

Huntingdonshire's Local Plan to 2036: Wind Energy Development

Huntingdonshire Local Plan | Huntingdonshire's Local Plan to 2036: Wind Energy Development

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Summary

Purpose of the document

This document considers the Council's options for whether and how to identify areas of Huntingdonshire as 'suitable' for wind energy development in the Huntingdonshire Local Plan to 2036. This responds to the approach set out in the 'Written Ministerial Statement' (WMS), issued on 18 June 2015 by Greg Clark, Secretary of State for Communities and Local Government. It forms a standalone consultation that supports the production of the Proposed Submission Draft Local Plan.

Structure of the document:

2 'Context'	Sets out the context of electricity generation in the UK, research and predicted impacts of climate change and the international efforts to tackle it, the requirements of national planning policy and guidance, and relevant local evidence
3 'Options'	Considers a range of possible options and assesses them in terms of their compatibility with national planning policy and guidance and relevant evidence
4 'Sustainability Appraisal'	Appraises the sustainability of each option
5 'Conclusions'	Brings together the conclusions from the consideration of the options
6 'Draft Policy'	A draft policy with supporting text is presented, using the same format as was used for other draft policies in the latest version of the Local Plan

Options considered

The options considered for identifying areas as being suitable for wind energy development are:

- 'Option 1: Whole district is identified as suitable'
- 'Option 2: Great Fen and its landscape and visual setting are not suitable'
- 'Option 3: Landscape character areas above prominent/ conspicuous thresholds are not suitable'
- 'Option 4: Whole district is not suitable'
- 'Additional Option A: Small turbines are suitable'

NB: For each option where an area would be identified as suitable it is the intention that this would be an 'in principle' suitability. Any wind turbine proposals put forward within that area would be subject to consideration of all planning impacts at the planning application stage. Impacts considered at the application stage will include those identified by local people who may be affected by the proposal, as well as cumulative impacts with existing development, in accordance with the requirements of the WMS.

Determining the way forward

No preferred option has been identified at this stage. The decision of which option to select as the preferred option will only be taken after the consultation on this document taking account of comments received. The approach to be taken will be a Member decision, with a policy, if that is decided upon as the approach to be taken, included in the Proposed Submission Local Plan when it is published in 2017.

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1 Introduction

Purpose of this Document

- 1.1** The purpose of this document is to consider what action the Council should take in response to the Written Ministerial Statement (WMS), issued on 18 June 2015 by Greg Clark, Secretary of State for Communities and Local Government, concerned with how planning proposals for wind turbine development should be handled:

Written Ministerial Statement

'I am today setting out new considerations to be applied to proposed wind energy development so that local people have the final say on wind farm applications, fulfilling the commitment made in the Conservative election manifesto.

Subject to the transitional provision set out below, these considerations will take effect from 18 June and should be taken into account in planning decisions. I am also making a limited number of consequential changes to planning guidance.

When determining planning applications for wind energy development involving one or more wind turbines, local planning authorities should only grant planning permission if:

- the development site is in an area identified as suitable for wind energy development in a Local or Neighbourhood Plan; and
- following consultation, it can be demonstrated that the planning impacts identified by affected local communities have been fully addressed and therefore the proposal has their backing.

In applying these new considerations, suitable areas for wind energy development will need to have been allocated clearly in a Local or Neighbourhood Plan. Maps showing the wind resource as favourable to wind turbines, or similar, will not be sufficient. Whether a proposal has the backing of the affected local community is a planning judgement for the local planning authority.

Where a valid planning application for a wind energy development has already been submitted to a local planning authority and the development plan does not identify suitable sites, the following transitional provision applies. In such instances, local planning authorities can find the proposal acceptable if, following consultation, they are satisfied it has addressed the planning impacts identified by affected local communities and therefore has their backing.'

Why is this document needed now?

- 1.2** The WMS clearly sets out the requirement for local authorities to only grant planning permission for wind turbine proposals where two requirements are fulfilled:
1. they fall within areas identified and allocated in Local or Neighbourhood Plans as being suitable for wind energy development; and
 2. following consultation, it can be demonstrated that the planning impacts identified by affected local communities have been fully addressed.
- 1.3** This document looks at the first requirement and considers whether or not areas should be identified as suitable for wind turbines and allocated in the Local Plan. Should the decision be taken to allocate areas it is the Council's view that the second requirement should be considered as part of the determination of individual planning applications when all of the planning issues specific to the individual proposal can be considered.

1 Introduction

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- 1.4** The draft Huntingdonshire Local Plan to 2036 will set out the long-term vision for how the towns, villages and countryside of the district will develop and evolve in the period up to 2036. The draft plan has been subject to extensive consultation since work started in 2012. The next stage for the Local Plan will be publication of the 'Proposed Submission' version of the plan for a statutory 6 week period when comments can be made. Comments at the Proposed Submission stage are required to be limited to issues of soundness and legal compliance⁽¹⁾. It has therefore been decided that to allow people to comment freely on new plan content, if that is the action decided upon, then it should be subject to separate consultation ahead of the Proposed Submission stage.
- 1.5** Huntingdonshire District Council is therefore undertaking this topic specific consultation to identify the appropriate action to be taken so that any new draft plan content relating to wind energy development is subject to appropriate consultation.

What does this document do?

- 1.6** This document looks at the context of electricity generation in the UK, scientific research and predicted effects of climate change and international efforts to tackle it, the requirements of national planning policy and guidance, and a review of relevant evidence. It then identifies a range of possible options and assesses them in terms of their compatibility with relevant evidence and national planning policy and guidance and appraises their sustainability. A draft policy with supporting text giving the reasoned justification is presented, using the same format as was used for other draft policies in the latest version of the Local Plan.
- 1.7** There are permitted development rights that allow the erection of small turbines without requiring a planning application to be made. There are a number of requirements that must be met for turbines to qualify as permitted development, set out on the [Planning Portal](#). The main requirement is that the turbine must be less than 15m total height or 3m above the highest part of the building which ever is less for building mounted turbines or less than 11.1m tall for free standing turbines. As the purpose of this document is to determine whether areas that are considered suitable for wind turbines and a policy to be applied to proposals for their erection should be drawn up this document will only deal with those turbines that would require planning permission.

What will happen after this consultation?

- 1.8** After this consultation the responses will be considered. The main issues raised will be summarised and the Council will then decide how to address these issues. Although conclusions are drawn together from the assessment and appraisal processes in this document no preferred option is selected at this stage. The decision of which option to select as the preferred approach will only be taken after the consultation.
- 1.9** To enable the Council to make a fully informed decision a consultation report will be produced after the consultation. The consultation report will summarise the main issues raised during the consultation, what conclusions can be drawn and whether a preferred approach can be recommended, and if so a revised draft policy. The report would be presented to committee for a decision to be taken by Members.

¹ For more information please see the [National Planning Practice Guidance](#).

2 Context

- 2.1** This chapter looks at the context of electricity supply and generation, international efforts to research, predict and tackle climate change and how they have been transposed into UK legislation and mechanisms. It also looks at the national planning context that sets out how the planning system should be planning for renewable and low carbon energy and dealing with development proposals as well as relevant local evidence.

Energy Generation

- 2.2** One of the first things that the government did after the EU Referendum vote was to form a new government department for business, energy and industrial strategy (BEIS). This new department has recognised that the energy sector is changing and has already published a report into '[The energy revolution and future challenges for UK energy and climate change policy](#)', herein referred to as the BEIS report.
- 2.3** The BEIS report is wide ranging and includes consideration of what innovations have the potential to revolutionise or disrupt the energy system in the future, what implications there may be for energy and climate change policy from the decision to leave the EU and what the legacy of the ECC is for the sector and the ongoing need for scrutiny.
- 2.4** The BEIS report observes that 'The energy sector is changing. Economic, environmental, social and public health concerns, as well as national and international climate change ambitions, are shifting not only the way in which electricity and heat are generated, but also the way in which supply and demand are considered across the energy network. The emergence and rapid uptake of renewable technologies have created new pressures on the network, with a move away from the classical model of large, localised power generating stations feeding into the transmission network, towards a decentralised system, where generation and demand can be met at a distribution- and individual-level. The variable nature of renewable generation creates the need for baseload power and enough flexibility on the grid to manage peaks and troughs in generation so as to avoid black-outs if weather conditions are not propitious. These challenges require innovative solutions at all levels and an updated management of the electricity system.'

Sources of electricity supply

- 2.5** In the UK about 30% of our electricity is generated from gas fired power stations⁽²⁾, which is the largest single source of electricity. The second biggest proportion comes from renewable energy sources that generated about 25%, having risen from below 2% in 1990. Sources include wind, wave, tidal, hydro, biomass and solar. Coal and Nuclear power generate about 23% and 21% respectively. The remainder came from direct electricity imports via interconnectors, mostly from France but also from the Netherlands and Ireland.
- 2.6** Many of the oldest power stations in Britain that are still generating are coal fired stations that were built during the second half of the twentieth century. Many of these coal fired stations are coming to the end of their design lives, while others are unable to meet clean air requirements, although some have been able to switch to part biomass. These are issues that are leading to stations being decommissioned and a recently published draft plan⁽³⁾ would see the UK's last eight coal power stations close by 2025. This potentially leaves a deficit in the amount of electricity being generated.

Security of supply

- 2.7** The gas for electricity generation comes from several different sources; about 43% comes from 'local' supplies, such as from the North and Irish seas. About 44% is imported via pipelines from Europe, most of which comes from gas fields in Russia and Norway, while the remaining 13% is imported via tankers as liquefied gas that comes from various sources including countries in Africa, the Middle East and Asia.

2 Figures from 2015

3 [Coal generation in Great Britain: The pathway to a low-carbon future](#)

2 Context

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- 2.8** Local supplies are declining and this means that proportionally more gas will need to be imported from abroad. Foreign sources can be significantly less secure than local sources due to a wide range of reasons including political instability and global demand, which in turn can lead to price volatility. One way to lessen the impact of such insecurity is to diversify electricity generation. Onshore wind energy is one of the most mature forms of renewable generation with costs per megawatt hour (mWh) that are cheaper than any other source; according to research conducted by Bloomberg that took account of all costs over the expected lifetimes of the energy sources, in 2015 the costs of generation in the UK were \$115 per mWh for coal, \$114 per mWh for gas and \$85 per mWh for onshore wind.

Local opportunities

- 2.9** The government recognises that renewable energy presents a number of opportunities for local communities with specific advice in the [NPPG](#) for providing support for community initiatives that would bring about positive local benefits. The potential financial returns from wind turbines mean that they have been attractive as community schemes. Such schemes are often for relatively modest single turbines or small groups and can provide the community with significant financial returns that can be put towards improving, or providing new, local facilities such as the village hall.
- 2.10** Many of the wind turbine schemes that have been erected in Huntingdonshire are relatively modest single turbines associated with rural enterprises; just under 29%⁽⁴⁾ are turbines of 25m or less in height⁽⁵⁾. These turbines are typically erected to enable a farm to diversify its energy supply and to generate alternative income.
- 2.11** The [Cambridgeshire Renewables Infrastructure Framework \(CRIF\) \(Camco for Cambridgeshire Horizons, 2012\)](#) identifies a wide range of significant local business opportunities, including wind energy. These opportunities can give benefits in terms of new business sectors for new and growing local businesses, generating additional local income and developing the skills of local people.

Climate Change

- 2.12** This section looks at the scientific research and predicted impacts of climate change, international efforts to tackle climate change and how they have been transposed into UK legislation and mechanisms.

UN International Panel on Climate Change

- 2.13** The Intergovernmental Panel on Climate Change (IPCC) is the international body for assessing the science related to climate change. The IPCC was set up in 1988 by the World Meteorological Organization (WMO) and United Nations Environment Programme (UNEP) to provide policy makers with regular assessments of the scientific basis of climate change, its impacts and future risks, and options for adaptation and mitigation.
- 2.14** IPCC assessments provide a scientific basis for the development of climate related policies, and they underlie negotiations at the UN Climate Conference – the United Nations Framework Convention on Climate Change (UNFCCC). The assessments present projections of future climate change based on different scenarios and the risks that climate change poses and discuss the implications of response options, but they do not tell policy makers what actions to take.

4 As noted in 1.7 above some turbines can be erected under permitted development rights. Only those turbines that require planning permission are monitored and included in the data presented here.

5 Within this document all references to height of a turbine refers to the maximum height of the turbine to the tip of a vertical blade.

- 2.15** The IPCC have produced a series of assessment reports and are now working towards the sixth report. As part of the 5th report⁽⁶⁾ a synthesis report was published in 2014 that included a [summary for policymakers](#). The summary included key assessment findings⁽⁷⁾ that identify that:

'Human influence on the climate system is clear, and recent anthropogenic emissions of greenhouse gases are the highest in history. Recent climate changes have had widespread impacts on human and natural systems.';

'Warming of the climate system is unequivocal, and since the 1950s, many of the observed changes are unprecedented over decades to millennia.'; and

'Anthropogenic greenhouse gas emissions have increased since the pre-industrial era, driven largely by economic and population growth, and are now higher than ever. This has led to atmospheric concentrations of carbon dioxide, methane and nitrous oxide that are unprecedented in at least the last 800,000 years. Their effects, together with those of other anthropogenic drivers, have been detected throughout the climate system and are extremely likely to have been the dominant cause of the observed warming since the mid-20th century.'

Predicted Impacts of Climate Change

- 2.16** There are a number of different effects that could affect Huntingdonshire and the wider east of England:

- **Flooding** - Rising global temperatures are likely to cause polar ice to melt and ocean waters to expand which in turn will raise global sea levels. This will increase the risk of coastal flooding, particularly likely to affect low lying areas such as the Fens. River flooding is also likely to increase due to more unpredictable weather with rainfall becoming more intense but sporadic, potentially overwhelming drainage systems and flood defences.
- **Water** - The east of England is already a water stressed area due to the limited amount of rainfall, with climate change expected to decrease the amount of rainfall it is likely that the availability of water will have impacts on potable water supply and the natural environment.
- **Infrastructure and Property** – Flooding and soil water-logging during winter months and soil shrinkage during summers that are predicted to be hotter and drier, could result in subsidence affecting buildings and important infrastructure. The increased risk of extreme weather (eg severe storms) could also result in more damage to property. A large number of areas are already at risk and many insurance companies are increasing premiums. Transport disruption is also likely because of such diverse things as buckled rail lines, melted tarmac, flooded roads and storm damage. Conversely, costs related to heating buildings may reduce, although this could be offset by the need for air conditioning to deal with hotter summer temperatures. Higher average temperatures may also mean less winter gritting is required but could lead to a greater need for pumping and other measures to deal with flooded roads and other infrastructure.
- **Agriculture** - Climate change will probably alter growing conditions, but some agricultural areas are relatively adaptable. New planting regimes may need to be investigated, but there may also be opportunities for diversification. Longer growing seasons, and increased productivity, may allow 'biomass' crops to be farmed and biofuels to be economically produced. However, many areas are likely to experience severe reductions in summer water availability due to low summer rainfall affecting yields of arable crops or increasing demand for water for irrigation. Conversely more land may be affected by winter flooding. Increased erosion and decreased soil fertility are also possible. Effects on live stock welfare could significantly reduce production.
- **Plants and Animals** - The biggest threats to wildlife are those factors which affect their habitats. Nature reserves may suffer prolonged floods, droughts, or significant temperature changes, forcing

6 IPCC, 2014: Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, R K Pachauri and L A Meyer (eds.)]. IPCC, Geneva, Switzerland, 151 pp.

7 The certainty in key assessment findings is communicated based on the author teams' evaluations of underlying scientific understanding and is expressed as a qualitative level of confidence (from *very low* to *very high*) and, when possible, probabilistically with a quantified likelihood (from *exceptionally unlikely* to *virtually certain*).

2 Context

species to move. Many of the most important designated sites in the district could be badly affected by changes in water quantity or quality as they are designated due to their relationship with water. Although mobile species can migrate to more suitable areas, and there is some evidence that this is already occurring, less mobile species face a greater risk. They may not be able to adapt or migrate fast enough to avoid climate change pressures. Alterations to an area's biodiversity may have complex effects on food chains and interactions between species. There is also a potential threat to the diversity of water life caused by rising temperatures of our rivers and other water bodies.

- **Amenities** – In a warmer climate people are likely to be able to spend more time outside but there may be more need for shade during summer months. Increased tourism may bring economic benefits, but this is balanced against increased pressure on existing resources, rights of way, and environmentally sensitive areas. Waste disposal techniques may have to be adjusted as a warmer climate increases the potential for pests and other hazards. Flooding may also have serious implications for landfill sites, with potential for contamination of surrounding areas.
- **Health** – There are a number of expected negative consequences for health. Skin cancers and heat exhaustion are likely to increase due to being exposed to higher temperatures and more sunshine. Pest species, and new diseases may also spread faster. Conversely, milder winters are likely to reduce winter mortality (particularly in the elderly), although such vulnerable groups are also less able to cope with the predicted increase in heat waves.

Paris 2015 Climate Agreement

2.17 The Paris Climate Agreement saw an unprecedented number of countries, including the UK, sign up to take action on climate change. The agreement was signed in December 2015 and came into force in November 2016 following ratification by a quorum of signatory countries. The key elements of the Paris Climate Agreement are:

- To keep global temperatures 'well below' 2.0C above pre-industrial times and 'endeavour to limit' them even more, to 1.5C
- The long term goal to limit the amount of greenhouse gases emitted by human activity to the same levels that the natural environment can absorb naturally, beginning at some point between 2050 and 2100
- To review each country's contribution to cutting emissions every five years so they are scaled up to meet the challenge
- For developed countries to help developing nations by providing funding to help them adapt to climate change and switch to renewable energy

Climate Change Act 2008

2.18 The UK was the first country in the world to set out legally binding emissions reduction targets in the Climate Change Act 2008. The Act includes:

- **2050 Target:** The Act commits the UK to reducing emissions by at least 80% by 2050 compared with 1990 levels.
- **Carbon Budgets:** The Act requires the government to set legally binding 'carbon budgets'. A carbon budget is a cap on the amount of greenhouse gases emitted in the UK over a five-year period. The budgets include comprehensive reviews identifying areas where additional action will be required. The first five carbon budgets have been put into legislation and cover the period up to 2032.
- **The Committee on Climate Change:** The Committee was set up to advise the government on emissions targets, and report on progress made in reducing greenhouse gas emissions. It includes the Adaptation Sub-Committee (ASC) which scrutinises and advises on the government's programme for adapting to climate change. The Committee provides advice on the appropriate level of each carbon budget which is designed to reflect the most cost effective path to achieving the long term objectives. The Committee also produces advice and monitoring on adaptation and mitigation of climate change.
- **A National Adaptation Plan:** The Act requires the government to assess the UK's risks from climate change, prepare a strategy to address them, and encourage important organisations to do the same.

Carbon Budgets

- 2.19** The 5th and latest carbon budget covers the period from 2028 to 2032 and was agreed by government in July 2016. It commits the UK to a 2-3% annual reduction in carbon emissions that would result in a 57% reduction in emissions by 2030, relative to 1990 levels, that would keep the UK on the lowest cost path to reaching the 2050 target.

Committee on Climate Change Annual Report

- 2.20** The Committee produces annual reports on progress towards meeting the statutory carbon budgets and the 2050 target. In its 2016 report the Committee identified a number of key points:

- Whilst emissions have fallen by an average of 4.5% a year since 2012, this has been almost entirely due to progress in the power sector, particularly reduced use of coal as mature generation comes to the end of its design life and is decommissioned and because of government policies that have promoted an expansion of renewable generation.
- There has been almost no progress in the rest of the economy, where emissions have fallen less than 1% a year since 2012. That is because there has been slow uptake of low-carbon technologies and behaviours in the buildings sector and improved vehicle efficiency has been offset by increased demand for travel as the economy has grown and fuel prices have fallen. There is also minimal evidence of progress in the industrial and agriculture sectors.
- Progress will need to be made across a wider range of sectors in order to meet the 5th carbon budget and to prepare sufficiently for the 2050 target. For example, while the complete replacement of coal-fired generation with low-carbon generation in the power sector is an important part of modelled scenarios, this would provide less than half of the total emissions reduction required by 2030.

- 2.21** The report concludes that if the identified progress can be secured the UK can meet its legislated targets in the lowest cost way, while maximising the opportunities these bring for UK businesses.

Planning Context

What are the national planning policy requirements with regards to wind turbine development?

- 2.22** The National Planning Policy Framework (NPPF) sets out national planning policy. In [paragraph 97](#) the NPPF sets out the requirements for Local Planning Authorities with regards to renewable and low carbon energy development, including wind energy.

NPPF paragraph 97

To help increase the use and supply of renewable and low carbon energy, local planning authorities should recognise the responsibility on all communities to contribute to energy generation from renewable or low carbon sources. They should:

- have a positive strategy to promote energy from renewable and low carbon sources;
- design their policies to maximise renewable and low carbon energy development while ensuring that adverse impacts are addressed satisfactorily, including cumulative landscape and visual impacts;
- consider identifying suitable areas for renewable and low carbon energy sources, and supporting infrastructure, where this would help secure the development of such sources; ^{Footnote 17}
- support community-led initiatives for renewable and low carbon energy, including developments outside such areas being taken forward through neighbourhood planning; and
- identify opportunities where development can draw its energy supply from decentralised, renewable or low carbon energy supply systems and for co-locating potential heat customers and suppliers.

Footnote 17:

2 Context

In assessing the likely impacts of potential wind energy development when identifying suitable areas, and in determining planning applications for such development, planning authorities should follow the approach set out in the National Policy Statement for Renewable Energy Infrastructure (read with the relevant sections of the Overarching National Policy Statement for Energy Infrastructure, including that on aviation impacts). Where plans identify areas as suitable for renewable and low-carbon energy development, they should make clear what criteria have determined their selection, including for what size of development the areas are considered suitable.

2.23 The [National Policy Statements](#) (NPSs) identified in Footnote 17, are the National Policy Statement for Renewable Energy Infrastructure (EN-3) and the Overarching National Policy Statement for Energy Infrastructure (EN-1) that were published in July 2011. They are part of a suite of documents to advise the Infrastructure Planning Commission (IPC) on nationally significant energy infrastructure projects. Other documents in the series cover fossil fuel electricity generation (EN-2); gas supply infrastructure and gas and oil pipelines (EN-4); the electricity transmission and distribution network (EN-5) and nuclear electricity generation (EN-6). It should be noted that since the Energy Act 2016 gained royal assent onshore wind energy development is not defined as being of national significance. This means that schemes over 50MW that were previously defined as nationally significant are no longer classed as such and will be dealt with by the Local Planning Authority for the area rather than the IPC.

What is the NPSs' approach?

2.24 The NPSs' approach identified in Footnote 17 is a combination of different sections of the two statements, EN-1 and EN-3:

- EN-1;
 - Part 4 sets out the general principles that should be applied in the assessment of development consent applications across the range of energy technologies; and
 - Part 5 sets out policy on the assessment of impacts which are common across a range of these technologies (generic impacts).
- EN-3;
 - Part 2 is concerned with impacts and other matters which are specific to biomass and energy from waste, onshore and offshore wind energy, or where, although the impact or issue is generic and covered in EN-1, there are further specific considerations arising from the technologies covered by EN-3.

2.25 The NPSs set out that energy is vital to economic prosperity and social well-being and so it is important to ensure that the UK has secure and affordable energy. Producing the energy the UK requires and getting it to where it is needed necessitates a significant amount of infrastructure, both large and small scale. The energy NPSs consider the large scale infrastructure that plays a vital role in ensuring we have the secure energy supplies we need.

2.26 They also identify that government is committed to meeting the legally binding target to cut greenhouse gas emissions by at least 80% by 2050, compared to 1990 levels. Further they identify that analysis of possible 2050 pathways shows that moving to a secure, low carbon energy system is challenging, but achievable. It requires major investment in new technologies to renovate our buildings, the electrification of much of our heating, industry and transport, prioritisation of sustainable bio-energy and low carbon power generation. It also requires major changes in the way energy is used by individuals, by industry, and by the public sector.

2.27 In terms of the impacts that need to be considered for onshore wind turbine development the NPSs specifically identify:

- Air quality and emissions;
- Biodiversity and geological conservation;
- Civil and military aviation and defence interests;
- Flood risk;
- Historic environment;
- Landscape and visual;
- Noise and vibration; and
- Traffic and transport

2.28 These impacts would be in addition to more general electricity generation issues such as electricity grid connection and access. It is not considered feasible to undertake an assessment of all factors outlined in the NPSs as many are clearly focused on individual site selection rather than the identification of broad areas. These would be more appropriately, and in some case could only be, considered by applicants in determining specific locations for and the details of proposals.

What national planning guidance is there with regards to wind turbine development?

2.29 National guidance for planning is set out in the National Planning Practice Guidance (NPPG). It was originally published in March 2014 but is an online resource that is updated and added to from time to time as necessary. The section dealing with [renewable and low carbon energy](#), reproduced in Appendix 1: 'Planning Practice Guidance', contains specific guidance about wind turbine development, which was updated when the 'Written Ministerial Statement' (WMS) was issued.

2.30 Key points from the guidance with regards to wind turbines are:

1. *'A planning application should not be approved unless the proposed development site is an area identified as suitable for wind energy development in a Local or Neighbourhood Plan.'* This reflects the first of the two requirements of the WMS.
2. *'Suitable areas for wind energy development will need to have been allocated clearly in a Local or Neighbourhood Plan. Maps showing the wind resource as favourable to wind turbines or similar will not be sufficient.'* This also reflects the first of the two requirements of the WMS.
3. In relation to the siting of wind turbines the technical considerations that should be taken into account are; *'predicted wind resource, considerations relating to air safeguarding, electromagnetic interference and access for large vehicles.'*
4. In relation to criteria based policies; *'cumulative impacts require particular attention, especially the increasing impact that wind turbines and large scale solar farms can have on landscape and local amenity as the number of turbines and solar arrays in an area increases'*
5. In relation to the particular planning considerations for wind turbine proposals; *'The following questions should be considered when determining applications for wind turbines:*
Do local people have the final say on wind farm applications?
How are noise impacts of wind turbines assessed?
Is safety an issue when wind turbine applications are assessed?
Is interference with electromagnetic transmissions an issue for wind turbine applications?
How can the risk of wind turbines be assessed for ecology?
How should heritage be taken into account in assessing wind turbine applications?
Is shadow flicker and reflected light an issue for wind turbine applications?
How to assess the likely energy output of a wind turbine?
How should cumulative landscape and visual impacts from wind turbines be assessed?
What information is needed to assess cumulative landscape and visual impacts of wind turbines?
Decommissioning wind turbines'

2.31 The NPPG also contains guidance in relation to noise, safety, interference with electromagnetic transmissions, ecology, heritage, shadow flicker and reflected light, likely energy output of a wind turbine, and pre-application consultation.

