9.0 RENEWABLE ENERGY

9.1 INTRODUCTION

9.1.1 The government's objectives for energy are set out in the Energy White Paper (February 2003). Its long term aim is to cut emissions of the main "greenhouse gas" carbon dioxide, by some 60% by 2050 and to make real progress towards this by 2020.

9.1.2 Grid-connected renewable energy will make a major contribution to this aim. Already the government target was to generate 10% of UK electricity from renewable energy sources by 2010 and the White Paper confirms a further aspiration to double the target to 20% by 2020. The Renewables Obligation calls on all licensed electricity suppliers in England and Wales to supply 15.4% of their electricity sales from renewable sources by 2015-16.

9.1.3 The Study, "Power to Prosperity", undertaken by Sustainability North West in 2001 suggests that Cumbria has the greatest potential contribution to make in achieving a regional target. The North West Development Agency has also highlighted renewable energy as a key growth sector in the Priority Areas for Regeneration of West Cumbria and Furness.

9.1.4 The Council recognises the benefits that both standalone and integrated renewable energy schemes can bring from a local to global scale. In land-use policy terms the important thing is to seek a balance between encouraging the development of renewable energy resources, taking into consideration the wider environmental, economic and social benefits of proposals, and appropriate ~~environmental~~ safeguards. ~~Policy ER13 of RPG requires an "Area of Search" approach to protect the most valuable and sensitive environments and Policy R39 in the JSP fulfils this at sub regional level on the back of a detailed assessment of potential carried out for the County Council and Sustainability North West in January 2003~~.

~~8.1.5 In the normal course of events the Council would undertake to more closely define the JSP's broad areas of search on the Local Plan Proposals Map. However, as this version of the Local Plan was being finalised the government published the draft of a new Planning Policy Statement on Renewable Energy (PPS 22, November 2003). The draft PPS suggests that local authorities should not base policy on assumptions about technical feasibility of renewable energy projects – which could undermine the work undertaken to define areas of search in the JSP. As a consequence the Council intends to proceed on the~~

~~basis of its existing suite of renewable energy policies noting that favourable consideration will be given to proposals within the areas of search indicated by the JSP authorities (and reproduced in Appendix 11 the Local Plan) so long as the proposals meet the criteria set out in the relevant policy.~~

9.1.5 The Council will expect developers of renewable energy schemes to engage with local communities regarding their proposals before a planning application is submitted. Utility companies will also be encouraged to discuss their proposals with the Council at an early stage.

9.2 RENEWABLE ENERGY SOURCES

9.2.1 Renewable energy resources can be categorised into three groups.

Primary: Energy derived directly from natural processes such as wind, wave, solar, tide, hydro and geothermal.

Secondary: Energy derived from animal and vegetable processes such as wood fuel and other vegetable based products either by biogestion or direct combustion.

Tertiary: Energy derived from urban and industrial waste such as land fill gas and municipal waste by biogestion and combustion.

The government provides assistance to most forms of renewable energy generation under the Renewables Obligation. Only hydro schemes greater than 10 megawatts and the processing of municipal solid waste do not currently attract assistance. Within Copeland there is the potential to exploit many of the resources mentioned above. In particular wind energy represents the most significant renewable energy source in the Borough.

Wind Energy

9.2.2 The best wind energy sites are open to constant high speed winds usually on the coast or on exposed hillsides and usually, therefore, in wild and unspoilt landscapes open to views from a wide area. The Council considers that the generally elevated, open nature of the areas designated as County Landscapes (Policy ENV 6) and the St Bees Heritage Coast (Policy ENV 7) make them particularly unsuited to this form of development ~~and even small-scale wind energy proposals, ie up to 10 turbines~~, and are unlikely to be acceptable if the character and appearance of these areas are to be safeguarded. The ~~protection of~~ impact upon other sensitive sites such as SSSIs,

sites of wildlife interest, RIGS, Scheduled Ancient Monuments and sites of local archaeological or historic importance must also be borne in mind along with affects on wildlife and the potential impact on residential amenity. Landscape impact is a test included in criteria 1 of Policy EGY 1 and this test will be assisted by use of Landscape Character Assessment currently being developed by Cumbria County Council in partnership with other Cumbrian local authorities to be brought forward subsequently as SPD (see also Section 5.2). ~~Generally the Council will not sanction larger scale developments, ie more than 10 turbines unless it can be shown that there is an overriding national need for a project and that the criteria in Policy EGY 1 can otherwise be met. Small clusters of turbines in the Areas of Search identified in the JSP (Appendix 11) outside the special landscape areas and other sensitive sites will be favourably considered subject to satisfactory detailed siting and so long as they meet the Policy EGY 1 criteria. In Copeland the most appropriate sites are likely to be coastal.~~ The Council will have regard to the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999 and where relevant proposals will be subject to Policy DEV9: Major Development. The Council will also take into account the cumulative effects of wind turbine developments in any locality so as to avoid significant adverse affects.

9.2.3 The Council also intends to adopt SPD to supply further guidance on achieving positive onshore wind energy development schemes as part of the Local Development Framework.

