
Report To: Safe, Sustainable Communities Committee **Date: 9 March 2010**

**Report By: Corporate Director, Environment and
Community Protection**

**Report No:
ECP/Plann/MP10/011**

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**Subject: Inverclyde Local Plan 2005: Interim Supplementary Planning Guidance
for Wind Farms**

1.0 PURPOSE

- 1.1 To inform Committee on the outcome of the targeted consultation on the proposed Supplementary Planning Guidance (SPG) for wind farms developments, and to seek approval of the amendments made for the Finalised Interim SPG.

2.0 SUMMARY

- 2.1 A draft SPG for wind farms was prepared to provide interim planning guidance for use alongside the adopted Local Plan until a full review is carried out as part of the new Local Development Plan. This draft SPG was reported to Committee in September 2009 and approval was obtained to carry out targeted consultation with key stakeholders and relevant community groups.

**Min Ref.
01/09/09;
para 511**

- 2.2 The consultation was carried out between September and November 2009 and 11 written representations were received. All of these have been addressed and amendments made, where appropriate, to produce the Finalised SPG.

- 2.3 It is now proposed that the Finalised SPG be adopted by the Council as interim planning policy guidance to augment Policy UT6 in the adopted Local Plan, until the preparation of the Local Development Plan affords the opportunity to incorporate this updated guidance in the Plan, or alternatively produced as statutory SPG, under The Planning etc. (Scotland) Act 2006. The Finalised SPG for Wind Farms is attached as Annex 1.

Annex 1

3.0 RECOMMENDATIONS

- 3.1 That Committee:

- a) note the responses received on the draft SPG and endorse the amendments made for the Finalised Interim SPG; and
- b) approve the Finalised Interim SPG for Wind Farms for use alongside the adopted Inverclyde Local Plan 2005.

4.0 BACKGROUND

- 4.1 In September 2007, the Scottish Government issued instructions that Supplementary Planning Guidance (SPG) was to be prepared by planning authorities to address the location of strategic wind farms (over 20MW) to meet the urgent need for up-to-date planning policies and spatial frameworks against which to consider development proposals and planning applications. **Min Refs. 27/10/07, para 682; 06/03/08, para 175**
- 4.2 The Planning etc (Scotland) Act 2006 came fully into force in February 2009 in terms of Development Plans, providing the opportunity to incorporate SPG into the preparation of the Local Development Plan (LDP) and take it through the full consultation process to become a statutory document. However, the LDP is unlikely to be adopted until 2014 which would leave Inverclyde without the required SPG for wind farms for over 4 years which would be unacceptable. **Min Ref. 10/03/09; para 182**
- 4.3 The draft non-statutory interim SPG for wind farms was, therefore, produced and endorsed at Committee in September 2009 to go out for targeted consultation with key stakeholders and relevant community groups. **Min Ref. 01/09/09; para 511**

Consultation Responses and Proposed Amendments

- 4.4 The consultation was carried out between 3 September and 2 November 2009. A letter explaining the purpose of the SPG and inviting comments was sent out with a copy of the draft SPG to 16 public bodies/organisations including Scottish Natural Heritage (SNH), Scottish Environment Protection Agency (SEPA) and Clyde Muirshiel Regional Park. Ten Community Councils were consulted and 3 major landowners, namely Ardgowan, Finlaystone and Duchal Estates. The SPG was also made available through the Council website where a short article was deposited on the Planning page.
- 4.5 Eleven representations were received in total. Of those contacted directly, eight responded. The remainder of responses came from consultants who had become aware of the draft SPG and chose to comment. It was hoped that more representations would have been received but the letter did state that if they did not comment by the closing date it would be assumed that they were content with the SPG. It is assumed, therefore, that they were. The representations received on the consultative draft SPG and the Council's responses are in Annex 2, attached to this report. **Annex 2**
- 4.6 Of the targeted consultees, the majority that responded were satisfied with the content of the SPG and requested only minor changes to the wording or diagrams to ensure greater accuracy and clarity. All of these requests were complied with. SEPA requested that content was added to both the wording and the diagrams concerning the requirement to protect the water environment. This has been implemented as it was acknowledged that this had been omitted from the draft SPG.
- 4.7 Other comments requesting more radical amendments to the SPG were also received. These came from consultants who were not part of the targeted consultation and represent the interests of wind energy companies or major landowners. As well as a number of minor amendments, their representations related to:
- The lack of a landscape capacity study
 - 'Areas of less constraint' rather than 'broad areas of search'
 - Interpretation of planning policy and guidance
 - The proposed wording of the new Policy UT6A.

Landscape Capacity Study

- 4.8 The absence of a landscape capacity study on which to base the content of the SPG is not something that can be overcome at this point in time due to limited resources. The lack of such a study is stated in the document as has the non-statutory interim basis of the SPG, to ensure the status of the planning policy guidance is clear.

'Areas of less constraint'

- 4.9 It was also suggested that as no landscape study had been carried out 'areas of less constraint' rather than the term 'broad areas of search' as used in Scottish Planning Policy 6 (SPP6) and Planning Advice Note 45 (PAN45) Annex 2, should be used to describe those areas where fewer constraints and designations of lesser importance might allow for the consideration of wind farm development. The term 'broad areas of search' is, however, retained in preference to 'areas of less constraint', which is considered to be too permissive. It is though made clear that these areas are identified solely on the basis of the desk exercise mapping all the constraints and designations to provide full coverage of these across the authority.

Interpretation of planning policy and guidance

- 4.10 Relevant sections of the national planning policy documents on renewable energy, wind farms and natural heritage have been expanded upon throughout the Finalised SPG to assist with clarification, as requested in the representations and to assist with the wording of new Policy UT6A.

New Policy UT6A

- 4.11 The wording of the new proposed Policy UT6 has been altered in the Finalised SPG to:
- remove terms which are difficult to quantify such as 'significant' and 'community';
 - add categories previously omitted such as 'biodiversity'; and
 - expand upon criteria for proposed development within natural heritage designations.

- 4.12 The finalised version of the Interim SPG for Wind Farms is attached as Annex 1 with the proposed modifications made, after consideration of the responses while the attached diagrams 1, 4, 6 and 7, are those that have been altered from the Consultative Draft SPG to take account of the representations received and amendments made.

Annex 1

5.0 PROPOSALS

- 5.1 Having taken into account the targeted and independent representations on the SPG and amended it where required and appropriate, it is now proposed to adopt as interim planning policy guidance the Finalised SPG for Wind Farms, until policy guidance can be incorporated in the new Local Development Plan, or alternatively, produced as statutory SPG. All the targeted consultees will be notified of this as will all other parties who submitted representations.

6.0 IMPLICATIONS

- 6.1 **Legal:** there are no direct legal implications arising from this report.
- 6.2 **Finance:** there are no financial implications arising from this report.

Financial implications – one-off costs

Cost Centre	Budget Heading	Budget Year	Proposed Spend this Report	Virement From	Other Comments
n/a	n/a	n/a	n/a	n/a	n/a

Financial implications – annually recurring costs/(savings)

Cost Centre	Budget Heading	Budget Year	Proposed Spend this Report	Virement From	Other Comments
n/a	n/a	n/a	n/a	n/a	n/a

6.3 **Personnel:** there are no personnel implications arising from this report.

6.4 **Equalities:** there are no implications arising from this report for the Council's Equalities Policy.