2 Context

Ways the Local Plan can respond to climate change commitments

- 2.32** The opportunities that are available through the Local Plan and planning policy to respond to the climate change mitigation commitments identified above relate to energy efficiency, sustainable travel, decentralised energy generation, renewable energy generation and water efficiency. However, these opportunities are now limited, partly due to changes to national planning policy, and partly due to the nature of the district:
- **Energy efficiency:** Changes to national planning policy and building regulations in 2015 to rationalise the standards being applied to housing development mean that the Local Plan cannot require new housing to go beyond the energy efficiency requirements set out in building regulations.
 - **Sustainable Travel:** The Local Plan will seek to promote sustainable, low carbon modes of travel. This can be achieved through seeking modal shift to walking, cycling and public transport with a strategy that reduces the need to travel by co-locating uses and policies such as those that promote walkable neighbourhoods. However, the large rural nature of the district means that cars will continue to be the dominant form of travel for the foreseeable future. Any de-carbonising of car or other motorised vehicle based travel would come about as a result of measures implemented at a national/international level rather than local planning initiatives.
 - **Decentralised energy generation:** Opportunities for 'district heating' are likely to be limited to locations where large scale mixed development is proposed due to the need for 'base-load' demand from business uses. This is because new residential properties are relatively energy efficient and require limited heat (hot water only) during summer months. Experience of implementing such systems is limited in the UK and so it seems unlikely that many of the few available opportunities in Huntingdonshire would come to fruition.
 - **Renewable energy generation:** The Local Plan is required by national planning policy to have a positive approach to renewable energy development. Studies⁽⁸⁾ have identified that local opportunities for renewable energy development are focused on photo-voltaic solar, bio-gas, but particularly on wind.
 - **Water efficiency:** The changes to national planning policy and building regulations in 2015 also introduced an additional more stringent water efficiency standard for new homes, 110 litres per person per day compared with the basic standard of 125 litres per person per day. This smaller standard can be applied if supported by evidence. The Detailed Water Cycle Study 2014 includes data that supports applying the more stringent standard based on the current situation. With water resources expected to be affected by climate change more significant measures may be justified, but the Local Plan is limited to only being able to apply the nationally set 110 litre standard.
- 2.33** Given the limited nature of opportunities for the Local Plan to respond to climate change identified above, a positive and supportive approach to renewable energy, of all types would seem to be one of the best ways to contribute to achieving the climate change commitments.

Neighbourhood Plans

- 2.34** The WMS makes provision for neighbourhood plans to designate areas as suitable for wind turbines. Responding to this provision the Centre for Sustainable Energy has published an advice document, see Appendix 3: 'Other Relevant Plans and Programmes', that is intended to help those producing neighbourhood plans with the process of identifying suitable areas. The document highlights advantages of deciding on the suitability of areas at the neighbourhood plan level, such as being able to be more certain about the impacts there might be if turbines were erected in a specified area. However, it also shows that there can be substantial work involved in the process that can add to the already considerable amount of work involved in producing a neighbourhood plan.

8 East of England Renewable and Low Carbon Energy Capacity Study (AECOM and the Landscape Partnership, 2011)
Cambridgeshire Renewables Infrastructure Framework (CRIF) (Camco for Cambridgeshire Horizons, 2011)

- 2.35** Reflecting the WMS requirement for areas considered suitable for wind turbine development to be identified in either local plans or neighbourhood plans, if it is decided to include a policy in the Local Plan this would be done as a 'development management policy'. This would mean that neighbourhood plans would not have to be in general conformity with the policy, as detailed in the [National Planning Practice Guidance](#) and would be able to propose local policies that supplement, modify or replace the Local Plan policy.

Local Evidence

- 2.36** There are three evidence documents that are considered to be relevant:

- Wind Turbine Development in Huntingdonshire (2005)
- Wind Energy Development in Huntingdonshire Supplementary Planning Document (SPD) (2014)
- Cambridgeshire Renewables Infrastructure Framework (2011)

Wind Turbine Development in Huntingdonshire (2005)

- 2.37** This study was undertaken by Land Use Consultants and underpinned the original Wind Energy SPD published in 2006. The study built upon earlier work produced by Landscape Design Associates to characterise Huntingdonshire's landscapes⁽⁹⁾. The study articulated those characteristics of the landscape character areas that are sensitive to wind turbine development and combined this with an understanding of any special values attached to those landscapes in order to understand their relative capacity for wind turbine development.
- 2.38** At the time the study was completed there were no operational wind turbines in Huntingdonshire. The study therefore provided a 'zero turbine' baseline for the landscape character areas.
- 2.39** The study concluded that all landscape areas in Huntingdonshire had some capacity to accommodate wind turbines, with the Nene Valley having the least landscape capacity.

Wind Energy Development in Huntingdonshire SPD, June 2014

- 2.40** The purpose of the SPD is to assist the interpretation and application of those policies concerned with landscape character, visual impacts, and the location of wind turbine developments. The SPD specifically focuses on these issues and does not consider other impacts which may also be associated with wind turbine development. The SPD is composed of two parts:
- Part 1: Landscape Sensitivity to Wind Turbine Development
 - Part 2: Cumulative Landscape and Visual Impacts of Wind Turbine Development
- 2.41** Part 1 is a revision of the original Wind Power SPD, published in 2006, that:
- i. provides information on the relative sensitivity and capacity of the district's landscapes in relation to wind turbines;
 - ii. indicates criteria relating to landscape and visual impact that need to be taken into account when considering specific proposals; and
 - iii. provides guidance on potential mitigation measures where appropriate.
- 2.42** Part 2 is based on an independent assessment of the cumulative impacts of wind turbines and future capacity of the landscape to accommodate them. Undertaken for the Council by the Landscape Partnership this part:

9 The work by Landscape Design Associates formed the basis of the [Huntingdonshire Landscape and Townscape Assessment SPD](#) adopted by the Council in 2007. Nine landscape character areas and one sub-area were identified, as shown on Map 3.1 ': Landscape character areas'

2 Context

Huntingdonshire Local Plan | Huntingdonshire's Local Plan to 2036: Wind Energy Development

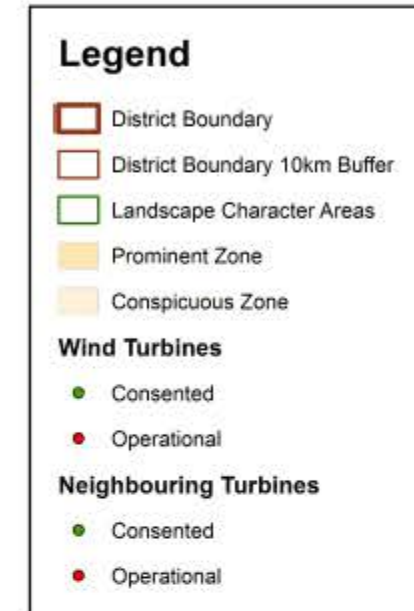
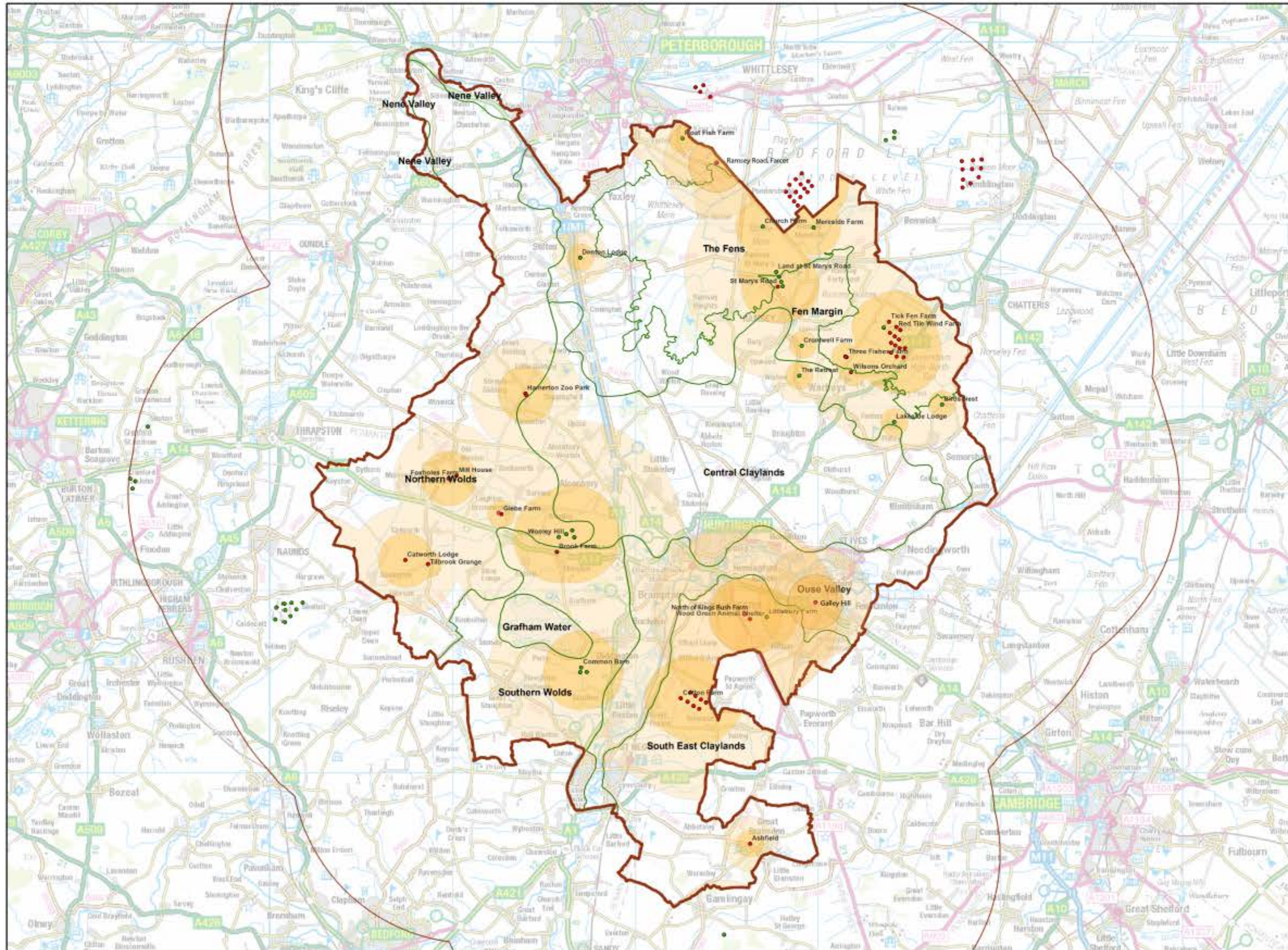
- i. evaluates the current cumulative landscape and visual impacts of wind turbine developments in the district; and
- ii. provides guidance on criteria for the assessment of cumulative landscape and visual impacts, including the consideration of 'Prominent' and 'Conspicuous' zones⁽¹⁰⁾ around turbines, see the updated Figure 16.5 over the page. It also provided indicative percentage thresholds for the landscape character areas.

2.43 The approach taken in the SPD was considered to be compatible with the approach advocated within the NPSs (see 'Planning Context' above) as it considers both turbine size and group size in consideration of impact in terms of landscape and visual effects.

2.44 Together the two parts provide comprehensive details on all scales of proposed wind turbine development in Huntingdonshire, setting out a positive approach to guide wind turbine development rather than setting absolute thresholds. In this way the SPD recognises and supports Huntingdonshire's capacity for wind energy development, while ensuring that proposals are guided to the most appropriate locations, safeguarding the key features and values of Huntingdonshire's landscapes.

2.45 The plan below is an updated version of the 'Prominent and Conspicuous Zones (Current Schemes)' plan in the Wind Energy SPD. It includes all schemes that have been consented and are now operational since the SPD was produced in March 2014. It should be noted that there are currently no 'in planning' proposals. Please also note that the plan is intended for printing on A3 sized paper.

10 'Prominent' and 'Conspicuous' are part of a sequence of visual effect characterisation that runs from 'Dominant' closest to the turbine, then moving away from the turbine zones of 'Prominent', 'Conspicuous', 'Apparent', 'Inconspicuous' and finally 'Negligible' visual effect. See Table 2 ': Zones of visual impact of turbines' for more details.



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Cambridgeshire Renewables Infrastructure Framework (2012)

2.46 The [Cambridgeshire Renewables Infrastructure Framework \(CRIF\) \(Camco for Cambridgeshire Horizons, 2012\)](#) was produced on behalf of all of the local authorities in Cambridgeshire. It identifies opportunities to invest and build the renewables business sector in the county. The CRIF identifies significant opportunities within Cambridgeshire for renewables, mostly wind and photo-voltaic solar but also in other forms such as bio-gas and domestic hot water solar. It identifies Huntingdonshire as having potential for:

- significant electricity generation from wind energy, which could contribute significantly to meeting the district's electricity demand.
- substantial electricity generation from photo-voltaic solar energy generation
- smaller amounts of energy generation from air source heat pumps, ground source heat pumps, domestic solar water heating, landfill gas, energy from waste, and biomass.

Conclusions from Local Evidence

2.47 Together the local evidence documents conclude that wind turbines are, at least to some extent, suitable in all parts of Huntingdonshire, subject to consideration of the planning impacts, specifically landscape and visual including cumulative impacts. They also identify opportunities for business growth related to renewable energy and for contributing to tackling climate change.

Other evidence

2.48 Several other documents have been identified as having some relevance for planning policy in relation to wind turbine development. These are set out in Appendix 3: 'Other Relevant Plans and Programmes'.

3 Options

3 Options

How to identify suitable options

Neighbouring Planning Authorities

- 3.1** As part of the preparation of this document research into the approaches being taken by Huntingdonshire's neighbouring planning authorities was completed in order to indicate how to inform the selection of options for Huntingdonshire.
- 3.2** The research identified that Bedford Borough, Central Bedfordshire, East Cambridgeshire and East Northamptonshire are all at early stages of preparing relevant parts of their Local Plans. For these authorities the issue of whether or not to identify areas as suitable for wind turbines has not as yet been considered in detail.

Cambridge City

- 3.3** Cambridge City is currently at examination (a joint examination with South Cambridgeshire) for its Local Plan. The issue of whether or not to identify areas that are suitable for wind turbines was one that was considered during a recent suspension of the examination hearing sessions. The City Council decided not to identify any areas as suitable. This decision was taken on the basis of recent evidence that showed that the majority of the City was unsuitable for wind turbines due to its built up nature which meant that the wind resource available was insufficient for wind turbines.

Peterborough

- 3.4** Peterborough City is in the early stages of preparing a new local plan. As part of consultation in January 2016 they asked for people's views on this issue and if they had any sites they would like considered for identification as suitable areas. No sites were submitted. They have therefore reported that they have no plans to identify areas for wind turbine development.

South Cambridgeshire

- 3.5** As identified above, South Cambridgeshire is currently at examination (a joint examination with Cambridge City) for its Local Plan. The issue of whether or not to identify areas that are suitable for wind turbines was one that was considered during a recent suspension of examination hearing sessions. On the basis of having no available evidence of suitability it was decided not to identify any areas as suitable within the plan but to propose a modification to the relevant policy to enable neighbourhood plans to identify suitable areas.

Other Areas

- 3.6** The research into the approaches taken elsewhere also looked further afield. Torridge District and North Devon Councils, neighbouring local authorities in Devon, have worked together to identify suitable areas. The approach taken has been to identify the whole of each district as suitable in principle, with sub-areas identified as being suitable for different scales of turbine proposals in terms of height of turbines and group size, based on the particular area's sensitivity in landscape and visual terms to wind turbines.
- 3.7** Rotherham Metropolitan Borough Council has used a combination of wind resource information and landscape appraisal to identify a small number of areas as suitable for wind turbines that cover a significant proportion of the rural parts of the council area. The approach did not make use of a recent study of the council area that had identified a very large number of small areas as being potentially suitable. Using the outputs from the recent study was discounted as an appropriate option as identifying such a large number of sites was considered to be impractical for the Local Plan process and for implementation as the small size of the areas would allow no potential for adjusting the location of turbines to mitigate adverse impacts on a case by case basis.

- 3.8** All three councils' approaches identify the areas that are considered suitable, whether that is qualified in some way or not, as an 'in principle' suitability. Consideration of planning applications would give full consideration to planning impacts including those identified by local communities.

Conclusions

- 3.9** As most of Huntingdonshire's neighbouring authorities are yet to consider whether to identify areas for wind turbines as part of their Local Plan processes there is little that can be concluded from that part of the research. The approaches taken elsewhere indicate that:
- options that are based around landscape impact should be investigated;
 - the practicalities of how an option might work in practice are worth considering as part of the process; and
 - identifying options that would identify areas as suitable in principle, with consideration of whether planning impacts including those identified by local communities have been addressed being reserved for the determination of planning applications is a valid approach.

Options

- 3.10** A series of options has been identified, taking account of the conclusions of the research into the approaches taken by other authorities and local evidence. The options identified are considered to represent all reasonable alternatives. For each option where an area would be identified as suitable it is the intention that this would be an 'in principle' suitability. Any wind turbine proposals put forward within the area would be subject to consideration of all potential planning impacts at the planning application stage. Impacts considered at the application stage, rather than at this strategic level, include those identified by local people who may be affected by the proposal, as well as cumulative impacts with existing development, in accordance with the requirements of the WMS and national policy and guidance.
- 3.11** Each of the following sections sets out for each option:
1. **Option Outline** - this provides a brief description of the option
 2. **Option Details** - this gives more detail about the parameters of the option
 3. **Assessment of Option** - this looks at how well the option complies with existing national planning policy and national guidance. It identifies the advantages and disadvantages of the option. It also looks at the practical and operational considerations that might affect how the option would work if it were to go forward as the preferred approach and adopted as part of the Local Plan.
- 3.12** The options are appraised in sustainability terms in Chapter 4 'Sustainability Appraisal'.
- 3.13** The options being considered are:

Option	Outline
'Option 1: Whole district is identified as suitable'	This option would identify the whole of Huntingdonshire as an area that is in principle suitable for wind turbines. It is based on the core conclusion of the Wind Turbine Development in Huntingdonshire (2005) study that all of the landscape character areas (LCAs) in the district have some capacity to accommodate wind turbines. This option would see 100% of the district identified as suitable.
'Option 2: Great Fen and its landscape and visual setting are not suitable'	This option would identify the whole of Huntingdonshire with the exception of the Great Fen and its landscape and visual setting as an area that is suitable for wind turbines. It takes account of the aims of the Great Fen project and the establishment of a landscape and visual setting by excluding these areas as not suitable. A central aim of the Great Fen is keeping it as an area where the

3 Options

Option	Outline
	experience gained by visitors will be one of a tranquil area of countryside unaffected by urban encroachment. This option would see just under 90% of the district identified as suitable.
'Option 3: Landscape character areas above prominent/ conspicuous thresholds are not suitable'	This option uses the consideration of landscape and visual impact capacity set out in part 2 of the Wind Energy SPD. Specifically the option uses the 'Prominent' and 'Conspicuous' thresholds for each landscape character area (LCA). Table 16 of the SPD for each LCA the percentage of the LCA that is within the Prominent and Conspicuous zones of constructed turbines. For this option where a LCA is identified as being above either the Prominent or Conspicuous thresholds it is identified as not suitable and where a LCA is below the thresholds it is identified as suitable. This option would see approximately 20% of the district identified as suitable.
'Option 4: Whole district is not suitable'	This option would not identify any areas as suitable for wind turbine development in Huntingdonshire and therefore proposals for wind turbines would not be permitted. This option would see 0% of the district identified as suitable.
'Additional Option A: Small turbines are suitable'	This option would identify the whole of Huntingdonshire as an area that is in principle suitable for small wind turbines. It is based on the core conclusion of the Wind Turbine Development in Huntingdonshire (2005) study that all of the landscape character areas (LCAs) in the district have some capacity to accommodate wind turbines and the conclusions of the CRIF that there are significant opportunities for the local economy, specifically for rural enterprises to diversify or support their businesses with small scale wind turbine development. This option would see 100% of the district identified as suitable for small turbines. This is identified as an additional option that could potentially be combined with Options 2, 3 or 4.

Option 1: Whole district is identified as suitable

Option Outline

- 3.14** This option would identify the whole of Huntingdonshire as an area that is in principle suitable for wind turbines. It is based on the core conclusion of the Wind Turbine Development in Huntingdonshire (2005) study that all of the landscape character areas (LCAs) in the district have some capacity to accommodate wind turbines. This option would see 100% of the district identified as suitable.

Option Details

- 3.15** If this option were to be taken wind turbine proposals could come forward anywhere in the district. Proposals would be subject to consideration of all planning issues to do with landscape and visual impact, impact on heritage assets etc including planning impacts raised by affected local communities. Such planning impacts would need to be fully addressed for the proposal to be granted planning permission.

Assessment of option 1

Compliance with National Planning Policy (NPPF):

- 3.16** By establishing the widest area possible this option is considered to be fully compliant with national planning policy as set out in the NPPF. It clearly fulfils the requirements set out in paragraph 97 for local planning authorities to:
- have a positive strategy to promote energy from renewable and low carbon sources; and
 - design their policies to maximise renewable and low carbon energy development while ensuring that adverse impacts are addressed satisfactorily, including cumulative landscape and visual impacts.

Compatibility with National Planning Practice Guidance (NPPG):

- 3.17** This option is considered to be compatible with national planning practice guidance. In relation to the key points from the guidance, identified in paragraph 2.30, this option would:
1. enable planning applications to be determined as it would identify an area as suitable for wind turbines;
 2. identify suitable areas within the local plan;
 3. not prevent the specific technical considerations for wind turbine proposals from being taken into account;
 4. be compatible with a criteria based policy that includes identification of cumulative impacts as an issue requiring particular attention; and
 5. not prevent the particular planning considerations for wind turbine proposals from being taken into account.

Advantages of this option

- 3.18** Of the four options being considered, this option identifies the largest area as suitable for wind turbines. It would:
- give the greatest opportunity for wind turbine development. This option therefore provides the most potential to contribute to the reduction of CO₂ thereby tackling climate change, provide energy security, and provide benefits to rural businesses.
 - not confine wind turbine proposals to smaller areas, as is the case with other options (particularly option 3). For specific wind turbine proposals, this option therefore gives the greatest potential for landscape, visual and other impacts, such as on heritage assets, to be avoided or mitigated.

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Disadvantages of this option

3.19 The disadvantages identified for this option are:

- This option would provide no special protection for areas of the district, such as the Great Fen, that are particularly sensitive to the impacts of wind turbine developments.
- It is considered likely that wind turbine proposals would continue to be concentrated in areas of the district where there are already wind turbines. This could mean that cumulative impacts adversely affect these areas; although proposals would be subject to consideration of planning matters such as their landscape and visual impact, and such impacts would therefore be mitigated or minimised there is potential for unforeseen impacts or for the impacts to be underestimated.

Other relevant requirements and considerations

3.20 If this option were to be taken the existing Wind Energy SPD could be retained in its current form, although several maps in Part 2 would benefit from being updated, as detailed advice about landscape and visual impact will be required. The [guidance note](#) that clarifies the specification of assessments and information that should be submitted with applications would also be retained, although would also need to be reviewed and potentially amended. There are considered to be no other relevant requirements, practical or operational considerations that might raise problems when applying this option should it be taken forward as the preferred approach.

Option 2: Great Fen and its landscape and visual setting are not suitable

Option Outline

3.21 This option would identify the whole of Huntingdonshire with the exception of the Great Fen and its landscape and visual setting as an area that is suitable for wind turbines. It takes account of the aims of the Great Fen project and the establishment of a landscape and visual setting by excluding these areas as not suitable. A central aim of the Great Fen is keeping it as an area where the experience gained by visitors will be one of a tranquil area of countryside unaffected by urban encroachment. This option would see just under 90% of the district identified as suitable.

Option Details

3.22 The [Great Fen](#) is a 50-year project to create a regional scale wetland area of over 3,700ha. As one of the largest restoration projects of its type in Europe, the landscape of the fens between Peterborough and Huntingdon is being transformed for the benefit of both wildlife and people.

3.23 The landscape and visual setting boundary for the Great Fen was defined in a study produced by LDA Design for the Council in July 2008.

3.24 Significant fieldwork was undertaken as part of the study as well as specific consideration of wind turbines and other large scale developments such as major telecommunications masts and large industrial structures/ chimneys.

3.25 The landscape and visual setting boundary, shown on the map below, in the study was defined as the area of land surrounding the Great Fen which exhibits some or all of the following:

1. Significant visual connections with the Great Fen;
2. Significant visual influence on/ falls within the visual envelope of the Great Fen;
3. Significant contributions to the key/ critical visual character of views as seen from the Great Fen;
4. Significant contributions to the key/ critical landscape character as seen from the Great Fen;
5. Shares the same landscape character as the Great Fen.

