



Planning and Public Protection Service

Interim Planning Guidance
WIND ENERGY DEVELOPMENT
CONSULTATION DRAFT

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INTRODUCTION

Denbighshire has a significant expanse of rural upland areas which have an abundant wind resource. The Clocaenog Forest has been designated as one of seven Wales-wide Strategic Search Areas (SSAs), and the Welsh Government's approach is to limit the development of large scale wind farms to within Strategic Search Areas, which have been independently and empirically assessed to be the most suitable areas for wind energy development. However, Welsh Government planning policy does not set out spatial limitations for wind energy development under 5 megawatts (MW); developments under 5MW are applicable to all parts of Wales subject to the assessment of localised impacts.

Denbighshire County Council have committed to produce a Wind Energy Supplementary Planning Guidance Note (SPG) following the adoption of the Denbighshire Local Development Plan (LDP), which is in advanced stage of its production.

However, in light of the increasing number of planning applications, Environmental Impact Assessment Screening Opinion requests and pre-application enquiries being submitted to the Council for individual and clusters of wind turbine developments of varying scales across the county, it is necessary to introduce interim planning guidance in advance of the production and adoption of a Wind Energy SPG.

The purpose of this Interim Planning Guidance is to:

- Provide guidance on the planning requirements for wind turbine developments.
- Clarify the guidelines the Council will apply when assessing planning applications for wind turbine developments which have been put forward as farm diversification or community driven energy schemes.
- Clarify the Council's approach to Community Benefit Schemes.

The document should be read in conjunction with the following planning policy documents:

- Planning Policy Wales Edition 4
- Welsh Government Technical Advice Notes
- Denbighshire Unitary Development Plan
- Denbighshire Landscape Strategy
- Denbighshire Supplementary Planning Guidance Notes (SPG)

For larger schemes or those which are likely to be subject to Environmental Impact Assessment, applicants are strongly advised to engage in pre-application discussions with the Council at the earliest opportunity.

Please contact the Council's planning department for further information:

Address: Development Control, Caledfryn, Smithfield Road, Denbigh, LL16 3RJ

Telephone: 01824 706727

Email: planning@denbighshire.gov.uk

ACKNOWLEDGEMENT

This IPG has been informed by national planning legislation, policy and guidance, together with the 'Isle of Anglesey County Council Wind Turbine Applications – Checklist' and the 'Rossendale District Council Wind Energy Application Supplemental Validation Policy'. Denbighshire County Council would like to thank Officers from Anglesey County Council and Rossendale District Council who kindly provided information and advice.

SECTION 1: GUIDANCE ON THE PLANNING REQUIREMENTS FOR WIND TURBINE DEVELOPMENTS

1.1 PERMITTED DEVELOPMENT RIGHTS

Most householders can carry out small extensions or additions to their homes without the need for planning permission. This is known as '**permitted development**'. Permitted development rights currently allow for small domestic wind turbines to be installed within the residential curtilage of a house without the need for planning permission, providing certain conditions are met. These conditions have been set to ensure that any negative impacts such as visual impact, noise and aviation interference are kept to a minimum.

Stand-alone wind turbines in the garden area of a dwelling house are permitted development provided that the following limits are met:

- The wind turbine complies with the Microgeneration Certification Scheme (MCS) Planning Standards (or equivalent).
- No other wind turbine or air source heat pump has been installed within the curtilage (additional equipment will require planning permission).
- The tip height of the turbine is no bigger than 11.1 metres in height.
- The swept area of the blades should be no more than 9.6 square metres.
- The lowest part of any blade must be at least 5 metres above ground level.
- The turbine should be sited so it is tip height plus 10% away from any site boundary (e.g. a 10 metre high turbine would need to be 11 metres (10m + 1m) away from the boundary).
- In conservation areas, the wind turbine should not be visible from a highway which bounds the curtilage of the house.

Permitted development rights do not extend to:

- the curtilage of listed buildings.
- sites designated as schedule monuments.
- land safeguarded for aviation or defence purposes.
- Areas of Outstanding Natural Beauty (AONBs), World Heritage Sites and Sites of Special Scientific Interest (SSSIs).

Full details are set out in the Town and County Planning (General Permitted Development) (Amendment) (Wales) Order 2012.

1.2 LOCAL REQUIREMENTS FOR WIND TURBINE PLANNING APPLICATIONS

Full planning permission will be required for all non-domestic wind turbines and domestic turbines that exceed the permitted development criteria set out in section 1.2 above.

Guidance on the use of the standard application form ('1app') and validation of applications can be found on the Welsh Government website:

<http://wales.gov.uk/topics/planning/policy/guidanceandleaflets/1appguidance/?lang=en>

Further guidance on the local requirements for wind turbine planning applications is set out below:

A. COMPLETED APPLICATION FORM AND CORRECT CERTIFICATIONS

Status: Statutory national requirement

Complete the 'Application for Planning Permission' form. Check all questions have been answered, the declaration has been signed and dated, and all correct certifications are completed, signed and dated, including the Agricultural Holdings Certificate.

The Description of the Proposal should include all elements of the development proposal and be described as follows "Erection of [NUMBER OF TURBINES] with a maximum hub height of up to [HUB HEIGHT IN METRES] rotor diameter of up to [DIAMETER IN METRES] and a maximum upright vertical tip height of up to [TIP HEIGHT IN METRES] together with the erection of [DETAILS OF ANCILLARY STRUCTURES E.G. EQUIPMENT CABINS / METRE BOXES] and provision of new access and access road [SPECIFY IF NEW ACCESS IS TEMPORARY / PERMANENT] on land at [INSERT ADDRESS]

Details of any pre-application discussions with the Council should be included in the relevant section of the form.

B. LOCATION PLAN

Status: Statutory national requirement

Location plan should be to a scale of 1:2500 or 1:1250 with the direction of north clearly shown.

