Inverclyde council

AGENDA ITEM NO. 11

Report To:	**Environment and Regeneration Committee**	**Date**:	**30 April 2015**
Report By:	**Corporate Director, Environment, Regeneration and Resources**	**Report No:**	**E+R/15/04/ 0SJ/RG**
Contact Officer:	**Stuart W Jamieson**	**Contact No**:	**01475 712491**
Subject:	**Inverclyde Local Development Plan: Supplementary Guidance on Renewable Energy**		

1.0 PURPOSE

1.1 The purpose of this report is to inform Committee of the outcome of the targeted consultation on the amended Supplementary Guidance on Renewable Energy and to seek approval for the amended guidance to be forwarded to the Scottish Government for permission to adopt it as Supplementary Guidance to the Local Development Plan 2014.

2.0 SUMMARY

2.1 The Planning etc. (Scotland) Act 2006 allows planning authorities to adopt statutory supplementary guidance, which provides further information on policies or proposals set out in the Local Development Plan. Renewable Energy was one of five Supplementary Guidance documents which were adopted alongside the Local Development Plan (LDP) in 2014.

2.2 In June 2014 the Scottish Government published its updated Scottish Planning Policy (SPP) which included changes to the policy on wind energy. This led to changes being required to Inverclyde's Supplementary Guidance on Renewable Energy. As the SPP changes came too late to be included in the Supplementary Guidance which had been through the LDP process in early 2014, an assurance was given that amended guidance would be published and consulted upon as soon as possible after the adoption of the LDP.

2.3 The consultation on this amended Supplementary Guidance was carried out between January and February 2015 and eight representations were received. All of these have been addressed and further amendments made where appropriate, to produce the final version. Annex 1 contains a summary of the representations received and the Council's proposed actions.

2.4 It is now proposed that this Supplementary Guidance is adopted by the Council to replace the version published alongside the LDP. This will augment Policy INF1 of the adopted Inverclyde Local Development Plan 2014. The amended Supplementary Guidance is attached in Annex 2.

3.0 RECOMMENDATION

3.1 That Committee approve the proposed Supplementary Guidance on Renewable Energy as statutory supplementary guidance to the Local Development Plan (2014) and agree that the Head of Regeneration and Planning should forward it to the Scottish Government for permission to adopt.

Aubrey Fawcett
Corporate Director, Environment, Regeneration and Resources

4.0 BACKGROUND

4.1 The Planning etc. (Scotland) Act 2006 allows planning authorities to adopt statutory supplementary guidance, which provides further information on policies or proposals set out in the Local Development Plan. Renewable Energy was one of a number of Supplementary Guidance documents which were adopted alongside the Local Development Plan (LDP) on 29 August 2014.

4.2 In June 2014 the Scottish Government published its updated Scottish Planning Policy (SPP) which included changes to the policy on wind energy. Broad Areas of Search for wind energy developments were replaced by a Spatial Framework for identifying those areas that are likely to be most appropriate for onshore wind farms. This resulted in changes being required to Inverclyde's Supplementary Guidance. As the SPP changes came too late to be included in the Supplementary Guidance which had been through the LDP Examination, an assurance was given that amended guidance would be published and consulted upon as soon as possible after the adoption of the LDP.

5.0 PROPOSALS

5.1 The changes required to incorporate the Spatial Framework into the Supplementary Guidance also provided an opportunity to incorporate details of the Landscape Capacity report for Wind Turbine Developments in Glasgow and the Clyde Valley which was submitted to Committee in May 2014.

5.2 The consultation on the amended guidance was carried out between 30 January and 27 February 2015 and eight representations were received. One was received from the Scottish Government, four from other national government organisations, two of which had no comments to make, two from the private sector and one from Kilmacolm Civic Trust. The comments related to various aspects of the Supplementary Guidance with requests to amend the layout and content of the document either to assist with clarity or to provide additional information.

5.3 While there were a number of minor alterations to the guidance requested, the majority of the representations related to:

- the Spatial Framework from the SPP and how it links to Policy INF1 of the LDP; and
- the inclusion of the Landscape Capacity Study for Wind Turbine Development and its relationship to the Supplementary Guidance.

5.4 Annex 1 contains a summary of the representations received and the Council's proposed actions, some for noting with no further action and others accepted and amendments made to the final version of the guidance. Annex 2 contains the amended version of the Supplementary Guidance incorporating the changes.

5.5 Once approved by Committee, the Supplementary Guidance will be submitted to the Scottish Government for 28 days approval after which it is proposed that this guidance is adopted by the Council to replace the version issued alongside the LDP. This will augment Policy INF1 of the adopted Inverclyde Local Development Plan 2014.

6.0 IMPLICATIONS

Finance

6.1 There are no direct 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

Annually Recurring Costs/Savings

Cost Centre	Budget Heading	With Effect from	Annual Net Impact	Virement From	Other Comments
n/a	n/a	n/a	n/a	n/a	n/a

Legal

6.2 There are no direct legal implications arising from this report.

Human Resources

6.3 There are no direct human resource implications arising from this report.

Equalities

6.4 There are no direct equalities implications arising from this report.

Repopulation

6.5 There are no direct repopulation implications arising from this report.

7.0 CONSULTATIONS

7.1 **Chief Financial Officer:** no requirement to comment.

7.2 **Head of Legal and Property Services:** no requirement to comment.

7.3 **Head of Organisational Development, HR and Communications:** no requirement to comment.

8.0 LIST OF BACKGROUND PAPERS

8.1 Inverclyde Local Development Plan 2014

Attachments

(1) Annex 1: Summary of Consultation Responses

(2) Annex 2: Amended Supplementary Guidance on Renewable Energy

Head of Regeneration and Planning
Municipal Buildings
Clyde Square
Greenock
PA15 1LY

ANNEX 1

SUPLEMENTARY GUIDANCE ON RENEWABLE ENERGY – CONSULTATION 30 JANUARY – 27 FEBRUARY 2015

REPRESENTATIONS

COMMENTS/ SUGGESTED CHANGES	ACTION PROPOSED
1. SCOTTISH GOVERNMENT	
Repetition of the comments from Forestry Commission Scotland (FCS) below.	See FCS below.
The Supplementary Guidance should only deal with Wind Energy and all other renewables covered in Non-Statutory Guidance.	No change. Policy INF1 addresses all types of renewables and specifically refers to the Supplementary Guidance on Renewable Energy. Propose to add the additional renewables to the list in the SG to make it more comprehensive and give fuller context.
There should be an identification of the minimum scale to which the spatial framework applies.	Agree. Amend text to clarify - as per Landscape Capacity Study, 1+ turbines, 15m – 150+m in height.
It might be more suitable for the spatial framework to focus on identifying suitable locations for wind turbines/farms with heights greater than 50m.	No change. Turbines below 50m can also have an impact, therefore they are included.
The content of the first footnote on page 7 is unclear as it should be covered by the policy in LDP.	No change. Footnote 1 was included in the supplementary guidance as a simple mitigation measure to address likely significant effects identified through the Appropriate Assessment of the SG as set out in the Habitats Regulations Appraisal Record.
For the assessment of developments, emphasis should be on the LDP Policy then the content of the SG.	Agree. Move Policy INF1 to start of the section with spatial framework afterwards and add text for clarification.
Page 9 Cumulative impact. It is unclear what is being termed a strategic wind farm. Neither the statement nor Diagram 3 are helpful in clarifying cumulative impact. The diagram does not indicate if capacity is affected.	Strategic windfarms are those over 20MW. Propose to incorporate in text. Agree. Change wording of text and remove reference to Diagram.
Clarification of access to and status of CMRP Framework Guidance is	Agree. Insert link into the text.