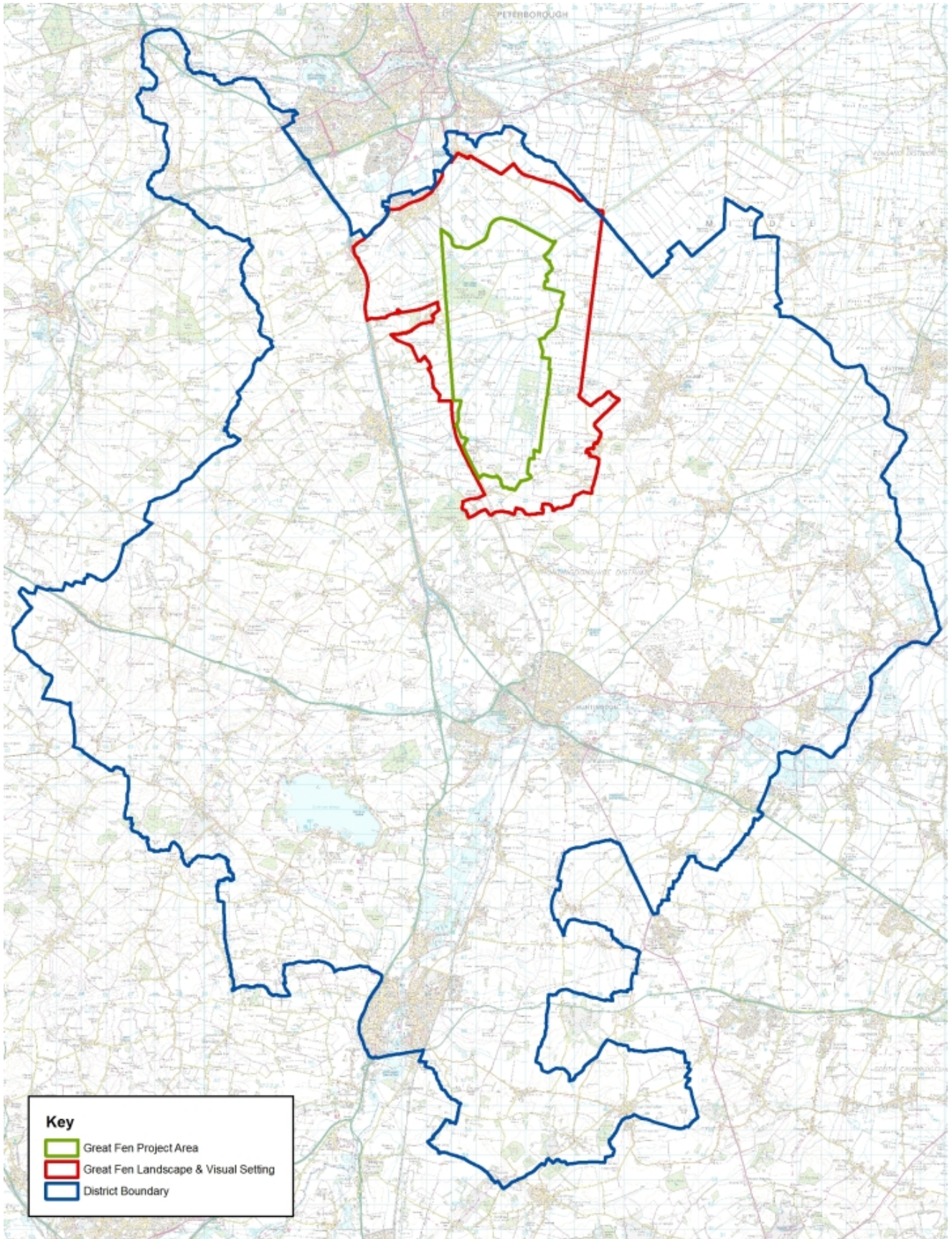
3.26 The setting excludes land where intervisibility exists but where the distance involved is so substantial that it is not significant in the immediate setting of the Great Fen. This 'offset' line was judged to be 3km from the edge of the Great Fen as beyond this development, including wind turbines, are unlikely to have significant visual impact on the special qualities of the Great Fen.

3.27 The Great Fen covers an area of approximately 3,792ha and together with the landscape and visual setting covers about 9,520ha. This is just over 10% of the district⁽¹¹⁾.

¹¹ The district is 91,255ha and the Great Fen and its landscape and visual setting are 10.4%.

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Figure 3.1 Great Fen and landscape and visual setting with landscape character areas



- 3.28** Proposals outside of the Great Fen and its landscape and visual setting would be subject to consideration of all planning issues to do with landscape and visual impact, impact on heritage assets etc including planning impacts raised by affected local communities. Such planning impacts would need to be fully addressed for the proposal to be granted planning permission.

Assessment of option 2

Compatibility with National Planning Policy Framework (NPPF):

- 3.29** By identifying a large proportion (just below 90%) as being suitable for wind turbines this option is considered to be fully compliant with national planning policy as set out in the NPPF. It fulfils the requirements set out in paragraph 97 for local planning authorities to:
- have a positive strategy to promote energy from renewable and low carbon sources; and
 - design their policies to maximise renewable and low carbon energy development while ensuring that adverse impacts are addressed satisfactorily, including cumulative landscape and visual impacts.

Compatibility with National Planning Practice Guidance (NPPG):

- 3.30** This option is considered to be compatible with national planning practice guidance. In relation to the key points from the guidance, identified in paragraph 2.30, this option would:
1. enable planning applications to be approved as it would identify an area as suitable for wind turbines covering the majority of the district;
 2. determine the approach to clearly identifying suitable areas within the local plan;
 3. not prevent the specific technical considerations for wind turbine proposals from being taken into account;
 4. be compatible with a criteria based policy that identifies cumulative impacts as an issue requiring particular attention; and
 5. not prevent the particular planning considerations for wind turbine proposals from being taken into account.

Advantages of this option

- 3.31** Of the four options being considered, this option identifies the second largest area as suitable for wind turbines. It would:
- give significant opportunity for wind turbine development, more than option 3, although less than option 1. This option therefore provides significant potential to contribute to the reduction of CO₂ thereby tackling climate change, provide energy security, and provide benefits to rural businesses, although less than that provided by option 1.
 - confine wind turbine proposals to a smaller area than option 1, but would not confine proposals to the extent that option 3 would. For specific wind turbine proposals, this option therefore gives significant potential for landscape, visual and other impacts, such as on heritage assets, to be avoided or mitigated.

Disadvantages of this option

- 3.32** This option has the disadvantages of:
- Providing no special protection for areas of the district, other than the Great Fen, that may be sensitive to the impacts of wind turbine developments. The landscape study identifies the Nene Valley in particular but also the Great Ouse Valley as having limited capacity for wind turbines.
 - It is considered likely that wind turbine proposals would continue to be concentrated in areas of the district where there are already wind turbines. This could mean that cumulative impacts adversely affect these areas; although proposals would be subject to consideration of planning matters such

3 Options

as landscape and visual impact, enabling such impacts to be mitigated or minimised, there is potential for unforeseen impacts.

Other relevant requirements and considerations

- 3.33** This option would enable the SPD to be retained, although as noted above in the assessment of option 1 several maps in part 2 would benefit from being updated. Further to this the tables in chapter 17 of the SPD concerned with assessing cumulative effects may need to be reviewed as the Great Fen and its landscape and visual setting cover a large area that extends into several landscape character areas. In particular the percentages for the prominent and conspicuous thresholds in Table 16 of the SPD may need to be revised. The [guidance note](#) that clarifies the specification of assessments and information that should be submitted with applications would also be retained, although would also need to be reviewed and potentially amended.
- 3.34** There are considered to be no other relevant requirements that might raise problems when applying this option should it be taken forward as the preferred approach.

Option 3: Landscape character areas above prominent/ conspicuous thresholds are not suitable












Option Outline

3.35 This option uses the consideration of landscape and visual impact capacity set out in part 2 of the Wind Energy SPD. Specifically the option uses the 'Prominent' and 'Conspicuous' thresholds for each landscape character area (LCA). Table 16 of the SPD for each LCA the percentage of the LCA that is within the Prominent and Conspicuous zones of constructed turbines. For this option where a LCA is identified as being above either the Prominent or Conspicuous thresholds it is identified as not suitable and where a LCA is below the thresholds it is identified as suitable. This option would see approximately 20% of the district identified as suitable.

Option Details

3.36 The LCAs were originally defined in the [Landscape and Townscape Assessment SPD \(2007\)](#) and were based upon a detailed landscape and townscape assessment carried out by Landscape Design Associates in 2001. The work identified 9 LCAs (and 1 sub area).

Landscape Character Areas

	Central Claylands		Ouse Valley
	Central Claylands sub area of Extensive Woodland		South East Claylands
	Fen Margin		Southern Wolds
	Grafham Water		The Fens
	Nene Valley		District Boundary
	Northern Wolds		

- **Prominent Zone** - This zone is close to but not immediately around each turbine. In this zone turbines form a very large element of the view, commanding and controlling the view. The radius of the Prominent Zone is related to the height of the turbine⁽¹²⁾, for a turbine that has a height of between 100m and 129m to blade tip the outer extents of this zone is considered to be 2km radius from the turbine.
- **Conspicuous Zone** - This zone is the area around the Prominent Zone. Turbines form a large element of the view, standing out from the surroundings and forming an unmistakable feature within the panorama. The radius of the Conspicuous zone is related to the height of the turbine, for a turbine that has a height of between 100m and 129m to blade tip this zone starts at a 2km radius and extends to a 5km radius from the turbine.

3.38 The SPD considers the character and sensitivity of each LCA and identifies a percentage threshold for Prominent and Conspicuous zones within the LCA that represents the capacity the area has to visually accommodate wind turbines.

3.39 In the SPD Table 16 shows the percentages of the LCAs that are in Prominent and Conspicuous zones and which LCAs are above or below the relevant Prominent and Conspicuous thresholds. The table below highlights the percentages for Prominent and Conspicuous that are above the each threshold (orange shading) and those percentages that are the same or within 5% below the threshold (yellow shading). The final column states whether the LCA should be considered to be suitable or not.

Table 1 : Landscape character area suitability based on thresholds for 'Prominent' and 'Conspicuous' zones and percentages as at November 2016⁽¹⁾

Landscape Character Area (LCA)	Prominent Zone Threshold	Current percentage in Prominent Zone ⁽²⁾	Conspicuous Threshold	Current percentage Conspicuous Zone ⁽²⁾	Total Prominent and Conspicuous Zones Threshold	Current combined percentage Prominent and Conspicuous Zones ⁽²⁾	Suitable?
The Fens	25	38	50	39	75	77	Above Prominent and combined Thresholds so Not suitable
Fen Margin	15	16	45	33	60	51	Above Prominent Threshold so Not suitable
Central Claylands	30	7	45	33	75	40	Below all thresholds so is suitable
Ouse Valley	5	13	50	64	55	77	Above Prominent, Conspicuous and

¹² The reduction in distances are not a straight forward pro-rata reduction based on height alone since smaller turbines are relatively more detracting in the landscape by virtue of the faster rotation speeds. Distances for different turbine heights are set out in Table 3 ': Zones of visual impacts of turbines extrapolated for different turbine height Distances are rounded to the closest 100m at <1km and then to the nearest 500m'

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Landscape Character Area (LCA)	Prominent Zone Threshold	Current percentage in Prominent Zone ⁽²⁾	Conspicuous Threshold	Current percentage Conspicuous Zone ⁽²⁾	Total Prominent and Conspicuous Zones Threshold	Current combined percentage Prominent and Conspicuous Zones ⁽²⁾	Suitable?
							combined Thresholds so Not suitable
South East Claylands	25	26	50	39	75	65	Above Prominent Threshold so Not suitable
Northern Wolds	10	15	40	37	50	52	Above Prominent and combined Thresholds so Not suitable
Grafham Water	5	21	50	79	55	100	Above Prominent, Conspicuous and combined Thresholds so Not suitable
Southern Wolds	25	26	50	51	75	77	Above Prominent, Conspicuous and combined Thresholds so Not suitable
Nene Valley	5	0	25	0	30	0	See ⁽³⁾ below

1. Ref. Table 16, Wind Energy Development in Huntingdonshire SPD, April 2014
2. NB: Current numbers relate to constructed and consented schemes as at 1 November 2016.
3. **Nene Valley** - This LCA is particularly sensitive to wind turbine development and is the smallest LCA at just 7km². Although none of the LCA is in either the Prominent or Conspicuous zones it is considered likely that a single turbine either within the LCA or close to it could increase the Prominent percentage above the threshold. For this reason the LCA is not considered to be suitable.

3.40 From the table above this option would see the Central Claylands identified as the only LCA that is suitable. Proposals for wind turbines within the Central Claylands would be subject to consideration of all planning issues to do with landscape and visual impact, impact on heritage assets etc including planning impacts raised by affected local communities. Such planning impacts would need to be fully addressed for the proposal to be granted planning permission.

3.41 The Central Claylands LCA is the second largest LCA in the district at approximately 18,600ha, which is approximately 20% of the district.

Assessment of option 3

Compatibility with National Planning Policy Framework (NPPF):

3.42 By establishing an area of the district (approximately 20%) as suitable for wind turbines this option is considered to be compliant with national planning policy as set out in the NPPF. It fulfils the requirements set out in paragraph 97 for local planning authorities to:

- have a positive strategy to promote energy from renewable and low carbon sources; and
- design their policies to maximise renewable and low carbon energy development while ensuring that adverse impacts are addressed satisfactorily, including cumulative landscape and visual impacts.

Compatibility with National Planning Practice Guidance (NPPG):

3.43 This option is considered to be compatible with national planning practice guidance as set out in the NPPG. In relation to the key points from the guidance, identified in paragraph 2.30, this option would:

1. enable planning applications to be approved as it would identify an area of the district as suitable for wind turbines;
2. determine the approach to clearly identifying suitable areas within the local plan;
3. not prevent the specific technical considerations for wind turbine proposals from being taken into account;
4. be compatible with a criteria based policy that identifies cumulative impacts as an issue requiring particular attention; and
5. not prevent the particular planning considerations for wind turbine proposals from being taken into account.

Advantages of this option

3.44 By identifying the LCA that is the least affected by Prominent and Conspicuous zones for existing wind turbines this option minimises the likelihood of cumulative landscape and visual impacts.

Disadvantages of this option

3.45 Of the three main options that identify any areas as being suitable, this option identifies the smallest area as suitable for wind turbines. It would:

- give limited opportunity for wind turbine development, less than options 1 or 2. This option therefore provides only limited potential to contribute to the reduction of CO₂ thereby tackling climate change, provide energy security, and provide benefits to rural businesses.
- confine wind turbine proposals to a smaller area than options 1 or 2. For specific wind turbine proposals, this option therefore gives only limited potential for landscape, visual and other impacts, such as on heritage assets, to be avoided or mitigated.

Other relevant requirements and considerations

3.46 There is a potential shortcoming of this option in that it discounts LCAs as unsuitable where they are above the thresholds but does not take account of whether turbines actually are prominent/ conspicuous in those areas. The actual landscape and visual effects would be locally limited by factors including topography, vegetation cover and built development. Furthermore, some factors e.g. topography would be more consistent in flatter LCAs such as the Fens but would vary in other LCAs where there is more variation in topography pattern e.g. the Northern Wolds. In some cases areas of intervening high ground may provide localised partial or complete screening of turbines from some viewpoint locations. Conversely turbines on more prominent ridges may be more widely visible from other ridges or along and across valleys.

3 Options

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- 3.47** When the tables in the SPD were drawn up account was taken of the character of each LCA in terms of the likelihood of there being intervening terrain, buildings, vegetation etc in the identification of the prominent/conspicuous thresholds. However, there was no consideration of how intervening features would affect the actual visibility of each turbine. This means that it is likely that turbines are less visible than would seem the case from the figures, particularly for small turbines and those in LCAs such as the Northern Wolds.
- 3.48** If this option were to be selected as the preferred approach the existing SPD could potentially be retained as advice on landscape and visual impact as well as cumulative effects would be needed. However, much of the advice in Part 1 would be redundant so the document would need to be reviewed and potentially revised extensively. The [guidance note](#) that clarifies the specification of assessments and information that should be submitted with applications could also be retained, although would also need to be reviewed and potentially amended.

Option 4: Whole district is not suitable

Option Outline

- 3.49** This option would not identify any areas as suitable for wind turbine development in Huntingdonshire and therefore proposals for wind turbines would not be permitted. This option would see 0% of the district identified as suitable.

Option Details

- 3.50** This option can be thought of as the 'do nothing' approach as by not identifying areas as suitable it would perpetuate the current situation that has existed since the WMS was issued.
- 3.51** This option would mean that all proposals would be refused. There would be no need to consider any planning issues or to judge whether the planning impacts identified by affected local communities have been fully addressed as the first requirement of the WMS, that the proposal is within an area identified as suitable for wind turbines in the Local Plan, would not have been fulfilled.

Assessment of option 4

Compatibility with National Planning Policy Framework (NPPF):

- 3.52** Huntingdonshire has had a significant amount of wind turbine development over the last ten years. The table in 'Option 3: Landscape character areas above prominent/ conspicuous thresholds are not suitable' shows that all LCAs apart from the Nene Valley have had some wind turbine development either within the LCA or close by such that the prominent or conspicuous zones affect the area. It is therefore reasonable to say that Huntingdonshire has contributed to renewable energy generation and as a result to reducing CO₂ emissions and tackling climate change. Furthermore Huntingdonshire continues to receive proposals for other forms of renewable energy development, the most significant of which being solar photo-voltaic (PV). Through this option Huntingdonshire would continue to be supportive of renewable energy proposals other than for wind energy and so would fulfil the requirements set out in paragraph 97 for local planning authorities to:

- have a positive strategy to promote energy from renewable and low carbon sources; and
- design their policies to maximise renewable and low carbon energy development while ensuring that adverse impacts are addressed satisfactorily, including cumulative landscape and visual impacts.

Compatibility with National Planning Practice Guidance (NPPG):

- 3.53** This option is considered to be compatible with national planning practice guidance as set out in the NPPG. In relation to the key points from the guidance, identified in paragraph 2.30, this option would:
1. enable planning applications to be approved as it would not prevent development schemes for renewable energy other than wind energy being proposed;
 2. determine the approach by clearly stating in the local plan that there are considered to be no suitable areas for wind turbines;
 3. not prevent the specific technical considerations for wind turbine proposals from being taken into account;
 4. be compatible with a criteria based policy that identifies cumulative impacts as an issue requiring particular attention; and
 5. not prevent the particular planning considerations for wind turbine proposals from being taken into account.

Advantages of this option

- 3.54** This option would have the advantage of removing all possibility of landscape and visual impacts from further wind turbine development.

3 Options

Disadvantages of this option

3.55 This option would have disadvantages:

- by preventing wind energy developments it would do nothing to contribute to reducing CO₂ emissions and addressing climate change.
- it would prevent local rural businesses from using wind turbines to diversify their energy procurement and support their businesses.

Other relevant requirements and considerations

3.56 With this option there would be no need to retain the existing Wind Energy Development in Huntingdonshire SPD. The [guidance note](#) that clarifies the specification of assessments and information that should be submitted with applications would be withdrawn.

3.57 With this option the draft policy set out in Chapter 6 'Draft Policy' would not be needed. Instead the existing draft policy for renewable and low carbon energy proposals LP 36, set out in Appendix 5: 'Draft Local Plan policy LP 36' would be amended to make it clear that it would apply to all renewable and low carbon energy proposals with the exception of those for wind turbines. The policy and/ or supporting text would also need to identify the possibility for neighbourhood plans to identify and allocate suitable areas to be consistent with the 'Written Ministerial Statement'.

Additional Option A: Small turbines are suitable

Option Outline

3.58 This option would identify the whole of Huntingdonshire as an area that is in principle suitable for small wind turbines. It is based on the core conclusion of the Wind Turbine Development in Huntingdonshire (2005) study that all of the landscape character areas (LCAs) in the district have some capacity to accommodate wind turbines and the conclusions of the CRIF that there are significant opportunities for the local economy, specifically for rural enterprises to diversify or support their businesses with small scale wind turbine development. This option would see 100% of the district identified as suitable for small turbines. This is identified as an additional option that could potentially be combined with Options 2, 3 or 4.

Option Details

3.59 In order for this option to be implemented what is meant by 'small turbines' needs to be defined. This can be informed by understanding the heights⁽¹³⁾ of existing turbines in Huntingdonshire. Appendix 2: 'Consented and Constructed Turbines' includes information about all consented and constructed turbines in Huntingdonshire including the number and height of turbines in each scheme. The data shows that many of the wind turbine schemes that have been erected in Huntingdonshire are relatively modest single turbines; just under 29%⁽¹⁴⁾ are turbines of 25m or less in height. These turbines have typically been erected to enable a farm to diversify its energy supply and to generate alternative income. The data shows that there are comparatively few turbines that are between 26m and 99m tall, just over 17% are within this height range, with all the remaining turbines, just under 54% being between 100m and 130m tall.

3.60 The visibility of turbines once erected is also an important part of deciding what is meant by 'small' turbines. The following tables are reproduced from the existing Wind Energy SPD. The first sets out the descriptions of the various zones of visual impact while the second details the distances from turbines these zones extend to and how that distance changes with the height of the turbine.

Table 2 : Zones of visual impact of turbines

Zones of Visual Impact	Description
Dominant	Turbines form the principle element of the view and may overpower the viewer
Prominent	Turbines form a very large element of the view, commanding and controlling the view
Conspicuous	Turbines form a large element of the view, standing out from the surroundings and forming an unmistakable feature within the panorama.
Apparent	Turbines form a medium element of the view, noticeable in panoramas, clearly visible and catching the eye.
Inconspicuous	Turbines form a small element of the view, that is visible but not distinct or obvious on first glance or in overcast conditions
Negligible	Turbines form a very small element of the view, barely visible in clear conditions

13 Within this document all references to the height of a turbine refer to the maximum height of the turbine to the tip of a vertical blade.

14 18 out of 63 turbines

3 Options

Table 3 : Zones of visual impacts of turbines extrapolated for different turbine height⁽¹⁾

Magnitude of Impact	Height of Turbine				
	<30m	30m to 69m	70m to 99m	100m to 129m	130m to 150m+
Dominant	<400m	<600m	<800m	<1km	<1.2km
Prominent	<750m	<1.5km	<1.75km	<2km	<2.5km
Conspicuous	750m to 1.5km	1.5km to 3km	1.75km to 4km	2km to 5km	2.5km to 6km
Apparent	1.5km to 3km	3km to 8km	4km to 12km	5km to 15km	6km to 18km
Inconspicuous	3 to 5km	8km to 16km	12km to 24km	15km to 30km	18km to 37km
Negligible	>5km	>16km	>24km	>30km	>37km

1. Distances are rounded to the closest 100m at <1km and then to the nearest 500m

3.61 As the table above shows turbines of up to 30m in height are significantly less visible compared with those of 100m or more in height.

3.62 'Small turbines' could therefore be defined as those up to 25m to the tip of a vertical blade. Using 25m would include all of the 'small' turbines in the district that have been erected or consented to date. Alternatively using a 30m height is unlikely to have much greater impacts in terms of visual, landscape or other impacts and would allow a margin for slightly taller turbines that could allow for technological development in the sector. Such technological development may see new models of turbine become available that are between 25m and 30m tall but that may have less impact in terms of issues such as noise and may also be more efficient.

3.63 A decision on which height to choose is not considered to be essential at this stage and can be taken if this additional option is selected as part of the preferred approach. The difference between 25m and 30m is considered to make no appreciable difference for the purposes of assessing and appraising the option.

Combining with the main options

3.64 As indicated in the outline this option is proposed as an additional option that would be combined with one of the other main options. The following table looks at how combining options could work:

Table 4 : How main options could work with additional option A

Option	Combined with option A?
'Option 1: Whole district is identified as suitable'	Option A would not work in combination with Option 1 as all heights of turbine are potentially acceptable anywhere in the district for Option 1 so Option A would be redundant.
'Option 2: Great Fen and its landscape and visual setting are not suitable'	Option A could work in combination with Option 2. The combined effect would be that small turbines would be potentially acceptable within the Great Fen and its landscape and visual setting, while elsewhere turbines of any height are potentially acceptable.
'Option 3: Landscape character areas above prominent/ conspicuous thresholds are not suitable'	Option A could work in combination with Option 3. The combined effect would be that small turbines could potentially be acceptable anywhere in the district but larger turbines would be potentially acceptable in the Central Claylands Landscape character area.

Option	Combined with option A?
'Option 4: Whole district is not suitable'	Option A could work in combination with Option 4. The combined effect would be that only small turbines could potentially be acceptable anywhere in the district.

Assessment of option A

Compliance with National Planning Policy (NPPF):

3.65 By establishing the widest area possible, although limiting acceptability to small turbines, this option is considered to be compliant with national planning policy as set out in the NPPF. It fulfils the requirements set out in paragraph 97 for local planning authorities to:

- have a positive strategy to promote energy from renewable and low carbon sources; and
- design their policies to maximise renewable and low carbon energy development while ensuring that adverse impacts are addressed satisfactorily, including cumulative landscape and visual impacts.

Compatibility with National Planning Practice Guidance (NPPG):

3.66 This option is considered to be compatible with national planning practice guidance. In relation to the key points from the guidance, identified in paragraph 2.30, this option would:

1. enable planning applications to be determined as it would identify an area as suitable for wind turbines;
2. identify suitable areas within the local plan;
3. not prevent the specific technical considerations for wind turbine proposals from being taken into account;
4. be compatible with a criteria based policy that includes identification of cumulative impacts as an issue requiring particular attention; and
5. not prevent the particular planning considerations for wind turbine proposals from being taken into account.

Advantages of this option

3.67 In common with main option 1 this option identifies the largest area as suitable for wind turbines, although limiting acceptability to small turbines. It would:

- provide some limited potential to contribute to the reduction of CO₂ thereby tackling climate change, providing energy security, and providing benefits to rural businesses and enabling local community projects.
- not confine wind turbine proposals to smaller areas, as is the case with some main options (particularly option 3). For specific wind turbine proposals, this option therefore gives the greatest potential for landscape, visual and other impacts, such as on heritage assets, to be avoided or mitigated. Additionally by limiting acceptability to small turbines the potential for landscape, visual and other impacts is likely to be limited as views to small turbines are more likely to be blocked by intervening features such as buildings, vegetation or topography.

Disadvantages of this option

3.68 This option would provide no special protection for areas of the district, such as the Great Fen, that are sensitive to the impacts of wind turbine developments.

3 Options

Other relevant requirements and considerations

- 3.69** If this option were to be taken the existing Wind Energy SPD could be retained. However it focuses on the visual and landscape impacts from large turbines. As this option is envisaged as working in combination with another option the existing SPD may need to be reviewed, for example if combined with option 4 whereby only small turbines could be potentially acceptable then much of the existing SPD would be of limited relevance.
- 3.70** In terms of practical or operational considerations that might raise problems when applying this option there may be issues with whatever height was selected for this option, for example if 'small turbines' was defined as all those below 25 metres in height there would be a question of what the approach would be for a proposal for a turbine of 26m. This would potentially be a problem that would occur with any height selected although as can be seen from the detail of the option there are distinct groupings of heights of existing turbines.

Summary of Assessment of Options

3.71 The following table gives a side by side comparison of the key points of the options being considered and the advantages and disadvantages of each identified in the assessments.

