



Irish Wind Energy Association,
Sycamore House,
Millennium Park,
Osberstown,
Naas,
Co. Kildare.

6 April 2010

Forward Planning Section,
Economic Development & Planning Department,
Clare County Council,
Áras Contae an Chláir,
New Road,
Ennis,
Co. Clare

By email: to forwardplan@clarecoco.ie

Re: Submission on the Draft Clare County Development Plan 2011 - 2017

Dear Sir/Madam,

The Irish Wind Energy Association ("IWEA") is Ireland's leading renewable energy representative body and as such has an active interest in the wind energy and related policies of the Clare County Development Plan (CDP). As the CDP will assist in the assessment of planning applications for wind energy developments and inform the subsequent decision making process, IWEA feels it is critically important to comment on the draft CDP currently on public display. We very much welcome the opportunity to comment at this consultation stage and look forward to engaging constructively with you going forward.

IWEA would like to request a meeting with the Council to discuss the CDP and our response in more detail.

Yours sincerely,

**sent by email, bears no signature*

Caitríona Diviney
Chief Operating Officer
Irish Wind Energy Association

IWEA Submission on the draft Clare County Development Plan

1. Introduction

Renewable energy development is a vital part of Ireland's strategy to tackle two major challenges facing us today – ensuring a secure supply of energy and combating climate change. Climate change is fast becoming a more important national and international issue. The availability of significant natural resources provides County Clare, due to its geographic location and its high average wind speeds, with the opportunity to make a meaningful contribution to this issue while delivering a cleaner local environment. Wind energy produces indigenous renewable electricity while reducing greenhouse gas emissions by displacing traditional fossil fuels. IWEA believes that increasing the share of our energy from renewable sources will deliver significant benefits for the electricity customer, the local economy and society. Recent volatility in fossil fuel prices has demonstrated that regions with a high dependence on energy imports are exposed to a high level of risk. This volatility makes it difficult for investors in the economy to make reliable long term forecasts of their energy costs. The most effective way to reduce this volatility is to increase the share of energy costs that are predictable and based locally. This will lead to lower and more stable long term energy costs. As other regions move to stabilise their long term energy costs it is essential that Ireland continues to increase its relative competitiveness in this area. It is estimated that between 25 and 30% of capital investment in renewable energy is retained in the local economy. This typically flows to the community in terms of land lease payments, local road upgrades, to the county council in terms of rates and to companies in terms of construction, legal, finance and other professional services.

It is essential that a planned and sustainable approach to development is adopted to ensure a future balance of economic development and employment creation with continued protection of the environment.

1.1. National Policy

There have been a number of policy documents published in recent years relating to targets for renewable energy developments. In March 2007 the Government published an Energy White Paper, Delivering a Sustainable Energy Future for Ireland 2007-2020. This paper sets out the Government's Energy Policy Framework 2007-2020. The report details the many challenges Ireland is going to face in the future and sets actions and targets for a framework to 2020. The paper set a target of 15% for renewable energy generation by 2010, and 33% by 2020.

The European Renewables Directive (2009/28/EC) on the promotion of renewable energy sources came into effect in 2009 establishes a binding target of 20% of overall EU energy consumption coming from renewable sources by 2020 as well as a binding 10% minimum target for energy from renewable resources in the share of transportation fuels. Ireland's target under the directive is for renewable resources to account for 16% of total energy consumption by 2020. In line with these commitments, Minister Eamonn Ryan T.D. announced a revised target for electricity from renewable energy sources (RES-E) of 40% by 2020. In the case of Ireland it is widely acknowledged that wind energy will contribute the vast bulk of this target. Failure to meet these targets could result in EU sanctions. It is proposed that the County Development Plan include an overall objective on renewable energy, in line with the targets to which Ireland is committed.

The first National Climate Change Strategy (NCCS) published in 2000, was reviewed in 2006 resulting in the publication of the NCCS 2007-2012 detailing how Ireland will meet its Kyoto 2008-2012 commitment and beyond. The Strategy states that: *“Electricity generation from renewable sources provides the most effective way of reducing the contribution of power generation to Ireland’s greenhouse gas emissions.”* This increase in renewables is largely expected to come from wind energy.

