



Cork County Council

**Cork County Development Plan 2009
Variation No 2: Wind Energy**

SEA Statement

Date: July 2011

Cork County Development Plan 2009 Variation No 2: Wind Energy SEA Statement



Contents

1	Introduction	3
	1.1 Background.....	3
	1.2 Background to the Variation.....	3
	1.3 Layout of the SEA Statement	6
2	Summary of SEA Process	7
	2.1.1 Screening.....	8
	2.1.2 Scoping of the Environmental Report for the Proposed Variation	8
	2.1.3 Environmental Report.....	14
	2.1.4 Proposed Variation & SEA Environmental Report.....	15
	2.1.5 Adopted Development Plan and SEA Statement	15
3	Consideration of Environmental Issues	16
	3.1 Introduction.....	16
	3.2 Environmental Protection Objectives	16
	3.3 Identification of Likely Significant Environmental Effects/Issues of Proposed Variation .	17
	3.4 Mitigation Measures	18
4	Summary and Responses to Submissions.....	21
5	Reasons for choosing the Adopted Variation	26
	5.1 Alternatives Considered	26
6	Mitigation Measures	28
7	Monitoring Measures	29
8	Conclusion from Managers Report	31



Cork County Development Plan 2009 Variation No 2: Wind Energy SEA Statement



Tables

Table 2.1 Summary of Statutory Consultee Responses

Table 3.1 Strategic Environmental Protection Objectives

Table 7.1: Indicators, Targets and Monitoring Sources for each Environmental Aspect



Cork County Development Plan 2009

Variation No 2: Wind Energy

SEA Statement



1 Introduction

1.1 Background

Cork County Council made a variation of the Cork County Development Plan 2009-2015 in accordance with Section 13 of the Planning and Development Act 2000 (as amended). The Variation became operational on the 13th December 2010.

This SEA Statement has been prepared in accordance with section 13(l)(1) of the Planning and Development (Strategic Environmental Assessment) Regulations 2004 S.I. 436 and contains the following information;

- Summary of how environmental considerations and the Environmental Report were factored into the variation;
- Summary of how submissions/consultations with the environmental authorities, prescribed bodies and the public were taken into account;
- Reasons for choosing the variation to the Development Plan as adopted by the Council, in light of other reasonable alternatives considered;
- Monitoring measures and arrangements which will identify at an early stage, any unforeseen adverse effects, which will require remedial action, making effective use of existing monitoring arrangements to avoid duplication.

In addition to providing the above information, this SEA Statement will provide a brief summary of the overall SEA process and also a background to the SEA.

1.2 Background to the Variation

WYG Environmental & Planning (Ireland) Ltd. were commissioned by Cork County Council to prepare the Environmental Report as part of the SEA process on the wind energy policy variation.

The variation concerns the inclusion of additional text to the Wind Energy policy contained in Chapter 6, Volume 1 of the County Development Plan 2009. The County Council has identified a number of locations in the county as suitable for large scale industry being Carrigtwohill, Kilbarry, Little Island, Ringaskiddy and Whitegate. In all these locations, except Ringaskiddy, wind energy proposals can be considered on their merits and in accordance with the criteria set out in objective INF 7-4.

Cork County Development Plan 2009

Variation No 2: Wind Energy

SEA Statement



The Council, in the preparation of its County Development Plan objective for wind energy, identified two special areas; Strategic Search Areas and Strategically Unsuitable Areas. Ringaskiddy is located within a Strategically Unsuitable Area where wind energy proposals, although not ruled out, will generally be small in scale. It is the Council's view that this policy position in relation to wind energy at Ringaskiddy is inconsistent with the other objectives for Ringaskiddy *i.e.* as a location for large scale industry, and in relation to encouraging business and industry generally to increase its use of wind energy.

Therefore, the variation brings the policy position in Ringaskiddy in line with the approach already taken with regard to other areas identified for large scale industry to enable wind energy proposals at Ringaskiddy to be considered on their merits in relation to the criteria set out in objective INF7-4 and other proper planning considerations.

Variation to the Development Plan Wind Energy Objective INF 7-4
(Note: Red bold and underlined denotes Variation and Green bold and underlined denotes recommended amendment to variation resulting from SEA/HDA process)

Wind Energy Projects

- a) It is an objective to encourage prospective wind energy businesses and industries. In assessing potentially suitable locations for projects, potential wind farm developers should focus on the strategic search areas identified in the Plan and generally avoid wind energy projects in the strategically unsuitable areas identified in this Plan.
- b) It is an objective to support existing and established businesses and industries who wish to use wind energy to serve their own needs subject to proper planning and sustainable development. **In particular, because of the potential for wind generated electricity to reduce the reliance of large scale industry on fossil fuel generated electricity, proposals located within the areas identified as suitable locations for large scale industrial development in Objective ECON 3-2 of this plan will be considered on their merits and subject to compliance with Article 6 of the EU Habitats Directive.**
- c) It is an objective in the strategic search areas (and in those areas that are identified as neither strategic search areas nor strategically unsuitable areas), to consider new, or the expansion of existing, wind energy projects on their merits having regard to normal planning criteria including, in particular, the following:
 - The sensitivity of the landscape and of adjoining landscapes to wind energy projects;
 - The scale, size and layout of the project, any cumulative effects due to other projects, and the degree to which impacts are highly visible over vast areas;
 - The visual impact of the project on protected views and prospects, and designated scenic landscapes as well as local visual impacts;



Variation to the Development Plan Wind Energy Objective INF 7-4
(Note: Red bold and underlined denotes Variation and Green bold and underlined denotes recommended amendment to variation resulting from SEA/HDA process)

- The impact of the project on nature conservation, archaeology and historic structures;
 - Local environmental impacts including noise and shadow flicker;
 - The visual and environmental impacts of associated development such as access roads, plant, grid connections etc.
 - The proximity and sensitivity of a recognised settlement,
 - The impact of the project on archaeology and historic structures,
 - The impact of nature conservation, in particular avoiding designated and proposed European sites.
- d) Similar criteria would be taken into account in the strategically unsuitable areas except that **(other than in areas to which Objective ECON 3-2 relates)** suitable projects will generally be on a smaller scale and on very special, carefully chosen sites.