COMMENTS/ SUGGESTED CHANGES	ACTION PROPOSED
required.	
Amend reference to wind speed/ grid connection.	Remove. It was originally included for information for non-industry readers.
Remove reference to sequential test on page 11.	Agree. Remove.
Diagram 1 would benefit from being clearer about the Group 3 areas.	Agree. Redraw diagram to show Group 2 and Group 3 areas.
Move the landscape character assessment tables next to the landscape sensitivity map and bring Diagram 1 more into the principal policy focus.	Agree. Re-arrange order of Diagrams in Annexes.
In relation to Diagram 2 further explanation is required regarding mitigation of impacts in areas of medium to high landscape impact where wind turbines have been accommodated.	Those turbines already in place prior to the LCS have been mitigated through planning conditions such as those on hours of operation (in regard to noise emissions and shadow flicker), colour of turbine and reinstatement of the ground at the end of the working life of the turbine. Proposed turbines would be assessed against landscape sensitivity in the context of those already in place. No change proposed.
2. FORESTRY COMMISSION SCOTLAND	
The main concern is the potential effect on Inverclyde's woodland resource and consequences for the ecology and landscape.	Noted.
In the Policy, Guidance and Legislation section, include Scottish Government's Control of Woodland Policy under 'Legislation'.	Agree to include Woodland Policy but under National Policy as it is not legislation.
In the same section, amend bullet point 'Landscape and visual effects on wild land' to add 'trees, forests and woodlands'.	Agree as Scottish Government made same suggestion and the wording is taken directly from their SPP.
Under 'Other Considerations' include an additional paragraph on Woodland Removal Policy.	Agree. Text to be taken from that suggested by FCS.
3. SNH	
Recommend Diagram 1 shows the spatial framework groupings rather than all the designations within them.	Agree. Redraw Diagram 1 to show Group 2 and Group 3 areas.

COMMENTS/ SUGGESTED CHANGES	ACTION PROPOSED
Recommend shading the full area between the settlement and the community separation distance rather than a dotted line for greater clarity.	Agree. Redraw Diagram 1.
Diagram 1 showing the spatial framework should be incorporated in the main body of the text rather than in the annex given its importance.	Agree. Now included as Figure 1.
The minimum scale of development to which the spatial framework applies should be inserted to comply with SPP.	Amend text to clarify - as per Landscape Capacity Study, 1+ turbines, 15m – 150+m in height.
Suggest providing a link to the Landscape Capacity Study to make it more accessible to developers for site selection.	Agree.
Suggested additional information which could be included to assist developers – various SNH and RSPB documents.	Agree. Include in the Guidance section with links.
Recommend inclusion of expectations for decommissioning of developments and site restoration.	Agree.
Comments made on Habitats Regulation Assessment.	Noted. Further screening will be undertaken once proposed changes have been approved.
4. WEST COAST ENERGY	
The interaction between the spatial framework and INF1 is very unclear.	Agree. Clarify with text and move Policy INF1 ahead of Spatial Framework
The spatial framework does not readily interface with the constraints of diagrams 1-5 leading to confusion about contents of Group 2 and 3.	Agree. Amend Diagram 1 as described above.
The insertion of carbon rich peat etc in the spatial framework is grossly precautionary.	Disagree. Retain as this is prescribed by Scottish Government.
Differences in the sensitivity of landscape character types need to be explained.	Agree. Clarify with link to LCS.
Clarification is required on how criteria would be applied to applications in Group 2 and Group 3.	Agree. Modify text to clarify meaning.

COMMENTS/ SUGGESTED CHANGES	ACTION PROPOSED
Unclear whether areas of special protection referred to on P9 apply to Group 2 only.	Correction. 'special protection' should say 'significant protection' identified in the spatial framework.
Needs to be more clarity on how the Spatial Framework, Policy INF1 and the Landscape Capacity Study are supposed to interact.	Agree. Clarify in LCS text and cross reference criteria of Policy INF1 and the spatial framework.
5. JONES LANG LASALLE	
The whole SG has been considered in order to give a fully informed representation albeit with a focus on wind energy.	Noted.
National targets for a low carbon economy should be included in Section 3 Policy, Guidance and Legislation and note that targets are not capped.	Agree. Currently the targets are included in the introduction but will move to the section on Policy.
The spatial framework should be shown in terms of Groups as per the SPP.	Noted. Spatial Framework Diagram to be amended.
Footnote 1 on page 7 should refer to 'any **unacceptable** adverse effect…' rather than 'adverse effect'	Disagree. Adverse means bad, undesirable, unsympathetic or harmful. There is unlikely to be an acceptable adverse effect therefore there is no need to reinforce this with 'unacceptable'.
It should be made clear that the 2km community separation distance is not a ban on wind farms in the identified area.	Agree. Amend text to clarify.
The important role of Policy INF1in balancing adverse effects with the benefits of proposed development should remain a key feature of the SG.	Noted.
The SG provides an opportunity for the Council to demonstrate full support and encouragement for renewable energy developments.	The Council fully supports renewable energy developments and the LDP and SG direct proposals to the appropriate locations.
Clarification required on the relationship of the Landscape Character Study (LCS) to the SG when not formally consulted upon.	Agree. Amend text to identify this as a background report which was prepared for the Council and feeds into the SG. Background reports are not usually issued for consultation.
Reference to Scottish Government's letter on preparation of SGs.	Noted.
The LCS should be identified as a Technical Report which was not consulted upon.	See above.

COMMENTS/ SUGGESTED CHANGES	ACTION PROPOSED
Request that SNH's data in table 2 should not form part of the mapping associated with the areas of 'significant protection' in Diagram 1 due to methods used by SNH.	Disagree. This data is the direct replacement for that previously used and from the source used by all GCV authorities. Propose to retain reference in table 2. Please note however that it is proposed to change Diagram 1.
The fact that sites will be dealt with on a case by case basis should be reflected in the SG.	Agree. Incorporate appropriate wording.
The reference to 'blanket restrictions' under 'Other Considerations' p.9 should be emphasised in the CMRP section.	Disagree. No need to single out the Park. Its status under Group 3 is clear.
Given its position in Group 3 of the Spatial Framework (SF), it should be noted that there is no limitation on wind farms in the Regional Park.	Disagree. In regard to Group 3 locations, 'no limitation' is not the same as 'likely to be acceptable, subject to detailed consideration against identified policy criteria' as stated in SPP.
Statement that the purpose of the Park for recreational value does not suggest that a prohibition on wind farms is supported by policy.	The SG does not state that there is a prohibition on wind farms in the Regional Park. However it should be noted that amenity of the Park was a reason for refusal of Corlic Hill application in 2007.
Specific to the Regional Park, the SG should reflect that Policy INF1 is positively worded in favour of wind farms.	Disagree. No need to single out the Park. Policy INF1 is positive provided the criteria are met.
6. KILMACOLM CIVIC TRUST	
Table 2: Spatial Framework – the community separation for consideration of visual framework should be 2.5km, not 2km	No change. Although a 2.5 - 3km buffer was suggested in the draft Scottish Planning Policy (SPP), it remained at 2km in the final version.
Policy INF1 does not make reference to 'impacts on communities and individual dwellings, including isolated dwellings	No change. This is mentioned in the Spatial Framework criteria of the SG. The SG will be used in conjunction with Policy INF1.
7. SEPA	
No comments	
8. MARINE SCOTLAND	
No comments	

ANNEX 2

INVERCLYDE LOCAL DEVELOPMENT PLAN

2014

SUPPLEMENTARY GUIDANCE on RENEWABLE ENERGY (Revised 2015)

CONTENTS

SUPPLEMENTARY GUIDANCE - RENEWABLE ENERGY

1.0 INTRODUCTION

This document provides guidance to supplement the Local Development Plan policy for renewable energy. It has been prepared to allow for the assessment of a variety of types of renewable energy development proposals aiming for a balance between promoting renewable technologies and meeting national guidance on other areas such as those relating to the natural environment, which may appear to be in conflict at times.

