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Planning for Renewable Energy:

Planning Review and Constraints
Mapping for Mid Devon District Council



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1 Introduction

1.1 Context and Aims of the Mid Devon Renewable Energy Study

- 1.1.1 The Government target for generating 10% of total electricity generation by 2010, enshrined in policy through the Energy White Paper 2003, is to be achieved through regional targets. The target for the South West region is 565 – 665 MW¹ of electricity to be generated through renewables by 2010, and the sub-regional target for Devon has been set at 151 MW. Devon currently derives 1.8% of its needs through renewables². Of the 151 MW target, 103 MW would be sourced from onshore wind, 5 MW from small scale hydro and 26 MW from biomass. The remainder would be sourced from other renewables technologies including solar, anaerobic digestion, poultry litter and landfill gas.
- 1.1.2 Mid Devon District Council is currently assessing the potential resources and likely mechanisms for harnessing available renewable energy resources and how it may actively contribute towards the County target. To this end it has commissioned a partnership of Anne Priscott Associates, Dulas Ltd and James Wilding to undertake a District Level Landscape Assessment, Renewable Energy and Rural Diversification Study. The Study will assess the landscape character and determine what the potential capacity may be for accommodating wind turbines; this will be combined with a renewable energy constraints mapping exercise and review of relevant planning policy guidance to determine where the resources are and what guidance may be required to facilitate the implementation of suitable renewable energy projects; and commensurate with these studies will be a District Farm Diversification Assessment to identify opportunities for the stimulation of the rural economy.

¹ REvision 2010 (2004) *Establishing County/Sub Regional Targets for Renewable Electricity Development to 2010*
Peter Capener, CSMA, CSE and ESD for the Government Office for the South West

² Devon County Council (2004) *A Renewable Energy Guide for Devon*

- 1.1.3 The Renewable Energy component of the District Level Landscape Assessment, Renewable Energy and Rural Diversification Study, in attempting to fulfil the above objectives, was formulated with three main objectives, laid out in the invitation to tender of June 2004. These were:

Undertake a review of recent guidance in Planning Policy Statement 22 (PPS22) and the Companion Guide, the Devon Structure Plan and other related guidance to inform the District on relevant renewable energy guidance.

Carry out a spatial planning exercise using Geographical Information Systems to map technical and environmental constraints to the development of onshore wind, biomass and small scale hydro, and elucidation on the relevant criteria to be considered in applications for these developments.

To undertake a one day workshop with District forward planning and development control officers to review the findings of the above and refine the maps so that broad renewable energy characterised areas could be identified in line with PPS22.

- 1.1.4 The methodology employed by the consultants to meet the objectives comprised the following elements:

- A review of the new planning guidance in Planning Policy Statement 22, the Companion Guide to PPS22 to inform the scope of the project and to highlight specific examples where Council planning policy could facilitate the uptake of RE technologies.
- Review the regional and sub-regional planning policy guidance including RPG10, REvision 2010, Devon Structure Plan and the Deposit Draft of Mid Devon District Council.
- Consult with major stakeholder organisations such as RegenSW, the County Council renewable energy officer and the Devon Strategic Partnership.
- Undertake a Geographical Information Systems (GIS) mapping exercise to identify broad areas where planning constraints for renewable energy are minimised, and where the technical potential for development exists.

- A workshop for planning and other local government officers in Mid Devon to improve knowledge and understanding of the criteria necessary for wind farm development, to use officers' local knowledge to refine the GIS constraints' maps and identify broad renewable energy characterisation areas where renewable energy development would be most likely to come forward in the near to medium term.
- 1.1.5 The outcomes of these components would be formulated into a written report comprising the following:
- Overview of existing planning policy guidance and recommendations for District level improvements in renewable energy policies or interim Supplementary Planning Documents,
 - Details on the findings of the constraints mapping exercise and the workshop,
 - Recommendations for the way forward for the District so that it can support the attainability of regional renewable energy targets and better manage and control the establishment of renewable energy developments in line with local policy objectives.
- 1.1.6 The report would also be accompanied by a set of GIS Constraints Maps for use by the District in:
- determining broad areas suitable for wind, hydro and biomass developments,
 - identifying the spatial location of available resources, and
 - understanding the technical and environmental implications of renewable energy developments in land use planning terms.
- 1.1.7 As a late addition to this study, the consultant has presented information relating to the potential economic benefits attributable to renewable energy projects which could be retained within the District. This is presented as an additional Appendix (Appendix 7) to the report as it does not sit well within the main body of the report, particularly as it lacks context within the overall objectives of the study. The purpose of such a presentation of information on economic benefits is to link with the parallel study being undertaken on behalf of MDDC regarding the potential and opportunities for rural diversification in the District.

- 1.1.8 This report, due to the wealth of information presented, has been structured to provide an overview of the findings of the renewable energy study. The more detailed information, particularly in regard to planning policy guidance, has been included as an Appendix to the final report. This is in order to make the results more digestible to Council officers and members, without the need to go through the detailed analyses that have been undertaken.

2 Overview of National and Regional Policy

2.1 Energy White Paper 2003

- 2.1.1 The Energy White Paper 2003 seeks to set out the mechanisms to ensure that the environment and economic growth are properly and sustainably integrated into energy policy. It re-iterates the primary challenge of climate change identified in previous Government policies and commits the UK to achieving a 60% cuts in emissions of greenhouse gases by 2050.
- 2.1.2 The second challenge under the Energy White Paper is to ensure the security of the UK energy supply as the UK is expected to shortly become a net importer of energy, as opposed to currently being a net exporter as a result of North Sea oil and gas. New sources of energy are likely to come from Russia, Middle East, North Africa and Latin America. Increasing dependency on these external sources for our energy will make the UK more vulnerable to price fluctuations and interruptions to supply caused by regulatory failures, political instability and conflict in these parts of the world. The Energy White Paper suggests that the best way of maintaining energy security and reliability is through delivering a diversity of home based energy supply, with renewables and smaller scale embedded supply such as CHP and (in the future) fuel cells playing an important role in avoiding over dependence on imports.
- 2.1.3 The Energy White Paper does not seek to prescribe the composition of fuel mix. Instead it aims to create a long-term market and policy framework which will create business and consumer incentives to find the right balance that will most effectively achieve the overall goals. Nonetheless, it does set out targets for renewable energy, re-stating the Government's January 2000 announcement³ for renewables to supply 10% of UK electricity by 2010 and taking this a significant step further in setting out an ambition to achieve 20% of electricity generation from renewables by 2020. The Government has

³ Department of Trade and Industry (2000) *New and Renewable Energy, Prospects for the 21st Century; Conclusion in Response to the Public Consultation*

also put in place the Renewables Obligation, which took effect in 2003, as part of the market incentives to implement renewable energy.

- 2.1.4 The Government will also further encourage renewable energy through a more positive approach to land use planning and capital grants for emerging technologies. In this context, the Government (including local government) aims to set an example to others by improving energy efficiency in its buildings and through its procurement policies.
- 2.1.5 The overall aim of the Energy White Paper is to encourage sustainable rates of economic growth through, in part, establishing competitive markets for reliable and affordable energy. It also lays the foundations for a future in which the energy system is likely to be quite different from that of today, encouraging and supporting innovative research and development of alternative energy systems which would underpin continued sustainable growth after the demise of the current carbon based economy.

2.2 Planning Policy Statement 22, Renewable Energy, November 2003 (PPS22)

- 2.2.1 In line with its commitment to integrate the environment into energy policy, the Government has issued Planning Policy Statement 22 – Renewable Energy⁴ to broaden the remit of the energy strategy, and to address the contribution the land use planning system can make to the aims and objectives of the Energy White Paper.
- 2.2.2 PPS22 sets out the Government's fundamental energy policy objectives more clearly than any other Government Statement, including the targets from the Energy White Paper, with still more renewable energy generation needed beyond the 2020 ambition in order to achieve 60% cuts in greenhouse gas emissions by 2050.
- 2.2.3 PPS22 sets out the National Planning Policies and the main principles of these are reproduced as follows:

⁴ Office of the Deputy Prime Minister (2004) *Planning Policy Statement 22 – Renewable Energy*

(i) Renewable energy developments should be capable of being accommodated throughout England in locations where the technology is viable and environmental, economic, and social impacts can be addressed satisfactorily.

(ii) Regional spatial strategies and local development documents should contain policies designed to promote and encourage, rather than restrict, the development of renewable energy resources. Regional planning bodies and local planning authorities should recognise the full range of renewable energy sources, their differing characteristics, locational requirements and the potential for exploiting them subject to appropriate environmental safeguards.

(iii) At the local level, planning authorities should set out the criteria that will be applied in assessing applications for planning permission for renewable energy projects. Planning policies that rule out or place constraints on the development of all, or specific types of, renewable energy technologies should not be included in regional spatial strategies or local development documents without sufficient reasoned justification. The Government may intervene in the plan making process where it considers that the constraints being proposed by local authorities are too great or have been poorly justified.

(iv) The wider environmental and economic benefits of all proposals for renewable energy projects, whatever their scale, are material considerations that should be given significant weight in determining whether proposals should be granted planning permission.

(v) Regional planning bodies and local planning authorities should not make assumptions about the technical and commercial feasibility of renewable energy projects (e.g. identifying generalised locations for development based on mean wind speeds). Technological change can mean that sites currently excluded as locations for particular types of renewable energy development may in future be suitable.

(vi) Small-scale projects can provide a limited but valuable contribution to overall outputs of renewable energy and to meeting energy needs both locally and nationally. Planning authorities should not therefore reject planning applications simply because the level of output is small.

(vii) Local planning authorities, regional stakeholders and Local Strategic Partnerships should foster community involvement in renewable energy projects and seek to promote knowledge of and greater acceptance by the public of prospective renewable energy

developments that are appropriately located. Developers of renewable energy projects should engage in active consultation and discussion with local communities at an early stage in the planning process, and before any planning application is formally submitted.

(viii) Development proposals should demonstrate any environmental, economic and social benefits as well as how any environmental and social impacts have been minimised through careful consideration of location, scale, design and other measures.

- 2.2.4 Paragraphs 2 to 5 of PPS22 discuss regional targets and state that these should be expressed as a minimum amount of renewable energy generated within a region and should be set as targets for 2010 and 2020. These targets, it goes on, should be reviewed regularly and, if they are met, revised upwards. More importantly, the fact that a target has been met should not be used as a reason for refusing planning permission for further renewable energy projects. In developing regional targets, although substantial offshore renewable energy resources could be exploited, this should not be used to set lower targets for onshore renewable energy resources.
- 2.2.5 In the context of the forthcoming planning policy framework set out in the Planning and Compulsory Purchase Act 2004 comprising Regional Spatial Strategy (RSS) and Local Development Documents (LDD), PPS22 provides the following guidance.
- 2.2.6 At the RSS level, paragraph 7 of PPS22 allows for the identification of broad areas at the regional or sub-regional level where particular types of renewable energy development may be appropriate. These should be based on the policies set out in the RSS where these can be applied across a Region.
- 2.2.7 However, at the LDD level, PPS22 advises that all planning applications should be assessed against specific criteria contained within the RSS and LDD. Moreover such renewable energy policies should be consistent with and reinforced by other policies in a Development Plan against which renewable energy applications could be assessed. Local Planning Authorities are advised not to allocate areas for renewable energy development except where there is already a high degree of commitment from a developer for a specific site.
- 2.2.8 The remainder of PPS22 focuses on locational and other considerations to be taken into account. With respect to international designations such as SPAs, SACs and RAMSAR

sites, renewable energy proposals would only be acceptable if they do not adversely affect the integrity of these designations or there are reasons of overriding public interest.

2.2.9 Projects within National Parks, Areas of Outstanding Natural Beauty (AONBs), Heritage Coasts, Sites of Special Scientific Interest (SSSIs) and National Nature Reserves (NNRs) will be granted planning permission where they can demonstrate that the objectives of the designation would not be compromised by the development and that any significant effects are outweighed by the benefits. Paragraph 12 further states that small-scale developments should be permitted in nationally designated landscapes provided that there is no serious harm to the area concerned.

2.2.10 Paragraph 14 clarifies the position of “buffer zones” and states that these should not be created around international or national designations. Nonetheless, it goes on to say that the potential impact of renewable energy projects on such designations would be a material consideration in determining any planning application. Paragraph 15 advises that, in themselves, local landscape and nature conservation designations should not be used to refuse planning permission for renewable energy developments.

2.2.11 With regard to visual effects, PPS22 advises that “Policies in local development documents should address the minimisation of visual effects (e.g. on individual turbine sites, layout, landscaping, design and colour of schemes), rather than trying to provide specific criteria against which potential harm is assessed”. With respect to wind turbines, local authorities should “...recognise that the impact of turbines on the landscape will vary according to the size and number of turbines and the type of landscape involved, and that these impacts may be temporary if conditions are attached to planning permissions which require the future de-commissioning of turbines.”

2.2.12 Other matters specifically related to wind turbines include noise, where it states that the method of assessment for this issue is set out in the “The Assessment and Rating of Noise from Windfarms”⁵. Finally PPS22 advises that development plans should not include policies relating to the impact of wind turbines on aviation interests including radar and

⁵ Energy Technology Support Unit (1996) *The assessment and rating of noise from wind farms*. ETSU for the Department of Trade and Industry. ETSU-R-97

aircraft or on the separation distances from roads, power lines or railways, but it is for the developer to resolve these issues prior to planning applications being submitted.

2.3 Planning for Renewable Energy: A Companion Guide to PPS 22

2.3.1 The PPS22 Companion Guide was issued by the Office of the Deputy Prime Minister in November 2003 and offers practical advice as to how these policies can be implemented on the ground. Regional and local action is identified as a key element in the successful implementation of the policies, with regard to both the strategic/forward planning and development control elements of regional and local planning. Each of these is addressed in the Guide. Case studies are used to illustrate key points and to demonstrate how specific issues can be addressed. The Technical Annex provides specific advice on the range of renewable energy technologies.

2.3.2 Whilst this report will briefly analyse the advice on appropriate criteria-based policies at the local level, the Guide identifies that there are general guiding principles common to both regional and local levels:

There is a need to make clear in policy that the planning body or authority will be supportive of renewable energy proposals in locations where environmental, economic and social impacts can be addressed satisfactorily.