All development relating to the wind turbine(s) must be within the red edge shown on the location plan. This includes:

- The swept area of the turbine blades.
- Any new temporary or permanent access tracks. Access track must join an existing track, lane or public highway which is capable of accommodating the construction vehicles. A suitable buffer zone (e.g. 1m wide) should be included within the red edge on either side of any proposed new access tracks.
- Ancillary equipment (e.g. equipment cabins, meter boxes, transformers).
- Cable trenches and / or new overhead lines.
- Meteorological masts.
- Any gates, fencing or landscaping proposed.
- Any other engineering works, buildings or structures relating to the turbine(s) (e.g. construction compounds).

The red edge need not be a continuous red line.

Any other land owned/controlled by the applicant needs to be outlined in blue.

Plans should also show the position of roads, tracks, public rights of way, railway lines and overhead transmission lines.

C. SITE PLAN

Status: Statutory national requirement

The site plan must be at a scale of 1:250 or 1:500.

It must show to scale the position of the wind turbine(s) and the position of ancillary equipment (equipment cabins, meter boxes etc.), along with access tracks, hardstandings, fencing etc. The proposed grid connection point and cable route should also be identified.

A six figure easting and six figure northing grid reference should be provided for each turbine.

Any trees or hedgerows within 50m of the swept area of the blades should be identified.

Any structures, trees and hedgerows which are to be removed should be highlighted on the site plan (with a dashed line).

D. ELEVATION PLANS

Status: Statutory national requirement

Elevation drawings are required for any turbine(s) and ancillary equipment, at a scale of 1:50 or 1:100. Details of the turbine foundation pad and depth, fencing and any other hardstandings should also be included on the elevation drawings.

Details are also required of any new / altered site access and access routes (including temporary access arrangements).

E. THE CORRECT FEE

Status: Statutory national requirement

Planning applications must be accompanied by the correct fee.

To work out the fee, you must work out the total land area over which the blades of the turbine(s) can rotate, plus the area of land required for ancillary structures, engineering works and any new access (temporary or permanent). The fee should correlate with the area within the red edge on the location plan.

Wind turbines are classed as Plant and Machinery. On a site of no more than 5 hectares, a fee of £335 per 0.1 hectare will apply. For sites over 5 hectares, a fixed fee of £16,565 is payable plus £100 for each additional 0.1 hectare over 5 hectares, subject to a maximum of £250,000.

Cheques should be made payable to Denbighshire County Council.

F. DESIGN AND ACCESS STATEMENT (DAS)

Status: Statutory national requirement

The Design and Access Statement (DAS) should include a concise description of the development which should include:

Context / Purpose: explain the purpose of the proposal (e.g. commercial venture, farm diversification, domestic turbine, energy / carbon offsetting project etc.) and why the proposed type and quantity of turbine(s) has been chosen (e.g. to offset annual electricity consumption of farm or dwelling / to maximise return on investment etc.).

Use: explain why the particular site has been chosen for the proposed turbine(s).

Description of the site: including land-use, setting, topography, and wind speed profile of site.

Description of the development: This should include the following information:

- Description of the turbine:
 - Make and model
 - Rated generation capacity (kW or MW)
 - Mast / hub height
 - Number of blades and rotor diameter

- Maximum tip height
- Colour of turbine mast, nacelle and blades (using RAL colour references)
- Indicative annual electricity output in kWh or MWh
- Foundation details.
- Details of annual electricity consumption of dwelling / farm / business (where the purpose of the proposal is a farm diversification, domestic turbine or an energy / carbon offsetting project).
- Details of any ancillary equipment (e.g. cabins and meter boxes) including colour and finish.
- Details of engineering and construction works including details of crane hardstandings, concrete mixing to be carried out on site and details of disposal of excess concrete and washing out of equipment.
- Grid connection arrangements including grid connection point, cable routes and whether or not overhead lines will be required. Please specify if the turbine will be connected to an existing building or if it will have its own dedicated grid connection.

Layout: explain why the turbine(s) and ancillary equipment has been positioned as proposed. Applicants should assess the potential for a proposal to have an impact on the outlook from inhabited buildings located within 500m of a proposed turbine. Turbines should be located to minimise significant detrimental visual impacts when viewed from occupied properties within 500m of the turbine(s).

Details should also be provided of the distance between the proposed turbine(s) and any existing operational or consented turbines within the locality. The Councils development control team can provide details of operational and consented schemes.

Access: Details of the access arrangements in order to construct, service and dismantle the turbine(s). Including:

- the construction of new / amendments to existing site access and access tracks, including details of their permanence or removal once the wind turbine(s) are erected.
- Type and number of vehicular movements to and from the site (car, lorry and abnormal loads).
- how the proposed access route is capable of safely accommodating the proposed traffic including long loads.
- Details of any improvements to the highways network which are required to allow safe vehicle access to the site.

Landscaping: explain what landscaping has been proposed and why (e.g. mitigation measure to overcome negative visual impact from sensitive receptor).

Inclusive access: if public access to the site is encouraged, provide details on how the application site is inclusive to all.

Other information: Topics such as ecology, noise, shadow flicker, hydrology, cultural heritage etc. can also be addressed in the Design and Access Statement.

G. OTHER SUPPORTING DOCUMENTS

Status: *Statutory and non-statutory national requirement (where relevant)*

Other supporting documents may be required depending on the size, scale and location of the development. This may include:

- Environmental Statement (where Environmental Impact Assessment is required)
- Landscape and Visual Impact Assessment
- Ecological and Ornithological Surveys and Assessments
- Noise and Shadow Flicker Assessment
- Transport Assessment / Traffic Management Plan
- Construction Method Statement
- Heritage Evaluation Assessment
- Flood Consequences Assessment
- Hydrological and Geological Assessment
- Tree Survey
- Farm Diversification Statement
- Socio-Economic Impact Assessment
- Impact on Communications / Broadcast Equipment
- Legal Agreements

1.3 FURTHER INFORMATION

Appendix 1 provides further details on the Environmental Impact Assessment (EIA) screening and scoping requirements for wind turbine development.