7.0 CONSULTATION

7.1 There have been no specific requirements for the Chief Financial Officer, the Head of Legal and Administrative Services or the Head of Organisational Development and Human Resources to make comment on this report.

8.0 CONCLUSIONS

8.1 The production of this Finalised SPG for Wind Farms will provide interim planning policy and guidance to augment the existing adopted Inverclyde Local Plan to assist in determining wind farm development proposals and planning applications, until the new Local Development Plan provides the opportunity to incorporate the SPG in the Plan, or produced as separate statutory SPG.

9.0 BACKGROUND PAPERS

- 9.1
- (1) Scottish Planning Policy 6 – 'Renewable Energy' 2007
 - (2) Planning Advice Note 45 Annex 2 – 'Spatial Frameworks and Supplementary Planning Guidance for Wind Farms' 2008
 - (3) Inverclyde Local Plan 2005, chapters 9 and 11
 - (4) Scottish Planning Policy - 2010

ATTACHMENTS

Annex 1 – Interim Supplementary Planning Guidance for Wind Farms
(for Inverclyde Local Plan 2005)
- including revised Diagrams – 1, 4 and 7, and new Diagram 6

Annex 2 – Summary of Consultation Responses and Council Amendments

Head of Planning and Housing
Cathcart House
6 Cathcart Square
Greenock

12 February 2010

SSC Cmtee SPG on Wind Farms (March 2010)

Annex 1

INTERIM SUPPLEMENTARY PLANNING GUIDANCE FOR WIND FARMS

PURPOSE OF THE SUPPLEMENTARY PLANNING GUIDANCE (SPG)

- To provide a non-statutory interim basis for decision making on wind farm applications until the Local Development Plan is prepared;
- To assist in the preparation of observations on applications to be determined by the Scottish Government (over 50 MW); and
- To set out policies to assist in planning for wind farm developments; and

CLARIFICATION

This document will provide interim guidance to supplement the existing Local Plan policy.

It brings together a spatial framework of the designations and constraints that would come into consideration when determining an application for a wind farm development.

As no landscape capacity study for wind farms has been carried out in Inverclyde, the landscape and visual impact of any proposed development would be considered on a case by case basis from the information included in a developer's Environmental Impact Assessment and/or Appropriate Assessment.

WHO THE GUIDANCE IS AIMED AT

- Developers/Professionals considering new projects;
- Communities/Interest Groups considering the impact of a proposed wind farm; and
- Local authority Councillors and Officers considering planning applications.

INTRODUCTION

Over the last 100 years, the amount of carbon dioxide in the atmosphere has been rapidly increasing due to the burning of fossil fuels such as coal and oil. Scientists believe that this change in levels of CO₂ in the atmosphere is responsible for climate change.

There is concern that the increase in natural disasters across the world is linked to climate change and unless the way energy is generated is changed the

problem may get worse, affecting the global economy and endangering lives in years to come.

In 2007 Inverclyde Council became a signatory of Scotland's Climate Change Declaration committing to a reduction in greenhouse gas emissions. This can be achieved through the reduction in energy consumption by means of better insulation in properties and through greater energy efficiency. Long-term, however, the solution depends on a move away from dependence on fossil fuels to renewable sources of energy which would also include the use of bio diesel, bio ethanol and other replacements for fossil derived transport fuels.

Renewable energy is generated from natural resources such as the sun, wind and water which are inexhaustible, but also includes energy from replenishable resources such as waste and biomass. Wind energy is the most well developed of the renewable resources and is the focus of this guidance.

CONTEXT

There is a commitment at UK and Scottish level to reduce greenhouse gas emissions. Scottish Government's target of 18% of electricity being generated from renewable sources by 2010 has been met resulting in new targets of 31% being set for 2011 (around 5GW installed capacity) and 50% by 2020.

The Climate Change (Scotland) Act 2009 sets key targets of an 80% reduction in greenhouse gas emissions by 2050 with an interim target of a 42% reduction by 2020 and driven by annual targets which can be set and revised by Ministers.

The UK Renewable Energy Strategy 2009 sets a target of 15% of energy from renewables by 2020 which could comprise over 30% of electricity, 12% of heat and 10% of transport energy.

The consultative Scottish Planning Policy - Proposed Policy Changes 2009 identifies that achieving these targets will require co-ordinated action and commitment to adapting the built environment to reduce resources and energy requirements.

As yet these targets have not been taken down to local authority level but planning authorities are still required to deliver policies to encourage renewable energy developments through the development plan process. This, however, has to be done whilst taking into account all statutory obligations, technical considerations such as aviation safety, the views of those living in or using the area for recreational and tourism purposes and the impact any development would have on the landscapes and natural heritage.

Applications for wind farm developments are determined by the Scottish Government under Section 36 of the Electricity Act 1989 where there is an output of over 50 Mega Watts (MW) while the planning authority is responsible for

determining applications which are below a generating capacity of 50MW in accordance with the development plan.

Inverclyde has a string of settlements squeezed between the Firth of Clyde and the Green Belt. Inland there are two further villages surrounded by Green Belt which extends towards Countryside to the south. The land is rural - made up of farmland, hills and moors - and a large part of which is contained within the Clyde Muirshiel Regional Park. Both in the Park and beyond there are a number of international, national, regional and local natural heritage designations.

WIND ENERGY

The technology related to the generation of electricity from wind is well established and is anticipated as the renewable energy option most likely to be adopted whether on a domestic, community or commercial scale.

The most common type of wind turbines operate with rotor blades on a vertical plane, extending from the hub attached to the nacelle which houses a generator and is located at the top of a tower. These can be installed as domestic units for individual buildings, with a number of small scale turbines servicing a local area or on a commercial level in the form of wind farms.

Within Inverclyde applications have been made to date for 3 individual turbines at a local high school, Inverclyde Royal Hospital and a light industrial unit and 2 wind farm developments within the Green Belt. All of the individual turbines were approved and 2 have subsequently been installed. The application for 10 x 3MW 125m high turbines at Leapmoor Forest was withdrawn in May 2009. The application at Corlic Hill for 22 x 2.5MW 100m high turbines was determined under the Electricity Act refused, appealed and refused after a Public Local Inquiry. Both of these developments would have provided over 20MW and would therefore have been classified as strategic.

Despite the positive aspects of renewable energy from wind turbines, they can have some negative impacts which have to be addressed when determining planning applications. These include:

- landscape and visual impact;
- impact on the natural heritage and historic environment;
- effect on the local and national economy and tourism and recreation interests;
- disbenefits for communities;
- aviation and telecommunications;
- noise and shadow flicker; and
- cumulative impact

Visual impact is particularly significant. Any potential for visual distraction should be minimised. This is also so in relation to the impact of turbines on the wider landscape. The greater the height of a turbine, the wider area it will have an

impact upon, depending on topography and other features which may limit its visibility. This is particularly important the closer viewers are to the turbine as impact diminishes as the distance increases. A clear view from distance will appreciably reduce the temptation of road users to turn when passing the turbines. A Landscape and Visual Impact Assessment (LVIA) would be required to accompany proposals to assess their impact.

NATIONAL PLANNING CONTEXT

Scottish Planning Policy 6 (SPP6) - Renewable Energy (2007) favours a positive approach to renewable energy by planning authorities, instructing them to create policies to direct wind energy developments to the most appropriate locations. They are expected to ensure the environmental, economic and social benefits of renewable energy are afforded to the local community. At the same time the interests of the natural and built environment must be protected, through the international and national statutory designations, as well as those of the community, recreation and tourism and, where significant, aviation interests.