Ensuring the security of energy supply is also a key part of the Government’s recent *Framework for Sustainable Economic Revival*. Having regard to the current economic downturn, the framework acknowledges the need to put the energy/climate change agenda at the heart of Ireland’s economic renewal. The large scale expansion of the Irish wind industry will be an extremely positive economic development for Ireland and will result in greater grid security and stability, job creation and lower energy prices. The wind energy sector generates more jobs per MW of power installed, per unit of energy produced and per euro of investment, than the fossil fuel energy sector. Industrial and craft jobs are created right through from manufacture and production to installation and maintenance. Although approximately 60% of these jobs are in the turbine and component manufacturing sector which are outside of Ireland, the remaining 40% of the jobs are in promotion, construction, engineering, project management, legal, accounting and financial services.

As the vast majority of new renewable capacity will be provided by on-shore wind, the 40% target is a significant challenge for the Irish wind industry. By January 2010 the installed capacity of wind energy had reached 1,264MW accounting for approximately 11% of total electricity generation in Ireland. Another approximately 5,000 MW of additional wind capacity will need to be installed within the next 10 years if Ireland is to meet the 40% target. This expansion in a relatively short period of time will present a considerable challenge for local authorities, not just in terms of processing planning applications for wind farms and grid connections, but also in terms of identifying and zoning lands suitable for wind farm development.

In identifying suitable zones for development, regard should be had to the level of the wind resource present, the separation distances from residences and sensitive buildings, the nature and the habitat status of the surrounding landscape and the Department of the Environment, Heritage and Local Government’s (DEHLG) Wind Farm Planning Guidelines 2006.

The current Government is striving to reach these EU targets for renewable energy and the development of wind farms is a priority, particularly in areas which are ideally suited for wind development. Generally there is a consistent and coherent policy to encourage and promote the development of wind farms provided they are in accordance with the proper planning and development of the area.

1.2. DoEHLG Wind Energy Development Guidelines (2006)

In June 2006, the Department of Environment, Heritage and Local Government (DoEHLG) published Wind Energy Development Guidelines for Planning Authorities under Section 28 of the Planning and Development Act, 2000, requiring planning authorities and An Bord Pleanála to have regard to them. The purpose of these guidelines is to provide advice to planning authorities on planning for wind energy through the development plan process. They also provide clarity to prospective developers and local communities.

Section 1.2 of the guidelines note the following *“The development of renewable energy sources, together with measures aimed at a reduction and more efficient use of energy, are priorities, nationally and at European level, on both environmental and energy policy grounds.”*

Furthermore, Section 3.1 gives guidance to local authorities with regard to wind energy and the CDP noting the following: *“The development plan must achieve a reasonable balance between responding to overall Government Policy on renewable energy and enabling the wind energy resources of the planning authority’s area to be harnessed in a manner that is consistent with proper planning and sustainable development.”*

With regard to the strategic aims and objectives of the CDP the guidelines note that the following, inter alia, be included:

- *“a positive and supportive statement of the importance of wind energy as a renewable energy source which can play a vital role in achieving national targets in relation to reductions in fossil fuel dependency and therefore greenhouse gas emissions, together with an objective to ensure the security of energy supply;”*
- *“objectives to secure the maximum potential from the wind energy resources of the planning authority’s area commensurate with supporting development that is consistent with proper planning and sustainable development;”*
- *“the identification on development plan maps of the key areas within the planning authority’s functional area where there is significant wind energy potential and where, subject to criteria such as design and landscape planning, natural heritage, environmental and amenity considerations, wind energy development will be acceptable in principle;”*

These are the current Guidelines and inform County Development Plans and planning permits for wind energy developments throughout the country. The Guidelines clearly encourage the implementation of efficient aims and objectives in the CDP to further Government Policy on the development of renewable energy. It should also be recognised that these guidelines will be updated at some stage in the near future.