The Guidance is aimed at:

- developers/professionals considering new projects;
- communities/interest groups considering the impact of a proposed renewable development; and
- local authority Councillors and Officers considering planning applications

Renewable energy is generated from natural resources such as sun, wind, and water which is inexhaustible but also includes energy from replenishable resources such as waste and biomass. Wind energy and hydro energy are currently the most well-developed of the renewable resources but it is considered that the others will increase their share over time.

It is the role of the planning system to reconcile the benefits of potential renewable energy developments with any detrimental impact on the environment.

There is support for the renewables industry in Inverclyde where Inchgreen on the Greenock Waterfront, which is promoted as an area to which renewable energy companies could locate, is in line to benefit from £9.4million from the Glasgow City Region Infrastructure Fund.

AIM: **To locate renewable energy developments where the technology can operate efficiently and environmental and cumulative impacts can be addressed satisfactorily.**

2.0 RENEWABLE ENERGY TECHNOLOGY

Onshore Wind Energy

Wind energy developments are currently the most popular type of renewable energy proposals and this type of development is Scotland's fastest growing renewable energy source – a trend which is expected to continue. By the end of 2013 there was 4.5GW of installed capacity in Scotland.

Wind energy developments are dealt with according to size:

Table 1: Determination of Wind Energy Applications

Scale	Determined By	Consultees
Up to 50MW	Inverclyde Council	Key Agencies
Over 50MW	Scottish Government	Inverclye Council and Key Agencies

They can also be classified according to height to blade tip, as is the case in landscape capacity studies: The Landscape Capacity Study for Wind Turbine Development 2014 which was carried out in Inverclyde used the following categories:

15 – 30m **small**
31 – 50m **small/medium**
51 – 80m **medium**
81 – 120m **large**
over 120m up to around 150m **very large**

Offshore Wind

Offshore wind, wave and tidal energy sources are increasing in importance in contributing to renewable energy targets.

Stronger wind speeds are available offshore compared to on land so the contribution of offshore wind farms in terms of electricity supplied is higher. Offshore includes inshore water areas such as lakes, fjords and sheltered coastal areas as well as deep water areas.

Micro-renewables

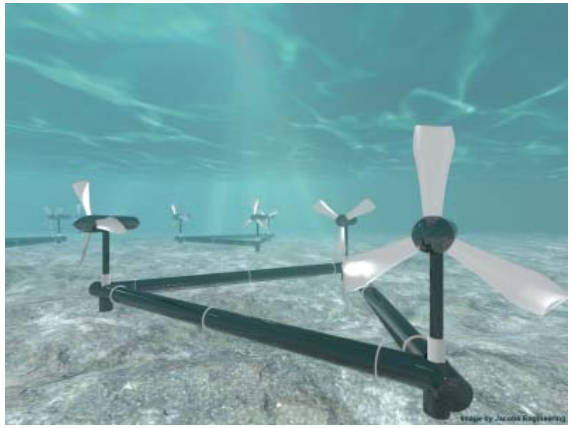
Micro-renewable energy generation is widely accepted to be the production of heat (less than 45kW) and/or electricity (less than 50kW capacity) from zero/low carbon technologies. This can include micro hydro, micro wind, solar energy, photovoltaics, biomass and geothermals.

Micro Hydro

The majority of small hydro schemes in Inverclyde are likely to be 'run-of-the river' where water is taken from a river from behind a low weir, with no facilities for water storage and returned to the same water course after passing through the turbine. These would be primarily for domestic/ individual landowner use with an output of under 100kW and Feed-In-Tariffs for any surplus sold back to the grid. There could be an impact on the natural and cultural heritage, water environment, fisheries, aquatic habitats and amenity, and relevant environmental and transport issues which would have to be addressed by the developer.

Tidal

Tidal power is a form of hydro power that converts the energy of tides into power – mainly electricity. Tides are more predictable than wind or solar power and have potential for future electricity generation.



Micro wind

At a domestic or commercial level, small turbines can be mounted on buildings or free standing to provide electricity and where there is surplus production, it can be sold back to the grid under the Feed-In-Tariffs (FIT).

Solar

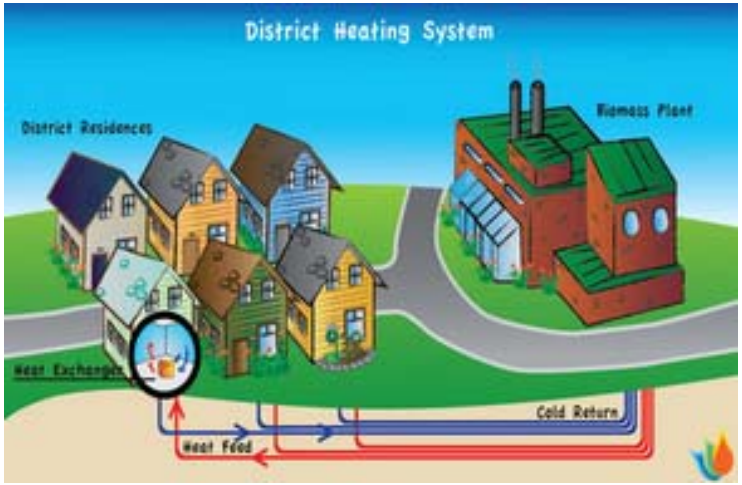
There are three ways in which to exploit solar power; firstly, through the installation of solar panels on buildings to harness energy for conversion into heat; secondly through photovoltaics which convert solar energy into electricity and finally passive solar gain through the orientation of buildings to make maximum use of the sun. These can be located in a variety of locations provided there is ample solar irradiation and electricity connection.

Biomass

Biomass is biological material which can be used to generate electricity. It can be either used directly as in combustion or converted in to fibres or chemicals such as biofuels. SPP advises that planning authorities should identify, through the development plan, where there are areas capable of accommodating new biomass plants with the location of large scale biomass plants determined by a number of factors including the economic costs of transporting fuel materials from source, the availability of feedstock during the year, the location of the end user and the scale of the plant.

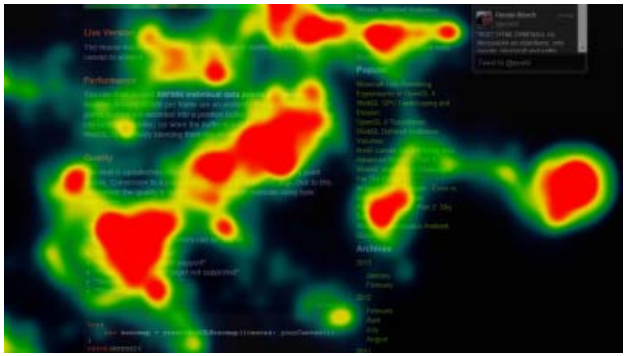
District Heat Network

A district heat network is a system for distributing heat generated in a centralised location for residential and commercial heating requirements such as space heating and water heating. District heat plants can provide higher efficiencies and better pollution control than localised boilers.