Appendix 2 contains further information and guidance on the production of the supporting documents required with wind turbine planning applications.

SECTION 2: GUIDELINES ON PLANNING APPLICATIONS FOR WIND TURBINE FARM DIVERSIFICATION AND COMMUNITY ENERGY SCHEMES

2.1: FARM DIVERSIFICATION SCHEMES

Technical Advice Note 6 (TAN6) supports national planning policy on sustainable rural communities and section 3.7 focusses on farm diversification. It states that “*When considering applications for farm diversification projects, planning authorities should consider the nature and scale of the activity*” and that “*Small on-farm operations such as..... renewable energy, are likely to be appropriate uses*”. Therefore the principle of installing a renewable energy project such as a wind turbine is a valid farm diversification activity, subject to the nature and scale of the activity.

However, not all forms of wind turbine development on agricultural land would constitute an acceptable farm diversification scheme.

The Council considers an acceptable wind turbine farm diversification scheme to be a proposal where:

- The applicant's main occupation is farming and the turbine would be erected on agricultural land which forms part of the applicant's farm holding.
- The turbine would be sited so it appears to physically relate to the farm complex in terms of its size, scale and location.
- The wind turbine proposal would be clearly subsidiary to the main farming business and sufficient information is provided to demonstrate how the wind turbine proposal fits into the wider farming picture and how it will contribute to the long term viability of the farming enterprise.
- The generating capacity of the turbine is proportional to the energy demands of the farming enterprise. The Council will assess this by comparing the size of the turbine in terms of its generating capacity against the annual electricity demand of the farm complex. Accurate annual electricity consumption data for the farm complex should be provided together with the predicated annual electricity output of the proposed turbine(s) in kWh or MWh.
- The turbine would be connected to the electricity grid via the farm's electricity meter so the electricity generated can be preferentially used onsite, rather than 100% of the electricity being exported directly to the grid.

Applicants will be required to submit a Farm Diversification Statement with the planning application. The Council will assess each application on its own merits, however the onus will be on the applicant to present a valid farm diversification justification.

Where an acceptable farm diversification justification cannot be established, the proposal will be treated as a commercial venture and planning applications will be assessed on their own merits.

2.2: 'COMMUNITY DRIVEN ENERGY PROJECT' SCHEMES

Planning Policy Wales states “*The Welsh Assembly Government’s policy is to support community driven renewable energy projects where benefits from the projects are returned to the host community*” (par. 12.18.19).

Planning Policy Wales states “*The Welsh Assembly Government’s policy is to support community driven renewable energy projects where benefits from the projects are returned to the host community*” (par. 12.18.19). Planning Policy Wales does not define what it meant by a ‘community driven energy project’ but there may be some instances where weight can be apportioned to the genuine and direct local benefits associated with a ‘community driven energy project’, which will need to be considered against other material planning considerations when planning applications are assessed.

Firstly, it important to distinguish between a ‘community driven energy project’ and a ‘community-scale’ or ‘community-based’ project; Technical Advice Note 8 (TAN 8) uses the term ‘community-based’ to refer to the size of a project in terms of its generating capacity, and not the ownership model, which can lead to confusion.

To explain, TAN 8 defines a ‘community-based’ wind energy project as a scheme with an installed capacity of less than 5MW. It also refers to Community Heating, which is a term used to describe a decentralised energy system which provides heat to more than one building; again the use of the term ‘community’ in this context relates to the size of the system rather than the ownership model.

Planning Policy Wales (Edition 4) has addressed this confusion; it refrains from using the word ‘community’ to describe the size of a renewable energy project, and instead classifies renewable energy and low carbon projects into the following scales of development:

Box 1: Planning Policy Wales renewable energy development classification

Scale of development	Threshold (electricity and heat)
Strategic	Over 25MW for onshore wind and over 50MW for all other technologies
Local Authority-wide	Between 5MW and 25MW for onshore wind and between 5MW and 50MW for all other technologies
Sub Local Authority	Between 50kW and 5MW
Micro	Below 50kW

For the avoidance of doubt, Denbighshire County Council will no longer use the term ‘community-based’ to describe the size of a project in terms its generating capacity. Reference will instead be made to the terminology contained in Planning Policy Wales which is presented in Box 1 above.

Denbighshire County Council definition of ‘community driven energy projects’

Denbighshire County Council consider a ‘community driven energy project’ to be projects which are driven by the local community for the benefit of the local community. When planning applications are assessed, weight will only be attributed to the direct and tangible local benefits of the scheme if it can be demonstrated that the proposal is a genuine ‘community driven energy projects’. This Council considers this to include:

- Schemes which are 100% owned and operated by a local community organisation such as a registered social enterprise, charity or not-for-profit special purpose vehicle (e.g. Energy Services Company), where the revenues generated through receipt of financial incentive payments or through the sale of energy on the wholesale market

should be used to finance community initiatives, or be re-invested into social, community or public assets; or

- A joint venture project where a local community organisation is a major shareholder; or
- A fully constituted community cooperative (e.g. a Community Benefit Society or an Industrial and Provident Society) which is regulated by the Financial Services Authority.

Please note: The Council would not consider a project which is being progressed by a local landowner, or a small group of private local individuals who have come together to invest in an energy project for financial gain to constitute a community driven energy project.

Projects which do not accord with the Council's definition of a 'community driven energy project' set out above will be considered to be commercial ventures and planning applications will be assessed on their own merits.

SECTION 3: COMMUNITY BENEFITS SCHEMES

It is important to note the distinction between a 'community driven energy project' and 'community benefits'.

It is common place for commercial wind energy developers to put forward a 'community benefits scheme' in which the developer commits to making financial payments to the local community (e.g. a Community Trust Fund) or where benefits are provided in kind (e.g. through the provision of new community facilities or buildings).