In addition, there is a variation to the definition of Strategically Unsuitable Areas, as outlined below;

Variation to the definition of Strategically Unsuitable Areas
(Note: Red bold and underlined denotes Variation and Green bold and underlined denotes recommended amendment to variation resulting from SEA/HDA process)

- e) Areas which, because of high landscape sensitivity, are considered generally to be unsuitable for wind energy projects. While there may be a small number of locations within these areas with limited potential for small-scale wind projects, their contribution to any significant reduction in greenhouse gas emissions would be negligible. Except on a small scale and at particularly suitable locations, wind projects would normally be discouraged in these areas. **However, because of the potential for wind generated electricity to reduce the reliance of large scale industry on fossil fuel generated electricity, for the avoidance of doubt, the areas identified as suitable locations for large scale industrial development in Objective ECON 3-2 of this plan are excluded from these areas and wind energy proposals in the areas referred to in ECON 3-2 will be considered on their merits and subject to compliance with Article 6 of the EU Habitats Directive.**

Cork County Development Plan 2009

Variation No 2: Wind Energy

SEA Statement



1.3 Layout of the SEA Statement

The remainder of this SEA Statement is structured as follows:

- Section 2** Summary of the SEA Process;
- Section 3** Consideration of environmental issues;
- Section 4** Summary and responses to submissions received;
- Section 5** Reasons for choosing the adopted final variation; and
- Section 6** Monitoring measures.



2 Summary of SEA Process

There are a number of steps in the SEA process (see **Figure 1**). The Planning and Development (Strategic Environmental Assessment) Regulations 2004 (S.I. 436 of 2004) transposes part of the EU Directive and makes SEA mandatory for particular Plans. This document 'SEA Statement' forms part of this statutory requirement.

FIGURE 1: SEA & DEVELOPMENT PLAN PROCESS: KEY STEPS



1. Should the Development Plan be subject to a full SEA?
- It was considered that the proposed variation to the Cork County Development Plan 2009-2015 has the potential to have significant effects on the environment, particularly in relation to the potential impacts on the wintering waterbird populations in Cork Harbour from the construction of wind farms in Ringaskiddy and the impact of wind turbines on the landscape of Cork Harbour.
2. What issues, scope and level of detail should be addressed within the Environmental Report? – Scoping Report completed.
3. Preparing the Environmental Report and variation to the Draft Development Plan. - SEA ER, AA and Proposed Variation to Plan Completed.
4. Consultation - The Proposed Variation has been published along with the SEA Environmental Report and AA and the period for making submissions or observations expired on the 29th of October, 2010. Six submissions were received in the public consultation period.
5. County manager recommended the adoption of the variation and published. Prepared a SEA Statement detailing how environmental considerations were incorporated into the variation to the Development Plan *etc.*
6. Monitoring the environmental effects of the variation.

Cork County Development Plan 2009

Variation No 2: Wind Energy

SEA Statement



2.1.1 Screening

Screening is the first stage in the SEA process and is the term given to the process where the need for an SEA of a given plan or programme is determined.

Article 13K(1) of the Planning and Development (Strategic Environmental Assessment) Regulations 2004 state that:

"Where a planning authority proposes to make a variation of a development plan under Section 13 of the Act it shall, before giving notice under section 13(2) of the Act, consider whether or not the Proposed Variation would be likely to have significant effects on the environment, taking into account of relevant criteria set out in Schedule 2A."

In accordance with the above Regulations, a Screening exercise was conducted to determine the need or otherwise to instigate a Strategic Environmental Assessment of the likely impacts arising from the Variation to the adopted Plan.

A SEA Screening Report was prepared by WYG, on behalf of the Council, which concluded that a Strategic Environmental Assessment of the Proposed Variation was required. This Screening Report was informed by the Habitats Directive Screening Assessment, which found that the Proposed Variation to the Plan may have a significant environmental effect on the Cork Harbour SPA.

2.1.2 Scoping of the Environmental Report for the Proposed Variation

Scoping is the term applied to the consideration of the range of environmental issues that will be addressed in the SEA Environmental Report. This is not a statutory process, but is however undertaken as per best practice. It is a crucial stage of the SEA process with respect to defining the scope and form of the SEA process.

The purpose of the scoping stage of the SEA process is to develop an understanding of the environmental parameters that may be affected by the key measures proposed by the Plan/Variation to a Plan, and to set a framework for identifying and evaluating the impact of these measures on these environmental parameters.

The aim of the scoping stage is to decide on the extent and level of detail to be included in the Environmental Report. This was done through consultation with the designated environmental authorities outlined below:

Cork County Development Plan 2009

Variation No 2: Wind Energy

SEA Statement



- Environmental Protection Agency (EPA);
- The Department of Environment, Community and Local Government (DoECLG) (formally Department of Environment, Heritage and Local Government (DoEHLG));
- The Department of Communication, Energy and Natural Resources (DoCENR).