Heat Mapping

Heat mapping is a means of assessing who needs heat (demand) and where sources of heat might come from (supply). The Scottish heat map can be used to identify where there are opportunities for heat networks to assess heat density and proximity to heat sources.



Ground Source Heat

Ground source heat pumps (GSHP) use pipes which are buried in the garden to extract heat from the ground. This can be used to heat radiators, underfloor or warm air heating systems and hot water in the home.

Energy from Waste

Energy from Waste systems either use a biological process including landfill gas, sewage gas or biogas from agricultural waste and digestible domestic or industrial waste or a thermal process such as incineration which tends to be on a larger industrial scale and requires careful siting. Location will be influenced by the source of the waste used with industrial sites with the potential for connection to the electricity grid or other possible users likely to be suitable locations for energy from waste plants.

Energy Storage

Energy storage entails the storage of energy generated during periods of low demand for use during periods of high demand. This not only helps overcome the problem of variable supply from renewable energy resources but also allows the grid to operate more efficiently and cost effectively.

3.0 POLICY, GUIDANCE AND LEGISLATION

National Planning Policy

National Planning Framework 3 (NPF3) considers the means of attaining a low carbon Scotland by reducing emissions and recognises the importance of the planning system in delivering targets. It recognises the importance of promoting greater use of renewable sources of heat energy and recovery of waste heat and supports the further deployment of onshore wind farms whilst addressing concerns about the impact of some developments and reflecting the objective of greater community ownership of renewable energy.

The Scottish Government's target of 18% of electricity being generated from renewable sources by 2010 was met, as was the new target of 31% set for 2011. The 2020 Route-map for Renewable Energy in Scotland, 2011 identifies a target of 30% of overall energy demand to be met from renewables by 2020 which is broken down to 100% of electricity, 11% of heat and 10% of transport fuels.

The Government's publication Scottish Planning Policy (SPP), published in 2014, addresses the main sources of renewable energy at present – wind and hydro – and those other technologies that may contribute in future such as biomass, solar, landfill gas, wave and tidal. SPP states that:

"Efficient energy resources are vital to reducing greenhouse gas emissions and can create significant opportunities for communities."

"The planning system should support the development of a diverse range of electricity generation from renewable energy technologies" and "guide development to appropriate locations."

"Development plans should seek to ensure an area's full potential for electricity and heat from renewable sources is achieved in line with national climate change targets, giving due regard to relevant environmental, community and cumulative impact considerations."

It continues:

"Local development plans should support new build developments, infrastructure or retrofit projects which deliver energy efficiency and recovery of energy that would otherwise be wasted."

The General Permitted Development Order (Scotland) (GPDO), 1992 has been amended to permit certain types of micro-generation equipment to be installed without the need for planning permission.

SPP requires planning authorities to set out a spatial framework identifying those areas that are likely to be most appropriate for wind energy development, as a guide to developers and communities.

Guidance

Planning Advice Note 45 (PAN45) Renewable Energy Technologies (2002) and Annex 2 Spatial Frameworks and Supplementary Planning Guidance for Wind Farms (2008) have been superseded by a series of online guidance relating to a variety of renewable technologies including:

Onshore wind turbines	Hydro schemes
Woody biomass	Landfill gas
Energy from waste	Anaerobic digestion
Deep geothermal	Large photovoltaic arrays
Energy storage	Microgeneration

PAN 51 Planning, Environmental Protection and Regulation (2006), the Water Framework Directive Scotland 2000, the River Basin Management Plan 2009 and the Clyde Area Management Plan 2010-2015 provide guidance on the issues related to the protection of the water environment in the Inverclyde area.

PAN 1/2013 Environmental Impact Assessment (EIA) provides advice on good practice and guidance for planners dealing with EIA screening and scoping where proposals are assessed to determine whether an EIA is required and, if so, assessed against the criteria in the EIA checklist to determine whether it will have a significant effect on the environment.

SNH has provided a number of documents relevant to the development process for onshore wind farms, including:

- Visual representation of wind farms
- Siting and designing wind farms in the landscape
- Visual assessment of wind farms - best practice
- Siting and design of small scale wind turbines of between 15 and 50 metres in height
- General advice and information on onshore wind

Managing Change Guidance – Micro-renewables (2010) from Historic Scotland provides guidance on applications for renewable energy developments affecting historic buildings, monuments and places.

Legislation

This Supplementary Guidance is prepared in accordance with the following legislation.
Town and Country Planning (Scotland) Act 1997
Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2008
Town and Country Planning (General Permitted Development Order) (Domestic Micro-generation) (Scotland) Amendment Order 2010
Climate Change (Scotland) Act, 2009
Circular 1/2012 Householder Permitted Development

Development Plan Policy

The development plan for Inverclyde comprises two parts. Strategic policy is set out in the approved Glasgow and the Clyde Valley Strategic Development Plan (2012) while detailed policy criteria are laid out in the Inverclyde Local Development Plan 2014.

Strategic Development Plan

The Strategic Development Plan (SDP) outlines broad areas of search for biomass wood fuel production and wind energy for the Local Development Plans (LDP) of the eight authorities to take forward and refine through their policies. Preferred urban fringe areas for biomass fuel are identified around the edges of the settlements in Inverclyde while no Broad Areas of Search (BAS) for strategic wind energy developments are identified within the authority. SPP has now superseded the SDP and no longer refers to BAS which will be taken account of in the preparation of the next SDP.

Local Development Plan

All renewable energy applications will be assessed against **Policy INF1** in the LDP which supports renewable energy development provided the adverse effects do not outweigh the benefits. For wind energy applications **Policy INF1** is used together with the SPP Spatial Framework and criteria, detailed below.

Woodland Removal Policy

The Scottish Government has developed a policy on the control of woodland removal in Scotland. The Policy presents the criteria for determining the acceptability of woodland removal, information and implementation. All wind energy developments should be designed in accordance with the Policy. The guiding principle of the Policy can be examined in detail at www.scotland.forestry.gov.uk/supporting/strategy-policy-guidance/woodland-expansion/control-of-woodland-removal.

4.0 RENEWABLE ENERGY IN INVERCLYDE

The majority of applications received in Inverclyde to date have been for single or groups of 2-3 wind turbines under 80m high, due to the increasing interest in small scale wind turbine developments which attract a FIT payment.

Wind Energy

The SPP Spatial Framework for wind energy developments, described in section 3.0 above, is set out in more detail in Table 2.

Table 2: Spatial Frameworks

<table>
<tr><td colspan="3">Group 1: Areas where wind farms will not be acceptable:
National Parks and National Scenic Areas.</td></tr>
<tr><td colspan="3">Group 2: Areas of significant protection:
Recognising the need for significant protection, in these areas wind farms may be appropriate in some circumstances. Further consideration will be required to demonstrate that any significant effects on the qualities of these areas can be substantially overcome by siting, design or other mitigation.</td></tr>
<tr><td>National and international designations:
• World Heritage Sites;
• Natura 2000 and Ramsar sites;
• Sites of Special Scientific Interest;
• National Nature Reserves;
• Sites identified in the Inventory of Gardens and Designed Landscapes;
• Sites identified in the Inventory of Historic Battlefields.</td><td>Other nationally important mapped environmental interests:
• areas of wild land as shown on the 2014 SNH map of wild land areas;
• carbon rich soils, deep peat and priority peatland habitat.</td><td>Community separation for consideration of visual impact:
• an area not exceeding 2km around cities, towns and villages identified on the local development plan with an identified settlement envelope or edge. The extent of the area will be determined by the planning authority based on landform and other features which restrict views out from the settlement.</td></tr>
<tr><td colspan="3">Group 3: Areas with potential for wind farm development:
Beyond groups 1 and 2, wind farms are likely to be acceptable, subject to detailed consideration against identified policy criteria.</td></tr>
</table>

Those identified in blue in Group 2 are those that occur in Inverclyde.

