

# Guidance Note on Assessing the Landscape and Visual Impact of Large Wind Turbine Developments June 2009



## Purpose of Guidance Note

This guidance note sets out how the Council intends to use the South Norfolk Landscape Assessment and the South Norfolk Wind Turbine Landscape Sensitivity Study when assessing the potential landscape and visual impact of large wind turbine proposals.

The guidance note will also discuss issues with regard to National guidance (e.g. PPS 22 Renewable Energy) and South Norfolk Local Plan policies.

### 1. Introduction

- 1.1 The evidence that climate change is happening, and that man-made emissions are its main cause, is strong and indisputable. Tackling climate change is a key Government priority for the planning system. In the UK, we are likely to see more extreme weather events, including hotter and drier summers, flooding and rising sea levels increasing the risk of coastal erosion. There will be permanent changes in the natural environment but also, and increasingly, substantial challenges to national prosperity and social cohesion.
- 1.2 The increased development of renewable energy resources is vital to facilitating the delivery of the Government's commitments on both climate change and renewable energy. Wind turbines represent one part of the potential solution to the challenge posed by climate change. Renewable energy developments (including wind turbines) 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. This guidance note sets out how the Council proposes to assess the potential landscape and visual impacts of wind turbines.
- 1.3 It is important to remember that the wider environmental and economic benefits of all proposals for renewable energy projects, whatever their scale, are material considerations that will be given significant weight in determining whether proposals should be granted planning permission.
- 1.4 This guidance note sets out the methodology South Norfolk Council will use when assessing the impact on landscape character and visual impact considerations (in relation to landscape character) only. It is fully acknowledged that many other factors may need to be considered as part of the decision making process.
- 1.5 Whilst the Wind Turbine Landscape Sensitivity Study (WTLSS) is primarily intended for the assessment of large commercial wind turbines of around 120m in height to blade tip (+/- 20m) it can also be used for smaller turbines. Judgement should be exercised in extrapolating the results of this study to turbines less than 100m. In general the main conclusions of the WTLSS will be relevant, although in some cases local circumstances may mean that there are lower sensitivities, for example due to the presence of screening elements. Building integrated turbines and those < 25m are not included within the scope of this guidance note or the WTLSS.



## 2. Background

- 2.1 South Norfolk is a landscape of subtle contrasts and restrained beauty with landscapes ranging from the exhilarating openness of the farmed plateaux to the peaceful rural quality of the valleys. The area predominantly consists of an arable agricultural landscape of farmland, woodland and historic parkland interspersed by a limited number of settlements.
- 2.2 The plateaux are dissected by the river valleys of the Yare, Tas, Tiffey, Chet, Wensum, Tud and Waveney rivers. The edge of Norwich in the north of the Plan Area is well defined by the Yare valley which provides a clear boundary between the City and the surrounding countryside. In the Rural Area much of the character is formed by the river valleys running east to west across the District and by the tributaries, which generally run south to north.
- 2.3 The landscape of the area will inevitably change in the future for a number of reasons, some of which will be a direct consequence of climate change e.g. changing farming practices and others due to continuing development pressures being experienced in East Anglia as a whole and in South Norfolk in particular.
- 2.4 The District Council is conscious of the threat to the character and appearance of the landscape in the Plan Area posed by the general trends outlined above. In order to better understand the landscape of the District, South Norfolk commissioned Land Use Consultants to produce a Landscape Assessment of the District (SNLA). The Landscape Assessment comprises of three main documents.



Landscape Types of South Norfolk



Landscape Character Areas of the Norwich Policy Area



Landscape Character Areas of the Rural Policy Area

- 2.5 A further study was also commissioned particularly concerned with wind turbine developments.

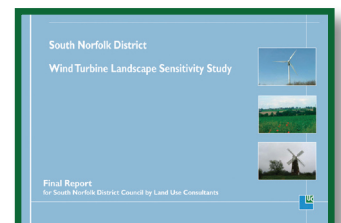


The “South Norfolk Wind Turbine Landscape Sensitivity Study” (WTLSS).

This builds upon the Landscape Assessment at the ‘type’ level. The aim of the study is to provide guidance for those seeking to identify suitable sites for the location of wind turbines and to provide robust guidance for the council in responding to such proposals. It will also help in the formulation of criteria against which specific proposals may be assessed.