A formal letter requesting submissions on the scope and detail of information to be contained in the Environmental Report was issued to these authorities in August 2010, accompanied by the SEA Scoping Report.

Responses were received from the EPA, DEHLG and DCENR. A summary of these responses are outlined in **Table 2.1** below.

Table 2.1: Summary of Statutory Consultee Responses

Consultee	Consultee Comment	Addressed in Report
Environmental Protection Agency	Consideration should be given to the merits of reviewing a specific spatial aspect of the Wind Energy Strategy <i>Strategic Search Areas</i> in the absence of revisiting the overall wind energy strategy for the County. Consideration should thus be given to undertaking an environmental assessment of the Cork County Wind Energy Strategy, as a follow on from the Cork County Development Plan review. As part of this review the scope of the SEA should then assess the feasibility on environmental grounds of the subject lands of the proposed review.	The wind energy variation is in Ringaskiddy and is intended to encourage economic stability and growth in an area categorised as a ' <i>large scale industrial development areas</i> '. The comments from the EPA on a county wind energy wide review has been noted by Cork County Council
	The implications of the Proposed Variation on the Carrigaline Local Area Plan which covers the subject lands should also be considered. The requirement and potential for the LAP, SEA and associated AA to assess the Proposed Variation should also be considered.	The implication on the Carrigaline LAP is outlined in Section 4.3 of the Environmental Report. Comment on requirement for SEA of the variation on the Carrigaline LAP has been noted by the County Council.

Cork County Development Plan 2009

Variation No 2: Wind Energy

SEA Statement



Consultee	Consultee Comment	Addressed in Report
	<p>The SEA and AA should assess the full range of environmental effects as set out in the SEA Directive and Habitats Directive.</p>	<p>This has been addressed throughout this Environmental Report. Potential impacts are addressed in Section 8 of the SEA Environmental Report.</p>
	<p>In particular potential cumulative and in combination effects in association with other relevant Plans, Programmes and projects should be assessed.</p>	<p>The linkage with other plans, programmes and projects is addressed in Section 4.3 of the SEA Environmental Report.</p>
	<p>The assessment should ensure likely significant effects associated with construction, operation, maintenance and decommissioning are fully assessed. The impacts associated with related infrastructure such as construction roadways, site investigations, power lines etc. should also be assessed.</p>	<p>The impacts of the SEA at a strategic level are addressed in Material Assets, Section 6.5 of the SEA Environmental Report. Project level impacts on construction, operation and maintenance will be addressed at project level (EIA's and AA's).</p>
	<p>The SEA and AA should consider reasonable and realistic spatial, density, intensity and technological alternatives in the context of the provisions for renewable energy in the Carrigaline area (<i>e.g.</i> Solar, Wind, Geothermal etc) and suitable combinations of the above.</p>	<p>Irish legislation does not permit transfer of privately generated electricity outside of a site unless it is connected to the national grid. Therefore, no other area in Carrigaline can be considered.</p> <p>Optimal electrical generation is from wind energy. Solar and geothermal energy sources generally generate heat and are not feasible alternative to wind energy.</p>
	<p>You are referred to the National Wind Energy Strategy Guidelines which should be incorporated and implemented as appropriate into the Proposed Variation.</p>	<p>The guidelines and recommendations are referenced throughout the SEA.</p>

Cork County Development Plan 2009

Variation No 2: Wind Energy

SEA Statement



Consultee	Consultee Comment	Addressed in Report
		It will be the key guidelines for the project levels developments.
	It should be ensured that wind energy development proposals are subject to an Environmental Impact Assessment, Appropriate Assessment including visual impact assessment.	This comment has been dealt with in Section 9 Mitigation Measures of the Environmental Report.
	The proximity of the subject lands to and the potential impact on designated national and international nature conservation sites (Natura 2000 Sites, RAMSAR Site, Natural Heritage Areas).	This has been addressed under various Biodiversity headings including Section 6.2 and Section 8.3.1 of the SEA Environmental Report.
	The requirement for an appropriate assessment in accordance with the Habitats Directive and the DoEHLG Appropriate Assessment Guidance for Planning Authorities. The potential impact on protected species-birds, bats <i>etc.</i> , including flight paths.	An Appropriate Assessment Screening Report has been completed. Protected species surveys are recommended as a mitigation measure at project level.
	Potential for impact on aircraft flight paths to and from Cork airport.	Ringaskiddy is located beyond the outer flight restriction zone, as presented in Section 6.5 of SEA Environmental Report.
	Scenic Views / Designated Landscape character areas-Confirm the status and availability of a Landscape Character Assessment for Cork County. The inclusion, in particular, in the context of the Proposed Variation consideration of seascape and coastscape elements should be considered.	Refer to Section 6.6 and mitigation measures in Section 9 of the SEA Environmental Report.
	The relevant environmental protection aspects of Cork Harbour Integrated Management Strategy.	Refer to Section 4.3, Table 4.7 of the SEA Environmental Report.
Department of Environmental Heritage and Local	<u>Archaeological Assessments</u> Proposed developments that may have implication for the archaeological heritage should be subject to	Refer to Section 9 Mitigation Measures of SEA Environmental Report.