Industry Best Practice is set out in set out in the RenewableUK Community Benefit Protocol. It recommends windfarm developers compensate host communities through the provision of a 'community benefit scheme'. Such benefits offered to local communities could take the form of one or more of:-

- in-kind benefits such as the construction of a needed community facility.
- a lump sum financial payment for the benefit of the community.
- annual payments to the community.
- a commitment from the developer to use local labour and/or contractors/services wherever possible.

Where financial contributions are offered, Industry Best Practice recommends wind energy projects over 5MW should allocate a minimum of £1,000 per megawatt of installed capacity per annum to a community benefit scheme.

Whilst TAN 8 supports the principle of community benefits payments as a means of compensating host communities, it is important to note that a 'community benefit scheme' is not a planning obligation. Technical Advice Note 8 (TAN8) clearly states "*such contributions should not enable permission to be given to a proposal that otherwise would be unacceptable in planning terms.*"(par. 2.16) and that community benefits payments "*must not impact upon the decision-making process*". (TAN 8 Annex B par. 1.3).

Therefore the presence of a community benefit scheme, or lack thereof, is not a material planning consideration and it will not be considered when planning applications are assessed.

Whilst the Council cannot require a windfarm developer to provide a community benefit scheme, where the developer is volunteering financial or in-kind contributions to the local community, the Council may seek to secure these through a legal agreement should planning consent be granted.

It is perfectly acceptable for a developer to enter into a legally binding agreement with third parties to deliver particular and agreed benefits to the community without any involvement of the Local Authority. However, where the Council is involved in discussions, legal agreements and / or governance arrangements relating to community benefits schemes, in the interests of transparency, these discussions to take place outside of the planning process to ensure the Council can remain impartial when planning decisions are made.

Further Information:

The Council's Regeneration team may be able to offer advice and support to windfarm developers and local communities in respect to community benefit schemes.

Further information can be found in the following documents:

A Community Commitment: The Benefits of Onshore Wind, RenewableUK, February 2011

<http://www.bwea.com/pdf/publications/CommunityBenefits.pdf>

'Delivering community benefits from wind energy development: A Toolkit', CSE Report for the Renewables Advisory Board, July 2009

<http://www.cse.org.uk/downloads/file/Delivering%20community%20benefits%20from%20wind%20energy%20-%20a%20toolkit.pdf>

APPENDIX 1: ENVIRONMENTAL IMPACT ASSESSMENT

The term 'environmental impact assessment' (EIA) describes a procedure that must be followed for certain types of projects. It ensures the likely effects of the development on the environment are fully understood and taken into account before it is allowed to go ahead.

Under the EIA Regulations wind turbine development falls under 'schedule 2 projects'. EIA is usually required for schedule 2 projects when a certain threshold or criterion is exceeded. For wind turbine development, the applicable threshold is as follows:

- i) The development involved the installation of more than 2 turbines; or
- ii) The hub height of any turbine or height of any other structure exceeds 15 meters.

For development where the applicable threshold or criterion is not exceeded or met, EIA is not normally required. EIA is more likely to be required for commercial development of five or more turbines, or more than 5MW of new generating capacity.

That said, even where the threshold is not met or exceeded, EIA may be required if the proposed development is in, or partly in, a 'sensitive area' such as:

- Sites of Special Scientific Interest (SSSIs)
- National Parks
- Areas of Outstanding Natural Beauty
- World Heritage Sites and scheduled monuments.

Screening Opinion Requests

Applicants can request a Screen Opinion from the local planning authority to obtain a clear view on the need for EIA before a planning application is submitted.

Screening Opinion requests need to be submitted in writing and must be accompanied by:

- A plan sufficient to identify the land;
- A brief description of the nature and purpose of the development and its possible effects on the environment; and
- Such other information or representations as the person making the request may wish to provide or make.

The local planning authority has 3 weeks to provide a Screening Opinion.

If the proposal is deemed to be EIA development, the environmental impact of the proposal will need to be assessed in detail and the findings of the EIA process would need to be presented in an Environmental Statement, to be submitted with the planning application.

Scoping Opinion Requests

Where an Environmental Impact Assessment is required, the applicant can seek advice on the contents of the Environmental Statement by requesting a Scoping Opinion from the local planning authority.

Scoping Opinion requests need to be submitted in writing and must be accompanied by:

- A plan sufficient to identify the land;
- A brief description of the nature and purpose of the development and its possible effects on the environment; and
- Such other information or representations as the person making the request may wish to provide of make.

The local planning authority has 5 weeks to provide a Scoping Opinion. The local planning authority may consult with statutory consultees prior to issuing a Scoping Opinion to ensure all potential impacts and assessment requirements are identified.

Please note:

- The receipt of a scoping opinion from the local planning authority does not absolve the applicant from responsibility for the assessments undertaken during the EIA process and the contents of the Environmental Statement; and
- The provision of a scoping opinion by the local planning authority does not preclude the authority from seeking further relevant environmental information once an Environmental Statement in support of a planning application has been received.

APPENDIX 2: GUIDANCE ON PLANNING APPLICATION SUPPORTING DOCUMENTS

A2.1 LANDSCAPE AND VISUAL IMPACT

A key consideration of wind energy proposals will be impacts on landscape character and visual amenity. The landscape and visual effects of wind turbines will vary on a case by case basis depending on the size of turbine, its location, the landscape setting and the impacts it will have on sensitive areas and receptors. Cumulative impact assessments may also be required where development proposals are close to existing or consented wind turbines, or turbines currently subject to a planning application.

Sensitive areas include National Parks, AONBs, Conservation Areas, Historic Landscapes / Parks & Gardens, World Heritage Sites, designated nature conservation areas etc. Sensitive receptors include, dwellings, listed buildings, Scheduled Ancient Monuments, public rights of way, road and rail network, protected species etc.