Discussions with relevant industry representatives will assist in clarifying the potential of broad areas (proposed in the regional spatial strategy) or specific locations where there are schemes being proposed (as part of the local development document preparation process). However, there is no requirement on the planning body or authority to refer in policy to the technical requirements associated with renewables since these may change over time.

Only the key criteria relevant to the level of planning should be included in order to assist decision-making at that level. This will ensure that the issues will be considered at the most relevant level with appropriate input from public involvement and statutory consultation. For some more detailed issues inclusion in a supplementary planning document may be more appropriate. Where supplementary planning documents are produced, local planning authorities should ensure that consultation is undertaken, including consultation with industry representative groups.

2.3.3 Chapter 4 of the Companion Guide deals with planning policy issues at the local level in which local planning authorities are advised to prepare policies relating to both stand alone renewables schemes and for the integration of renewable energy within the built environment. Such policies may be backed up by supplementary planning guidance. Further to this the obligation for local planning authorities to revisit their development plan policies under the Planning and Compulsory Purchase Act 2004 presents a useful opportunity to local authorities to raise the profile of renewable energy.

2.3.4 The key issues cited in the Guide in planning for renewables at the local level include:

the introduction of the spatial planning approach within the new system provides an important opportunity for integrating renewable energy generation into the wider local planning framework;

local planning authorities should prepare criteria-based policies that focus on key local issues, within the framework set out by national planning policy and the Regional Spatial Strategy, or Spatial Development Strategy in London. Policies may relate to stand alone schemes or the development of integrated renewables within developments;

supplementary planning documents can be useful in illustrating how particular types of technology, or passive solar design principles, can be applied in the particular local context;

some local planning authorities have set specific targets for on-site generation; it may be appropriate for other authorities to do the same, and this should be considered by policy-makers in preparing local development documents;

local planning authorities have the scope to demonstrate practical support for renewable energy through their procurement strategies; and

local planning authorities should encourage community involvement in planning for renewable energy, through consultation exercises during plan-making and also, where possible, by supporting appropriate community-led development proposals.

2.3.5 Criteria-based policy at the local level is required to give guidance both in relation to stand alone renewable energy schemes and the integration of renewable energy into new development. It is advised that a plan will contain two different policy areas: an overarching policy in the core strategy relating to the renewable energy and sustainability objectives of the LPA and an energy development policy document within the local

development framework. Both policies could be supported by supplementary planning documents on the range of issues pertinent to renewable energy and by guidance on the incorporation of design principles into new build. Examples of best practice relating to these policies are given in paragraphs 4.14 – 4.14 of the Guide.

- 2.3.6 In respect of landscape issues, one of the most sensitive issues associated with renewable energy, particularly wind energy, the Guide advises that a LPA may wish to undertake a landscape capacity and sensitivity analysis in order to support decision making outside of nationally protected areas. Character areas could form the basis for considering which technologies at which scale may be appropriate in different locations, although the LPA should not prescribe specific locations or technologies that may be suitable to particular sites or areas.
- 2.3.7 On the matter of supplementary planning documents, the Guide identifies that they could play a critical role in implementing renewable energy schemes and act as a tool for raising awareness of the potential of renewable energy technologies. The supplementary planning documents, which should only elaborate on the policies and proposals in development plan documents, as identified in paragraph 4.20, may include the following:

design guidance (among other topics, general design guidance may include reference to potential for passive solar design, or building-integrated renewables such as Photovoltaics); and

site development briefs (inclusion of renewable energy generation as a potential future use of specific major brownfield sites, or reference to potential for passive solar gain through careful site layout, for example.

- 2.3.8 Advice on public involvement in the development plan preparation and the encouragement of community-led initiatives is provided in paragraphs 4.21 – 4.32.

2.4 Regional Planning Guidance for the South West – Energy Efficiency and Renewable Energy

2.4.1 Regional Planning Guidance 10 (RPG10) for the South West⁶ was published in September 2001 and provides:

A regional spatial strategy within which local authority development plans and local transport plans in the South West should be prepared

A broad development strategy for the period to 2016 and beyond

A spatial framework for other strategies and programmes.

2.4.2 Section 9 of RPG10 sets out the policy relating to energy efficiency and renewable energy. The relevant policy on renewable energy, RE 6, states the following:

Policy RE 6: Energy Generation and Use

Local authorities, energy suppliers and other agencies should:

support and encourage the region to meet the national targets for:

a 12.5% reduction in greenhouse gas emissions below 1990 levels by 2008-2012 and a 20% reduction (from 1990 levels) in carbon dioxide emissions by 2010;

a minimum of 11-15% of electricity production to be from renewable energy sources by 2010;

encourage and promote the greater use of renewable energy sources, including community-based projects, such as Combined Heat and Power and Community Heating and their integration into more energy efficient new build or redevelopment proposals;

have full regard to the recommendations and detailed background information contained in the report “Renewable energy assessments and targets for the South West” (GOSW APRIL 2001).

⁶ Government Office for the South West (2001) *Regional Planning Guidance for the South West (RPG10)* DTLR September 2001

Development Plans should:

specify the criteria against which proposals for renewable energy projects will be assessed, balancing the benefits of developing more sustainable forms of energy generation against the environmental impacts, in particular on national and international designated sites;

promote energy conservation measures through policies guiding the design, layout and construction techniques of new development proposals.

- 2.4.3 The explanatory notes to this policy given in paragraphs 9.32 to 9.35 restate the international climate changes objectives and the need to ensure energy consumption is reduced through renewable energy and energy efficiency. Paragraph 9.34 identifies the issues associated with the provision of a grid transmission infrastructure and the need to assess associated impacts, whilst stating that a diversity of supply should be an objective of development plans and that sub-regional targets should be developed. Paragraph 9.35 states that it is important that renewable energy schemes are compatible with other environmental objectives for the region and that environmental impact must be addressed by developers. It further states that rural development opportunities could be enhanced through the use of biomass fuels to generate energy.

2.5 REvision 2010: Establishing County/Sub Regional Targets for Renewable Energy Electricity Development to 2010

- 2.5.1 REvision 2010, funded by GOSW and the South West Regional Assembly, supersedes the South West regional renewable energy resource assessment carried out by Terence O'Rourke and ETSU in 2001. The overriding objective of REvision 2010 was to support the attainability of the 10% renewables target set by the Energy White Paper 2003 through encouraging the adoption of county or sub regional targets for renewable energy up to 2010.
- 2.5.2 Through a combination of sub regional resource mapping, consultations and workshops REvision 2010 was able to establish the technical, economic and environmental feasibility for renewable energy development in the South West region. This process resulted in the formulation of renewable energy targets for each of the Counties in the

South West. For Devon, the target range has refined to 151 MW to be developed prior to 2010. This would generate approximately 623 GWhrs, which would provide for the equivalent of 155,750 homes. This would represent the electricity equivalent of roughly half of the total County population based on 2001 Census figures for 278,576 domestic homes.

- 2.5.3 Of this target, 26MW is expected to arise from biomass, 5MW from small scale hydro and 103MW from onshore wind.

2.6 Conclusions on National and Regional Perspectives

- 2.6.1 PPS22 plainly sets out the Government's policies with respect to achieving 2010, 2020 and 2050 targets on the implementation of renewable energy developments. It provides much needed clarity on issues relating to development within, and more importantly, on the fringes of nationally and internationally designated areas and advises that local landscape and nature conservation designations should not be used in themselves to refuse planning permission for renewable energy developments.
- 2.6.2 Overall, PPS22 will serve as an important driver in ensuring that the Government's targets and aspirations set out in the Energy White Paper will be delivered through the land use planning system. In this respect, it provides a very important material consideration in the determination of any planning application for renewable energy development.
- 2.6.3 RPG10 reflects and reinforces the national guidance and will further assist the implementation of renewable energy developments in the South West. It provides clear guidance on the targets to be achieved on a sub regional basis and states that all development plans should have full regard to the findings of the GOSW 2001 renewable energy assessments and targets, which have since been superseded by the GOSW 2004 REvision 2010 renewable energy assessments and targets. It can safely be presumed that the REvision targets would be equally supported by this regional guidance. RPG10 further requests that local planning authorities specify the criteria against which renewable energy proposals should be assessed and emphasises the need for the incorporation of energy conservation and efficiency measures into new development

proposals. Overall, PPS22 and RPG10, in combination with the renewable energy targets set out in REvision 2010, set in place a strong framework for the development of renewable energy in the South West.

- 2.6.4 In the next section Structure and Local Plan policies are reviewed and measured against the emerging national and regional policy framework.

3 Structure and Local Development Plans

3.1 Devon Structure Plan 2001 to 2016

3.1.1 The Devon Structure Plan was adopted in October 2004 and provides an up-to-date policy context for renewable energy. Policy CO12 relates specifically to renewable energy developments:

Policy CO12

Provision should be made for renewable energy developments, including offshore developments, in the context of Devon's sub regional target of 151MW of electricity production from landbased renewable sources by 2010, subject to the consideration of their impact upon the qualities and special features of the landscape and upon the conditions of those living or working nearby.

In providing for strategic wind based energy production in the period to 2016, priority should be given to locations within the areas of search identified on the Key Diagram⁷.

- The Policy clearly makes the recommendation that local planning authorities should plan positively in order to contribute to renewable energy targets, and cites the areas of search as pivotal for the development of strategic wind based energy production. However, such planning should take into account potential impacts to the landscape and the amenity of those living or working near to renewable energy developments.

3.1.2 No explanatory memorandum or explanatory paragraphs accompany the Devon Structure Plan.

⁷ The Key Diagram identifies the 'areas of search' as being located mostly in Torridge and North Devon local authorities, but also partly into West Devon and Mid Devon. The area of search in Mid Devon is located west-north-west of Tiverton and south of the A261. This area is pinched between two Areas of Great Landscape Value.

3.2 Mid Devon District Local Plan – Deposit Draft (September, 2002)

3.2.1 The Mid Devon Local Plan First Alteration was published for consultation in October 2001. The "Revised Deposit" was published for further comment in September 2002, which was subject to a number of "Pre-Inquiry Changes". The Local Plan Inquiry was held from July 2003 to April 2004 and the Inspector's Report on the proposed Plan is expected to be received in November 2004. It is expected that the recommendations of the Inspector's Report will be considered by the Council in 2005, with the expectation that the Mid Devon Local Plan First Alternation should be adopted in 2005.

3.2.2 The main policy relating to renewable energy is ENV3: Renewable Energy. The policy is as follows:

ENV3: Renewable Energy

Proposals for wind turbine development will be permitted provided that:

Any connection to the electricity generating grid is visually unobtrusive; and

It has no unacceptable impact on other uses in terms of noise, shadow flicker, road safety and electro-magnetic production and interference (e.g. television, radio and microwave transmission). To this end, there will be no residential property lying within 400 metres of any turbine and turbines are to rotate in one direction (this would not apply to small scale domestic schemes serving a single dwelling); and

The site is reinstated, should it cease to operate, to its condition before the development took place; and

Within an AONB or AGLV the suitability of a site for potential wind energy generation outweighs the impact upon the special landscape character of the designated area.

In all cases, where there are likely to be significant effects on the environment the council will require an environmental assessment of a proposal's impact.

3.2.3 Paragraph 5.6 of the Deposit Draft identifies the pressure placed on areas of national and county landscape significance arising from wind energy and that the benefits of wind power must be balanced against the need to protect the landscape whilst meeting

sustainability objectives. This form of policy is common in many development plans but it still leads to uncertainty in how developers and planners reach the balance of opinion. The need for renewable energy and landscape protection are equally encouraged through national and local planning policy guidance and therefore may come into conflict. Such conflict may be resolved through more detailed studies of the landscape, as have been commissioned by Mid Devon District Council, and it is possible that Supplementary Planning Documents that provides more prescriptive criteria against which to evaluate a wind energy proposal would shed more light on reaching a balance of opinion in determining wind energy applications.

- 3.2.4 With respect to small hydro, solar, biomass and methane energy, Policy ENV4 has been formulated as guidance on developments of this nature and the supporting text again cites the need to protect the landscape and the need to ensure the management of the site during the construction phase.

Policy ENV4

Other Renewable Energy Sources

Proposals for other forms of renewable energy will be permitted provided that:

any connection to the electricity generating grid is visually unobtrusive; and

existing buildings are used as far as possible to house generating plant and associated machinery; and

all services are buried underground as far as possible.

- 3.2.5 Further policies that are of relevance to renewable energy are ENV1 and ENV2 which address protection of the landscape. ENV1 states that priority will be given to the protection of the Blackdown Hills Area of Outstanding Natural Beauty. Development that is deemed to have an adverse effect on the natural beauty, character and quality of the landscape will not be permitted and only development that pays particular regard to the context and to landscape and settlement character. Similarly development proposals outside but affecting the AONB will be judged against landscape, nature conservation, heritage and socio-economic criteria to determine whether they are acceptable or not. Policy ENV2 sets out to protect the wider landscape, especially those areas designated Areas of Great Landscape Value.

3.2.6 In May 2005 the Proposed Modifications to the Local Plan were published by MDDC which list the modifications which the Council propose to make to the Mid Devon Local Plan First Alteration Revised Deposit. The Modifications have been published in accordance with regulation 29(1) of the Town and Country Planning (Development Plans)(England) Regulations 1999.

3.2.7 The Proposed Modifications make the following relevant amendments:

- Areas of Great Landscape Value are to be deleted from the Local Plan, and would therefore no longer present a specific constraint.
- Amendments to the policy ENV3 and supporting text are proposed as follows:

Proposed Modification 93 - Policy ENV3

*Amend the policy as follows: Delete criteria (II) * (IV) and replace with the following:*

"II) it has no unacceptable impact on other uses in terms of noise, shadow flicker and electro-magnetic production and interference (e.g. television, radio or microwave transmission);

III) should the use cease to operate, the site is reinstated to its condition before the development took place, and

IV) the suitability of the site for potential wind energy generation outweighs the impact upon the landscape, taking into account the designations of AONB where appropriate".