Cork County Development Plan 2009

Variation No 2: Wind Energy

SEA Statement



Consultee	Consultee Comment	Addressed in Report
Government	archaeological assessment. <u>Architectural Heritage</u> "The Proposed Variation of the CCDP could have a significant effect on the architectural heritage of the locality involved. It is therefore recommended that significant effects on architectural heritage is taken into account in the SEA process".	Addressed in Baseline Cultural Assets Section 6.7 and Mitigation Measures Section 9 of SEA Environmental Report.
Department of Communications, Energy and Natural Resources	"The Department of Communications, Energy and Natural Resources have no observations/comments to make on this scoping request. This is without prejudice to any comments/observations Inland Fisheries Ireland may have in this regard."	
Development Application Units - NPWS	"For the avoidance of doubt, the amended wording should have the clause added as follows (in italics): "will be considered on their merits <i>and subject to compliance with Article 6 of the EU Habitats Directive</i> " The submission noted that in the absence of this amended wording, it is recommended that the variation be not adopted until detailed data becomes available allowing a conclusion of no adverse effects of wind turbine development within the area outlined on cork Harbour SPA.	See Mitigation Measures Section 9 of SEA Environmental Report.

The SEA Scoping process highlighted the issues that needed to be addressed in the Environmental Report. It also identified the issues which could be scoped out and did not require further attention in the Environmental Report.

Environmental Aspects	Potential Positive or Negative Effects	Scoping Summary
Biodiversity, Flora & Fauna	There is a potential for a negative impact on the internationally important wintering waterbird populations in Cork Harbour SPA due to the presence of wind turbines in	Due to potential negative impacts on wintering waterbirds, biodiversity, flora and fauna is scoped in.

Cork County Development Plan 2009

Variation No 2: Wind Energy

SEA Statement



Environmental Aspects	Potential Positive or Negative Effects	Scoping Summary
	Ringaskiddy.	
Population & Human Health	<p>There may be some noise or shadow flicker effects of turbines which may have a negative impact on the local population.</p> <p>Overall reduction in use of fossil based fuel sources for energy production may reduce air pollution – having a positive impact on human health in the locality of power plants.</p> <p>An increase in energy security for manufacturing plants in the Ringaskiddy area will have a positive effect on employment in the Cork Region.</p>	<p>At local level with regards to noise and shadow flicker effects and at a Cork regional scale of secured employment and a reduction of fossil fuel emissions helping human health in energy production areas, it is considered that population and human health is scoped in.</p>
Water	No significant negative or positive effects on water have been identified in the scoping study.	As no significant negative or positive effects on water have been identified, water is scoped out .
Air & Climate	There is a potential for reduction in carbon emissions due to use of wind energy and a reduction in use of fossil fuels. This could have a significant positive effect.	Air and climate is scoped in due to positive effects on climate change of using wind energy.
Soils	No significant negative or positive effects on soils have been identified in the scoping study.	As no significant negative or positive effects on soils have been identified, soils are scoped out .
Material Assets	Potential interference with air flight path lines, broadcast communications and overhead power lines. Therefore there is potential for negative effects.	Due to potential negative impacts on infrastructure, material assets is scoped in .
Landscape & Landuse	Due to the high value landscape and landscape sensitivity, there is potential for negative impact.	Due to potential negative impacts on the landscape of the Cork Harbour, landscape and land use

Cork County Development Plan 2009

Variation No 2: Wind Energy

SEA Statement



Environmental Aspects	Potential Positive or Negative Effects	Scoping Summary
		is scoped in .
Cultural Heritage, including Architectural and Archaeological Heritage	Due to the presence of protected monuments there is potential for negative impact if turbines are insensitively placed in relation to these monuments. Buildings considered to be Architectural Heritage importance are located in the area and may be affected by the turbines.	Due to potential negative impacts on cultural heritage, this category is scoped in .

2.1.3 Environmental Report

The Environmental Report followed the requirements of Schedule 2B (Planning and Development (Strategic Environmental Assessment) Regulations S.I. 436 of 2004). It contained details on relevant plans and programmes which have been taken into consideration during the preparation of the variation to the Cork Development Plan 2009. Existing environmental issues were identified and Environmental Objectives (based on the environmental receptors – biodiversity, water, air *etc.*) were drafted from national environmental policy while taking existing environmental issues into account.

A compatibility matrix was used to assess the Proposed Variation to the wind energy policy objective against Strategic Environmental Protection Objectives so that aspects of the Proposed Variation with the potential for significant adverse environmental impacts could be highlighted.

Where conflicts arose, opportunities to prevent, reduce or offset any significant adverse effects of implementing the wind policy variation were examined and mitigation was proposed.

The consideration of alternatives is an important part of the SEA process. The aim of the consideration of alternatives is to look at differing ways to achieve a stated objective or intention. Through considering alternatives, it is often possible to achieve the overall goal whilst minimising environmental effects.

Two alternative strategies were considered: Do Nothing Scenario and the Proposed Variation. Each alternative was assessed against the environmental aspects using assessment criteria.

Monitoring will be based around indicators of change in the environment over the lifetime of the varied Development Plan and set targets which are to be reviewed over the duration of the varied Plan.

Cork County Development Plan 2009

Variation No 2: Wind Energy

SEA Statement



2.1.4 Proposed Variation & SEA Environmental Report

The SEA Environmental Report and the Proposed Variation were made available for public viewing and submissions and observations were invited from the Environmental Authorities, the Prescribed Bodies and interested parties from the 1st Oct - 29th Oct 2010. Following on from the public consultation, the submissions were compiled in a Manager's Report which identified the main issues in the submissions, a response to the issues raised and a recommendation to the Council as to the adoption of the variation *i.e.* Members of the Council at this stage decided on whether to formally vary the wind energy policy in the Cork County Development Plan 2009. It was at this stage of the process the Council decided to make the Variation, without any modifications.