When determining suitable locations broad areas of search can be identified by taking account of all these factors. This, however, does not rule out the consideration of wind energy developments outside such an area if they meet the criteria clearly laid out by the planning authority.

Planning Advice Note 45 (PAN45) Renewable Energy Technologies (2002) supports the policies of SPP6 by providing detailed information and advice on best practice for renewable energy technologies.

PAN 45 Annex 1 Planning for Micro-renewables (2006) deals with the design, siting and permitted development rights of micro (small scale) renewable energy developments.

PAN 45 Annex 2 Spatial Frameworks and Supplementary Planning Guidance for Wind Farms (2008) provides planning authorities with guidance on the preparation of Supplementary Planning Guidance (SPG), such as this document, for strategic wind farms. In particular it focuses on the preparation of a spatial framework to identify a broad area of search in which strategic wind farms might be located.

PAN 51 Planning, Environmental Protection and Regulation (2006), The Water Framework Directive Scotland 2009, the River Basin Management Plan 2009 and the Clyde Area Management Plan 2009-2015 provide guidance on the issues related to the protection of the water environment in the Inverclyde area.

DEVELOPMENT PLAN POLICY

The development plan for Inverclyde comprises 2 parts. Strategic policy is set out in the Glasgow and the Clyde Valley Structure Plan (2006) while detailed policies

and proposals are laid out in the Inverclyde Local Plan (2005). In terms of wind farms, applications are deemed to be strategic when over 20MW.

Structure Plan policy comprises Strategic Policies 8, 9B (iv) and 10A (v) and 10B (iii) (a).

Strategic Policy 8

Sustainable Development of Natural Resources

The Metropolitan Development Strategy supports developments which satisfy the following criteria:

- (a) have regard to the relative sensitivities for further afforestation indicated on **Diagram 21** and the Glasgow and the Clyde Valley Forestry and Woodland Framework;
- (b) are in the Potential Areas of search for significant windfarm developments indicated on **Diagram 22**;
- (c) extend the supply of minerals at existing operational sites or in the locations identified in local plans in the search areas identified in **Diagram 23** and **Schedule 8**; and
- (d) safeguard and enhance the Strategic Environmental Resources, **Schedule 7**.

In order to accord with the Structure Plan, development proposals will require to satisfy the following criteria.

Any proposal which fails to meet these criteria will be regarded as a departure from the development plan and will be required to be justified against the criteria in **Strategic Policy 10**.

These criteria are complementary, and the fulfilment of one criterion does not over-ride the need to satisfy the others.

A That the case for any development which exceeds the thresholds set out in Schedule 9 has been established in the terms of:

- (i) the ten-year marketable land supply for industrial and business development;
- (ii) the assessment of housing proposals (except on urban brownfield sites) against the demand and effective supply of owner occupied housing land in the relevant housing market area, **Schedule 6(b)(i)**, and planned programmed output in the appropriate Sub-market or Housing Market Areas in **Schedule 6(b)(ii)**; or
- (iii) a requirement identified in a local plan (**Schedule 6(b)(iii)**) for affordable housing as defined and categorised in **PAN 74**; or
- (iv) the criteria set out in **Schedule 6(c)(i)** and the requirements identified in **Schedule 6(c)(iv)**; or
- (v) the assessment of aggregate mineral extraction proposals (except extensions to existing workings) against the ten-year supply and demand within the Structure Plan Area; or
- (vi) its relationship to the requirements for waste management facilities set out in the **Glasgow and Clyde Valley Area Waste Plan**.

B That the location of the development is appropriate in terms of the need to:

- (i) safeguard and avoid the diversion or displacement of investment from the development locations identified in **Strategic Policies 1, 5, 6 and 8**;
- (ii) promote Urban Regeneration by:
 - (a) giving preference to the use of brownfield urban land rather than greenfield land or open space;
 - (b) safeguarding the Glasgow and Clyde Valley Green Belt, **Strategic Policy 1**;
- (iii) safeguard and promote the vitality and viability of town centres identified in **Schedule 1(a)** by:
 - (a) locating major office development within or adjoining the Strategic Business Centres identified in **Schedule 5(a)**;
 - (b) taking a sequential approach to proposals for retail, office (Class 2), cultural and leisure development as set out in **Schedule 6(c)(ii)**;
 - (iv) safeguard the environmental resources listed in **Schedule 7** or identified in local plans (including regard to landscape character and quality);
 - (v) avoid isolated and sporadic development in the Green Belt and the wider countryside;
 - (vi) promote Sustainable Transport by:
 - (a) the application of the Hierarchy of Accessibility as set out in **Schedule 3(a)(i)**;
 - (b) the application of criteria for sustainable locational choices as set out in **Schedule 3(a)(ii)**;
 - (c) the safeguarding of the routes for Strategic Transport Network development proposals (**Schedule 4**);
 - (vii) implement the waste management hierarchy as defined in the **National Waste Strategy** and priorities identified in the **Area Waste Plan**;

- (viii) avoid the risk of flooding from all sources throughout the relevant water and drainage catchment area and safeguard the storage capacity of the functional flood plain;
 - (ix) avoid negative impact upon Health and Safety;
 - (x) contribute to the implementation of the Air Quality Strategy.
- C That appropriate provision has been made by the developer for:**
- (i) the infrastructure or facilities required to make the development acceptable;
 - (ii) the implementation of appropriate transport measures for the minimisation and management of the future levels of traffic generated, including Green Transport Plans;
 - (iii) remedial environmental action and maintenance of related greenspaces;
 - (iv) the provision of sustainable urban drainage systems in accord with the relevant drainage strategy or assessment;
 - (v) the provision of ICT network connections;
 - (vi) arrangements for the maintenance of measures required under Criteria **C(i)** to **C(iv)** above;
 - (vii) the excavation and recording of archaeological sites where preservation cannot be achieved;
 - (viii) the requirements in the approved master plans for the Community Growth Areas set out in **paragraph 8.14**; and
 - (ix) energy conservation in the layout and design of buildings.

Any proposal which fails to meet the relevant criteria in Strategic Policy 9 will be regarded as a departure from the Development Plan and consideration shall require to be given to the appropriateness of the development having regard to the following criteria:

A The justification for the development in terms of:

- (i) an updated assessment agreed by the Joint Committee of the supply and demand estimates used in the Plan;
- (ii) clear evidence of a shortfall in the existing and planned supply of land for:
 - industrial, business or aggregate mineral development within the Structure Plan area;
 - housing development within the appropriate Market Area; taking account of the need to provide for choice in terms of size and type of housing, or
 - retail development within the appropriate Retail Catchment Area;
- (iii) requirements for affordable (including social rented housing) identified in a Strategic Housing Agreements or Local Housing Strategy;
- (iv) the contribution the development would make to remedying any qualitative deficiencies in existing retail provision; or
- (v) specific locational need.