Proposed Modification 94 - Paragraph 5.8

Amend as follows: "The Government has indicated that at distances greater than 350-400m noise pollution is unlikely to arise. This distance provides reasonable guidance for most developments, but there may be instances where lesser separation distances are acceptable because of the technology used and the individual site characteristics."

- 3.2.8 Such Modifications remove reference to the AGLVs in the policy in line with national guidance under PPS22 and also revise the guidance on the distance of turbines to dwellings.

3.3 Conclusions

- 3.3.1 There is strong support for renewable energy through the Devon Structure Plan, which is exemplified by a commitment to the generation of 151MW of renewable energy by 2010, by far the highest target of all the Counties of the South West. Devon will therefore shoulder the majority of the South West's renewable target. The areas in Devon which are suitable for wind turbine development have been identified in the Structure Plan and are generally devoid of designations, although there may be grid and road infrastructure issues to be resolved. There is a strong drive for regeneration in mid Devon and renewable energy is identified as being one of the options open to the agricultural community.
- 3.3.2 The Draft Deposit of the Mid Devon Local Plan reflects the positive slant of regional planning policy guidance by encouraging renewable energy developments whilst citing the criteria against which applications are to be judged. Whilst the County Structure Plan identifies broad areas of wind energy potential these have been removed from the Draft Deposit of the Local Plan because of the "uncertainty" they may cause. This is line with national planning policy guidance which states, in paragraph 7 of PPS22, that local planning authorities should "*only focus on the key criteria that will be used to judge applications*". An analysis of the conformity of the Local Plan with National and Regional planning policy guidance for renewable energy is presented in Chapter 6 of this report, along with recommendations for further action.

4 GIS Resource and Constraints Mapping

4.1 Resource and Constraints Mapping

- 4.1.1 A Resource and Constraints Mapping exercise using Geographical Information Systems' (GIS) overlays was undertaken for Mid Devon District Council. This aimed to identify areas across the district where planning and technical barriers to wind, hydro and biomass energy development would be minimised and where wind speeds and gird proximity are favourable.

4.2 Resource and Constraints Mapping Methodology

- 4.2.1 The ArcView 8.2 GIS software was employed to generate four transparent 'virtual' overlays comprising environmental and technical data relevant to renewable energy developments. The data for the overlays was collected from a variety of sources, the majority of which are available publicly, or were generated in house by Dulas Ltd.
- 4.2.2 The overlays present information that is particularly pertinent to wind energy. This is because it is considerably easier to map the resource (i.e. wind) and constraints (i.e. air-safeguarding zones) for wind energy than for hydropower or biomass. With respect to hydropower potential within the District, riverine systems constitute the potential resource, and these can be identified on the Ordnance Survey based map included with the resource and constraints maps provided to MDDC. It is widely acknowledged, and also identified in the *Renewable Energy Guide for Devon*⁸, that the true potential of hydropower has not yet been adequately assessed. Abstraction licences from the Environment Agency for Mid Devon's river systems could be difficult to attain on the basis of private potable supplies and the Water Framework Directive, which would limit the potential to extract water at volumes suitable for economically viable hydropower schemes. The potential hydropower resource is likely to be limited to old mill sites,

⁸ Devon County Council (2004) *Renewable Energy Guide for Devon 2004* Devon Strategic Partnership

which are likely to be ‘low head’ schemes with small power generation. Such schemes, again, are unlikely to be economically viable and would only be taken forward by particularly committed individuals / organisations, and not by developers. With respect to biomass resource mapping, an overlay presenting forestry interests has been presented. However, the mapping of agricultural grades of land that could be utilised for short rotation coppice or other biomass sources has not been possible within the remit of this study.

- 4.2.3 The data overlays are presented on top of 12: 50 000 Ordnance Survey (OS) colour raster base layers, or similar. The first two layers of information provide a composite view of environmental and technical constraints in the site selection process by presenting the data sets listed in the table below. Those areas largely free of such environmental and technical constraints show an absence of hatching/colouring (or in the case of airport consultation zones, inclusion within a series of concentric circles) and these areas are deemed to have the greater potential for site location. The third layer shows the spatial distribution of the electricity grid as maintained by the District Network Operator (DNO). The fourth layer shows predicted wind speeds for each kilometre square from the Department of Trade and Industry’s⁹ NOABL¹⁰ database at 45 metres above ground level (AGL) in a series of colours, which leave the areas with the most economic wind speeds most readily visible.
- 4.2.4 Images, for illustrative purposes only, of the District wide base map and four layers of constraint are shown in Figures 1 – 4 in Appendix B. A further layer with the forestry resource is has been produced for MDCC but is not presented in this report due to copywrite reasons. Lastly, an additional layer portraying the landscape character areas drawn up by Anne Priscott is presented as Figure 6. Viewing these layers at such as small scale is not very informative. A full set of A0 overlays has been supplied to MDCC to readily identify the resources and constraints.

- 4.2.5 The data for the four constraints layers was derived from the following organisations:

⁹ Energy Technology Support Unit (1999) NOABL Database for Department of Trade and Industry

¹⁰ Numerical Objective Analysis of Boundary Layer

Environmental Constraints:

Supplier	Designation Type	Data-Layer
English Nature	International Protected Areas	Special Areas of Conservation (SAC) Special Protected Areas (SPA) Ramsar Sites
English Nature	National Protected Areas	Ancient Semi-Natural Woodland National Nature Reserves (NNRs) Sites of Special Scientific Interest (SSSIs)
Woodland Trust Local Authorities	Woodland Locally Important Areas	Woodland Trust Sites Such as: Green belt Local Wildlife Sites Historic Parks
RSPB	International and Locally Protected Areas	RSPB Reserves

Landscape Constraints:

Supplier	Designation Type	Data-Layer
Countryside Agency and National Parks	National Landscape Areas	Areas of Outstanding Natural Beauty National Parks
Local Authorities	Local Landscape Areas	Areas of Special Landscape Quality Landscape Character Areas

Archaeological Constraints:

Supplier	Designation Type	Data-Layer
English Heritage and/ or Local Authorities	Major Archaeological Sites	Scheduled Ancient Monuments

Technical Constraints:

Supplier	Constraint Type	Data-Layer
BBC	Radio and TV Transmitters	Primary TV Transmitters Secondary TV Transmitters Primary Radio Transmitters Secondary Radio Transmitters
Civil Aviation Authority, NATS and MOD	Controlled and Consultative Air Traffic Zones	Major Airports and Heliports Local Aerodromes Controlled and Consultative Airspace Areas (for approach / landing, take off and radar contact) NATS controlled DVOR and masts
Department of Trade	NOABL	Predicted Wind Speeds at 45m hub

Supplier and Industry	Constraint Type	Data-Layer height
Wind Industry/ British Wind Energy Association	Existing or Consented Wind Farms	Wind Farms
District Network Operator	Electricity transmission network at and below 132kV	Substation and transmission lines at applicable voltages
Meteorological Office	Weather Radar	Weather Radar Consultative Zones

4.3 Points of Note Regarding Datasets

Base Layer

- 4.3.1 It is clear from the Ordnance Survey base layer that the highways network in Mid Devon District places a highly restrictive constraint on the potential delivery of wind turbine components. The likely delivery route of wind turbine components would be via the M5. With respect to the north of the District, delivery would have to be made via the A36. This appears to be a reasonable road and if wind farm sites closely adjoining the A36 could be identified by developers then some potential for development exists. However, delivery deeper into the north of the District would be problematic. Apart from the A396, which itself would present some limitations, there are no other suitable road arteries for large wind turbine component delivery. This severely inhibits the size of turbine that could be erected in the north of the District. Only a detailed transport study would, however, confirm this.
- 4.3.2 The same restrictions exist for the west and south of the District. Delivery via the A30 to the south of the District would be possible, but the road network then presents serious constraints, with only C class roads available. The west of the District would have to be accessed via the A3072, A377 and A3072. Access to these roads would have to be made via Tiverton and Crediton, and it is safe to say that wind turbine component delivery through these towns would be impractical.
- 4.3.3 The east of the District is similarly constrained, and is largely typified by the Blackdown Hills, which would not be an appropriate area for wind turbines.

- 4.3.4 These road artery restrictions present a considerable constraint on wind energy development in Mid Devon District. This limits the potential wind energy development to smaller wind turbines, possible less than 850kW machines, or domestic size turbines.

Layer 1 - Environmental

- 4.3.5 Environmental data was obtained from Mid Devon District Council. One area of Mid Devon is currently designated as an AONB: Blackdown Hills, in the East of the District. This is construed to be an absolute constraint on wind energy development, except in respect of community wind power which may prove feasible and acceptable in this area.
- 4.3.6 Dartmoor National Park is located to the south of the District, but does not infringe a great deal over the District boundary.

Layer 2 - Technical

- 4.3.7 There are very few aeronautical interests within the Mid Devon District. However, there are several MOD airbases that have consultation zones which extend into the district boundary: RAF Chivenor to the West of the District and RAF Merryfield to the East of the District. Where there are runways, landing and take-off consultation zones these are shown in the form of 26km long cones with an included angle of 30°, as per information released by Defence Estates (DE) regarding runway exclusion zones in August 2002.
- 4.3.8 However, it must be stressed that all developments are dealt with on a case by case basis by DE and as most concerns involving radar will be highly dependent on the topography between the radar and wind farms.
- 4.3.9 There are no known Air Defence Radars in the vicinity of Mid Devon, but as these installations are usually given a high degree of secrecy no certainty can be given in respect to their whereabouts. The reader is directed to the wind energy and aviation interim guidelines¹¹ for further background to these and other civilian constraints.
- 4.3.10 The other large airport consultation area shown comes from Exeter Airport to the south of the District. Further guidance on safeguarded areas around these sorts of facilities can be found at <http://www.ais.org.uk/aes/> after registering for use.

¹¹ Department of Trade and Industry (2002) *Wind Energy and Aviation Interests – Interim Guidelines*.

4.3.11 One weather radar at Cobbacombe Cross, Devon is located within the Mid Devon District. 5km, 10km and 20km consultation zones are shown on the map overlay for the radar station.

4.3.12 Any primary TV or radio mast within the Mid Devon border has been presented and where a mast has links to secondary masts that cross Mid Devon, all links have been shown from that primary. There are no primary radio or TV masts within Mid Devon, but there are secondary TV masts at Bampton, Culm Valley and Crediton, and a secondary radio mast at Gogwell.

4.3.13 At the time this map was produced, there were no existing or consented wind farms in Mid Devon.

Layer 3 – DNO Network

4.3.14 The grid data shown has been digitized from documents within the Western Power Distribution Long Term Development Statement, correct at April 2003.

Layer 4 - Windspeed

4.3.15 The wind data included is from the NOABL database and should be treated as indicative – the layer used here gives predicted wind speeds at 45m Above Ground Level.

Other Data

4.3.16 A further layer showing areas of woodland over 2ha was included, utilising data from the Forestry Commission. This map is not available for publication by Dulas Ltd due to licence agreements with the Forestry Commission.

4.3.17 A further overlay was produced showing the Landscape Character Areas for the District. This map was produced by the Landscape Architect undertaking the landscape character assessment.

Disclaimer

4.3.18 Dulas can in no way be held accountable for any loss, financial or otherwise, attributable to inaccuracies or insufficiencies in the data provided to us and presented within these datasets.

5 The Renewable Energy Workshop

5.1 The Workshop

- 5.1.1 Subsequent to the completion of the planning policy review and the GIS constraints mapping exercise, a workshop was held at Tiverton Town Hall on 14th December 2004. The aims of the workshop were to:

set the context for renewable energy development in the UK;

present the findings of the Renewable Energy study, including planning policy guidance, technical and environmental constraints mapping and the landscape character assessment;

offer an assessment of the scale of wind, hydro and biomass energy deployment that might be feasible in Mid Devon District and set this in the context of renewable energy targets for 2010 and beyond;

give delegates a good basic understanding of the issues relating to wind, hydro and biomass energy development that will be of benefit in appraising and scoping planning applications that are likely to come forward in the near future; and

present possible options for identifying suitable broad areas for such developments and a discussion forum for potential Supplementary Planning Documents on renewables.

- 5.1.2 The workshop was attended by forward planning, development control and sustainability officers from MDDC. The morning session identified the policy background and commercial drivers for renewable energy, and presented technical information on the main renewable energy technologies: wind, biomass and hydro-electric energy. Planning issues relevant to development control officers were also presented and discussed. It should be noted that whilst the consultant was instructed to investigate the hydropower potential of the District, it is clear that the mapping and potential development of hydro power is severely curtailed by a number of factors. These include:

strategically it is very difficult to map hydro-electric resources except by way of showing where river systems are located. The potential resource of these river systems cannot be

presented without detailed actual river flow data or catchment modelling which would inform the viability of hydro-electric schemes;

existing abstraction consents and private potable supplies drawn from riverine systems would be likely to limit the volume of water that could be extracted from Mid Devon's rivers;

Mid Devon does not have a high incidence of rivers with significant volumes of water that would make hydro-electric development possible;

the greatest potential for hydro-electric power development lies at old river mills, such as Thorveton Industrial Mill, which are low head schemes that would not make a meaningful contribution to renewable energy targets.

- 5.1.3 Consequently, hydropower was not a focus of the renewable energy study and no information on the potential locations and resources are presented in the GIS constraints mapping.
- 5.1.4 The afternoon session focussed on applying the information and learning from the morning session in identifying broad areas across the District where the harnessing of wind energy and biomass generation may have some potential. Workshop attendees scrutinised the constraints maps in order to better understand the technical and environmental interests present in their administrative area that would control renewable energy development, and broad areas that may be suitable for the deployment of wind and biomass energy were identified. However, the workshop did not confirm or delineate any clear areas that would be considered suitable for these purposes. This would have been contrary to the policies in PPS22 and was intended solely as a tool to improve the appreciation of planning issues relevant to planning applications.
- 5.1.5 The workshop concluded with a discussion amongst officers on how the Council can now best reflect the new planning policy guidance set out in PPS22 and its Companion Guide in local development plans, particularly in light of the Planning and Compulsory Purchase Act 2004 which requires the formulation of RSS and LDD in coming years in replacement of the existing structure and local plan approach. Mid Devon District Council expects to submit its first local development document in spring 2005, with an expectation that it will reflect some of the recommendations of this renewable energy study. These recommendations are presented in Chapter 6 of this report.