1.3. Regional Policy

The Mid-West Regional Authority published Draft Regional Planning Guidelines in November 2009 for the period 2010 - 2022. These draft guidelines encourage the provision of renewable energy as follows:

“Renewable and sustainable energy lie at the heart of the Governments environmental and economic policies. The Mid-West Region is particularly well-placed to make use of these policies with a wide range of renewable energy generating resources such as wind and wave power, a substantial bio-mass resource in its forestry and the potential for anaerobic digestion generation at a smaller scale from the farm waste generated in certain parts of the region.”

“The region has a substantial renewable energy resource potential. The development of wind power requires that a consistent approach be taken to the management of such provision at a regional and inter-regional level.”

The draft Guidelines set out fourteen detailed objectives one of which relates specifically to renewable energy as follows: *“That the high potential of the region for the provision of renewable energy and other green technologies would be harnessed to the benefit of the economy and the environment alike.”*

The draft guidelines highlight the potential and the needs of each zone within the Region, Zone 3, Zone 4 and Zone 8, West Clare, North Clare and North East Clare respectively have identified the need of development of alternative agricultural enterprise including renewable energy and afforestation.

2. Draft Clare County Development Plan

Clare County currently has an installed wind energy capacity of 32.1MW (Source: http://www.iwea.com/index.cfm/page/windenergy_onshore) with as indicated by the draft CDP more than 100MW currently permitted.

Ireland has one of the best wind resources in Europe, yet the industry is relatively undeveloped compared to some of our European counterparts. Ireland should be harnessing this free natural resource and become a net exporter of power rather than importer, dependent on external energy sources. Given our geographical location, we are at a significant advantage to most other countries in our renewable capacity. It is of vital importance for the future of our environment & economy, to harness these natural resources. The CDP must be pro active in encouraging industrial and economic activity in order to promote economic and employment generation for Clare.

IWEA wishes to emphasise that the optimum siting of wind farm developments is in an area where there is a sufficient wind resource. However with the continuing increase in hub heights and rotor diameter being offered by turbine manufacturers, the resource in less windy inland sites can also be exploited. Identification of suitable areas will ensure that wind energy will be developed on the optimum sites and will deliver tangible benefits in terms of Local Authority rates, service jobs in legal, engineering and construction, construction supplies, landowner annual rental income and increased security of electricity supply.

Wind resource

The energy in the wind is a cubic factor of its speed. This means that there is eight times more energy in wind with a speed of 10 meters per second (m/sec) compared to a wind speed of 5m/sec. Therefore Clare as a county exposed to a vigorous coastal wind regime the best wind resource exists in the elevated areas.

Given that sustainable development is now one of the most universally endorsed aspirations of our time and that it is generally recognised that sustainability is a central concept which must underpin economic, social and environmental development wind farms should be built where the resource can be harnessed economically and therefore forward planers need to seriously consider the optimum sites in the county, in terms of resource for wind energy development.

Designated areas

There are a variety of habitats and areas designated throughout the Mid-West Region , for example, NHAs, SACs and SPAs. There are situations where the designation of some of these sites with proper controls in place, would not be negatively impacted upon by the

development of a wind farm near or on the site. In particular wind farms may have little or no impact on sites if the construction process is managed in a manner sensitive to the key reason for the designation. In such cases wind energy developments should be considered on their individual merits rather than with a presumption of incompatibility with the designated area.

Infrastructure

IWEA would like to highlight the importance of the development of grid infrastructure recommend that the Development Plan should facilitate the provision of energy networks.

Efficiency

Building larger and more efficient turbines means fewer turbines overall. For the larger commercial turbines, a 10-15% increase in turbine height can increase the energy yield by up to 50%. These more efficient turbines increase our ability to meet targets, reduce the amount of turbines needed and reduce the amount of raw materials required.

2.1. Specific Submission Proposals

Volume 1 Written Statement

Ireland has one of the best wind resources in Europe, yet the industry is relatively undeveloped compared to some of our European counterparts. Ireland should be harnessing this free natural resource and become a net exporter of power rather than importer, dependent on external energy sources. Given our geographical location, we are at a significant advantage to most other countries in our renewable capacity. It is of vital importance for the future of our environment & economy, to harness these natural resources. The CDP must be pro active in encouraging industrial and economic activity in order to promote economic and employment generation for Clare.