**Gissing Church**

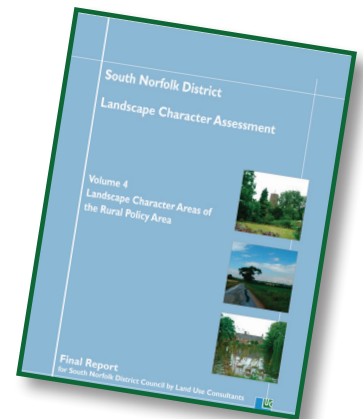


**South Norfolk District  
Wind Turbine  
Landscape  
Sensitivity Study**

- 2.6 Clearly, any decision on an application for wind turbines should not be considered in isolation, and should be the subject of a site-specific investigation, drawing on information in this guidance. The WTLSS does not negate the need for detailed considerations of landscape and visual impact on a case-by-case basis in relation to individual applications or as part of an environmental statement. Local variations in character and visual impact will also need to be considered in relation to applications/ environmental statements, although applicants are strongly advised to use the Council's published Landscape Assessment documents and WTLSS as the basis for any work examining potential landscape impacts.

### 3. Using the SNLA and WTLSS to assess the landscape and visual impacts of large turbine proposals

- 3.1 When assessing the landscape and visual impacts of large turbine proposals the Council will use the information contained within the South Norfolk Landscape Assessment and the South Norfolk Wind Turbine Landscape Sensitivity Study.
- 3.2 Volume 1 of the SNLA provides strategic scale information on the seven Landscape Types found across South Norfolk including key characteristics and landscape assets. This information is quite broad and generic, looking at shared combinations of geology, topography, vegetation and human influences and is used as the basis of the WTLSS.
- 3.3 Volumes 2 and 4 of the SNLA refine the Landscape Type work to identify Landscape Character Areas and set out the unique qualities and attributes that define them as discrete geographic areas.
- 3.4 When assessing the landscape and visual impact of proposals the Council will have particular regard to the landscape assets and key characteristics as identified in the SNLA.



**South Norfolk  
Landscape  
Assessment**

#### 3.5 What are the key characteristics important to the character of the landscape?

- 3.6 The key characteristics for each landscape type and character area are set out in a text box on the opening page of each type/character description within the Landscape Assessment.

#### 3.7 What are the identified landscape assets important to the character of the landscape?

- 3.8 The assets important to the character of landscape types and landscape character areas in South Norfolk are set out in volumes 1, 2 and 4 of the South Norfolk Landscape Assessment (SNLA). Assets are presented at three levels National/International, District/Council and Local.
- 3.9 Examples of identified assets, and their level of importance e.g. National/International, District/Council and Local, that make significant contributions to the landscape character of the area include:



**Wymondham  
Abbey**

#### **National/International**

- Ecological assemblages e.g. River Wensum Special Area of Conservation
- Scheduled Ancient Monuments, Historic Parkland and Listed Buildings e.g. Caistor Roman Town, Kimberley Hall and Parkland and Wymondham Abbey.
- Round towered medieval churches often in prominent or isolated positions
- Norfolk and Suffolk Broads

#### **District/County**

- Historic field/hedgerow patterns such as that found in the Dickleburgh area
- County Wildlife Sites
- Distinctive river valley landform (e.g. Tas River Valley)



## Local

- Important views to Norwich City (including Cathedral), Wymondham Abbey and to and from the Broads
- Strategic breaks between settlements

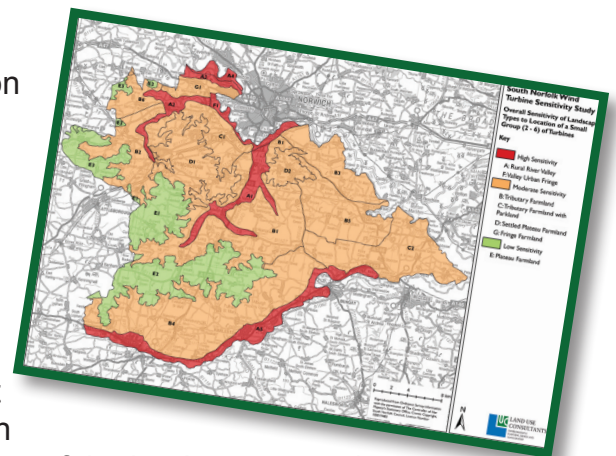
3.10 N.B. Some of the assets identified in the SNLA as being important from a landscape character perspective may also benefit from statutory protection e.g. Special Areas of Conservation, Listed Buildings etc. It is possible that the significance of identified assets may vary between areas. For example a view of District/County importance in one landscape may only be of local importance in an adjacent landscape.

