

Cranborne Chase Area of Outstanding Natural Beauty



POSITION STATEMENT

Number 5

RENEWABLE ENERGY

Background

Areas of Outstanding Natural Beauty are nationally designated areas of especially fine landscape. The Cranborne Chase and West Wiltshire Downs AONB has been established under the 1949 National Parks and Access to the Countryside to conserve and enhance the outstanding natural beauty of this area. The Countryside and Rights of Way Act 2000 now provides the statutory basis for the designation, administration, and management of AONBs. Natural beauty includes wildlife, scientific, and cultural heritage, and it is also recognised that in relation to their landscape characteristics and quality, National Parks and Areas of Outstanding Natural Beauty are equally important aspects of the nation's heritage assets and environmental capital.

The European Landscape Convention, which came into force in the UK on the 1st March 2007, defines landscape as “an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors”. It aims to ‘promote landscape protection, management and planning’. Clearly there are many aspects of renewable energy that contribute to sustainability but there are also factors that challenge and threaten the conservation and enhancement of fine and outstanding landscapes.

The National Planning Policy Framework (March 2012) seeks to achieve social, economic, and environmental gains jointly and simultaneously (paragraph 8). Pursuing sustainable development involves seeking improvements in the quality of the built, natural, and historic environment, as well as in people's quality of life (paragraph 9). The 12 principles of paragraph 17 include a focus on sustainable economic development and thriving rural communities as well as ‘the intrinsic character and beauty of the countryside’, ‘the transition to a low carbon future’, ‘conserving and enhancing the natural environment’, and conserving heritage assets ‘so they can be enjoyed for their contribution to the quality of life of this and future generations’.

Section 10 addresses ‘Meeting the challenge of climate change, flooding and coastal change’ where paragraphs 97 and 98 look to the positive promotion of energy from renewable and low carbon sources where the impacts of the

development are (or can be made) acceptable. Local Planning Authorities are exhorted to have a positive strategy for renewable and low carbon, including identifying suitable areas and supporting community led initiatives. Even small scale projects contribute to cutting greenhouse gas emissions.

Section 11 puts considerable emphasis on 'Conserving and enhancing the natural environment' with paragraph 115 indicating that 'Great weight should be given to conserving landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty, which have the highest status of protection in relation to landscape and scenic beauty'.

Paragraph 116 directs that planning permission of major developments should be refused in these designated areas 'except in exceptional circumstances and where it can be demonstrated they are in the public interest'.

Section 12, 'Conserving and enhancing the historic environment' focuses not just on heritage assets but also the impacts of developments on the setting of heritage assets, whether or not they are in an AONB.

Where farming land is proposed to be converted to solar energy generation the National Planning Practice Guidance (paragraph 013) requires a sequential consideration. This involves evaluating whether the use of 'greenfield' land is necessary and poor quality land is used in preference to higher quality, and whether the proposal allows continued agricultural use and/or biodiversity improvements. The Environment Secretary (19th October 2014) announced the intent to remove agricultural subsidies from agricultural land that is used for solar panels.

The 'Permitted Development' regulations within the overall planning system allow the installation of domestic renewable energy devices in many situations.

This AONB's [Landscape Sensitivity Study \[2007\]](#) highlights the inherent fragility of the landscape character of most of the landscapes of Cranborne Chase & West Wiltshire Downs.

The AONB Management Plan is a statutorily required document, approved by the Secretary of State and adopted by the constituent Local Authorities. The 2009 – 2014 version addressed renewable energy issues and the potential environmental impacts. The 2014 – 2019 Management Plan refines the approach to those issues.

Renewable Energy and the Cranborne Chase and West Wiltshire Downs AONB

Climate change is a major challenge facing all landscapes. The AONB recognises the national need for everyone to be more sustainable, and renewable energy has a significant part to play in this. That can be on both the individual and community level; with a scattered and sometimes remote population the AONB has a particular interest in community projects that enable people to take responsibility for their energy usage and the impacts of it.

Renewable energy takes many forms from simple wood fires through maize and oil seed crops, bio-digestion, and the capture of solar energy to wind turbines and wave / tidal devices. Being some distance from the coast this AONB is not affected by the latter, although water turbines in rivers are feasible.

The AONB Partnership supports renewable energy generation within the AONB or contiguous areas provided it is consistent with the primary purposes of AONB designation; namely, conserving and enhancing the landscape and natural beauty of the area. This position is consistent through the Cranborne Chase & West Wiltshire Downs AONB Management Plans [(2009 – 2014, pages 27, 31, and 37) and (2014 – 2019 pages 69 – 73)] which have been adopted by all the local authorities of the AONB.