In all cases, impacts on residential amenity should be assessed separately to the landscape and visual impact assessment.

Assessments should be carried out by a suitably qualified professional. The guidance contained in the following documents should be adhered to and the professional credentials of the Assessment author should be clearly specified within the submission:

- 'Guidelines for Landscape and Visual Impact Assessment' (Landscape Institute and the IEMA, 2002)
- 'LANDMAP' (Countryside Council for Wales - The Denbighshire Landscape Strategy has been produced using LANDMAP data).
- 'LANDMAP Information Guidance Note 3: Using LANDMAP for Landscape and Visual Impact Assessment of Onshore Wind Turbines' (Countryside Council for Wales, 2010)

The following requirements will apply for different scales of development:

a) Turbines with a blade tip less than 20m in height

A formal LVIA is less likely to be required for individual turbines with a blade tip height less than 20m, depending on the sensitivity of the site and nearby receptors, and the presence of existing or consented wind turbine development in the immediate locality.

However, as a minimum, a Statement should be submitted with the application which provides a description of the site topography and details any sensitive areas or receptors within the locality of the site. Where there are residential dwellings within 500m of the application site, the Statement should demonstrate how the turbine has been sited so as to minimise the impact on the visual amenity of those neighbouring dwellings. Photographs of the application site from different vantage points should also be submitted.

Photomontages, wireframes and Zone of Theoretical Visibility maps are not compulsory for this scale of development, however they may assist the local planning authority determine the application.

The local planning authority reserves the right to request additional supporting information on a case by case basis.

b) Turbines with a blade tip between 20 – 50m in height

A LVIA is likely to be required for this scale of development.

The LVIA should include, as a minimum:

- a detailed description of the site topography together with the likely visual impacts upon dwellings up to 1km from the site and an assessment of the likely impacts on designated sites, sensitive areas and receptors within the locality of the site.
- a Zone of Theoretical Visibility (ZTV) map covering a 15km radius from the turbine(s).
- Wireframe and photomontages from a limited number of key viewpoints, proportional to the scale of the development and sensitivity of the location.
- An assessment of the sensitivity of the landscape (based on LANDMAP Landscape Character Areas).

Where the turbine(s) are located in a Historic Landscape Area, or a Landscape Character Area designated as either 'Outstanding' or 'High' on LANDMAP, the applicant should consult with the local planning authority on the level of assessment required for a specific proposal.

A cumulative impact assessment may also be required depending on the proximity to operational and consented wind turbine developments, as well as wind turbine proposals which are subject to a pending planning application.

c) Turbines with a blade tip height over 50m in height

A LVIA will be required for this scale of development.

The LVIA should include, as a minimum:

- a detailed description of the site topography together with the likely visual impacts upon dwellings up to 1km from the turbine and an assessment of the likely impacts on designated sites, sensitive areas and receptors within the locality of the site.
- A ZTV map up to 35km as appropriate.
- Wireframes, photomontages and / or visualisations focussing on key viewpoints from within the immediate locality and from the wider landscape.
- An assessment of the sensitivity of the landscape (based on LANDMAP Landscape Character Areas), the magnitude of change and residual impacts.
- A map of all operational, consented, and in-planning wind turbine proposals within a 60km radius of the application site.
- A focussed assessment of all operational, consented or in-planning wind turbine proposals within 30km radius of the application site.

Cumulative impacts

The inter-relationship between individual turbines can have a key impact on the landscape. It can lead to massing and the visual impression of a concentration of wind farms even when they are in fact distant from each other. This is known as 'cumulative impact' which is a material consideration when turbines are assessed.

Cumulative impacts can occur where there is existing wind turbine development and an extension is proposed to that development or where there are other existing or proposed wind turbine developments within the same area.

The visual impact will vary depending on the size and location of the developments in relation to each other and the landscape setting in question. The capacity of the landscape to accept additional turbines and the cumulative effect of a group of turbines must therefore be evaluated.

Where appropriate, the cumulative visual impact of the proposed turbine(s) with other existing or consented turbines, or turbines currently subject to a planning application should be fully addressed in the Landscape and Visual Impact Assessment.

The individual or cumulative effect of turbines shall be assessed so as not to create unacceptable visual or landscape impacts. Cumulative effects may present an eventual limit to the extent of wind energy development in particular areas.

For larger developments, applicants are advised to contact the Council's Planning department during the pre-application stages.

Further information and guidance:

LANDMAP and Special Landscape Areas

Countryside Council for Wales (2008)

<http://landmap.ccw.gov.uk/>

LANDMAP Information Guidance Note 3: Using LANDMAP for Landscape and Visual Assessment of Onshore Wind Turbines

Countryside Council for Wales (2010)

<http://www.ccw.gov.uk/landscape--wildlife/protecting-our-landscape/landmap/landmap-guidance--newsletter.aspx?lang=en>

Guidelines on Landscape and Visual Impact Assessment (GLVIA) Second Edition

Landscape Institute and IEMA (2002)

This is a paid for publication. A copy can be ordered from The Landscape Institute website at a cost of £45 (Third Edition is currently out to consultation).