## 4. Assessing landscape and visual impact using the WTLSS

4.1 The WTLSS provides a tool for evaluating landscape impacts and visual impacts. It also deals with impacts on character and the integrity of the landscape and cumulative impacts in a transparent, robust and defensible framework which provides a sound baseline for making decisions about wind energy developments on landscape grounds and also provides positive guidance to developers.

4.2 The WTLSS **only** deals with landscape and visual impacts. Clearly a great many other factors (both positive and negative) will be taken into consideration when reaching any decision on wind turbine developments.

4.3 In the WTLSS 'sensitivity' is defined as the extent to which the character of the landscape is vulnerable to being changed as a result of wind turbine development. Sensitivity is an indication of the overall robustness of the landscape and the extent that it can accommodate wind turbine development. It is an overall judgement and recognises that some attributes of the landscape may be more important in defining character than others and may be more sensitive. The judgement is not therefore a simple sum of the sensitivity of all attributes and is based on transparent professional analysis, rather than any form of scoring system. The judgements on sensitivity in the WTLSS are made on a three-point scale:



**Low** – key characteristics of the landscape are robust and would not be adversely affected by turbine development. The landscape would be able to accommodate development with out a significant change in character.

**Moderate** – key characteristics of the landscape are vulnerable and maybe adversely affected by turbine development. The landscape may have some ability to absorb types of wind energy development without a significant change in character.

**High** - key characteristics of the landscape are fragile and would be adversely affected by turbine development. Wind turbine development would be likely to result in a significant change in character.

4.4 The WTLSS assesses wind turbine developments as single, small, medium and large groups. These are arbitrary divisions developed simply to aid the evaluation and making of judgements. If a planning application is received on the threshold of a grouping e.g. for 6 or 7 turbines the judgements for both a small and medium group of turbines will be reviewed.

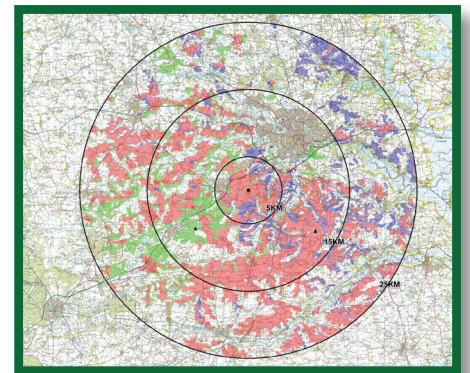
4.5 The sensitivity judgements relate to broad thresholds of change rather than absolutes. It should be noted that guidance contained in any single row of the tables included in the WTLSS should not be considered in isolation. The sensitivity of the combination of landscape characteristics (each column) should be considered in forming a judgement about overall sensitivity of the landscape to each scale of development. However, the judgement is not simply an average for all the characteristics in any column - as some characteristics may be deemed to be so sensitive that they have an overriding influence on the overall sensitivity of the landscape.

4.6 The Council is happy to engage with developers throughout the planning process to discuss potential impacts, areas to be covered, key receptors, the identification of landscape assets, potential photomontage viewpoints etc. Developers are also reminded of the need for community engagement as required by the Council's Statement of Community Involvement.

#### 4.7 Cumulative Impact

4.8 The effect of any cumulative development will be a key factor when assessing any wind turbine proposals.

4.9 Any assessment of cumulative impact should include schemes that have been in the public domain. This includes screening and scoping opinions, approved and undetermined planning applications (including those subject to a live appeal). Refused planning applications and schemes dismissed at appeal will not be considered as part of any cumulative impact assessment.