Clare has a very good wind regime; strongly evident in west Clare which has a high quality wind resource. Clare has an excellent opportunity to expand on its renewable capacity, given the geographical size of the county, and its excellent wind resource.

Chapter 1: Introduction

IWEA welcome Clare County Council's positive position regarding renewable energy as set out in section 1.5 Goals:

"Goal IX

A County Clare that is the national leader in renewable energy generation which supports energy efficiency and conservation and with an accessible modern telecommunications infrastructure which achieves balanced social and economic development throughout the county and assists Ireland's Green Energy target."

This Goal is further reinforced in Chapter 13 Rural Development & Natural Resources

Objective 13.11 Wind Energy Development:

"It is an objective of Clare County Council:

To facilitate the development of Wind Energy developments in rural areas in accordance with the Draft Wind Energy Strategy 2011 – 2017"

Chapter 6: Employment, Economy and Enterprise

IWEA concurs with Clare County Council through **Chapter 5, Section 6.3.5 Energy**, where it states:

“County Clare’s ability to continue to attract and retain high levels of foreign direct investment and to provide a supportive environment for industry will depend on its capacity to deliver a competitive, secure and uninterrupted energy supply. County Clare has had a long and proud tradition of energy production, with the construction of Ardnacrusha in the late 1920s and Moneypoint in 1979. County Clare is uniquely positioned and has significant potential to increase the production of electricity from renewable energy sources such as wind and will encourage and promote the increase in capacity of the grid system”.

“The creation and storage of sustainable forms of energy and the associated development of new energy technologies will assist in the creation of a low-carbon County that can be developed and marketed to the benefit of local business and can deliver jobs in the County.”

IWEA welcomes the positive support of renewables through its Objective **CDP6.5 Energy Supply** as detailed below, where Clare County Council recognises the national requirement for renewable energy developments and aims to support research, technology development and innovation:

“It is an objective of Clare County Council:

To contribute to the economic development and enhanced employment opportunities in the County

a) By facilitating the development of a self-sustaining, secure, reliable and efficient renewable energy supply and storage for the County.

b) By facilitating the County to become a leader in the production of sustainable and renewable energy for National and International consumption through Research, Technology Development and Innovation.”

Chapter 10 Energy & Communication

IWEA welcomes Objectives (as detailed below) **CDP 10.2 Renewable Energy** the recognition from Clare County Council of the importance of developing renewable energy resources and also **CDP 10.3 Wind Energy Development** which aims to facilitate wind energy production in the county.

CDP 10.2 Renewable Energy

It is an objective of the Development Plan:

To encourage and to favourably consider proposals for renewable energy developments and ancillary facilities.

CDP 10.3 Wind Energy Development

It is an objective of the Development Plan:

To promote and facilitate wind energy production in the County. Proposals for the development of infrastructure for the production and distribution of electricity through the harnessing of wind energy will be determined by reference to the County Wind Energy Strategy.

Section 10.3.3 of the Draft Plan details the renewable energy targets set for County Clare. The Midwest Regional Climate Change Strategy identifies Clare as having the potential to accommodate 600MW of renewable energy by 2020. The Draft County Development plan sets out a target of 550MW by 2017.

According to the Draft Wind Energy Strategy, there are currently approximately 101.4MW of permitted windfarms in County Clare. This leaves a target of 450MW to be achieved by 2017. According to EirGrid Grid Connection Offer lists there are a total of 165.3MW of grid offers in the county, 129.3MW of which are Gate 3. After the Gate 3 offers have been issued all Government renewables targets up to 2025 will be met. As such the network will only be developed to accommodate this figure. Currently there are approximately 500MW of applications in the queue for Gate 4 in County Clare. If however Government targets were to change or a large portion of Gate 3 grid connection agreements were not accepted than an additional round of grid offers may be issued by EirGrid and then there is a possibility that some of the Gate 4 applications in County Clare would be accommodated.