B The following criteria:

- (i) **Economic Benefit**
 - (a) the need to accommodate inward investment for industrial or business development that would otherwise be lost to the Structure Plan area or to Scotland;
 - (b) the protection of existing jobs or the creation of a significant number of net additional permanent jobs to the Structure Plan area;
- (ii) **Social Benefit**
 - (a) assisting the urban renewal or rural regeneration of the Priority Areas identified in **Schedule 1(b)** and **1(d)**;
 - (b) supporting or enhancing community facilities;
 - (c) the capacity of the settlement and surrounding area to absorb further development;
- (iii) **Environmental Benefit**
 - (a) the protection and enhancement of environmental resources identified in **Schedule 7** or local plans;
 - (b) the significant restoration of vacant or derelict land for environmental purposes;
 - (c) improvement of air and water quality.

Technical Report TR8/06 – Renewable Wind Energy in Glasgow and the Clyde Valley identified Potential Areas for wind farms, none of which are within Inverclyde as Diagram 22 from the approved Glasgow and the Clyde Valley Structure Plan indicates.

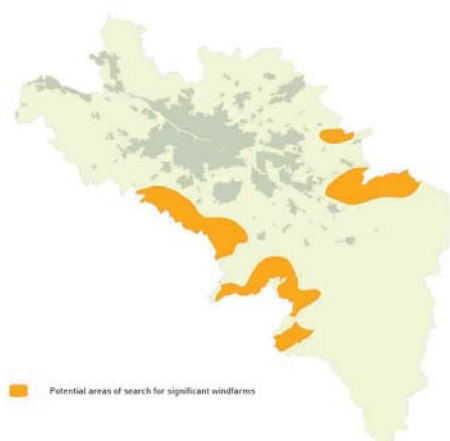


Diagram 22 Renewable Energy

In light of the approach to identifying broad areas of search required by SPP6, a review of the Technical Report, has been prepared in draft form and was the subject of consultation in October/November 2009 as part of the preparation of the Main Issues Report for the Glasgow and the Clyde Valley Strategic Development Plan, which will commence in March 2009. In this Spatial

Framework for Wind Farms Issues Report, there are no broad areas of search identified in Inverclyde.

Local Plan policy comprises Local Plan Policy UT6

Policy UT6 Renewable Energy Infrastructure

In assessing proposals for renewable energy infrastructure, Inverclyde Council, as Planning Authority, will have regard to the impact on:

- (a) the natural environment and built heritage of the locality;*
- (b) the landscape, particularly when viewed from major transport corridors;*
- (c) residential amenity;*
- (d) tourism and leisure resources, particularly if within the Clyde Muirshiel Regional Park;*
and
- (e) the operation of aircraft and telecommunications equipment.*

This policy provides criteria against which wind farm proposals can be assessed but requires to be updated and expanded upon. This will be done through the SPG until the Local Development Plan is prepared. The time scale for this will be in tandem with the preparation of the Glasgow and Clyde Valley Strategic Development Plan.

In the case of both the Structure Plan and the Local Plan, the policies relating to renewable energy do not stand alone. The planning authority must find a balance between policy aims promoting new technologies and those which are in place to meet national guidance on other areas such as those relating to the natural environment which may appear to be in conflict.

IDENTIFYING A BROAD AREA OF SEARCH FOR WIND FARMS

SPP6 Annex A, dealing with wind farms over 20MW states that *'development plan policies should be based on the principle that wind farms should be accommodated where technology can operate efficiently and environmental and cumulative impacts can be addressed satisfactorily.'*

Broad areas of search are areas where proposals are likely to be supported subject to specific matters addressing all other material considerations. These can guide developers on acceptable locations for wind farms, without ruling out other areas outside them that could still be considered in the context of specific applications.

Three stages have been completed in the identification of broad areas of search:

1. Identifying areas which will be afforded significant protection

These are areas that would have the original reason for their designation unacceptably compromised by the location of a wind farm and include areas with international and national natural heritage designations, Green Belts and areas where limits of cumulative impact have been reached.

International and national natural heritage designations

Inverclyde has one on-shore internationally designated Natura 2000 Special Protection Area (SPA) and 7 nationally designated Sites of Special Scientific Interest (SSSI) covering a combined area of 831 hectares. (See Diagram 1).

NPPG14 Natural Heritage 1999 states that any development which would have an adverse effect on a Natura 2000 site would only be permitted where:

- there is no alternative solution; and
- there are imperative reasons of over-riding public interest, including those of a social or economic nature.

For wind farm proposals which are likely to have a significant effect on a Natura 2000 site, Pan 45 Annex 2 states that an Appropriate Assessment must be undertaken to assess the implications for the conservation interests of the site.

Development that would affect a designated area of national importance should only be permitted where:

- the objectives of designation and the overall integrity of the area will not be compromised; or
- any significant adverse effects on the qualities for which the area has been designated are clearly outweighed by social or economic benefits of national importance

SPP6 also states that 'planning authorities should identify and protect areas designated for their international and national heritage value through their development plans.', and that 'Policies should seek to facilitate the meeting of national targets away from these locations in recognition of the strength of protection afforded to them by law.'

Wind farm development should, therefore, be directed away from these designated areas and any adjoining sites which might impact on them.

Green Belt

The Green Belt comprises the area immediately outside the existing urban area where development pressure is at its greatest. The more rural area beyond the outer edge of the Green Belt is designated as 'Countryside' (See Diagram 1). In the Green Belt the emphasis is on preventing development while in the Countryside it is on controlling development. Wind farm development would, therefore, be more appropriately directed towards the Countryside but would only be acceptable if it could be accommodated within the context of all other designations and criteria.

It is necessary to remember, however, that in exceptional circumstances, development normally deemed inappropriate within the Green Belt might still be acceptable to meet an established need if no other site is available. (SPP21: Green Belts, 2006)

Cumulative Impact

To date there are no wind farm developments within Inverclyde (See Diagram 2) but the cumulative impact would have to be taken into consideration if development were to go ahead. It is difficult, however, to assess cumulative impact until the specific site locations of proposals are known. Should the need arise, cognisance will be taken of the relevant guidance from SNH and other bodies. At this time, however, cumulative impact is not a consideration in defining broad areas of search within Inverclyde.

2. Identifying other constraints and policy criteria

After areas afforded significant protection have been addressed, other potential constraints have to be identified which could affect the location of wind farm developments, whilst recognising that they themselves cannot lead to blanket restrictions on development.

Regional and local natural heritage designations

An area of approximately 781 hectares within Inverclyde has been designated as Clyde Muirshiel Regional Park (CMRP) while the regional designation of the West Renfrew Hills Scenic Area covers an area of 77 hectares which is largely contained within the Park. While not afforded the same high protection as international and national designations, these areas are valued for their scenic qualities and their recreational opportunities. The Park has its own Framework Guidance Document on wind farm development and proposals within the Park which looks at landscape value and sensitivity. This has been agreed by the Park Authority which incorporates the three local authorities covering the area, namely Inverclyde, Renfrewshire and North Ayrshire and states that 'it is difficult to envisage a wind farm development that would not have significant adverse impact on the values that make the Park distinct It is for the developer to show that this is not the case.' Prepared in 2005, a review of this is imminent to take account of new legislation, new designations and new pressures on the Park.

In addition to the regional designations, there are 52 locally designated Sites of Importance for Nature Conservation (SINC) which are locally valued for their flora, fauna or wildlife habitats. While wind farm development could not be ruled out on or adjacent to these locations, strict criteria would have to be laid down to ensure that the impact on the interests for which these areas are designated would be addressed.