6 Conclusions and Recommendations

- 6.1.1 In order to formulate recommendations for further action on renewable energy on behalf of Mid Devon District Council, the consultants have reviewed the activities undertaken (planning policy review, GIS resource and constraints mapping, and workshop) so that a current planning and technical ‘baseline’ can be established. From this baseline it can be professionally deduced what potential measures the Council could undertake to take up the challenge set in PPS22 to “*promote and encourage renewable energy*”.
- 6.1.2 The planning policy review has clearly identified the national, regional and local guidance in respect of renewable energy. Whilst some inconsistencies remain between the national and local level, it is clear that they are moving towards greater conformity through the development plan process undertaken by MDDC and the emerging need to develop local development documents in conformity with the Planning and Compulsory Purchase Act 2004.
- 6.1.3 The GIS resource and constraints mapping exercise has considered a comprehensive range of potential constraints mainly to wind energy deployment within the District, taking into account both technical (including grid infrastructure, air safeguarding, UHF rebroadcast links etc) and environmental (such as national landscape designations, national and international nature conservation designations, historic designations etc) factors, overlaid on 1:50,000 Ordnance Survey base maps. The mapping of the biomass resource has been limited to forestry interest in the District. No mapping in respect to the hydropower potential has been undertaken due to the complexity of mapping such a resource which would require catchment modelling, knowledge of existing abstractions and private potable supplies, and an understanding of commercial rates of return that would determine whether such schemes would be viable or not. This would require considerable time and expense.
- 6.1.4 This above datasets provided the tools for a workshop for forward planning and development control officers in the District which sought to disseminate up-to-date information about wind, biomass, hydro and solar energy. This in turn informed a discussion on forward planning and development control issues among workshop participants.

- 6.1.5 It is evident that few opportunities exist for the development of large-scale wind energy developments across the District not only as a result of the presence of technical and environmental constraints but because the transport network in the more unconstrained areas would not have the capacity to take wind energy components such as wind turbine blades. The local B and C road network would have to be severely modified to accommodate turbine delivery vehicles which would likely economically inhibit the development of wind energy. Further to this, individual dwellings throughout the District are likely to severely inhibit the deployment of large scale wind energy projects as sites will be limited by the need to conform with noise emissions criteria outlined in ETSU-R-97.
- 6.1.6 There is a significant biomass resource in Mid Devon in the form of woodland, both operated by the Forestry Commission and private owners. The limitations of such a resource are linked to proximity to the heat loads. In order to encourage the uptake of biomass schemes, heat loads close to the potential resource will need to be identified in order to limit the transport impact of taking the biomass resource to the boiler installations that would utilise it. It is estimated, in addition, that a considerable potential resource in the form of short rotation coppice is available as Mid Devon has wide expanses of good quality agricultural land. However, monoculture and landscape impact issues should be addressed by both planners and developers in encouraging this form of renewable energy generation.
- 6.1.7 Where wind energy potential is present, developers and planners should give consideration to the installation of large scale 2 MW or greater wind turbines in wind energy proposals in order to support the achievability of the sub-regional obligations. Fewer large-scale turbines would perhaps be more appropriate to Mid Devon rather than a greater number of smaller-scale turbines.
- 6.1.8 The nurturing and encouragement of small scale (which can reasonably be defined as 1 to 4 wind turbines not generating more than 5MW) and/or community wind energy developments within strongly protected areas, such as the Blackdown Hills AONB, whilst not contributing significantly to the onshore regional target, should be considered. Such developments would be perceived as less intrusive in sensitive amenity and landscape character areas, and would set an example to other communities in establishing localised sustainability in electricity generation.

- 6.1.9 With regard to the planning policy guidance given in the Deposit Draft of the Mid Devon Local Plan, the Draft identifies the protection of nationally designated sites and the need for development proposals to demonstrate that they do not compromise the objectives of the designations. However, Policy ENV1 clearly still presents, in effect, what could be construed as a buffer zone that is specifically encouraged against in paragraph 14 of PPS22. Further to this paragraph 15 states that local landscape designations should not be used in themselves to refuse planning permission for renewable energy developments whereas Policies ENV2 and ENV3 both cite the protection of the AGLVs as an important determinant of whether renewable energy developments should be permitted. However, this has now been redressed by the Proposed Modifications to the Local Plan issued in May 2005 which removes local landscape designations from the Plan; this ensure the local guidance more accurately reflects national guidance. Some conflict remains therefore between national and local planning policy guidance; however the Deposit Draft does set out the criteria based policies and the criteria specific to the type of landscape area specified (ENV2) against which to evaluate a proposal, in line with national guidance. The revised guidance in the Proposed Modification better elucidates the criteria against which wind energy applications are to be determined, particularly with regard to the distance of wind turbines property and the potential impacts arising to the amenity of domestic dwellings and the protection of microwave transmission interests.
- 6.1.10 The Policies in the Deposit Draft do not elucidate the appropriateness of the criteria in determining applications for both rural and urban areas. There is no such delineation between urban and rural in the Draft. Similarly, there is no mention in the Deposit Draft of the encouragement of small scale renewables, clearly prescribed by PPS22 which states that “*Local planning authorities should specifically encourage such schemes through positively expressed policies in local development documents*”. This appears to be an omission from the Deposit Draft. Further omissions appear to include an absence of a policy to foster community involvement in renewable energy projects (Key Principles of PPS22, 1 (vii), the failure of the Policies to state the minimum separation distances between different types of renewable energy projects and existing developments for noise purposes along with the prescription of ETSU-R-97 as the guiding methodology for noise assessments (paragraph 22), and the need for clearly stated criteria on the effects of transport on traffic levels arising from biomass projects. These are considered to be omissions because local planning authorities are expected, under the Key Principles to

PPS22, to set out the criteria that will be applied in assessing applications for planning permission for renewable energy projects. These omissions could be redressed through input into the imminent local development document in spring 2005 or the issuance of Supplementary Planning Documents.

- 6.1.11 In order to make a contribution to the 2010 targets set under National and Regional policies, renewable energy projects will need to be constructed before the winter of 2009-10 due to the construction time required and because, in relation to wind energy, developments cannot be constructed during the breeding bird season (March to early July). There are other consenting procedures (e.g. setting of legal obligations or conditions, and pre-construction monitoring plans) to resolve subsequent to the award of a planning consent, which typically take about 6 months; this further delays the construction process and therefore makes the 2010 target very challenging.
- 6.1.12 On this basis, renewable energy developments will have to gain consent before the spring of 2009. Taking account of the determination period (16 weeks under Statutory Instrument 1999 No. 293 but experience indicates that they typically take nearer to 24 months) and the preparation of the Environmental Impact Assessment (EIA), renewable energy projects should be brought to the local authorities' attention through Scoping by the beginning of 2008 in order to meet the 2010 timetable. Therefore, within the next three and a half years, it is fundamental that sufficient projects are encouraged by local planning authorities to make a contribution to the national and regional targets.
- 6.1.13 Supplementary Planning Documents may well be an appropriate vehicle to bridge the gap that currently exists. SPG can be issued relatively quickly and, if it is obviously in line with the emerging RPG10 and PPS22, significant weight should be attached to it. Moreover, early publication as a draft working document would allow scrutiny through thorough public consultation in order to increase their credibility in the planning and development control processes. The SPG policy could be designed in such a way that it would naturally form the basis of the policies that are likely to be included in the Local Development Documents.
- 6.1.14 Whilst the emerging PPS22 and RPG10 clearly provide a very strong national/regional framework in which to deploy renewable energy projects and both would be material to considering individual planning applications, this commitment is not necessarily reflected

at the local level. Local decisions are primarily made on the basis of local policies, whilst national and regional policy objectives are considered as relatively remote. These national and regional perspectives are then given greater weight in the appeal or call in processes but this would clearly considerably extend the time over which projects are implemented. There is, therefore, a necessity for informed decisions consistent with national and regional policy to be made at a local level. Since any SPG would be approved by the relevant local planning committee, it would clearly provide a locally acceptable policy framework to work alongside PPS22 and RPG10. Moreover, the SPG should provide a substantial amount of information about the important issues to be taken into account in any EIA of an application for a renewable energy development. This in itself would raise awareness and extend the knowledge base of those who approve it, which in turn would facilitate better decision-making. In this context, we believe that SPG would form an important part of a continuum of policy and information from national down to local level.

- 6.1.15 Further to the above, and in view of the short time frame to making a contribution to the 2010 targets, it is advisable that renewable energy briefings or workshops for elected members, local stakeholders involved in renewable energy and the wider public would ensure that the technical guidance and SPG framework are well understood. This would also facilitate the adaptation of SPG to local circumstances and enable the achievement of a timeframe for adopting the SPG to sit alongside PPS22 and RPG10. It would also fulfil the obligation on local planning authorities under PPS22 (paragraph 1(vii) of the Key Principles) for fostering community involvement in renewable energy projects and promoting knowledge of and greater acceptance by the public of prospective developments that are appropriately located.

7 Appendices

Appendix 1: Detailed Planning Policy Review in respect of National, Regional and Local Guidance

Appendix 2: Illustrations of the GIS Constraints Mapping for Mid Devon District

Appendix 3: Workshop Structure

Appendix 4: Renewable Energy Workshop Attendees

Appendix 5: Powerpoint Presentation from the Renewable Energy Workshop

Appendix 6: Potential Economic Benefits arising from Renewable Energy

Appendix 1: Detailed Planning Policy Review in Respect of National, Regional and Local Guidance

Energy White Paper 2003

The Government's Energy White Paper¹² in 2003 states that energy policy to date had not paid enough attention to environmental problems. As a consequence, the White Paper seeks to set out the mechanisms to ensure that the environment and economic growth are properly and sustainably integrated into energy policy.

The Energy White Paper re-iterates the primary challenge of climate change identified in previous Government policies and commits the UK to achieving a 60% cuts in emissions of greenhouse gases by 2050.

The second challenge under the Energy White Paper is to ensure the security of the UK energy supply as the UK is expected to shortly become a net importer of energy, as opposed to currently being a net exporter as a result of North Sea oil and gas. New sources of energy are likely to come from Russia, Middle East, North Africa and Latin America. Increasing dependency on these external sources for our energy will make the UK more vulnerable to price fluctuations and interruptions to supply caused by regulatory failures, political instability and conflict in these parts of the world. The Energy White Paper suggests that the best way of maintaining energy security and reliability is through delivering a diversity of home based energy supply, with renewables and smaller scale embedded supply such as CHP and (in the future) fuel cells playing an important role in avoiding over dependence on imports.

In order to accommodate a greater penetration of dispersed embedded generation, the current distribution infrastructure, which is designed to supply energy across the country from large centralised generating plants, would require substantial adaptation and modernisation. This will also require greater involvement from the English Regions, Devolved Administrations and local communities complemented by a planning system that is more helpful to investment in renewable energy generation and infrastructure.

¹² Department of Trade and Industry (2003) *Our energy future: creating a low carbon economy*

The Energy White Paper does not seek to prescribe the composition of fuel mix. Instead it aims to create a long-term market and policy framework which will create business and consumer incentives to find the right balance that will most effectively achieve the overall goals.

Nonetheless, it does set out targets for renewable energy, re-stating the Government's January 2000 announcement¹³ for renewables to supply 10% of UK electricity by 2010 and taking this a significant step further in setting out an ambition to achieve 20% of electricity generation from renewables by 2020. The Government has also put in place the Renewables Obligation, which took effect in 2003, as part of the market incentives to implement renewable energy. This is similar in its outcomes to the carbon emissions trading scheme, which will come into force EU wide in 2005. By setting caps on emissions this latter scheme will provide clear incentives for investment into energy efficiency and cleaner technologies at lowest cost.

These measures will not solely deliver the Government's environmental goals; together with a range of efficiency measures across all energy consuming sectors, the Government will also further encourage renewable energy through a more positive approach to land use planning and capital grants for emerging technologies. In this context, the Government (including local government) aims to set an example to others by improving energy efficiency in its buildings and through its procurement policies.

The overall aim of the Energy White Paper is to encourage sustainable rates of economic growth through, in part, establishing competitive markets for reliable and affordable energy. It also lays the foundations for a future in which the energy system is likely to be quite different from that of today, encouraging and supporting innovative research and development of alternative energy systems which would underpin continued sustainable growth after the demise of the current carbon based economy.

Planning Policy Statement 22, Renewable Energy, November 2003 (PPS22)

In line with its commitment to integrate the environment into energy policy, the Government has issued Planning Policy Statement 22 – Renewable Energy¹⁴ to broaden the remit of the energy

¹³ Department of Trade and Industry (2000) *New and Renewable Energy, Prospects for the 21st Century; Conclusion in Response to the Public Consultation*

¹⁴ Office of the Deputy Prime Minister (2004) *Planning Policy Statement 22 – Renewable Energy*

strategy, and to address the contribution the land use planning system can make to the aims and objectives of the Energy White Paper.

Planning Policy Statements (PPSs), as with the preceding Planning Policy Guidance (PPG) series, are material to individual planning applications. Indeed, even in their draft form, they are a material consideration in current planning applications for renewable energy development, although less weight should be attached to them. Nonetheless, since much of PPS22's policy is already based on the existing guidance and, more importantly, on the Energy White Paper, the principle aims and objectives remain unchanged.

PPS22 sets out the Government's fundamental energy policy objectives more clearly than any other Government Statement, including the targets from the Energy White Paper, with still more renewable energy generation needed beyond the 2020 ambition in order to achieve 60% cuts in greenhouse gas emissions by 2050.

The new PPSs are intended to provide shorter and more focused statements of national planning policies than PPGs. PPS22 is no exception to this and, although much of the guidance within it reflects the advice contained within the current PPG22, paragraph 5 of the introduction states that its policies are firmly based on the recent Energy White Paper. The introduction also notes that most of the contextual and non-planning material in PPG22 would not be appropriate to the new form of PPS22. However, whilst this has been omitted from PPS22, the Government has published to PPS22 which contains general technical advice on different renewable technologies together with examples of good practice in terms of both development plan policy and the development of projects.