Section 10.3.8 Electricity recognises the importance of reinforcing the existing grid infrastructure and extension to areas that are currently not adequately serviced. Objective CDP 10.8 sets out the path to achieve a stronger grid infrastructure in County Clare.

CDP 10.8 Electricity Network

It is an objective of Clare County Council:

- a) To facilitate improvements in energy infrastructure and encourage the expansion of the infrastructure within the County.*
- b) To facilitate future alternative renewable energy developments throughout the County.*
- c) To collaborate with EirGrid in accordance with the Grid 25 Strategy to facilitate the delivery of quality connection, transmission and market services to electricity generators, suppliers and customers utilising the high voltage electricity system in County Clare*

The various Local Area Plans for Clare are stated as informing the preparation of the Draft Development Plan. Though not directly referenced in the Draft Development Plan – the Local Area Plans recommend that “*power lines between ESB points of generation and wind farm substations should, where possible, be laid underground to minimise visual impact*”.

In fulfilling Objective CDP 10.8 above it is important that Clare County Council consider the requirement of overhead lines for windfarm developments in conjunction with the points laid out below. The industry would urge that applications for overhead lines be assessed on their own merits to ensure that there is no prescribed direction to place the lines required to connect farms to the electricity network underground.

The existing approach to landscape protection and wind energy development involves consultation between developers, the electricity system operators and the planning authority. This system provides for an assessment of issues and appropriate mitigation measures to be included in any development proposals and allows each application to be considered on its own merits.

It is currently not the policy of the system operators to offer underground cable options instead of overhead power lines. There are many technical and operational difficulties that apply to underground cables which do not apply to overhead power lines.

- Overhead power lines can provide a more secure electricity supply than underground cables. Overhead lines are easier and faster to maintain and repair while underground cable faults can take weeks to repair may be difficult to locate and maintenance and repair is thus a much slower process

- Trenching associated with underground cables has its own environmental and technical concerns and also from a technical point of view certain land types are not suitable/desirable for undergrounding cables
- Underground high voltage cables are considerably more expensive to install than overhead lines. In some cases this extra cost may render a wind energy project economically non-viable

The above is supported by an independent Study commissioned by Eamon Ryan, T.D., Minister for Communications, Energy and Natural Resources in 2008 on the Comparative Merits of Overhead Electricity Transmission Lines Versus Underground Cables.

In Minister Ryan's keynote address at the IWEA '09 annual conference on 26 March 2009 he referred to the conclusions of this study which included:

- International experience of laying such cables over long distances is limited and the majority of existing projects do not represent transmission connections in conventional networks such as we have in Ireland
- Underground cables can be expected to have forced outage rates which are at least 10 times greater than that of overhead lines.
- Underground cables are therefore severely limited in terms of transmission adequacy and are not equivalent to overhead lines in terms of security of electricity supply
- Work undertaken on the two case studies suggest that the capital cost of constructing underground cables would be approximately 5 times greater than the cost of overhead lines and would have 3 times the lifecycle costs

Ireland designs and operates transmission assets in line with World Health Organisation (WHO) guidelines and this study confirmed that in Ireland magnetic field exposure directly under a transmission line is generally 80-90% lower than the maximum levels recommended in the WHO guidelines. This study also found that exposure to magnetic fields may be higher directly above an underground cable than directly underneath overhead lines. It should be noted that additional measures can reduce the magnetic field for both underground and overhead options.

If Ireland is to meet its national targets and its international obligations, it is essential that all regions develop a well designed wind development strategy with defined zoning as part of county development plans.

The industry wishes to suggest the most appropriate approach is for the electricity system operators and developer to work with the planning authority on a case by case basis with regard to the feasibility of developing the most environmentally and technically effective options for connecting a windfarm to the national grid.

We believe that such an approach would provide applicants, planners and consultees with the necessary re-assurance that cherished landscapes would receive a high level of protection, while facilitating the delivery of wind energy development in the most appropriate locations.