Example of zone of visual influence

4.10 The term 'group' applies to a single development of turbines in close proximity (usually on a single site). In cases where applications are made for further turbines in relation to an existing development, the judgement will need to consider the total number of turbines (existing and proposed). If more than one turbine development is proposed in close proximity, i.e. more than one development being visible in a single view, each will need to be considered on its own merits and effect on landscape sensitivities. It should be noted that the sensitivity judgements in the WTLSS relate to the sensitivity of the landscape to one single development. **The WTLSS sets out separate recommendations on cumulative development at the end of each landscape type chapter.** Any proposed developments will need to take account of their own impacts as well as any cumulative impacts with other schemes.

## 5. Impact of proposals upon the Broads Area.








5.1 The Norfolk and Suffolk Broads are a unique asset, attracting a wealth of tourism related activity to the area. In considering the impact of proposals adjacent to the Broads Area the Council will have particular regard to those characteristics that particularly befits their status equivalent to a National Park. This will be done with reference to the SNLA and in consultation with the Broads Authority regarding their own landscape assessment studies.



5.2 When assessing the impacts upon the Broads Area the Council will have regard to the issues covered in paragraph 3.2 in that impacts of proposals close to the boundaries of a national designation will be a material consideration whilst remembering the advice in PPS 22 on the unacceptability of buffer zones.

## 6. Other landscape considerations

6.1 In reaching a decision on the potential landscape impact of any wind turbine proposal the Council will also have regard to:

-  The appropriateness of any landscape scheme / planting proposed.
-  Impacts arising from construction activities/access arrangements (or subsequently) e.g. temporary construction compounds, loss of trees, hedgerow removal, on existing public rights of way crossing or passing directly adjacent to the site.
-  The effect on landscape character of any major earth movements/bunding.
-  Loss of recreational or amenity land.
-  Compromised archaeological remains.
-  Habitat protection.
-  Impact from grid connection, access tracks, meteorological mast and associated structures e.g. electricity substations and/or control buildings.

6.2 Note: It is recognised that the scope of UTL 13: 'Renewable energy' encompasses a wider range of criteria than covered in this guidance note. The full content of policy UTL 13, other relevant national and local policies and material considerations will form part of the comprehensive assessment by Planning Committee on the suitability of any large wind turbine proposal.

## 7. Development Plan Policy

7.1 Whilst this guidance note is specifically concerned with policies ENV1 and UTL13 it is important to remember that National and Regional policy also forms part of the "Development Plan". All of the following examples of National Policy and Regional Policy have been introduced after the adoption of the South Norfolk Local Plan and as such could be expected to take precedence in the event of any policy conflict/contradiction. This guidance note sets out the Council's methodology for assessing the impact on landscape character of proposals for large wind turbine development. It does not and cannot rewrite existing policy.

### 7.2 National Policy

- **Planning Policy Statement (PPS) 1 – Delivering Sustainable Development (2005)** PPS1 sets out the Government's overarching planning policies on the delivery of sustainable development through the planning system.
- **Planning and Climate Change Supplement to PPS1 (2007)** This Planning Policy Statement (PPS) sets out how planning, in providing for the new homes, jobs and infrastructure needed by communities, should help shape places with lower carbon emissions and resilient to the climate change now accepted as inevitable.
- **PPS 7 – Sustainable Development in Rural Areas (2004)** PPS7 sets out the Government's planning policies for rural areas, including country towns and villages and the wider, largely undeveloped countryside up to the fringes of larger urban areas.
- **PPS 22 – Renewable Energy & Companion guide (2004)** PPS22 and the companion guide sets out the Government's policies for renewable energy, which planning authorities should have regard to when preparing local development documents and when taking planning decisions. PPS 22 and the companion guide are particularly relevant to this guidance note.

### 7.3 Regional Policy

- East of England Plan (2008) The Plan sets out policies which address the needs of the region and key sub-regions. These policies provide a development framework for the next 15 to 20 years that will influence the quality of life, the character of places and how they function, and informs other strategies and plans.

### 7.4 Local Policy

- South Norfolk Local Plan (2003)
- Supplementary Planning Guidance (2000) Developer Requirements for the consideration of Landscape and Visual Impact of Wind Turbine Development Proposals in South Norfolk District N.B. National and local policies referred to in this document have changed substantially since its publication, although the Appendices are still of some relevance.

