, this is not necessarily confirmed by recent development control experience" (February 2002, p9).

What are the renewable source specific issues that the planning system has to consider?

The umbrella term 'renewable electricity' includes a number of different technologies that present diverse issues for consideration under the planning system: both for planning control and development planning.

From the planning control perspective, it is therefore unsurprising to find that different technologies achieve differing rates of success in terms of positive planning determinations. The following list arranges the technologies in order *from least to*

most successful and highlights the key issues of opposition to their development (Hartnell, 2001):

- *Energy from waste*, while encompassing several technologies, generally suffers from opposition around the following key issues: high visual impact, particularly of chimneys; pollution control; traffic to and from the site; strong negative public perceptions. All of these issues can become particularly emotive when set in the context of a site's proximity to residential areas.
- *Wind farms*, particularly large developments, suffer from the perception of their negative visual impact, especially in areas of natural beauty; their potential interference with civil and military aviation (with offshore wind also suffering from its impact on shipping movements); their potential impact upon biodiversity; perceptions that they will be noisy and interfere with local television reception.
- *Biomass* developments suffer from similar issues to energy from waste, but on a far smaller scale, in rural rather than urban environments, and against a general background of greater public acceptance for the technology.
- *Hydro* electricity developments share generic issues in common with wind – namely their effect on the landscape and biodiversity. They also demand a consideration of specific factors such as impacts on water resources and fisheries.
- *Landfill Gas* achieves a very high success rate under the planning system, with planning objections directed towards the application for the actual landfill sites, rather than any subsequent use of their landfill gas.

The level of opposition around the above issues is frequently related to the scale of the development being proposed, with larger developments being less successful in gaining planning permission than their smaller counterparts (Hartnell, 2001).

Hartnell's list does not include embedded production such as solar, pv and CHP. These technologies, being part of the built environment, raise different planning issues when compared with those raised by the generation of remote renewable electricity. Although pv and CHP may face planning refusal, particularly in conservation areas or on listed buildings, their main difficulty appears to be an absence of proactive development planning, rather than the presence of strong opposition at the control phase.

On the issue of development planning, solar, pv and CHP are not the only technologies that can be said to be suffering from an absence of proactive policies. The Regional Renewable Energy Assessments revealed widespread differences both in whether a technology was even considered in development plans and if it was, whether that treatment was then positive, neutral or even hostile.

What are the planning barriers identified in the literature?

- *PPG22 and its two annexes*: cited are their age, lack of current technological applicability and failure to encourage proactive development planning.
- *Lack of uniformity, understanding and goodwill in and across planning authorities*

- *Failure to disaggregate national and regional targets into proactive development plans*
- *Lack of funding for planning*

What are the solutions suggested in the literature for removing or alleviating the barriers?

Suggested solutions for solving the problems with PPG22:

- A revised PPG22 “should incorporate a presumption in favour of renewables” (Select Committee on Environmental Audit, p120).
- There should be clear guidance on when there is a national case for new investment in renewables facilities (*The Energy Review*, PIU, 2002).
- Update PPG22’s annexes frequently.

Suggested solutions for solving the problem of lack of uniformity in the treatment of renewables by local and regional bodies:

- Set regional targets for renewable electricity generation on a consistent basis, using transparent screening processes (Royal Commission on Environmental Pollution).
- Revise PPG22 to effect a more comprehensive treatment of renewable electricity in development plans and to recognise potential local benefits from renewable electricity as well as negative control issues (Terence O’Rourke, 1998, p6).
- Involve the renewables industry in creating the policy framework (ibid p77).
- Provide more information on planning for renewables developments, and particularly more technical information on renewable electricity, to the planning community (Chris Blandford Associates, 2000).

Suggested solutions to the absence of pro-active development planning:

- Draw up national land-use guidance identifying suitable areas for the various types of renewable electricity development across the country (Blowers ed., 1997, p61). As a comparative example, the Danish system involves the drawing up of ‘national wind map’ (Krohn, 1998).
- Draw up regional and/or local energy plans, in much the same way as waste and mineral planning are treated separately under the current system (Blowers ed., 1997, p61). “Areas of search” should be identified for sites which development planners deem to be suitable for wind and biomass developments (Chris Blandford Associates, 2000).
- Local energy consortia should be developed with government, business, utilities and voluntary sector members (ibid).

- Regional targets need to be agreed and imposed (Select Committee on Environmental Audit; OXERA, 2002).
- Renewables development plan policies should be written up as a matter of priority. In areas without a supportive development plan policy, successful planning applications are fewer than two to one. This compares with a rate of three successes to one refusal in areas with a policy in place (OXERA, 2002, reporting DTI statistics).
- Local planning authorities should demand that a proportion of the energy coming into new developments is renewably-sourced (Hewett, 2002 p23).
- Use the planning gain system to ameliorate or compensate for the greenhouse gas emissions from new developments (ibid p25).

3.2 The planning research results

We used the above findings from the literature review to guide our qualitative research. The following section summarises the results from our interviews with experts from the renewables industry, the planning profession and regional-level policy-makers.

Planning themes arising from the literature review, raised by interviewees

Several key barriers identified in the literature review were raised again by interviewees:

Cross-cutting issues

- PPG22 and a positive national policy framework

The majority of interviewees from the energy and planning sectors cited the absence of a positive national planning policy framework and the consequent inadequacy of PPG22 as a key problem within the planning system. The essential role of central government in providing the incentive for local and regional government to take on renewables planning (both strategically and in development control terms) was explicitly acknowledged.

However, a revised PPG22 was not the only mechanism suggested for reflecting a positive central government lead. Other suggestions included: a 'Climate Change Circular'; a national spatial strategy including energy planning; a revision of PPG7 to complement, rather than confuse any revision of PPG22.

- A positive local strategic framework

Many interviewees went on to make the link between the (perceived) lack of central policy guidance and the lack of positive guidance in most local authorities. Acknowledgement was made of the low priority given to energy at the local strategic level, the absence of energy chapters in local plans, the inability to join energy planning up with other local sustainability initiatives such as LA21, and the general absence of local sustainable energy policies.

- Funding

Another issue raised by interviewees that had been identified in the literature was inadequate funding for planners. Planners were said to be over-burdened with work, underpaid, and consequently unable to devote the time necessary to get up to speed with energy planning issues through continuous professional development.

The issue of low pay failing to attract enough candidates with the necessary skills was also raised. Additional resources and training for planners was felt to be a high priority to help improve planning for renewables. An effective mechanism for information sharing on renewables developments was also raised as a means of improving planners' understanding of renewable energy issues.

Specific policy proposals

- Areas of Search (the mapping out of suitable development sites in development plans)

There were conflicting views amongst the interviewees as to whether areas of search were desirable. Those against felt that they would 'do more harm than good', by designating commercially unrealistic areas for development, and causing everything outside those areas to become no-go areas. They felt instead that siting decisions were best taken by developers, given their commercial and technical knowledge and that criteria-based planning guidance was the best way of achieving that outcome.

One interviewee expressed particular concern over the use of areas of search for biomass plants. He argued that the economic feasibility of such plants was marginal and siting constraints set out in areas of search may prevent the technology's development entirely. Currently, planning was not a particular barrier for biomass – financial issues were more serious – however, areas of search may change that situation for the worse.