Volume 5 Draft Wind Energy Strategy

1.0 Introduction

There seems to be a disproportionate area of sites designated as Strategic and Acceptable in Principle relative to the size of County Clare (just 2.6%). While IWEA commend Clare County Council for designating areas as strategic where applications will be looked up favourably, there is concern that pushing developers into this relatively small area will cause clustering, especially if the council is expecting these areas to accommodate 400MW of wind energy developments.

IWEA would like to urge Clare County Council to assess applications in areas designated Open to Consideration on a case by case basis and should not look upon these potential developments less favourably than applications in Strategic Areas or Acceptable in Principle Areas if it can be proven through the Environmental Impact Assessment process that the development would meet all statutory requirements.

IWEA would also like to point out that based on the figures given in the Draft WES, the calculation of percentages appears to be incorrect (see next paragraph) and also, another point to note is that there seems to be a doubling up in terms of areas calculated for Strategic Areas and Acceptable in Principle. The figure given for areas designated as Acceptable in Principle (13.8%) include the area calculated for Strategic areas (2.6%) therefore the figure of 16.4% appears to be incorrect. Based on the figures printed in the Draft WES – the total figure for Strategic and Acceptable in Principle should be 13.8%.

However, we note that it is stated that the total Strategic Area is 9150 hectares – so working out the percentage using the total land area of Clare stated in the Draft WES as 318784 hectares – the actual percentage should be 2.9% and for areas Strategic Areas and Acceptable in Principle (47616 hectares) the percentage should in fact be 14.9%. The areas designated then as Acceptable in Principle should really be 38466ha or 12.1%.

See for information the map in the appendix to this document.

We would also like to query Figure A Planning Applications in the Wind Energy Strategy which we believe contains errors. Two of the applications are met masts and out of the other 6 one is a house and one was refused by ABP.

6.0 Annex A: Best Practice and General Considerations for Wind Energy developments in County Clare

IWEA would like to highlight a number of comments on particular sections of the Annex as per the below:

6.1 General Considerations for Applications for Wind Energy Development.

- Clare County Council will require compliance with the *Wind Energy Development Guidelines, Guidelines for Planning Authorities* (DEHLG, 2006) in preparing planning applications.
 - IWEA note that these guidelines maybe updated in the near future.
- Early and meaningful consultation with Clare County Council and statutory agencies will assist in identifying environmental sensitivities and considerations during the preparation of a planning application.

- IWEA welcomes this recommendation as we strongly support early pre-planning discussions between developers and the Local Authority.
- The current requirement for Environmental Impact Assessment for wind energy developments is for 5 turbines of 5MW or more. The Council may require the preparation of an Environmental Impact Assessment for sub threshold development.
 - Early consultation with the Planning Authority will highlight the requirement for a sub threshold EIA.
- All wind energy developments, including those sub threshold for EIA may require Habitats Directive Assessment screening under Article 6 of the Habitats Directive.
 - Consultation with the appropriate authorities and screening should be carried out to ascertain whether the Habitats Directive Assessment is required.
- All wind energy developments should prepare an environmental constraints map to identify the most and least sensitive environmental resources on the site. This constraints map will assist in informing the size, layout and design of the wind energy development.
 - IWEA welcomes this recommendation by Clare County Council as identifying environmental constraints early on will inform the developer of the best layout for the windfarm leading to less requirements to modify later on in the planning process.
- An Ecological Impact Assessment may also be required as appropriate.
 - Where appropriate upon consultation with the relevant statutory consultees.