In Inverclyde the Spatial Framework applies to one or more turbines 15-150m+ in height and is as follows:

Group 1 areas where wind energy developments will not be acceptable. Inverclyde has no National Parks and no National Scenic Areas therefore there are no Group 1 areas in Inverclyde.

Group 2 areas where there is a need for significant protection but wind energy developments may be appropriate in some circumstances. These include one on-shore internationally designated Special Protection Area (SPA) and one located along the shoreline to the east, which is also a Ramsar site (1), along with 7 nationally designated Sites of Special Scientific Interest (SSSI) covering a combined area of 831ha. Three Gardens and Designed Landscapes and areas of peatland (2) to the south of the authority complete the designations falling within this category. These are shown in **Figure 1.** The community separation distance of up to 2km in Group 2 does not represent a ban on wind energy developments in this area, as demonstrated by the turbines already granted within this location (**Diagram 2**).

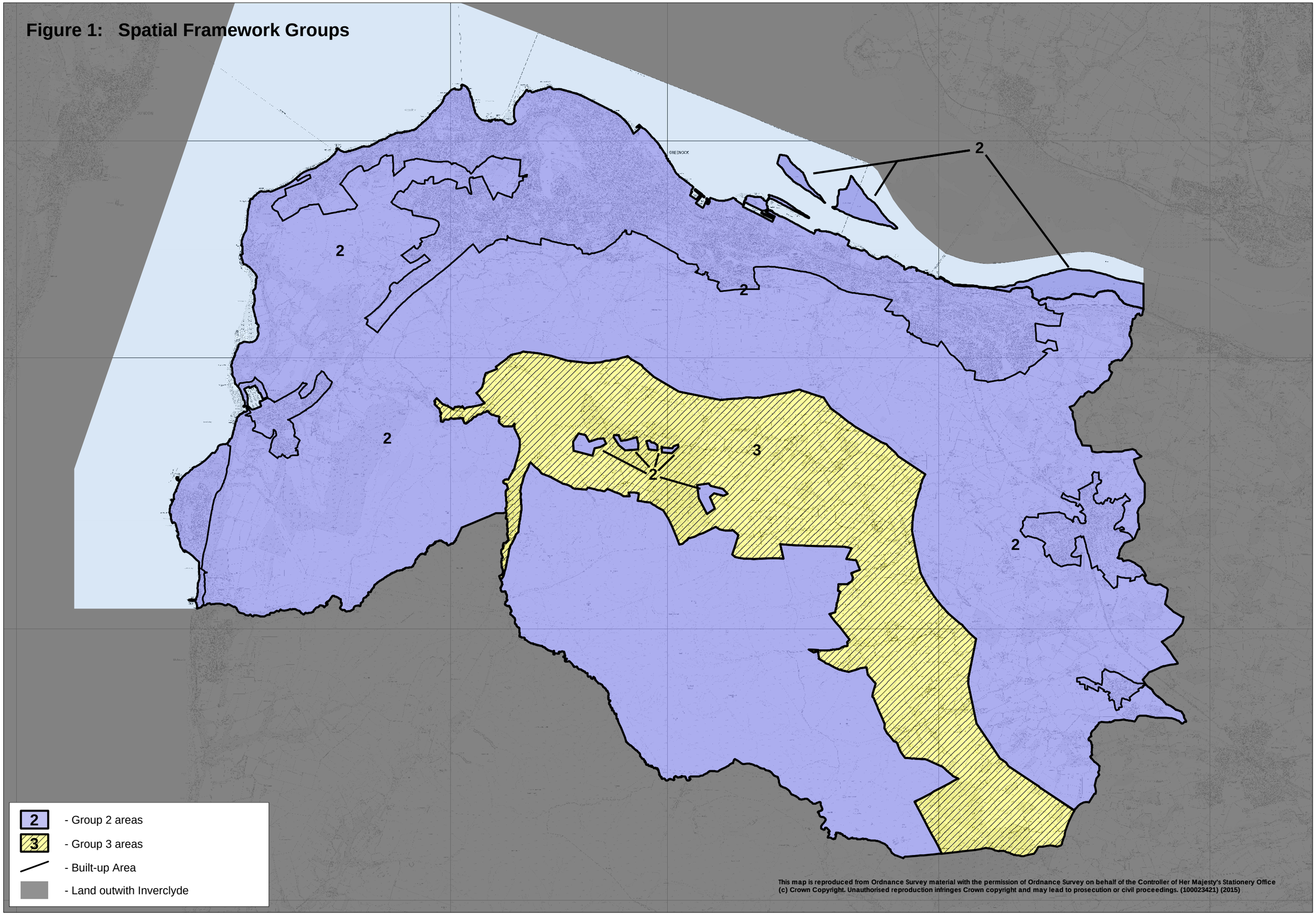
Group 3 where wind energy developments are likely to be acceptable subject to detailed consideration against policy criteria. This includes all other areas in Inverclyde not already included in Group 2.

(1) Any development for wind energy generation will only be permitted where it can be demonstrated that it will not have any adverse effect on the integrity of the Inner Clyde Estuary SPA/Ramsar site, the Renfrewshire Heights SPA or any other Natura site outwith Inverclyde where there is ecological connectivity.

(2) SNH are due to publish definitive mapping for priority peatland, deep peat and carbon rich soils in June. When this data is available, it will replace the data currently in use.

Note: *A large amount of information as shown in Figure 1 and across Diagrams 1-4 of this Supplementary Guidance should be viewed as a whole when considering the location for wind energy proposals.*

Figure 1: Spatial Framework Groups



Proposals for **all** types of renewable energy development, in both Group 2 and Group 3, will be assessed against **Policy INF1** of the Local Development Plan (LDP). In addition to Policy INF1, proposals for **wind energy** will be assessed against a wide range of criteria which complement the SPP spatial framework, some of which elaborate on those included in Policy INF1.

As **Policy INF1** addresses all types of renewables, the criteria are more generalised than those that accompany the SPP spatial framework.

Policy INF1 states that the Council will support development required for the generation of energy from renewable sources unless any economic, environmental and social benefits of the proposal are outweighed by significant adverse effects upon the criteria shown below.