PPS22 also states that "Positive planning which facilitates renewable energy developments can contribute to all four elements of the Government's sustainable development strategy:

Social progress which recognises the needs of everyone – by contributing to the nation's energy needs, ensuring all homes are adequately and affordably heated; and providing new sources of energy in remote areas;

The effective protection of the environment – by reductions in greenhouse gases and thereby reducing the potential for the environment to be affected by climate change

Prudent use of natural resources – by reducing the nation's reliance on ever diminishing supplies of fossil fuels; and,

Maintenance of high and stable levels of economic growth and employment – through the creation of jobs directly related to renewable energy developments, but also in the development of new technologies. In rural areas, renewable energy projects have the potential to play an increasingly important role in the diversification of rural economies.

PPS22 sets out the National Planning Policies and the main principles of these are reproduced as follows:

(i)Renewable energy developments should be capable of being accommodated throughout England in locations where the technology is viable and environmental, economic, and social impacts can be addressed satisfactorily.

(ii)Regional spatial strategies and local development documents should contain policies designed to promote and encourage, rather than restrict, the development of renewable energy resources. Regional planning bodies and local planning authorities should recognise the full range of renewable energy sources, their differing characteristics, locational requirements and the potential for exploiting them subject to appropriate environmental safeguards.

(iii)At the local level, planning authorities should set out the criteria that will be applied in assessing applications for planning permission for renewable energy projects. Planning policies that rule out or place constraints on the development of all, or specific types of, renewable energy technologies should not be included in regional spatial strategies or local development documents without sufficient reasoned justification. The Government may intervene in the plan making process where it considers that the constraints being proposed by local authorities are too great or have been poorly justified.

(iv)The wider environmental and economic benefits of all proposals for renewable energy projects, whatever their scale, are material considerations that should be given significant weight in determining whether proposals should be granted planning permission.

(v)Regional planning bodies and local planning authorities should not make assumptions about the technical and commercial feasibility of renewable energy projects (e.g. identifying generalised locations for development based on mean wind speeds). Technological change can mean that sites currently excluded as locations for particular types of renewable energy development may in future be suitable.

(vi) Small-scale projects can provide a limited but valuable contribution to overall outputs of renewable energy and to meeting energy needs both locally and nationally. Planning authorities should not therefore reject planning applications simply because the level of output is small.

(vii) Local planning authorities, regional stakeholders and Local Strategic Partnerships should foster community involvement in renewable energy projects and seek to promote knowledge of and greater acceptance by the public of prospective renewable energy developments that are appropriately located. Developers of renewable energy projects should engage in active consultation and discussion with local communities at an early stage in the planning process, and before any planning application is formally submitted.

(viii) Development proposals should demonstrate any environmental, economic and social benefits as well as how any environmental and social impacts have been minimised through careful consideration of location, scale, design and other measures.

Paragraphs 2 to 5 of PPS22 discuss regional targets and state that these should be expressed as a minimum amount of renewable energy generated within a region and should be set as targets for 2010 and 2020. These targets, it goes on, should be reviewed regularly and, if they are met, revised upwards. More importantly, the fact that a target has been met should not be used as a reason for refusing planning permission for further renewable energy projects. In developing regional targets, although substantial offshore renewable energy resources could be exploited, this should not be used to set lower targets for onshore renewable energy resources.

In the context of the forthcoming planning policy framework set out in the Planning and Compulsory Purchase Act 2004 comprising Regional Spatial Strategy (RSS) and Local Development Documents (LDD), PPS22 provides the following guidance.

At the RSS level, paragraph 7 of PPS22 allows for the identification of broad areas at the regional or sub-regional level where particular types of renewable energy development may be appropriate. These should be based on the policies set out in the RSS where these can be applied across a Region.

However, at the LDD level, PPS22 advises that all planning applications should be assessed against specific criteria contained within the RSS and LDD. Moreover such renewable energy policies should be consistent with and reinforced by other policies in a Development Plan against

which renewable energy applications could be assessed. Local Planning Authorities are advised not to allocate areas for renewable energy development except where there is already a high degree of commitment from a developer for a specific site.

The guidance clearly indicates that the allocation of search areas at the local level is not acceptable. However, the identification of areas at the Regional level where renewable energy may be appropriate is of key importance in engaging a public debate on the implications of regional targets, raising awareness about the constraints to such development and guiding the evolution of local policy to ensure that regional and sub-regional targets are achievable.

The remainder of PPS22 focuses on locational and other considerations to be taken into account. With respect to international designations such as SPAs, SACs and RAMSAR sites, renewable energy proposals would only be acceptable if they do not adversely affect the integrity of these designations or there are reasons of overriding public interest.

Projects within National Parks, Areas of Outstanding Natural Beauty (AONBs), Heritage Coasts, Sites of Special Scientific Interest (SSSIs) and National Nature Reserves (NNRs) will be granted planning permission where they can demonstrate that the objectives of the designation would not be compromised by the development and that any significant effects are outweighed by the benefits. Paragraph 12 further states that small-scale developments should be permitted in nationally designated landscapes provided that there is no serious harm to the area concerned.

Paragraph 14 clarifies the position of “buffer zones” and states that these should not be created around international or national designations. Nonetheless, it goes on to say that the potential impact of renewable energy projects on such designations would be a material consideration in determining any planning application. Paragraph 15 advises that, in themselves, local landscape and nature conservation designations should not be used to refuse planning permission for renewable energy developments.

With regard to visual effects, PPS22 advises that “Policies in local development documents should address the minimisation of visual effects (e.g. on individual turbine sites, layout, landscaping, design and colour of schemes), rather than trying to provide specific criteria against which potential harm is assessed”. With respect to wind turbines, local authorities should:

“...recognise that the impact of turbines on the landscape will vary according to the size and number of turbines and the type of landscape involved, and that these

impacts may be temporary if conditions are attached to planning permissions which require the future de-commissioning of turbines.”

Other matters specifically related to wind turbines include noise, where it states that the method of assessment for this issue is set out in the “The Assessment and Rating of Noise from Windfarms”¹⁵. Finally PPS22 advises that development plans should not include policies relating to the impact of wind turbines on aviation interests including radar and aircraft or on the separation distances from roads, power lines or railways, but it is for the developer to resolve these issues prior to planning applications being submitted.

Planning for Renewable Energy: A Companion Guide to PPS 22

The PPS22 Companion Guide was issued by the Office of the Deputy Prime Minister in November 2003. The introduction quotes the House of Lords Science and Technology Committee in a session on the practicalities of renewable energy:

“The sources of renewable energy ... are inexhaustible, indigenous and abundant, and their exploitation, properly managed, has the potential to enhance the long-term security of the United Kingdom’s energy supplies and to help us cut carbon dioxide emissions.”

Whilst PPS22 sets out the policy context for action, the Companion Guide offers practical advice as to how these policies can be implemented on the ground. Regional and local action is identified as a key element in the successful implementation of the policies, with regard to both the strategic/forward planning and development control elements of regional and local planning. Each of these is addressed in the Guide. Case studies are used to illustrate key points and to demonstrate how specific issues can be addressed. The Technical Annex provides specific advice on the range of renewable energy technologies.

Chapter 2 gives the context of the ‘Bigger Picture’ of global climate change and the guiding principles in planning for renewable energy. Issues of Sustainability Appraisals, environmental-

¹⁵ Energy Technology Support Unit (1996) *The assessment and rating of noise from wind farms*. ETSU for the Department of Trade and Industry. ETSU-R-97

economic-social benefits, and community involvement are discussed and examples set out. On the matter of criteria-based policy, paragraphs 2.16 – 2.18 states that they are:

“an essential part of the approach established under PPS22. The policies at regional level will provide the link between targets and the identification of broad areas where different renewable technologies may be located without causing unacceptable environmental impacts. At local planning authority level, criteria based policies should be developed to reflect specific local circumstances.”

Whilst this report will briefly analyse the advice on appropriate criteria-based policies at the local level, the Guide identifies that there are general guiding principles common to both regional and local levels:

There is a need to make clear in policy that the planning body or authority will be supportive of renewable energy proposals in locations where environmental, economic and social impacts can be addressed satisfactorily.

Discussions with relevant industry representatives will assist in clarifying the potential of broad areas (proposed in the regional spatial strategy) or specific locations where there are schemes being proposed (as part of the local development document preparation process). However, there is no requirement on the planning body or authority to refer in policy to the technical requirements associated with renewables since these may change over time.

Only the key criteria relevant to the level of planning should be included in order to assist decision-making at that level. This will ensure that the issues will be considered at the most relevant level with appropriate input from public involvement and statutory consultation. For some more detailed issues inclusion in a supplementary planning document may be more appropriate. Where supplementary planning documents are produced, local planning authorities should ensure that consultation is undertaken, including consultation with industry representative groups.

Chapter 4 of the Companion Guide deals with planning policy issues at the local level in which local planning authorities are advised to prepare policies relating to both stand alone renewables schemes and for the integration of renewable energy within the built environment. Such policies may be backed up by Supplementary Planning Documents. Further to this the obligation for local planning authorities to revisit their development plan policies under the Planning and

Compulsory Purchase Act 2004 presents a useful opportunity to local authorities to raise the profile of renewable energy.

The key issues cited in the Guide in planning for renewables at the local level include:

- the introduction of the spatial planning approach within the new system provides an important opportunity for integrating renewable energy generation into the wider local planning framework;
- local planning authorities should prepare criteria-based policies that focus on key local issues, within the framework set out by national planning policy and the Regional Spatial Strategy, or Spatial Development Strategy in London. Policies may relate to stand alone schemes or the development of integrated renewables within developments;
- supplementary planning documents can be useful in illustrating how particular types of technology, or passive solar design principles, can be applied in the particular local context;
- some local planning authorities have set specific targets for on-site generation; it may be appropriate for other authorities to do the same, and this should be considered by policy-makers in preparing local development documents;
- local planning authorities have the scope to demonstrate practical support for renewable energy through their procurement strategies; and
- local planning authorities should encourage community involvement in planning for renewable energy, through consultation exercises during plan-making and also, where possible, by supporting appropriate community-led development proposals.

Criteria-based policy at the local level is required to give guidance both in relation to stand alone renewable energy schemes and the integration of renewable energy into new development. It is advised that a plan will contain two different policy areas: an overarching policy in the core strategy relating to the renewable energy and sustainability objectives of the LPA and an energy development policy document within the local development framework. Both policies could be supported by supplementary planning documents on the range of issues pertinent to renewable

energy and by guidance on the incorporation of design principles into new build. Examples of best practice relating to these policies are given in paragraphs 4.14 – 4.14 of the Guide.

In respect of landscape issues, one of the most sensitive issues associated with renewable energy, particularly wind energy, the Guide advises that a LPA may wish to undertake a landscape capacity and sensitivity analysis in order to support decision making outside of nationally protected areas. Character areas could form the basis for considering which technologies at which scale may be appropriate in different locations, although the LPA should not prescribe specific locations or technologies that may be suitable to particular sites or areas.

On the matter of supplementary planning documents, the Guide identifies that they could play a critical role in implementing renewable energy schemes and act as a tool for raising awareness of the potential of renewable energy technologies. The supplementary planning documents, which should only elaborate on the policies and proposals in development plan documents, as identified in paragraph 4.20, may include the following:

design guidance (among other topics, general design guidance may include reference to potential for passive solar design, or building-integrated renewables such as Photovoltaics); and

site development briefs (inclusion of renewable energy generation as a potential future use of specific major brownfield sites, or reference to potential for passive solar gain through careful site layout, for example.

Advice on public involvement in the development plan preparation and the encouragement of community-led initiatives is provided in paragraphs 4.21 – 4.32.

Regional Planning Guidance for the South West – Energy Efficiency and Renewable Energy

Regional Planning Guidance 10 (RPG10) for the South West¹⁶ was published in September 2001 and provides:

¹⁶ Government Office for the South West (2001) *Regional Planning Guidance for the South West (RPG10)* DTLR September 2001

- A regional spatial strategy within which local authority development plans and local transport plans in the South West should be prepared
- A broad development strategy for the period to 2016 and beyond
- A spatial framework for other strategies and programmes.

Section 9 of RPG10 sets out the policy relating to energy efficiency and renewable energy. The relevant policy on renewable energy, RE 6, states the following:

Policy RE 6: Energy Generation and Use

Local authorities, energy suppliers and other agencies should:

support and encourage the region to meet the national targets for:

a 12.5% reduction in greenhouse gas emissions below 1990 levels by 2008-2012 and a 20% reduction (from 1990 levels) in carbon dioxide emissions by 2010;

a minimum of 11-15% of electricity production to be from renewable energy sources by 2010;

encourage and promote the greater use of renewable energy sources, including community-based projects, such as Combined Heat and Power and Community Heating and their integration into more energy efficient new build or redevelopment proposals;

have full regard to the recommendations and detailed background information contained in the report “Renewable energy assessments and targets for the South West” (GOSW APRIL 2001).

Development Plans should:

specify the criteria against which proposals for renewable energy projects will be assessed, balancing the benefits of developing more sustainable forms of energy generation against the environmental impacts, in particular on national and international designated sites;

promote energy conservation measures through policies guiding the design, layout and construction techniques of new development proposals.

The explanatory notes to this policy given in paragraphs 9.32 to 9.35 restate the international climate changes objectives and the need to ensure energy consumption is reduced through renewable energy and energy efficiency. Paragraph 9.34 identifies the issues associated with the provision of a grid transmission infrastructure and the need to assess associated impacts, whilst stating that a diversity of supply should be an objective of development plans and that sub-regional targets should be developed. Paragraph 9.35 states that it is important that renewable energy schemes are compatible with other environmental objectives for the region and that environmental impact must be addressed by developers. It further states that rural development opportunities could be enhanced through the use of biomass fuels to generate energy.

REvision 2010: Establishing County/Sub Regional Targets for Renewable Energy Electricity Development to 2010

REvision 2010, funded by GOSW and the South West Regional Assembly, supersedes the South West regional renewable energy resource assessment carried out by Terence O'Rourke and ETSU in 2001. The overriding objective of REvision 2010 was to support the attainability of the 10% renewables target set by the Energy White Paper 2003 through encouraging the adoption of county or sub regional targets for renewable energy up to 2010.