## 8. Local Plan policy and the assessment of landscape and visual impact of large wind turbines

- 8.1 There are two Local Plan policies that are particularly relevant to the assessment of landscape and visual impact of large wind turbine proposals - ENV1 – Protection of Landscape & UTL13 – Renewable Energy. This guidance note also discusses Local Plan policy ENV 8 – Development in the Open Countryside and wind turbine development (section 8.9-8.12)

#### **Policy ENV 1: Protection of landscape**

**Development will not be permitted where it would significantly harm the identified assets important to the character of the landscape.**

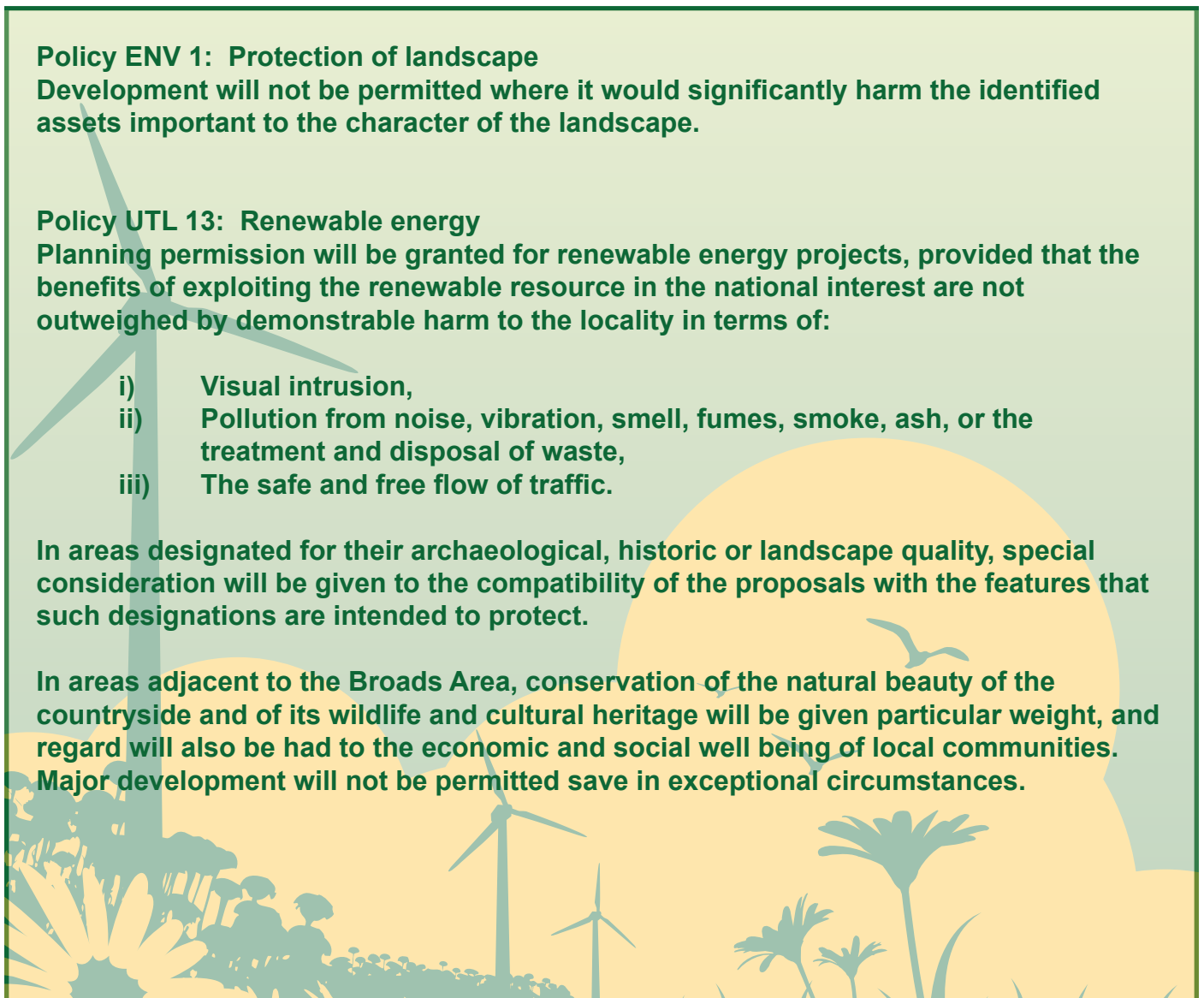
#### **Policy UTL 13: Renewable energy**

**Planning permission will be granted for renewable energy projects, provided that the benefits of exploiting the renewable resource in the national interest are not outweighed by demonstrable harm to the locality in terms of:**

- i) Visual intrusion,
- ii) Pollution from noise, vibration, smell, fumes, smoke, ash, or the treatment and disposal of waste,
- iii) The safe and free flow of traffic.