Table 5 : Summary of advantages and disadvantages of main options

Option	1: Whole district is identified as suitable	2: Great Fen and its landscape & visual setting area are not suitable	3: Landscape character areas above prominent/ conspicuous thresholds are not suitable	4: Whole district is not suitable	A: Small turbines
Approximate %age of district	100%	90%	20%	0%	100%
Advantages	Provides most potential to contribute to the reduction of CO ₂ thereby tackling climate change, provide energy security, and provide benefits to rural businesses. For specific wind turbine proposals, gives the greatest potential for landscape, visual and other impacts, such as on heritage assets, to be avoided or mitigated.	Provides significant potential to contribute to the reduction of CO ₂ thereby tackling climate change, provide energy security, and provide benefits to rural businesses, although less than that provided by option 1. For specific wind turbine proposals, gives significant potential for landscape, visual and other impacts, such as on heritage assets, to be avoided or mitigated, although less than that provided by option 1.	Minimises the likelihood of cumulative landscape and visual impacts.	Removes possibility of landscape and visual impacts from further wind turbine development.	Provides some limited potential to contribute to the reduction of CO ₂ thereby tackling climate change, providing energy security, and providing benefits to rural businesses and enabling local community projects. By limiting to small turbines this option gives the greatest potential for landscape, visual and other impacts, such as on heritage assets, to be avoided or mitigated.
Disadvantages	No special protection for areas of the	No special protection for areas of the district that	Provides only limited potential to contribute to	Does not contribute to reducing CO ₂ emissions and climate change.	Provides no special protection for areas of the

3 Options

Option	1: Whole district is identified as suitable	2: Great Fen and its landscape & visual setting area are not suitable	3: Landscape character areas above prominent/ conspicuous thresholds are not suitable	4: Whole district is not suitable	A: Small turbines
	<p>district, such as the Great Fen, that are sensitive to the impacts of wind turbine developments. Greatest likelihood of cumulative landscape and visual impacts from wind turbines being concentrated in areas of the district where there are already wind turbines.</p>	<p>may be sensitive to the impacts of wind turbine developments, other than the Great Fen. Second greatest likelihood of cumulative landscape and visual impacts from wind turbines being concentrated in areas of the district where there are already wind turbines.</p>	<p>the reduction of CO₂ thereby tackling climate change, provide energy security, and provide benefits to rural businesses. For specific wind turbine proposals, this option gives only limited potential for landscape, visual and other impacts, such as on heritage assets, to be avoided or mitigated.</p>	<p>Does not allow local rural businesses to diversify their energy procurement through wind energy.</p>	<p>district, such as the Great Fen, that are sensitive to the impacts of wind turbine developments.</p>

4 Sustainability Appraisal

- 4.1** This section sets out the sustainability appraisal (SA) of the 4 main options and the additional option A. The appraisals for the main options are presented side by side so that comparisons between them can be made. Conclusions for each option are presented below the main appraisal table, including consideration of ways of mitigating adverse effects and maximising beneficial effects, which is a requirement of the SA process. The appraisal for the additional option A is presented after the main options and includes commentary about how combining with each of the main options is considered to affect the impacts that might arise.
- 4.2** In completing the appraisal it is assumed that for all options where an area of the district is identified as suitable the second part of the WMS (whether planning impacts including those raised by local communities have been fully addressed) would be applied through the planning application process. This means that any potential adverse impacts would have to be fully addressed for proposals to be permitted.
- 4.3** Appendix 4: 'The Sustainability Appraisal Process' sets out the Sustainability Appraisal Framework established through preparation of the Local Plan. The appendix sets out the full Framework including the three sets of decision aiding questions (DAQs) used for appraising different sections of the Local Plan and explains the reasons for the different sets. The appraisal of options uses the Development Policies sets of DAQs as the expectation is that if a policy is to be taken forward from this process into the Local Plan then it will be a development management policy, rather than a strategic policy, for more detail on this point see Chapter 6 'Draft Policy'.

SA appraisals will use the following system to identify what effects the option being appraised will have for each decision aiding question:

-	The likely impacts of this option are considered to be negative.
--	The '- -' and '- - -' values are intended to help enable differentiation between multiple options where negative impacts are considered likely. The values are also used to convey the magnitude of the negative impacts. This is explained in the commentary.

+	The likely impacts of this option are considered to be positive.
++	The '+ +' and '+ + +' values are intended to help enable differentiation between multiple options where positive impacts are considered likely. The values are also used to convey the magnitude of the positive impacts. This is explained in the commentary.
+++	
+++	
~	The likely impacts of this option are considered to be neither positive nor negative, or are very limited (either positive or negative) or are potentially both positive and negative but on balance broadly neutral. This is explained in the commentary.
N	There is considered to be no relationship between the Decision Aiding Question and the option being assessed.

How impacts change over time

- 4.4** Unless otherwise specified in the appraisal or commentary the impacts identified are considered to take effect immediately, be consistent in magnitude and be enduring for the whole of the local plan period to 2036. However, in some cases impacts are likely to change over time. Where this is the case the short term impact is shown on the left of each individual impact appraisal and the long term impact on the right. This is then explained in the commentary.

4 Sustainability Appraisal

Sustainability appraisal of main options

4.5 The tables below set out the main options and the sustainability appraisal of them.

Table 6 : Options being appraised:

Option	Outline
'Option 1: Whole district is identified as suitable'	This option would identify the whole of Huntingdonshire as an area that is in principle suitable for wind turbines. It is based on the core conclusion of the Wind Turbine Development in Huntingdonshire (2005) study that all of the landscape character areas (LCAs) in the district have some capacity to accommodate wind turbines. This option would see 100% of the district identified as suitable.
'Option 2: Great Fen and its landscape and visual setting are not suitable'	This option would identify the whole of Huntingdonshire with the exception of the Great Fen and its landscape and visual setting as an area that is suitable for wind turbines. It takes account of the aims of the Great Fen project and the establishment of a landscape and visual setting by excluding these areas as not suitable. A central aim of the Great Fen is keeping it as an area where the experience gained by visitors will be one of a tranquil area of countryside unaffected by urban encroachment. This option would see just under 90% of the district identified as suitable.
'Option 3: Landscape character areas above prominent/ conspicuous thresholds are not suitable'	This option uses the consideration of landscape and visual impact capacity set out in part 2 of the Wind Energy SPD. Specifically the option uses the 'Prominent' and 'Conspicuous' thresholds for each landscape character area (LCA). Table 16 of the SPD for each LCA the percentage of the LCA that is within the Prominent and Conspicuous zones of constructed turbines. For this option where a LCA is identified as being above either the Prominent or Conspicuous thresholds it is identified as not suitable and where a LCA is below the thresholds it is identified as suitable. This option would see approximately 20% of the district identified as suitable.
'Option 4: Whole district is not suitable'	This option would not identify any areas as suitable for wind turbine development in Huntingdonshire and therefore proposals for wind turbines would not be permitted. This option would see 0% of the district identified as suitable.

4.6 The following table presents the side by side sustainability appraisal of the four main options. 'Sustainability appraisal of additional option A' follows afterwards.

Table 7 : Appraisal of options against SA decision aiding questions

SA Decision Aiding Questions (DAQ)	Impact				Commentary
	Option 1	Option 2	Option 3	Option 4	
Will it promote the use of land that has previously been developed?	~	~	~	-	It is considered that Option 3 is the most likely to lead to the reuse of previously developed land. However, it is considered
	Although it is possible that this option would lead to the reuse of previously developed land	Although it is possible that this option would lead to the reuse of previously developed land it is considered to	The LCA that is below the threshold is where the majority of previously developed land	Reuse of previously developed land would not happen with this option.	

SA Decision Aiding Questions (DAQ)	Impact				Commentary
	Option 1	Option 2	Option 3	Option 4	
	it is considered to be unlikely that any reuse would be significant given that turbines are most efficient when sited on open sites away from existing buildings and other features that would affect the wind resource.	be unlikely that any reuse would be significant given that turbines are most efficient when sited on open sites away from existing buildings and other features that would affect the wind resource.	is located so it is possible that this option would lead to the reuse of previously developed land. However, it is considered that any reuse would be limited given that turbines are most efficient when sited on open sites away from existing buildings and other features and planning policy means that there are other uses that would be more likely to reuse such sites.		that any reuse would be limited given that turbines are most efficient when sited on open sites away from existing buildings and other features and planning policy means that there are other uses that would be more likely to reuse such sites.
Will it promote the use of land that is classified as grade 3 agricultural land or lower (including urban and non-agricultural)?	~	+	-	~	In the terms of the DAQ it seems likely that Option 2 would be the most likely to promote the use of land classed as grade 3 or lower. However Option 4 would see the least use of any grade of land.
	Given that about 43% of all agricultural land in the district is classed as grade 3 or lower this option is likely to lead to some turbines on lower grade land. However this option would not specifically promote lower grade land in preference to higher grades.	The Great Fen and its visual setting are mainly classed as grade 1 agricultural land, with much of the remaining land classed as grade 2 so excluding these from the suitable area would direct wind turbines to grades 3 or lower to some extent.	The LCA below the thresholds is predominantly grade 2 agricultural land with grade 3 making up much of the remaining land. Land classed as grade 3 and grade 4 is mostly located in the Northern Wolds and the Ouse Valley respectively and as these LCAs are above the thresholds it seems unlikely that this option would lead to turbines being	This option would not see any turbine development so would not promote grade 3 land, but would not see development on higher grades either.	

4 Sustainability Appraisal

SA Decision Aiding Questions (DAQ)	Impact				Commentary				
	Option 1	Option 2	Option 3	Option 4					
			on grade 3 or lower.						
Will it promote development at higher densities where it is appropriate?	N								
	There is no relationship between the options and the density of development.								
Will it promote a reduction in water consumption?	N								
	There is no relationship between the options and water consumption.								
Will it ensure that development has taken flood risk into account, both in terms of risk to the development and to displaced risk?	~	+++	~	++	+	+	~	---	Option 3 seems the most likely to direct turbines to areas that are not at risk of flooding but in the terms of the DAQ none of the options is likely to have any significant effect as flood risk is not a factor taken into account in defining any of the options. In the longer term the extent to which the options address climate change mean that option 1 would be best.
	In the short term this option would not be particularly likely to affect whether or not development has taken account of flood risk. As this option would do the most to tackle climate change and the associated increase in flood risk by allowing the most opportunity for wind turbine development it would have the most significant positive impact in the long term.	The Great Fen and its visual setting include some areas that are at risk of flooding so this option is considered to have some positive effect but it is likely to be limited. As this option would tackle climate change and the associated increase in flood risk by allowing a significant opportunity for wind turbine development it would have a significantly positive impact in the long term.	Flood risk is in general terms located mostly within the Ouse Valley, the Nene Valley and to a lesser extent the Fens LCAs. As this option excludes these LCAs it is considered likely to direct turbines away from areas at risk of flooding. As this option would tackle climate change and the associated increase in flood risk by allowing some opportunity for wind turbine development it would have a positive impact in the long term.		This option would not see any turbine development so would not have an impact either way on whether or not development has taken account of flood risk. As this option would do nothing to tackle climate change and the associated increase in flood risk by preventing wind turbine development it would have the most significantly negative impact in the long term.				
Will it promote the use of SuDS and reduced runoff rates?	N								
	There is no relationship between the options and the use of SuDS or on reducing run-off rates.								

SA Decision Aiding Questions (DAQ)	Impact				Commentary
	Option 1	Option 2	Option 3	Option 4	
Will it promote an increase in the quantity and quality of publicly accessible open space?	N				
	There is no relationship between the options and the quantity and quality of publicly accessible open space.				
Will it promote an increase in households that have easy access to natural green space?	N				
	There is no relationship between the options and whether or not households have access to natural green space.				
Will it promote the protection of sites designated for their nature conservation value?	-	+	~	++	Option 4 would see the least negative effect to promote the protection of sites of nature conservation value.
	This option would not specifically promote the protection of sites of nature conservation value. It is likely to have the a negative impact as there may be some adverse impacts as a result of wind turbine development that could be anywhere in the district.	This option would not specifically promote the protection of sites of nature conservation value but the Great Fen and its visual setting include several designated sites including internationally important SAC and NNR. This option would therefore help protect specific sites of significant nature conservation value. However, for the rest of the district there may be some negative impacts as there may be some adverse impacts as a result of wind turbine development that could be anywhere in the rest of the district. On	This option would not specifically promote the protection of sites of nature conservation value. The LCA is not considered to have any more designated sites than other LCAs that are excluded. It is therefore considered that this option would have no or very limited impact.	This option would not specifically promote the protection of sites of nature conservation value but as there would be no further turbine development with this option it would prevent any possible adverse impacts as a result of wind turbine development, which would have a significantly positive effect on promoting the protection of sites of nature conservation value.	

4 Sustainability Appraisal

SA Decision Aiding Questions (DAQ)	Impact				Commentary
	Option 1	Option 2	Option 3	Option 4	
		balance this is considered to be a positive result			
Will it promote the conservation of species, the reversal of their decline, and the enhancement of biodiversity?	- ++	~ ++	~ +	+ ---	Comparing the options it would seem that Option 2 is the most beneficial for biodiversity as it would over the longer term have a positive effect, although slightly less positive than option 1, in addressing climate change which is a significant threat to biodiversity. Any local adverse impacts from turbine development are likely to be made up for by enhancements in the Great Fen and its landscape and visual setting.
	As this option would do the most to tackle climate change, which is a significant long term risk for the conservation of species, by allowing the most opportunity for wind turbine development it would have a significant positive impact in the long term. However in the short term, there may be some adverse impacts.	As this option would contribute to tackling climate change, which is a significant long term risk for the conservation of species, by allowing the most opportunity for wind turbine development it would have a significant positive impact in the long term. However, in the short term by excluding the Great Fen and its setting any adverse impact from turbine development is likely to be made up for by enhancements for biodiversity within the Great Fen.	This option is likely to have similar but more limited long term effects in terms of tackling climate change to Option 2 and any adverse impacts from development could be made up for by enhancements for biodiversity in 'not suitable' areas. Therefore in the short term this is considered to be a neutral result and in the long term a positive result.	This option would prevent further wind turbine development and would not do anything to tackle climate change, which is a significant long term risk for the conservation of species. However in the short term it would prevent turbine development that may have some local adverse impact on biodiversity.	
Will it promote the protection of the diversity and distinctiveness of landscape and townscape character?	--	--	-	+++	Option 4 would lead to no impacts on landscape or townscape. Option 1 would lead to the most impacts on landscape or townscape.
	This option is likely to have the most adverse impact on landscape and townscape as there are likely to be some unforeseen impacts that could be	This option is likely to have some adverse impact on landscape and townscape as there are likely to be some unforeseen impacts that could be anywhere in the	This option is likely to have some adverse impact on landscape and townscape as there are likely to be some unforeseen impacts but these would be limited to the	By preventing turbine development this option would not lead to any impacts on landscape or townscape.	

SA Decision Aiding Questions (DAQ)	Impact				Commentary
	Option 1	Option 2	Option 3	Option 4	
	anywhere in the district. However as the whole district would be considered suitable there is the most potential to avoid or minimise adverse impacts and so the result is considered to be significantly negative.	district except in the Great Fen and its landscape and visual setting. However as 90% of the district would be considered suitable there is the significant potential to avoid or minimise adverse impacts and so the result is considered to be significantly negative.	LCA in this option. As the LCA is about 20% of the district there would be limited potential to avoid any adverse visual impacts.		
Will it improve the quality of urban, architectural and landscape design?	N				
	There is no relationship between the options and urban, architectural or landscape design.				
Will it seek to minimise the potential adverse visual effects of development?	--	--	-	+++	Option 4 would lead to the least impacts in terms of the visual effects of development. Option 1 would lead to the most impacts in terms of the visual effects of development.
	This option is likely to have the most adverse visual effects as there may be some impacts that could be anywhere in the district. However as the whole district would be considered suitable there is the most potential to avoid or minimise adverse impacts and so the result is considered to be significantly negative.	This option is likely to have some adverse visual effects as there may be some impacts that could be anywhere in the district outside of the Great Fen and its visual setting. However as 90% of the district would be considered suitable there is the significant potential to avoid or minimise adverse visual impacts and so the result is considered to be significantly negative.	This option is likely to have some adverse visual effects as there are likely to be some unforeseen impacts but these would be limited to the LCA in this option. As the LCA is about 20% of the district there would be limited potential to avoid any adverse visual impacts.	By preventing turbine development this option would not lead to any adverse visual effects.	

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SA Decision Aiding Questions (DAQ)	Impact				Commentary
	Option 1	Option 2	Option 3	Option 4	
Will it promote the protection of heritage assets (including designated and non-designated) and their settings?	--	--	-	+++	Option 4 would lead to the least impacts of the options in terms of adverse impact on heritage assets and their settings. Options 1 or 2 would lead to the most impacts in terms of adverse impact on heritage assets and their settings.
	This option is likely to have the most adverse impact on heritage assets and their settings as there may be some adverse impacts that could be anywhere in the district. However as the whole district would be considered suitable there is the most potential to avoid or minimise adverse impacts and so the result is considered to be significantly negative rather than most negative.	This option is likely to have some adverse impact on heritage assets and their settings as there may be some unforeseen impacts that could be anywhere in the district except in the Great Fen and its visual setting. The area in which to avoid or minimise adverse impacts is substantial and so the result is considered to be significantly negative rather than most negative.	This option is likely to have some adverse impact on heritage assets and their settings as there are likely to be some unforeseen impacts but these would be limited to the LCA in this option.	By preventing turbine development this option would prevent adverse impacts on heritage assets and their settings and so is considered to be the most positive.	
Will it promote actions to tackle climate change both through adaptation and mitigation?	+++	++	+		Option 1 would do the most to promote actions to tackle climate change. Option 4 would be the worst option as it would prevent actions that would tackle climate change.
	This option would have the most positive effect on promoting actions to tackle climate change through tackling CO ₂ emissions as turbines would be possible anywhere in the district.	This option would have a positive effect on promoting actions to tackle climate change through tackling CO ₂ emissions as turbines would be possible anywhere in the district except in the Great Fen and its visual setting.	This option would have some positive effect on promoting actions to tackle climate change through tackling CO ₂ emissions as turbines would be possible in the LCA in this option.	This option would prevent actions that would tackle climate change.	

SA Decision Aiding Questions (DAQ)	Impact				Commentary
	Option 1	Option 2	Option 3	Option 4	
Will it promote an increased proportion of energy needs being met from renewable sources?	+++	++	+	---	Option 1 would do the most to promote an increased proportion of energy needs being met from renewable sources. Option 4 would be the worst option as it would prevent actions that would increase the proportion of energy needs being met from renewable sources.
Will it seek to ensure that development is not affected by or causes unreasonable impacts from light, noise, air or other forms of pollution?	---	--	-	~	Option 4 would lead to the least impacts in terms of pollution of the options assessed. Option 1 would lead to the most impacts in terms of adverse impact.
Will it promote the reduction of waste throughout the lifetime (construction, use and redevelopment) of development?	---	--	-	~	Option 4 would lead to the least impacts in terms of promoting the reduction of waste throughout the lifetime of development. Option 1 would
	This option would have the most positive effect on promoting an increased proportion of energy needs being met from renewable sources as turbines would be possible anywhere in the district.	This option would have a positive effect on promoting an increased proportion of energy needs being met from renewable sources as turbines would be possible anywhere in the district except in the Great Fen and its visual setting.	This option would have some positive effect on promoting an increased proportion of energy needs being met from renewable sources as turbines would be possible in the LCA in this option.	This option would prevent actions that would increase the proportion of energy needs being met from renewable sources.	
	This option is likely to have the most adverse impact in terms of pollution as there are likely to be some unforeseen impacts, noise and light (shadow flicker) that could be anywhere in the district.	This option is likely to have some adverse impact in terms of pollution as there are likely to be some unforeseen impacts, noise and light (shadow flicker) that could be anywhere in the district except in the Great Fen and its visual setting.	This option is likely to have some adverse impact in terms of pollution as there are likely to be some unforeseen impacts, noise and light (shadow flicker) but these would be limited to the LCA in this option.	This option would not lead to any adverse impact in terms of pollution.	
	This option is likely to have the most adverse impact in terms of promoting the reduction of waste throughout the	This option is likely to have some adverse impact in terms of promoting the reduction of waste throughout the lifetime of development as	This option is likely to have some adverse impact in terms of promoting the reduction of waste throughout the lifetime of	By preventing turbine development this option will do the most to promote the reduction of waste throughout the	

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SA Decision Aiding Questions (DAQ)	Impact				Commentary
	Option 1	Option 2	Option 3	Option 4	
	lifetime of development, as there are likely to be some unforeseen impacts that could be anywhere in the district.	there are likely to be some unforeseen impacts that could be anywhere in the district except in the Great Fen and its visual setting.	development as there are likely to be some unforeseen impacts but these would be limited to the LCA in this option.	lifetime (construction, use and redevelopment) of development.	lead to the most impacts. However, impacts from options 1, 2 and 3 are likely to be limited.
Will it enable people to lead healthy lifestyles, including travel choices?	N				
	There is no relationship between the options and enabling people to lead healthy lifestyles.				
Will it promote accessibility of cultural or social activities?	N				
	There is no relationship between the options and promoting accessibility of cultural or social activities.				
Will it support the provision of housing that will meet identified needs (including for affordable and traveller accommodation)?	N				
	There is no relationship between the options and supporting the provision of housing.				
Will it promote accessibility for all members of society, including the elderly and disabled?	N				
	There is no relationship between the options and promoting accessibility for all members of society.				
Will it promote development that is designed to reduce and prevent crime, anti-social behaviour and the fear of crime?	N				
	There is no relationship between the options and promoting development that is designed to reduce and prevent crime, anti-social behaviour and the fear of crime.				
Will it promote accessibility of services?	N				
	There is no relationship between the options and promoting accessibility of services.				

SA Decision Aiding Questions (DAQ)	Impact				Commentary
	Option 1	Option 2	Option 3	Option 4	
Will it promote access to employment?	++	+	~	-	Option 1 seems the most likely to promote access to employment with jobs from manufacturing and construction of turbines and monitoring and management. However, the numbers of jobs are likely to be limited.
	This option is likely to have the most positive impact in terms of promoting access to employment, as with anywhere in the district being suitable this could give rise to jobs from manufacturing and construction of turbines and ongoing monitoring and management.	This option is likely to have some positive impact in terms of promoting access to employment, as with anywhere in the district being suitable other than the Great Fen and its visual setting this would give rise to jobs from manufacturing and construction of turbines and ongoing monitoring and management.	This option is likely to have some positive impact in terms of promoting access to employment, turbine development would give rise to jobs from manufacturing and construction of turbines and monitoring and management. However, the numbers of jobs are likely to be very limited given the size of the area that is suitable.	This option would not promote access to employment in any way.	
Will it support economic activity in sectors targeted for growth or in the rural economy?	++	++	+	~	Options 1 and 2 are likely to have similar effects which are considered to be significantly positive as they would give opportunities for creation of jobs. Option 3 is also considered to be positive but as all three of these options may have some negative impact on tourism the potential benefits of option 3 are
	There are likely to be the most positive impacts for the rural economy from jobs from manufacturing and construction of turbines and ongoing monitoring and management. However there may also be some negative impacts on tourism.	This option is likely to be similar to option 1 so there are likely to be some positive impacts for the rural economy from jobs from manufacturing and construction of turbines and ongoing monitoring and management. However there may be some negative impacts on tourism.	This option is likely to be similar to options 1 and 2 so there are likely to be some positive impacts for the rural economy from jobs from manufacturing and construction of turbines and ongoing monitoring and management. However there may be some negative impacts for tourism. This is considered to result in a	By preventing turbine development this option will have no impact on economic activity.	

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SA Decision Aiding Questions (DAQ)	Impact				Commentary
	Option 1	Option 2	Option 3	Option 4	
			limited positive impact.		considered to be significantly less than options 1 or 2. Option 4 would have no impact either positive or negative.
Will it enable existing businesses to grow?	++	++	+	~	Options 1 and 2 are likely to have similar effects positive effects as identified above. Similarly Option 3 is likely to be somewhat positive. Option 4 would have no impact either positive or negative.
	Impacts are likely to be similar to those identified above for impacts on targeted sectors and the rural economy.	Impacts are likely to be similar to those identified above for impacts on targeted sectors and the rural economy.	Impacts are likely to be similar to those identified above for impacts on targeted sectors and the rural economy.	By preventing turbine development this option will have no impact on enabling existing businesses to grow.	
Will it support the vitality and viability of established retail and service centres?	N				
	There is no relationship between the options and supporting the vitality and viability of established retail and service centres				
Will it promote easy access to training and education?	N				
	There is no relationship between the options and promoting easy access to training and education.				
Will it support and improve community and public transport?	N				
	There is no relationship between the options and supporting and improving community and public transport.				
Will it help improve cycle routes, footpaths and bridleways?	N				
	There is no relationship between the options and improving cycle routes, footpaths and bridleways.				
Will it improve accessibility by means other than the car?	N				
	There is no relationship between the options and improving accessibility by means other than the car.				