However, those in favour of areas of search tended to advocate them as a means of encouraging developers to work in partnership with local planning authorities and as a good mechanism for providing a positive local framework for development.

- Renewables Targets and Regional Planning Guidance

There was also a divergence of opinion amongst interviewees as to how far the national target for renewable electricity generation should be disaggregated.

Regional targets were generally welcomed on the basis that they acted as an effective mechanism for focussing people's minds on the regional contribution to the national objective and of contributing to a positive framework for renewables with a goal that could be worked towards.

However, some interviewees felt that any target was potentially unhelpful:

- Instead of encouraging renewables, development targets may act as ceilings on development. It was argued that developments should be market led and targets may not represent the true market development potential of the region.

- Asking bodies without the power to deliver targets to set them, was thought to be an ill-advised strategy. On the one hand it gave responsibility (and the potential for being blamed) to bodies without power. On the other it gave no responsibility to the bodies with the power to deliver and would not provide any motivation for those bodies to either meet or exceed the targets.

Sub-regional targets produced an even more mixed response, and local targets were generally not welcomed. Those arguing in favour of sub-regional and/or local targets made the following points:

- Sub-regional targets can promote renewables if they are set in an effective way. One such way is to map the maximum potential for certain technologies in an area and then negotiate a deliverable proportion of that maximum that can be achieved within a given time scale (i.e. up to 2010). If it is then left up to sub-regional decision-makers and the market to decide which technologies will actually achieve the sub-regional target, a mechanism has been created which, without being too prescriptive, prevents any one sub-region from shirking its responsibility.
- Targets can be made meaningful and a real source of motivation if local people and local authorities are involved in setting them.

Those arguing against the disaggregation of regional targets raised the issues of: the time and resources needed to disaggregate targets at the local level; the potential for local conflict that such a process might have; and the inability for local targets to move fast enough to deal with the fast-changing renewables technologies.

It should be noted that even amongst those welcoming local targets, there was the recognition that on their own they would not solve local planning conflicts.

- Planning gain

Using planning gain, in the absence of positive and prescriptive central government policy guidance on renewables, was raised by some interviewees as a possible way to improve the development of embedded technologies.

Land-use planning themes arising from consultation, not found in the literature reviewed

Interviewees expressed a number of views that had not been found in the literature reviewed:

The planning system is inherently sound

No interviewee called for a radical overhaul of the planning system. Indeed some (in particular the planners) explicitly stated that the system worked well and that it was simply stronger political will that was needed to deliver renewables developments through the system more effectively.

Some interviewees felt that the historic reason for considering planning a 'barrier' to development came through NFFO⁴ contracts awarded for sites where planning permission was going to be difficult to obtain, forcing developers into protracted and embittered battles for planning. However, with the end of NFFO, sites are able to be chosen with ease of planning in mind.

The officer/councillor split and the importance of local politics

The split between officers (who were generally seen as relatively supportive and constructive) and councillors (who were seen as unsupportive and obstructive) was identified by many interviewees. Amongst those consulted who had experience with the wind industry, a pattern of officer recommendation, councillor rejection and planning inspector approval was frequently described.

The important influence of local politics (which may not share the same priorities as national or even regional agendas) upon development control decisions was often raised. However, some interviewees described situations where they had encountered majority local support for a development, but where that development had still been turned down by councillors.

The solution proposed to this perceived problem was councillor education. Some suggested that developers themselves should embark upon a programme of 'selling' renewables to councillors. However, others felt that councillor training was a role better suited to government.

Blame and responsibility

The developers and their trade associations generally felt that the renewables industry was doing what it could in terms of facilitating consultation and engagement procedures. However, one industry interviewee acknowledged that more proactive partnership working between developers, planners and councillors was required. The absence of local energy companies in the regional renewables assessments and on Local Strategic Partnerships was also noted.

However, other interviewees felt that developers could do a lot more to engage positively with communities, planners and councillors. Some suggested that the renewables industry may need to devote more resources to the upfront management of planning issues, rather than spending money reactively on fighting opposition to specific applications.

"Outside agitators" and "incomers"

Some industry interviewees described the phenomenon of anti-wind campaigners from outside the area local to the development proposal, raising opposition within the local community.

Others also reported that they had noticed a split within rural communities between long-term residents (who were generally pro-development) and more recent incomers (who were generally opposed to development).

⁴ The Non-Fossil Fuel Obligation, the predecessor to the Renewables Obligation. In brief, the system allocated sites for specific kinds of renewables developments, and contracts for bringing forward the developments were then awarded. However, the contracts were not awarded with planning permission, and many sites were chosen in controversial locations, making permission difficult to obtain.

Public awareness

Most interviewees felt that something should be done to increase public awareness and acceptability of renewables. Many thought that a government-funded mass marketing campaign would be the best means of doing this.

However, one interviewee whole-heartedly disagreed, feeling instead that the public was generally aware of renewables and their environmental advantages, and that conflict over specific renewables proposals was not linked with that awareness. Instead, he believed the conflict was a result of concerns over issues of local amenity, and that these could only be dealt with on a case-by-case basis.

Others felt that more research was required to give a deeper understanding of attitudes towards renewables and peoples' experiences of living with renewables. The need in particular for qualitative research at district and county level was thought to be particularly important.

A role was identified for regional and central government in funding such research. However, the extent to which regional government should be publicising research findings and promoting awareness-raising of renewables, was uncertain.

In terms of practical steps that might encourage positive commitment to renewables from the general public, three arguments were put forward:

- If manufacturing of renewables technologies could be developed in an area, then people would be able to see the link more clearly between economic growth and job creation and renewable energy developments.
- If there were more community-scale initiatives, then people would have a better understanding of the technologies, see that they could bring local advantages, and be more prepared to accept larger-scale developments.
- If communities were more involved in developers' applications for large-scale plant and were offered a real and meaningful benefit from the development, they would be more willing to support planning applications.

A requirement/encouragement for new developments to produce a percentage of their electricity needs from renewable sources on site

There was widespread support for this policy approach. However, the following two concerns were raised:

- It may bring forward the cheapest, not the best renewables solution. Such a solution may be badly designed and inappropriate for the development in question, which may adversely affect the comfort of the building's users.
- It may be suitable for a London Borough, with high land values and a competitive development market, but it is not suitable for other areas of the UK, where the aim is often to attract developers to sites as part of regeneration or economic development strategies.

Focusing on Large-Scale Electricity Generation

Several factors are influencing the current (and likely short-term) pattern of development of renewable energy technologies. In particular, because of the operation of the Renewables Obligation in a de-regulated market, as well as the current pricing regime, there is a considerable focus on the development of large-scale generating capacity. Recent announcements concerning the production of off-shore wind are the most obvious example.

Many interviewees agreed that this was an efficient way quickly to reach the 10% target for 2010. However, others feared the consequences for smaller-scale and/or embedded production technologies, in both the short and longer term.