The position is in line with Government Policy and adopted, and emerging local policies. At the same time these high level policy statements make it clear that the purposes of designating an AONB are not to be compromised. This makes sense as the contribution that can be made from the AONB to national and regional renewable energy generation objectives is relatively small while the harm to the landscapes of this area of nationally designated heritage enjoyed by many people could be great.

The impacts of renewable energy activities can vary from the short term appearance of an oil seed crop in a field through new plantings of rotational biomass crops to the long term provision of structures, buildings, and attachments to buildings in the landscape. Deciding whether these comply with the objectives of conserving and enhancing the natural beauty of the AONB can be tricky. The [Landscape Character Assessment for the AONB \[2003\]](#) provides a substantial evidence base, supplemented by the [Landscape Sensitivity Study \[2007\]](#), the [Historic Landscape Characterisation \[2008\]](#), and [A Landscape View of Trees and Woodlands \[2010\]](#), for considering the impacts of proposals on the landscapes of the AONB.

What Does Our Management Plan Say?

The AONB 2009 – 2014 Management Plan [2009, page 37], adopted by all the local authorities of the AONB, set the scene:

*7.42 **Renewable energy** - There is an increased demand for renewable energy. Developments must harmonise with the character of the area and inappropriate developments, such as visually intrusive wind turbines, should not be sited within the AONB boundary, its setting or impair significant views from it. Options for the AONB to help meet local energy needs on a scale that can be accommodated within the landscape include:*

- *wood-fuelled heating and hot water systems,*
- *micro-hydro electricity generation,*
- *on-farm bio-digestion,*
- *active solar and*
- *photo-voltaics.*

Objective F states: *The AONB Partnership and other stakeholders work together to secure the sustainable future of natural resources within and around the AONB.*

The relevant policies that flow from this Objective are:

Policy F1: *The exploitation of natural resources is managed so as to conserve and enhance the natural beauty of the AONB.*

Policy F2: *Reduce carbon emissions from activities within the AONB by applying energy conservation measures and encouraging more sustainable patterns of development.*

Policy F3: *Support renewable energy generation by technologies that integrate with the landscape character, are neither visually intrusive nor harmful to wildlife, and are of an appropriate scale to their location and siting.*

The more recent adopted **Management Plan 2014 – 2019** says: (pages 69 to 73)

13.11 *Developments in the setting of the AONB can also have significant impacts on the area and need to be considered in relation to the purposes of designation. Construction of high or expansive structures; development or change generating movement, noise, odour, vibration or dust over a wide area will affect the setting. As our appreciation of the relationships between neighbouring landscapes grows, so our understanding of what constitutes the setting continues to evolve.*

Sustainability

13.12 *There is increasing pressure for the AONB to accommodate within its boundary or its setting or impairing significant views to or from it, very tall or substantial structures such as wind turbines and telecommunication masts. Similarly, extensive farm scale photo-voltaic arrays also seek to occupy productive farmland. These types of developments can introduce a sense of 'industrialisation' into an otherwise unspoilt or tranquil landscape. They are frequently visually intrusive and fail to harmonise with the scale and character of the area.*

13.13 *Recycling storage space, composting areas, and roof based PV installations should be integral to the design of all new build, extensions and conversions.*

This leads on to the following Objectives and Policies

Objective PTB *Strategic and local decisions are formulated taking full account of the purposes of designation and are implemented in a comprehensive, coherent and consistent way with regard to the character and quality of the area and its setting, together with views into*

and out of the AONB such that these decisions result in no net detriment to the special qualities of the AONB

Policy PT13 *Local Planning Authority partners ensure that where new development is permitted it complements the special qualities of the AONB and takes full account of the area's setting and context through the consideration of appropriate Landscape Character Assessments and sensitivity and design studies.*

Policy PT14 *Support renewable energy generation by technologies that integrate with the landscape character, are neither visually intrusive to the AONB or its setting, nor impair significant views to or from it, are not harmful to wildlife, and are of an appropriate scale to their location and siting.*

Objective PTC *Policies and schemes to meet the housing and employment needs of local communities enhance the special qualities and characteristics of the AONB, including its built heritage*

Policy PT18 *Work with Local Authority partners to establish policies that encourage appropriate use of sustainable technologies, such as solar thermal, photovoltaics and wood fuel (at the appropriate scale) and provide sufficient space for short term handling of waste and recyclable materials, in both domestic and employment situations and, in particular, within all new build.*

What Has Been Achieved So Far?