SA Decision Aiding Questions (DAQ)	Impact				Commentary
	Option 1	Option 2	Option 3	Option 4	
<p>Overview: For many of the DAQs there is no relationship between the subject of the DAQ and any of the options. In general terms there are similarities between options 1, 2 and 3 but more marked differences between option 4 and the others.</p>					

Table 8 : Conclusions from the appraisal of 'Option 1: Whole district is identified as suitable'

<p>Option 1 is the best option for SA Decision Aiding Questions:</p>	<p>Will it promote the reuse of land that has been previously developed? (joint with Options 2 and 3) Will it ensure that development has taken flood risk into account, both in terms of risk to the development and to displaced risk? (long term only) Will it promote actions to tackle climate change both through adaptation and mitigation? Will it promote an increased proportion of energy needs being met from renewable sources? Will it promote access to employment? Will it support economic activity in sectors targeted for growth or in the rural economy? Will it enable existing businesses to grow?</p>
<p>Option 1 is the worst option for SA Decision Aiding Questions:</p>	<p>Will it promote the protection of sites designated for their nature conservation value? Will it promote the protection of the diversity and distinctiveness of landscape and townscape character? Will it seek to minimise the potential adverse visual effects of development? Will it promote the protection of heritage assets (including designated and non-designated) and their settings? Will it seek to ensure that development is not affected by or causes unreasonable impacts from light, noise, air or other forms of pollution? Will it promote the reduction of waste throughout the lifetime (construction, use and redevelopment) of development?</p>
<p>Ways to mitigate negative effects</p>	<p>It should be possible for them to be minimised and potentially eliminated through careful wording of applicable policies and through the planning application process but some negative impacts would still be possible, however unlikely.</p>
<p>Ways to maximise positive effects</p>	<p>There are considered to be no available ways in which to maximise beneficial effects as through this option the largest possible area would be identified as suitable for turbines and changing the option to exclude parts of the district would erode the difference between this option and others.</p>

Table 9 : Conclusions from the appraisal of 'Option 2: Great Fen and its landscape and visual setting are not suitable'

<p>Option 2 is the best option for SA Decision Aiding Questions:</p>	<p>Will it promote the reuse of land that has been previously developed? (joint with Options 1 and 3) Will it promote the use of land that is classified as grade 3 agricultural land or lower? Will it promote the conservation of species, the reversal of their decline, and the enhancement of biodiversity?</p>
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Option 2 is the worst option for SA Decision Aiding Questions:	None.
Ways to mitigate negative effects	Where there is potential for negative impacts it should be possible for them to be minimised and potentially eliminated through careful wording of applicable policies and through the planning application process but some negative impacts would still be possible.
Ways to maximise positive effects	There are considered to be no available ways in which to maximise beneficial effects that would not lead to potential for more adverse effects; limiting the unsuitable area to the Great Fen rather than the landscape and visual setting would potentially increase benefits in terms of tackling climate change and the proportion of renewable energy being used but would be likely to increase adverse effects including on agricultural land and biodiversity which would undermine this as the best option.

Table 10 : Conclusions from the appraisal of 'Option 3: Landscape character areas above prominent/conspicuous thresholds are not suitable'

Option 3 is the best option for SA Decision Aiding Questions:	Will it promote the reuse of land that has been previously developed? (joint with Options 1 and 2) Will it ensure that development has taken flood risk into account, both in terms of risk to the development and to displaced risk? (short term only)
Option 3 is the worst option for SA Decision Aiding Questions:	Will it promote the use of land that is classified as grade 3 agricultural land or lower? Will it promote access to employment?
Ways to mitigate negative effects	It should be possible for negative effects to be minimised and potentially eliminated through careful wording of applicable policies and through the planning application process. However, some negative impacts would still be possible.
Ways to maximise positive effects	There are considered to be no possible ways in which to maximise beneficial effects that would not lead to potential for more adverse effects. The options considered were the Inclusion of the Nene Valley as an area considered suitable for turbines as it is close to but not currently above either the Prominent or Conspicuous thresholds. This would increase the area of the district considered suitable and could increase the number of turbines developed. This would potentially increase benefits in terms of tackling climate change and the proportion of renewable energy being used. However, it would also be likely to increase negative effects including on avoiding flood risk as significant areas of the Nene valley are flood zone 3b - functional floodplain.

Table 11 : Conclusions from the appraisal of 'Option 4: Whole district is not suitable'

<p>Option 4 is the best option for SA Decision Aiding Questions:</p>	<p>Will it promote the protection of sites designated for their nature conservation value? Will it promote the protection of the diversity and distinctiveness of landscape and townscape character? Will it seek to minimise the potential adverse visual effects of development? Will it promote the protection of heritage assets (including designated and non-designated) and their settings? Will it seek to ensure that development is not affected by or causes unreasonable impacts from light, noise, air or other forms of pollution? Will it promote the reduction of waste throughout the lifetime (construction, use and redevelopment) of development?</p>
<p>Option 4 is the worst option for SA Decision Aiding Questions:</p>	<p>Will it promote the reuse of land that has been previously developed? (joint with Options 2 and 3) Will it ensure that development has taken flood risk into account, both in terms of risk to the development and to displaced risk? (long term only) Will it promote the conservation of species, the reversal of their decline, and the enhancement of biodiversity? Will it promote actions to tackle climate change both through adaptation and mitigation? Will it promote an increased proportion of energy needs being met from renewable sources? Will it promote access to employment? Will it support economic activity in sectors targeted for growth or in the rural economy? Will it enable existing businesses to grow?</p>
<p>Ways to mitigate negative effects</p>	<p>It is not possible to minimise or mitigate the negative effects of this option without fundamentally changing its nature as a 'do nothing' approach.</p>
<p>Ways to maximise positive effects</p>	<p>It is not possible to maximise the positive effects of this option without fundamentally changing its nature as a 'do nothing' approach.</p>

Overall Conclusions from Sustainability Appraisal of main options

- 4.7** Overall the best main option from the appraisal of sustainability would appear to be 'Option 2: Great Fen and its landscape and visual setting are not suitable'. This is due to a combination of being the best option in terms of promoting the use of land classified as grade 3 or lower and promoting the conservation of species and the enhancement of biodiversity, a second best option for a wide range of decision aiding questions (DAQ) and not being the worst option for any DAQ.
- 4.8** While options 1 and 4 are the best option for several DAQs they are also the worst option for several. Option 3 is the best option for reuse of previously developed land and avoiding flood risk (in the short term), is a second best option for a wide range of DAQs, but is the worst option for promoting the use of land classified as grade 3 or lower (for which option 2 is best) and promoting access to employment.

4 Sustainability Appraisal

Sustainability appraisal of additional option A

4.9 The tables below set out the sustainability appraisal of the additional option and the impacts when combined with each of the main options, other than option 1; as detailed in 'Additional Option A: Small turbines are suitable' option A would not work in combination with Option 1 as all heights of turbine are potentially acceptable anywhere in the district for Option 1 so Option A would be redundant. The appraisals should be read in conjunction with the 'Sustainability appraisal of main options' which has been used as a starting point as it is generally thought that combining small turbine suitability with the main options will not have a significant effect.

'Additional Option A: Small turbines are suitable'	This option would identify the whole of Huntingdonshire as an area that is in principle suitable for small wind turbines. It is based on the core conclusion of the Wind Turbine Development in Huntingdonshire (2005) study that all of the landscape character areas (LCAs) in the district have some capacity to accommodate wind turbines and the conclusions of the CRIF that there are significant opportunities for the local economy, specifically for rural enterprises to diversify or support their businesses with small scale wind turbine development. This option would see 100% of the district identified as suitable for small turbines. This is identified as an additional option that could potentially be combined with Options 2, 3 or 4.
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Table 12

SA Decision Aiding Questions (DAQ)	Impact of Option A when combined with			Commentary
	Option 2	Option 3	Option 4	
Will it promote the use of land that has previously been developed?	+	+	+	There is considered to be very little difference between options as reuse of previously developed land is unlikely to be significant given that turbines are most efficient when sited away from existing buildings and other features that would affect the wind resource.
	Very limited supply of previously developed land within the Great Fen means that this option is unlikely to have any noticeable impact in addition to option 2. Impact is considered to be limited positive as reuse is unlikely to be significant given that turbines are most efficient when sited away from existing buildings and other features that would affect the wind resource	The LCA that is below thresholds makes up approximately 20%, so this option may add to the reuse of previously developed land in the other 80% of the district. Impact is considered to be limited positive as reuse is unlikely to be significant given that turbines are most efficient when sited away from existing buildings and other features that would affect the wind resource.	The combination of option 4 with option A could lead to previously developed land being reused for small turbines. Impact is considered to be limited positive as reuse is unlikely to be significant given that turbines are most efficient when sited away from existing buildings and other features that would affect the wind resource.	
Will it promote the use of land that is classified as grade 3 agricultural land	+	~	~	In the terms of the DAQ it seems likely that the
	The Great Fen and its visual setting are mainly classed as grade 1	As concluded in the appraisal of option 3 it seems unlikely that	Option 4 in isolation would not see any turbine development	

SA Decision Aiding Questions (DAQ)	Impact of Option A when combined with			Commentary			
	Option 2	Option 3	Option 4				
or lower (including urban and non-agricultural)?	agricultural land, with much of the remaining land classed as grade 2 so the effect of option 2 in isolation, to direct wind turbines to grades 3 or lower to some extent would be somewhat reduced with the addition of option A as small turbines could potentially be on higher grade land. The impact is considered to be limited positive, the same as option 2 in isolation, as small turbines are not considered to have much impact in this small area (approx. 10%) given the effect of the management of the Great Fen that is considered to be likely to exclude turbines of any size.	option 3 in isolation would lead to turbines being on grade 3 or lower due to areas of lower grade mostly being located elsewhere. In combination with option A small turbines could be located in those lower grade land areas but also in areas of grade 1 land that are mostly outside of the option 3 area. The impact of this combination is considered to be a neutral impact.	so would not promote grade 3 land, but would not see development on higher grades either. Combining with option A could lead to small turbines anywhere in the district, on land classed as grade 3 or lower to some extent, but also on grade 1 land. The impact is considered to be neutral.	combination of option 2 and option A would be the most likely to promote the use of land classed as grade 3 or lower, but only to a limited extent. The other combinations are considered to be neutral.			
Will it promote development at higher densities where it is appropriate?	N						
	There is no relationship between the options and the density of development.						
Will it promote a reduction in water consumption?	N						
	There is no relationship between the options and water consumption.						
Will it ensure that development has taken flood risk into account, both in terms of risk to the development and to displaced risk?	~	++	~	+	~	--	Neutral impacts are expected in the short term for all option combinations. In the long term the combination with main option 2 is considered to be the most
	Enabling small turbines in the Great Fen and its landscape and visual setting is unlikely to make any particular difference in the short term. In the longer term this additional option may have a slight positive impact in addition to that of option	Enabling small turbines outside of the Central Claylands in addition to turbines of any height within the LCA would mean turbines could be proposed in areas with more significant flood risk such as the Ouse and Nene Valleys. This is considered to give a			The short term neutral impact of the main option is considered to be unchanged with this additional option. In the long term small turbines would have some effect on tackling climate change and therefore flood risk but this is considered to be		

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SA Decision Aiding Questions (DAQ)	Impact of Option A when combined with			Commentary
	Option 2	Option 3	Option 4	
	2 in isolation. However, the impact is still considered to be positive.	neutral impact in the short term. In the long term the positive impact of the main option would be added to but is considered to be limited so the impact is still considered to be limited positive.	limited so the impact is considered to be negative, compared with the significant negative of the main option.	positive. When combined with main option 4 the long term impact is less negative than option 4 alone due to small turbines having some effect on tackling climate change and therefore future flood risk.
Will it promote the use of SuDS and reduced runoff rates?	N			
	There is no relationship between the options and the use of SuDS.			
Will it promote an increase in the quantity and quality of publicly accessible open space?	N			
	There is no relationship between the options and the quantity and quality of publicly accessible open space.			
Will it promote an increase in households that have easy access to natural green space?	N			
	There is no relationship between the options and whether or not households have access to natural green space.			
Will it promote the protection of sites designated for their nature conservation value?	+	~	++	Option 4 in combination with option A is considered to be the most positive in terms of promoting the protection of designated nature conservation sites.
	As identified in the SA of option 2 there are internationally important sites for nature conservation within the Great Fen. Enabling small turbines may potentially adversely impact on such sites and so would	Small turbines being suitable outside of the LCA may increase the potential for impacts on designated nature conservation sites. However adverse impacts would be addressed as part of determining planning	If small turbines are potentially suitable across the district this would increase the potential for impacts on designated nature conservation sites. Although adverse impacts would be addressed as part of determining planning	

SA Decision Aiding Questions (DAQ)	Impact of Option A when combined with						Commentary
	Option 2		Option 3		Option 4		
	undermine the positive impact of the main option. However adverse impacts would be addressed as part of determining planning applications so the impact is considered to be limited positive.		applications so the impact is considered to remain neutral.		applications there is significantly more likelihood that they would occur and this is considered to be of positive effect.		
Will it promote the conservation of species, the reversal of their decline, and the enhancement of biodiversity?	~	++	~	+	+	--	In the short term option 4 and option A would have the most positive effect for the conservation of species. However in the long term option 2 and option A are considered the most positive.
	Small turbines being potentially suitable within the Great Fen and its landscape and visual setting is considered to have similar impacts to main option 2 in that in the short term there is some small potential for some adverse impact but in the longer term the options would contribute significantly to tackling climate change. This is considered to be a neutral and positive effect respectively.		Small turbines being potentially suitable outside the LCA is considered to have similar impacts to main option 3 in that in the short term there is some small potential for some adverse impact but in the longer term the options would contribute to tackling climate change. This is considered to be a neutral and limited positive effect respectively.		Small turbines being potentially suitable across the whole district is considered to have similar impacts to main option 4 in that in the short term it would have a positive impact but in the longer term the options would contribute to tackling climate change in a limited way. This is considered to be a limited positive and negative effect respectively.		
Will it promote the protection of the diversity and distinctiveness of landscape and townscape character?	--		-		++		Option 4 and option A would have the most positive effect for promoting the protection of landscape and townscape.
	Small turbines being potentially suitable within the Great Fen and its landscape and visual setting is considered to have similar impacts to main option 2 and is potentially slightly more negative but this is not considered sufficient to give a significantly negative impact.		Small turbines being potentially suitable outside the LCA is considered to have similar impacts to main option 3 and is potentially slightly more negative but this is not considered sufficient to a negative impact.		Small turbines being potentially suitable across the whole district is considered to have less positive impact than main option 4. Small turbines could have an adverse effect on landscape and townscape but this is considered to be limited and this combination would give a positive impact.		

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SA Decision Aiding Questions (DAQ)	Impact of Option A when combined with			Commentary
	Option 2	Option 3	Option 4	
Will it improve the quality of urban, architectural and landscape design?	N			
	There is no relationship between the options and urban, architectural or landscape design.			
Will it seek to minimise the potential adverse visual effects of development?	--	--	++	Option 4 and option A would have the most positive effect for minimising the adverse impacts of development.
	The combination of option 2 and option A is considered to have slightly more potential for adverse effects but this is not considered sufficient to give a significantly negative impact.	The combination of option 3 and option A is considered to have significantly more potential for adverse effects than option 3 in isolation due to the area where small turbines would be potentially suitable. This is considered to be a negative impact.	Small turbines being potentially suitable across the whole district is considered to have less positive impact than main option 4. Small turbines could have adverse visual effects but this is considered to be limited and this combination would give a positive impact.	
Will it promote the protection of heritage assets (including designated and non-designated) and their settings?	--	--	++	Option 4 and option A would have the most positive effect for protecting against .
	The combination of option 2 and option A is considered to have slightly more potential for adverse effects but this is not considered sufficient to give a significantly negative impact.	The combination of option 3 and option A is considered to have significantly more potential for adverse effects than option 3 in isolation due to the area where small turbines would be potentially suitable. This is considered to be a negative impact.	Small turbines being potentially suitable across the whole district is considered to have less positive impact than main option 4. Small turbines could have adverse effects on heritage assets but this is considered to be limited and this combination would give a positive impact.	
Will it promote actions to tackle climate change both through adaptation and mitigation?	++	+	--	The combination of option 2 and option A is considered to be the most positive in terms of tackling climate change.
	This combination would have a positive effect in terms of tackling climate change. It is considered to be potentially slightly more positive than option 2 in isolation, but not sufficient to give a significant positive impact.	This combination would have a positive effect in terms of tackling climate change. It is considered to be potentially more positive than option 3 in isolation, but only enough to give a limited positive impact.	This combination is considered to be significantly less negative than option 4 in isolation. However it will only do a limited amount to tackle climate change so is considered to give a negative impact.	

SA Decision Aiding Questions (DAQ)	Impact of Option A when combined with			Commentary
	Option 2	Option 3	Option 4	
Will it promote an increased proportion of energy needs being met from renewable sources?	+ +	+	- -	The combination of option 2 and option A is considered to be the most positive in terms of promoting an increased proportion of energy needs being met from renewable sources
	This combination would have a positive effect on promoting an increased proportion of energy needs being met from renewable sources, although any increase over option 2 in isolation is likely to be very limited.	This combination would have a positive effect on promoting an increased proportion of energy needs being met from renewable sources. The contribution from small turbines across the district is unlikely to be particularly significant so this is considered to be a minor positive impact.	The contribution from small turbines across the district for this combination is unlikely to be particularly significant so this is considered to be a negative impact.	
Will it seek to ensure that development is not affected by or causes unreasonable impacts from light, noise, air or other forms of pollution?	- -	-	~	The combination of option 4 and option A would lead to the least impacts in terms of pollution of the option combinations assessed.
	This combination is likely to have some adverse impact in terms of pollution as there are likely to be some unforeseen impacts, noise and light (shadow flicker) that could be anywhere in the district except in the Great Fen and its visual setting, although any increase over option 2 in isolation is likely to be very limited.	This option is likely to have some adverse impact in terms of pollution as there are likely to be some unforeseen impacts, noise and light (shadow flicker) but these would be limited as any increase over option 3 in isolation is likely to be limited.	This option is likely to have some very minor adverse impact in terms of pollution as there are likely to be some unforeseen impacts, noise and light (shadow flicker) due to small turbines anywhere in the district. However the impact is considered to be neutral	
Will it promote the reduction of waste throughout the lifetime (construction, use and redevelopment) of development?	- -	-	~	The combination of option 4 and option A would lead to the least impacts in terms of promoting the reduction of waste throughout the lifetime of development.
	This combination is likely to have some adverse impact in terms of promoting the reduction of waste throughout the lifetime of development as there are likely to be some unforeseen impacts that could be anywhere in the district except in the Great Fen and its visual setting, although any increase over option 2	This option is likely to have some adverse impact in terms of promoting the reduction of waste throughout the lifetime of development as there are likely to be some unforeseen impacts but these would be limited as any increase over option 3 in isolation is likely to be limited.	This option is likely to have some very limited adverse impact in terms of promoting the reduction of waste throughout the lifetime of development as there are likely to be some unforeseen impacts due to small turbines anywhere in the district. However the impact is	

4 Sustainability Appraisal

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SA Decision Aiding Questions (DAQ)	Impact of Option A when combined with			Commentary
	Option 2	Option 3	Option 4	
	in isolation is likely to be very limited.		considered to be neutral	
Will it enable people to lead healthy lifestyles, including travel choices?	N			
	There is no relationship between the options and enabling people to lead healthy lifestyles.			
Will it promote accessibility of cultural or social activities?	N			
	There is no relationship between the options and promoting accessibility of cultural or social activities.			
Will it support the provision of housing that will meet identified needs (including for affordable and traveller accommodation)?	N			
	There is no relationship between the options and supporting the provision of housing.			
Will it promote accessibility for all members of society, including the elderly and disabled?	N			
	There is no relationship between the options and promoting accessibility for all members of society.			
Will it promote development that is designed to reduce and prevent crime, anti-social behaviour and the fear of crime?	N			
	There is no relationship between the options and promoting development that is designed to reduce and prevent crime, anti-social behaviour and the fear of crime.			
Will it promote accessibility of services?	N			
	There is no relationship between the options and promoting accessibility of services.			
Will it promote access to employment?	++	+	~	The combination of option 2 and option A seems the most likely to promote
	This combination is likely to have a positive impact in terms of promoting access to employment, as it would	This option is likely to have some positive impact in terms of promoting access to employment. However,	Any increase over option 4 in isolation is likely to be limited so this combination would not do much to	

Sustainability Appraisal 4

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SA Decision Aiding Questions (DAQ)	Impact of Option A when combined with			Commentary
	Option 2	Option 3	Option 4	
	give rise to jobs from manufacturing and construction of turbines and ongoing monitoring and management.	the numbers of jobs are likely to be limited as any increase over option 3 in isolation is likely to be limited.	promote access to employment.	access to employment of the combinations assessed. However, the numbers of jobs are likely to be limited.
Will it support economic activity in sectors targeted for growth or in the rural economy?	+ + This combination is likely to be the most positive in terms of impacts for the rural economy, although any increase over option 2 in isolation is likely to be very limited. However there may also be some negative impacts.	+ + This is likely to bring about some positive impacts for the rural economy particularly for agriculture and other rural enterprises. However there may be some negative impacts. This is considered to result in a positive impact.	+ This is likely to bring about some positive impacts for the rural economy particularly for agriculture and other rural enterprises. However there may be some negative impacts. This is considered to result in a positive impact.	The combination of option 2 and option A is likely to be the most positive but there is little difference between it and the combination with option 3. The combination with option 4 could have the most positive impact when compared with the appraisal of main option in isolation.
Will it enable existing businesses to grow?	+ + Impacts are likely to be similar to those identified above for impacts on targeted sectors and the rural economy.	+ + Impacts are likely to be similar to those identified above for impacts on targeted sectors and the rural economy.	+ Impacts are likely to be similar to those identified above for impacts on targeted sectors and the rural economy.	The combination of option 2 and option A is likely to be the most positive but there is little difference between it and the combination with option 3. The combination

4 Sustainability Appraisal

SA Decision Aiding Questions (DAQ)	Impact of Option A when combined with			Commentary
	Option 2	Option 3	Option 4	
				with option 4 could have the most positive impact when compared with the appraisal of main option in isolation.
Will it support the vitality and viability of established retail and service centres?	N			
	There is no relationship between the options and supporting the vitality and viability of established retail and service centres.			
Will it promote easy access to training and education?	N			
	There is no relationship between the options and promoting easy access to training and education.			
Will it support and improve community and public transport?	N			
	There is no relationship between the options and supporting and improving community and public transport.			
Will it help improve cycle routes, footpaths and bridleways?	N			
	There is no relationship between the options and improving cycle routes, footpaths and bridleways.			
Will it improve accessibility by means other than the car?	N			
	There is no relationship between the options and improving accessibility by means other than the car.			
<p>Overview: For many of the DAQs there is no relationship between the subject of the DAQ and any of the combinations being appraised. In general terms there are similarities between the combinations of options 2 and 3 with option A but more marked differences between the combination with option 4 and the others, but this is less pronounced than with the main options in isolation.</p>				

Table 13 : Conclusions from the appraisal of additional option A combined with option 2

<p>This is the best combination of options for SA Decision Aiding Questions:</p>	<p>Will it promote the use of land that is classified as grade 3 agricultural land or lower (including urban and non-agricultural)?</p> <p>Will it ensure that development has taken flood risk into account, both in terms of risk to development and to displaced risk? (longer term only)</p> <p>Will it promote the conservation of species, the reversal of their decline, and the enhancement of biodiversity? (longer term only)</p> <p>Will it promote actions to tackle climate change both through adaptation and mitigation?</p> <p>Will it promote an increased proportion of energy needs being met from renewable sources?</p> <p>Will it promote access to employment?</p> <p>Will it support economic activity in sectors targeted for growth or in the rural economy? (joint with the combination with option 3)</p> <p>Will it enable existing businesses to grow? (joint with the combination with option 3)</p>
<p>This is the worst combination of options for SA Decision Aiding Questions:</p>	<p>Will it promote the protection of the diversity and distinctiveness of landscape and townscape character?</p> <p>Will it seek to minimise the potential adverse visual effects of development? (joint with the combination with option 3)</p> <p>Will it promote the protection of heritage assets (including designated and non-designated) and their settings? (joint with the combination with option 3)</p> <p>Will it seek to ensure that development is not affected by or causes unreasonable impacts from light, noise, air or other forms of pollution?</p> <p>Will it promote the reduction of waste throughout the lifetime (construction, use and redevelopment) of development?</p>
<p>Ways to mitigate negative effects</p>	<p>One way in which negative impacts may be mitigated would be to limit small turbines to the landscape and visual setting and not the Great Fen itself. This could limit negative impacts on designated nature conservation sites and the protection of species. However, it is considered that the main option 2 exclusion of wind turbines of any height from the Great Fen and its landscape and visual setting is likely to be a better approach. Otherwise it should be possible for them to be minimised and potentially eliminated through careful wording of applicable policies and through the planning application process but some negative impacts would still be possible, however unlikely.</p>
<p>Ways to maximise positive effects</p>	<p>The way to mitigate negative effects identified above would be likely to maximise positive effects. However it is similarly considered that the main option in isolation would be a better approach.</p>

Table 14 : Conclusions from the appraisal of additional option A combined with option 3

<p>This is the best combination of options for SA Decision Aiding Questions:</p>	<p>Will it support economic activity in sectors targeted for growth or in the rural economy? (joint with the combination with option 2)</p> <p>Will it enable existing businesses to grow? (joint with the combination with option 2)</p>
<p>This is the worst combination of options for SA Decision Aiding Questions:</p>	<p>Will promote the protection of sites designated for their nature conservation value?</p> <p>Will it seek to minimise the potential adverse visual effects of development? (joint with the combination with option 2)</p> <p>Will it promote the protection of heritage assets (including designated and non-designated) and their settings? (joint with the combination with option 2)</p>

4 Sustainability Appraisal

<p>Ways to mitigate negative effects</p>	<p>One way to mitigate negative effects might be to exclude LCAs, such as the Nene or Great Ouse valleys, from the area identified as suitable for small turbines. However, how the LCAs would be selected is not clear as selecting an LCA on the basis of minimising one negative effect could potentially limit some other positive effects. Where there is potential for negative impacts it should be possible for them to be minimised and potentially eliminated through careful wording of applicable policies and through the planning application process but some negative impacts would still be possible.</p>
<p>Ways to maximise positive effects</p>	<p>The way to mitigate negative effects identified above would be likely to maximise positive effects, but it is likely to be difficult to identify LCAs that would maximise positive impacts while not leading to more negative effects or increasing their likelihood.</p>

Table 15 : Conclusions from the appraisal of additional option A combined with option 4

<p>This is the best combination of options for SA Decision Aiding Questions:</p>	<p>Will it promote the protection of sites designated for their nature conservation value? Will it promote the conservation of species, the reversal of their decline, and the enhancement of biodiversity? (short term only) Will it promote the protection of the diversity and distinctiveness of landscape and townscape character? Will it seek to minimise the potential adverse visual effects of development? Will it promote the protection of heritage assets (including designated and non-designated) and their settings? Will it seek to ensure that development is not affected by or causes unreasonable impacts from light, noise, air or other forms of pollution? Will it promote the reduction of waste throughout the lifetime (construction, use and redevelopment) of development?</p>
<p>This is the worst combination of options for SA Decision Aiding Questions:</p>	<p>Will it ensure that development has taken flood risk into account, both in terms of risk to development and to displaced risk? (longer term only) Will it promote the conservation of species, the reversal of their decline, and the enhancement of biodiversity? (longer term only) Will it promote actions to tackle climate change both through adaptation and mitigation? Will it promote an increased proportion of energy needs being met from renewable sources? Will it promote access to employment? Will it support economic activity in sectors targeted for growth or in the rural economy? Will it enable existing businesses to grow?</p>
<p>Ways to mitigate negative effects</p>	<p>One way to mitigate negative effects might be to exclude LCAs, such as the Nene or Great Ouse valleys, from the area identified as suitable for small turbines, as identified above for the combination of option 3 and option A. The difficulty with identifying which LCAs would still mean that while mitigating negative effects positive effects may limit positive effects. Otherwise it should be possible for negative effects to be minimised and potentially eliminated through careful wording of applicable policies and through the planning application process. However, some negative impacts would still be possible.</p>
<p>Ways to maximise positive effects</p>	<p>The way to mitigate negative effects identified above and for the combination of option 3 and option A could maximise positive effects but may also potentially lead to more negative effects or increasing their likelihood.</p>

Overall Conclusions from Sustainability Appraisal of Additional Option A

- 4.10** Overall the best combination of main and additional options from the appraisal of sustainability would appear to be main 'Option 3: Landscape character areas above prominent/ conspicuous thresholds are not suitable' and additional option A. This is due to a combination of being the best option in terms of a small number of decision aiding questions (DAQs) and being the worst option for a small number of DAQs.
- 4.11** While the combination of main options 2 and 4 with additional option A are the best options for several DAQs they are also the worst option for several. The combination with option 2 is possibly marginally better than with option 4 but there is little between the two.