For example, interviewees concurred with the Energy White Paper's conclusions that achieving the 2050 target for CO₂ emission reductions would certainly require an extensive network of small-scale and embedded technologies. However, some went on to say that there was a risk that current short-term priorities would either squeeze out such technologies entirely, or push them so far into the future that the targets will become unachievable in the time available.

Renewable energy versus sustainable energy

Some interviewees had an ideological preference for '*sustainable energy*' and therefore rejected the separate and exclusive planning treatment of renewable electricity. For such interviewees the issue of climate change, rather than renewable electricity, was their main policy concern.

However, there were also interviewees opposed to the exclusive treatment of renewables for less ideological and more pragmatic reasons:

- Areas with limited renewable resources, such as urban areas, needed to adopt a more integrated approach to energy management in the built environment as large-scale renewable electricity generation in such areas is not currently feasible.
- So long as energy issues were not being dealt with in a coherent way across all policies, it was difficult to convince people that there was a pressing need for renewables to be developed – the poor energy efficiency of the built environment and transport policy did not send out the message that carbon reduction is a pressing policy concern.

However, other interviewees, whilst recognising the need for progress in integrating sustainable energy into planning policy, argued that there was still a need for a separate renewable electricity policy: there are discrete planning issues facing the generation of large-scale renewable electricity that need to be dealt with by separate policy measures.

3.3 Conclusions

- The 'planning barrier' has been encountered predominantly by the wind industry. However, thanks to the Renewables Obligation, obtaining planning permission for wind developments has become less problematic, and thanks to the DTI's planning facilitation work and the revision of PPG22, it looks set to improve further.
- Developers of biomass technologies have been too preoccupied with the financial viability of their projects to have been particularly concerned with a 'planning barrier'.
- Developers of PV and solar installations claim not to have experienced a 'planning barrier': they are more concerned with what they call 'a planning frustration' (i.e. the time and resources taken in securing permission). In particular the pv/solar industry feel that they would benefit greatly from more positive planning policies or building regulations, which contain certain stipulations to use embedded renewables in the built environment.
- The new PPS22, should be positive and unambiguous in its guidance on renewable energy developments to provide clear political leadership in support of renewables.
- There is no consensus over whether PPS22 should recommend the use of a criteria-based approach to development planning for renewables or an area-of-search based approach.
- Regional renewable electricity targets are a useful tool for encouraging areas to take ownership of the national target. Sub-regional targets may help to channel this ownership further. However, local targets are generally considered to relate to too small a geographical area to be technically and administratively feasible.
- The planning system should be able to consider energy use, and local authorities should be able to require developers to install embedded renewables technologies.
- Local political leadership on renewables should be developed with the aim of building awareness of, and support for, renewables amongst members of the public.

4 Community Renewables and Urban Regeneration

The research has focused specifically upon renewable energy schemes in instances where they have been incorporated into regeneration. However, it was also informed by the wider debate upon urban governance and engagement and has therefore also looked at community ownership of renewables, regardless of whether that ownership has been part of a regeneration initiative.

To research regeneration and governance issues in depth, we undertook a case study of one English region – the South West. Limited comparative analysis with other regions was also carried out via a seminar with invitees from all regions.

The South West was chosen because of the relatively long and positive history of renewables in that area. A positive example was selected on the basis that it might provide indications as to what constitutes ‘good practice’.

This section of the report presents the findings of both the literature review and the primary research.

4.1 Literature on community engagement in regeneration schemes

What are the types of community engagement described in the literature?

The literature reviewed suggests that community engagement in renewable electricity schemes can be either direct – in the form of some kind of community leadership or partnership – or indirect – in the form of a commercial energy developer’s consultation with the community. It is the former which has been the main concern of this research.

Types of direct community involvement in renewables projects are described as involving either a ‘community of locality’ (sharing geographical proximity) or a ‘community of interest’ (sharing ethical or financial interests). However, the literature focuses primarily on the former.

Consider, for instance, the DTI’s categorisation of the four different development models that community renewables groups might follow:

- Developer-led (developed and possibly managed by a commercial developer, but owned by a group of local investors)
- Existing group-led (development trusts or charities operate a development on behalf of a community)
- Small-group-led (developed by a small local group)
- New-group-led (developed and managed by a specially formed community group)

The Community Renewables Initiative (CRI) categorises community involvement differently, but categories reflecting communities of locality also dominate:

- Community involvement run for community benefit, by public, private, voluntary or community organisations.
- Schemes initiated by voluntary or community organisations, with additional community involvement to ensure wider support and knowledge.

- Schemes in which voluntary or community organisations are partners in a meaningful way.
- Schemes owned by the local community.
- Schemes managed by voluntary or community organisations, through agreement with the developers.
- Voluntary or community-run projects with other priorities, but which incorporate elements of renewable energy.

What does the literature on community engagement in renewables cover?

A number of case studies on projects with direct community involvement have been carried out, along with self-help information guides. The DTI is the major contributor in this field, being responsible for guides on how to start up, develop and finance a community scheme. The DTI has also commissioned a case study of the Awel Aman Tawe Community Wind Farm (Hinshelwood, 2001a) and out of that a toolkit for community consultation has been developed (Hinshelwood, 2001b).

Another major source of information on community renewables projects is the Renewable Energy Investment Club (REIC). They have produced publications on empowering communities and overcoming barriers to community involvement in wind farms (both by Leany et al).

Given the research project's emphasis on urban governance and community engagement, it is important to note that the above-mentioned community studies focus exclusively on wind projects in rural locations.

The final source of primary information has been the recent CRI evaluation report. This offers a perspective on a diverse range of renewables, but is again focussed on rural areas – although it does include initiatives in market towns.

In addition to the 'primary source' material, there is a body of secondary comment which theorises on the potential benefits of 'sustainable energy' solutions for communities (e.g. Barton ed, 2000).

What are the specific issues raised by different sources of renewable electricity for urban community engagement?

The literature reviewed suggests that urban communities have the potential to expand the use of small-scale, embedded technologies such as biomass or renewable waste powered CHP or district heating schemes, solar and pv installations and perhaps small-scale wind turbines. However, this appears to be taken as given, without any evidence of research into what the potential might be and how it might be manifested. Furthermore, different technologies may present different challenges from the perspective of urban community leadership and governance. These are considered below:

District Heating Systems (DHS) and Combined Heat and Power (CHP):

A number of DHS installed in the 1960s and 1970s became the focus for tenant dissatisfaction in public-sector housing, due to poor design, maintenance and the increasing costs of the heat purchased.

A challenge for new DHS or CHP may be to overcome any negative perceptions held by those who have experienced or heard about older systems, and to provide a technology that will not replicate the undesirable elements of older systems.

There is potential for DHS/CHP to be owned by either Registered Social Landlords or by community groups offering the possibility for varying degrees of community involvement. However, in both instances there is also the issue of how consumer choice in a deregulated electricity market can be reconciled with DHS and CHP, and whether community ownership and lower prices can be used to off-set the loss of consumer-choice.

PV and solar

While 'solar clubs' do exist, the potential for direct community involvement in the installation of solar or pv technologies on individual owner-occupied houses is limited and very different to the common ownership or management of group assets such as wind turbines or CHP plant. However, the potential for direct community involvement in pv installations on housing association or local authority-owned property is greater.