The AONB Team has supported, via its Sustainable Development Fund, a number of successful renewable energy projects. It has responded to requests from people within the AONB and, in addition to facilitating the utilisation of micro-hydro electricity generation, it has sponsored two demonstration projects for wood fuelled heating. One is on a typical family farm and the other is linked to a Listed Manor House within a Conservation Area. On a 'business scale' another project helped to establish solar panels on farm buildings to heat water twice daily for a substantial dairy.

Woodlands are a particular characteristic of this AONB, however many of the smaller woodlands receive little management and their viability is in jeopardy. Stimulating the use of woodland products has been an objective of the highly successful Cranborne Chase & West Wiltshire Downs AONB Woodfairs, and the Sustainable Development Fund has supported demonstration projects that use wood fuel in domestic and farm scale situations. Adding impetus to the wood fuel market can facilitate the economic management of woods, aid the viability of smaller woodlands, provide business opportunities, and help conserve key landscape features of this AONB.

The AONB has actively encouraged the installation of PV panels on the roofs of existing and new agricultural buildings – where there are no conflicts with

Listed Buildings or Conservation Areas – to help offset the electricity costs of the use of those buildings and the associated farmstead.

The AONB Partnership has successfully challenged attempts to install large wind turbines close to the AONB boundary that would have had serious adverse impacts on views to and from the AONB and on the character of the AONB.

What Is The Situation In This AONB?

The appropriateness of renewable energy activities is considered in the context of policy guidance, the purposes of AONB designation, and the landscape characterisation and sensitivity studies. The social and economic aspects are taken into account, bearing in mind that the AONB is nationally designated for its landscape importance. Size, scale, and location are likely to be key considerations in assessments of the potential benefits and impacts on the landscapes of the AONB so some elements of renewable energy are more relevant or appropriate to this AONB than others.

Bio-energy comes in many forms. The information available to the AONB Team indicates that although bio-digestion and gas production [for direct use or conversion into electricity] may be conceptually attractive and viable on a small scale for the re-use of slurry from livestock enterprises, installed digesters are large and rely on specifically grown crops and imported green matter, often maize. These actions effectively reduce the land available for food production and therefore conflict with the primary objectives of farming. Bio-digestion schemes also involve somewhat unusual domed structures as well as material storage areas and generators. There is an industrial atmosphere about them which can be exacerbated by the need for bigger than domestic scale electricity cable connections.

The growing of short rotation crops [biomass production] does not have significant biodiversity benefits and there are negative landscape impacts. As with feed stocks for bio-digesters there could be transportation issues and significant levels of use of fossil fuels.

Wind turbines can fulfil an important role in the generation of renewable electricity although there are questions about their efficiency and reliability. These range from single small scale domestic appliances through moderately sized individual business applications to 120m or higher commercial generation units. However, due to their function, wind turbines are often very tall, have moving parts that attract attention and generate noise, are positioned in exposed windy locations, and can have a visual impact over a wide area that can be unacceptably harmful. That visual impact is often exacerbated by the industry's insistence on colouring turbine structures 'off white' or a very light grey. When turbines are grouped in numbers to create 'wind farms' their harmful impact on the landscape is cumulative and hence generally greater.

Within the nationally important landscapes of the AONB, areas outside providing views to the AONB, and areas easily visible from the AONB, it therefore follows that:

- Wind farms, commercial scale wind turbines, or large scale biomass energy generation facilities are likely to be inappropriate.
- Small scale single wind turbines promoted by individual businesses and local communities and designed to produce electricity for local use may be more readily assimilated into the landscape.

The Dorset AONB team have produced a guidance note, [Guidance for Wind Turbine Development in the Dorset AONB](#), for the location of small wind turbines in different types of landscapes.

Ground mounted, extensive scale, PV panels have a particularly industrial appearance and require security fencing around them. The supports for the frames on which they are mounted can put underground archaeology and heritage features at risk. Although designed to absorb light energy in the countryside they present an unusual, alien, glassy image in wider views, completely out of character with surrounding arable and pasture fields. Whilst it is argued that some grazing is needed to manage the land (often a few sheep, geese, or chickens) the shading of the ground by the panels means that this form of renewable energy is another one that takes measurable areas of land out of food production. In addition, significant numbers of inverter and transformer buildings are required within the fields. This type of renewable energy generation is, perhaps, more appropriate to a brownfield site, such as a worked out gravel pit. In such situations, it is likely that there will be opportunities to enhance biodiversity.