6.2 Biodiversity, Flora and Fauna

Birds

- Construction works should be timed and designed so as not to disturb breeding birds and site specific advice should be sought from a qualified and experienced ecologist.
 - where appropriate, on consultation with the relevant statutory consultees.
- Yearly monitoring of wind farm developments associated with wind energy areas identified in the Strategy should be undertaken by professional ecologists and funded by the relevant wind energy developer. The methodology, responsibility and rationale for this approach should be clearly outlined by the NPWS to assist developers.
 - Where monitoring is required, a timeline for monitoring should be agreed by the developer and the Planning Authority upon consultation with the relevant statutory consultees.
- Where nesting hen harriers or merlins are recorded within close proximity to turbines, appropriate mitigation measures may be required to avoid any potential risks to displaying birds and newly fledged birds. Advice should be sought from a qualified and experienced ecologist.
 - In addition to advice from ecologist – measures should be agreed with appropriate statutory consultees.
- Any proposed wind energy developments within the Wind Energy Area adjacent to the Lower River Shannon SPA will require, subject to consultation with Clare County Council, a Habitats Directive Assessment. Such assessments will need to consider the cumulative impacts of wind energy developments with the conservation objectives of the relevant site. Wind farm developments occurring within or adjacent to this Natura 2000 site will only be considered where it can be shown, following a Habitats Directive Assessment, that the development, in combination with other plans or projects, will not have an adverse effect on the conservation management objectives of this site.

- Consultation with the appropriate authorities and screening should be carried out to ascertain whether the Habitats Directive Assessment is required.

Bats

- Construction works should be timed and designed so as not to disturb breeding bats.
 - where appropriate, on consultation with the relevant statutory consultees.

Peat

- The careful siting of tracks, construction compounds, cable trenches etc. will be carried out so that areas of deep/wet peat are avoided. Where deep/wet peat cannot be avoided floating roads will be used to reduce the adverse effects associated with the construction and operation of such structures.
 - Floating roads should only be used where appropriate /subject to geotechnical site specific review.
- During construction works, the enforcement of standard pollution control measures will be undertaken to prevent potential polluting substances from entering drains and having the potential to affect water quality further downstream from wind farm areas.
 - Appropriate measure will be put in place on consultation with relevant consultees.
- The indirect impact of construction on peat habitats is generally far greater than immediate footprint due to impacts on hydrology. Environmental Impact Assessments done on Peatland habitats affected by wind farm development should estimate 'permanent loss; due to direct and indirect effects.
 - IWEA would also like to note that Windfarms and Peatland are not mutually exclusive. The application of the Bird and Habitats directives on onshore wind power development has had the effect that project developers tend to avoid planning projects in Natura 2000 designated sites. In this regard, IWEA underlines the importance of further clarifying that wind energy development is possible and compatible with Natura 2000 areas (both Special Protection Areas and Special Areas of Conservation). All areas are potential sites, subject to appropriate assessments and monitoring requirements in accordance with European and National legislation.

Buffer Zones

- Buffer zones will be established for wind energy developments close to Natura 2000 sites in the County. The extent of the buffer zones will be dependant on the habitat type and species present. Buffer zones should be developed at the preplanning stage of wind energy project in consultation with Clare County Council, National Parks and Wildlife Service of the Department of Environment, Heritage and Local Government and where fisheries protection is concerned, the Shannon Regional Fisheries Board, at the pre-planning stage of wind energy projects.
 - Some areas designated as Strategic Areas and Acceptable in Principle are adjacent to designated conservation sites – Creating enforced buffer zones around Natura 2000 sites denies the due process of Environmental Impact Assessment and Habitats Directive Assessments.

Landscape Character Areas

IWEA have issues with the current practice of recommending number and size of windfarms within LCAs. This practice looks at LCAs individually and does not take into account cumulative effects with adjacent LCAs.

3. Conclusion

Clare County Council has adopted a very progressive outlook on the renewable energy sector and we would like to commend the council for their continued support to the renewable industry. Application of national energy targets at local level is best achieved through this type of positive collaboration with the relevant parties.

However, the positive elements of the proposal are not being adopted in a balanced manner through the various objectives within the draft CDP and draft Wind Energy Strategy. IWEA has serious concern that the draft CDP and WES, while containing commendable targets are minimising the amount of wind energy development within Clare County through the publishing of the plans as they currently stands with the relatively small area of lands zoned Strategic and Acceptable in Principle. This is contravenes the government policy as expressed in the Wind Energy Guidelines, *“achieve a reasonable balance between responding to overall Government Policy on renewable energy and enabling the wind energy resources of the planning authority’s area to be harnessed in a manner that is consistent with proper planning and sustainable development”*.