Table 3: Policy INF1 and SPP Spatial Framework Criteria

Policy INF1 Criteria	SPP Spatial Framework Criteria
(a) natural heritage designations (international and national designations should not be compromised);	effects on the natural heritage, including birds;
(b) the landscape and wider environment;	landscape and visual impacts, including effects on wild land, trees, forests and woodland;
(c) neighbouring settlements;	impacts on communities and individual dwellings, including visual impact, residential amenity, noise and shadow flicker;
(d) tourism, recreation and conservation matters;	impacts on tourism and recreation; public access, including impact on long distance walking and cycling routes
(e) the built heritage;	impacts on the historic environment, including scheduled monuments, listed buildings and other settings
(f) biodiversity and the water environment;	hydrology, water environment and flood risk;
(g) air quality;	not applicable
(h) road safety and service infrastructure; and	impacts on roads; impacts on adjacent trunk roads
(i) the cumulative effect of such proposals.	cumulative impacts – planning authorities should be clear about likely cumulative impacts arising from all of the considerations below, recognising that in some areas the cumulative impact of existing and consented energy development may limit the capacity for further development;
Note: Additional information to assist in submitting proposals is contained within the Supplementary Guidance on Renewable Energy.	net economic impact, including local and community socio-economic benefits such as employment, associated business and supply chain opportunities;
	the scale of contribution to renewable energy generation targets from output;
	effect on greenhouse gas emissions;

Policy INF1 Criteria	SPP Spatial Framework Criteria
	impacts on carbon rich soils, using the carbon calculator;
	impacts on aviation and defence interests and seismological recording;
	impacts on telecommunications and broadcasting installations, particularly ensuring that transmission links are not compromised;
	the need for conditions relating to the decommissioning of developments, including ancillary infrastructure, and site restoration;
	opportunities for energy storage; and
	the need for a robust planning obligation to ensure that operators achieve site restoration.

Other considerations

In addition to areas of significant protection identified in the SPP spatial framework, other more localised factors which could affect the location of wind energy developments, require further consideration whilst recognising that they themselves cannot lead to blanket restrictions on development, and that applications will be determined on a case by case basis.

Green Belt

As stated in SPP, where planning authorities consider it appropriate, a Green Belt can be designated around a town to support the spatial strategy by:

- directing development to the most appropriate locations and supporting regeneration;
- protecting and enhancing the character, landscape setting and identity of the settlement; and
- protecting and providing access to open space

Being within the Glasgow and the Clyde Valley area with a Green Belt designated in the approved SDP 2012, Inverclyde, through its Local Development Plan 2014, has defined the boundaries of the inner and outer Green Belt within its authority.

Cumulative Impact

Cumulative impacts arising from the combined effect of the proposal with other existing or approved wind energy developments need to be conisdered. To date there are no strategic (20MW+) wind farms in Inverclyde, only a number of developments granted for between one and three turbines. The applications which have been granted are shown in **Diagram 2**.

Clyde Muirshiel Regional Park

An area of approximately 781 hectares within Inverclyde has been designated as the Clyde Muirshiel Regional Park (CMRP) while the regional designation of the West Renfrew Hills Scenic Area covers an area of 77 hectares and is largely contained within the Park. (See **Diagram 3**) 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 considers in particular the landscape value and sensitivity. This can be accessed at www.clydemuirshiel.co.uk/wp-content/uploads/2011/03/Framework-Guidance-for-Windfarms.pdf. Reviewed in 2010, this document has been agreed by the Park Authority which incorporates the three local authorities covering the area, namely Inverclyde, Renfrewshire and North Ayrshire and takes account of new legislation, new designations and new pressures on the Park.

Local Designations

In addition to the regional designations, there are 52 Sites of Importance for Nature Conservation (SINC) (See **Diagram 3**). These 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.

Birds

Onshore wind turbines can potentially have a detrimental impact on birds through death from collision with turbines, displacement from their normal migratory routes and breeding grounds or loss of habitat through formation of infrastructure. As all wild birds are protected under the Wildlife and Countryside Act, 1981, developers are required to quantify these risks through surveys at different times of the year. SNH provides guidance on its website regarding bird survey methods and assessments.

Historic Environment

In Inverclyde, there are a number of historic environment resources besides the Gardens and Designed Landscapes mentioned in SPP, including Listed Buildings and Scheduled Monuments. 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.

Community Benefits

Community benefits are those given by the developers to the communities in the vicinity of the proposed wind farm development on a voluntary basis.

These are generally not a planning consideration when dealing with the application unless they relate to something that meets the criteria of Circular 3/2012 'Planning Agreements'.

Aviation and Defence Interests

Where there is an airport nearby aviation and defence issues need to be considered. The proximity of Inverclyde to Glasgow International Airport raises the issue of safety where part of the airport safeguarding zone is identified on the eastern edge of the authority. (See **Diagram 4**). 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 International 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. Potential developers are therefore advised to undertake NATs pre-planning service and consult with the Civil Aviation Authority and MoD as part of the scoping exercise.

Water environment

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

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 www.sepa.org.uk/water/regulations.aspx. Particular designated sites such as SPAs and SSSIs may also be dependent on the status of the water environment.

Woodland

There is a strong presumption in favour of protecting Scotland's woodland resource. Its removal should be allowed only where it would achieve significant and clearly defined additional public benefit. In some cases, a proposal for compensatory planting may be a condition of permission.

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 would likely be disrupted. In either case, early consultation with the relevant network provider would be expected.

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 possible, however, to calculate very precisely whether flicker will occur and for how many hours per year. 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 these times.

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**).

Decomissioning and Restoration

When the life span of the development is complete, or it is deemed no longer to be required, it is necessary to dismantle the equipment and remove it from the site prior to reinstating it fully to its former condition. This is in the interests of safety and visual amenity, and minimising impacts on the natural heritage.

Landscape Capacity Study

In 2014, a Landscape Capacity Study for wind turbine development was carried out for Inverclyde in association with the local authorities in the Glasgow and the Clyde Valley SDP Authority to assess the capacity of the landscape to accommodate all sizes of wind energy.

This study has been treated as a background report which has informed but does not comprise part of this Supplementary Guidance. It should be read in conjunction with it when addressing the suitability of locations for wind turbine developments. This document can be accessed from the Local Development Plan page of the Council's website.

Sensitivity of the landscape to the various sizes of wind turbines has been assessed across the landscape characters within Inverclyde as identified in the Glasgow and the Clyde Valley Landscape Assessment 1999. Within Inverclyde, there are 4 landscape character types out of a total of 20:

- Raised Beach (1)
- Rugged Upland Farmland (6)
- Upland River Valley (12)
- Rugged Moorland Hills (20)

Diagram 1 shows the sensitivity of the areas to each size of turbine. The sensitivity of the landscape to small, small-medium, medium, large and very large turbines within each landscape character typology is summarised in **Appendix 1**.

Details of how the landscape sensitivity was determined can be found in the Landscape Capacity Study for Wind Turbines mentioned above.

5.0 CONCLUSION

At present in Inverclyde, there is a preference amongst developers for small-scale wind energy developments of single or small groups of turbines which earn income from selling surplus electricity back to the grid**.** To date (August 2014) 19 applications have been granted for small scale turbines and micro-renewable developments across the authority and 6 have been refused, including one for a strategic development. More recent applications have been for larger turbines in the small-medium range while a cluster of one and two turbine development proposals is emerging within the Rugged Upland Farmland landscape typology.

To guide developers and inform communities on the most appropriate locations for wind energy developments Scottish Planning Policy has identified three groups which form a Spatial Framework. Inverclyde does not have any areas in Group 1 where wind energy developments will not be acceptable but it does have areas that fall within Groups 2 and 3 where there will be significant protection but opportunity for wind energy development in some circumstances and where there will be potential for wind energy development respectively.

Criteria against which applications will be assessed have been identified and the landscape sensitivity to different scales of development has been addressed through the Landscape Capacity Study. Other considerations including the potential impact of development on a variety of interests such as birds, historic buildings and designed landscapes, the community, aviation, broadcasting equipment, notifiable installations and the water environment will also be addressed.