What are the benefits identified in the literature to communities from participation in renewable electricity schemes?

Environmental sustainability

The biggest environmental advantage of renewables technologies is that they generate energy with significantly less – or no - polluting emissions than conventional generation. This may have positive local impacts where renewables technologies are able to take the place of conventional power stations.

Technologies may cause loss of amenity or have visual impacts which some people find unpleasant. Although, there may also be those who feel that renewables developments have enhanced their local environment. However, technologies involving biomass or waste may contribute to air pollution and movement of vehicles to and from the plant may add to noise pollution.

Economic sustainability

The literature suggests that local ownership has implications for the local economy (and by extension for the national economy where ownership by a community displaces electricity supplied by a non-UK based electricity company). In the literature it is often expressed in terms of "stopping money leaking from the local economy in fuel purchases" (Draisey, 2002).

A commercially successful project also creates the potential for capital growth and income for owners (whether individuals or community organizations) from any investment made.

Further local economy arguments include the potential for the creation of local skills and creation of employment opportunities (Barton et al, 2000 p113).

Social sustainability

The literature argues that community renewable electricity schemes may have a part to play in reducing fuel poverty: the poorest often pay the highest energy costs per unit from major suppliers, whereas local embedded schemes can aim to provide cost-effective electricity without penalties for those who need to make frequent, small cash payments.

The ideal of 'environmental justice' may also be served by community involvement in renewables schemes. Those who live near to a renewable electricity scheme, who either may possibly suffer some loss of amenity as a result or who have contributed time and effort to facilitating its development, may be able to enjoy the advantage of competitively-priced electricity from the scheme and/or a share of its ownership. In Denmark this ideal was embodied in their 'criterion of residence' where wind turbine ownership was restricted to those living within 3km of the site (Tranaes; undated).

The idea has also been put forward that local schemes deal better with debt and non-payment. On the one hand it is argued that a member's failure to pay when he/she is able will reflect badly on his/her social standing. On the other hand it is argued that where genuine problems of debt arise, community schemes will be more responsive than large utility companies. Parallels are drawn with housing, where there is evidence that arrears among tenant-run co-ops are far lower than among other social landlords (Barton ed, 2000, p194).

What are the benefits identified in the literature to renewable electricity development from community engagement in schemes?

The literature suggests that achieving community engagement in renewable electricity schemes, whether directly or indirectly, is an effective way of increasing awareness and acceptability. Wind farm case studies and surveys are cited in support of the argument: it has been noted in numerous surveys that positive opinions of wind farms increase once the project has been completed. With greater public acceptability through community involvement is expected to come fewer objections to planning, faster and more predictable planning procedures and related economic benefits.

However, if the Danish experience is considered, community-led schemes may generally be expected to win greater public acceptability than large-scale commercial projects: it is reported that while planning issues concerning co-operatively owned wind turbines have been quickly resolved, large utility-owned wind farms "evoked strong local protests" (Van Est 1999).

Furthermore, the extent to which *urban* community schemes can increase the public acceptability of large-scale rural schemes is doubtful. Given that local issues dominate planning control processes, acceptability of renewables amongst remote urban communities may make little difference to the success rate of wind and biomass scheme planning applications.

All of the above also presupposes that there are communities and local groups with enthusiasm for becoming involved in local renewables schemes. However, no empirical research was referenced in the literature reviewed, either to support or refute the existence of community enthusiasm for renewables.

What are the barriers to greater community engagement identified in the literature?

Institutional

The planning system is cited as a potentially important institutional barrier to greater community engagement in renewable electricity schemes, both from the perspective of community applicants and from the perspective of objectors/interviewees.

In relation to the former, arguments have been made for providing a simplified planning process for small renewable electricity schemes (www.reic.co.uk).

In terms of the latter, the adversarial nature of community consultation in the planning process and the use of bureaucratic, legalistic or technical language by the professionals involved in that process are all considered to be significant barriers to community consultation.

Financial

Identification of this barrier was a key reason for the setting up of the Renewable Energy Investment Club (REIC) – its aim being to simplify and reduce the cost of offering shares in community-owned renewables enterprises.

While the DTI and The Countryside Agency's Community Renewables Initiative offer advice on financing procedures, it is clear that there is a confusing plethora of potential funding sources, the navigation through which is a time-consuming process. Additionally, there is rarely 100% funding available for community renewables schemes and groups may have to search out funding from a number of different sources.

The DTI's proposals for Community Interest Companies may also make it easier for communities wishing to set up renewable energy schemes (www.dti.gov.uk/cics/). The Welsh Assembly has already recognised the potential for renewables to act as a key growth area in the social enterprise sector (Welsh Assembly, 2003).

Technical/Knowledge

Fair and easy access to information and specialist information - whether about the planning system, the renewables technologies, access to electricity markets or financial and legal arrangements for a scheme – are all argued to present challenges for community engagement in renewable electricity schemes. This point is underlined by the CRI's evaluation, which suggests that those community schemes which are most successful involve a local expert (CRI, 2003).

Again, the DTI provides toolkits and guidance, and the *Community Renewables Initiative* offers support, however the presence of technical barriers within urban institutions will need to be explored further: the extent to which those involved in urban governance are aware of the technical issues represented by community renewable electricity schemes, or are themselves equipped with the knowledge to act as catalysts for such schemes has not been assessed in the literature reviewed.

4.2 The research results on community renewables in regeneration

Part of the research involved a case study of the South West region, within which we studied three schemes where renewable energy had been incorporated into the local regeneration agenda. We also interviewed a number of experts involved in regeneration both in the South West and nationally.

The overarching conclusion of the research was that energy issues were at best a peripheral concern in regeneration.

Community ownership of renewables schemes

Achieving community ownership of renewables schemes was generally felt by interviewees to be a time-consuming exercise. However, interviewees varied in whether they were positive about the potential for community ownership to expand, with developers generally expressing uncertainty on the one hand and community practitioners seeing wider possibilities for community renewables on the other.

Several interviewees compared the UK community renewables position unfavourably with that of Denmark. One went so far as to describe the share schemes that have been on offer to some communities in the UK as 'tokenistic' and a source for further division within the community.

Community strategies

The potential for Community Strategies to promote renewable energy was only acknowledged by two interviewees.

Another interviewee explained that energy is not mentioned in the Community Strategy Guidance Note and therefore it is not expected to be given priority when the Strategies are drawn up. In fact, energy was described as "a second tier priority" by the interviewee, upon which there was no ODPM-policy position.

The ODPM is currently investigating how well Community Strategies have been integrated within the planning system and it is therefore not yet known how far local authorities with proactive renewables policies have extended those policies into Community Strategies. Similarly the relationship between the Community Strategies and energy agencies such as the Energy Saving Trust and the Community Renewables Initiative has not been assessed, but was not considered to be strong.

Results from the South West case study: three regeneration schemes

Three regeneration schemes in the South West were researched in detail:

The Ashley Vale self-build project, Bristol took place on a brown-field site that was bought and then sold for development by the local residents' group, the Ashley Vale Community Group. The ethos behind the development has been to create sustainable housing which, in addition to high levels of energy efficiency, includes a 1KW photovoltaic panel on the roof of every house.