Through a combination of sub regional resource mapping, consultations and workshops REvision 2010 was able to establish the technical, economic and environmental feasibility for renewable energy development in the South West region. This process resulted in the formulation of renewable energy targets for each of the Counties in the South West. For Devon, the target range has refined to 151 MW to be developed prior to 2010. This would generate approximately 623 GWhrs, which would provide for the equivalent of 155,750 homes. This would represent the electricity equivalent of roughly half of the total County population based on 2001 Census figures for 278,576 domestic homes.

Of this target, 26MW is expected to arise from biomass, 5MW from small scale hydro and 103MW from onshore wind.

Conclusions on National and Regional Perspectives

PPS22 plainly sets out the Government's policies with respect to achieving 2010, 2020 and 2050 targets on the implementation of renewable energy developments. It provides much needed clarity on issues relating to development within, and more importantly, on the fringes of nationally and internationally designated areas and advises that local landscape and nature conservation designations should not be used in themselves to refuse planning permission for renewable energy developments.

Overall, PPS22 will serve as an important driver in ensuring that the Government's targets and aspirations set out in the Energy White Paper will be delivered through the land use planning system. In this respect, it provides a very important material consideration in the determination of any planning application for renewable energy development.

RPG10 reflects and reinforces the national guidance and will further assist the implementation of renewable energy developments in the South West. It provides clear guidance on the targets to be achieved on a sub regional basis and states that all development plans should have full regard to the findings of the GOSW 2001 renewable energy assessments and targets, which have since been superseded by the GOSW 2004 REvision 2010 renewable energy assessments and targets. It can safely be presumed that the REvision targets would be equally supported by this regional guidance. RPG10 further requests that local planning authorities specify the criteria against which renewable energy proposals should be assessed and emphasises the need for the incorporation of energy conservation and efficiency measures into new development proposals. Overall, PPS22 and RPG10, in combination with the renewable energy targets set out in REvision 2010, set in place a strong framework for the development of renewable energy in the South West.

Structure and Local Development Plans

Devon Structure Plan 2001 to 2016

The Devon Structure Plan was adopted in October 2004 and provides an up-to-date policy context for renewable energy. Policy CO12 relates specifically to renewable energy developments:

Policy CO12

Provision should be made for renewable energy developments, including offshore developments, in the context of Devon's sub regional target of 151MW of electricity production from landbased renewable sources by 2010, subject to the consideration of their impact upon the qualities and special features of the landscape and upon the conditions of those living or working nearby.

In providing for strategic wind based energy production in the period to 2016, priority should be given to locations within the areas of search identified on the Key Diagram¹⁷.

The Policy clearly makes the recommendation that local planning authorities should plan positively in order to contribute to renewable energy targets, and cites the areas of search as pivotal for the development of strategic wind based energy production. However, such planning should take into account potential impacts to the landscape and the amenity of those living or working near to renewable energy developments. Included amongst the policies that are relevant to balancing the need for renewable energy with landscape and amenity issues are:

- Policy CO1, Landscape Character and Local Distinctiveness: policies and proposals within each part of Devon should be informed by and be sympathetic to its landscape character and quality
- Policy CO2: National Parks: with respect to Dartmoor National Park, the conservation and enhancement of the natural beauty, wildlife and cultural heritage will be given priority over other considerations in the determination of development proposals. This is relevant also to developments outside the National Park.
- Policy CO3, Areas of Outstanding Natural Beauty: once again the conservation and enhancement of the natural beauty of AONBs is to be given priority over other considerations, both for developments within and adjacent to such areas.

¹⁷ The Key Diagram identifies the 'areas of search' as being located mostly in Torridge and North Devon local authorities, but also partly into West Devon and Mid Devon. The area of search in Mid Devon is located west-north-west of Tiverton and south of the A261. This area is pinched between two Areas of Great Landscape Value.

- Policy CO4, Areas of Great Landscape Value: the conservation and enhancement of the landscape quality and individual character of the AGLVs is recognised and development should only be permitted where it would be limited in its visual impact.
- Other policies of relevance: CO5, Coastal Protection Area; CO6 Quality of New Development; CO7, Historic Settlements and Buildings; CO8, Archaeology; CO10, Protection of Nature Conservation Sites and Species; CO14, Conserving Agricultural Land; CO16, Noise Pollution; and TO6, Long Distance Recreational Footpaths and Cycle Routes

No explanatory memorandum or explanatory paragraphs accompany the Devon Structure Plan.

Mid Devon District Local Plan – Deposit Draft (September, 2002)

The Mid Devon Local Plan First Alteration was published for consultation in October 2001. The "Revised Deposit" was published for further comment in September 2002, which was subject to a number of "Pre-Inquiry Changes". The Local Plan Inquiry was held from July 2003 to April 2004 and the Inspector's Report on the proposed Plan is expected to be received in November 2004. It is expected that the recommendations of the Inspector's Report will be considered by the Council in 2005, with the expectation that the Mid Devon Local Plan First Alteration should be adopted in 2005.

The main policy relating to renewable energy is ENV3: Renewable Energy. The policy is as follows:

ENV3: Renewable Energy

Proposals for wind turbine development will be permitted provided that:

Any connection to the electricity generating grid is visually unobtrusive: and

It has no unacceptable impact on other uses in terms of noise, shadow flicker, road safety and electro-magnetic production and interference (e.g. television, radio and microwave transmission). To this end, there will be no residential property lying within 400 metres of any turbine and turbines are to rotate in one direction (this would not apply to small scale domestic schemes serving a single dwelling); and

The site is reinstated, should it cease to operate, to its condition before the development took place; and

Within an AONB or AGLV the suitability of a site for potential wind energy generation outweighs the impact upon the special landscape character of the designated area.

In all cases, where there are likely to be significant effects on the environment the council will require an environmental assessment of a proposal's impact.

Paragraph 5.6 of the Deposit Draft identifies the pressure placed on areas of national and county landscape significance arising from wind energy and that the benefits of wind power must be balanced against the need to protect the landscape whilst meeting sustainability objectives. This form of policy is common in many development plans but it still leads to uncertainty in how developers and planners reach the balance of opinion. The need for renewable energy and landscape protection are equally encouraged through national and local planning policy guidance and therefore may come into conflict. Such conflict may be resolved through more detailed studies of the landscape, as have been commissioned by Mid Devon District Council, and it is possible that Supplementary Planning Documents that provides more prescriptive criteria against which to evaluate a wind energy proposal would shed more light on reaching a balance of opinion in determining wind energy applications.

With respect to small hydro, solar, biomass and methane energy, Policy ENV4 has been formulated as guidance on developments of this nature and the supporting text again cites the need to protect the landscape and the need to ensure the management of the site during the construction phase.

Policy ENV4

Other Renewable Energy Sources

Proposals for other forms of renewable energy will be permitted provided that:

any connection to the electricity generating grid is visually unobtrusive; and

existing buildings are used as far as possible to house generating plant and associated machinery; and

all services are buried underground as far as possible.

Further policies that are of relevance to renewable energy are ENV1 and ENV2 which address protection of the landscape. ENV1 states that priority will be given to the protection of the Blackdown Hills Area of Outstanding Natural Beauty. Development that is deemed to have an adverse effect on the natural beauty, character and quality of the landscape will not be permitted and only development that pays particular regard to the context and to landscape and settlement character. Similarly development proposals outside but affecting the AONB will be judged against landscape, nature conservation, heritage and socio-economic criteria to determine whether they are acceptable or not. Policy ENV2 sets out to protect the wider landscape, especially those areas designated Areas of Great Landscape Value.

Conclusions

There is strong support for renewable energy through the Devon Structure Plan, which is exemplified by a commitment to the generation of 151MW of renewable energy by 2010, by far the highest target of all the Counties of the South West. Devon will therefore shoulder the majority of the South West's renewable target. The areas in Devon which are suitable for wind turbine development have been identified in the Structure Plan and are generally devoid of designations, although there may be grid and road infrastructure issues to be resolved. There is a strong drive for regeneration in mid Devon and renewable energy is identified as being one of the options open to the agricultural community.

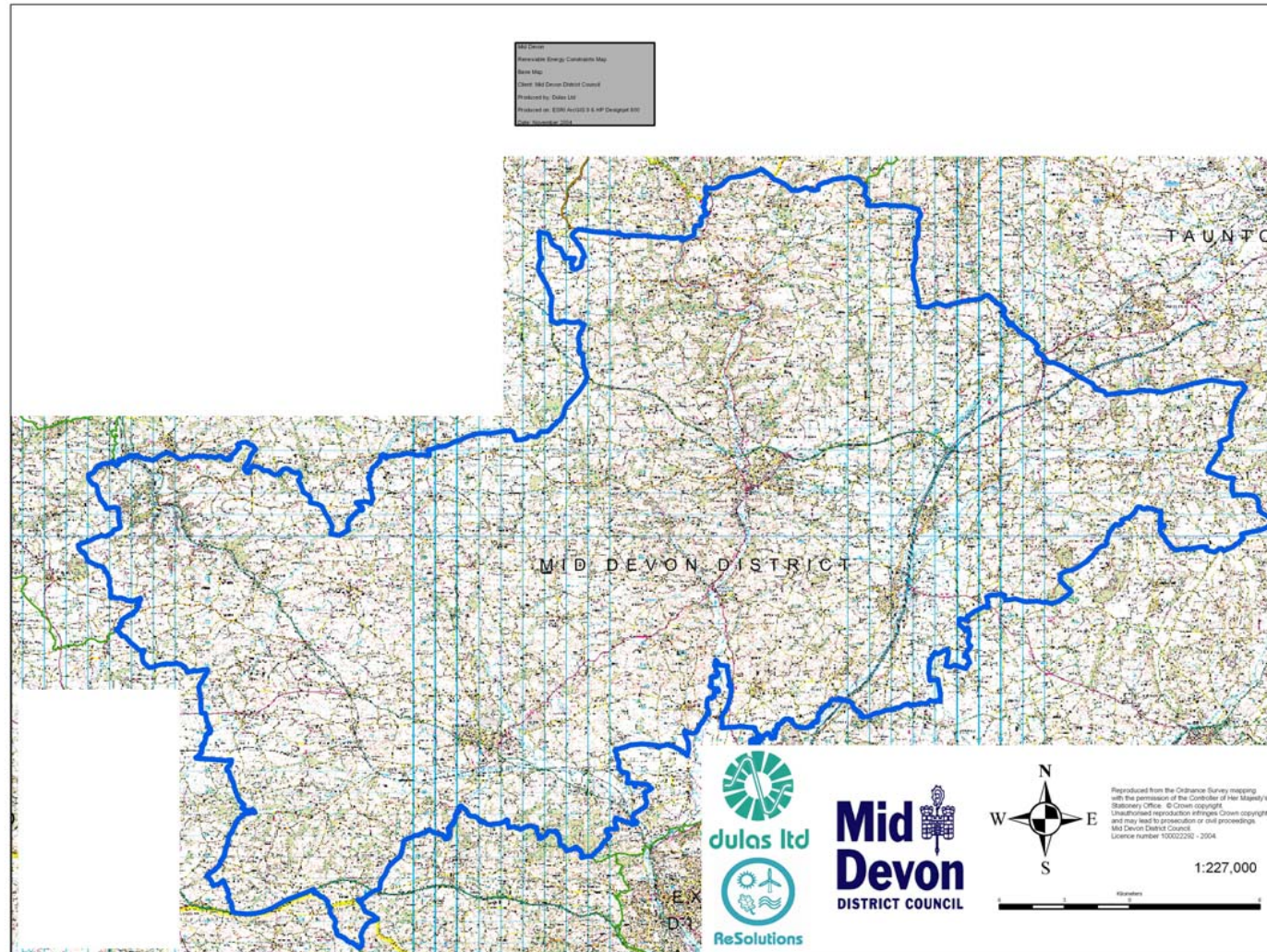
The Draft Deposit of the Mid Devon Local Plan reflects the positive slant of regional planning policy guidance by encouraging renewable energy developments whilst citing the criteria against which applications are to be judged. Whilst the County Structure Plan identifies broad areas of wind energy potential these have been removed from the Draft Deposit of the Local Plan because of the "uncertainty" they may cause. This is line with national planning policy guidance which states, in paragraph 7 of PPS22, that local planning authorities should "*only focus on the key criteria that will be used to judge applications*". However, whilst the Deposit Draft identifies the protection of nationally designated sites and the need for development proposals to demonstrate that they do not compromise the objectives of the designations, Policy ENV1 clearly still presents, in effect, what could be construed as a buffer zone that is specifically encouraged against in paragraph 14 of PPS22. Further to this paragraph 15 states that local landscape designations should not be used in themselves to refuse planning permission for renewable

energy developments whereas Policies ENV2 and ENV3 both cite the protection of the AGLVs as an important determinant of whether renewable energy developments should be permitted. Some conflict remains therefore between national and local planning policy guidance; however the Deposit Draft does set out the criteria based policies and the criteria specific to the type of landscape area specified (ENV2) against which to evaluate a proposal, in line with national guidance.