2.1.5 Adopted Development Plan and SEA Statement

The Variation to the Cork County Development Plan 2009 was adopted and came into effect on the 13th December 2010. This SEA Statement has been prepared in accordance with section 13(I)(1) of the Planning and Development (Strategic Environmental Assessment) Regulations 2004 S.I. 436. The main purpose of the SEA Statement is to provide information on the decision-making process making the process more transparent. It must be made available to the public to accompany the adopted Variation to the Plan.



3 Consideration of Environmental Issues

3.1 Introduction

The SEA process is intended to improve the quality of plans in terms of sustainability and their potential impact on the environment.

The SEA process involved consultation with the public and prescribed environmental authorities (EPA, DoEHLG and DCENR).

The consultation and desktop review of documentation highlighted a number of key Environmental Protection Objectives relevant to the variation of the Development Plan. The Environmental Protection Objectives were distinct from the Development Plan 2009 objectives and provided a standard against which the Proposed Variation to the wind energy policy objective could be assessed in order to highlight if the Proposed Variation had the potential to adversely impact on the environment.

The Environmental Protection Objectives for the Variation to the Plan were selected from European, National and Regional Environmental Policy and Guidance. The scoping and public consultation processes for the Proposed Variation to the Development Plan and SEA (and Appropriate Assessment) informed the selection of appropriate objectives. The objectives are set out below, under the range of environmental aspects specified in the relevant SEA Regulations and in the DoEHLG and EPA guidelines.

3.2 Environmental Protection Objectives

The key Strategic Environmental Protection Objectives for the Variation to the 2009 County Development Plan are outlined in the sub-sections below in **Table 3.1**.

Table 3.1 Strategic Environmental Protection Objectives

Environmental Aspect	Strategic Environmental Protection Objective
Biodiversity, Flora & Fauna	B.1. Prevent damage to biodiversity, particularly EU designated sites and protected species.
Population & Human Health	P.1. Improve energy security.
Air & Climate	A.1. Reduce greenhouse gas/carbon emissions.
Landscape & Landuse	L.1. Minimise the landscape impact of new wind turbines and protect the character, diversity and special qualities of landscapes.



Environmental Aspect	Strategic Environmental Protection Objective
Material Assets	M.1. Promote sustainable energy infrastructure and practices.
Cultural Heritage, including Architectural and Archaeological Heritage	C.1 Protect the character, diversity and special qualities of cultural heritage, architectural and archaeological heritage.

3.3 Identification of Likely Significant Environmental Effects/Issues of Proposed Variation

The Environmental Protection Objectives provided the standards against which the Proposed Variation to the wind energy policy was assessed in terms of its environmental sustainability.

A compatibility matrix was used to assess the Proposed Variation to the wind energy policy objective against Strategic Environmental Protection Objectives, so that aspects of the Proposed Variation with the potential for significant adverse environmental impacts could be highlighted.

Biodiversity, Flora & Fauna

The key issue raised in relation to biodiversity is the potential impact of turbines in Ringaskiddy on the important populations of wintering waterbirds in Cork Harbour. The Proposed Variation to the Plan is likely to result in the construction of several windfarms within the existing industrial areas of Ringaskiddy. Two of the intertidal areas of the Cork Harbour SPA are located immediately adjacent to Ringaskiddy, with Monkstown Creek located to the north and Lough Beg to the south. Both of these areas are used by qualifying interest species such as cormorant, shelduck, oystercatcher, black-tailed godwit, curlew and redshank for feeding and roosting during the winter season.

Population & Human Health

Noise and/or shadow flicker effects of wind turbines may potentially occur and may have a negative impact on the local population close to the turbines.

A reduction in energy production costs and increase in energy security for current and prospective industry in Ringaskiddy will help secure employment in the Cork region. This is considered a key positive impact on the regional population and economy. A reduction in the use of fossil fuels will have a positive impact on the health of people living close to power plants.

Cork County Development Plan 2009

Variation No 2: Wind Energy

SEA Statement



Air & Climate

The industries in Ringaskiddy are high electricity consumers. The use of renewable energy sources will have a positive impact on the regional and national consumption of fossil fuels and carbon emissions.

Material Assets (Infrastructure)

There are no significant potential impacts on the material assets of the area.

Landscape & Land Use

While wind turbines may have a landscape impact on the Ringaskiddy and Cork Harbour, it is considered that the recognised industrialised characteristics of Ringaskiddy may be able to accommodate wind turbines. The potential impact is mainly determined by the size, scale and positioning of turbines. Therefore, it was considered that the best approach is to assess potential impacts on the landscape of Cork Harbour is to address the potential landscape impact at the project level.

Cultural Heritage, including Architectural and Archaeological Heritage

The recorded monuments, other archaeological features and architectural heritage structures in Ringaskiddy may be compromised by wind turbines. There are a number of these protected structures in the Ringaskiddy area. The inappropriate positioning of turbines would be considered a key likely impact on the cultural heritage of the area.

3.4 Mitigation Measures

Various mitigation measures were recommended and these were aimed at addressing the above impacts of the Proposed Variation. The key mitigation measures are outlined below:

General

- It is recommended by the EPA that for each energy development an Environmental Impact Assessment including visual impact assessment and an Appropriate Assessment be completed.
- Wind Energy Development Guidelines (DoEHLG 2006) should be adhered to on all projects.
- Compliance with relevant policies of the current Cork County Development Plan 2009-2015 and satisfy normal planning provisions as set out in the Wind Energy Development Guidelines (2006).