Conclusions from Sustainability Appraisal

- 4.12** From the sustainability appraisal of the four main options it was concluded that the best main option would appear to be 'Option 2: Great Fen and its landscape and visual setting are not suitable'. From the appraisal of the combination of main options with additional option A the best combination would appear to be main 'Option 3: Landscape character areas above prominent/ conspicuous thresholds are not suitable' and additional option A. Overall there would appear to be very limited difference between these two options; option 2 is likely to be somewhat more beneficial in terms of sustainability objectives such as tackling climate change and increasing the proportion of renewable energy but the combination of option 3 and option A is likely to be more beneficial in terms of sustainability objectives such as protecting designated nature conservation sites and protecting landscape and townscape. The difference may be possible to summarise as option 2 being better for strategic/ global sustainability, while the combination of option 3 and A being better for local sustainability.

5 Conclusions

5 Conclusions

5.1 This section draws together the conclusions from previous sections that have looked at the extent to which the options are compatible with relevant policies, guidance, operational considerations and the appraisal of their sustainability.

'Option 1: Whole district is identified as suitable'

5.2 In the assessment of this option it was considered to have the advantages that it would:

- give the greatest opportunity for wind turbine development. This option therefore provides the most potential to contribute to the reduction of CO₂ thereby tackling climate change, provide energy security, and provide benefits to rural businesses.
- not confine wind turbine proposals to smaller areas, as is the case with other options (particularly option 3). For specific wind turbine proposals, this option therefore gives the greatest potential for landscape, visual and other impacts, such as on heritage assets, to be avoided or mitigated.

5.3 The assessment also identified disadvantages:

- This option would provide no special protection for areas of the district, such as the Great Fen, that are sensitive to the impacts of wind turbine developments.
- It is considered likely that wind turbine proposals would continue to be concentrated in areas of the district where there are already wind turbines. This could mean that cumulative impacts adversely affect these areas; although proposals would be subject to consideration of planning matters such as their landscape and visual impact, and such impacts would therefore be mitigated or minimised there is potential for unforeseen impacts.

5.4 From the sustainability appraisal it was considered that although this option is the most positive in terms of sustainability objectives such as tackling climate change it is likely to be the worst option in terms of several sustainability objectives.

'Option 2: Great Fen and its landscape and visual setting are not suitable'

5.5 In the assessment of this option it was considered to have the advantages that it would:

- give significant opportunity for wind turbine development, more than option 3, although less than option 1. This option therefore provides significant potential to contribute to the reduction of CO₂ thereby tackling climate change, provide energy security, and provide benefits to rural businesses, although less than that provided by option 1.
- confine wind turbine proposals to a smaller area than option 1, but would not confine proposals to as small an area as option 3. For specific wind turbine proposals, this option therefore gives significant potential for landscape, visual and other impacts, such as on heritage assets, to be avoided or mitigated, although less than that provided by option 1.

5.6 The assessment also identified disadvantages:

- This option would provide no special protection for areas of the district, other than the Great Fen, that may be sensitive to the impacts of wind turbine developments. The landscape study identifies the Nene Valley in particular but also the Great Ouse Valley as having limited capacity for wind turbines.
- It is considered likely that wind turbine proposals would continue to be concentrated in areas of the district where there are already wind turbines. This could mean that cumulative impacts adversely affect these areas; although proposals would be subject to consideration of planning matters such as landscape and visual impact, enabling such impacts to be mitigated or minimised, there is potential for unforeseen impacts.

5.7 From the sustainability appraisal it was considered that this option is likely to be positive in terms of tackling climate change and adverse impacts are likely to be less significant in comparison with Option 1. The option could be considered to be the best main option in terms of the sustainability appraisal.

'Option 3: Landscape character areas above prominent/ conspicuous thresholds are not suitable'

5.8 In the assessment of this option it was considered to have the advantage that:

- By identifying the LCA that is the least affected by Prominent and Conspicuous zones for existing wind turbines this option minimises the likelihood of cumulative landscape and visual impacts.

5.9 The assessment also identified disadvantages, that it would:

- give limited opportunity for wind turbine development- less than options 1 or 2. This option therefore provides only limited potential to contribute to the reduction of CO₂ thereby tackling climate change, provide energy security, and provide benefits to rural businesses.
- confine wind turbine proposals to a smaller area than options 1 or 2. For specific wind turbine proposals, this option therefore gives only limited potential for landscape, visual and other impacts, such as on heritage assets, to be avoided or mitigated.

5.10 From the sustainability appraisal it was considered that this option is likely to have only a limited impact in terms of tackling climate change due to the more limited area identified as suitable compared with options 1 and 2, but would be unlikely to lead to adverse impacts to the same extent as might occur with Option 1 in particular but also option 2. There are concerns that the basis for discounting landscape character areas is over simplified as there may be limited landscape or visual impact even where a LCA is above the Prominent/ Conspicuous threshold due to intervening vegetation or buildings or because of topography.

'Option 4: Whole district is not suitable'

5.11 In the assessment of this option it was considered to have the advantages that it would remove the possibility of landscape and visual impacts from further wind turbine development.

5.12 The assessment also identified disadvantages:

- As this option prevents wind energy developments it does nothing to contribute to reducing CO₂ emissions or to tackling climate change.
- This option would not allow local rural businesses to diversify their energy procurement through wind energy.

5.13 From the sustainability appraisal it was considered that this option would do nothing to tackle climate change but would not lead to any of the adverse impacts that might occur with the other main options. However, it is questionable whether this option is compatible with the requirements of the NPPF, specifically the requirement to take a positive approach in local plans.

'Additional Option A: Small turbines are suitable'

5.14 In the assessment of this option it was considered to have the advantages that it would:

- provide some potential to contribute to the reduction of CO₂ thereby tackling climate change, providing energy security, and providing benefits to rural businesses and enabling local community projects.
- not confine wind turbine proposals to smaller areas, as is the case with other options (particularly option 3). For specific wind turbine proposals, this option therefore gives the greatest potential for landscape, visual and other impacts, such as on heritage assets, to be avoided or mitigated. Additionally by limiting acceptability to small turbines the potential for landscape, visual and other impacts is likely to be limited as views to small turbines are more likely to be blocked by intervening features such as buildings, vegetation or topography.

5 Conclusions

- 5.15** The assessment also identified the disadvantage that this option would provide no special protection for areas of the district, such as the Great Fen, that are sensitive to the impacts of wind turbine developments.
- 5.16** From the sustainability appraisal it was considered that the best combination of main and additional options would appear to be main 'Option 3: Landscape character areas above prominent/ conspicuous thresholds are not suitable' and additional option A. This is due to a combination of being the best option in terms of a small number of decision aiding questions (DAQs), less than either of the other two combinations, and being the worst option for a small number of DAQs, also less than either of the other two combinations.
- 5.17** When comparing the conclusions of the sustainability appraisal of main options with the combination of main options with additional option A it was concluded that of the two best options, Option 2 and the combination of option 3 and option A it would appear that there are very limited differences between these two options; option 2 is likely to be somewhat more beneficial in terms of sustainability objectives such as tackling climate change and increasing the proportion of renewable energy but the combination of option 3 and option A is likely to be more beneficial in terms of sustainability objectives such as protecting designated nature conservation sites and protecting landscape and townscape. The difference may be possible to summarise as option 2 being better for strategic/ global sustainability, while the combination of option 3 and A being better for local sustainability.

6 Draft Policy

- 6.1** Presented below is a draft policy and supporting text set out in the same format as used for draft policies in the latest published version of the emerging Local Plan ([the Targeted Consultation](#)). The draft policy is worded so that it can apply to any of the main options that identify an area as suitable (Options 1, 2 or 3). The supporting text would be added to with relevant text describing the area identified as suitable and the reasoning for it, depending on whether options 1, 2 or 3 is selected. If option 4 is selected the draft policy would not be needed. Whichever option is selected the existing draft policy LP 36 and it's supporting text, see Appendix 5: 'Draft Local Plan policy LP 36', would be amended to make it clear that it does not apply to wind energy proposals.
- 6.2** If additional option A is combined with a main option the additional criterion 'b.' will be included in the policy. If additional option A isn't included then criterion 'b.' will be deleted and criterion 'c.' renumbered as 'b.'.
- 6.3** Reflecting the WMS requirement for areas considered suitable for wind turbine development to be identified in either local plans or neighbourhood plans this policy would be included in the Local Plan as a 'development management policy'. This would mean that neighbourhood plans would not have to be in general conformity with this policy, as detailed in the [National Planning Practice Guidance](#) and would be able to propose local policies that supplement, modify or replace the Local Plan policy.

Table 16 : Draft Policy and Supporting Text

<p>The purpose of this policy is to set out the Council's approach to development proposals for wind turbines as part of Huntingdonshire's contribution to the UK's energy infrastructure and efforts to achieve reductions in contributing factors to climate change while ensuring that all adverse impacts are fully addressed.</p>
<p>LP XX</p> <p>Wind Energy</p> <p>A proposal for wind energy development will only be supported where:</p> <ol style="list-style-type: none"> it lies within an area identified as suitable for wind energy development, as defined on the Policies Map or within an adopted neighbourhood plan; or it is a proposal for turbines that are 25/ 30m or less in height to the tip of a vertical blade; and (<i>criteria subject to selected approach including additional option A</i>) following consultation, it can be demonstrated that all potential adverse planning impacts, including cumulative impacts and those identified by affected local communities, have been fully addressed. <p>When identifying and considering the acceptability of potential adverse planning impacts their significance and level of harm will be weighed against the public benefits of the proposal.</p> <p>When identifying and considering impacts on heritage assets and/ or their settings special regard will be had to the desirability of sustaining and enhancing the significance of such assets.</p> <p>When identifying and considering impacts on the surrounding landscape regard will be had to the Huntingdonshire Landscape and Townscape Assessment SPD (2007) and the Wind Energy Development in Huntingdonshire SPD (2014) or successor documents as applicable.</p> <p>Having identified potential adverse impacts the proposal should seek to address them all firstly by seeking to avoid the impact, then to minimise the impact and finally to include alternative enhancement and/ or compensatory measures. All reasonable efforts to avoid, minimise and compensate will be essential for significant adverse impacts to be considered fully addressed.</p>

6 Draft Policy

Provision will be made for the removal of apparatus and reinstatement of the site to an acceptable condition, should the scheme become redundant or at the end of the permitted period for time limited planning permissions.

Reasoning

Together with energy conservation measures, the construction of renewable energy generation installations is central to efforts to reduce reliance on fossil fuels and achieve international agreements and UK legislation on reductions in carbon dioxide emissions in order to tackle climate change. Government policy encourages renewable energy schemes unless the environmental impacts would outweigh the wider social, economic and environmental advantages that stem from exploiting the energy generation potential unless restrictive policies set out in the NPPF indicate that development should be limited.

In responding to the Written Ministerial Statement (WMS), issued on 18 Jun 2015 by the Secretary of State for Communities and Local Government concerning the approach local planning authorities should take with proposals for wind energy development, the Council has identified an area of Huntingdonshire that is considered suitable for wind energy development, subject to potential planning impacts being fully addressed.

If option 1, 2 or 3 is selected additional text describing the area identified as suitable and the reasoning for it would be added here.

If additional option A is selected as part of the selected approach then additional text will be added here.

It should be noted that many small 'domestic' turbines are classed as permitted development and as such do not require planning permission. These small turbines could be developed outside of the area identified as suitable.

There are many different issues that need to be considered when dealing with an application for a wind turbine and these often only come to light when the detail of the proposal have been decided. Therefore, the area identified is only potentially suitable, and criterion 'c.' of the policy will need to be satisfied before a proposal can be approved.

Potential adverse impacts including cumulative impacts and those identified by affected local communities will include, but will not be limited to, any on the surrounding environment; amenity, and in particular impacts from noise and light; those affecting heritage assets and/ or their settings; biodiversity; and the surrounding landscape. Impacts will also include the effects of noise generation, shadow flicker and electromagnetic disturbance.

The [National Planning Practice Guidance \(NPPG\)](#) has guidance about what issues should be considered and how to determine whether or not they have been addressed. Whether the proposal has fully addressed all potential planning impacts and therefore has the backing of the affected local community is a planning judgement for the Council.

Natural England has produced an [Information Note](#) providing detailed guidance on onshore wind turbine developments which should be referred to in demonstrating how adverse impacts on the natural environment, particularly protected species, can be minimised.

The [Wind Energy Development in Huntingdonshire SPD \(2014\)](#) was adopted by the Council in 2014. The SPD provides information on the relative sensitivity and capacity of the district's landscapes in relation to wind turbines, indicates the criteria that need to be taken into account and provides guidance on potential mitigation measures. It also includes guidance on cumulative impacts. Wind energy proposals can have residual landscape and visual impacts which, because of the scale of proposed development, are impossible to fully mitigate through careful positioning of turbines. In such circumstances it may be appropriate to make landscape enhancements in the wider site and surroundings, create new habitats or enhance existing ones before such impacts can be considered to be fully addressed.

The Council has issued clarification on the specification of assessments and information on impacts that should be submitted with applications in the form of a [guidance note](#).

Where sites and equipment become obsolete or redundant or in any other circumstances where a site ceases operation arrangements for the removal of any equipment and the return of the site to an acceptable state will be required to be agreed with the Council prior to a proposal being approved. In appropriate circumstances this may include the creation of priority habitats such as those included in the England Biodiversity List, rather than returning the site to the conditions that prevailed prior to development.

Appendix 1: Planning Practice Guidance

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Appendix 1: Planning Practice Guidance

The following text reproduces the NPPG on Renewable and low carbon energy.

Planning for renewable & low carbon energy –

Introduction

Why is planning for renewable and low carbon energy important?

Increasing the amount of energy from renewable and low carbon technologies will help to make sure the UK has a secure energy supply, reduce greenhouse gas emissions to slow down climate change and stimulate investment in new jobs and businesses. Planning has an important role in the delivery of new renewable and low carbon energy infrastructure in locations where the local environmental impact is acceptable.

Are all energy developments handled by local planning authorities?

Local planning authorities are responsible for renewable and low carbon energy development of 50 megawatts or less installed capacity (under the Town and Country Planning Act 1990). Renewable and low carbon development over 50 megawatts capacity are currently considered by the Secretary of State for Energy under the Planning Act 2008, and the local planning authority is a statutory consultee. It is the Government's intention to amend legislation so that all applications for onshore wind energy development are handled by local planning authorities. Microgeneration is often permitted development and may not require an application for planning permission.

Developing a strategy for renewable and low carbon energy

How can local planning authorities develop a positive strategy to promote the delivery of renewable and low carbon energy?

The National Planning Policy Framework explains that all communities have a responsibility to help increase the use and supply of green energy, but this does not mean that the need for renewable energy automatically overrides environmental protections and the planning concerns of local communities. As with other types of development, it is important that the planning concerns of local communities are properly heard in matters that directly affect them.

Local and neighbourhood plans are the key to delivering development that has the backing of local communities. When drawing up a Local Plan local planning authorities should first consider what the local potential is for renewable and low carbon energy generation. In considering that potential, the matters local planning authorities should think about include:

- the range of technologies that could be accommodated and the policies needed to encourage their development in the right places;
- the costs of many renewable energy technologies are falling, potentially increasing their attractiveness and the number of proposals;
- different technologies have different impacts and the impacts can vary by place;
- the UK has legal commitments to cut greenhouse gases and meet increased energy demand from renewable sources. Whilst local authorities should design their policies to maximise renewable and low carbon energy development, there is no quota which the Local Plan has to deliver.

There is information below on community-led renewable energy initiatives.

What is the role for community led renewable energy initiatives?

Community initiatives are likely to play an increasingly important role and should be encouraged as a way of providing positive local benefit from renewable energy development. Further information for communities interested in developing their own initiatives is provided by the Department of Energy and Climate Change. Local planning authorities may wish to establish policies which give positive weight to renewable and low carbon energy initiatives which have clear evidence of local community involvement and leadership.

Neighbourhood plans are an opportunity for communities to plan for community led renewable energy developments. Neighbourhood Development Orders and Community Right to Build Orders can be used to grant planning permission for renewable energy development. To support community based initiatives a local planning authority should set out clearly any strategic policies that those producing neighbourhood plans or Orders will need to consider when developing proposals that address renewable energy development. Local planning authorities should also share relevant evidence that may assist those producing a neighbourhood plan or Order, as part of their duty to advise or assist. As part of a neighbourhood plan, communities can also look at developing a community energy plan to underpin the neighbourhood plan.

How can local planning authorities identify suitable areas for renewable and low carbon energy?

There are no hard and fast rules about how suitable areas for renewable energy should be identified, but in considering locations, local planning authorities will need to ensure they take into account the requirements of the technology and, critically, the potential impacts on the local environment, including from cumulative impacts. The views of local communities likely to be affected should be listened to.

When identifying suitable areas it is also important to set out the factors that will be taken into account when considering individual proposals in these areas. These factors may be dependent on the investigatory work underpinning the identified area.

There is a methodology available from the Department of Energy and Climate Change's website on assessing the capacity for renewable energy development which can be used and there may be existing local assessments. However, the impact of some types of technologies may have changed since assessments were drawn up (e.g. the size of wind turbines has been increasing). In considering impacts, assessments can use tools to identify where impacts are likely to be acceptable. For example, landscape character areas could form the basis for considering which technologies at which scale may be appropriate in different types of location. Landscape Character Assessment is a process used to explain the type and characteristics of landscape in an area. Natural England has used Landscape Character Assessment to identify 159 National Character Areas in England which provide a national level database. Landscape Character Assessment carried out at a county or district level may provide a more appropriate scale for assessing the likely landscape and visual impacts of individual proposals. Some renewable energy schemes may have visual impacts on the marine and coastal environment and it may be appropriate to also to assess potential impacts on seascape character.

Identifying areas suitable for renewable energy in plans gives greater certainty as to where such development will be permitted. For example, where councils have identified suitable areas for large scale solar farms, they should not have to give permission outside those areas for speculative applications involving the same type of development when they judge the impact to be unacceptable.

In the case of [wind turbines](#), a planning application should not be approved unless the proposed development site is an area identified as suitable for wind energy development in a Local or Neighbourhood Plan.

There is information in the rest of the guidance on [technical considerations](#), [criteria-based policies](#), [buffer zones](#) and [decentralised energy](#).

How are 'suitable areas' defined in relation to wind energy development?

[Suitable areas](#) for wind energy development will need to have been allocated clearly in a Local or Neighbourhood Plan. Maps showing the wind resource as favourable to wind turbines or similar will not be sufficient.

What technical considerations relating to renewable energy technologies affect their siting?

Examples of the considerations for particular renewable energy technologies that can affect their siting include proximity of grid connection infrastructure and site size, and:

- for biomass, appropriate transport links,
- for hydro-electric power, sources of water,
- for wind turbines, predicted wind resource, considerations relating to air safeguarding, electromagnetic interference and access for large vehicles.

Discussions with industry experts can help to identify the siting requirements and likely impacts of technologies. The [National Policy Statements](#) on the Department of Energy and Climate Change's website give generic and technology specific advice relevant to siting particular technologies. The Environment Agency has published advice showing which areas may be suitable for [open loop ground source heat pumps](#) as well as advice on the technologies it regulates.

Do criteria based policies have a role in planning for renewable energy?

Policies based on clear criteria can be useful when they are expressed positively (i.e. that proposals will be accepted where the impact is or can be made acceptable). In thinking about criteria the [National Policy Statements](#) published by the Department of Energy and Climate Change provide a useful starting point. These set out the impacts particular technologies can give rise to and how these should be addressed.

In shaping local criteria for inclusion in Local Plans and considering planning applications in the meantime, it is important to be clear that:

- the need for renewable or low carbon energy does not automatically override environmental protections;
- cumulative impacts require particular attention, especially the increasing impact that wind turbines and large scale solar farms can have on landscape and local amenity as the number of turbines and solar arrays in an area increases;
- local topography is an important factor in assessing whether wind turbines and large scale solar farms could have a damaging effect on landscape and recognise that the impact can be as great in predominately flat landscapes as in hilly or mountainous areas;
- great care should be taken to ensure heritage assets are conserved in a manner appropriate to their significance, including the impact of proposals on views important to their setting;
- proposals in National Parks and Areas of Outstanding Natural Beauty, and in areas close to them where there could be an adverse impact on the protected area, will need careful consideration;
- protecting local amenity is an important consideration which should be given proper weight in planning decisions.

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Are buffer zones/ separation distances appropriate between renewable energy development and other land uses?

Local planning authorities should not rule out otherwise acceptable renewable energy developments through inflexible rules on buffer zones or separation distances. Other than when dealing with set back distances for safety, distance of itself does not necessarily determine whether the impact of a proposal is unacceptable. Distance plays a part, but so does the local context including factors such as topography, the local environment and near-by land uses. This is why it is important to think about in what circumstances proposals are likely to be acceptable and plan on this basis.

How can decentralised energy opportunities be identified?

There is an important contribution to be made by planning that is independent of the contribution from other regimes such as building regulations. For example, getting the right land uses in the right place can underpin the success of a district heating scheme. Similarly, planning can influence opportunities for recovering and using waste heat from industrial installations.

Planning can provide opportunities for, and encourage energy development which will produce waste heat, to be located close to existing or potential users of the heat. Planning can also help provide the new customers for the heat by encouraging development which could make use of the heat.

Information on local heat demand is published by the Department of Energy and Climate Change to assist planners and developers in identifying locations with opportunities for heat supply. See the [national heat map](#) and the [UK CHP development map](#). This information will be supplemented in future by further work, including detailed mapping, on the potential for combined heat and power and district heating and cooling.

[View the National Planning Policy Framework definition of 'Decentralised Energy'.](#)

Particular planning considerations for hydropower, active solar technology, solar farms and wind turbines

What are the planning considerations that relate to specific renewable energy technologies?

Renewable energy developments should be acceptable for their proposed location. In addition to the factors that should be considered regarding the acceptability of a location for any form of [renewable energy development](#) there are particular considerations for the following technologies: [hydropower](#), [active solar technology \(photovoltaics and solar water heating\)](#), [solar farms](#) and [wind turbines](#). Also, local planning authorities may wish to consider how planning conditions or planning obligations can mitigate the impacts described.

What are the particular planning considerations that relate to Hydropower?

Planning applications for hydropower should normally be accompanied by a Flood Risk Assessment. Early engagement with the local planning authority and the Environment Agency will help to identify the potential planning issues, which are likely to be highly specific to the location. Advice on environmental protection for new hydropower schemes has been published by the [Environment Agency](#).

What are the particular planning considerations that relate to Active solar technology (Photovoltaic and Solar Water Heating)?

Active solar technology, (photovoltaic and solar water heating) on or related to a particular building is often [permitted development](#) (which does not require a planning application) provided the installation is not of an unusual design, or does not involve a listed building, and is not in a designated area.

Where a planning application is required, factors to bear in mind include:

- the importance of siting systems in situations where they can collect the most energy from the sun;
- need for sufficient area of solar modules to produce the required energy output from the system;
- the effect on a protected area such as an Area of Outstanding Natural Beauty or other designated areas;
- the colour and appearance of the modules, particularly if not a standard design.

What are the particular planning considerations that relate to large scale ground-mounted solar photovoltaic Farms?

The deployment of large-scale solar farms can have a negative impact on the rural environment, particularly in undulating landscapes. However, the visual impact of a well-planned and well-screened solar farm can be properly addressed within the landscape if planned sensitively.

Particular factors a local planning authority will need to consider include:

- encouraging the effective use of land by focussing large scale solar farms on previously developed and non agricultural land, provided that it is not of high environmental value;

- where a proposal involves greenfield land, whether (i) the proposed use of any agricultural land has been shown to be necessary and poorer quality land has been used in preference to higher quality land; and (ii) the proposal allows for continued agricultural use where applicable and/or encourages biodiversity improvements around arrays. See also a [speech by the Minister for Energy and Climate Change, the Rt Hon Gregory Barker MP, to the solar PV industry on 25 April 2013](#) and [Written Ministerial Statement – Solar energy: protecting the local and global environment – made on 25 March 2015](#).
- that solar farms are normally temporary structures and planning conditions can be used to ensure that the installations are removed when no longer in use and the land is restored to its previous use;
- the proposal's visual impact, the effect on landscape of glint and glare (see [guidance on landscape assessment](#)) and on neighbouring uses and aircraft safety;
- the extent to which there may be additional impacts if solar arrays follow the daily movement of the sun;
- the need for, and impact of, security measures such as lights and fencing;
- great care should be taken to ensure heritage assets are conserved in a manner appropriate to their significance, including the impact of proposals on views important to their setting. As the significance of a heritage asset derives not only from its physical presence, but also from its setting, careful consideration should be given to the impact of large scale solar farms on such assets. Depending on their scale, design and prominence, a large scale solar farm within the setting of a heritage asset may cause substantial harm to the significance of the asset;
- the potential to mitigate landscape and visual impacts through, for example, screening with native hedges;
- the energy generating potential, which can vary for a number of reasons including, latitude and aspect.

The approach to assessing cumulative landscape and visual impact of large scale solar farms is likely to be the same as assessing the [impact of wind turbines](#). However, in the case of ground-mounted solar panels it should be noted that with effective screening and appropriate land topography the area of a zone of visual influence could be zero.