When assessing a proposal for wind energy, all the elements that have to be considered can be summarised as follows:

Spatial Framework and criteria
*
LDP Policy and criteria
*
Other considerations
(technical, environmental, landscape, social etc.)

When assessing a proposal for wind energy development, any of these elements may influence the determination of an application.

With the Scottish Government targets set for 2020, planning authorities are expected to support a wide variety of renewable energy technologies and guide them to the most appropriate locations by taking cognisance of issues that will affect this location. **Policy INF1** together with this Supplementary Guidance will be used to assess and determine planning applications for all types of renewable technologies, including all sizes of wind energy developments, on a case by case basis.

LIST OF FIGURES, TABLES, DIAGRAMS AND APPENDICES

GLOSSARY

Carbon calculator – a computer program that calculates the approximate amount of carbon dioxide produced by an individual, business or organization compared to the average amount produced.

Feed-in-tariff (FIT) - a payment made to households or businesses generating their own electricity through the use of methods that do not contribute to the depletion of natural resources, proportional to the amount of power generated.

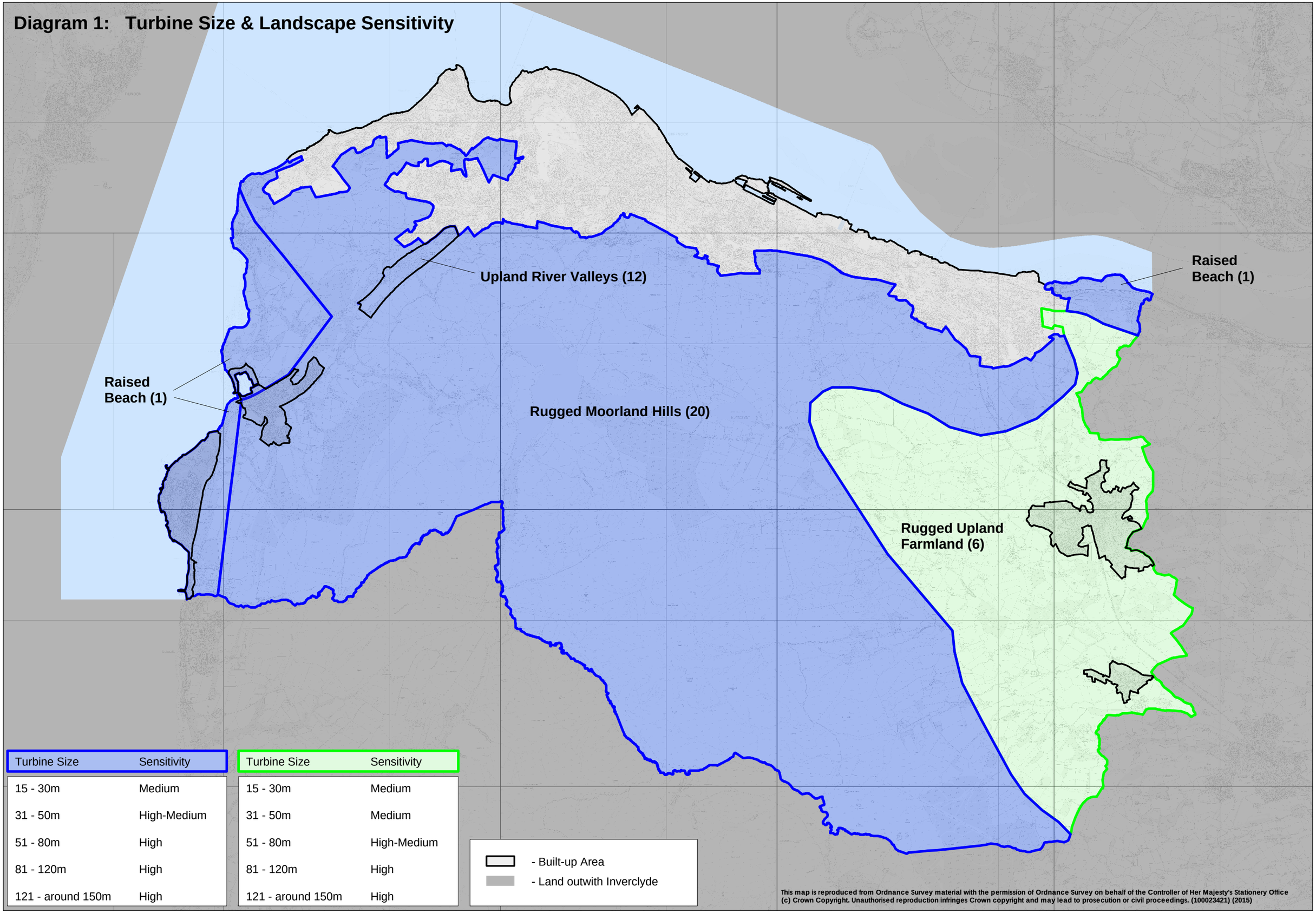
Geothermal energy – the power generated from natural steam; hot water; hot rocks or lava in the Earth's crust.

Photovoltaic – a material or device in which electricity is generated as a result of exposure to light.

Ramsar – a site proposed or designated as being wetland of international importance, especially as a waterfowl habitat, under the 1971 Ramsar Convention and ratified by the UK government in 1976.

Solar irradiation – the power produced by the sun in the form of electromagnetic radiation which is perceived by humans as sunlight.

Diagram 1: Turbine Size & Landscape Sensitivity



Turbine Size	Sensitivity
15 - 30m	Medium
31 - 50m	High-Medium
51 - 80m	High
81 - 120m	High
121 - around 150m	High

Turbine Size	Sensitivity
15 - 30m	Medium
31 - 50m	Medium
51 - 80m	High-Medium
81 - 120m	High
121 - around 150m	High

- Built-up Area
- Land outwith Inverclyde

APPENDIX 1 - Landscape Character Type, Turbine Size and Sensitivity

Landscape Character Type	Turbine Size (to blade tip)	Sensitivity
(1) Raised Beach	Small 15 – 30m	Medium
	Small – Medium 31 – 50m	High - Medium
	Medium 51 – 80m	High
	Large 81 – 120m	High
	Very Large over 120m ⇨150m	High
(6) Rugged Upland Farmland	Small 15 – 30m	Medium
	Small – Medium 31 – 50m	Medium
	Medium 51 – 80m	High - Medium
	Large 81 – 120m	High
	Very Large over 120m ⇨150m	High

Landscape Character Type	Turbine Size (to blade tip)	Sensitivity
(12) Upland River Valley	Small 15 – 30m	Medium
	Small – Medium 31 – 50m	High - Medium
	Medium 51 – 80m	High
	Large 81 – 120m	High
	Very Large over 120m ⇨150m	High
(20) Rugged Moorland Hills	Small 15 – 30m	Medium
	Small – Medium 31 – 50m	High - Medium
	Medium 51 – 80m	High
	Large 81 – 120m	High
	Very Large over 120m ⇨150m	High