Biodiversity, Flora & Fauna

- A Habitats Directive Assessment (Appropriate Assessment) should be carried out, in accordance with the Department of the Environment Heritage and Local Government (DoEHLG) Appropriate Assessment Guidance for Planning Authorities, on all proposed wind energy developments at Ringaskiddy.

Cork County Development Plan 2009

Variation No 2: Wind Energy

SEA Statement



- A buffer zone between turbines and waterbird high tide roost sites or important intertidal feeding areas is required. The buffer zone distance should be based on current best practice, site conditions and advice from the NPWS.
- Wind farm layout design to be configured to ensure that wind turbines are not placed directly on important bird flight paths.

Cultural Heritage, including Architectural and Archaeological Heritage

- An archaeological, architectural and cultural heritage assessment should be conducted for all proposed wind energy developments. This assessment should identify all baseline archaeological and cultural heritage resources and recommend appropriate mitigation to address any likely significant effects.
- Recorded Monuments and any other archaeological features should be preserved in-situ or preserved by record.
- Where a proposed development includes a monument or site included in the Record Monument and Places within the landholding, it is recommended by the DEHLG that an archaeological assessment is commissioned to establish the extent of archaeological material associated within the monument or site. A buffer area with the monument shall be established to preserve the setting and visual amenity of the site.

Landscape & Land Use

- For each project a Landscape and Visual Impact Assessment (LVIA) should be conducted,
- Key landscape views to be considered are;
 - View from Scenic Routes recognised in the CCDP
 - Views from main population centres which overlook the proposed turbines *e.g.* Cobh
 - Seascape and coastscape view.

Material Assets

- An assessment of the impacts of the proposed wind energy development on electricity grid and communication networks to be conducted for each planning permission.
- As requested by the EPA, impacts associated with infrastructure such as construction of roadways, site investigations, power lines etc should be assessed for each project.

Amend Text of Variation

It is imperative that an Habitats Directive Assessment, in compliance with Article 6 of the EU Habitats Directive, is prepared for each proposed development at the planning application stage *i.e.* project level. As requested by the National Parks and Wildlife Service (NPWS) during the scoping process, the variation

Cork County Development Plan 2009

Variation No 2: Wind Energy

SEA Statement



was subsequently amended to include the line that all projects shall be "**subject to compliance with Article 6 of the EU Habitats Directive**".

This amendment to the Proposed Variation was included to ensure that there are no adverse effects of wind turbine development on the Cork Harbour SPA.



4 Summary and Responses to Submissions

This section of the SEA Statement provides a summary of the environmental issues raised in the submissions received during the statutory public consultation stage and the Managers response to these submissions.

Interested Party	Sub Ref	Summary of Issues Raised
Department of the Environment	2001	<p>This submission raised concerns that no appropriate assessment of the Proposed Variation has been carried out to date. It recommends that the Proposed Variation be screened for appropriate assessment.</p>
An Taisce	2002	<p>This submission proposed that strategically unsuitable areas include area of ecological sensitivity. The submission recommends additional text to be included in the variation (INF 7-1c) to refer to ecologically damaging energy transmitting infrastructure.</p> <p>The submission claimed that the additional text included as part of the variation conflicts with the objective to protect areas of recognised landscape sensitivity.</p> <p>An Taisce claimed in this submission that energy developments should not process in strategically unsuitable areas until there is sufficient understanding of the cumulative and long term ecological and hydrological environment.</p> <p>The submission also requested that areas such as Mullaghanish to Musheramore Mountains, Stacks to Mullaghanish Mountains, West Limerick Hills and Mount Eagle SPA, Killarney national Park, Macgillycuddy Reeks and the Caragh River be designated as strategically unsuitable areas.</p> <p>The submission also stated that the SEA report does not</p>

Cork County Development Plan 2009
 Variation No 2: Wind Energy
 SEA Statement



Interested Party	Sub Ref	Summary of Issues Raised
		address the capacity of Hen Harrier areas to accommodate large scale wind development projects.
Tadhg O'Mahony	2003	<p>This submission highlighted a number of concerns specifically in relation to the environmental report that need to be further addressed. These include;</p> <p>The alternatives provided in Chapter 5 of the Environmental Report need further development.</p> <p>It is not clear how the Proposed Variation can be justified on environmental grounds, particularly in the context of the previous strategic wind energy assessment, which would appear to have precluded the Ringaskiddy area from classification as an area suitable for large scale wind energy development</p> <p>The preferred option as assessed in Table 8.1 would appear to contain more significant negative environmental effects than positive effects.</p> <p>Further clarification is sought on how the Proposed Variation has taken into account the "Precautionary Principle" and "In-combination Effects" in the context of the likely effects on Natura 2000 sites within the zone of influence of the Proposed Variation.</p> <p>Consideration should be given to inclusion of a requirement to carry out a visual impact assessment in addition to EIA and AA screening for proposed wind energy developments.</p> <p>Consideration should be given to the establishment of a County Wind Energy / Renewable Energy Strategy.</p>

Cork County Development Plan 2009

Variation No 2: Wind Energy

SEA Statement



Interested Party	Sub Ref	Summary of Issues Raised
		<p>Cork County Council should consider inclusion of a general objective to ensure the preparation and implementation of an Environmental Management Plan/System.</p> <p>The submission suggests that it is a matter for Cork County Council to determine whether the implementation of future Proposed Amendments/ Variations would be likely to have significant effects on the environment.</p>
National Roads Authority	2004	The NRA have no comments to make on the Proposed Variation
Department of Communications, Energy and Natural Resources Mining Division	2005	The DCENR Exploration and Mining Division, has no comments to make on the Proposed Variation.
Department of Communications, Energy and Natural Resources	2006	The DCENR has no comment to make on the Proposed Variation.