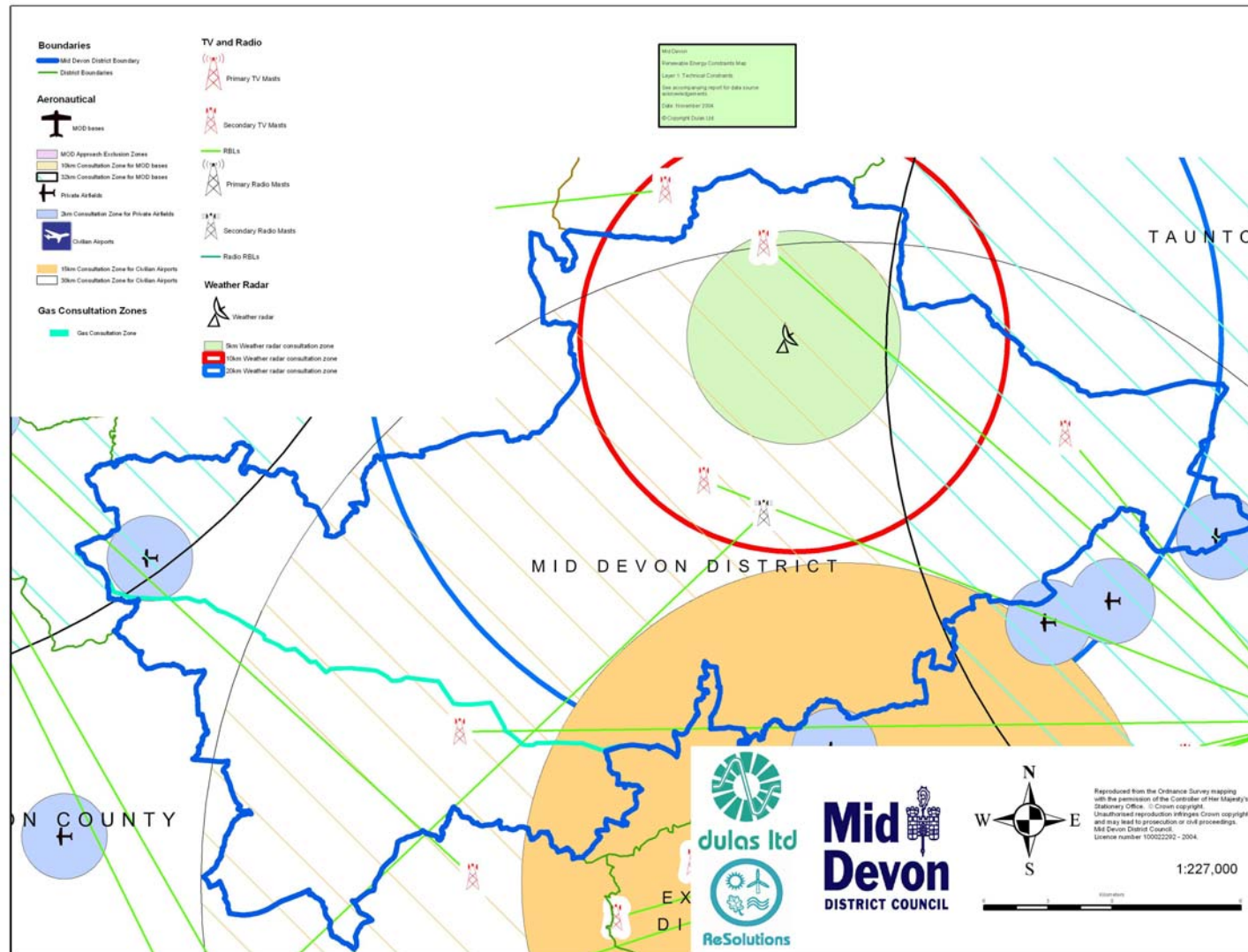
The Policies in the Deposit Draft do not elucidate the appropriateness of the criteria in determining applications for both rural and urban areas. There is no such delineation between urban and rural in the Draft. Similarly, there is no mention in the Deposit Draft of the encouragement of small scale renewables, clearly prescribed by PPS22 which states that “*Local planning authorities should specifically encourage such schemes through positively expressed policies in local development documents*”. This appears to be an omission from the Deposit Draft. Further omissions appear to include an absence of a policy to foster community involvement in renewable energy projects (Key Principles of PPS22, 1 (vii)), the failure of the Policies to state the minimum separation distances between different types of renewable energy projects and existing developments for noise purposes along with the prescription of ETSU-R-97 as the guiding methodology for noise assessments (paragraph 22), and the need for clearly stated criteria on the effects of transport on traffic levels arising from biomass projects. These are considered to be omissions because local planning authorities are expected, under the Key Principles to PPS22, to set out the criteria that will be applied in assessing applications for planning permission for renewable energy projects. These omissions could be redressed through late revisions to the local development documentation or the issuance of Supplementary Planning Documents.