Historic Environment and Designed Landscapes

In Inverclyde, there are a number of historic environment resources including Historic Gardens and Designed Landscapes, Listed Buildings, Scheduled Monuments and Archaeological Sites (See Diagram 3). It is Council policy to prevent unacceptable impact on these sites by development which could compromise or destroy them and their settings. As a result development is normally permitted only where there is no adverse effect on the resource. The Sites and Monuments Record contains a range of information on Inverclyde's archaeological resources and can be consulted online at <http://gis.south-ayrshire.gov.uk/wosas/Default.aspx>. Pre-application advice on behalf of the Council is also available from the West of Scotland Archaeology Service.

In addition to the identification of these land designations, a physical study of the capacity and suitability of the landscape to accommodate wind farms would be beneficial. Unfortunately, it has not been possible to carry out this work. The Glasgow and the Clyde Valley Landscape Assessment may be of some use but it is now 10 years old and wind farm technology has moved on apace since that described in this document.

Impact on Communities/Buffer Zones

Wherever strategic wind farms are located in Inverclyde, they would have some impact on the local communities and the character of the rural landscape around them. The extent of this impact would be dependent on the size of the development and the ability of the topography to screen developments. While a 3km buffer around the edge of communities provides enough distance within which turbines can merge with the landscape, this is likely to be unnecessary in many cases as the topography will reduce the impact.

A 2km buffer (See Diagram 4) around Inverclyde communities would eliminate the direct visual impact of the turbines. Beyond this buffer zone, subject to other designations and constraints, there would normally be scope for broad areas of search for strategic wind farms. In Inverclyde, however, there is limited land beyond this buffer for such an area. Within the buffer zone proposals for wind farm developments would be determined on a case-by-case basis and assessed against criteria.

Aviation and defence interests

Where there is an airport nearby aviation and defence issues need to be considered. The proximity of Inverclyde to Glasgow Airport raises the issue of safety where part of the airport safeguarding zone is identified on the eastern edge of the authority (See Diagram 5). The impact of moving turbine blades on the effective operation of both civil and military radar installations at the airport must also be considered. Potential interference with radar at Glasgow Airport has also been anticipated outwith the safeguarding zone. Without specific details of proposals, however, it is difficult to determine the exact effect a wind farm development would have. It is therefore necessary to consult with the relevant bodies when dealing with developments on a case by case basis.

Water environment

Watercourses, lochs, wetlands and riparian areas are potential constraints for wind farm developments as well as sensitive ecosystems. SEPA's early input is therefore required on the potential impact of the location, layout and design of the proposed development. Diagram 6 shows the watercourses within Inverclyde.

Pollution risks during the construction of wind turbines and associated hardstanding are a major concern. Adequate measures to protect the water environment and prevent or mitigate potential impacts on water resources would be imperative at this stage and again at the decommissioning phase.

Further advice on the factors to be addressed when assessing a potential site can be obtained from <http://www.sepa.org.uk/water/regulations.aspx>.

Particular designated sites such as SSSIs and SPAs may also be dependent on the status of the water environment.

Broadcasting installations

As wind turbines can cause disruption to radio and television signals, it is important to know the location of such installations. While interference would not necessarily rule out the siting of a wind farm development, they would only be acceptable where the developer could either maintain the transmission or provide

alternative arrangements at no cost to those whose service was disrupted. In either case, early consultation with the relevant network provider would be expected.

3. Refining remaining areas of no significant constraint

In some areas there may be scope to further refine the areas based on a number of factors in order to identify where wind farm development would be most appropriately directed. This would involve taking account of factors such as:

Wind speed/Grid connection

Wind speed is a primary determinant of where wind farms can go. If there is no consistent exposure to prevailing winds there is no point in locating a wind farm. Erection of an anemometer will provide developers with the relevant data.

Shadow flicker

When the sun passes behind the blade of a turbine, as the blades rotate it can cast a flickering shadow which can cause problems for neighbouring properties. It is, however, possible to calculate very precisely whether flicker will occur and for how many hours per year whereby planning conditions can be applied to ensure the turbines do not operate at times when this problem would occur by means such as a system that can be installed to shut turbines down at times when shadow flicker is likely to occur.

Notifiable installations and exclusion zones

When locating wind farms attention must be paid to the proximity of turbines to notifiable installations and exclusion zones with consultation required with the Health and Safety Executive.

In Inverclyde there is a large gas transmission pipeline running from west to east and south east across a large part of the rural area with a consultation zone of 22m on either side. A military technical site also runs north to south at Burnhead Moor with a consultation zone of 25m either side (See Diagram 3).

CONCLUSIONS ON OPPORTUNITIES FOR STRATEGIC WIND FARMS

There are a number of constraints which have to be taken into consideration when attempting to identify possible broad areas of search. Diagram 7 shows all of the constraints and designations combined on one map. The three stages outlined in PAN 45 Annex 2 to identify broad areas of search for strategic wind farms lead to the conclusion that there are no Potential Areas or broad areas of search in Inverclyde.

The sensitivity of the international and national designations rules them out of the broad areas of search while policy preventing development of the Green Belt removes this area from consideration unless under exceptional circumstances dictated by government. Potential wind farm development could be directed to the Countryside but in these areas other designations and constraints restrict opportunities. Although regional designations are therefore not of the same

significance, Clyde Muirshiel Regional Park and West Renfrew Hills are of such landscape and recreational importance that they too are excluded as the siting of large wind farm developments within these areas would not be compatible with their strategic recreational and environmental assets.

Outwith these areas other location could potentially accommodate wind farms were it not for a plethora of local natural heritage designations and constraints that would diminish development opportunities. Interference with aviation and broadcasting systems, technical considerations such as noise and shadow flicker from turbines and installations unconnected to the wind farm such as the major gas transmission pipeline across a large swathe of Inverclyde's rural area all combine to reduce development opportunities. Given the confined nature of Inverclyde's landscape, a lot of the aforementioned restrictions do overlap thus strengthening the argument against wind farm development at these locations.

When all these limitations are taken into consideration, there are only relatively small areas remaining. In these locations, the impact on adjacent areas would still have to be taken into account and they would be unlikely to be sufficient to accommodate strategic wind farms, comprising turbines, ancillary development and access tracks.

POLICIES

Strategic wind farms (>20MW)

While not identifying any broad areas of search within Inverclyde, it is still necessary to have policies detailing the criteria that would have to be met when assessing proposals for both strategic wind farm developments (>20MW) and non-strategic (<20MW) on a case by case basis. In keeping with SPP6 the wording of the policy is more positive than previously where it now states that developments will be supported provided they meet the relevant criteria.