**In areas designated for their archaeological, historic or landscape quality, special consideration will be given to the compatibility of the proposals with the features that such designations are intended to protect.**

**In areas adjacent to the Broads Area, conservation of the natural beauty of the countryside and of its wildlife and cultural heritage will be given particular weight, and regard will also be had to the economic and social well being of local communities. Major development will not be permitted save in exceptional circumstances.**





- 8.2 When making any assessment against policies ENV1 and/or UTL13 it is important to remember that elements of the 'Development Plan' e.g. National/Regional guidance may take precedence over older Local Plan policies. One example of this is the potential conflict between the final paragraph of UTL13 and paragraph 14 of PPS 22 which states that "local planning authorities should not create "buffer zones" around international or nationally designated areas and apply policies to these zones that prevent the development of renewable energy projects. However, the potential impact on designated areas of renewable energy projects close to their boundaries will be a material consideration to be taken into account in determining planning applications."

### 8.3 Key elements for consideration under ENV 1: Protection of Landscape and UTL13: Renewable Energy:

#### 8.4 Policy ENV 1: What constitutes "significant harm" to the asset(s)?

- 8.5 Discussions on the degree and severity of impact will need to form a part of any Environmental Impact Assessment. However, any assessment of harm and the determination of when it becomes significant is, likely to be subjective to some degree. In order to reduce the amount of subjectivity around this issue the Council intends to use the SNLA and the WTLSS as a basis for any such assessment. Any assessment of harm to a landscape asset will be based upon several factors.

- Assessment of potential harm at a landscape type, landscape character and site specific level. The WTLSS provides strategic guidance on the suitability of sites in relation to their impact upon landscape types whilst the more detailed landscape character information will help inform appraisals at a site-specific level (this does not replace the need for detailed site-specific assessments in an EIA - see section 2.9). In particular volumes 2 and 4 of the SNLA provide more detail on 'key characteristics', 'sensitivities and vulnerabilities' and 'development considerations' for each character area. The Council will have regard to this information/guidance when determining whether significant harm would occur as a result of the development.
- The size and scale of the proposed development and any cumulative impact with other schemes.
- The number and importance of the asset(s) affected.  
Whether the harm is permanent or temporary. Given the level of access roads, foundations required etc. constructional impacts are most likely to be permanent. However when considering landscape impacts regard must be had to para. 20 of PPS22 advising that landscape impacts "may be temporary if conditions are attached to planning permissions which require the future decommissioning of turbines."
- Any mitigation measures proposed.

- 8.6 When considering whether a proposal could result in 'significant harm' to the identified assets important to the character of the landscape **the Council will have particular regard to the findings on sensitivity as set out in the WTLSS**. This will include impact upon the key characteristics as set out under the eight attribute headings, the landscape sensitivity overview and guidance (including cumulative impact).

## **8.7 Policy UTL 13: Visual intrusion**

8.8 When considering visual intrusion and the issue of “demonstrable harm to the locality” (as in UTL 13) the Council will follow the approach outlined above but will pay particular regard to the following:

- Impact upon important views highlighted as assets in the SNLA e.g. views to Norwich Cathedral, Caistor Roman Town, Wymondham Abbey and The Broads.
- Whether the proposal has the potential to impact upon the “sensitivity and vulnerabilities” views to Churches and the valley crest skyline and the threat of intrusion of development into these views” (SNLA vol.4 para. 7.18)
- Does the development accord with any “development considerations” relating to visual impact as described for each character area? e.g. “conserve the sensitive open valley crest that forms the backdrop in views from the Broads to the east. Maintain key views into and from The Broads” (SNLA vol.4 para.14.19)

## **8.9 Note regarding South Norfolk Local Plan policy ENV 8 ‘Development in the Open Country side’ and large wind turbines.**

8.10 The Government considers large wind turbine developments to have a role in supporting economic activity in rural areas e.g. farm diversification – thus meeting the requirement of criteria ii) of ENV 8; because of their sheer size and scale it is felt that they are unlikely to satisfy the requirements of criteria iv) and v) regarding respecting the beauty and diversity of the landscape and integration into rural surroundings. This guidance note seeks to establish a procedure for assessing the landscape and visual impact of proposals in terms of impact upon landscape character, whereas ENV 8 could apply at both a wider landscape and a site-specific scale.