The Managers responses to the above submission are tabled below.

<p>Issue 1: When will the Proposed Variation be screened for Appropriate Assessment?</p> <p><i>Submissions received relevant to this issue: 2001</i></p>
<p>Managers Response:</p> <p>The variation has already been screened for Appropriate Assessment. No further action is necessary.</p>
<p>Issue 2: Should the Proposed Variation give greater consideration to the ecologically damaging consequences of energy transmitting infrastructure?</p> <p><i>Submissions received relevant to this issue: 2002</i></p>
<p>Managers Response</p> <p>The Proposed Variation does not concern energy transmitting infrastructure which is addressed in objective INF 7-5 of the Cork County Development Plan 2009. No further action is necessary.</p>



Issue 3: Does the variation adequately protect areas of landscape sensitivity?

Submissions received relevant to this issue: 2002

Managers Response

The effect of the Proposed Variation is not to create a presumption in favour of wind energy projects in Strategic Industrial Areas but instead to allow proposals to be considered on their merits. Landscape impact is an issue that will be considered at the project stage. No further action is necessary.

Issue 4: Should a more detailed analysis of the ecological and hydrological environment of strategically unsuitable areas be undertaken prior to permitting wind energy related developments in such areas?

Submissions received relevant to this issue: 2002

Managers Response

A Strategic Environmental Assessment and Appropriate Assessment have been prepared in relation to this variation. No further action is necessary.

Issue 5: Can additional areas be designated as strategically unsuitable areas for wind energy related developments?

Submissions received relevant to this issue: 2002

Managers Response

This issue was not considered as part of the Proposed Variation. No further action is necessary.

Issue 6: How will the SEA Report address the capacity of hen harrier areas to accommodate large scale wind development projects?

Submissions received relevant to this issue: 2002

Managers Response

There are no known hen harrier habitats within the strategic industrial areas identified affected by this variation. No further action is necessary.

Issue 7: Will the scenarios in the Environmental Report be further developed, given the preferred scenario appears to have more significant negative environmental effects that positive effects?

Submissions received relevant to this issue: 2003

Managers Response

The scenarios in the Environmental Report will not be further considered. No further action is necessary.

Issue 8: How are the recommendations of this environment report justified given previous environmental assessments have precluded Ringaskiddy as an area suitable for large scale wind energy development?

Submissions received relevant to this issue: 2003



Managers Response

The effect of this variation is to allow these environmental issues to be considered at the project level within Strategic Industrial Areas. No further action is necessary.

Issue 9: Should additional text be included in the variation to require a visual impact assessment to be carried out for proposed wind energy developments?

Submissions received relevant to this issue: 2003

Managers Response

Where appropriate, this is likely to be a requirement of any planning application. No further action is necessary.

Issue 10: Should consideration be given to the preparation of a County Wind energy/ renewable energy strategy?

Submissions received relevant to this issue: 2003

Managers Response

The wind energy strategy for the County is set out in the Cork County Development Plan 2009. Any issues arising can be considered when that plan is reviewed. No further action is necessary.

Issue 11: Should consideration be given to the preparation of an Environmental Plan?

Submissions received relevant to this issue: 2003

Managers Response

Through the Strategic Environmental Assessment process, the environmental effects of implementing any statutory plan are given separate consideration. No further action is necessary.

Issue 12: Has the Council adequately considered whether the implementation of future Proposed Amendments/ Variations would be likely to have significant effects on the environment?

Submissions received relevant to this issue: 2003

Managers Response

The environmental report addresses this issue. No further action is necessary.



5 Reasons for choosing the Adopted Variation

This section explains the reasons for adopting the final form of the variation and the reasons for adopting it in its final form.

It will briefly outline the main alternatives considered, including how they were assessed and why the preferred option was selected. The SEA Directive requires the selection and assessment of alternatives. Article 5 requires the Environmental Report to consider "*reasonable alternatives taking into account the objectives and geographical scope of the plan or programme*". The guidelines state that the significant environmental effects of the alternatives selected also need to be considered.

5.1 Alternatives Considered

The consideration of alternatives is an important part of the SEA process. The aim of the consideration of alternatives is to look at differing ways to achieve a stated objective or intention.

Two alternative strategies were considered:

1. Do Nothing Scenario;
2. The Proposed Variation.

5.1.1 Do Nothing Scenario

The 'do nothing scenario' would result in Ringaskiddy remaining designated as a 'Strategically Unsuitable Areas' for wind energy proposals. Based on the wind energy policy of the Cork County Development Plan it would not be possible to develop large wind energy infrastructure in the area. This will result in an incompatibility with other objectives of the Plan, particularly as the designation of Ringaskiddy as an area suitable for large scale industrial development, as presented in Objective ECON 3-2. This could have long term consequences for Ringaskiddy as a major employer for the Cork region due to inflexibility in allowing local industry to develop wind energy infrastructure.