<http://www.landscapeinstitute.org/publications/index.php>

Wind Farm Design Guidance

Design Commission for Wales (2012)

http://dcfw.org/publications/view/wind_farm_design_guidance/

Guidelines on Environmental Impacts of Wind Farms and Small Scale Hydro Electricity Schemes

Scottish Natural Heritage, 2001

<http://www.snh.gov.uk/publications-data-and-research/publications/search-the-catalogue/publication-detail/?id=108>

Visual Assessment of Wind Farms: Best Practice

University of Newcastle, (2002), Commissioned by Scottish Natural Heritage (Report No FO1AA3030A)

http://www.snh.org.uk/pdfs/publications/commissioned_reports/f01aa303a.pdf

Assessing the Cumulative effects of onshore wind energy developments

Scottish Natural Heritage (2012)

<http://www.snh.gov.uk/docs/A675503.pdf>

Siting and Designing Wind Farms: Version 1

Scottish Natural Heritage (2009)

<http://www.snh.gov.uk/docs/A337202.pdf>

Visual Representation of Wind Farms : Good Practice Guidance

Scottish Natural Heritage (2007)

<http://www.snh.gov.uk/publications-data-and-research/publications/search-the-catalogue/publication-detail/?id=846>

Photography and Photomontage in Landscape and Visual Impact Assessment – Advice Note 01/11

The Landscape Institute (2011)

<http://www.landscapeinstitute.org/PDF/Contribute/LIPhotographyAdviceNote01-11.pdf>

A2.2 ECOLOGICAL AND ORNITHOLOGY IMPACT

Applicants should consider the potential for a wind energy proposal to impact upon areas of nature conservation and protected species. Areas of nature conservation include statutory designated sites (Special Protected Areas, Special Areas of Conservation, Ramsar Sites, Sites of Special Scientific Interest, National Nature Reserves etc.) and local wildlife sites.

Depending on the size and location of the wind turbine development, a habitat and vegetation survey such as a phase 1 habitat survey may be required, which should encompass the whole development site including the turbine location and any other area of land affected by the development (e.g. access roads, control buildings and land affected by excavation and construction activities).

Habitat surveys should be carried out between April and September and should list the species and their rated abundance for each habitat. Habitats and species should be considered for their significance locally, regionally, nationally and internationally and particular reference should be made to the species and habitats listed in Section 42 to the Natural Environment and Rural Community (NERC) Act.

Further ecological assessments may also be required to assess the impact on particular flora and fauna (e.g. bats, birds, newts etc.).

Ecological assessments may also be required to assess the impact of service roads, excavation, construction activities and other ancillary development.

Any impacts to habitats, vegetation of species must be mitigated and the enhancement of wildlife features is encouraged.

In accordance with best practice advice, wind turbines should be set away from linear habitat features used by bats such as trees and hedgerows, and a buffer zone of 50m from the habitat feature and the swept area of the blade should be applied in all cases.

Larger wind energy developments are more likely to require comprehensive ecological assessments. Applicants are advised to contact the Council's Countryside Services department during the pre-application stages.

Further information and guidance:

Legislation:

Council Directive 79/409/EEC on the Conservation of wild birds (Birds Directive)

http://ec.europa.eu/environment/nature/legislation/birdsdirective/index_en.htm

The Conservation of Habitats & Species Regulations 2010

<http://www.legislation.gov.uk/uksi/2010/490/contents/made>

Wildlife and Countryside Act 1981 (as amended)

<http://www.legislation.gov.uk/ukpga/1981/69>

The Natural Environment and Rural Communities (NERC) Act 2006

<http://www.legislation.gov.uk/ukpga/2006/16/contents>

UK Biodiversity Action Plan (UKBAP)

<http://jncc.defra.gov.uk/page-5155>

IEEM Guidelines on Ecological Impact Assessment in the UK

Institute of Ecology and Environmental Management (2006)

http://www.ieem.net/data/files/Resource_Library/Technical_Guidance_Series/EcIA_Guidelines/TGSEcIA-EcIA_Guidelines-Terrestrial_Freshwater_Coastal.pdf

Handbook for Phase 1 Habitat Survey: A Technical for Environmental Audit

Joint Nature Conservation Committee (2010)

<http://jncc.defra.gov.uk/page-2468>

Natural England Guidance: Making space for renewable energy: assessing on-shore wind energy development (NE254)

Natural England (2010)

<http://publications.naturalengland.org.uk/publication/38006>

Natural England Guidance: Assessing ornithological impacts associated with wind farm developments: surveying recommendations (TIN008)

Natural England (2007)

<http://naturalengland.etraderstores.com/NaturalEnglandShop/TIN008>

Natural England Guidance: Assessing the effects of onshore wind farms on birds (TIN069)

Natural England (2010)

<http://naturalengland.etraderstores.com/NaturalEnglandShop/TIN069>

Natural England Guidance: Bats and onshore wind turbines (interim guidance) (TIN051)

Natural England (2009)

<http://naturalengland.etraderstores.com/NaturalEnglandShop/TIN051>

Natural England Guidance: Bats and single large wind turbines: Joint agencies interim guidance (TIN059)

Natural England (2009)

<http://naturalengland.etraderstores.com/NaturalEnglandShop/TIN059>

Bat Surveys: Good Practice Guidelines, 2nd Edition

Bat Conservation Trust (2012)

<http://www.bats.org.uk/publications.php?keyword=bat+surveys&month=&year=&category=&search=search>

Survey Methods for use in Assessing the Impacts of Onshore Windfarms on Bird Communities

Scottish Natural Heritage (2005)

http://www.snh.org.uk/pdfs/strategy/renewable/bird_survey.pdf

Assessing Significant of Impact from Onshore Windfarms outwith Designated Areas

Scottish Natural Heritage (2006)

<http://www.snh.org.uk/pdfs/strategy/renewable/Significance%20of%20bird%20impacts%20July%2006.pdf>

A2.3 NOISE

Wind turbine can have a detrimental impact on the amenity of nearby dwellings and buildings and depending on the size and location of the development, and the proximity to noise sensitive receptors, a noise impact assessment may be required.

For the purposes of noise, sensitive receptors include dwellings, quiet leisure based businesses, quiet areas that are particularly valued for their acoustic environment and areas of landscape quality or designated sites where noise may have an adverse impact on protected species or other wildlife.

EIA development

Large windfarm developments are likely to require EIA, and a full noise impact assessment will be required which should be conducted in accordance with TAN11, ETSU-R-97, BS4142 BS 5228 Parts 1 and 2.