8.11 Policy UTL13 provides a separate mechanism for approving large turbines where the benefits to be derived from the renewable energy outweigh the potential harm to the countryside that policy ENV8 would normally prevent. PPS 22 also sets out a number of material considerations. Key Principle 1(i) states “Renewable energy developments should be capable of being accommodated throughout England in locations where the technology is viable and where environmental, economic and social impacts can be addressed satisfactorily.” Key Principle (iv) goes further stating “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.” Page 4 of PPS 22 also states that in line with the Government’s sustainable development strategy “In rural areas, renewable energy projects have the potential to play an increasingly important role in the diversification of rural economies.” and furthermore in paragraph 17 that “Many types of renewable energy developments are capable of being accommodated in urban as well as rural areas.” The above considerations (PPS22 and UTL13) are capable of representing material considerations that can justify approving a renewable energy project that might otherwise be considered to be in conflict with policy ENV 8.

8.12 The landscape character and visual issues encompassed in policies ENV1, UTL13 and in criteria iv) and v) of ENV 8 regarding respecting the beauty and diversity of the landscape and integration into rural surroundings should be considered by following the procedures for assessing the landscape and visual impacts of large wind turbines using the Landscape Character Assessment and Wind Turbine Landscape Sensitivity Study as set out in this guidance note. N.B. Other elements of ENV 8 e.g. ecology and recreational value of the countryside will still need to be assessed as part of the appraisal of any planning application.

## Useful links

### National Policy

PPS 1 'Delivering Sustainable Development' <http://www.communities.gov.uk/publications/planningandbuilding/planningpolicystatement1>

Planning and Climate Change Supplement to PPS1 <http://www.communities.gov.uk/publications/planningandbuilding/ppsclimatechange>

PPS 7 'Sustainable Development in Rural Areas' <http://www.communities.gov.uk/planningandbuilding/planning/planningpolicyguidance/planningpolicystatements/planningpolicystatements/pps7>

PPS 22 'Renewable Energy' <http://www.communities.gov.uk/planningandbuilding/planning/planningpolicyguidance/planningpolicystatements/planningpolicystatements/pps22/>

### Regional Policy

East of England Plan (2008) [http://www.go-east.gov.uk/goeast/planning/regional\\_planning/](http://www.go-east.gov.uk/goeast/planning/regional_planning/)

### Local Policy

South Norfolk Local Plan (2003) <http://www.south-norfolk.gov.uk/planning/256.asp>

Wind Turbine SPG (2000) <http://www.south-norfolk.gov.uk/landscapestudies>

South Norfolk Landscape Character Assessment  
<http://www.south-norfolk.gov.uk/landscapestudies>

Wind Turbine Sensitivity Study  
<http://www.south-norfolk.gov.uk/landscapestudies>

### Other Guidance

Scottish Natural Heritage – Guidelines for Landscape and Visual Impact Assessment (2005) <http://www.snh.org.uk/publications/on-line/heritagemanagement/EIA/appendix1.shtml>

Landscape Institute and the Institute for Environmental Assessment "Guidelines for Landscape and Visual Impact Assessment" (2002)

Landscape Character Assessment Guidance for England and Scotland prepared on behalf of the Countryside Agency and SNH (2002)

[http://www.naturalengland.org.uk/Images/lcaguidance\\_tcm6-7460.pdf](http://www.naturalengland.org.uk/Images/lcaguidance_tcm6-7460.pdf)



## Useful links

The Landscape assessment & wind turbine landscape sensitivity documents referred to in this guidance note are available to view on the Council's website via the following links:

South Norfolk Landscape Assessment (Vols 1, 2 & 4).

<http://www.south-norfolk.gov.uk/landscapestudies>

Wind Turbine Landscape Sensitivity Study

<http://www.south-norfolk.gov.uk/landscapestudies>