At present the main land use in Ringaskiddy is a mixture of industry/commercial enterprises and agriculture. The main concentration of industrial activity is along the coastline. However, the majority of the other parts of Ringaskiddy are zoned for industry/enterprise which are at the moment agricultural lands. Even without the inclusion of wind energy, it is likely that Ringaskiddy will develop further as an industrial zone, although at a potentially compromised state.

Cork County Development Plan 2009

Variation No 2: Wind Energy

SEA Statement



5.1.2 The Proposed Variation

The Proposed Variation would involve changing the Cork County Development Plan to enable wind power proposals located within the areas identified as suitable locations for large scale industrial development in Objective ECON 3-2 of the Cork County Development Plan 2009, which Ringaskiddy is part of, to be considered on their merits.

5.1.3 Conclusion

Each alternative was assessed against environmental aspects using assessment criteria (see Section 5.2 of SEA Environmental Report).

It was concluded that the do nothing scenario will not allow large wind energy projects to occur in the industrial areas of Ringaskiddy and will not contribute to Ireland's obligations under the Renewable Energy Directive (2009/28/EC) that by 2020, Member States will generate 20% of their energy from renewable sources. The do nothing scenario will also not help contribute towards reducing greenhouse gas emissions and combating Climate Change. Hence, this scenario was not recommended.

Therefore, the Proposed Variation to the Plan, to remove the classification of Ringaskiddy as a 'Strategically Unsuitable Area', was chosen as the preferred strategy. The variation to the Plan will help Ireland comply with the UN Kyoto protocol and other Climate Change policies and also the Renewable Energy Directive (2009/28/EC) that states that Member States must generate 20% of their energy from renewable sources by 2020.



6 Mitigation Measures

In addition to the specific mitigation measures for each environmental aspect as outlined in **Section 3.4**, any proposals in relation to the development of wind energy at Ringaskiddy would have to demonstrate compliance with relevant policies of the Cork County Development Plan 2009-2015 and also satisfy normal planning provisions as set out in the Wind Energy Development Guidelines (2006).



7 Monitoring Measures

Article 10 of the SEA Directive requires that monitoring should be carried out in order to identify at an early stage any unforeseen adverse effects due to implementation of the Plan, and to be able to take remedial action. Monitoring is carried out by reporting on a set of indicators, which enable positive and negative impacts on the environment to be measured. They have been developed to show changes that would be attributable to implementation of the Plan. These indicators will be refined and included in the SEA Statement as part of the monitoring programme.

Monitoring is often based on indicators which measure changes in the environment, especially changes which are critical in terms of environmental quality. Indicators aim at simplifying complex inter-relationships and providing information about environmental issues which are relatively easy to understand. They provide a means of measuring the progress towards achieving the environmental objective over time.

A number of targets have been proposed for each objective and these refer to the desirable state in relation to each objective in quantifiable terms.

The following indicators and targets are proposed as part of this SEA process, to monitor the effects on the environment of implementing the Variation to the Plan. As measurements for indicators should come from existing monitoring sources and no new monitoring should be required to take place, all monitoring sources are maintained by Cork County Council and relevant authorities *e.g.* EPA, NPWS.

Table 7.1 overleaf outlines the selected indicators, targets and monitoring sources with regard to relevant environmental aspects.

Cork County Development Plan 2009

Variation No 2: Wind Energy

SEA Statement



Table 7.1: Indicators, targets and monitoring sources for each environmental aspect

Environmental Aspect	Environmental Protection Objectives	Targets	Indicators	Indicators information Source
Biodiversity, Flora & Fauna	B.1 Prevent damage to biodiversity, particularly EU designated sites and protected species.	No loss of protected species.	Results from winter bird monitoring surveys completed to comply with planning permission conditions.	Monitoring survey data from permitted developments.
Population & Human Health	P.1 Improve energy security.	Increase in percentage of wind energy utilised by industry in Ringaskiddy.	Number of wind energy planning permission granted.	Cork County Council.
Air & Climate	A.1 Reduce greenhouse gas/carbon emissions.	Increase number of permissions granted for renewable energy projects.	Number of wind energy planning permission granted.	Cork County Council.
Landscape & Landuse	L.1 Minimise the landscape impact of new wind turbines and protect the character, diversity and special qualities of landscapes.	To control wind energy developments to avoid possible adverse impacts upon designated scenic routes or scenic landscape.	Results from landscape impact assessments which have been carried out to look at the cumulative impacts of permitted developments.	Cork County Council.



Environmental Aspect	Environmental Protection Objectives	Targets	Indicators	Indicators information Source
Cultural Heritage, including Architectural and Archaeological Heritage	C.1 Protect the character, diversity and special qualities of cultural heritage, architectural and archaeological heritage	No adverse impacts on the cultural heritage landscape.	Results from cultural heritage/landscape impact assessments which have been carried out to look at the cumulative impacts of permitted developments.	Assessment data from permitted developments. Cork County Council.

The Strategic Environmental Assessment carried out during the preparation of the Variation to the Plan has ensured that any potential significant environmental impacts of the variation to the Plan are identified and that they have been given appropriate consideration.

Throughout the preparation of the Development Plan and the Environmental Report consultation has taken place which has contributed to the final Adopted Varied Plan.

8 Conclusion from Managers Report

Because of their potential for environmental effects, large scale wind energy projects raise significant planning issues. However, when allied to large scale industrial projects, they also have the potential to bring significant environmental benefits through the increased use of renewable energy sources.

The purpose of this Variation is to revise the County Development Plan policy framework, which is currently predisposed against large scale projects in certain Strategic Industrial Areas, so that their advantages and disadvantages can be assessed at the project level.