Diagram 2: Wind Energy Applications Granted in Inverclyde

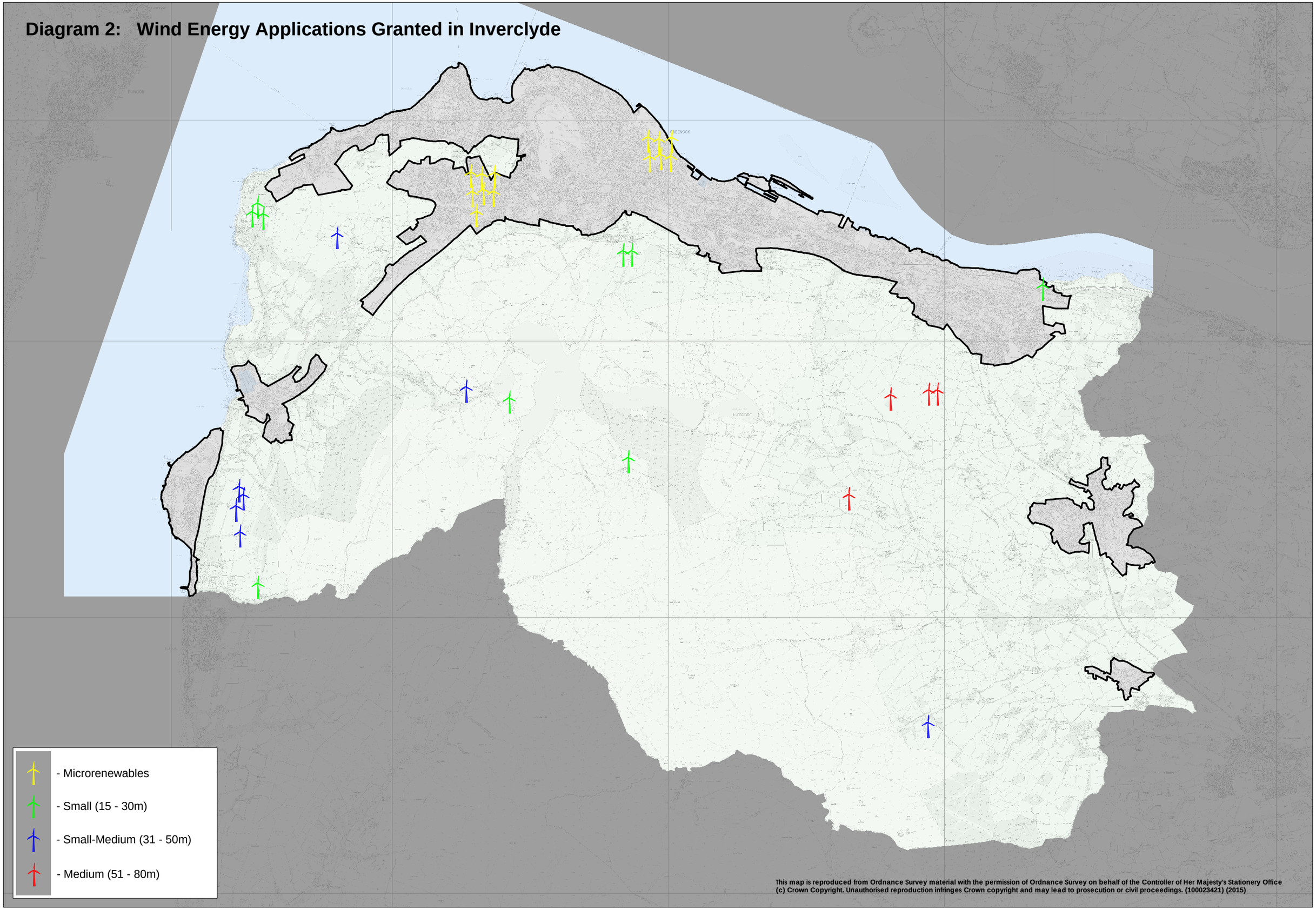


Diagram 3: Other Considerations

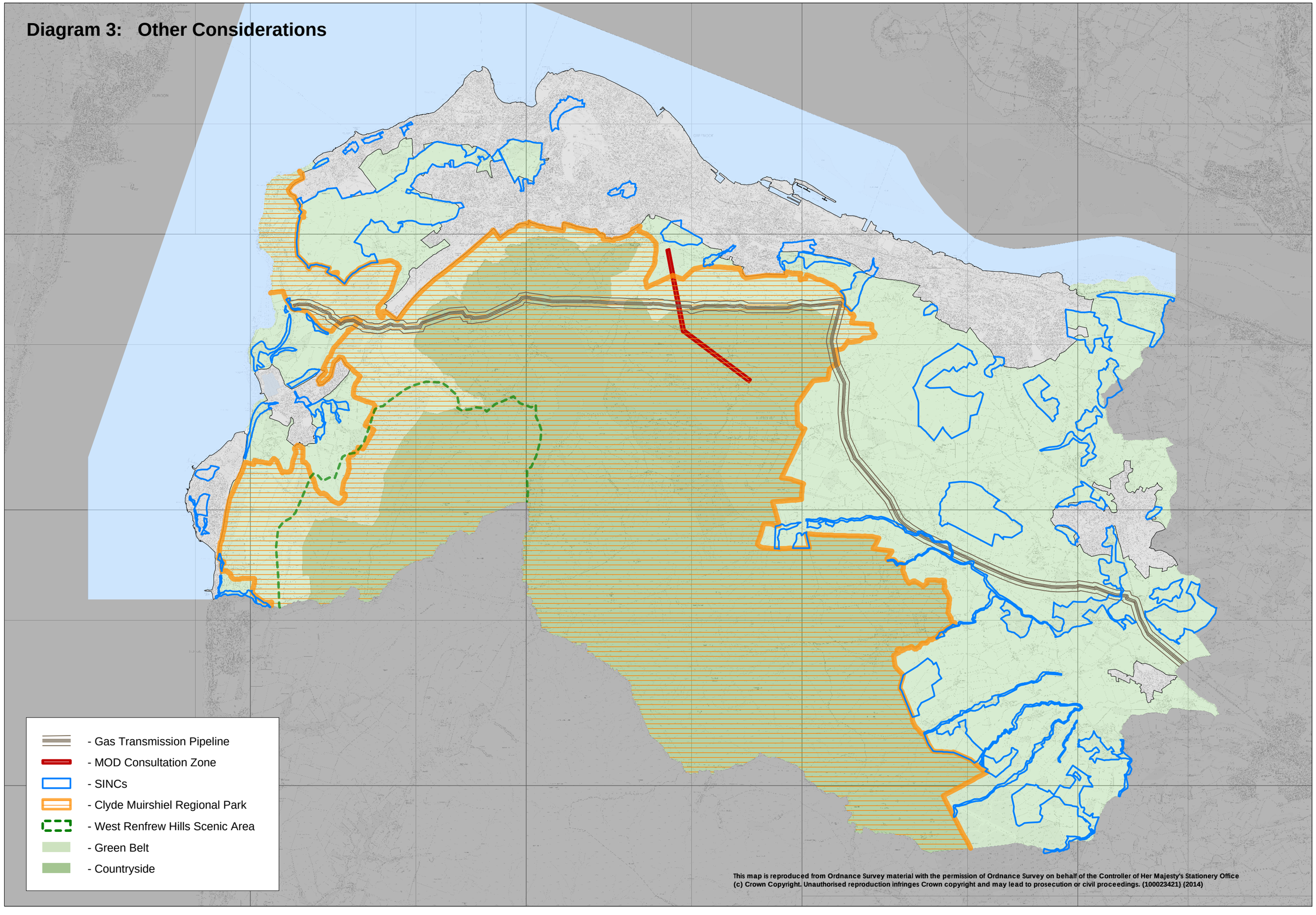


Diagram 4: Glasgow Airport Safguarding Zone