The Beacon Community Partnership, Falmouth, Cornwall undertook a trial of three solar water heaters on three houses on the estate. The initiative emerged out of an

energy efficiency/fuel poverty scheme that itself brought about the creation of the Beacon Partnership.

Lydney Local Power, Gloucestershire, a group of volunteers facilitated by the Severn and Wye Energy Agency, has been working in conjunction with the Lydney Area Regeneration Partnership (formed under the Market and Coastal Towns Initiative) and local land owners to achieve a variety of renewable energy schemes in and around the market town of Lydney.

The success of the projects

In terms of delivering renewable energy in regeneration, the Ashley Vale project was the most successful of the three. Ashley Vale involved a community of interest (in sustainable housing) which came together as a community of location through the individual purchase of plots on the site. Bristol City Council was not involved in the building programme, except in an administrative capacity as the local planning authority. Help from the Bristol energy organisation, the Centre for Sustainable Energy was sought, but the organisation by no means took a leading role. However, the only reason that the Ashley Vale project was able to incorporate renewables into its housing, was due to a 95% grant from the DTI towards the cost of the pv. The feasibility of developing a wood-fuelled CHP plant was also assessed, but it was found not to be financially viable.

By contrast, the Beacon Partnership emerged out of concern by local health professionals over the health of residents on the Beacon estate. The local district council – Carrick Council – took a leading role in terms of both funding and providing personnel to guide the partnership through its energy efficiency programme. The Cornwall energy organisation, Community Energy Plus, took a proactive role in alerting the Beacon Partnership to funding sources, and was instrumental in securing the solar water heating trial. The trial, however, was not a success: the residents who took part did not experience reduced energy bills as a result. Instead they appear to have been confused and worried about controlling the systems and did not understand how to use them effectively. The Beacon Partnership has blamed the failure on an absence of support to the residents during the trial period.

Finally, the Lydney Local Power Project was also facilitated by a professional energy organisation – the Severn and Wye Energy Agency. The Agency conducted a survey of attitudes towards various proposals for incorporating renewables into the regeneration of Lydney, and out of that process it established a steering group of volunteers to take the proposals forward. Despite the enthusiasm of the steering group and the favourable response from the consultation process, none of the projects had made any headway at the time of research. The major stumbling block appeared to be that the local landowners, necessary for any of the schemes to progress, were difficult to engage.

Renewables in regeneration across the South West

Difficulties encountered

In general, those interviewees familiar with the urban regeneration agenda and procedures, felt that regeneration was not engaged with energy issues. However, some interviewees did point to a number of renewable energy regeneration schemes in rural locations in Wales.

However, the impression given was very much that such initiatives were exceptional, often under-funded and under-supported, and frequently had little or nothing to show in the way of operational renewable energy schemes, despite the enthusiasm of some local participants.

Interviewees also felt that neither regeneration professionals, nor local authorities had the expertise, or even awareness of the potential for incorporating renewable energy within regeneration, to provide support or leadership. In particular it was noted that the organisational structure of local authorities meant that even if there was expertise somewhere within the authority, it was unlikely that it would be brought to bear on a regeneration project.

It was felt that energy issues had to be on the regeneration agenda from the outset, rather than brought in later. A need to promote renewable energy to regeneration professionals was therefore raised as a key priority.

The view was also expressed by one interviewee that “renewables are regarded as a bit of a luxury”. Both the Bristol and Cornwall regeneration schemes that we investigated confirmed that view – with energy efficiency being given the highest priority in both cases. However, this is not to suggest that energy efficiency is high on the regeneration agenda either, rather that if energy is considered at all, renewables do not necessarily represent good value for money in the regeneration context.

Promising signs

Interviewees reported that there were several Local Strategic Partnerships in the region that were beginning to look at renewable energy. It was also stressed that Bristol’s Community Strategy included a climate change goal. However, there was criticism of ODPM’s guidance on Local Strategic Partnerships and Community Strategies for not giving any steer at all on energy issues.

The Market and Coastal Towns Initiative was flagged up as a promising catalyst for bringing energy considerations into regeneration, as there were several towns in the region that had begun to look at energy under that initiative.

One interviewee noted that renewables had the potential to be incorporated into regeneration schemes, but that the potential for doing so successfully depended upon the priorities of the local community. Whilst energy issues could be incorporated through the fuel poverty agenda, it was felt that communities with other pressing issues (such as crime or drugs) would not be interested in renewable energy schemes.

From the industry perspective, there was the general perception that it would be desirable to become involved in regeneration schemes, but that current available resources were being devoted to other more pressing policy issues.

4.3 Conclusions

- Renewable energy technologies can, in theory, be incorporated into regeneration in an urban context:
 - through being embedded in the built environment as part of a physical regeneration scheme, promoted by a regeneration body or social landlord;
 - through being developed as a 'community asset' by a community group or not-for-profit organisation as a community renewables initiative.
- There are examples of community renewables initiatives, but these are most often found in rural areas, and their use in regeneration, and particularly urban regeneration, is extremely rare. The only successful example we researched, Ashley Vale in Bristol, was atypical in that it involved a community of interest moving into an area to regenerate it, because the site had already been allocated for 'sustainable housing'.
- A significant barrier to developing community renewables in urban areas, is that when energy issues are being considered at all, energy efficiency may be given priority, as it is likely to be more desirable from an environmental and financial perspective. Renewables may, at best, be an afterthought to be considered only if a funding opportunity presents itself. It may be that unless there is a professional 'push' to include renewables, or unless there happens to be a resident local expert, renewables are highly unlikely to be developed by communities.
- The current funding regime does little to help put renewables within the reach of interested community groups.
- Another barrier is the low (or non-existent) priority given to energy issues. Only in 'fuel poor' areas of poor housing stock is energy likely to be seen as a priority issue (such as the Beacon Estate in Falmouth).
- Urban communities are also at a disadvantage, relative to their rural counterparts in that they have no support network equivalent to the CRI. Access to information on renewables is therefore more limited for urban communities and the professionals that serve them.
- The final barrier concerns the ownership of assets. Most of the cases of community schemes to date come from rural areas. In these instances local landowners/asset owners have been part of the community group interested in developing renewables. However, in many urban areas undergoing regeneration, the community owns none of their local land or built-environment assets, and the achievement of a community renewables initiative would depend on the willing participation of the land/asset owner – which may be difficult to secure.

- There are no positive policies on energy issues that might guide a local community to consider how energy might affect its well being. Guidance on drawing up Community Strategies fails to mention energy, and it is rarely brought up in other ODPM policies relating to urban regeneration and neighbourhood renewal.
- Although some local authorities have prioritised energy issues, many have not. This is in part due to a failure to 'join up' sustainability concerns with regeneration policy and practice.

5 Governance of Renewable Energy

This section of the report supplies the overarching framework within which the previous two sections (on planning and regeneration) have been analysed.

The governance of both planning for renewables and renewables in regeneration profoundly influences the effectiveness of all the fore-going policy initiatives raised, and with this in mind, one of our research objectives has been to explore how governance structures can influence the uptake of renewables.