POLICY EGY 1: Wind Energy

~~**Proposals for large scale wind energy developments (more than 10 turbines) will not normally be permitted unless it can be demonstrated that benefits associated with a scheme outweigh environmental impacts and that the following criteria are satisfied:**~~

Proposals for ~~small scale~~ wind energy developments will be favourably considered so long as:

1. **The development including any service roads and transmission lines/equipment has no significant adverse impact on local landscape character**

2. **they do not involve unreasonable disturbance to local residents in terms of noise, visual**

intrusion, electro-magnetic interference, shadow flicker or reflected light

3. **they would not have a significant adverse effect on historic conservation or wildlife interests**

4. **they would not be prejudicial to highway safety**

5. **the development and any other existing or approved turbine groups in a locality would not ~~be their~~ have an adverse cumulative ~~effects have adverse~~ impact as regards the matters detailed in criteria 1-4 above**

6. **there would be no undue electromagnetic disturbance to existing transmitting or receiving systems and**

7. **there is a scheme for the removal of the turbines and associated structures and the restoration of the site to agriculture when the turbines become redundant.**

Where the proposals involve the installation of more than two turbines or the hub height of any turbine or any other structure exceeds 15 meters an Environmental Impact Assessment will be required and the proposal will be subject to Policy DEV9.

Other Sources

9.2.4 As outlined in 3.2.7 and Policy DEV 7 (5) the location and design of schemes can contribute to energy conservation. The use of solar radiation as a source of energy could be maximised by its incorporation into the design of buildings. Solar power can be utilised in a number of forms:

i) Active solar heating which requires the arrangement of solar collectors on external roof surfaces.

ii) Photovoltaics which involve roof mounted collectors of similar appearance which produce electricity as opposed to heat fluids.

iii) Passive solar heating which is more a set of principles used in the design of new buildings.

One of the principal factors when assessing proposals for solar energy production is its impact on the design and setting of the

building. Proposals that involve Listed Buildings are unlikely to be acceptable, similarly schemes within Conservation Areas would have to be carefully assessed.

POLICY EGY 2 : Solar Energy

Proposals for solar energy developments will be favourably considered so long as:

1. **the proposal does not affect the character and setting of a Listed Building, ~~or~~ Conservation Area or Landscape of County Importance**

2. **the installation is generally flush with the plane of the roof and does not in undue harm to the character of the building**

3. **light reflection from the installation would not adversely affect residential amenity or highway safety**

9.2.5 Small scale hydro electric schemes can be well integrated into the environment by exploiting rivers and streams with a reasonably constant flow. Proposals which require re-engineering of the watercourse or substantial infrastructure can have a significant impact on the landscape and ecological habitats and are unlikely to be acceptable. Currently no sites in the plan area have been identified as having potential for 100KW installed capacity which is the yardstick of economic viability.

POLICY EGY 3 : Hydro Electric Schemes

Proposals for Hydro Electric schemes will ~~normally~~ be permitted subject to the requirements of ~~policy DEV 6 and~~ other policies in the plan.

9.2.6 Some time ago a consortium of companies carried out a feasibility study into the potential of the Duddon Estuary for tidal energy but the overall conclusion was that such a scheme was not commercially viable at ~~present~~ at that time. The estuary is of international importance for nature conservation (see ~~5~~6.1.7/8 and Policy ENV 1), It is also a significant landscape feature and recreational site, and there would certainly have to be clear cut and wide ranging benefits, sufficient to outweigh the nature conservation and landscape/recreation interests of the site, for there to be any justification for such a development.

POLICY EGY 4 : Tidal ~~Barrages~~ Energy

The Council will ~~not~~ only support proposals for a tidal barrage or other tidal energy scheme across the Duddon Estuary ~~unless~~ so long as there are no imperative reasons of overriding ~~public~~ national interest which are sufficient to outweigh any damage to nature conservation and other interests. Proposals for all such development will be measured against Policy DEV ~~8~~ 9.

9.2.7 Bio-fuels ~~such as~~ for short rotation coppice can have a significant impact on the landscape especially if located in a sensitive area or on a large scale. The Council will encourage full consultation by developers. MAFF, the Forestry Authority and the County Council regarding proposed schemes.

9.2.8 Farm slurries, general industrial and commercial wastes such as paper, poultry litter and landfill gasses can provide a significant energy source by either biogestion or direct combustion. It can also offer opportunities for farm diversification. ~~However, the Council is determined to ensure that~~ sSuch development ~~does~~ must be of an appropriate scale and not pose a threat to the health, safety or amenity of adjoining neighbours and areas of landscape and conservation importance. Energy from the incineration of municipal waste is covered in Section 6.11 of the Cumbria Minerals and Waste Local Plan 1996-2006. Further issues regarding waste disposal and recycling are discussed in Section 6.7 of this Plan.

POLICY EGY 5 : Waste and Bio-fuels

Proposals for the generation of energy or heat from commercial, domestic and agricultural waste or Bio-fuels will be permitted so long as:

1. **the scale, design and siting of development is in keeping with its surroundings**

2. **no unreasonable disturbance to the locality is created in terms of noise, smell, fumes, dust or other airborne deposits or in terms of access and transport**

3. **no health and safety hazards are posed to the locality in the short or long term**

4. **there is no significant adverse effect on conservation or wildlife interest.**

5. **the site has direct access to the primary road network.**

Wherever possible new plant for the scheme should be located on existing industrial sites or previously developed land and where practicable measures to transport fuel and waste by rail shall be made.

9.2.9 ~~The County Council has indicated in its Areas of Search for Energy from waste and Biomass that only sites in or close to Whitehaven would meet the JSP Criteria~~. The use of landfill gas is covered by JSP Policy R4~~7~~51 and decisions on such development are managed by the County Council as part of waste-control. There is only one site north of Distington which is likely to have any potential in the Borough.