The assessment should include:

- Identification of nearest noise sensitive receptors.
- Baseline noise surveys to establish current background levels (day and night) at designated receptor sites.
- Predicated operational noise impact assessment of the turbines individually and cumulatively (where in proximity to other operational / consented turbines) from designated receptor sites.
- Impacts from construction and operation of the turbines including vehicular movements.
- Appropriate mitigation measures.

The location and duration of the background monitoring should be agreed with the Council's Public Protection department in advance of the field assessment being carried out. Assessments should be carried out by suitably qualified acoustic professionals and the findings of the assessment should be submitted with the planning application.

Non-EIA development

Where EIA is not required, applicants will still be expected to provide adequate information on the likely noise impacts associated with the development proposal. Where noise sensitive receptors are within the locality of the site, a test report should be prepared using either International Standard IEC61400 'Wind turbine generator systems – Part II' or the British Wind Energy Associations 'Small Wind Turbine Performance and Safety Standard'.

The applicant should demonstrate that the information contained in the noise report has been applied to determine the precise location of the turbine (identified using a six figure easting and a six figure northing grid reference) and separation distance from nearby residential properties. Where the predicated noise level is greater than 35dB(A) at 10m/s at 10m height at any nearby property not in the ownership of the applicant and no background noise measurements have been included, the applicant will be required to provide justification as to the non-inclusion of such data.

Cumulative noise impacts

In situations where a turbine is proposed within or close to a zone of predicated noise influence of another turbine or group of turbines, a cumulative noise impact assessment will be required. The boundary of the 'zone of predicated noise influence' shall equate to the 35dB LA90 contour based upon a wind speed of 10m/s at 10m height.

The cumulative noise assessment will need to demonstrate that the combined noise level from all wind turbines will not exceed an overall level of 35dB(A) or 5dB(A) above background noise levels up to wind speeds of 12m/s at 10m height. The background noise levels and noise assessment shall adopt a methodology that makes every endeavour to ensure that the quiet day-time and night-time periods used for the background noise assessment, are not influenced by any nearby wind turbines.

Applicants are advised to contact the Council's Public Protection department during the pre-application stages.

Further information and guidance:

ETSU-R-97 The Assessment and Rating of Noise from Wind Farms

The Working Group on Noise from Wind Turbines (1996)

http://regmedia.co.uk/2011/08/02/etsu_r_97.pdf

DECC Hayes McKenzie Report in Wind Turbine Noise

Department for Energy and Climate Change (2011)

<http://www.decc.gov.uk/assets/decc/11/meeting-energy-demand/wind/2033-how-noise-impacts-are-considered.pdf>

International Standard IEC61400-2 Wind turbines – Part 2: Design requirements for small wind turbines

IEC (2006)

This is a paid for publication.

http://webstore.iec.ch/preview/info_iec61400-2%7Bed2.0%7Den_d.pdf

Small wind performance & safety standard

RenewableUK (formerly British Wind Energy Association) (2008)

<http://www.bwea.com/small/standard.html>

BS 4412:1997 Method for rating industrial noise affecting mixed residential and industrial areas

British Standard (1997)

<http://shop.bsigroup.com/en/ProductDetail/?pid=000000000001154363>

BS 5228-1:2009 Code of practice for noise and vibration control on construction and open sites. Part 1 - Noise

British Standard (2009)

This is a paid for publication.

<http://shop.bsigroup.com/ProductDetail/?pid=000000000030141421>

BS 5228-2: 2009 Code of practice for noise and vibration control on construction and open sites. Part 2 – Vibration

British Standard (2009)

This is a paid for publication.

<http://shop.bsigroup.com/en/ProductDetail/?pid=000000000030141423>

A2.4 SHADOW FLICKER

In terms of shadow flicker, applicants should take into account the impact on nearby dwellings. An assessment of potential shadow flicker throughout the year should be provided for all dwellings within a 10 rotor diameter distance of the proposed location of each wind turbine. Details of each dwelling affected together with photographs, orientation, position of principal windows etc. needs to be included together with monitoring proposals and details of mitigation measures.

Applicants are advised to contact the Council's Public Protection department during the pre-application stages.

Further advice and guidance:

DECC Wind Turbine Shadow Flicker Evidence Base

Department of Energy and Climate Change (2011)

http://www.decc.gov.uk/en/content/cms/meeting_energy/wind/onshore/comms_planning/shadow_flicker/shadow_flicker.aspx

A2.5 CONSTRUCTION METHOD STATEMENT

All applications for wind energy developments should include a Construction Method Statement. The Statement should be proportional to the scale of the development and should outline the following information (where relevant):

- Construction and reinstatement of the temporary site compound.
- Construction and reinstatement of all internal tracks including measures to reinstate planting on approach tracks.
- Traffic Management including HGV routes, frequency of vehicular movements, traffic signing along public roads etc.
- Soil stripping management.
- Surface and foul water drainage.
- Pollution Prevention and Control plan.
- Recording the existing state of the site.
- Mitigation measures that will be applied (e.g. erection of fencing to protect a habitat feature).

A2.6 TRANSPORT ASSESSMENT / TRAFFIC MANAGEMENT PLAN

For larger developments, the Welsh Government has advised that a Traffic Management Plan (TMP) should be agreed with all relevant highways authorities before a planning application for windfarm development is determined and therefore where relevant, an agreed TMP should be submitted with the planning application, either as a stand-alone document or as part of the Construction Method Statement. Where a TMP is required, it should contain the information set out below:

Introduction: Background; number of turbines; scope of TMP.

Context: Relevant policy framework; legislative context for abnormal load movements; relevant studies to TMP proposals; other proposed wind farm development that may be using a similar access route.

Description of Route: Detailed description of the access route to site, identifying road types and characteristics; anticipated background traffic flows on the network, including other proposed developments such as other windfarms; plans showing the extent of the route; consideration of alternative modes of transport.

Convoy size: Number and sizes/details of loads; possible convey composition including private and police escort (to be agreed with police).