As in the previous section, the case study of the South-West region provided the focus for the in-depth qualitative research, with some comparative examples provided from a seminar held for all the English regions. This section reports the research results.

5.1 Introduction to the South West

The South West was the first region to incorporate a regional renewable electricity target into its planning guidance.⁵ It also has a number of other 'firsts' in terms of renewables – the country's first commercial wind farm was in Cornwall, and its first biomass plant was in Devon. It has a regional renewables office – Regen South West – funded by the RDA and put together by a regional renewables consortium. The South West has also recently produced a Regional Renewable Energy Strategy (2003).

The South West is currently conducting a region-wide consultation process with the aim of agreeing and setting sub-regional renewable electricity targets that together will amount to the regional target. This process is called 'Revision 2010'.

The region also has a proportionately large number of renewable energy schemes under consideration and development with the help of the Community Renewables Initiative. Furthermore, it has a high number of energy organisations, both in the private and voluntary sectors.

5.2 Regional-level governance of renewables in the South West

All interviewees were under the impression that members of regional government (from the Assembly, the Government Office and the Regional Development Agency) had good and productive working relationships over the issue of renewables.

Some tensions were noted between the development and planning agendas, but these were not felt to be serious. Indeed, regional government representatives commented that working together on renewable energy had helped to crystallise the nature of the working relationships between the regional bodies as a whole.

The region has a well-established and effective renewables network consisting of regional government, energy organisations and consultants, the local renewables industry and other local interested parties. Out of the network was formed a core group – the Regional Renewables Group – which took the role of a steering group,

⁵ 11-15% of the region's electricity generation is to be from renewable sources by 2010.

developing the Regional Renewables Strategy and scoping out, and then acting as the board for, the regional renewables office – Regen South West (Regen SW).

Most people we interviewed in the region had heard of, and were positive about the potential for Regen SW. One of the main intentions of those involved in establishing Regen was that it would be “more than a talking shop”. The early favourable response to Regen indicates that it is working hard to realise that intention. However, there also appears to be some confusion over the extent of Regen’s role and this is a marketing issue it will need to resolve.

Extending the regional renewables network

Through interviewing people in regional government who were not directly responsible for renewables, but whose remit could impact upon the use of renewables in the region (for example, those working in regeneration and construction), it became clear that the regional governance network for renewables is beginning to widen.

Although there were problems over issues such as access to expertise and funding within areas like construction and regeneration, RDA personnel and people in Sustainability South West (and its construction body, Future Foundations), were aware of and appeared interested in progressing the renewables agenda.

Interviewees from the RDA in particular mentioned the need for more co-ordinated work on renewables in construction and regeneration with the Government Office. This was raised as an issue for other English regions who had been trying to involve construction and regeneration personnel in renewables governance.

Some interviewees also commented on the slow pace of progress in involving renewables in sustainable construction, in particular given that there are a number of competing priorities for developers’ funds – not only within the sustainable construction agenda, but in the wider number of demands being made through the planning gain system (such as for affordable housing, transport provision etc).

The relationship between regional, county and district governments

The relationship between the regional government and the County Councils appears to have been strengthened as a result of the Revision 2010 process.

Although Revision 2010 focused on sub-regional authorities (County and Unitary Councils), District Councils have also been involved. But many interviewees recognised that there is a challenging job of work to be done to ensure consistent and genuine support for the Regional Renewable Energy Strategy across the district authorities.

This research has identified some poor relationships between Counties and Districts. This is of particular importance for Revision 2010’s aims, as it seeks to use Counties as the main conduits for putting the regional target into practice.⁶ We encountered two pronounced examples of this issue:

⁶ Unitary Authorities will also have disaggregated targets, but the majority of the Region’s renewable electricity output to 2010 will come from the rural counties.

- during the course of our research in Cornwall, it became clear that Regional Planning Guidance on renewable energy, which was based on the Cornwall Landscape Character Assessment, was not popular with the district planners. It transpired that although the Cornwall Landscape Character Assessment was referred to within the County Structure Plan, it had not been used in practice by the Districts;
- a widely reported concern amongst many of our interviewees referred to Devon's situation. It was believed that although at County level there was an increasingly positive attitude to renewables, this would be very difficult to disseminate to the Districts, where attitudes against wind farms in particular were entrenched, and where no District wanted to be the first in the county to approve a wind development.

The relationship between energy organisations, environmental charities and Government

During our research it became evident that the NGO sector dealing with renewable energy in the South West was characterised by energy-only, as opposed to environmental/sustainability, organisations. The key organisations identified were:

- The Centre for Sustainable Energy, Bristol
- The Severn and Wye Energy Agency, Gloucestershire
- Devon Association of Renewable Energy
- The Cornwall Sustainable Energy Partnership

Between them the above organisations covered the whole of the region apart from Dorset, which at the time of research, had no independent energy organisation of its own.

We also contacted a number of environmental charities based in the region but found that, generally speaking, energy issues were not particularly high on their agendas.

It was made explicit by several interviewees that there have not been good relationships in the recent past between regional renewables personnel and environmental NGOs. However, it was noted that this was beginning to change thanks to the Revision 2010 process, which had involved environmental NGOs and had enabled them to have an input into landscape character assessments, which had been the main bone of contention between the two groups in the past.

5.3 Conclusions

Regional-to-local governance of planning for renewables

- Unless there is the regional and local will to put national, regional and local planning policies into action, positive national and regional policy on renewables is unlikely to have its desired impact.
- Regional government's role is to develop strategy and facilitate delivery of the strategy. It is powerless to deliver the regional renewables target by itself and must work in partnership with the renewables industry, electricity suppliers, grid

companies, sub-regional and local government, the environment sector, the built-environment sector and community groups to encourage its target to be met.

- On this basis, regional government is best placed to act as a strategic leader and facilitator of a regional renewables network.
- Any regional renewables network needs to have a positive role in contributing to a regional strategy and meeting the regional renewables target – it must be more than a talking shop. It should seek to involve regional and local leaders who will be fundamental in influencing change and implementing actions.
- To help the network engage effectively in such a role, it may be necessary to form a core group of members to act as a steering group.
- If the region has identified renewables as an economic development opportunity, it may find it advantageous to form and fund a promotional organisation to take that opportunity forward (the South-West, East, and North-West regions all have such organisations).
- The regions that have created promotional organisations have also appointed a renewables champion to lead those organisations. The appointment of a dedicated individual to co-ordinate and lead on regional renewables initiatives provides a clear commitment and a central point of contact.
- Regional government and the regional-level renewables network need to work closely with sub-regional and, importantly, local government in the region. Local plans, and particularly local planning control officers and members, will still have the dominant influence over the success of applications for renewables developments. This fact should be reflected in the regional renewables strategy and actions.
- There may be a number of local groups in a region which exist to promote sustainable and/or renewable energy solutions at the community level. These groups can form a valuable part of a regional renewables network, as they themselves are usually part of wider local and sub-regional networks.