Policy UT6A: Wind Farms of 20MW and Above

Wind farms with an output of 20MW and over will be supported where:

- a) the objectives of international natural heritage designation are not compromised or where the proposed development is likely to have an adverse effect:***
 - there is no alternative solution; and***
 - there are imperative reasons of over-riding public interest, including those of a social or economic nature;***

- b) the objectives of national natural heritage designation and the overall integrity of the area are not compromised or where any significant adverse effects on the qualities for which the area has been designated are clearly outweighed by social and economic benefits of national importance;***

and where the proposed development:

- c) is sited within the landform to ensure it does not have a detrimental effect on the landscape and wider environment;**
- d) does not have an unacceptable adverse impact on the positive strategic assets of Clyde Muirshiel Regional Park and the West Renfrew Hills Scenic Area, such as:
 - i. landscape and visual amenity;**
 - ii. tourism;**
 - iii. recreation; and**
 - iv. conservation;****
- e) does not have an unacceptable adverse impact directly on the built heritage of the area or its setting;**
- f) does not have an unacceptable adverse impact on biodiversity;**
- g) does not have an unacceptable impact on the water environment, including its quality, quantity and ecological status;**
- h) does not lead to unacceptable cumulative impacts on the landscape;**
- i) does not have an unacceptable adverse effect on aviation interests;**

and where:

- j) in consultation with the relevant bodies, the presence of notifiable installations and exclusion zones are taken into account when designing sites; and**
- k) in consultation with the relevant bodies, the presence of broadcasting and telecommunications infrastructure are taken into account when designing sites.**

Note (1) These criteria would also apply to smaller scale wind farms (<20MW) which can often be more easily accommodated in the landscape, therefore, some of the areas that are not suitable for strategic wind farms could be acceptable. It would still be necessary to protect the environmental and built heritage resources and the local community by ensuring they were designed and sited to incur minimum impact. Given the variety of combinations and sizes of turbines that could be used to produce an output up to 20MW, it is likely that it will only be possible to determine what is acceptable when specific applications are assessed.

REFERENCES

Adopted Inverclyde Local Plan 2005

Inverclyde Planning and Building Standards Handbook 2008

Approved Glasgow and the Clyde Valley Structure Plan 2006

SPP6: Renewable Energy 2007

PAN45: Renewable Energy Technologies 2006

PAN45 Annex 1: Microrenewables 2006

PAN45 Annex 2: Spatial Frameworks and Supplementary Planning Guidance for
Wind Farms 2008

PAN51: Planning, Environmental Protection and Regulation 2006

Scottish Planning Policy – 2010

Framework Guidance Document on Windfarm Development Proposals Affecting
Clyde Muirshiel Regional Park 2005

'Wind Turbines: The Bigger the Better?' – Ole Thybo Thomsen, Aalborg
University 2009

LIST OF DIAGRAMS

Diagram 1 – Natural Heritage Designations, Green Belt and Countryside

Diagram 2 – Wind Farm Applications

Diagram 3 – Built Heritage and Notifiable Installations

Diagram 4 – Potential 2km Buffer Zone around Settlements

Diagram 5 – Glasgow Airport Safeguarding Zone

Diagram 6 – Water Environment

Diagram 7 – Amalgamated Potential Constraints

Diagram 4 - Wind Farms : Supplementary Planning Guidance
Potential 2 Kilometre Buffer Zone around Settlements

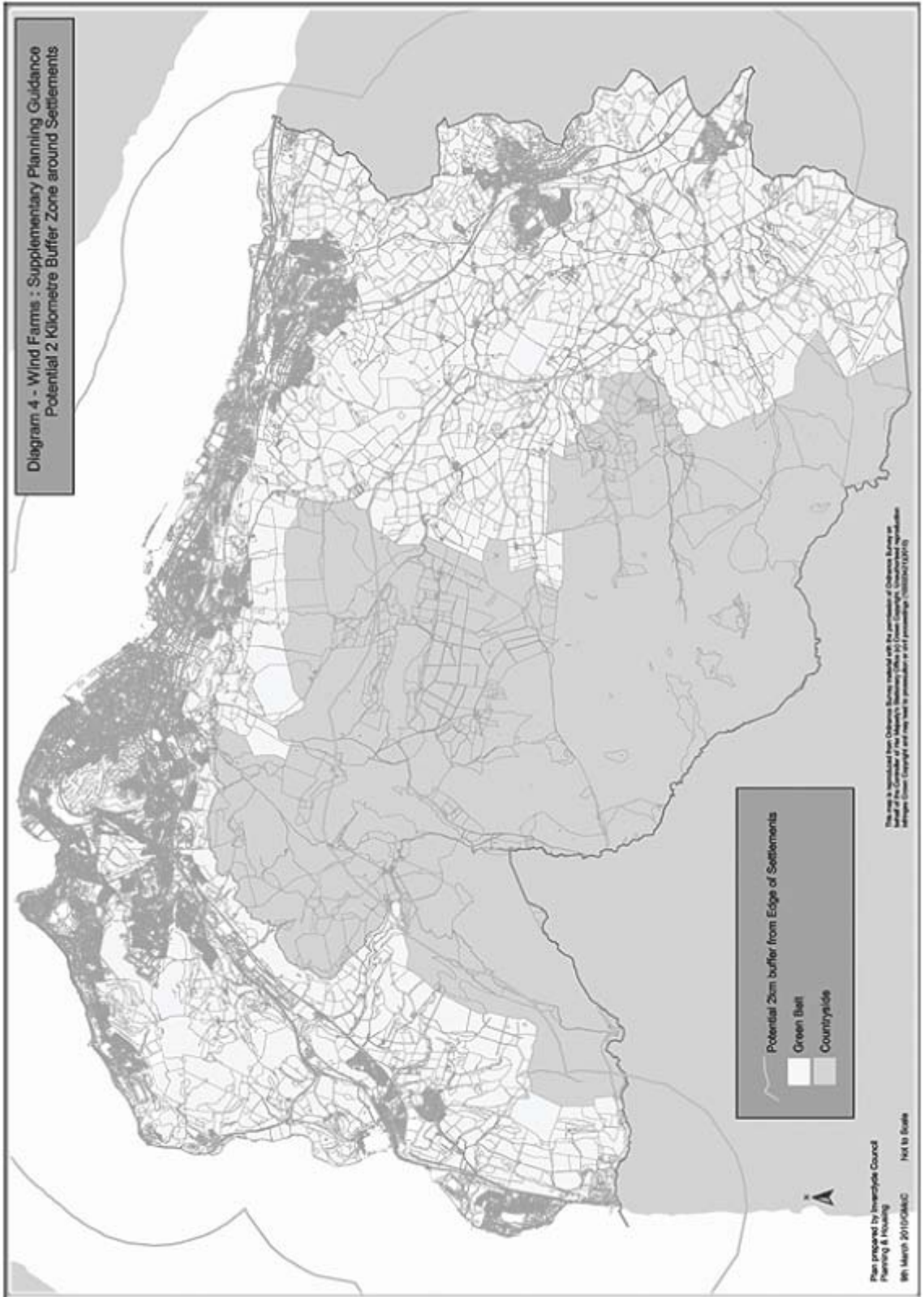
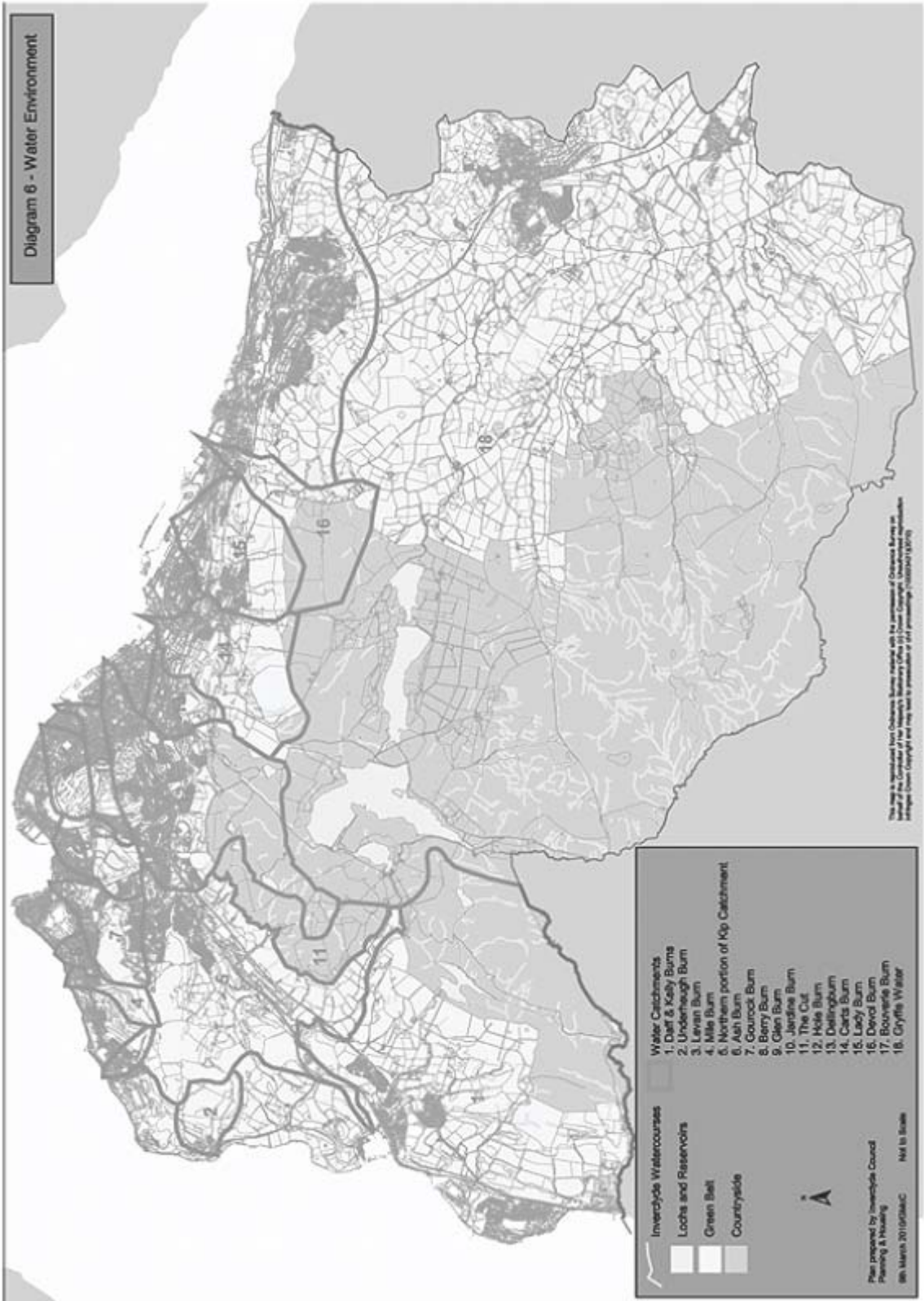