Traffic Management: Methodology for moving convoys whilst minimising delays to other traffic; outline design and location of holding areas, including passing places and overnight / longer term layover areas; plans showing points where the policy may need to hold other traffic to enable the convoys to pass, such as at junctions or bends; contingency plans in the event of incidents or emergencies.

Delivery Times: Estimated journey durations based on assumed convoy speeds, including timings for traffic sensitive locations, delays to negotiate constraints and assumed arrival / departure times at residential communities; forecast queries of other traffic in both directions along the route, based on background traffic flow data; consideration of turbine deliveries to other windfarms proposing similar routes

Highway Works: Location, nature and details of all potential horizontal and vertical constraints such as junctions, bends and junctions, bends and steep gradients; swept path analysis of horizontal constraints, based on topographical survey data at bridges and critical constraints; outline design of proposed permanent improvement works to address the constraints, such as bend widening, junction modification or changes to vertical alignment, ideally to enable movement of the convoys without the use of manual rear wheel steer; plans showing all improvement works in relation to the highway boundary; cross sections and long sections of any works beyond the highway boundary.

Structures: Carriageway width at all highway structures, headroom at all bridges, supplemented by vertical swept path analysis and topographical survey where required; indication of assumed axle / vehicle loading; proposals for assessing the impact on highway structures, non-highway structures and buildings, and any embankment slopes possibly affected by loads; identification of listed structures.

Trial Runs: Documented trial run information, mimicking the movement of the longest and widest anticipated loads, witnessed / observed by the relevant highway authorities and police and recorded with full video coverage.

Environmental Impact: All physical works and operation along the extent of the transport route to be considered as part of the environmental assessment of the development.

Public Awareness: Proposals for consultation with and notification to the travelling public and local communities.

General Construction Traffic: Details of all non-abnormal loads forecast to travel to and from the site; route choice for different types of load throughout the construction programme; anticipated times of movement through traffic sensitive and/or residential areas; cumulative associated with other proposed developments such as windfarms using the same access route.

Site Accesses: Full details of all accesses at road crossings, including the detailed design, layout and drainage etc. including wheel wash facilities.

Site compounds: Full details of the site compound locations indicating material storage areas staff car parking, loading and unloading facilities off the highway including wheel wash facilities.

Consultees for TMP: List to include all affected highway authorities and police forces.

Applicants are advised to contact the Council's Highways and Transportation department during the pre-application stages.

Further information and guidance:

Dear Chief Planning Officer Letter: Environmental Impact Assessment (EIA): Transportation Issues Arising from Windfarms

Welsh Government (2009)

<http://wales.gov.uk/topics/planning/policy/dearcpoletters/?lang=en>

Highways Agency Spatial Planning Advice Note: SP 12/09: Planning applications for wind turbines sited near to trunk roads

Highways Agency (2009)

http://www.dft.gov.uk/ha/standards/tech_info/files/wind_turbines_sp_12-09.pdf

A2.7 HERITAGE EVALUATION

There are many important areas of historic and heritage interest within the County both above and below the ground. Where turbines are proposed in close proximity to an area of heritage interest, or where the turbines may have an impact on the setting of a historic feature, it may be necessary to commission a heritage evaluation to assess the implications of the proposal on features of historic interest either through direct loss of a feature or visual impact on the setting of features of historic interest.

Applicants are advised to contact the Council's Countryside Services department during the pre-application stages.

A2.8 HYDROLOGY AND GEOLOGY ASSESSMENT

Applicants should consider how the excavation and construction works can be carried out without substantially altering the hydrological and geological regime of the site and particular consideration should be applied in peatland areas where peat plays an important role in hydrology regimes, and is also recognised as an important store of carbon.

In addition, a number of properties within rural areas of the County are reliant on private water supplies. Depending on the geology of the site and the proximity to sources of supply, construction activities relating to wind turbine development has the potential to cause adverse impacts on the quantity, quality and colouration of water supplies.

The local planning authority may request a hydrological and / or a geological report to be submitted and a scheme of works to be drawn up to ensure hydro/geological assets are safeguarded during the construction, operation and decommissioning of the turbine(s).

Applicants are advised to contact the Council's Public Protection department during the pre-application stages.

A2.9 DETAILS OF IMPACTS ON AVIATION, COMMUNICATIONS AND BROADCAST EQUIPMENT

The local planning authority will consult the Ministry of Defence (Defence Infrastructure Organisation) and National Air Traffic Services (NATS) on all wind turbine applications over 15m in height, and Airbus Operations Ltd where development proposals fall within the 30km Hawarden Airport Safeguarding Zone. As such, there is no requirement for applicants to consult with these bodies prior to submission of an application.

However, it is the responsibility of the applicant to demonstrate that the proposed turbine(s) will not cause any interference to the operation of any communications or broadcast equipment, through consultation with the operators of any masts or antennae which may be subject to adverse effects from the proposed turbine(s). Consultation responses from any such individuals or organisations should be submitted with the planning application.

Further information and guidance:

Wind Energy and Aviation Interests: Interim Guidelines

Wind Energy, Defence and Civil Aviation Interests Working Group on behalf of UK Government (2002)

<http://www.bwea.com/pdf/Wind-Energy-and-aviation-interim-guidelines.pdf>

A2.10 LEGAL AGREEMENTS

The need for developer contributions required as a result of the proposed wind turbine development (e.g. to secure road network enhancements or the implementation of habitat management plans) may need to be secured through the use of legal agreements.

A legal agreement may also be required to ensure a suitable mechanism is in place (e.g. a bond) to ensure that sufficient resources would be available for dismantling the turbines and site remediation when the planning permission expires. This is necessary to prevent large redundant wind turbines from remaining in the landscape once the end of their operating life has been reached, and acts as a safeguard in case of any financial constraints which may prevent the owner / operator of the turbine(s) from carrying out decommissioning works in future.

Where legal agreements are necessary, it would be preferable for heads of terms to be discussed and prepared at an early stage in the planning process.