Regional-to-local governance of renewables in regeneration

- Regional personnel dealing with physical regeneration in regions with a renewables network were not part of that network, although in several cases attempts were being made to include them.
- Regional regeneration personnel in the South West appeared to feel fully occupied in trying to deal with the 'Rethinking Construction' agenda: embedded renewables was a technological consideration too far – and also one that was seen as too expensive.
- The extent to which, at this stage and without additional funding, renewables will become routinely incorporated in the built environment through regeneration is doubtful. With so many competing pressures on regeneration funding, without specific additional funding allocations, renewables look set to remain a minority interest.

6 Final Conclusions and Recommendations

This section presents the final conclusions and recommendations of our research, based on our analysis of the findings presented in the previous chapters. In line with the purpose of the New Horizon's research programme that funded this project, it highlights the key policy and research issues for ODPM over the next five to ten years.

Overview

The research work for this study approached the issue of renewable energy from three perspectives:

- land use planning
- urban regeneration
- governance

Our research suggests that the issue(s) of renewable energy is, in general, restricted to a small but enthusiastic minority of players in regional and local government. For the mainstream practitioner in land-use planning and urban regeneration, energy issues generally, and renewable energy issues in particular, have a low priority.

Those practitioners with responsibility for renewables, while making some headway in forging links with *regional* planners, appear to operate discretely from regeneration practitioners at all levels and planners at the *local* level. As a result, no "critical mass" of concern has come about, so there has been no significant impetus for the development of a "community of interest" encompassing planning, regeneration and renewable energy personnel, at both regional and local levels.

The absence of such linkages, in our view, is not an issue that will significantly undermine the achievement of the 2010 national target to supply 10% of electricity from renewables. Whilst we have not investigated the operation of the principal tool for achieving this target, the Renewables Obligation, in any depth for the purposes of this report, it would seem that this fiscal instrument is operating effectively upon its intended major foci, that is, the large suppliers and producers of electricity.

In the longer term, however, it would seem that if the UK is to achieve truly dramatic reductions in its emissions of carbon dioxide (as envisaged, most obviously, by the Royal Commission on Environmental Pollution), then a more radical and far-reaching programme of change will be required.

In particular, as stressed in the Energy White Paper, alongside potentially profound improvements in energy efficiency, the production of energy from renewable sources will need to be taking place on both a large scale and in a highly distributed fashion.

For this scenario to come about, the linkages referred to above would need to be not merely in place, but well-developed. Planning mechanisms at regional, local and neighbourhood level would need to be able to take routine and well-informed account of renewable energy issues; regeneration projects, indeed economic development strategies generally, would need to be similarly well-informed; and governance procedures, again at key spatial levels, would need to be able to treat energy issues

directly and also to ensure the effective interaction between economic development and land-use planning.

Our research suggests that such a scenario is achievable, but that bringing it about will require a clear central government policy commitment and careful attention to implementation mechanisms. Indeed, we would argue that the time is right for a period of "sustained nurture" in order to develop the capacity of the various institutions involved.

What policies will be necessary to achieve the cross-cutting delivery of renewable energy development will require further detailed investigation. However, as a general principle, action is required which results in a steadily increasing number of renewable energy schemes now, but which is principally intended to develop the capacity of regional authorities, local authorities, communities and others to be able to deliver much larger and more numerous schemes in the medium to longer-term.

In particular, the opportunity to embed renewables into the massive building programme proposed by the *Communities Plan* should be seized upon if the long-term legacy of that programme is to be sustainable.

On the basis of our research, there is a wide range of specific actions, together with areas for both further research as well as monitoring and evaluation, that lie behind (and, indeed, culminate in) this broad overview. We set these out, in detail, below, in the sequence in which the issues were tackled during the main body of this report.

Planning for wind energy

Historically, the planning barrier for wind developments had largely been created by the old NFFO system, which awarded sites for development without taking into account planning viability. The Renewables Obligation has eased that problem, allowing developers to add the likelihood of obtaining planning permission into the mix of commercial considerations when deciding whether to develop a particular site.

The future for wind development appears increasingly optimistic: the Energy White Paper gives a firm commitment to renewable electricity; the DTI and ODPM have embarked on planning facilitation for renewables; planning officers are becoming increasingly aware of the technology, although councillors and sections of public opinion remain either unsure or antagonistic; technology continues to improve, reducing the pressure to build on the most 'contentious' sites; and PPG22 and the planning system are being revised.

Recommendation 1: *Apart from the general governance recommendations made under 'planning facilitation' below, we do not believe that any specific policy or research action in addition to what is currently being embarked upon, are necessary to improve planning for wind energy.*

Planning for biomass

Recommendation 2: *Although the 'planning barrier' was low down the list of problems for biomass developers, as the technology progresses, planning barriers may emerge. The situation therefore needs to be monitored carefully, and detailed further research should only be undertaken if and when it becomes apparent that barriers have emerged.*

Planning for pv, solar and other small-scale and micro-renewables

The biggest barrier faced by small-scale and micro-renewables is the relatively low demand for their products. The industry feels that this demand could be given a legislative push through either local planning policies or building regulations.

Many interviewees hoped that the London Borough of Merton's policy idea of requiring a percentage of a building's energy requirements to be generated on site by embedded renewables' technologies, would become an example which other local authorities could follow and, at the time of writing, Merton's UDP is being considered⁷.

In any case, the Energy White Paper includes a commitment to examine "how to bring consideration of the use of renewables and energy efficiency in developments more within the scope of the planning system". The Energy White Paper states that embedded renewables technologies are expected to play an important role in the future low-carbon economy and there is currently no policy in place to facilitate that role.⁸

Giving local planning authorities the power to consider a building's energy use would complement and strengthen the local authorities' 'well-being' powers⁹. It would also add weight to the proposed statutory duty for planners to carry out their functions "with a view to contributing to the achievement of sustainable development"¹⁰. However, any new power given to planners must be accompanied by the necessary additional resources needed for them to carry out those powers effectively.

Recommendation 3: *While the current commitment to large-scale generation should not waiver, there needs to be a parallel commitment to embedded technologies now, if they are to fulfil their future contribution to the low carbon economy in the longer term. We believe that the planning system already has the potential to serve as the much-needed policy delivery tool for promoting embedded renewables. To fulfil this potential, planners and planning authorities will need appropriate funding, training and staffing levels. Detailed research into the details of these needs should be undertaken.*

Planning facilitation

The planning facilitation funding from the DTI has provided an opportunity for work between the regional, sub-regional, local governments and the energy sector to start to happen. However, the task is extensive and the local engagement work, particularly with local councillors, needs to be extended and accelerated.

Recommendation 4: *An evaluation of the governance impacts of the DTI facilitation programme should be conducted and made publicly available as soon as possible,*

⁷ Policy PE14 of Merton's proposed modifications to 2nd deposit draft UDP, p80, states that 'All new non-residential development above a threshold of 1,000 sqm will be expected to incorporate renewable energy production equipment to provide at least 10% of predicted energy requirements.'

⁸ *The Energy White Paper* (2003) para 4.31

⁹ Local Government Act 2000, s.2 provides that every local authority is to have the power to do anything they consider likely to achieve the promotion or improvement of the economic, social and environmental well-being in their area.