Diagram 6 - Water Environment



ANNEX 2 SUMMARY OF CONSULTATION RESPONSES AND PROPOSED AMENDMENTS

NO.	RESPONDENT	COMMENTS/PROPOSED CHANGES	AMENDMENTS
1	Jones Lang LaSalle (for Airtricity)	<ul style="list-style-type: none"> • National Planning Policy background – reiterates content • Introduction – make reference to Green House Gas emissions rather than purely CO2; expand content to include Climate Change (Scotland) Act 2009 and UK Renewable Energy Strategy 2009 • Objectives on p.1 - content of the SPG falls short in meeting these; objective 4 is contradicted by wording in para 4.7 • In lieu of BAS, an 'area of least constraint' is suggested • Policy is contrary to SPP6 and PAN45 • International & national natural heritage designations – object to negative wording and refer to national policy • Regional & local natural heritage designations • Impact on community/buffer zones • Policy for strategic wind farms over 20 MW • Policy UT6A suggested wording: 	<p>No action required</p> <p>Changes made</p> <p>Wording of objective 4 amended</p> <p>BAS retained but status of SPG document without a landscape study, is clarified.</p> <p>Wording amended to comply</p>

2	<p>Historic Scotland</p>	<p><i>Wind farms with an output of 20MW and over will be supported where:</i></p> <p><i>a) If a proposed development is likely to result in an adverse effect on an SPA or other international designation:</i></p> <ul style="list-style-type: none"> there is no alternative solution; and there are imperative reasons of overriding public interest, including those of a social or economic nature. <p><i>b) In respect of national designations:</i></p> <ul style="list-style-type: none"> the interests of the designated area and overall integrity of the area would not be compromised; or any significant adverse effects on the qualities which the area has been designated are clearly outweighed by social or economic benefits of national importance. <p><i>c) The development does not have an unacceptable significant adverse impact on the functions of the Clyde Muirshiel Regional Park or the West Renfrew Hills Scenic Area;</i></p> <p><i>d) The development is sited within the landform to minimise significant adverse effects on the landscape and wider environment;</i></p> <p><i>e) The development would not result in significant adverse effects on the built heritage unless all mitigation has been investigated and the development can be justified in the national interest;</i></p> <p><i>f) The development would not result in unacceptable significant adverse effects on the amenity of local residents by reason of visual impact, noise or shadow flicker;</i></p> <p><i>g) The development does not lead to unacceptable significant adverse cumulative impacts on the landscape or the local community;</i></p> <p><i>h) The development does not result in unacceptable adverse effects on civil and military aviation operations (to be informed by the consultation responses from the appropriate organisation);</i></p> <p><i>i) The development does not adversely affect notifiable installations; and</i></p> <p><i>j) The development would not cause significant interference to broadcasting installations, which cannot be overcome.</i></p> <ul style="list-style-type: none"> Diagrams – the role of the diagrams in decision making on development proposals should be clarified The colours on the key should match those on the diagrams in the final version as some currently do not Look at how the overlapping boundaries are illustrated as some designations appear to not have a complete delineation Conclusion – there are concerns about the drafting of the SPG as a whole The SPG requires more clearly defined policy guidance Broadly content with the draft guidance Cite the omission of listed buildings from 'built heritage and 	<p>The wording of a) and b), taken from NPPG 14 has been included</p> <p>Wording of c) amended but without 'significant' which is also removed from d), e), f), g) and j) due to difficulties in definition</p> <p>d) is accepted</p> <p>e) built heritage is covered with different wording than suggested</p> <p>f) visual impact covered elsewhere in the Policy and noise and shadow flicker can be dealt with by planning conditions</p> <p>g) 'local community' removed due to difficulties in definition</p> <p>h) accepted apart from wording in bracket which is procedure</p> <p>i) content accepted with alternative wording</p> <p>j) content accepted with alternative wording</p> <p>Amendments have been made to diagrams to correct errors and clarify</p> <p>Dealt with throughout the document</p> <p>See above</p> <p>Reference to listed buildings included</p>
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		<ul style="list-style-type: none"> designed landscapes' section Use 'historic environment' instead of built heritage and 'scheduled monument' instead of scheduled ancient monument Rewording of 2nd sentence in built heritage and designed landscapes section to include 'by development which could compromise or destroy them.' 	<p>Wording changed</p> <p>Wording changed</p>
3	West of Scotland Archaeology Service	<ul style="list-style-type: none"> Drop the Regional and Local Archaeological Site & Other Sites from Diagrams 3 & 6 as they do not match WoSAS Trigger data and put in a link include reference to pre application advice Policy UT6A (d) wording – suggest changing to 'both direct detrimental impacts and impacts on setting'. 	<p>Diagrams 3 & 6 altered and a link put in to WSoS</p> <p>Wording incorporated</p> <p>No changes required</p>
4	Save Your Regional Park Campaign	<p>Welcomes the document</p>	<p>No changes required</p>
5	Clyde Muirshiel Regional Park	<ul style="list-style-type: none"> Context – last line, punctuation Wind Energy – add 'per unit of energy generated' as turbine sizes increase Mention the other criteria determining the location of wind farms from Para 141 of draft consolidated SPP Replace 'therefore of less importance' with 'not of the same significance' in Conclusions on Opportunities para 2 Policy UT6A (b) replace (i) visual landscape with 'landscape and visual amenity' and add (iv) conservation; (c) add (iii) biodiversity Diagram 1 – move the Green SPA line to coincide with the dark red SSSI boundary 	<p>Punctuation amended</p> <p>Section now removed</p> <p>Criteria included as appropriate</p> <p>Wording amended</p> <p>Wording amended</p> <p>Correction made</p>
6	West Coast Energy	<ul style="list-style-type: none"> Wind Energy section - request removal of reference to potential or future heights of blade tips and turbines Objection to wording relating to visual impact on pedestrians, drivers & cyclists Identifying BAS for wind farms –CMRP Framework Guidance & whether landscape study undertaken 2km buffer –this only relates to visual impact, according to PAN 45 <u>not</u> turbine noise as stated on p.9 Shadow flicker – should not be included as it can be controlled The relatively small areas (p.11) should be regarded as BAS as there is no sound argument for them not to be. Quote from 	<p>Wording removed</p> <p>Wording removed</p> <p>Background work to CMRP study and Ayrshire & Clyde Valley Study landscape capacity study was carried out in 2004</p> <p>Wording amended to only apply to visual impact</p> <p>Reference to shadow flicker removed</p> <p>The areas are represented</p>