Bio-fuels [such as oil seeds] are being grown by farmers and whilst this can be very successful there are significant concerns about the impacts on biodiversity – particularly insects and small birds – when extensive and contiguous fields are grown at the same time. Some people find the bright colours of the flowers a strange feature in the landscape. The need for substantial buildings to store the crops presents considerable, and long term, landscape challenges. Nevertheless, bio-fuels utilise existing farm machinery and technologies, and on-farm processing using existing buildings could provide locally produced bio-diesel for farm and community use.

Micro-hydro turbines would utilise the waters of the area and it is noticeable that historically the vast majority of mills in, or associated with, this AONB were water driven. Care is necessary to avoid risks to fisheries and biodiversity. These days many organisations would be involved in establishing a scheme.

Ground source heat pumps, so long as they avoid areas of archaeological and wildlife interest, have scope at both domestic and farm building scales. Air source heat pumps do, however, have noise issues that may make them less appropriate in a tranquil area such as the AONB. Their appearance is likely to make them unacceptable in the context of Listed Buildings and Conservation Areas.

The Way Forward

This AONB Partnership recognises that small scale renewable energy projects may well be able to be accommodated within the landscape without causing significant harm. However, what constitutes “small” and the significance of any visual impact must be judged in relation to the critical characteristics which make that landscape special. The issue of taking farmland out of food production, and the effect that has on the countryside, should not be overlooked.

Projects which are close to existing settlements, where the impacts of man-made structures are more prevalent, are likely to be more acceptable than projects in the open countryside where visual clutter and intrusion should be avoided. It is expected that all renewable energy proposals will be subjected to a landscape and visual impact appraisal. Extra care will be necessary in connection with Listed Buildings and Conservation Areas where otherwise relatively innocuous equipment can have detrimental impacts.

- The use of wood fuel to provide heat, and possibly electricity, is encouraged as it would also have benefits for woodland management and waste reduction.
- With care solar photovoltaic and solar thermal applications can be installed on farm and domestic buildings with only limited visual impacts and should be encouraged in all new building projects, including conversions and extensions to existing structures.
- Ground source heat pumps can be encouraged in new constructions or conversions.
- Small scale hydro applications would be welcome provided biodiversity issues are taken into account.
- Bio-digestion schemes should be critically assessed to ensure that they operate effectively without the need to import digestible materials, do not consume fossil fuels in the transport of materials, and are sensitively located and designed to avoid harm to the landscapes of the AONB.
- Biomass energy appears to have more negative than positive attributes. Furthermore, the siting of accessible large scale processing facilities may be difficult.
- Small to medium scale community projects are encouraged, in particular where they generate combined heat and power.
- Bio-fuels schemes are accepted in principle provided care is taken to ensure that the scale of the processing site, including traffic flows, is consistent with the landscape character and tranquillity and that agricultural monoculture is avoided. Large scale industrial processing sites will not meet these criteria.

Each of the above sources has implementation drawbacks. The Partnership wishes to work with land managers, local communities, and renewable energy promoters to overcome those problems in ways which are consistent with the protection, conservation, and enhancement of the landscape. This AONB already has experience of supporting pilot projects.

In order to assist local authorities in devising the criteria based policies which are required under government policy on where and how renewable energy (particularly wind turbine) projects may be acceptable, the AONB Partnership has already commissioned a sensitivity study of the landscapes [2007] based on the [Landscape Character Assessment \[2003\]](#) for the whole area. The outputs of the [Historic Landscape Characterisation \[2008\]](#) and the [Historic Environment Action Plans](#) projects should be of further assistance.

The Cranborne Chase & West Wiltshire Downs AONB Partnership recognises that new technologies for renewable energy generation are being developed and may issue further guidance on this topic as necessary.

At its meeting on the 6th April 2016 the AONB Partnership Panel endorsed this Position Statement, including the following statement:

The Partnership for this AONB recommends, and encourages, all its Partners to:

- a) *Work with the AONB Team, land managers, local communities, and providers of renewable energy to enable and take forward renewable energy provision as set out in this Position Statement in and around the AONB.*
- b) *Work together to enable businesses and communities to adapt to unavoidable climate change and to take advantage of appropriate renewable energy opportunities.*
- c) *Work with local, regional, and national partners to ensure strategic plans are relevant and responsive to the need for renewable energy technologies that do not prejudice the outstanding character and characteristics of the AONB and its setting.*
- d) *Encourage and promote the capture and utilisation of solar power in domestic, agricultural, business, industrial, public service, and institutional buildings across the AONB consistent with the conservation and enhancement of the landscape and the historic character of the locality.*

RB 13 04 2016