Appendix 2: Illustrations of the GIS Constraints Mapping for Mid Devon District

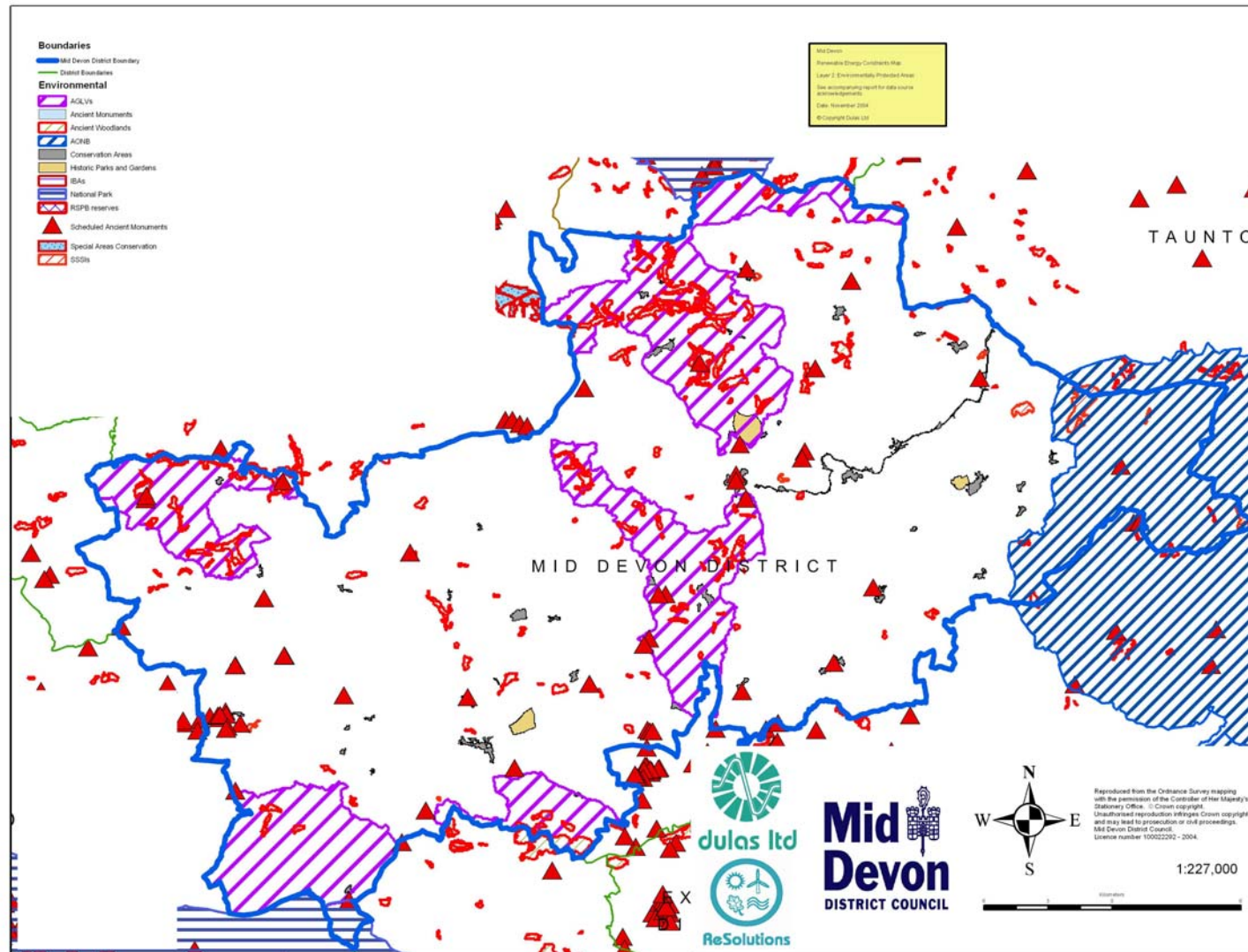
BASE ORDNANCE SURVEY LAYER FOR THE DISTRICT



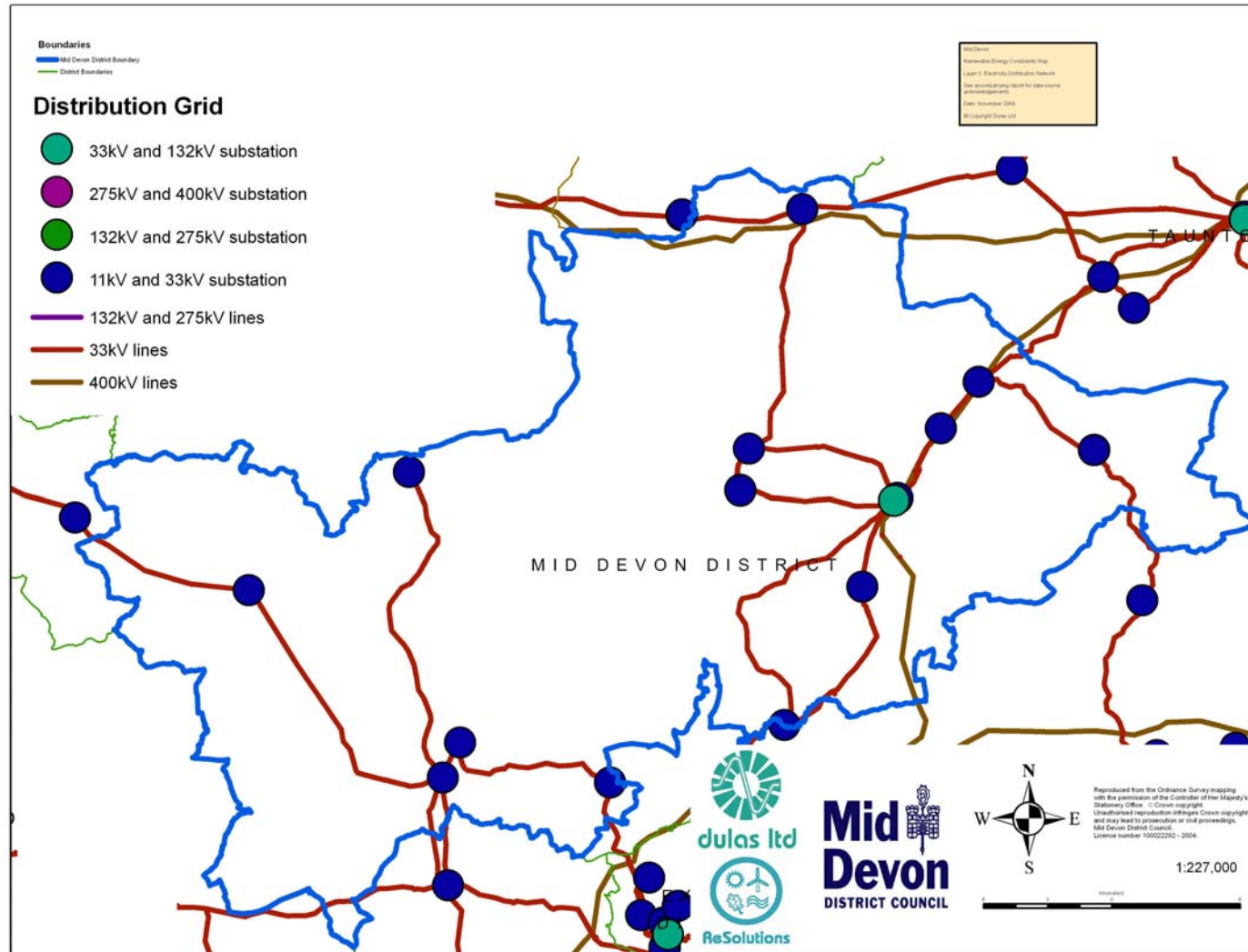
TECHNICAL CONSTRAINTS



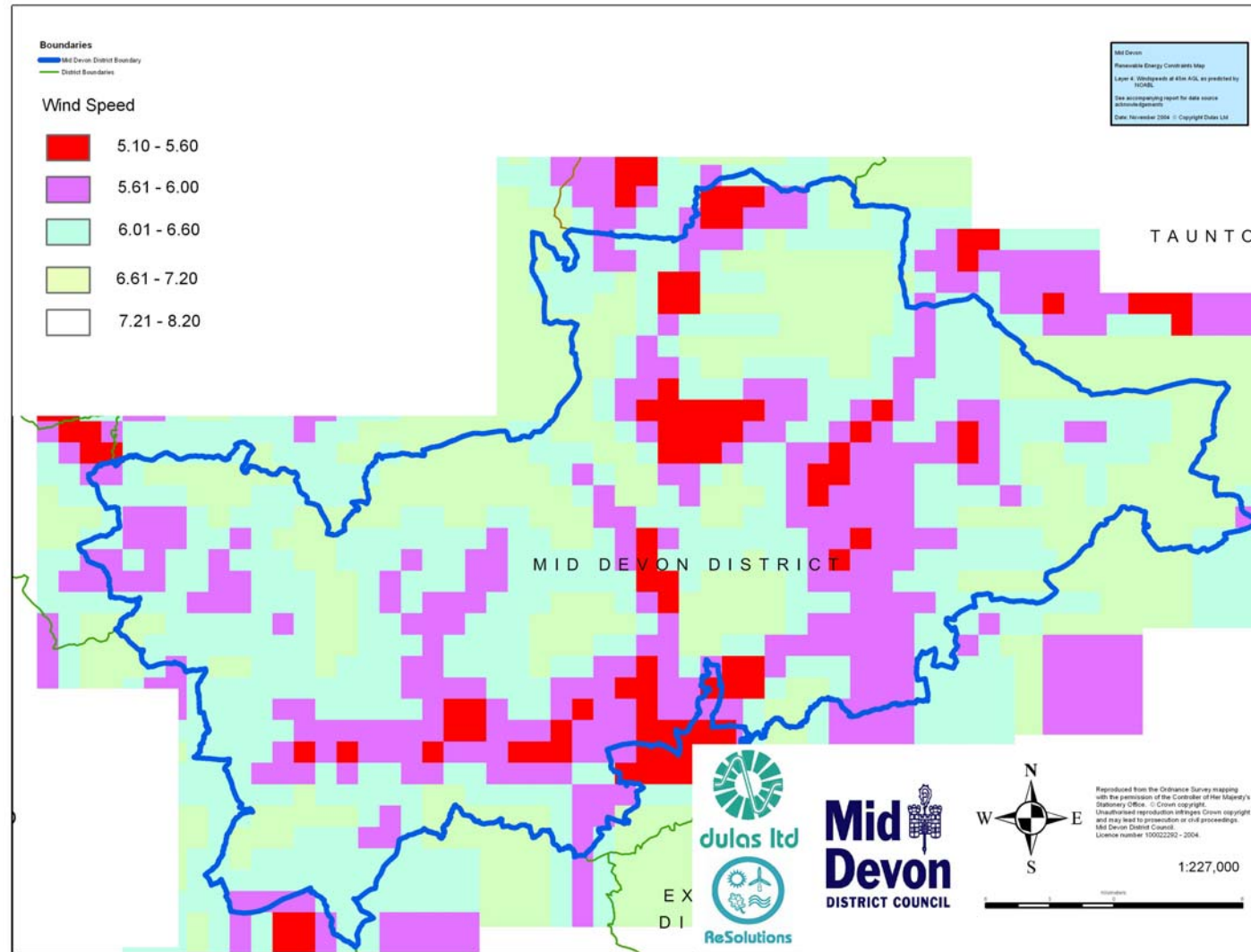
ENVIRONMENTALLY PROTECTED AREAS



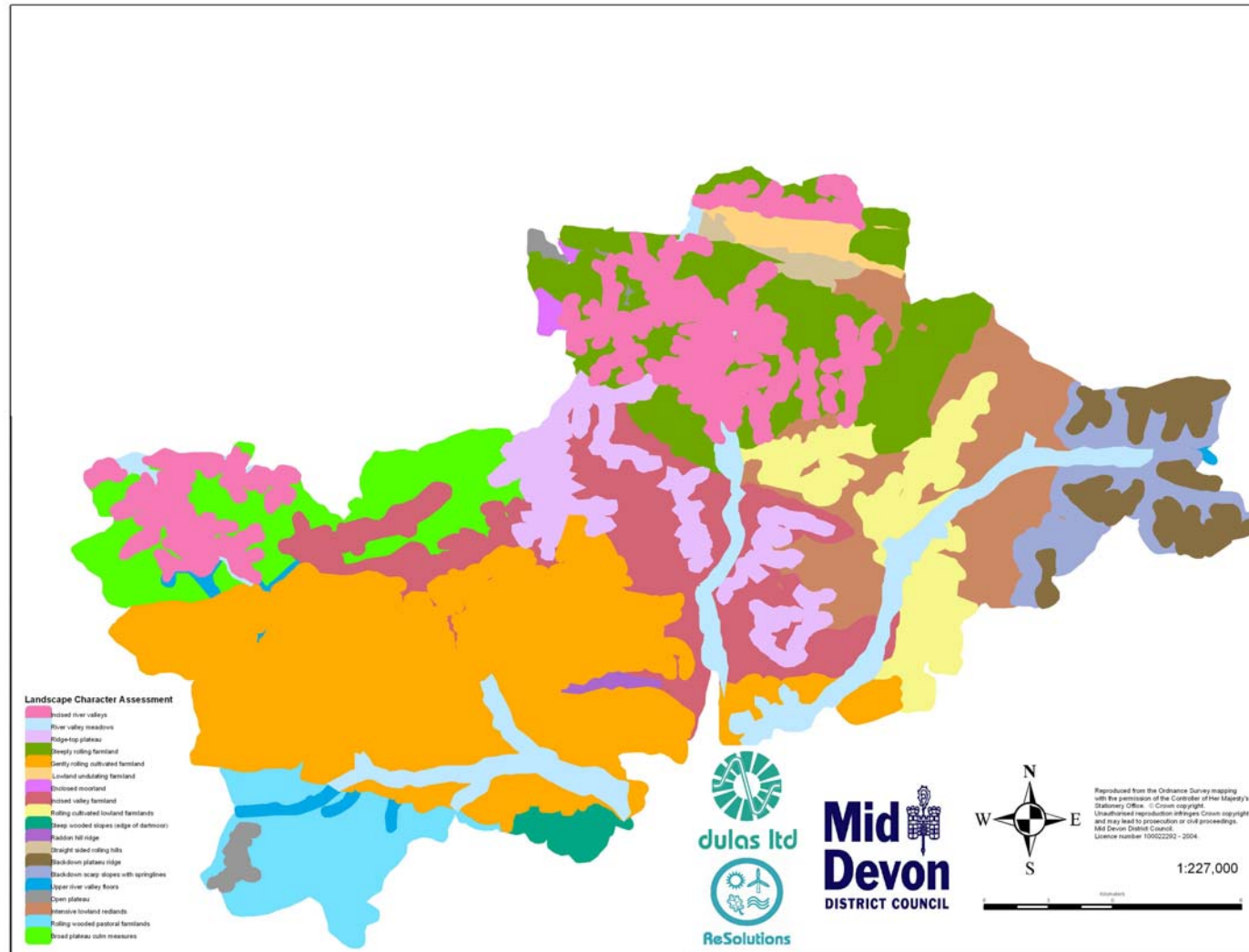
ELECTRICITY DISTRIBUTION NETWORK



WINDSPEEDS AT 45 METRES ABL AS PREDICTED BY NOABL



LANDSCAPE CHARACTER AREAS FOR THE DISTRICT



Appendix 3: Workshop Structure

RENEWABLE ENERGY

IN

MID DEVON DISTRICT COUNCIL

Planning, Environmental and Technical Assessment Workshop for Wind, Hydro and Biomass

Time and **Wednesday 14th December 2004**
Location **9.30am (Registration from 9.00am) to approximately
4.00pm**
Council Planning Offices, Tiverton

Participants District Council Forward Planning and Development Control Officers
Dulas Ltd (Mike Phillips, Dr Conrad Trevelyan, Sally Archer)
Albro Planning and Environmental (Peter Newland)

Anne Priscott Associates (Anne Priscott)

Outcomes

The workshop will:

1. set the context for renewable energy development in the UK;
2. present the findings of the Renewable Energy study, including planning policy guidance, technical and environmental constraints mapping and the landscape character assessment;
3. offer an assessment of the scale of wind, hydro and biomass energy deployment that might be feasible in the District and set this in the context of renewable energy targets for 2010 and beyond;
4. give delegates a good basic understanding of the issues relating to wind, hydro and biomass energy development that will be of benefit in appraising and scoping planning applications that are likely to come forward in the near future; and
5. present possible options for identifying suitable broad areas for such developments and a discussion forum for potential Supplementary Planning Documents on renewables.

Agenda Overleaf

Agenda	Topic	Speaker
09.00	Registration	
09.30	Welcome and Introduction	Simon Thorney, MDDC
09.45	Overview of the Workshop and Objectives	Peter Newland
10.00	Overview of the three generating technologies: wind, hydro and biomass	Dr Conrad Trevelyan
10.45	Market Drivers: Developers' perspective	Pete Newland
11.15	Questions and answers	Panel
11.35	Tea and Coffee	
12.00	Planning Perspective: National, Regional and sub- Regional perspectives	Michael Phillips
12.25	EIA Process and Development Control experience	Sally Archer
12.50	Questions and answers	Panel
13.00	Outline of afternoon: aims and approach	Peter Newland
13.45	Lunch	
14.15	Overview of findings of Landscape Character Assessment	Anne Priscott
14.35	Questions and Answers	Panel
15.00	Presentation of Findings from GIS mapping exercise	Dr Conrad Trevelyan
15.15	Discussion session on GIS mapping and implications for MDDC	Panel and participants
	Tea	
15.35	Where do we go to from here? Open discussion on how to contribute to the sub-regional targets, the need for relevant planning policy guidance and use of the Constraints Maps	Peter Newland, Panel and participants
16.00	Conclusions and close	Peter Newland

Appendix 4: Renewable Energy Workshop Attendees

Mid Devon District Council

Simon Thornley	Senior Planning Officer
Dave Scott	Forward Planning and Conservation Manager
Belinda Lau	Assistant Planning Officer
Jenny Clifford	Area Planning Officer
Alison Fish	Area Planning Officer
Keith Garside	Area Planning Officer
Jeremy Ebdon	Planning Officer
Amy Taylor	Planning Assistant
Lucy Hodgson	Planning Officer
Mike Griffiths	Planning Assistant
John Matthias	Environmental Coordinator
Clive Dines	Principal Planning Officer

Dulas Ltd and Albro Planning and Environmental

Peter Newland	Albro Planning and Environmental
Michael Phillips	Dulas Ltd
Sally Archer	Dulas Ltd
Conrad Trevelyan	Dulas Ltd
Anne Priscott	Landscape Architect

Appendix 5: Powerpoint Presentation from the Renewable Energy Workshop

Appendix 6: Potential Economic Benefits arising from Renewable Energy

Introduction

In the late stages of preparation of this report Mid Devon District Council requested an outline of the potential economic benefits that can arise from renewable energy. Such an outline would accompany a parallel study for MDDC on rural diversification. Following is some generic information on the potential economic benefits; however, it should be supplemented by more detailed research through analysis of the following reference documents:

- Department of Trade and Industry (2004) *UK Energy Sector Indicators 2004* A Supplement to the first annual report on the Energy White Paper. DTI Pub 7313/3k/04/04/NP. URN 04/193
- European Wind Energy Association (2004) *Wind Energy: The Facts. An analysis of wind energy in the EU-25*.

There are likely to be other analytical papers and research documents available for reference but it has not been possible to highlight these in the short timeframe before submission of this report.

Potential Economic Benefits

In the past socio-economic issues were not necessarily construed as ‘material considerations’ in planning applications as they were not considered to be land use matters. However, recently they have often been proven to comply with policy planning guidance for rural and agricultural diversification, and the creation of community benefits, and have occasionally been considered as an element of a planning application.

Recently, Planning Policy Statement 22: Renewable Energy (National Planning Policies 1 (iv) of the Key Principles), stated that economic benefits are now material considerations in planning applications.

In addition, an analysis of the environmental benefits generated through greenhouse gas saving, offsetting of emissions instrumental in acid rain and industrial pollution, and a quantification of

the equivalent number of properties that would be served by renewable energy developments are now considered material to planning application under PPS22.

The expected benefits of a renewable energy development are as follows:

- Local and regional employment during the construction phase of the wind farm delivered under three key contract areas:
 - civils design and build contracts available for award to suitably qualified local or regional companies;
 - equipment supply contracts for wind turbines, hydro systems or biomass generators;
 - grid connection: the regional Distribution Network Operator will receive a significant volume of work to connect the development to the local grid.
- Further long-term employment possibilities exist through the requirement for ongoing operational management and/or maintenance of the renewable energy development.
- Reliable income streams for landowners through lease payments or direct partnership with developers, thereby facilitating measures for rural diversification.
- Community Benefits' Packages: please see below.

In addition to the above benefits, many developers have been keen to implement direct community benefits' packages financed from the renewable energy development cash flows. The purpose was usually to increase public acceptability of such developments (they are less likely to oppose such developments if they can benefit from them) and increase the chances of planning success. Recently, however, local planning authorities are requesting the formulation of initiatives that include localised socio-economic benefits, in light of the guidance in PPS22; developers in response are increasing the level of funds made available to local communities and identifying mechanisms to achieve this. Typical examples include:

- Investment share schemes or bond issues so that local people can invest directly in renewable energy projects. The Baywind Cooperative and Bro Dyfi Community Renewables are good examples of such schemes.

- Apportioning a certain percentage of the generation benefits to energy efficiency measures to the communities linked to renewable energy schemes. Such measures engender the advantage of targeting reductions in energy demand whilst being financed by renewable energy developments.
- Investing the generation benefits in community trust funds operated locally, such as through Parish Councils or Community Councils, who will then distribute to local projects focussing primarily on the environment and energy.
- Investing the generation benefits in educational initiatives to encourage reduce energy demand and highlighting through schools' programmes the issues of climate change and global warming.

Such benefits' packages should be developed in conjunction with local communities so that they can identify and adopt schemes preferable to the local area.

Employment and the Economy – Wind Energy as an Example

As example, the wind industry today provides more than 50,000 jobs worldwide and is becoming more multinational as the industry is becoming more multinational as the industry matures and more manufacturing is established in new markets. In the UK, for example, there is no doubt that the demand for wind turbines in the UK is creating new employment.

In Denmark alone, 20,000 people make a living from wind energy, designing and manufacturing wind turbines, components, or rendering consultancy and engineering services. Today employment in the Danish wind industry is larger than, for example, the fishing industry. Under current European market conditions the installation of each 1 MW of wind power creates jobs for between 6 and 16 people (DTI, 2004). In more labour intensive parts of the world this figure may double. Further jobs will also be created, including jobs in operation, service and maintenance. A timetable for the development of wind energy in Europe is set out in the table below:

Year EWEA goals	MW	Jobs created Man years
1996	3,500	-
2000	8,000	72,000
2010	40,000	512,000
2020	100,000	960,000

“17 man-years are created for every MW of wind energy manufactured and 5 job-years for the installation of every MW” (EWEA, 2000).

The wind energy industry in the UK currently supports over 3,500 direct and indirect jobs (BWEA, 1997; DTI, 2004) and this is set to grow as more wind farms, both onshore and offshore, continue to be built across the UK.

The infrastructure requirements of wind energy are modest, whilst the potential direct gains in employment are considerable. It is a "high-tech" industry. Ninety per cent of the world's wind turbine manufacturers are European, with a combined annual turnover of more than one billion euros. The overall economic profile of wind power compares favourably with fossil fuel power stations. Whereas the costs of most forms of energy are expected to rise with time, the costs of wind energy are actually coming down (www.bwea.com, and ECD 2003).

In addition to direct employment in the industry, numerous other jobs are associated to a greater or lesser extent with wind power developments. These range from ornithologists carrying out bird studies on wind energy projects to factory workers fabricating steel or components; from laboratory technicians working on fatigue properties of materials to post-graduate students researching and perfecting blade design; and from civils construction engineers to planning consultants working on future wind energy projects. Wind energy demands a range of skilled professionals to develop wind farm sites, thereby contributing in a meaningful way to economic and employment generation.