		<p>Section 4 Annex A of SPP6 re blanket restrictions</p> <ul style="list-style-type: none"> Formally OBJECT due to no landscape study being used to rule out areas. This is contrary to SPP6 and PAN45 	<p>spatially outwith the designations The lack of a landscape study is highlighted</p>
7	Atmos Consulting	<ul style="list-style-type: none"> It does not fully accord with SPP6 Wind Energy section - request removal of reference to potential or future heights of blade tips and turbines P.3 Refer to requirement for a Landscape & Visual Impact Assessment (LVIA) rather than refer to certain parts like distraction No statement of the size of existing and consented turbines or their cumulative impact Explanation of shadow flicker should be included Policy UT6A as it is set out is contrary to SPP6 - needs to address balance between harm & benefit <p><i>a) do not have a detrimental impact on international and national natural heritage designations;</i></p> <p>This criterion does not accord with national policy as set out in NPPG14 as for example the test in respect of national nature conservation designations is not whether a proposal would have a detrimental impact. Rather, the test is whether a proposal would compromise the objectives of designation and the overall integrity of the area and any significant adverse effects on the qualities for which the area has been designated are clearly outweighed by social or economic benefits of national importance. A distinction should also be made between international and national designations where different tests apply.</p> <p><i>b) do not have a detrimental impact on the positive strategic functions of Clyde Muirshiel Regional Park and the West Renfrew Hills such as:</i></p> <ul style="list-style-type: none"> <i>i. visual landscape;</i> <i>ii. tourism; and</i> <i>iii. recreation</i> <p>The proposed criterion is somewhat vague and does not provide a clear policy. The test set should be concerned with the significance of impacts on the interests which the designations seek to protect. Reference should be made to the challenges for designations and criteria set as appropriate. In the cases of recreation and tourism, the planning authority will need to have a good understanding of the baseline conditions in order to begin to assess impacts from wind farm development. It should be noted that there have been number of reports produced for public inquiries which show that tourism impacts are generally not as significant as is argued.</p>	<p>Dealt with throughout document</p> <p>Wording changed</p> <p>Wording added on LVIA</p> <p>There are none</p> <p>Additional wording included</p> <p>Wording from NPPG14 incorporated</p>

8	Bell Ingram (for Ardgowan Estates)	<p><i>c) are sited within the landform to ensure they do not have a detrimental effect on the landscape and wider environment:</i></p> <p><i>i. including green belt; and</i></p> <p><i>ii. particularly from major transport corridors;</i></p> <p>This criterion is confused and tries to deal with three issues; appropriate siting in the landscape; green belts and effects on transport corridors. The green belt issue should be dealt with separately to landscape and visual effects.</p> <p><i>d) do not have a significant detrimental effect on the built heritage;</i></p> <p>The criterion should be worded to the effect that a proposal should not have an unacceptable adverse impact on the historic heritage of the area. Impacts should be assessed on the basis of the significance and character of historic heritage assets affected.</p> <p><i>e) do not have a significant detrimental effect on the amenity of local residents by reason of visual impact, noise or shadow flicker</i></p> <p>The criterion should be phrased to the effect that proposals should not have unacceptable impacts on amenity. Noise and shadow flicker impacts can be mitigated via planning conditions.</p> <p><i>f) do not lead to unacceptable cumulative impacts on the landscape or the local community;</i></p> <p>The reference to 'local community' is not understood.</p> <p><i>g) do not adversely affect civil and military aviation operations;</i></p> <p>The criterion should be worded to the effect that the proposal should not have unacceptable effects upon aviation interests.</p> <p><i>h) do not adversely affect notifiable installations and exclusion zones; and</i></p> <p>The criterion should be worded to the effect that proposals should take account of the presence of infrastructure in site design in consultation with the relevant bodies.</p> <p><i>i) do not cause significant interference to broadcasting installations, which cannot be overcome.</i></p> <p>The criterion should be worded to the effect that proposals should take account of the presence of broadcast and telecommunications infrastructure in site design in consultation with the relevant bodies.</p> <ul style="list-style-type: none"> • There is no criterion for water or development affecting peat 	<p>Wording amended to remove reference to green belt and transport corridors</p> <p>Wording amended to include setting of built heritage – see 3 above</p> <p>Reference removed</p> <p>Wording 'local community' removed</p> <p>Wording amended</p> <p>Wording amended to include reference to design</p> <p>Wording amended to include reference to design</p> <p>Wording amended</p>
	Bell Ingram (for Ardgowan Estates)	<ul style="list-style-type: none"> • Comments in general support of those from Jones Lang LaSalle (JLL) 	See amendments at 1 above

		<ul style="list-style-type: none"> Note the SPG was prepared without a landscape assessment & only based on desk study of designations and constraints. Accept this is in accordance with SPP6 but would like to see a further plan indicating 'areas of less constraint for wind farm development' as identified by JLL Identifies the benefits Ardgowan has for mitigating the impact of wind farm development Mention Biodiversity and Biodiversity Duty in Regional and local natural heritage designations section Policy UT6A wording (a) add 'local'; (b) add (iv) conservation and (c) add (iii) Local biodiversity 	<p>The lack of a landscape study has been highlighted See response at 1 above</p> <p>No action required</p> <p>Biodiversity included as a separate item Change wording</p> <p>No action required</p>
9	Biodiversity Officer (RC/IC/ERC)		
11	Scottish Natural Heritage	Note and agree content	