What are the particular planning considerations that relate to wind turbines?

The following questions should be considered when determining applications for wind turbines:

- [Do local people have the final say on wind farm applications?](#)
- How are [noise impacts of wind turbines assessed](#)?
- Is [safety an issue when wind turbine applications are assessed](#)?
- Is [interference with electromagnetic transmissions an issue for wind turbine applications](#)?
- How can the [risk of wind turbines be assessed for ecology](#)?
- How should [heritage be taken into account](#) in assessing wind turbine applications?
- Is [shadow flicker and reflected light an issue](#) for wind turbine applications?
- How to assess the likely [energy output](#) of a wind turbine?
- How should [cumulative landscape and visual impacts](#) from wind turbines be assessed?
- What information is needed to [assess cumulative landscape and visual impacts](#) of wind turbines?
- [Decommissioning wind turbines](#)

Do local people have the final say on wind farm applications?

The [Written Ministerial Statement](#) made on 18 June 2015 is quite clear that when considering applications for wind energy development, local planning authorities should (subject to the transitional arrangement) only grant planning permission if:

- the development site is in an area identified as suitable for wind energy development in a Local or Neighbourhood Plan; and
- following consultation, it can be demonstrated that the planning impacts identified by affected local communities have been fully addressed and therefore the proposal has their backing.

Whether the proposal has the backing of the affected local community is a planning judgement for the local planning authority.

How are noise impacts of wind turbines assessed?

The report, 'The assessment and rating of noise from wind farms' ([ETSU-R-97](#)) should be used by local planning authorities when assessing and rating noise from wind energy developments. Good practice guidance on noise assessments of wind farms has been prepared by the Institute Of Acoustics. The Department of Energy and Climate Change accept that it represents current industry good practice and endorses it as a supplement to ETSU-R-97. It is available on the [Department of Energy and Climate Change's website](#).

Is safety an issue when wind turbine applications are assessed?

Safety may be an issue in certain circumstances, but risks can often be mitigated through appropriate siting and consultation with affected bodies:

- *Buildings* – Fall over distance (i.e. the height of the turbine to the tip of the blade) plus 10% is often used as a safe separation distance. This is often less than the minimum desirable distance between wind turbines and occupied buildings calculated on the basis of expected noise levels and due to visual impact.

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- *Power lines* – National Grid, and/or the relevant Distribution Network Operators will be able to advise on the required standards for wind turbines being separated from existing overhead power lines.
- *Air traffic and safety* – Wind turbines may have an adverse affect on air traffic movement and safety. Firstly, they may represent a risk of collision with low flying aircraft, and secondly, they may interfere with the proper operation of radar by limiting the capacity to handle air traffic, and aircraft instrument landing systems. There is a 15 kilometre (km) consultation zone and 30km or 32km advisory zone around every civilian air traffic radar, although objections can be raised to developments that lie beyond the 32km advisory zone. There is a c.15km statutory safeguarding consultation zone around Ministry of Defence aerodromes within which wind turbine proposals would be assessed for physical obstruction. See the Town and Country Planning (safeguarded aerodromes, technical sites and military explosives storage areas) direction 2002. Further advice on wind energy and aviation can be found on the [Civil Aviation Authority](#) and [National Air Control Transport Services](#) websites.
- *Defence* – Wind turbines can adversely affect a number of Ministry Of Defence operations including radars, seismological recording equipment, communications facilities, naval operations and low flying. Developers and local planning authorities should consult with the [Ministry of Defence](#) if a proposed turbine is 11 metres (m) to blade tip or taller, and/or has a rotor diameter of 2m or more.
- *Radar* – In addition to air traffic radar, wind turbines may affect other radar installations such as weather radar operated by the Meteorological Office.
- *Strategic Road Network* – The Highways Agency / Department for Transport have produced advice for siting wind turbines safely in relation to the strategic road network titled "[The strategic road network and the delivery of sustainable development](#)" (2013).

Is interference with electromagnetic transmissions an issue for wind turbine applications?

Wind turbines can potentially affect electromagnetic transmissions (e.g. radio, television and phone signals). Specialist organisations responsible for the operation of electromagnetic links typically require 100m clearance either side of a line of sight link from the swept area of turbine blades. OFCOM acts as a central point of contact for identifying specific consultees relevant to a site.

How can the risk of wind turbines be assessed for ecology?

Evidence suggests that there is a risk of collision between moving turbine blades and birds and/or bats. Other risks including disturbance and displacement of birds and bats and the drop in air pressure close to the blades which can cause barotrauma (lung expansion) in bats, which can be fatal. Whilst these are generally a relatively low risk, in some situations, such as in close proximity to important habitats used by birds or bats, the risk is greater and the impacts on birds and bats should therefore be assessed. Advice on assessing risks is available from [Natural England's website](#).

How should heritage be taken into account in assessing wind turbine applications?

As the significance of a heritage asset derives not only from its physical presence, but also from its setting, careful consideration should be given to the impact of wind turbines on such assets. Depending on their scale, design and prominence a wind turbine within the setting of a heritage asset may cause substantial harm to the significance of the asset.

Is shadow flicker and reflected light an issue for wind turbine applications?

Under certain combinations of geographical position and time of day, the sun may pass behind the rotors of a wind turbine and cast a shadow over neighbouring properties. When the blades rotate, the shadow flicks on and off; the impact is known as 'shadow flicker'. Only properties within 130 degrees either side of north, relative to the turbines can be affected at these latitudes in the UK – turbines do not cast long shadows on their southern side.

Modern wind turbines can be controlled so as to avoid shadow flicker when it has the potential to occur. Individual turbines can be controlled to avoid shadow flicker at a specific property or group of properties on sunny days, for specific times of the day and on specific days of the year. Where the possibility of shadow flicker exists, mitigation can be secured through the use of conditions.

Although problems caused by shadow flicker are rare, where proposals for wind turbines could give rise to shadow flicker, applicants should provide an analysis which quantifies the impact. Turbines can also cause flashes of reflected light, which can be visible for some distance. It is possible to ameliorate the flashing but it is not possible to eliminate it.

How to assess the likely energy output of a wind turbine?

As with any form of energy generation this can vary and for a number of reasons. With wind turbines the mean wind speed at hub height (along with the statistical distribution of predicted wind speeds about this mean and the wind turbines used) will determine the energy captured at a site. The simplest way of expressing the energy capture at a site is by use of the 'capacity factor'. This though will vary with location and even by turbine in an individual wind farm. This can be useful information in considering the energy contribution to be made by a proposal, particularly when a decision is finely balanced.

How should cumulative landscape and visual impacts from wind turbines be assessed?

Cumulative landscape impacts and cumulative visual impacts are best considered separately. The cumulative landscape impacts are the effects of a proposed development on the fabric, character and quality of the landscape; it is concerned with the degree to which a proposed renewable energy development will become a significant or defining characteristic of the landscape.

Cumulative visual impacts concern the degree to which proposed renewable energy development will become a feature in particular views (or sequences of views), and the impact this has upon the people experiencing those views. Cumulative visual impacts may arise where two or more of the same type of renewable energy development will be visible from the same point, or will be visible shortly after each other along the same journey. Hence, it should not be assumed that, just because no other sites will be visible from the proposed development site, the proposal will not create any cumulative impacts.

What information is needed to assess cumulative landscape and visual impacts of wind turbines?

In identifying impacts on landscape, considerations include: direct and indirect effects, cumulative impacts and temporary and permanent impacts. When assessing the significance of impacts a number of criteria should be considered including the sensitivity of the landscape and visual resource and the magnitude or size of the predicted change. Some landscapes may be more sensitive to certain types of change than others and it should not be assumed that a landscape character area deemed sensitive to one type of change cannot accommodate another type of change.

In assessing the impact on visual amenity, factors to consider include: establishing the area in which a proposed development may be visible, identifying key viewpoints, the people who experience the views and the nature of the views.

The Historic England website provides information on undertaking historic landscape characterisation and how this relates to landscape character assessment.

The bullets below set out the type of information that can usefully inform assessments.

Information to inform landscape and visual impact assessments

- a base plan of all existing windfarms, consented developments and applications received, showing all schemes within a defined radius of the centre of the proposal under consideration
- for those existing or proposed windfarms within a defined radius of the proposal under consideration, a plan showing cumulative 'zones of visual influence'. (A zone of visual influence is the area from which a development or other structure is theoretically visible). The aim of the plan should be to clearly identify the zone of visual influence of each windfarm, and those areas from where one or more windfarms are likely to be seen
- the base plan and plan of cumulative zones of visual influence will need to reflect local circumstances, for example, the areas covered should take into account the extent to which factors such as the topography and the likely visibility of proposals in prevailing meteorological conditions may vary
- maps of cumulative zones of visual influence are used to identify appropriate locations for visual impact studies. These include locations for simultaneous visibility assessments (i.e. where two or more schemes are visible from a fixed viewpoint without the need for an observer to turn their head, and repetitive visibility assessments (i.e. where the observer is able to see two or more schemes but only if they turn around)
- sequential effects on visibility occur when an observer moves through a landscape and sees two or more schemes. Common routes through a landscape (e.g. major roads; long distance paths or cycle routes) can be identified as 'journey scenarios' and the proposals impact on them can be assessed
- photomontages showing all existing and consented turbines, and those for which planning applications have been submitted, in addition to the proposal under consideration. The viewpoints used could be those identified using the maps of cumulative zones of visual influence. The photomontages could be annotated to include the dimensions of the existing turbines, the distance from the viewpoint to the different schemes, the arc of view and the format and focal length of the camera used
- at the most detailed level, description and assessment of cumulative impacts may include the following landscape issues: scale of development in relation to landscape character or designations, sense of distance, existing focal points in the landscape, skylining (where additional development along a skyline appears disproportionately dominant) and sense of remoteness or wildness

Decommissioning wind turbines

Local planning authorities should consider using planning conditions to ensure that redundant turbines are removed when no longer in use and land is restored to an appropriate use.

When is pre-application consultation with the local community compulsory for wind turbine proposals?

There is a legal requirement to carry out pre-application consultation with the local community for planning applications for wind turbine development involving more than 2 turbines or where the hub height of any turbine exceeds 15 metres as identified in [Article 3 of the Town and Country Planning \(Development Management Procedure\) \(England\) \(Order\) 2015](#). The following questions should be considered when undertaking compulsory pre-application consultation with the local community for wind turbine proposals:

- [Who is responsible for conducting compulsory pre-application consultation with the local community for wind turbine proposals?](#)
- [What must a prospective applicant for planning permission for a wind turbine do when undertaking compulsory pre-application consultation with the local community?](#)
- [How can a prospective applicant for planning permission for a wind turbine establish who needs to be consulted?](#)
- [Will compulsory pre-application consultation with the local community apply to planning applications for wind turbine\(s\) determined by the Secretary of State?](#)

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- [What role can the local planning authority play in compulsory pre-application consultation with the local community for wind turbine proposals?](#)
- [What happens if a prospective applicant for a wind turbine does not comply with the requirement to undertake compulsory pre-application consultation with the local community?](#)

Who is responsible for conducting compulsory pre-application consultation with the local community for wind turbine proposals?

The requirement to undertake compulsory pre-application consultation with the local community is the responsibility of the prospective applicant for planning permission.

What must a prospective applicant for planning permission for a wind turbine(s) do when undertaking compulsory pre-application consultation with the local community?

The requirements that must be fulfilled are set out in [Sections 61W and 61X of the Town and Country Planning Act 1990](#) and [Article 4 of the Town and Country Planning \(Development Management Procedure\) \(England\) \(Order\) 2015](#). In summary, a prospective applicant for planning permission must:

- publicise the proposal in such a way as the applicant reasonably considers is likely to bring it to the attention of a majority of the people who live at, or otherwise occupy, premises in the vicinity of the land;
- set out how persons may contact them regarding the proposal. The applicant must give sufficient information about the proposed timetable to ensure that people wishing to comment on the proposed development may do so in good time;
- if they decide to go ahead with making an application for planning permission, have regard to any responses received when finalising the application to be submitted;
- when submitting their application explain how the local community has been consulted, what comments have been received, and how account has been taken of those comments.

These are minimum requirements, but it is in the prospective applicant's interest to conduct pre-application consultation to an appropriate standard to ensure that they fully understand the views of those within the vicinity of the land to which the application relates.

How can a prospective applicant for planning permission for a wind turbine(s) establish who needs to be consulted?

Where it is required, compulsory pre-application consultation must meet the legislative requirements set out in [Section 61W of the Town and Country Planning Act 1990](#). These require that applicants must publicise the proposal in such a way as the applicant reasonably considers is likely to bring it to the attention of a majority of persons who live at or otherwise occupy premises in the vicinity of the land.

There is no one size fits all approach to pre-application consultation and, providing it meets the legislative requirements, decisions on the nature and extent of consultation will need to be made on a case by case basis and in light of the relevant circumstances. Pre-application consultation should be proportionate to the scale and nature of a proposed development, the local context and the people that might be materially affected by the planning impacts of the development.

When deciding how and who to consult, prospective applicants will need to consider what is necessary in the specific circumstances of their proposal but a useful starting point is to consider the extent of engagement with the local community a local planning authority would normally undertake if a formal planning application were to be submitted. Prospective applicants are encouraged to [discuss these matters with the local planning authority](#).

Will compulsory pre-application consultation with the local community apply to planning applications for wind turbine(s) determined by the Secretary of State?

Compulsory pre-application consultation with the local community applies to applications under [Part 3 of the Town and Country Planning Act](#) which meet the [criteria](#). Specific provision is made so that the duty applies to applications meeting the [criteria](#) made directly to the Secretary of State where a local planning authority has been designated as poorly performing under [section 62A of the 1990 Act](#).

What role can the local planning authority play in compulsory pre-application consultation with the local community for wind turbine proposals?

Local planning authorities are encouraged to work constructively with prospective applicants undertaking compulsory pre-application consultation with the local community. Under [Section 61W\(7\) of the Town and Country Planning Act 1990](#), an applicant must have regard to the advice (if any) given by the local planning authority about local good practice. More general information on the role of the local planning authorities at the pre-application stage is available in [this guidance suite](#).

What happens if a prospective applicant for a wind turbine does not comply with the requirement to undertake compulsory pre-application consultation with the local community?

If the requirements set out in [Sections 61W and 61X of the Town and Country Planning Act 1990](#) and [Article 4 of the Town and Country Planning \(Development Management Procedure\) \(England\) Order 2010](#) have not been met and a planning application is submitted, the local planning authority will not be able to validate it until the prospective applicant complies.

Appendix 2: Consented and Constructed Turbines

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Appendix 2: Consented and Constructed Turbines

The following table sets out information for all the constructed and consented turbines in Huntingdonshire. This information has been updated from that which was presented in the existing SPD to reflect the current position. As no planning applications for wind turbines have been received since August 2014 there are no applications that remain to be determined through the planning process

Table 17 : Constructed and Consented schemes in Huntingdonshire

Site Name	Planning Application Reference	Number of Turbines	Proposed Height
Ashfield, Meadow Road, Gransden	1201268FUL	1	18
Birds Nest, Parkhall Road, Somersham	1200225FUL	1	20
Brook Farm, Ellington	1000887FUL	1	25
Church Farm, Ramsey Mereside	1200669FUL	1	46
Denton Lodge, The Old North Road, Denton	0702290FUL	1	15
Float Fish Farm, Milk and Water Drove, Farcet	0901252FUL	1	18
Glebe Farm, Spaldwick	1002042FUL	1	25
Hamerton Zoo Park, Hamerton	1200670FUL	2	46
Lakeside Lodge, Pidley	0803141FUL	1	19
Woolley Hill, Ellington	1001741FUL	4	130
Foxholes Farm, Leighton Bromswold	1201829FUL	1	34
The Retreat, Wistow	1201985FUL	2	18
Red Tile Wind Farm	0302827FUL	12	100
Mereside Farm, Ramsey Mereside	0101772FUL	1	34
Cotton Farm, Graveley Road, Offord Darcy	0802296FUL	8	125
Mill House, Old Weston	1201408FUL	1	20
Littlebury Farm, Hemmingford Abbots	1301361S73	1	46
Common Barn, Rectory Lane, Southoe	1200803FUL	3	125
Catworth Lodge, Tilbrook	1300264FUL	1	46
Land at St Mary's Road, Ramsey	1101865FUL	4	127
St Mary's Road, Ramsey	0400031FUL	1	125
Wilson Orchard, Fenside Road, Warboys	1200454FUL	1	20

Consented and Constructed Turbines Appendix 2:

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Site Name	Planning Application Reference	Number of Turbines	Proposed Height
Cromwell Farm, Warboys Road, Bury	1300274FUL	1	25
Three Fishes Farm, Warboys	1201034FUL	3	18
Tick Fen Farm, Warboys	1300084FUL	1	74
Tick Fen Farm, Warboys	1000119FUL	1	25
Tick Fen Farm, Warboys	1101601FUL	1	46
Tilbrook Grange, Tilbrook	1101420FUL	1	25
Wood Green Animal Shelter	1101886FUL	1	102
Glebe Farm, Spaldwick	1400095FUL	1	25
Ramsey Road, Farcet	1401448FUL	1	50
Galley Hill Farm, Hemingford Grey	1301724FUL	1	42
North of King's Bush Farm, Godmanchester	1301687FUL	1	100

Appendix 3: Other Relevant Plans and Programmes

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Appendix 3: Other Relevant Plans and Programmes

The following list identifies other plans, programmes and documents that have been identified as relevant for planning policy in relation to wind turbine development.

Table 18 : Relevant plans, programmes and other documents

Plan/ Programme	Aims and Objectives
How to identify suitable areas for onshore wind development in your neighbourhood plan (Centre for Sustainable Energy, 2016)	<p>This guidance document provides those producing neighbourhood plans with a step-by-step guide as to how to cost-effectively identify suitable areas for onshore wind development in their plans. The document introduces the changes to planning policy brought about by the 'Written Ministerial Statement', discusses the type of supporting evidence needed to demonstrate that an area is suitable and the process including public consultation that would be required.</p>
East of England Renewable and Low Carbon Energy Capacity Study (AECOM and the Landscape Partnership, 2011)	<p>The study looks at the potential for renewable energy generation in the East of England and considers the practicalities of implementation. For Cambridgeshire, the study identifies that there are particular opportunities for wind, large scale solar photo-voltaic, and biomass energy generation.</p>
St Neots Energy Study (AECOM for HDC, 2009)	<p>The study seeks to identify opportunities for low and zero carbon decentralised energy for the town and the surrounding area. The study places a particular emphasis on the proposed urban expansion of the town to the east of the railway. It contains:</p> <ul style="list-style-type: none"> • a policy and literature review which supports the development and the implementation of decentralised low carbon and renewable energy policies and targets for the district; • baseline energy demands and CO₂ emissions for existing homes and businesses; • a review of wind and biomass resource potential within the district; • an evaluation of the potential for district heating and stand alone low carbon options in the urban extension; and • a series of supply-mix masterplan options for future energy demands are presented and financing for these examined.

Appendix 4: The Sustainability Appraisal Process

The sustainability appraisal process was most recently set out in the [Initial Sustainability Report](#) published alongside the Stage 3 consultation for the emerging Local Plan. As set out in the methodology of that report Stage A is the scoping process that establishes the sustainability appraisal framework (see below), which includes the sustainability objectives and the decision aiding questions for appraising the Local Plan options. The methodology also sets out the steps that are part of 'Stage B: Developing and refining options and assessing effects' within which tasks B 2 to B 5 are concerned with appraising policy options.

In this document:

- Chapter 2 'Context' and the consultation process cover the Stage A tasks;
- Chapter 3 'Options' fulfils task 'B 2: Developing plan options';
- Chapter 4 'Sustainability Appraisal' fulfils tasks;
 - 'B 3: Predicting the effects of the plan and alternatives';
 - 'B 4 Evaluating the effects of the plan and alternatives'; and
 - 'B 5: Considering ways of mitigating adverse effects and maximising beneficial effects';
- Drawing up this document fulfils 'Stage C: Preparing the Sustainability Appraisal Report'; and
- Consultation on this document will fulfil task 'D 1: Public participation'.

The final stages (tasks D 2 and D 3 and Stage E) of the SA process will be completed for the Local Plan as a whole once the final preferred approach for the wind energy policy has been incorporated into the Local Plan.

Sustainability Appraisal Framework

The SA Framework below is the result of the tasks undertaken at Stage A. The tasks included identifying sustainability objectives that cover the full range of issues that make up sustainability. The SA Framework includes three sets of decision aiding questions (DAQs) that have been drawn up with the appraisal of different sections of the Local Plan in mind:

The Strategy DAQs: These questions were drawn up to enable appraisal of the overall development strategy and the strategic policies of the Local Plan and deal with strategic issues relating to each SA objective.

Sites DAQs: These questions were drawn up with the appraisal of individual sites in mind and wherever possible have questions that have specific 'yes' or 'no' answers to enable comparison between sites.

Development Management DAQs: These questions were drawn up with the appraisal of the development management policies in mind and deal with more localised issues relating to each SA objective.

SA Objective	Decision Aiding Questions for use in appraising options for		
	The Strategy	Sites ⁽¹⁵⁾	Development Management Policies
Land, Water and Flood Risk			
1. Minimise development on greenfield land, maximise development on previously	Will it enable the use of land that has previously been developed in preference to land that has not been developed?	Is more than half the site Previously Developed Land (PDL)?	Will it promote the use of land that has previously been developed?

15 See notes on site assessment and significant constraints below

Appendix 4: The Sustainability Appraisal Process

Huntingdonshire Local Plan | Huntingdonshire's Local Plan to 2036: Wind Energy Development

SA Objective	Decision Aiding Questions for use in appraising options for		
	The Strategy	Sites ⁽¹⁵⁾	Development Management Policies
developed land or land with the lowest agricultural value	<p>Will it promote development in locations that are grade 3 agricultural land or lower (including urban and non-agricultural) in preference to higher grades?</p> <p>Will it promote development in locations where higher densities are appropriate?</p>	<p>Is more than half the site located on grade 3 agricultural land or lower (including urban and non-agricultural)?</p> <p>Is the site in an area where higher density development is appropriate?</p>	<p>Will it promote the use of land that is classified as grade 3 agricultural land or lower (including urban and non-agricultural)?</p> <p>Will it promote development at higher densities where it is appropriate?</p>
2. Protect water resources (both quality and quantity)	<p>Will it direct development away from waterways that are sensitive to changes in water quality?</p> <p>Will it direct development towards locations where water treatment capacity exists or can be added to effectively?</p>	<p>What impact will development have on water resources?</p>	<p>Will it promote a reduction in water consumption?</p>
3. Manage and minimise all forms of flood risk (taking into account climate change)	<p>Will it minimise risk to people and property from flooding, now and in the future?</p>	<p>Is more than half the site located in flood zone 1, flood zone 2, flood zone 3a (with climate change allowance), flood zone 3a, or functional floodplain (flood zone 3b)?</p> <p>Is any part of the site located in a rapid inundation zone?</p> <p>Can the site incorporate SuDS?</p>	<p>Will it ensure that development has taken flood risk into account, both in terms of risk to the development and to displaced risk?</p> <p>Will it promote the use of SuDS and reduced runoff rates?</p>
Green Infrastructure and Open Space			
4. Improve the quantity and quality of publicly accessible open and natural green space and promote the	<p>Will it direct development to areas which are either well served by open space or publicly accessible green space or have the capacity</p>	<p>Is the site within 300m of an area of accessible natural green space over 2ha⁽¹⁶⁾?</p>	<p>Will it promote an increase in the quantity and quality of publicly accessible open space?</p>

15 See notes on site assessment and significant constraints below

16 Natural England ANGSt 'local' standard

The Sustainability Appraisal Process Appendix 4:

Huntingdonshire Local Plan | Huntingdonshire's Local Plan to 2036: Wind Energy Development

SA Objective	Decision Aiding Questions for use in appraising options for		
	The Strategy	Sites ⁽¹⁵⁾	Development Management Policies
strategic green infrastructure network and links to it	for providing more open space or publicly accessible green space?	Does the site present opportunities to link into and/ or form part of the Green Infrastructure Network?	Will it promote an increase in households that have easy access to natural green space?
Biodiversity			
5. Protect, maintain and enhance biodiversity and habitats	Will it protect, restore, create or enhance habitats?	Is the site a designated nature site, immediately adjacent to a designated nature site or within 2km of a Ramsar, SAC or SPA, 1km of a SSSI or NNR or 200m of a CWS? Are protected species known to exist on the site or is there potential for protected species to exist on the site ⁽¹⁷⁾ ? ⁽¹⁸⁾	Will it promote the protection of sites designated for their nature conservation value? Will it promote the conservation of species, the reversal of their decline, and the enhancement of biodiversity?
Landscape			
6. Protect, maintain and enhance landscape and townscape character and the sense of place of our settlements	Will it promote development of a type and scale which recognises and responds to the valued characteristics of landscape character types? Will it promote development of a type and scale which recognises and responds to the valued characteristics of existing townscapes?	Will development have a significant impact on the surrounding townscape or landscape?	Will it promote the protection of the diversity and distinctiveness of landscape and townscape character? Will it improve the quality of urban, architectural and landscape design? Will it seek to minimise the potential adverse visual effects of development?
Heritage			
7. Protect, maintain and enhance heritage assets, whether they are designated or not	Will it promote development which preserves and enhances the district's heritage?	Will development impact on heritage assets or their settings?	Will it promote the protection of heritage assets (including

15 See notes on site assessment and significant constraints below

17 with reference to [Natural England's protected species decision checklist](#)

18 subject to appropriate surveys being carried out

Appendix 4: The Sustainability Appraisal Process

Huntingdonshire Local Plan | Huntingdonshire's Local Plan to 2036: Wind Energy Development

SA Objective	Decision Aiding Questions for use in appraising options for		
	The Strategy	Sites ⁽¹⁵⁾	Development Management Policies
			designated and non-designated) and their settings?
Climate Change and Energy			
8. Reduce emissions of greenhouse gases and improve energy efficiency	<p>Will it lead to development that can take advantage of or enable opportunities for decentralised low carbon energy sources or networks?</p> <p>Will it promote the location of significant areas of growth where the need to travel is minimised due to the mix of employment and housing?</p> <p>Will it promote actions to tackle climate change both through adaptation and mitigation?</p>	Can development take advantage of existing or planned opportunities for decentralised low carbon energy sources or networks?	<p>Will it promote actions to tackle climate change both through adaptation and mitigation?</p> <p>Will it promote an increased proportion of energy needs being met from renewable sources?</p>
Pollution			
9. Improve air quality	Will it recognise and tackle the causes of air pollution, particularly from traffic?	Is the site outside or adjacent to an air quality management area?	Covered by decision aiding questions for SA Objective 10
10. Avoid unnecessary light, noise and visual pollution	Will it promote the retention of the quiet rural character of the district?	Is the site located in such a position that development is unlikely to cause widespread light, noise or other forms of pollution?	Will it seek to ensure that development is not affected by or causes unreasonable impacts from light, noise, air or other forms of pollution?
Waste and Recycling			
11. Reduce waste production and increase reuse, recycling and composting	Will it direct development away from areas of search for waste purposes designated in the Cambridgeshire and Peterborough Minerals and Waste Local Plan?	Is the site outside areas of search for waste purposes designated in the Cambridgeshire and Peterborough Minerals and Waste LDF?	Will it promote the reduction of waste throughout the lifetime (construction, use and redevelopment) of development?