¹⁰ Planning and Compulsory Purchase Bill, clause 38.

with models for good practice highlighted. Follow-on funding should be forthcoming to continue the work identified in the evaluation as making a positive contribution to planning for renewables. We see this evaluation as an opportunity to progress the joint-working on renewables between the DTI and ODPM.

A particular governance issue requiring investigation (that has arisen from the South West case study conducted as part of this research) is the effectiveness of using sub-regional government as the tier of government that will deliver the regional target. In effect, sub-regional government has the same powers and constraints as regional government: it can only act as a facilitator. Furthermore, sub-regional powers are being taken away and given to either local or regional government.

Recommendation 5: *As part of the evaluation of planning facilitation, the success of the South West's sub-regional planning facilitation strategy should be monitored, and compared with other regions that have taken a different approach (the East of England for example).*

Targets: sustainable energy or renewable electricity?

At this early stage in the development of renewable electricity, there is merit in arguing for its separate treatment through national and regional planning policy guidance and targets.

However, this is not to suggest that the other elements of the energy hierarchy – energy use, energy efficiency, cleaner and more efficient non-renewables generation – should not be pursued through separate policy initiatives. Nor is it to suggest that at local and community level 'sustainable energy' in the round is not the best way forward.

However, to conflate the different energy issues in national and regional planning policy at this stage may see renewables fall down the list of priorities, when they should currently be being dealt with on a parallel track to other sustainable energy issues, to arrive at the best possible reduction in CO₂ emissions in the shortest time frame practicable.

Recommendation 6: *Separate renewable electricity targets should remain in place in the medium- to long-term. However, the targets, and/or other policies aimed at promoting sustainable energy in the round, particularly at the regional and local level, should be developed and implemented. This will require a mix of both further research and policy development.*

Community renewables

It appears unlikely that a community will take an interest in renewable energy schemes unless there is either professional leadership, one or more local experts/enthusiasts, or the community has previously taken an interest in an energy efficiency scheme. However, our research only provides indicative results on this issue, and a body such as the CRI is far better placed to assess the factors that promote the development of community renewables. We understand that the CRI will continue to monitor the schemes it has dealt with, with a view to identifying 'critical success factors'.

Recommendation 7: *We support the continued evaluation of community renewables schemes through the CRI, and recommend that ODPM policy makers with an interest in community engagement, environmental well-being and urban renewal, make links with the CRI and keep informed of the findings from its evaluations.*

Regeneration: national policy

There is no support structure in urban areas or serving urban regeneration professionals which either brings the potential benefits of community renewables schemes onto the agenda, or helps those groups wishing to pursue such schemes.

Recommendation 8: *We recommend that the feasibility of extending the Community Renewables Initiative to urban areas be researched, alongside other possible alternatives. The proposed policies and solutions should then be implemented on a trial basis in urban areas across England.*

The situation on the ground, where energy in general and renewables in particular, are not considered in community regeneration schemes, is mirrored at national level by the policy priorities within the Neighbourhood Renewal Unit (NRU).

The NRU national strategy set out 'housing and physical environment' as one of its five key action areas (*A New Commitment to Neighbourhood Renewal: National Strategy Action Plan*, Summary, p10). However, this only related very broadly to non-decent housing. Subsequently, *Achieving Environmental Equity through Neighbourhood Renewal: Policy and Practice Guide* has been published. This does mention fuel poverty under the heading of 'access to environmental goods', but does not consider the potential for renewable energy to contribute to neighbourhood renewal.

If the political will exists to implement the Energy White Paper's vision for the energy system in 2020 that has, "much more local generation, in part from medium to small local/community power plant" and "much more micro-generation" (2003, p18), regeneration policy-makers could find energy issues increasingly on their agenda. However, it is unlikely that renewables on their own will form the main future energy policy concern for sustainable communities and the built environment – instead *sustainable* energy issues are likely to dominate.

Recommendation 9: *We recommend further research and policy development on the way in which sustainable energy can fit into the urban renewal agenda, in terms of helping to reduce environmental exclusion, promote environmental justice, and bring the national energy strategy and climate change policy to bear on neighbourhood renewal. Any policy development in this area needs to address the funding barrier to implementing renewables in regeneration, and also the information/support barrier to urban communities and regeneration professionals.*

Regeneration: regional policy

It is unsurprising that given the low priority of energy issues at a national level, renewables do not often appear on the regional agenda, either as part of 'Rethinking Construction', or in sustainable communities' initiatives. The priorities for spending in these areas mean that renewables, if considered at all, are seen as an expensive added extra.

Recommendation 10: *In anticipation of an increasing policy impetus to see renewables embedded in developments, we recommend that regional sustainable construction agendas incorporate embedded renewables as a standard sustainability issue to be considered in every development. Guidance from either the ODPM and/or DTI should also be developed – implying a mix both of research and policy development - to help regional government understand how they can promote embedded renewables. However, any serious commitment to renewables in physical regeneration or sustainable communities will require specific additional funding due to the many competing demands being made on existing funds.*

Recommendation 11: *We recommend that action is taken now to incorporate embedded renewables technologies in the building programme that will take place as a result of the Communities Plan. Further policy development should be carried out to develop goals for embedded renewables in the growth areas and an action plan for achieving those goals.*

Regeneration: local policy

Some local authorities researched for this project were keen to develop policy and practice on renewable energy. However, practice appears to be highly varied, and there is potential to strengthen and support the contributions being made by proactive authorities and to use those authorities as an example for others.

Recommendation 12: *Those within a local authority who have knowledge and expertise on renewables (such as sustainability or LA21 officers) should create local-level renewables networks, linked into the regional network. The regional network should seek to offer support to local authorities wishing to build their expertise on renewables. Guidance on regional-to-local renewables networks should be produced on the basis of the findings from the evaluation of the DTI's planning facilitation programme (recommended at 4 above).*

Community Strategies have the potential to deal with local energy issues, even if this is not a priority as set out in the current guidance. In particular, the local authorities' power to promote well-being supports such an approach.

Recommendation 13: *The ODPM's forthcoming evaluation of Community Strategies needs to examine the role and potential role of local energy issues. We propose that, in light of national climate change and energy policies and the power to promote well-being, energy is rightfully a 'first tier priority'. As such, we recommend that additional guidance on Community Strategies and energy be issued.*

Concluding remarks

Perhaps the single most important concluding remark for ODPM is to point out that its extensive responsibilities for the built environment mean that it cannot avoid a significant role in the development of policies on renewables over the course of the next five to ten years. Indeed, given the potentially vital role of the linkages between planning, regeneration and governance, and the ODPM's responsibilities across these areas, the Department could reasonably be considered to be the most important in helping the country to become a low carbon economy.

The planning directorate has already begun to grapple with its renewable energy policy through the revision of PPG22. However, that was prompted by the difficulties faced by large-scale renewable electricity developments.

The next policy challenge will be how to deal with small-scale community and micro-renewables – a challenge not just for planning, but for all parts of the ODPM dealing with the built environment, sustainable communities and neighbourhood renewal.

Recommendation 14: *the ODPM conducts a formal analysis of what internal and inter-departmental mechanisms need to be in place to ensure that the programme of "sustained nurture" proposed by this report can be delivered in a coherent and effective way.*