15 See notes on site assessment and significant constraints below

The Sustainability Appraisal Process Appendix 4:

Huntingdonshire Local Plan | Huntingdonshire's Local Plan to 2036: Wind Energy Development

SA Objective	Decision Aiding Questions for use in appraising options for		
	The Strategy	Sites ⁽¹⁵⁾	Development Management Policies
		Will development reduce waste production and increase reuse, recycling and composting?	
Health and Well-being			
12. Promote built environments that encourage and support physical activity, including extending and improving access to facilities	Covered by decision aiding questions for SA Objective 4	Is the site within 500m of an existing area of open space? ⁽¹⁹⁾ Is the site within 800m of an outdoor sports facility?	Will it enable people to lead healthy lifestyles, including travel choices?
13. Promote accessibility of cultural and social activities	Will it promote accessibility to cultural or social activities?	Is the site within 800m of a facility where cultural or social activities can be accessed?	Will it promote accessibility of cultural or social activities?
Population and Housing			
14. Ensure all groups in society have access to decent, appropriate and affordable accommodation	Will it promote a growth in the provision of housing to meet needs (including for affordable and traveller accommodation)?	Will the site provide an increase in residential accommodation?	Will it support the provision of housing that will meet identified needs (including for affordable and traveller accommodation)?
Deprivation, Crime and Access to Services			
15. Redress inequalities	Will it help reduce poverty and social exclusion for those areas and groups most affected?	Will development address a particular housing equality issue?	Will it promote accessibility for all members of society, including the elderly and disabled?
16. Reduce and prevent crime, anti-social behaviour and the fear of crime	Will it promote a reduction in levels of crime or the fear of crime?	Will development help to make the area safer?	Will it promote development that is designed to reduce and prevent crime, anti-social behaviour and the fear of crime?
17. Improve the quality, range and accessibility of social and community services and facilities including	Will it facilitate access to basic services?	Is the site within 400m of a food shop? Is the site within 1km of a GP surgery/ health centre?	Will it promote accessibility of services?

15 See notes on site assessment and significant constraints below

19 Reference to the council's Developer Contributions SPD with respect to scale of development will be had with the impact identified based on the likelihood of provision on site

Appendix 4: The Sustainability Appraisal Process

Huntingdonshire Local Plan | Huntingdonshire's Local Plan to 2036: Wind Energy Development

SA Objective	Decision Aiding Questions for use in appraising options for		
	The Strategy	Sites ⁽¹⁵⁾	Development Management Policies
promotion of multi-purpose design and use and efficient use of these resources			
Employment, Business, Retail and Tourism			
18. Improve access to satisfying work, appropriate to skills, potential and place of residence	Will it match areas of population growth to employment growth in a manner which facilitates easy access to jobs?	Is the site within 2km of a major concentration of employment opportunities and/or potential employees?	Will it promote access to employment?
19. Positively and pro-actively encourage sustainable economic growth by improving the efficiency, competitiveness, vitality and viability of the local economy	Will it enhance Huntingdonshire as a business location and encourage inward investment?	Will the site provide opportunities for investment to create additional jobs?	Will it support economic activity in sectors targeted for growth or in the rural economy? Will it enable existing businesses to grow? Will it support the vitality and viability of established retail and service centres?
Education			
20. Ensure that the educational needs of the growing population are served locally while improving uptake of learning and training opportunities	Will it help improve the availability of training and education opportunities?	Is the site within 600m of a primary school?	Will it promote easy access to training and education?
Transport Infrastructure and Commuting			
21. Reduce the need to travel and promote necessary infrastructure improvements and sustainable modes of transport (walking, cycling, and public transport)	Will it reduce the need to travel? Will it match areas of growth to those with better or improving transport infrastructure?	Is the site within 400m of a bus stop? Is the site free of known major transport infrastructure constraints? Will the site support a mix of uses such as housing, employment, retail and/or community facilities?	Will it support and improve community and public transport? Will it help improve cycle routes, footpaths and bridleways? Will it improve accessibility by means other than the car?

15 See notes on site assessment and significant constraints below

Appendix 5: Draft Local Plan policy LP 36

The following text replicates for reference purposes the draft Local Plan policy LP 36: Renewable and Low Carbon Energy as presented in the Targeted Consultation version of the emerging Huntingdonshire Local Plan to 2036 published in January 2015.

The purpose of this policy is to set out the Council's approach to development proposals for renewable and low carbon energy generation as part of Huntingdonshire's contribution to this important part of the UK's energy infrastructure and efforts to achieve reductions in contributing factors to climate change.

LP 36

Renewable and Low Carbon Energy

A proposal for a renewable or low carbon energy generating scheme will be supported where it is demonstrated that all potential adverse impacts including cumulative impacts are or can be made acceptable.

When identifying and considering the acceptability of potential adverse impacts their significance and level of harm will be weighed against the public benefits of the proposal.

When identifying and considering impacts on heritage assets and/ or their settings special regard will be had to the desirability of sustaining and enhancing the significance of such assets.

When identifying and considering impacts on the surrounding landscape regard will be had to the [Huntingdonshire Landscape and Townscape Assessment SPD \(2007\)](#) and the [Wind Energy Development in Huntingdonshire SPD \(2014\)](#) or successor documents as applicable.

Having identified potential adverse impacts the proposal should seek to address them all firstly by seeking to avoid the impact, then to minimise the impact and finally to include alternative enhancement and/ or compensatory measures. All reasonable efforts to avoid, minimise and compensate will be essential for significant adverse impacts to be considered acceptable.

Provision will be made for the removal of apparatus and reinstatement of the site to an acceptable condition, should the scheme become redundant or at the end of the permitted period for time limited planning permissions.

Reasoning

Together with energy conservation measures, the construction of renewable energy generation installations is central to efforts to reduce reliance on fossil fuels and achieve statutorily agreed reductions in carbon dioxide emissions. Government policy encourages renewable energy schemes unless the environmental impacts would outweigh the wider social, economic and environmental advantages that stem from exploiting the energy generation potential unless restrictive policies set out in the NPPF indicate that development should be restricted.

Cambridgeshire Renewables Infrastructure Framework (CRIF) has demonstrated significant potential for renewable energy generation in Huntingdonshire, especially from biomass (including waste), wind and solar sources. This policy is intended to encourage appropriate schemes whilst ensuring the risk of adverse impacts is minimised.

Potential adverse impacts to be identified will include, but will not be limited to, any on the surrounding environment; amenity, and in particular impacts from noise, light or odour; heritage assets and/ or their settings; biodiversity; and the surrounding landscape. The Council's [Huntingdonshire Landscape and Townscape Assessment SPD \(2007\)](#) should be used to inform assessment of potential impacts on the surrounding landscape.

Appendix 5: Draft Local Plan policy LP 36

Natural England have also produced a series of [Information Notes](#) providing detailed guidance, particularly relating to onshore wind turbine developments and solar farms which should be referred to in demonstrating how adverse impacts on the natural environment, particularly protected species, can be minimised.

The [Wind Energy Development in Huntingdonshire SPD \(2014\)](#) was adopted by the Council in 2014 and has accompanying guidance notes. This document provides information on the relative sensitivity and capacity of the district's landscapes in relation to wind turbines, indicates the criteria that would need to be taken into account and provides guidance on potential mitigation measures. It also includes guidance on cumulative impacts taking account of wind turbine development to date and proposals that are 'in planning', which the Council will keep up to date. A range of matters will need to be considered, including the effects on amenity such as noise generation, shadow flicker and electromagnetic disturbance as well as the impact on the natural and built environment. The Council also issued clarification on the specification of assessments and information that should be submitted with applications in the form of a guidance note.

In the case of wind energy proposals there are often residual landscape and visual impacts which, because of the scale of proposed development, are impossible to fully mitigate. In such circumstances it may be appropriate to make landscape enhancements in the wider site and surroundings, create new habitats or enhance existing ones.

Proposals for solar photo-voltaic schemes, often referred to as 'solar farms' should apply national guidance contained in the [NPPG](#) and seek to follow industry best practice guidance such as that available from the [Solar Trade Association](#) and from the [Building Research Establishment \(BRE\)](#). Additional information about how the government sees solar energy being deployed is available in the UK Solar PV Strategy. Developers and landowners considering such proposals should be aware of the high proportion of high quality agricultural land (grades 1 and 2) in the district. BRE have also published [guidance](#) for solar energy developments on the biodiversity benefits that can be realised.

Some renewable energy technologies are developing rapidly, and it is recognised that sites and equipment may become obsolete. Arrangements for the removal of any equipment, should it cease to be operational, are required in order to prevent unnecessary environmental intrusion. Where sites become redundant they should be returned to a state agreed by the Council. In appropriate circumstances this may include the creation of priority habitats included in the England Biodiversity List. In most cases this will be secured through the use of planning conditions. An acceptable condition may be decided as part of the determination of the planning application but may be conditioned to be determined prior to the scheme becomes redundant and/ or at the end of the permitted period for time limited planning permissions.

Glossary

Affordable housing

Social rented, affordable rented and intermediate housing, provided to eligible households whose needs are not met by the market. Eligibility is determined with regard to local incomes and local house prices. Affordable housing should include provisions to remain at an affordable price for future eligible households or for the subsidy to be recycled for alternative affordable housing provision.

Social rented housing is owned by local authorities and private registered providers (as defined in section 80 of the Housing and Regeneration Act 2008), for which guideline target rents are determined through the national rent regime. It may also be owned by other persons and provided under equivalent rental arrangements to the above, as agreed with the local authority or with the Homes and Communities Agency.

Affordable rented housing is let by local authorities or private registered providers of social housing to households who are eligible for social rented housing.

Affordable Rent is subject to rent controls that require a rent of no more than 80% of the local market rent (including service charges, where applicable).

Intermediate housing is homes for sale and rent provided at a cost above social rent, but below market levels subject to the criteria in the Affordable Housing definition above. These can include shared equity (shared ownership and equity loans), other low cost homes for sale and intermediate rent, but not affordable rented housing.

Homes that do not meet the above definition of affordable housing, such as "low cost market" housing, may not be considered as affordable housing for planning purposes.

Aged or veteran tree

A tree which, because of its great age, size or condition is of exceptional value for wildlife, in the landscape, or culturally.

Air Quality Management Areas

Areas designated by local authorities because they are not likely to achieve national air quality objectives by the relevant deadlines. Information regarding air quality management in Huntingdonshire can be found in the latest version of the Council's [Air Quality Updating and Screening Assessment Report](#).

Allowable Solutions

Allowable Solutions are a wide range of carbon-saving measures that are available to developers to allow them, in addition to on-site building performance target to meet the Zero Carbon Housing policy of all housing achieving effectively zero CO₂ emissions from regulated energy use such as energy used for space heating and cooling, hot water, fixed lighting and ventilation, from 2016.

Amenity

A positive element or elements that contribute to the overall character or enjoyment of an area. For example, open land, trees, historic buildings and the inter-relationship between them, or less tangible factors such as tranquillity.

Ancient woodland

An area that has been wooded continuously since at least 1600 AD.

Annual Monitoring Report (AMR)

Document produced each year to report on progress in producing the development plan documents and implementing its policies.

Archaeological interest

There will be archaeological interest in a heritage asset if it holds, or potentially may hold, evidence of past human activity worthy of expert investigation at some point. Heritage assets with archaeological interest are the primary source of evidence about the substance and evolution of places, and of the people and cultures that made them.

Best and most versatile agricultural land

Land in grades 1, 2 and 3a of the Agricultural Land Classification.

Birds and Habitats Directives

European Directives to conserve natural habitats and wild fauna and flora.

Brownfield

See previously developed land (PDL)

Built-up area

The built-up area is defined as a distinct group of 30 or more homes, other existing non-agricultural buildings of a permanent nature and their immediate surroundings. See policy LP 2: The Relationship Between the Built-up Area and the Countryside in the Local Plan for the full definition.

Climate change adaptation

Adjustments to natural or human systems in response to actual or expected climatic factors or their effects, including from changes in rainfall and rising temperatures, which moderate harm or exploit beneficial opportunities.

Climate change mitigation

Action to reduce the impact of human activity on the climate system, primarily through reducing greenhouse gas emissions.

Community Infrastructure Levy

A levy allowing local authorities to raise funds from owners or developers of land undertaking new building projects in their area. Arrangements for the Community Infrastructure Levy for Huntingdonshire are set out in the Huntingdonshire Community Infrastructure Levy Charging Schedule.

Community Right to Build Order

An Order made by the local planning authority (under the Town and Country Planning Act 1990) that grants planning permission for a site-specific development proposal or classes of development.

Comparison shopping

Comparison shopping is the provision of items not obtained on a frequent basis. These include clothing, footwear, household and recreational goods.

Conservation (for heritage policy)

The process of maintaining and managing change to a heritage asset in a way that sustains and, where appropriate, enhances its significance.

Conservation Area

A designated area of special architectural and/or historical interest, the character or appearance of which it is desirable to preserve or enhance. It is a recognition of the value of a group of buildings and their surroundings and the need to protect not just individual buildings but the character of the area as a whole.

Convenience shopping

Convenience shopping is the provision of everyday essential items, including food, drinks, newspapers/magazines and confectionery.

Curtilage

The area occupied by a property and land closely associated with that property. In terms of a house and garden, the garden normally forms the curtilage of the property, but fields and paddocks would be outside the curtilage.

Custom build homes

Custom home building typically involves individuals or groups of individuals commissioning the construction of a new home or homes from a builder, contractor or package company or, in a modest number of cases, physically building a house for themselves or working with sub-contractors. This latter form of development is also known as 'self build' (i.e. custom build encompasses self build).

Decentralised energy

Local renewable and local low-carbon energy usually but not always on a relatively small scale encompassing a diverse range of technologies.

Development plan

This includes adopted Local Plans and neighbourhood development plans, and is defined in section 38 of the Planning and Compulsory Purchase Act 2004.

Edge of centre

For retail purposes, a location that is well connected and up to 300 metres of the primary shopping area. For all other main town centre uses, a location within 300 metres of a town centre boundary. For office development, this includes locations outside the town centre but within 500 metres of a public transport interchange. In determining whether a site falls within the definition of edge of centre, account should be taken of local circumstances.

Environmental Impact Assessment

A procedure to be followed for certain types of project to ensure that decisions are made in full knowledge of any likely significant effects on the environment.

European site

This includes candidate Special Areas of Conservation, Sites of Community Importance, Special Areas of Conservation and Special Protection Areas, and is defined in regulation 8 of the Conservation of Habitats and Species Regulations 2010.

Geodiversity

The range of rocks, minerals, fossils, soils and landforms.

Green infrastructure

A network of multi-functional green space, urban and rural, which is capable of delivering a wide range of environmental and quality of life benefits for local communities.

Green spaces

Publicly accessible spaces, including local parks, sports grounds, cemeteries, school grounds, allotments, commons and historic parks and gardens.

Habitat

The natural home or environment of a plant or animal.

Heritage asset

A building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest. Heritage asset includes designated heritage assets (world heritage sites, scheduled monuments, listed buildings, protected wreck sites, registered parks and gardens, registered battlefields or conservation areas) and assets identified by the local planning authority (including local listing).

Infrastructure

A collective term for services such as roads, electricity, sewerage, water, education and health facilities.

International, national and locally designated sites of importance for biodiversity

All international sites (Special Areas of Conservation, Special Protection Areas, and Ramsar sites), national sites (Sites of Special Scientific Interest) and locally designated sites including County Wildlife Sites.

Landscape Character Assessment

An assessment to identify different landscape areas which have a distinct character based on a recognisable pattern of elements, including combinations of geology, landform, soils, vegetation, land use and human settlement.

Large scale development

For dwellings, a large scale development is one where the number of residential units to be constructed is 50 or more. Where the number of residential units to be constructed is not given in the application a site area of 2 hectares or more should be used as the definition of a large scale development. For all other uses a large scale development is one where the floor space to be built is 2,500m² or more, or where the site area is 2 hectares or more.

Large scale major development

For dwellings, a large scale major development is one where the number of residential units to be constructed is 200 or more. Where the number of residential units to be constructed is not given in the application a site area of 4 hectares or more should be used as the definition of a large scale major development. For all other uses a large scale major development is one where the floor space to be built is 10,000m² or more, or where the site area is 2 hectares or more.

Listed building curtilage

Listed building curtilage is a legal term describing an area around a building, the boundary of which is defined by matters including past and present ownership and functional association and interdependency. The setting of a heritage asset will normally include, but generally be more extensive than, its curtilage.

Local planning authority

The public authority whose duty it is to carry out specific planning functions for a particular area. All references to local planning authority apply to the district council, London borough council, county council, Broads Authority, National Park Authority and the Greater London Authority, to the extent appropriate to their responsibilities.

Main town centre uses

Retail development (including retail warehouse clubs and factory outlet centres); leisure, entertainment facilities, the more intensive sport and recreation uses (including cinemas, restaurants, drive-through restaurants, bars and pubs, night-clubs, casinos, health and fitness centres, indoor bowling centres, and bingo halls); offices; and arts, culture and tourism development (including theatres, museums, galleries and concert halls, hotels and conference facilities).

Major scale development

Development above a particular scale (10 or more homes for residential development) as defined in the General Development Procedure Order (2006) as amended.

Mineral Safeguarding Area

An area designated by Minerals Planning Authorities which covers known deposits of minerals which are desired to be kept safeguarded from unnecessary sterilisation by non-mineral development.

Minor scale development

Development up to a particular scale (10 or more homes for residential development) as defined in the General Development Procedure Order (2006) as amended.

Mitigation measures

These are measures requested/ carried out in order to limit the damage by a particular development/ activity.

Neighbourhood Development Order

An Order made by a local planning authority (under the Town and Country Planning Act 1990) through which Parish Councils and neighbourhood forums can grant planning permission for a specific development proposal or classes of development.

Neighbourhood Development Plans

A plan prepared by a Parish Council or Neighbourhood Forum for a particular neighbourhood area (made under the Planning and Compulsory Purchase Act 2004).

Obtrusive light

Light pollution that includes the brightening of the night sky (sky glow), uncomfortably bright light (glare) and light spilled beyond the area being lit (light intrusion).

Older people

People over retirement age, including the active, newly-retired through to the very frail elderly, whose housing needs can encompass accessible, adaptable general needs housing for those looking to downsize from family housing and the full range of retirement and specialised housing for those with support or care needs.

Open space

All open space of public value, including not just land, but also areas of water (such as rivers, canals, lakes and reservoirs) which offer important opportunities for sport and recreation and can act as a visual amenity.

Original building

A building as it existed on 1 July 1948 or, if constructed after 1 July 1948, as it was built originally.

Out of centre

A location which is not in or on the edge of a centre but not necessarily outside the urban area.

Out of town

A location out of centre that is outside the existing urban area.

Planning condition

A condition imposed on a grant of planning permission (in accordance with the Town and Country Planning Act 1990) or a condition included in a Local Development Order or Neighbourhood Development Order.

Planning obligation

A legally enforceable obligation entered into under section 106 of the Town and Country Planning Act 1990 to mitigate the impacts of a development proposal.

Playing field

The whole of a site which encompasses at least one playing pitch as defined in the Town and Country Planning (Development Management Procedure) (England) Order 2010.

Pollution

Anything that affects the quality of land, air, water or soils, which might lead to an adverse impact on human health, the natural environment or general amenity. Pollution can arise from a range of emissions, including smoke, fumes, gases, dust, steam, odour, noise and light.

Previously developed land (PDL)

Land which is or was occupied by a permanent structure, including the curtilage of the developed land (although it should not be assumed that the whole of the curtilage should be developed) and any associated fixed surface infrastructure. This excludes: land that is or has been occupied by agricultural or forestry buildings; land that has been developed for minerals extraction or waste disposal by landfill purposes where provision for restoration has been made through development control procedures; land in built-up areas such as private residential gardens, parks, recreation grounds and allotments; and land that was previously-developed but where the remains of the permanent structure or fixed surface structure have blended into the landscape in the process of time.

Primary shopping area

Defined area where retail development is concentrated (generally comprising the primary and those secondary frontages which are adjoining and closely related to the primary shopping frontage). They are defined on the policies map. Policy applies only to the ground floor of properties within a primary shopping area.

Primary and secondary shopping frontage

Primary frontages are likely to include a high proportion of retail uses which may include food, drinks, clothing and household goods. They are defined on the policies map. Policy applies only to the ground floor of properties within a primary shopping frontage. Secondary frontages provide greater opportunities for a diversity of uses such as restaurants, cinemas and businesses. Secondary frontages are all those streets located within the primary shopping area that are not primary shopping frontages.

Priority habitats and species

Species and habitats of principal importance included in the England Biodiversity List published by the Secretary of State under section 41 of the Natural Environment and Rural Communities Act 2006.

Ramsar sites

Wetlands of international importance, designated under the 1971 Ramsar Convention. They mainly provide habitats for water birds

Registered Providers

These are independent housing organisations registered with the Housing Corporation under the Housing Act 1996. Most are housing associations, but there are also trusts, co-operatives and companies.

Renewable and low carbon energy

Includes energy for heating and cooling as well as generating electricity. Renewable energy covers those energy flows that occur naturally and repeatedly in the environment – from the wind, the fall of water, the movement of the oceans, from the sun and also from biomass and deep geothermal heat. Low carbon technologies are those that can help reduce emissions (compared to conventional use of fossil fuels).

Rural exception schemes/ sites

Small sites used for affordable housing in perpetuity where sites would not normally be used for housing. Rural exception sites seek to address the needs of the local community by accommodating households who are either current residents or have an existing family or employment connection. Small numbers of market homes may be allowed at the local authority's discretion, for example where essential to enable the delivery of affordable housing units without grant funding.

Self build homes

See custom build homes above.

Setting of a heritage asset

The surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral.

Significance (for heritage policy)

The value of a heritage asset to this and future generations because of its heritage interest. That interest may be archaeological, architectural, artistic or historic. Significance derives not only from a heritage asset's physical presence, but also from its setting.

Special Areas of Conservation

Areas given special protection under the European Union's Habitats Directive, which is transposed into UK law by the Habitats and Conservation of Species Regulations 2010.

Special Protection Areas

Areas which have been identified as being of international importance for the breeding, feeding, wintering or the migration of rare and vulnerable species of birds found within European Union countries. They are European designated sites, classified under the Birds Directive.

Site of Special Scientific Interest

Sites designated by Natural England under the Wildlife and Countryside Act 1981.

Strategic Housing Market Assessment

A study intended to review the existing housing market in an area, consider the nature of future need for market and affordable housing and to inform policy development.

Submission

Point at which a draft development plan is sent to the Secretary of State for examination.

Superfast broadband

Fast internet connections typically making use of fibre-optic technologies. There is a wide range of speeds that are considered to be superfast but it is currently typically considered to be at least 25Mbps.

Supplementary planning documents

Documents which add further detail to the policies in the Local Plan. They can be used to provide further guidance for development on specific sites, or on particular issues, such as design. Supplementary planning documents are capable of being a material consideration in planning decisions but are not part of the development plan.

Sustainable Drainage System (SuDS)

Previously known as Sustainable Urban Drainage Systems, these cover a range of approaches to surface water drainage management including source control measures such as rainwater recycling, infiltration devices to allow water to soak into the ground, vegetated features that hold and drain water downhill mimicking natural drainage patterns, filter drains and porous pavements to allow rainwater and run-off to infiltrate into permeable material below ground and provide storage if needed and basins and ponds to hold excess water after rain and allow controlled discharge that avoids flooding.

Sustainable transport modes

Any efficient, safe and accessible means of transport with overall low impact on the environment, including walking and cycling, low and ultra low emission vehicles, car sharing and public transport.

Town centre

Area defined on the local authority's policies map, including the primary shopping area and areas predominantly occupied by main town centre uses within or adjacent to the primary shopping area. References to town centres or centres apply to city centres, town centres, district centres and local centres but exclude small parades of shops of purely neighbourhood significance. Unless they are identified as centres in Local Plans, existing out of centre developments, comprising or including main town centre uses, do not constitute town centres.

Transport assessment

A comprehensive and systematic process that sets out transport issues relating to a proposed development. It identifies what measures will be required to improve accessibility and safety for all modes of travel, particularly for alternatives to the car such as walking, cycling and public transport and what measures will need to be taken to deal with the anticipated transport impacts of the development.

Transport statement

A simplified version of a transport assessment where it is agreed the transport issues arising out of development proposals are limited and a full transport assessment is not required.

Travel plan

A long-term management strategy for an organisation or site that seeks to deliver sustainable transport objectives through action and is articulated in a document that is regularly reviewed.

Use Classes Order

Planning regulations outlining a schedule of uses to which a given premises or building can be put. Some changes of use require planning permission.

Viability Assessment

An assessment of viability considering assumed costs that may be incurred and values and income that may be generated (e.g. from completed house sales), which determines the residual land value and compares that value to a viability benchmark agreed by the Council or its nominated representative, namely Existing Use Value or Alternative Use Value plus a reasonable uplift.

Vitality and Viability

In terms of retailing, vitality is the capacity of a centre to grow or to develop its level of commercial activity. Viability is the capacity of a centre to achieve the commercial success necessary to sustain the existence of the centre.

Windfall sites

Sites which have not been specifically identified as available in the Local Plan process. They normally comprise previously-developed sites that have unexpectedly become available.

Zero carbon building

A building with net carbon emissions of zero over a typical year.